

Angie Gonzalez

From: Ronald Kirkish <hykirkish@charter.net>
Sent: Friday, March 19, 2021 4:38 PM
To: Christina Turner; Rich Constantine; Yvonne Martinez Beltran; Rene Spring; John McKay; Shane Palsgrove; Gino Borgioli
Cc: Bob Cooke; Terry Ratto; Ladera Grill Dan; Ladera Grill Morgan; Kevin A. Sabet; Monte Stiles; Roger Morgan; Carla Lowe; John Lovell; Scott Chipman; Paulette Nagle IFBC; HENRY LOZANO; Paul Chabot
Subject: [Men's Journal] Shocker: 20-Year Study Says That Marijuana Makes You Stupid

MEN'S JOURNAL

Shocker: 20-Year Study Says That Marijuana Makes You Stupid

<https://www.mensjournal.com/adventure/shocker-20-year-study-says-marijuana-makes-you-stupid/>

by Nikki Donnelly, March 19, 2021

Marijuana has adopted a relatively harmless reputation in recent years, but a [new 20-year study](#) published in the journal *Addiction* is calling BS.

Its authors suggest that marijuana is linked to decreased cognitive [function](#) and could potentially lead to a slew of mental disorders.

Though the short-term effects of marijuana are not particularly serious, the new study demonstrates that with chronic use, the drug could lead to schizophrenia as well as an increased risk of psychotic symptoms such as hallucinations.

The drug has been linked to reduced learning, memory, and attention, and could also be addictive for some people.

As if that weren't enough to keep you away, the study also found that after smoking marijuana, you're twice as likely to die from crashing your car.

Do yourself a favor and keep your body [clean](#) and drug-free.

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Angie Gonzalez

From: Ronald Kirkish <hykirkish@charter.net>
Sent: Thursday, April 8, 2021 7:09 AM
To: Christina Turner; Rich Constantine; Yvonne Martinez Beltran; Rene Spring; John McKay; Shane Palsgrove; Gino Borgioli
Cc: Matt Wendt
Subject: [New York Daily News] Using weed while pregnant linked to psychotic-like behaviors in children: study

Dear All,

Marijuana dispensaries, Apothecary businesses, bud tender's, and their pro-pot advocates often advise pregnant mothers to abuse marijuana to alleviate their morning sickness and instructing them not to pay attention to the those who try to warn you that marijuana is bad for the developing baby in the womb.

Let's be frank, pro-pot folks could care less about the mother and the health of her baby, all they want is their money.

For your consideration and B/r,

Ronald L. Kirkish

[New York Daily News]Using weed while pregnant linked to psychotic-like behaviors in children: study

<https://www.nydailynews.com/news/national/ny-weed-use-pregnant-psychotic-behavior-children-study-20200923-f6rrqaqljhojaatudtwjdntcy-story.html>

By [DAVID MATTHEWS](#) - NEW YORK DAILY NEWS - SEP 23, 2020 AT 2:00 PM

Additional links:

- [CNN] Using weed during pregnancy linked to psychotic-like behaviors in children, study finds - <https://www.cnn.com/2020/09/23/health/weed-pregnancy-childhood-psychosis-trnd-wellness/index.html>
- [Miami CBS Local] Study: Marijuana Use During Pregnancy Linked To Psychotic-Like Behaviors In Kids - <https://miami.cbslocal.com/2020/09/24/study-marijuana-use-pregnancy-linked-psychotic-behaviors-children/>
- [CBS LOCAL] Using Weed During Pregnancy Linked To Psychotic-Like Behaviors In Children, Study Finds <https://baltimore.cbslocal.com/2020/09/23/using->

[weed-during-pregnancy-linked-to-psychotic-like-behaviors-in-children-study-finds/](https://whdh.com/news/using-weed-during-pregnancy-linked-to-psychotic-like-behaviors-in-children-study-finds/)

- [WHDT, Boston News 7] Using Weed During Pregnancy Linked To Psychotic-Like Behaviors In Children, Study Finds - <https://whdh.com/news/using-weed-during-pregnancy-linked-to-psychotic-like-behaviors-in-children-study-finds/>

A new study found that [using marijuana while pregnant](#) may increase psychotic-like behavior in children.

The study, published Wednesday in [JAMA Psychiatry](#), followed 11,489 children over a series of years and evaluated their cognitive and behavior patterns around their 9th birthdays.

Only 655 of those children were exposed to weed in utero, but the study found that those children were overwhelmingly more likely to have psychotic-like behaviors as well as more attention, social and sleep issues, as well as lesser cognitive abilities. While the vast majority used weed in their first trimester, the first trimester is arguably the most critical time for the fetus' developing brain.

According to the Centers for Disease Control and Prevention, previous studies have linked weed use to low birth weight, impulsivity, hyperactivity, and attention issues. Other studies have linked weed use to autism.

In 2019, the U.S. Surgeon General Jerome Adams warned against cannabis use by pregnant women.

“Recent increases in access to marijuana and in its potency, along with misperceptions of safety of marijuana endanger our most precious resource, our nation’s youth,” he said.

“THC has been found in breast milk for up to six days after the last recorded use,” the advisory states. “It may affect the newborn’s brain development and result in hyperactivity, poor cognitive function, and other long-term consequences.

“Additionally, marijuana smoke contains many of the same harmful components as tobacco smoke. No one should smoke marijuana or tobacco around a baby.

The problems were even more pronounced if the mother continued to use weed after learning she was pregnant.

A [recent study](#) from the National Institute on Drug Abuse found that marijuana use by pregnant women doubled between 2002 and 2017.

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Angie Gonzalez

From: Ronald Kirkish <hykirkish@charter.net>
Sent: Thursday, March 25, 2021 6:50 AM
To: Christina Turner; Rich Constantine; Yvonne Martinez Beltran; Rene Spring; John McKay; Shane Palsgrove; Gino Borgioli
Cc: Terry Ratto; Ladera Grill Dan; dave@lokeyfirearms.com; Matt Wendt; Chris Borello
Subject: [New York Post] The link between pot and mass shootings may be closer than we think

Dear all,

A lot has been learned about the link to marijuana's THC and mental illness.

This article in the New York Post shows us that many of the mass shootings are also linked to mental illness caused by the abuse of marijuana.

B/r,

Ronald L Kirkish



The link between pot and mass shootings may be closer than we think

<https://nypost.com/2019/08/07/the-link-between-pot-and-mass-shootings-may-be-closer-than-we-think/>

By [Miranda Devine](#) - August 7, 2019 | 9:26pm

You can't walk through the streets of Manhattan these days without smelling weed.

Even as evidence mounts of the health problems associated with marijuana, New York has insisted on joining other greedy states scrambling to legalize this deceptively dangerous drug.

It makes no sense at a time when American youth is suffering from an unprecedented mental health crisis.

And, in all honesty, we cannot rule out a connection between [increasing marijuana use](#), mental illness and the recent spate of mass shootings by disturbed young males.

We don't yet know much about the mental state or drug use of the El Paso or Dayton killers. But a former girlfriend of Dayton killer Connor Betts, 24, has [indicated he was mentally ill](#), and two of his friends interviewed by reporters this week mentioned his previous drug use.

Just last year, the Parents Opposed to Pot lobby group tried to sound the alarm on the link between marijuana and mass shootings, compiling a list of mass killers it claims were heavy users of marijuana from a young age, from Aurora, Colo., shooter James Holmes and Tucson, Ariz., shooter Jared Loughner to Chattanooga, Tenn., shooter Mohammad Abdulazeer.

Until we understand those links, it is nuts to enact lax laws that encourage more young people to use a drug proven to trigger mental illness.

President Trump was right to [highlight mental illness](#) in his remarks Wednesday on the El Paso and Dayton shootings, not that his unscrupulous critics will listen, so determined are they to brand him a white supremacist.

We know from a 2018 FBI report that 40% of "active shooters" in the US between 2008 and 2013 had been diagnosed with a mental illness before the attack and 70% had "mental health stressors" or "mental health concerning behaviors."

So for anyone actually interested in preventing future such massacres, the [so-called "red flag" legislation](#) Trump is advocating to deny people with mental illness access to firearms is the most logical measure and the one most likely to be embraced by both sides of politics.

But it also should apply to marijuana use, seeing as the two go hand in hand.

You can't address the youth mental health crisis without considering the effect of rising teen marijuana use.

Among American teenagers, the drug's "daily use has become as, or more, popular than daily cigarette smoking" according to the National Institute of Health's 2017 Monitoring the Future study.

We've successfully demonized cigarettes while new laws send kids the message that marijuana is harmless.

Yet we've known for more than a decade of the link between marijuana and psychosis, depression and schizophrenia.

In 2007 the prestigious medical journal Lancet recanted its previous benign view of marijuana, citing studies showing "an increase in risk of psychosis of about 40 percent."

A seminal long-term study of 50,465 Swedish army conscripts found those who had tried marijuana by age 18 had 2.4 times the risk of being diagnosed with schizophrenia in the following 15 years than those

who had never used the drug. Heavy users were 6.7 times more likely to be admitted to a hospital for schizophrenia.

Another study, of 1,037 people in New Zealand, found those who used cannabis at ages 15 and 18 had higher rates of psychotic symptoms at age 26 than non-users.

A 2011 study in the British Medical Journal of 2,000 teenagers found those who smoked marijuana were twice as likely to develop psychosis as those who didn't.

Another BMJ study estimated that "13 percent of cases of schizophrenia could be averted if all cannabis use were prevented."

That's more than 400,000 Americans who could be saved from a fate worse than death.

Young people and those with a genetic predisposition are most at risk, particularly during adolescence, when the brain is exquisitely vulnerable.

The evidence of harm is overwhelming, and it defies logic to [think that legalizing marijuana](#) won't increase the harm.

And yet marijuana activists pretend there is no problem and baby-boomer lawmakers, perhaps recalling their own youthful toking, ignore the science.

To make matters worse, the marijuana sold at legal dispensaries today is five times more potent than the pot of the 1970s and '80s, according to a thoroughly researched new book by former New York Times reporter Alex Berenson: "[Tell Your Children: The Truth About Marijuana, Violence and Mental Health](#)."

Berenson reports that the first four states to legalize marijuana, Alaska, Colorado, Oregon and Washington, have seen "sharp increases" in violent crime since 2014.

If we care about mental illness, which has been spiking up at an alarming rate in recent years among young people, especially teenage boys, we should care about the convincing evidence of marijuana-induced psychosis.

We didn't have to wait for three mass shootings in two weeks to know that young males are in crisis.

Youth suicide is at an all-time high and rates of serious mental illness in this country are on the rise, especially among people aged 18 to 25, the cohort most likely to use marijuana.

Young people born in 1999, the birth year of the El Paso shooter, were 50% more likely than those born in 1985 to report feeling "serious psychological distress" in the previous month, according to an alarming study published this year in the Journal of Abnormal Psychology.

With all we know, it's time to put the brakes on marijuana legalization before it's too late.

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Angie Gonzalez

From: Ronald Kirkish <hykirkish@charter.net>
Sent: Wednesday, March 17, 2021 11:09 PM
To: Christina Turner; Rich Constantine; Yvonne Martinez Beltran; Rene Spring; John McKay; Shane Palsgrove; Gino Borgioli
Cc: Terry Ratto; Marsha Edick; Michael Lancaster; dave@lokeyfirearms.com; ryan@lokeyfirearms.com; Ladera Grill Dan; Ladera Grill Morgan; Bob Cooke
Subject: 20210317_203614.pdf

Dear all,

You might want seriously reconsider it you should bring marijuana back up — you shouldn't want to open that can of worms, for a 3rd time again.

Best regards,

Ronald L. Kirkish

[Click to Download](#)

20210317_203614.pdf0 byt

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From: [Ronald Kirkish](#)
To: [Christina Turner](#); [Rich Constantine](#); [Yvonne Martinez Beltran](#); [Rene Spring](#); [John McKay](#); [Shane Palsgrove](#); [Gino Borgioli](#)
Subject: ADHD numbers are rising and scientists are trying to understand why
Date: Sunday, April 4, 2021 8:14:48 AM

Dear All,

The frequency of ADHD has exploded since the 1990's as has the huge increase of the %THC in "Skunk marijuana"

NIDA's Dr. Nora Volkow's research shows that THC does damage to the human brain's white matter and the damage is substantial.

B/r

Ronald L. Kirkish

The Impact of ADHD Persistence, Recent Cannabis Use, and Age of Regular Cannabis Use Onset on Subcortical Volume and Cortical Thickness in Young Adults

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5289096/>

Results

ADHD numbers are rising and scientists are trying to understand why: In the late 1990s, 7.2 percent of non-Hispanic white children, 4.7 percent of non-Hispanic black children and 3.6 of Hispanic children were diagnosed with ADHD, according to the study. By 2016, it was 12 percent of white kids, 12.8 percent of blacks and 6.1 percent of Hispanics.

After controlling for age, gender, total brain volume, nicotine use, and past-year binge drinking, childhood ADHD diagnosis did not predict brain structure; however, persistence of ADHD was associated with **smaller left precentral/postcentral cortical thickness**.

Compared to all non-users, CAN users had decreased cortical thickness in right hemisphere superior frontal sulcus, anterior cingulate, and isthmus of cingulate gyrus regions and left hemisphere superior frontal sulcus and precentral gyrus regions. Early cannabis use age of onset (CUO) in those with ADHD predicted greater right hemisphere superior frontal and postcentral cortical thickness.



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To: [Christina Turner](#); [Rich Constantine](#); [Yvonne Martinez Beltran](#); [Rene Spring](#); [John McKay](#); [Shane Palsgrove](#); [Gino Borgioli](#)
Cc: [Matt Wendt](#); [Chris Borello](#)
Subject: Adolescent cannabis and tobacco use are associated with opioid use in young adulthood-12-year longitudinal study in an urban cohort
Date: Friday, March 19, 2021 5:24:50 PM

Dear All,

Advocates for the abuse of marijuana argue that their drug of choice isn't a gateway drug..... they are lying.

Ronald L. Kirkish

Adolescent cannabis and tobacco use are associated with opioid use in young adulthood-12-year longitudinal study in an urban cohort

PMID: 32692425 PMCID: PMC7855765 (available on 2022-03-01)

DOI: [10.1111/add.15183](https://doi.org/10.1111/add.15183)

Abstract

Background and aims: Cannabis, tobacco and alcohol use are prevalent among youth in the United States and may be risk factors for opioid use. The current study aimed at investigating associations between developmental trajectories of cannabis, tobacco and alcohol use in adolescence and opioid use in young adulthood in an urban cohort over the span of 12 years.

Design: Cohort study of adolescents originally recruited for a randomized prevention trial with yearly assessments into young adulthood.

Setting: Nine urban elementary schools in Baltimore, MD in the United States.

Participants: Participants (n = 583, 86.8% African American, 54.7% male) were originally recruited as first grade students.

Measurements: Cannabis, tobacco and alcohol use were assessed annually from ages

14-18 years and opioid use from ages 19-26. Socio-demographics were assessed at age 6. Intervention status was also randomly assigned at age 6. Gender, race, free/reduced-priced lunch and intervention status were included as covariates in individual and sequential growth models.

Findings: There were significant positive associations between the cannabis use intercept at age 14 and the opioid use intercept at age 19 (beta = 1.43; $P = 0.028$), the tobacco use intercept at age 14 and the opioid use intercept at age 19 (beta = 0.82; $P = 0.042$). Specifically, more frequent use of cannabis or tobacco at age 14 was associated with more frequent use of opioids at age 19.

Conclusions: Cannabis and tobacco use in early adolescence may be risk factors for opioid use in young adulthood among African Americans living in urban areas.

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From: [Ronald Kirkish](#)
To: [Christina Turner](#); [Rich Constantine](#); [Yvonne Martinez Beltran](#); [Rene Spring](#); [John McKay](#); [Shane Palsgrove](#); [Gino Borgioli](#)
Cc: [Matt Wendt](#); [Chris Borello](#); [Terry Ratto](#); dave@lokeyfirearms.com; [Ladera Grill Dan](#)
Subject: Amsterdam drugs: Tourists face ban from cannabis cafes
Date: Sunday, March 28, 2021 2:17:49 PM

Dear All,

Morgan Hill City **Councilman Rene Spring** originally immigrated to the United States from the European country of Switzerland to eventually settle in Morgan Hill and is an avid advocate for marijuana businesses including sales, distribution and growth.

However, unlike Councilman Spring, the Mecca of Europe for of all things pot, Amsterdam, Holland, their residents are demanding that the marijuana businesses go the way of the dinosaur's.....they want their city and nation back.

For decades, the City of Amsterdam, Holland, has been the recognized pioneer for all things marijuana and for these last several years that nation has been having to deal with all of the significant problems caused by their liberal views in regards to marijuana.

This BBC article, dated **January 30, 2021** shows you why [after several decades] Holland has been closing down their **"Coffee Shops"** all around their nation for several years now including and especially in Amsterdam, where marijuana has been typically served to their customers and now they are discussing to shut them all down, permanently; post the COVID shutdown.

You will learn that the indigenous residents of Amsterdam are completely fed up with all the horrid anti-social behaviors and criminal activity that the marijuana culture in Amsterdam encourages and that the residents of that city are insisting on closing it all down and take their city back.

Frankly, why in "Haiti's" would any sane resident of Morgan Hill and/or Gilroy even want to seriously consider allowing this business to operate within their jurisdiction knowing that the residents of Amsterdam, the Mecca for the Pot culture, want to closed it "all" down after suffering from it's depraved consequence's for several decades.

For your consideration and B/r,

Ronald L. Kirkish

Amsterdam drugs: Tourists face ban from cannabis cafes

<https://www.bbc.com/news/world-europe-55765554>

By Anna Holligan - BBC News, Amsterdam - Published 30 January, 2021

When international visitors are eventually able to return to the canals that crisscross the medieval streets of Amsterdam, they may find one of the Dutch capital's famous tourist attractions off limits.

Amsterdam Mayor Femke Halsema wants to ban foreign tourists from cannabis cafes **to tackle anti-social behaviour** and push the city upmarket.

Owners of Amsterdam's fabled coffee shops are pushing back. They have told the BBC that if tourists are banned from regulated establishments, they will be pushed into the hands of ruthless drug gangsters on the streets.

'They let go of all discipline'

Amsterdam is famous for an array of things, including its thriving nightlife - red light district, cannabis cafes and bars - attracting 20 million tourists per year.

Like the rest of the Netherlands, the capital is currently in lockdown.

Some of its 850,000 residents would prefer its post-Covid life to resemble its current state, rather than return to what it was. Bernadette de Wit wants to get rid of what she calls "low-value tourists", including young British women "dressed up as pink penises - they let go of all discipline".

Bernadette wobbles around to demonstrate how some visitors act from late morning onwards, **urinating in the street and vomiting in gardens.**

This is our home. This is a Unesco World Heritage Site. Rembrandt used to live in this neighbourhood you know?

Bernadette de Wit

Amsterdam resident

The mayor has a plan. Cutting off the lifeblood of cannabis tourism, she believes, will deter that type of visitor and reduce the kind of conduct often associated with them. Most of the Netherlands already requires visitors to coffee shops to show proof of residence, but the rule is not enforced in the capital.

The council has already tried other methods to reduce the pressure that comes with "over-tourism". Airbnb-style holiday rentals were recently banned from the historic centre, and the future of the red light district is under discussion with proposals to create a sex zone on the outskirts instead.

Coffee shops are the latest pleasure-seekers' pursuit to be targeted.

'Only eight coffee shops left'

Inside Joachim Helms' Greenhouse cafe, the walls are resplendent with photos of him hugging celebrity clientele, from Rihanna to Richard Branson, Snoop Dogg and Miley Cyrus.

"I've lived here all my life," the owner told me. "People who come to smoke weed aren't the ones causing the disturbance."

Taking the tourists out of coffee shops may be easier to enforce than tackling cheap flights and accommodation, but it is not the way to improve Amsterdam for the locals, he believes.

'Left behind' by Dutch cannabis laws

Contradictory Dutch regulations have created what's known as a "backdoor" policy: cannabis production is illegal, but [Dutch coffee shops are allowed to sell it](#). Even though that's technically a criminal offence, the sale of small quantities is "tolerated".

This policy means the coffee shops buy their stock from underground criminal growers, who mostly cultivate it illegally in the Netherlands or smuggle it in from places such as Morocco, Jamaica, Colombia and Thailand.

Joachim and other owners have told the BBC their reputation is being damaged by disjointed regulations. Experiments are under way in 10 cities that allow a small number of coffee shops to buy their products from authorised Dutch cannabis growers.

"We are seeing other cities going ahead while we are left behind. It's bad for Amsterdam - a liberal, tolerant city is actually going backwards," he complains.

Could tourists be targeted by street dealers?

The BBC asked Amsterdam's local authority what it made of the warning from coffee shop owners that banning visitors from their premises would merely move the issue on to the capital's streets.

In a statement, it said: "A growing cannabis market generating ever larger profits is increasingly vulnerable to criminal activity. The current tolerance policy makes it difficult, if not impossible, for coffee shop operators not to maintain ties with illegal suppliers."

But Mark Jacobs, who runs The Rookies Club on a narrow street in the shadow of the Rijksmuseum, believes the mayor's plans will fuel the very crime and anti-social behaviour the council is trying to combat.

"The hard dealers are the ones who will be happy: brutal guys, I already see it. At 01:00 I have to close my doors, then there are dealers waiting, they don't care what they sell you, or what happens to you.

"It won't be safe on the streets as it is now. You'll get the new Al Capones, the new dealers will emerge, thousands of them."

The coffee shops play an important role in protecting young people, according to Joachim Helms, who fears that otherwise they could end up as drug mules or selling drugs on the street.

Other small business owners have their own concerns.

But many residents do not see it the same way, and with police and prosecutors in favour of tighter controls, it is highly likely that foreign visitors will be barred from Amsterdam's cannabis cafes from next year.

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From: [Cari Farquhar](#)
To: [Christina Turner](#); [Rene Spring](#); [John McKay](#); [Yvonne Martinez Beltran](#); [Gino Borgioli](#); [Rich Constantine](#)
Subject: Commercial Marijuana in Morgan Hill
Date: Friday, March 19, 2021 3:33:27 PM

Hello Council,

I am writing to you today to stress my opposition to having commercial marijuana dispensaries in our city. Having this kind of a business which sells a drug that alters minds of our youth should not be readily accessible. Speaking to my neighbors, I found they were not against adults using marijuana, but did not want their children exposed to it. Last year former FDA head Scott Gottlieb warned of potential harm of the widespread use of cannabis and that we are “conducting a widespread experiment of THC on the public by making it broadly available.” I don’t want our children here in Morgan Hill along for this experiment, as I recognize that the adults who are pushing this on us will have no responsibility for the consequences. If necessary a person needing the drug can drive the short distance to another local city for purchase or have it delivered to their residence.

Thank you,
Cari Farquhar
Morgan Hill Resident for 28 years

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From: [Carol Lillig](#)
To: [Christina Turner](#)
Subject: Commercial marijuana in town
Date: Thursday, March 25, 2021 8:17:14 AM

Hi Ms. Turner,

I understand that there's a possibility of a council agenda item that would bring commercial marijuana to Morgan Hill. I understand that there are a variety of responses to issues like this but I wanted you to know that I would really prefer that this kind of business not be allowed in town. Folks can grow their own or purchase from delivery services so it seems that it wouldn't be an inconvenience for them to not have this establishment in town.

Just thought I'd let you know that, for me, this is an issue that I feel strongly about. I understand that others may feel differently, and I respect that. Just wanted to let my opinion be known.

Kind regards,
Carol Lillig

Carol Lillig
275 Hazelton Ct
Morgan Hill, CA 95037
408-857-4516

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To: [Christina Turner](#); [Rich Constantine](#); [Yvonne Martinez Beltran](#); [Rene Spring](#); [John McKay](#); [Shane Palsgrove](#); [Gino Borgioli](#)
Cc: [Matt Wendt](#); [Chris Borello](#); [Terry Ratto](#); [Ladera Grill Dan](#); [daniel harney](#); [Bob Cooke](#); [Marsha Edick](#); [Michael Lancaster](#); [dave@lokeyfirearms.com](#); [ryan@lokeyfirearms.com](#); [trailblazer413@yahoo.com](#)
Subject: Don't allow Constantine & Spring to destroy Morgan Hill's wholesome culture
Date: Monday, March 22, 2021 10:29:58 AM

Dear All,

Morgan Hill's Mayor Rich Constantine and his cohort City Councilman Renee Spring are trying (for a 3rd time) to allow for the sales, distribution and growing of marijuana within the jurisdiction and city limits of Morgan Hill.

Twice already they have been denied but once again they are intending to stubbornly turn the wholesome culture of Morgan Hill into a culture of drug abuse; and into a crime syndicate hub for all criminal drug cartel activity which "will" include the smorgasbord of "all dangerous and illegal drugs" that come across our southern border with Mexico for the purpose of reaching their tentacles deep into every nook and cranny of your neighborhoods.

Instead of promoting Morgan Hill's famous kid sports programs like "Pony Baseball, Pop-Warner football, soccer, basketball, girls softball", these two gentlemen want to promote the abuse of drugs. Illegal and dangerous drugs are flooding across our Mexican border and into your own community, **if you allow it and make it easy for them.**

I received this information from a great friend and awesome human being who is friends with the gentleman [Robert Almonte] who is being interviewed on Fox News.....here is my friends remarks:

"Ron - Robert Almonte is a personal friend from Texas. He is a retired Deputy Chief from El Paso PD and former US Marshal. He teaches about Cartel violence all over the world. Feel free to post and share."

And, I strongly urge you all to also share this important information with others within your sphere's of influence. We "have" to get the truth, the facts, out to the residents of Morgan Hill that Mayor Constantine and Councilman Spring are intending to destroy the City of Morgan Hill and their kids with their pro-drug abuse agenda.

For your consideration and B/r, Ronald L. Kirkish.

https://video.foxnews.com/v/6242611555001?fbclid=IwAR1coPCVKkFKE4DMpeQJQgBnur3F54vnpbQYJ2OI9Gb2I_LQds-vd1TCzxE#sp=show-clips

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Cc: [Matt Wendt](#); [Chris Borello](#); [Terry Ratto](#); dave@lokeyfirearms.com; [Ladera Grill Dan](#); [Ladera Grill Morgan](#); [Bob Cooke](#)
Subject: Drug abuse and the City of Santa Cruz, CA
Date: Wednesday, March 24, 2021 4:14:36 PM

Dear All,

The City of Santa Cruz, CA [just a few miles from Morgan Hill] is ground zero for drug abuse and the drug epidemic America is experiencing can be directly traced to this city.

When compared to the national averages for issues regarding drug abuse, the City of Santa Cruz far exceeds all others in all categories; why? Because of their many years of being soft on drug abuse policies

When we can see with our own eyes what has been happening in Santa Cruz, the rampant drug abuse among their youth, why would any other city, especially including Morgan Hill, want to walk in the same foot steps, steps that lead down the path to great harm and damage to their community and their children?

Ronald L. Kirkish.

Santa Cruz County Drug and Alcohol Abuse Statistics

<https://elevaterehab.org/santa-cruz-county-california-drug-alcohol-abuse-statistics/>

December 18, 2016

Drug and alcohol abuse is considered California's top premature killer. In California, 40,000 emergency room visits each year are drug-related.

Though illicit drug and alcohol abuse is a statewide problem, it is particularly prevalent in Santa Cruz County.

Unlike other areas that often see spikes of one particular drug, the area's abuse rates cover various drugs—from **marijuana** and cocaine to hallucinogens and prescription drugs.

The statistics offered by the Santa Cruz County Health Department show a large disparity between the state and the county.

The percentage of adults who need help for emotional/mental problems or drug and alcohol problems for California is 15 percent, and for just Santa Cruz County, it's 22 percent.

These numbers suggest that the county is fighting a larger battle against drugs than other areas in the state. The drug and alcohol issues of Santa Cruz County top the state.

How Commonly Abused Drugs Have Become More Dangerous

The problems of Santa Cruz County have recently become part of a national spotlight on the drug epidemic in the United States.

There have been at least four high-profile overdoses in Santa Cruz County that resulted in fatalities in 2015, all under the age of 25, and stem from a mix of drugs known as a cocktail.

The mixes of drugs vary; they can include:

- methadone
- xanax
- oxycodone
- allergy medication
- cocaine

Some of these drugs speed up the heart and nervous system, while others slow it down. The inclusion of alcohol adds an even higher level of danger to the drugs.

Some users will use one kind of drug to counteract the other's effects, assuming that they can be taken together because they both aren't downers, but combining any of them can be deadly.

According to the Santa Cruz Sentinel, part of the issue in Santa Cruz County is that many of these drugs have become more readily available.

Young adults and adolescents—people who aren't aware of how harmful it can be to mix drugs with alcohol or other substances—are the groups most likely to abuse drugs.

The Demographics and Substance Abuse in Santa Cruz County

Consider the following drug statistics:

- In 2013, about 23 percent of teens and young adults reported using an illegal drug within the past month.
- Of those, about 27 percent of females reported needing help due to illicit drug use.
- Only 18 percent of males reported needing help.
- In the entire state of California, only 18.5 percent of adults seek help for drug and alcohol abuse, causing the statistics significantly higher for Santa Cruz County.

Adolescent Drug And Alcohol Users

Though addiction at any age can be crippling, those who seem to struggle the most in this area are young.

Adolescents in Santa Cruz County are struggling with addiction at an alarming rate, which is a problem for many reasons.

The brain is still maturing during adolescence. The prefrontal lobe—which controls emotions, is not thoroughly developed, so this demographic doesn't fully appreciate the long-term consequences of drug use or the dangerous behaviors in which they may show while on drugs.

- About 40 percent of Santa Cruz County students report using **marijuana**, inhalants, or prescription drugs in the past year.
- **Marijuana** use is significantly higher for this county than in the rest of California.
- Though marijuana is now legal for California residents, users must be at least 21 years old— as with alcohol—which is also commonly and secretly abused by teens.

The Far-Reaching Effects Of Drug Abuse Among Adolescents

Recent studies, such as the California Healthy Kids Survey, concluded that:

- Ninth and eleventh graders are the two groups of high school students most likely to use drugs.
- Many of these students voluntarily report **marijuana** or alcohol use.
- In Santa Cruz County, one-third of the eleventh graders report binge drinking, and 30 percent say regular **marijuana** use.
- Nationwide, 1-in-5 high school juniors report binge drinking.
- Across California, only 20 percent of high school students report **marijuana** use.

Abusing Drugs and Alcohol While Driving

Most California students can begin driving during their sophomore year of high school. Because they are new to driving and somewhat because their brains are still developing, these drivers are already a risk on the roads.

The risks to themselves and others skyrocket if they abuse drugs or alcohol while driving.

Effects of Substance Abuse in Santa Cruz County

The number of alcohol-involved vehicle accidents for licensed drivers has climbed steadily in the past decade.

Accident numbers remain significantly higher for Santa Cruz County than the entire state of California.

When people are driving while under the influence of any drug or medicine, the consequences go far beyond themselves.

Traffic Accidents and Substance Abuse

Accidents involving people under the influence of drugs or alcohol often affect others. They must live with the aftermath of someone else's choice to drive while intoxicated.

The effects of substance abuse on those who use are countless and can be permanent. The results are heightened when the abuse starts young.

Risks of Drug and Alcohol Abuse in Santa Cruz

Teen and young adult drug users often experience emotional and behavioral problems; anxiety, depression, and suicidal thoughts are shared.

Drug abuse may mask an underlying mental disorder that causes these issues, such as bipolar disorder or major depressive disorder. These disorders can lead to fighting, stealing, and other negative behaviors.

Drug and alcohol abusers are more prone to engage in risky sexual behavior, which is especially true of adolescents who are likely engaging in sexual activity for the first time.

Unprotected sex is common, leading to higher incidences of sexually transmitted diseases (STDs). In Santa Cruz County and California, the risk of HIV and AIDS is down from 10 years ago.

However, drug-abusing teens and young adults remain at higher risk than those who don't engage in substance abuse. They are also at higher risk for Hepatitis B and C and other blood-borne infections.

Drug Abuse, Learning Issues, and Brain Damage

Drug and alcohol abuse damages short-term memory and can lead to long-term memory problems. This can cause long-term learning problems in teens and young adults.

In some cases, substance abuse masks learning disabilities. These disabilities include:

- dyslexia (general term for disorders that involve difficulty in learning to read or interpret words, letters, and other symbols)
- dyscalculia (a math learning disability that impairs an individual's ability to learn number-related concepts, perform accurate math calculations, reason and problem solve, and perform other necessary math skills)
- dysgraphia (a learning disability that affects writing abilities. It can manifest itself as difficulties with spelling, poor handwriting, and trouble putting thoughts on paper)

Substance abuse may be a way for individuals to self-medicate. For instance, those with undiagnosed ADHD may find certain drugs calm them or help them stay focused.

Drug abuse will continue to mask learning disabilities or other diagnoses from kids in this age group. Others will use drugs to dull their lives' difficulty that may involve family strife, bullying, or fear of failure.

If adolescent drug and alcohol use remains untreated, severe brain damage can occur.

Existing learning disabilities and other problems may become more severe. Over time, brain cells will shrink, further impairing decision-making and emotional control.

Some teens and young adults experience amnesia from drug use. Overdose is common because of adolescents' lack of decision-making skills at this age.

Other health risks include:

- seizures
- coma

potential death

In severe cases, someone may enter into a vegetative state. Some teens and young adults end up in nursing homes, needing full-time round the clock care.

Substance Abuse and Arrests for Adults and Juveniles

- Juvenile arrests had dropped 43 percent nationally in the early part of the decade. However, they are back up with the rise of abuse since 2013.
- Along with increased drug use comes a slight increase in truancy and alcohol or drug-related misdemeanor arrests. Despite an overall decrease in juvenile substance abuse arrests, juvenile detention rates remain high.
- Males and Latinos of both sexes remain overrepresented in California's youth justice system. There is less forgiveness in the judicial system for adult addicts.
- Incarceration is a real consequence of drug and alcohol abuse. It stops many from seeking the help they need.
- In 2012, about 45 percent of bookings into the Santa Cruz County Jail were alcohol-related.
- Many arrestees were dual diagnosis, suffering from mental disorders as well as substance abuse.
- The number of dual diagnosis arrestees has increased since 2012.

Because drug use may mask other disorders, statistics may under-represent the actual numbers.

The Corresponding Rise Of Substance Abuse and STIs

Teens are vulnerable to drug use, but the incidence among Santa Cruz County adults is also high.

Adult alcohol and drug treatment admissions are well above average in Santa Cruz County and have steadily increased since the early 2000s.

Unfortunately, cases of STDs seem to rise with increases in drug use. As of October 2016, cases of chlamydia, gonorrhea, and syphilis have increased.

Adults younger than 35 were particularly at risk; females were most at risk for chlamydia, and men having sex with men were most at risk for syphilis. One congenital case of syphilis was reported in October 2016.

Drug And Alcohol Abuse Statistics For Hospitals

There were about 845,000 drug and alcohol-related emergency department visits nationwide in 2011, according to the Substance Abuse and Mental Health Services Administration (SAMHSA) and the Drug Abuse Warning Network (DAWN).

That number has climbed since, particularly in states like California; more than 400 of those visits involved marijuana, and more than 300 involved alcohol mixed with drugs.

Most people brought to emergency departments for substance abuse are between the ages of 18 and 25.

Of these patients, most receive care due to addiction to marijuana or prescription painkillers.

Heroin—one the most addictive of all drugs—is the next most commonly used drug, with about 228 emergency department visits in 2011.

Hospital Discharges Involving Addiction

Drug-related hospital discharges in Santa Cruz County have been well above the national average for more than a decade.

Although this trend is declining, the rate can be as high as 10 percent of people per 100,000. Adverse events after hospital discharge are common for drug-abuse patients, too.

Adverse events include:

- non-permanent or permanent disability
- several days of ongoing symptoms
- continuing minor symptoms

In 2016, about 19 percent of patients in the US had an adverse event; most were preventable.

Currently, hospital discharge statistics only reflect injuries or illnesses directly attributed to substance abuse.

They do not include dual diagnoses or cases in which substance abuse is partially responsible for the onset of physical symptoms.

Thus, healthcare professionals find it more challenging to diagnose and treat substance abuse patients adequately. Only about 20 percent of drug abusers with health insurance will seek emergency treatment and rehabilitation. Even with insurance, few patients receive follow-up care.

Without adequate follow-up and rehabilitation, these patients are far less likely to stay sober.

Understanding the Drug Problem in Santa Cruz County, California

Several factors are contributing to Santa Cruz County's rise in drug abuse. The area—like other areas that struggle with drug addiction—also faces different challenges. Homelessness and transience are significant factors.

Though working hard to find answers, the county doesn't have the resources it needs to help all who suffer.

Additionally, it seems as if the rise in drug use has spread from those on the street to younger adults—those in high school and the nearby The University of California, Santa Cruz.

Substance abuse disorders and treatment cost Santa Cruz County about \$207 million per year. Only 3.3 percent of that total is spent on treatment.

Treatment quality always needs improvement, and access remains unavailable for a large number of users. Repeat offenders are another huge problem.

Healthcare professionals, drug treatment providers, and police often don't work together—healthcare professionals report treating the same people in their emergency departments, hospitals, and clinics. Many addicts are, sadly, simply lost in the shuffle.

Finally, dual diagnosis—the term used to describe those who have both a mental illness and a substance-abuse disorder—remains an obstacle for many substance abusers in Santa Cruz County.

The high rate of drug incidents involving younger users may be the focus. This might mean older adults who suffer from both mental health issues and substance abuse may not be getting attention or the correct diagnosis.

Identifying and Solving Substance Abuse in Santa Cruz County

The Santa Cruz County Health Services Agency and Board of Supervisors are enacting a multi-phase plan to help solve the area's drug and alcohol issues.

Strategic planning efforts began in June 2013. Phase 1, which started December 1 of that year, included gathering community input and identifying key issues, such as commonly used drugs and treatment access.

With this information, Santa Cruz County HSA was able to propose workable goals and outcomes.

Phase 2 began in February 2015. Its focus was reporting on current substance abuse disorders and evaluating current treatment programs.

During this phase, changes to the Drug Medi-Cal (DMC) program were proposed and made to provide more people with affordable treatment.

Short-and long-term financing for treatment facilities and other programs was examined during Phase 3, April – May 2015.

Better Treatment Opportunities For Substance Abuse

The good news is that people are seeking treatment. Since the HSA plan implementation, most treatment facilities around Santa Cruz County have increased their clientele.

Prevention coalitions, such as the United Way of Santa Cruz, also have seen an increase in

funding, which goes a long way to help those who are addicted and can't afford help.

Along with substance abuse treatment funding, mental health treatment funding has increased in Santa Cruz County this past year.

Finding Help for Drug Addiction in Santa Cruz County, California

Despite the risks associated with drug and alcohol use, many people do not receive treatment or even ask for help.

Across the US, statistics indicate 85 percent of drug users won't ask for the help they need.

Often, those addicted to drugs are reluctant to request help due to fear of legal repercussions. Even for those fighting addictions to legal substances, such as alcohol, there is still a stigma that prevents many from seeking help.

In other cases, though, there is a more concrete reason for not finding the appropriate help. Many drug users don't have health insurance that would cover addiction treatment.

Though the Affordable Care Act offers some help, many addicts have no type of insurance. Only about 35 percent of addicts without health coverage will ever seek treatment.

Severe drug and alcohol abuse impede the ability to meet this requirement. Under or unemployed substance abusers may not receive enough aid to pay for rehabilitation programs. The legal residency requirement may prevent some people from getting help.

Seeking Treatment for Substance Abuse and Alcohol Abuse in Santa Cruz County

Drug and alcohol abuse rates in Santa Cruz County are now at astounding levels, and residents of the area are eager to seek help to end their addictions.

At Elevate Addiction Services, we invite members of the Santa Cruz County community that are struggling with substance abuse, chemical dependency, and alcohol abuse to contact us and allow us to show you that there is hope for recovery.

We will work with you to achieve your recovery goals.

WARNING: This message is from an external user. Confidential information such as social security numbers, credit card numbers, bank routing numbers, gift card numbers, wire transfer information and other personally identifiable information should not be transmitted to this user. For question, please contact the Morgan Hill IT Department by opening a new helpdesk request online or call 408-909-0055.

From: Ronald Kirkish <hykirkish@charter.net>

Sent: Thursday, April 1, 2021 2:29 PM

To: Christina Turner <Christina.Turner@morganhill.ca.gov>; Rich Constantine <Rich.Constantine@morganhill.ca.gov>; Yvonne Martinez Beltran <yvonne.martinezbeltran@morganhill.ca.gov>; Rene Spring <Rene.Spring@morganhill.ca.gov>; John McKay <john.mckay@morganhill.ca.gov>; Shane Palsgrove <Shane.Palsgrove@morganhill.ca.gov>; Gino Borgioli <Gino.Borgioli@morganhill.ca.gov>
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Subject: Medical Associations [SCMA/AMA] wholeheartedly disagree with Morgan Hill's Apothecary owner, Ms. Malisha Kumar, regarding the compassionate use of medical marijuana

Dear All,

The owner of the owner of "The Apothecary at 875 Jarvis Drive #140 - Malisha Kumar" in Morgan Hill appears to be one of the more significant pot-advocates behind the scene's at Morgan Hill's City Hall and arguably carries significant influence with some of Morgan Hill's decision makers who rein on the City Council, as evidenced by two Council members third attempt to place the sales, distribution and growing of marijuana on the agenda for the city council to consider once again.

From information gleaned from her own "Apothecary Website, '**Morgan Hill...The Time is Now**' - November 3, 2019", Ms. Kumar claims she worked as a professional "**Bud Tender**" at a marijuana dispensary and during the time she was trimming marijuana buds there she allegedly asserts she gained enough of a **medical education** saying "**she saw a need to educate the public on the medical uses of cannabis**"

However, unlike Ms. Kumars recommendations, you can see from this letter from the South Carolina Medical Association [SCMA], dated March 30, 2021 (three days ago) that the SCMA & AMA [American Medical Association] do "NOT" recommend the "compassionate use of marijuana" for medical purposes, and they list the reasons for their reluctance.

I strongly urge those on the Bcc to share this information with others within your spheres of influence in the City of Morgan Hill.

For your consideration and B/r,

Ronald L. Kirkish



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Michael T. Finch, Jr., MD
President

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Christopher A. Yeakel, MD
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Chairman of the Board

March 30, 2021

Chairman Daniel Verdin, III Senate Medical Affairs Committee 412 Gressette Bldg.
Columbia 29201

Re: Senate Bill 150, the Compassionate Care Act

Dear Senator Verdin:

The South Carolina Medical Association (SCMA) writes to oppose Senate Bill 150, the Compassionate Care Act ("CCA"). Despite our position, the perception that physicians are not compassionate when it comes to patients' needs could not be further from the truth. Physicians care about patient safety, which is why this issue creates such passionate debate. The opposition from the SCMA stems from asking physicians, without the benefit of adequate clinical or academic research and/or FDA approval, to be the legal access point for marijuana and its derivatives in South Carolina. The American Medical Association (AMA) has a similar stance, urging legislatures to "delay legalizing cannabis until further research is completed on the public health, medical, economic, and social consequences of its use." (August 29, 2019, Pres. AMA Dr. Harris)

Physicians recommend treatments for patients based on clinical data explaining the efficacy in treatment, data showing usage and desultory, and data on potential side effects. Marijuana is a plant with over 400 compounds, with only one component being tetrahydrocannabinol (THC). This is what makes approval of marijuana in medicine form so difficult. This is not to say it is not possible; the FDA has approved a cannabis-derived drug product, Epidiolex (cannabidiol), and three synthetic cannabis-related drug products, Marinol (dronabinol), Syndros (dronabinol), and Cesamet (nabilone). We stand in full support of an FDA approved process that will provide clinical testing and medical derivatives physicians can prescribe.

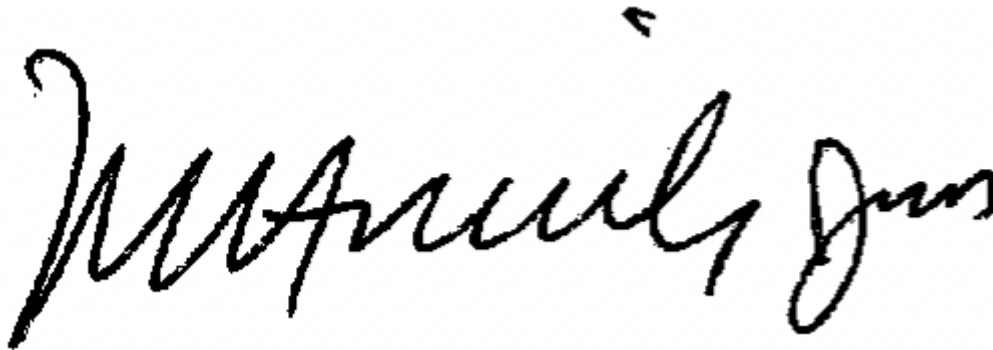
Senate Bill 150 provides that physicians and podiatrists may "recommend" marijuana for medical use. Aside from the unusual addition of podiatrists as an access point, providing a physician as the only other access point provides a false sense of security that the marijuana is a true medication and regulated. South Carolina's regulation of the marijuana plant will not equate to an FDA process, and does not provide the clinical evidence physicians rely on in prescribing medication. However, many citizens will believe that because it is accessed by a physician it is a safe, effective, clinically proven drug.

Chairman Daniel Verdin, III March 30, 2021
Page 2

We appreciate that many people are in support of medical marijuana. However, as we saw with the opioid epidemic, there can be deadly consequences even when medications are properly tested. The concentration of the psychoactive component THC is perhaps 10 times the concentration of marijuana from the 1970s, and it is a very addictive substance, affecting the brain's reward system just as other addictive drugs do. The newspapers show story after story of the problems other states face from allowing marijuana to be used as medicine. We ask that members consider that the two groups in charge of controlling medical marijuana, physicians and the South Carolina Law Enforcement Division (SLED), stand in opposition to passage of this bill.

Sincerely,

Michael T. Finch, Jr., MD President

A handwritten signature in black ink, reading "Michael T. Finch, Jr." in a cursive script. The signature is written in a fluid, connected style with a large initial 'M' and a prominent 'F'.

cc: The Honorable Harvey S. Peeler, Jr.

From: [Ronald Kirkish](#)
To: [Rich Constantine](#); [Yvonne Martinez Beltran](#); [Rene Spring](#); [John McKay](#); [Shane Palsgrove](#); [Gino Borgioli](#); [Christina Turner](#)
Cc: [Bob Cooke](#); [Ladera Grill Dan](#); [Ladera Grill Morgan](#); [Terry Ratto](#)
Subject: From Argentine Shrine to Marijuana Corridor: The Story of Itatí (especially for Constantine, Spring and Borgioli)
Date: Friday, March 19, 2021 9:26:00 AM
Attachments: [1F69D574-CF37-4292-A3B3-5FC4BE67C553.jpeg](#)

Dear All,

This is a story about a “corrupt” **mayor** and **deputy mayor** who turned their once beautiful city [of Itatí, Argentina] into a criminal trafficking hub for spreading the drug cartels marijuana and other illegal drugs far and wide throughout South America.

This information is especially for the attention of: **Mayor Rich Constantine**, **Councilman Rene Spring** and **Councilman Gino Borgioli** (this will be the “**third**” attempt for Constantine and Spring to turn the city of Morgan Hill's beautiful wholesome culture into a culture of drug abuse and crime; becoming a hub of drug gang/cartel criminal activity for the South Santa Clara County communities of Gilroy, San Martin and of course Morgan Hill; hardly a neighborly thing to do.

B/r,

Ronald L. Kirkish

From Argentine Shrine to Marijuana Corridor: The Story of Itatí

<https://insightcrime.org/investigations/argentine-shrine-marijuana-corridor-story-itati/>

[ARGENTINA](#)/ 16 MAR 2021 BY JOSEFINA SALOMÓN*

An ambitious mayor, a well-connected deputy mayor, dirty cops, a corrupt judge, and a lot of marijuana. This is the story of Itatí, the sleepy town that went from religious hub to key stop on Argentina’s marijuana highway, and the mayor that helped make it happen.

The tears running down Natividad Terán’s face were a telling sign that this was not just another political scandal.

“People are praying for me,” Terán [told](#) a TV reporter, visibly shaking.

Terán was the mayor of Itatí, a small town of some 9,000 people on the northern corner of the Corrientes province, on the banks of the Paraná River. On the other side of the river is Paraguay, the top marijuana producer in Latin America and, depending on who you asked, the source of Terán’s pain or his power.

It was April 3, 2017. Just a couple of weeks earlier some 700 members of Argentina's gendarmerie [had rained on Itatí](#). The "Sapucay Operation," as it was called, was nothing short of an action-packed blockbuster. A special unit carried out 43 separate searches in residences where they found drugs, arms, mobile phones and cash in numerous currencies. They arrested 15 individuals suspected of being part of a sophisticated crime organization.

Terán was among them, accused of being the most important political cog in a translational criminal organization that used the town as its center of operations to move tons of drugs every year from Paraguay to Argentina's capital, Buenos Aires, and other cities.

Logically, the story was [top news](#) in Argentina. And so Terán was crying, protesting his innocence.

"I'm a nobody in this whole issue. I'm just a mayor that has no real power in these issues, but I trust justice will be served," [he told America TV](#), tears running down his face.

Small Towns, Big Networks

Itatí was long known for its imposing cathedral in the center of town, which houses the Our Lady of Itatí. The cathedral put the small border town on Argentina's religious map. Hordes of people travel to Itatí each year to visit the shrine, an annual pilgrimage slowed only by the coronavirus pandemic.

But Itatí also has a less desirable reputation for its role in Argentina's drug trafficking. The town is one of the many places where illegal drugs enter Argentina, a country that is one of the largest drug consumer markets in the world and is [a transit route](#) for some of the cocaine headed to Europe and other destinations.

Much of these drugs come from or via Paraguay. Argentina and Paraguay are separated by the Paraguay and Paraná rivers. Authorities claim there is little to no drug trafficking via rivers, but the lack of policing in the waters that separate the riverbanks of Paraguay and Argentina makes it relatively easy to smuggle anything.

And smugglers do, from clothes and electronics to illegal cigarettes. A number of journalists and experts interviewed in both countries also said vast quantities of drugs are smuggled along these fluvial highways, navigable all year round. Indeed, [seizures in Europe](#) indicate that large cocaine shipments have left from Asunción, moved along the Paraguay River to the Paraná River, and then shipped from Buenos Aires ports or Montevideo.

Further west, along the Bolivian border, cocaine trafficking is even more prolific. In Salta, along the so-called dry border, the Loza family began moving small amounts of cocaine in the 1980s. By the 1990s, the Lozas were wholesalers in Buenos Aires, and by the 2000s, they had begun moving cocaine to Europe on cargo ships via the "rip-on rip-off" method – sneaking drugs into containers without top-level collusion from the ship.

Alongside them was the Castedo clan. The Castedos acquired land on both sides of Salta's dry border in the city of Salvador Mazza and smuggled drugs through their private estates. Delfín Castedo, referred to as the "boss" of the border by media, [reportedly owned](#) as much as 25,000 hectares just on the Argentine side. Like the Lozas, the Castedos eventually moved to [shipping cocaine to Europe](#). Several sources insisted that the group was not the owner of the merchandise but was hired by European-based drug traffickers.

Like Itatí, Salta provided the perfect setting for these clans to grow. The Aguas Blancas border crossing, in the municipality of Orán, is a known [contraband hotbed](#) where large swathes of the population live off illegal economies. As much as a third of locals could live off contraband, a local [prosecutor estimated](#) in 2017.

Argentine counternarcotics officials told InSight Crime that drugs are smuggled by land through the Aguas Blancas and the Professor Salvador Mazza dry border areas in Salta, and in the La Quiaca area in the neighboring province of Jujuy in lesser quantities. Cocaine is also trafficked in large volumes by aerial drops in a zone that covers southern Salta and the northern part of the neighboring Santiago del Estero province, they added.

Along the northeastern border, marijuana is trafficked more often. One [recent report in La Nación](#) said cargo operators receive as much as \$10,000 to move marijuana along the riverine highways. In Argentina, where marijuana use has nearly doubled in the last 20 years, the drug could be more lucrative than cocaine.

It is little surprise then that around 20 percent of all illegal marijuana produced in Paraguay is transported to Argentina, much of it through towns like Itatí. Along the river, a collection of small islands scattered across the approximately three kilometers that separate both shores make for useful stop-off points. But once the drugs are in Argentina, they need storage and transport networks. That, judicial investigators say, is where politicians and small-town bureaucrats came into the picture.

The Itatí Network

Perhaps the most remarkable thing about Natividad Terán is that, until the day of his arrest, he [wasn't particularly remarkable](#). Before launching his political career as a local city councilor — an entry gate for politicians in many small towns across Argentina — the Paraguay-born 54-year-old turned Argentine national owned a local hardware store.

“Political figures from small border towns close to Paraguay are always under suspicion, but there was nothing that pointed to Terán in particular. He was a bit of an unknown figure until all this,” a former prosecutor in the case said.

His 12 years as city councilor for a Peronist political faction during the administration of César Torres were also unremarkable. Torres, who was from the center-right New Party (Partido Nuevo – PANU), was mayor of Itatí for [more than two decades](#) and dominated the local political scene.

But Terán, who was known more popularly by his nickname “Roger,” had higher ambitions, even if he didn’t show it. And so, prior to municipal elections in September 2013, he brokered a coalition with PANU and another party, Crecer con Todos (Grow with Everyone), to back his candidacy for mayor, which he won with more than [50 percent of the vote](#).

Then he set to work with his new colleagues. One of them was Fabián Aquino of the Crecer con Todos party, who became his deputy mayor. The two were close, investigators later said, and would eventually become the foundation of the drug trafficking scheme. (For his part, Aquino claimed Terán promised him a level of political participation that never materialized and that they “hardly spoke.”)

Authorities said Terán also became close with Luis Saucedo, a police inspector, who people referred to as “El Gordo” (the Fat One). Saucedo had begun working with City Hall in 2012, under the Torres administration. And by the time Terán took office, Saucedo already had a reputation for his connection to drug trafficking. Still, Terán left him in his job, perhaps because he was the logistical mastermind of the Argentine side of the network.



In fact, investigators say [it was Saucedo’s network](#) that extended to Paraguay. There, according to an anonymous witness who spoke to Argentine prosecutors, the police inspector worked closely with Hugo and Ariel Arce, brothers who transported marijuana by truck from the north of Paraguay to the city of Ayolas, just upriver from Itatí.

That is where Federico Marín, known as “Morenita” after a type of bait for fishing, would often take over. Marín was famous for his knowledge of the Paraná River and for the [high-quality marijuana](#) he provided his customers. He got the drugs to Itatí, often via speedboat.

“They have everything arranged with people from the coast guard, gendarmerie and the federal and local police. They load (the boats) up 100 meters from the Coast Guard,” one witness [declared](#).

The marijuana that arrived in Itatí was stored in sheds where the network relied on municipal authorities to hide and then move it. Saucedo, for instance, coordinated operations directly with Terán, who then passed on orders to his deputy mayor, Fabio Aquino. Aquino, in turn, was the link to local police Chief Osvaldo Ocampo Alvarenga, who, according to court files, was working with at least two members of Argentina’s Federal Police [stationed in Corrientes](#) and one member of the gendarmerie. They sometimes freelanced, authorities later claimed, stealing and reselling drugs to trafficking groups.

Except for the local priest, who was forced into exile due to [death threats](#), there was little resistance in the town. Money flowed easily, and it was injected into the local economy through car dealerships or horse racing. Even kids were employed as lookouts, their parents unaware or turning a blind eye.

The close family connections also made the network efficient as they ensured loyalty and agile communications. “Fish” was code word for marijuana. They used various species to indicate the quality of the drugs. The “golden key,” federal prosecutors told InSight Crime, was their connection within the top echelons of the judiciary.

Indeed, if anything went wrong, they had at least one judge working with them. Judge Carlos Soto Dávila had been dealing with [drug trafficking cases](#) in the province for more than two decades. The judge, prosecutors said, worked with two of his secretaries and five lawyers who used to represent individuals on drug trafficking charges. Together, they negotiated delays in [investigations](#) or secured reduced sentences in exchange for payments, prosecutors said.

Authorities, for example, say Soto Dávila [helped Saucedo](#) escape prosecution on several occasions. They also noted an anomaly in the statistics: the considerable number of seizures did not match the low number of arrests. One of the lawyers believed to have acted as an intermediary between the judge’s office and criminal groups, who has since become a key witness in the case, said they were frequently asked to “[collect money for the old man](#),” including from those in Terán’s organization.

Eventually, authorities said, the marijuana left the city and was transported to least seven distribution points across Argentina, including important consumption and distribution hubs such as Rosario and the poor neighborhoods in Buenos Aires. In all, investigators think the network was moving as much as 15 tons of marijuana per year worth millions of dollars.

A ‘Nobody’?

It was in Buenos Aires that investigators [caught wind](#) of the network. It happened because they were tracing the origin of the marijuana that three women were selling in a rundown area known as Villa 21. They tapped their phones, which at first led to a number of small wholesalers. Soon after, authorities arrested the women. The arrests and the wiretaps eventually led to the wider network.

The leader, authorities said, was Carlos Alberto Barreiro, a convicted drug trafficker who was operating from his jail cell in Chaco. Authorities said that locals called him “El Patrón,” an homage to a person they described as “the Pablo Escobar of Itatí.”

Barreiro’s connection to Itatí’s City Hall was personal. Deputy Mayor Aquino’s sister, María Emilia Aquino, had two children with Barreiro. Aquino later claimed that after the couple split, he cut all contact with Barreiro. But at some point, the sister got a loan to purchase a drug load, authorities would claim later. The load, they said, was captured and the sister was left owing the criminal group for the lost drugs and her loan.

“I’m not involved in anything strange, and neither is she,” Aquino told the courts, referring to his sister. “Many of these problems are happening because I wanted to become mayor. I used to help everybody, but I never did anything illegal.”

Aquino’s brother, Hernán, was also connected to the network. He was arrested on [drug trafficking charges](#). Judge Soto Dávila released him. One of Aquino’s other sisters was also linked to the network. A local police officer, she was allegedly responsible for alerting drug traffickers about upcoming raids or road checks.

Just what role Terán played in the network is still a matter of debate. Some paint Terán as a pawn in this scheme, and he would later famously say on TV that he was a “nobody.”

“This was a big organization, there is no doubt of that,” a former prosecutor from Corrientes told InSight Crime, speaking on the condition of anonymity because he was not authorized to speak about the case. “The arms they had access to and the kind of boats they used. That shows the power they had. Terán, the members of the security forces, the judge. They were just cogs in that network and paid for their favors.”

But prosecutors say Terán was a key member of the group, providing top-cover for its activities and connections to various parts of the wider network. Authorities also say Saucedo financed Terán’s campaign with drug money.

What’s more, some of Terán’s family were also tied to the scheme, including his daughter and son-in-law. The investigation into the two had begun in 2014, when 188 kilos of marijuana were found in their abandoned car after the car outraced authorities in a chase near Itatí. Both said their car had been stolen and that the drugs were not theirs.

Still, relations between the two became tense in the months afterwards. Authorities knew

because they were monitoring their communications.

“I can destroy your family,” he once told her on the telephone, “because we know where your money comes from.”

To be sure, authorities said the couple had a hard time explaining why they owned several SUVs and had as much as [\\$60,000 in jewelry](#) in the house. [On February 14, 2017](#), Terán’s daughter and son-in-law were arrested.

A week later, Hernán Aquino was arrested again, this time after he and the sister of a local city councilor were stopped on a highway with 500 kilos of marijuana.

The noose was tightening.

‘Operation Sapucay’

Around 5 a.m., on March 14, under the cover of darkness, the first teams of gendarmerie entered Itatí. They set up a communications hub at the entrance to the town, and then they began rustling up civilian witnesses in the neighborhoods where they were staging more than two dozen simultaneous search and seizures.

At 6 a.m., the teams hit 32 houses. In all, over 700 gendarmerie took part in the operation. The haul was monumental: motorcycles, boats, cars, trucks, drugs, weapons and 70 people [arrested](#), among them Mayor Terán, his deputy mayor, Fabio Aquino, and the police chief, Ocampo Alvarenga. In addition, the gendarmerie found marijuana bricks in the local jail cell and in Ocampo Alvarenga’s desk. All three were accused of various [crimes related to drug trafficking](#).

Others initially evaded capture. Even though there was an Interpol arrest warrant and a large reward for information hanging over his head, Saucedo managed to stay off the radar for more than two years until authorities caught up with him in the city of Pilar, Paraguay, where they arrested him in September 2019. They quickly extradited him to Argentina where he is now facing [charges](#) that include international drug trafficking, money laundering and falsification of documents.

Most damning in the case against Saucedo was his patrimony. Although Saucedo was receiving a municipal employee salary that his wife said was 10,000 pesos a month (approximately \$1,000 at the time), he had [23 luxury cars](#) and three properties, among other assets.

Marín also evaded authorities for years. He went into hiding before the first raids took place in Itatí in 2017, and it took authorities more than two years and an intense search across Argentina to find him. They finally caught up with him in October 2018, when he returned to Itatí to visit his five children and his wife, who was under house arrest at the time, serving out her own drug trafficking sentence.

Soto Dávila at first claimed he was innocent and that the charges against him were politically [motivated](#). However, as pressure around him built and after he was indicted in February 2019, he [resigned](#). He is now awaiting trial alongside the two secretaries and five lawyers who worked as [intermediaries](#).

Operation Sapucay was one of many that broke up long-time Argentine border trafficking networks during this same time period. In July 2016, [authorities captured](#) Delfin Castedo, the capo of the Castedo clan. [Other arrests](#) of key members of the organization followed.

In December 2018, [authorities hit](#) numerous Loza clan hideouts and properties, arresting four of the clan leaders. And in September 2019, [authorities seized](#) a record 800 million Argentine pesos from the clan (over \$13 million), 45 buildings and 30 vehicles just in Argentina.

The Never-ending Battle at the Border

Authorities in Argentina see these as success stories in the country's long fight against drug trafficking — an example of the results they yield from long investigations and efficient coordination between governmental institutions. Indeed, the country's Attorney General's Office reported that 40 individuals have already been sentenced in the Itatí case, and 36 more are awaiting trial. This includes Barreiro, who is accused of being one of the main leaders of the organization.

But many battles remain.

“The Itatí case is clearly just the tip of the iceberg,” the former prosecutor from the case told InSight Crime. “The network of connections between politicians, security forces and drug traffickers is a long-dated one and will continue to exist. You can cut some heads off, and others will quickly surface. As long as one has money and territorial control and the other, a need for campaign funds and votes, those relations will continue.”

Still, criminal organizations may be making some slight adjustments. Alfredo Zacarías, a journalist who has been investigating security issues in Corrientes for more than 30 years, said the traffickers are becoming more clandestine, moving drugs, for example, under the cover of darkness rather than during the day as they once did.

Controlling the waterways is extremely difficult at any time, he added, particularly given the limited resources the authorities have at their disposal. He also said that while the organization in Itatí was dismantled, the business hasn't been.

“The problem is that when they (authorities) dismantle an organization, the big bosses move to another area, where they find new partners, so the business continues,” he explained. “Itatí is not an exception. Since the ‘Sapucay Operation,’ everybody says there're no drugs in Itatí, but that is not true. It's just that the dynamics have changed.”

To Zacarías' point, the Paraguayan networks remain very much operational. And groups like the Castedos allegedly keep trafficking [operations going from prison](#). What's more, record loads of marijuana are still [being seized](#) in Itatí, even during the pandemic-induced [lockdown](#).



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From: Ronald Kirkish <hykirkish@charter.net>

Sent: Thursday, April 1, 2021 2:29 PM

To: Christina Turner <Christina.Turner@morganhill.ca.gov>; Rich Constantine <Rich.Constantine@morganhill.ca.gov>; Yvonne Martinez Beltran <yvonne.martinezbeltran@morganhill.ca.gov>; Rene Spring <Rene.Spring@morganhill.ca.gov>; John McKay <john.mckay@morganhill.ca.gov>; Shane Palsgrove <Shane.Palsgrove@morganhill.ca.gov>; Gino Borgioli <Gino.Borgioli@morganhill.ca.gov>

Cc: Matt Wendt <mattwendtsccr@gmail.com>; Chris Borello <Chris@BorelloFamily.com>; Terry Ratto <terry@moollc.com>; Ladera Grill Dan <dan@laderagrill.com>; dave@lokeyfirearms.com; Marsha Edick <marsha@marshaedick.com>; Bob Cooke <sacbob.cooke@gmail.com>; Michael Lancaster <mikelancaster5917@yahoo.com>

Subject: Medical Associations [SCMA/AMA] wholeheartedly disagree with Morgan Hill's Apothecary owner, Ms. Malisha Kumar, regarding the compassionate use of medical marijuana

Dear All,

The owner of the owner of "The Apothecary at 875 Jarvis Drive #140 - Malisha Kumar" in Morgan Hill appears to be one of the more significant pot-advocates behind the scene's at Morgan Hill's City Hall and arguably carries significant influence with some of Morgan Hill's decision makers who rein on the City Council, as evidenced by two Council members third attempt to place the sales, distribution and growing of marijuana on the agenda for the city council to consider once again.

From information gleaned from her own "Apothecary Website, '**Morgan Hill...The Time is Now**' - November 3, 2019", Ms. Kumar claims she worked as a professional "**Bud Tender**" at a marijuana dispensary and during the time she was trimming marijuana buds there she allegedly asserts she gained enough of a **medical education** saying "**she saw a need to educate the public on the medical uses of cannabis**"

However, unlike Ms. Kumars recommendations, you can see from this letter from the South Carolina Medical Association [SCMA], dated March 30, 2021 (three days ago) that the SCMA & AMA [American Medical Association] do "NOT" recommend the "compassionate use of marijuana" for medical purposes, and they list the reasons for their reluctance.

I strongly urge those on the Bcc to share this information with others within your spheres of influence in the City of Morgan Hill.

For your consideration and B/r,

Ronald L. Kirkish



P.O. Box 11188
Columbia, SC 29211
1-800-327-1021
803-772-6783 Fax
www.scmedical.org

Michael T. Finch, Jr., MD
President

John C. Ropp III, MD
President-Elect

Christopher A. Yeakel, MD
Treasurer

M. Mayes DuBose, MD
Chairman of the Board

March 30, 2021

Chairman Daniel Verdin, III Senate Medical Affairs Committee 412 Gressette Bldg.
Columbia 29201

Re: Senate Bill 150, the Compassionate Care Act

Dear Senator Verdin:

The South Carolina Medical Association (SCMA) writes to oppose Senate Bill 150, the Compassionate Care Act ("CCA"). Despite our position, the perception that physicians are not compassionate when it comes to patients' needs could not be further from the truth. Physicians care about patient safety, which is why this issue creates such passionate debate. The opposition from the SCMA stems from asking physicians, without the benefit of adequate clinical or academic research and/or FDA approval, to be the legal access point for marijuana and its derivatives in South Carolina. The American Medical Association (AMA) has a similar stance, urging legislatures to "delay legalizing cannabis until further research is completed on the public health, medical, economic, and social consequences of its use." (August 29, 2019, Pres. AMA Dr. Harris)

Physicians recommend treatments for patients based on clinical data explaining the efficacy in treatment, data showing usage and desultory, and data on potential side effects. Marijuana is a plant with over 400 compounds, with only one component being tetrahydrocannabinol (THC). This is what makes approval of marijuana in medicine form so difficult. This is not to say it is not possible; the FDA has approved a cannabis-derived drug product, Epidiolex (cannabidiol), and three synthetic cannabis-related drug products, Marinol (dronabinol), Syndros (dronabinol), and Cesamet (nabilone). We stand in full support of an FDA approved process that will provide clinical testing and medical derivatives physicians can prescribe.

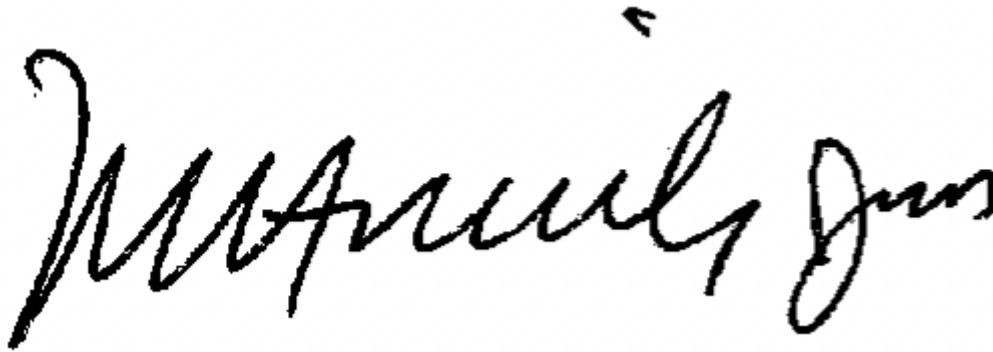
Senate Bill 150 provides that physicians and podiatrists may "recommend" marijuana for medical use. Aside from the unusual addition of podiatrists as an access point, providing a physician as the only other access point provides a false sense of security that the marijuana is a true medication and regulated. South Carolina's regulation of the marijuana plant will not equate to an FDA process, and does not provide the clinical evidence physicians rely on in prescribing medication. However, many citizens will believe that because it is accessed by a physician it is a safe, effective, clinically proven drug.

Chairman Daniel Verdin, III March 30, 2021
Page 2

We appreciate that many people are in support of medical marijuana. However, as we saw with the opioid epidemic, there can be deadly consequences even when medications are properly tested. The concentration of the psychoactive component THC is perhaps 10 times the concentration of marijuana from the 1970s, and it is a very addictive substance, affecting the brain's reward system just as other addictive drugs do. The newspapers show story after story of the problems other states face from allowing marijuana to be used as medicine. We ask that members consider that the two groups in charge of controlling medical marijuana, physicians and the South Carolina Law Enforcement Division (SLED), stand in opposition to passage of this bill.

Sincerely,

Michael T. Finch, Jr., MD President

A handwritten signature in black ink, reading "Michael T. Finch, Jr." in a cursive script. The signature is written in a fluid, connected style with a large initial 'M' and a prominent 'F'.

cc: The Honorable Harvey S. Peeler, Jr.

From: Fawn Myers <[REDACTED]>
Sent: Friday, April 16, 2021 5:40 PM
To: Michelle Bigelow <Michelle.Bigelow@morganhill.ca.gov>
Subject: Agenda for 4/21/21 - On retail cannabis

Dear City Clerk,

I have submitted the following to the Mayor, Mayor Pro Tem, and each council member:

Dear Council Member,

After a thorough discussion of allowing storefront retail of cannabis products in Morgan Hill, the City Council ultimately voted no.

Despite a robust discussion and community engagement on this topic in 2019, a council member has asked that the issue be brought forward again. As with many topics, there are competing interests and facts, and it behooves all of us within the community to ponder the motivation of those who are in favor of retail cannabis.

- **Interest:** Increase local tax base. **Competing facts:** Other communities have NOT experienced an increase in local tax revenue when adjusting for increased security and enforcement costs.
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- **Interest:** Elected officials may want to appease a portion of their constituents. **Competing facts:** Have any of the elected officials received a campaign contribution from the cannabis industry or from individual cannabis business owners who now expect to buy a favorable vote?

I share with you a recent editorial from Denver. Communities are struggling with legalization of cannabis and increased need for services and intervention for who abuse the products. We can learn from these communities. The concluding statement in this article is: "Shutting down the pipeline to our schools is essential for public health and safety."

THE DENVER POST EDITORIAL BOARD on February 28, 2021.

“Colorado doctors say they are seeing an alarming spike in patients suffering psychosis — a break from reality that comes with disorders like schizophrenia — especially in young patients using high-potency marijuana concentrates.

“It’s OK to be skeptical of that anecdote. We were too. After all, marijuana is a natural plant that has been used for centuries as a medicine and for fun. It gives users a mild, mostly benign, high from the compound Delta-9-tetrahydrocannabinol.

“However, reading peer-reviewed research in top medical journals around the world has led us to conclude the risk of high-potency marijuana to Coloradan’s mental health is substantial. Marijuana must be regulated as any other harm-causing food, medicine or recreational drug. Products with high levels of caffeine are regulated for safety. Tobacco products come with warnings about cancer, and flavored cigarettes have long been banned. Grain alcohol like Everclear isn’t sold in grocery stores or convenience stores for a reason.

“And yet, a teen with a medical marijuana card is able to “loop purchase” — the act of going to several stores to purchase the maximum allowable amount multiple times — enough watermelon-flavored concentrate to have his or her entire senior class high for a week.

“Chris Rogers, the medical director of child and adolescent services at The Medical Center of Aurora, has no doubt that high-potency marijuana concentrates are causing psychosis in the adolescent patients he treats.

“ ‘It has not been good for the kids of Colorado,’ Rogers, the past-president of the Colorado Child and Adolescent Psychiatry Society, said. He said patients exhibit extreme paranoia and lose all touch with reality believing doctors and parents are out to get them or that food and water are poison. “There’s no telling who comes back from this and who doesn’t. It can be recurrent, and it tends to get worse.”

“This isn’t your grandma’s joint. This new age remix of chemically isolated THC in a crystal-like or liquid substance — shatter, oil or wax — is heated with a butane torch or vape pen and inhaled. It’s called dabbing. And the products contain 60% to 90% THC, generating a high described as mind-blowing in marijuana publications.

“When Colorado voters approved the sale of marijuana for both medical and recreational use, many of us were sold on it being a holistic remedy for our aches, pains and anxiety. We still believe that is the case for many marijuana products on the market today.

“But for a decade now peer-reviewed research in medical journals has been documenting the prevalence of marijuana use, particularly of these high-potency concentrates, among patients suffering psychosis. Studies in the Lancet Psychiatry, Neuropharmacology, Asian Journal of Psychiatry, American Journal of Psychiatry, The American Journal on Addictions and World Psychiatry, have explored the link.

“There is some research suggesting that the link may be correlated and not causal – meaning those suffering from psychosis may be more likely to use cannabis and other drugs to self-medicate. But one study, in particular, found a higher rate of psychosis in cities with easy access to high-concentrate marijuana in addition to a high rate of concentrates use among those seeking treatment for psychosis.

“Cannabis users need to know the risks. We learned from Big Tobacco the damage of waiting for scientifically proven causation.

“Colorado lawmakers must take action this session. Legislation is being proposed that would cap the potency of marijuana products to something more reasonable like 30%, which is about the most that can be found in the actual non-refined flower product. Critically, the legislation also must

create a shared computer system for tracking purchases across multiple stores to prevent looping. And we must find a way to ensure teens with medical marijuana cards are getting the drug they need for medical purposes and that's all.

"We aren't calling for the recriminalization of these drugs — putting teens behind bars for selling a legal product to their friends would do more harm than good. But shutting down the pipeline to our schools is essential for public health and safety, and there are reasonable measures we can put in place to protect teens."

Respectfully,

Fawn

Fawn Myers
Assistant Superintendent of Human Resources
Morgan Hill Unified School District
15600 Concord Circle
Morgan Hill, CA 95037
408-201-6015 or ext. 51015
MyersF@mhusd.org

Input - Intellection - Learner - Context - Relator

"I define a leader as anyone who takes responsibility for finding the potential in people and processes, and who has the courage to develop that potential." Brené Brown, *Dare to Lead: Brave Work. Tough Conversations. Whole Hearts*

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From: Fawn Myers <[REDACTED]>
Sent: Friday, April 16, 2021 5:40 PM
To: Michelle Bigelow <Michelle.Bigelow@morganhill.ca.gov>
Subject: Agenda for 4/21/21 - On retail cannabis

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From: [Rene Spring](#)
To: [Christina Turner](#)
Subject: Fwd: Capitola cannabis dispensaries
Date: Wednesday, April 14, 2021 4:02:15 PM

FYI

Sent from my iPhone

Begin forwarded message:

From: smalech@gmail.com
Date: March 30, 2021 at 10:11:43 AM PDT
To: Rene Spring <Rene.Spring@morganhill.ca.gov>, John McKay
<john.mckay@morganhill.ca.gov>, Rich Constantine
<Rich.Constantine@morganhill.ca.gov>, Yvonne Martinez Beltran
<yvonne.martinezbeltran@morganhill.ca.gov>, gino.borgiolli@morganhill.ca.gov
Subject: Capitola cannabis dispensaries

Dear City Council,

I spoke with Chief Andy of the City of Capitola police department. Capitola has two cannabis dispensaries, and their town is similar to Morgan Hill in that it has a somewhat conservative population. My conversation with Andy covered many aspects of Capitola's dispensary experience. The summary of our conversation was that the dispensaries were an overall positive addition to the community. They did see an increase in revenue, however not as much as some people had hoped. Also the related crime was relatively small - a break-in (and I don't think any cannabis was taken), and no real loitering, etc.. Capitola did much in advance to mitigate potential problems with dispensaries. I would highly recommend our City representatives talk with their government officials and police regarding how this could be a positive experience for Morgan Hill if it does get approved.

I recommend the City of Morgan Hill contact (as a team) not just Andy, but members of their Council, and visit their dispensaries.

Regards,

--

Steve Malech

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From: [Fawn Myers](#)
To: [Michelle Bigelow](#)
Subject: Agenda for 4/21/21 - On retail cannabis
Date: Friday, April 16, 2021 5:40:57 PM

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“However, reading peer-reviewed research in top medical journals around the world has led us to conclude the risk of high-potency marijuana to Colorado’s mental health is substantial. Marijuana must be regulated as any other harm-causing food, medicine or recreational drug. Products with high levels of caffeine are regulated for safety. Tobacco products come with warnings about cancer, and flavored cigarettes have long been banned. Grain alcohol like Everclear isn’t sold in grocery stores or convenience stores for a reason.

“And yet, a teen with a medical marijuana card is able to “loop purchase” — the act of going to several stores to purchase the maximum allowable amount multiple times — enough watermelon-flavored concentrate to have his or her entire senior class high for a week.

“Chris Rogers, the medical director of child and adolescent services at The Medical Center of Aurora, has no doubt that high-potency marijuana concentrates are causing psychosis in the adolescent patients he treats.

“ ‘It has not been good for the kids of Colorado,’ Rogers, the past-president of the Colorado Child and Adolescent Psychiatry Society, said. He said patients exhibit extreme paranoia and lose all touch with reality believing doctors and parents are out to get them or that food and water are poison. “There’s no telling who comes back from this and who doesn’t. It can be recurrent, and it tends to get worse.”

“This isn’t your grandma’s joint. This new age remix of chemically isolated THC in a crystal-like or liquid substance — shatter, oil or wax — is heated with a butane torch or vape pen and inhaled. It’s called dabbing. And the products contain 60% to 90% THC, generating a high described as mind-blowing in marijuana publications.

“When Colorado voters approved the sale of marijuana for both medical and recreational use, many of us were sold on it being a holistic remedy for our aches, pains and anxiety. We still believe that is the case for many marijuana products on the market today.

“But for a decade now peer-reviewed research in medical journals has been documenting the prevalence of marijuana use, particularly of these high-potency concentrates, among patients suffering psychosis. Studies in the Lancet Psychiatry, Neuropharmacology, Asian Journal of Psychiatry, American Journal of Psychiatry, The American Journal on Addictions and World Psychiatry, have explored the link.

“There is some research suggesting that the link may be correlated and not causal – meaning those suffering from psychosis may be more likely to use cannabis and other drugs to self-medicate. But one study, in particular, found a higher rate of psychosis in cities with easy access to high-concentrate marijuana in addition to a high rate of concentrates use among those seeking treatment for psychosis.

“Cannabis users need to know the risks. We learned from Big Tobacco the damage of waiting for scientifically proven causation.

“Colorado lawmakers must take action this session. Legislation is being proposed that would cap the potency of marijuana products to something more reasonable like 30%, which is about the most that can be found in the actual non-refined flower product. Critically, the legislation also must create a shared computer system for tracking purchases across multiple stores to prevent looping. And we must find a way to ensure teens with medical marijuana cards are getting the drug they need for medical purposes and that’s all.

“We aren’t calling for the recriminalization of these drugs — putting teens behind bars for selling a legal product to their friends would do more harm than good. But shutting down the pipeline to our schools is essential for public health and safety, and there are reasonable measures we can put in place to protect teens.”

Respectfully,

Fawn

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Input - Intellection - Learner - Context - Relator

“I define a leader as anyone who takes responsibility for finding the potential in people and processes, and who has the courage to develop that potential.” Brené Brown, *Dare to Lead: Brave Work. Tough Conversations. Whole Hearts*

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Subject: Marijuana and the Workplace; a true story
Date: Saturday, March 20, 2021 6:57:07 AM

Marijuana and the Workplace; a true story

During the early 1980's, marijuana's THC was much weaker (~2%) than today's which can range from 14% to over 80%. But even at 2%, marijuana abuse in the work place was causing a lot of problems for the semiconductor industry.

MANNY

As a Thin Film's process engineer and working at National Semiconductor (NSC) in the early 1980's at the time, I was asked to take over the Vapox Process as part of my Thin Films engineering responsibility's. The process was used to deposit a extremely thin layer (2um) of SiO2 (glass) in-between metal layers as a interlayer dielectric, and then as a cap layer over the whole wafer to protect the wafer from contamination during further processing to cut the wafer up into individual discrete integrated circuits.

Along with inheriting the Vapox process I inherited "**Manny**". Manny was young and a giant of a man and you didn't want to cross him; especially when you are only 5 foot 4 and 3/4in in height and weigh 145 pounds soaking wet.

Manny's job was to routinely clean the Vapox machine of the built up SiO2 which meant taking it apart and etching the parts in Hydrofluoric (HF) acid and rinsing in Deionized water for a few hours and then allowing the parts to dry before re-assembling.

While waiting for the parts to dry and putting the Vapox machine back together, Manny would go out to his car in the parking lot and smoke a couple of joints of marijuana.

Even though he was high as a kite, Manny could disguise his incapacitation pretty well except for the reeking smell of marijuana from his cloths underneath his cleanroom suit.

When he reassembled the machine, he would forget how the gas dispersion tubes were suppose to go back in (with the holes pointing up) and would install them with the holes pointing down. This was found when we ran a test to check uniformity of deposition and the test results came out bad, very bad. This meant the system had to be torn back down and reassembled properly which extended the downtime for when the system couldn't used for production; a very costly enterprise; when product is forced to pile up and waiting to be processed.

When discovering he had installed the gas distribution tubes incorrectly, he stated, "**I will never do that again**", but unfortunately it did happen again on at least 3 more occasions and yes, he was stoned on every occasion.

Unfortunately for Manny, we eventually had to write him up and let him go and I heard he soon found another job as a bouncer at the “Pink Poodle” in San Jose, and he was very successful, according to his sister who also work at NSC.

When we hired a person to replace Manny, the company initiated the stipulation that a person must pass a drug test as a condition of employment.

This was when the strength of the THC for marijuana was only 2%....can you imagine what the today’s strength does to the brain and the havoc it is causing for the workforce for companies trying to find and hire folks who can pass a drug test?? Pretty hard.

And then you have to worry and wonder about a potential future President of the United States [Kamala Harris] who is a ardent advocate for marijuana and a self identified user.

And now you know a little about why I am so against the abuse of marijuana.

B/r,

Ronald L. Kirkish

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Subject: Marijuana and today's violence/anarchy
Date: Thursday, March 25, 2021 8:52:03 AM
Attachments: [2020 Marijuana and Violence.pdf](#)
[marijuana-violence-and-law-2017.pdf](#)

Dear All,

If you took the time to watch NIH/NIDA Director Nora Volkow's video's that I just sent you regarding how marijuana abuse permanently destroys very important components of the brain, the following articles (linked below) will make more sense why we are seeing so much violence and anarchy in our nation today; mostly perpetrated by the youth of our nation.

For your consideration & B/r,

Ronald L. Kirkish

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Review

A Review of Cases of Marijuana and Violence

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Abstract: Marijuana is the most consumed illicit drug in the world, with over 192 million users. Due to the current legalization push of marijuana in the United States, there has been a lack of oversight regarding its public health policies, as marijuana advocates downplay the drug's negative effects. This paper's approach is from a public health perspective, focusing specifically on the cases of violence amongst some marijuana users. Here, we present 14 cases of violence with chronic marijuana users that highlight reoccurring consequences of: marijuana induced paranoia (exaggerated, unfounded distrust) and marijuana induced psychosis (radical personality change, loss of contact with reality). When individuals suffering from pre-existing medical conditions use marijuana in an attempt to alleviate their symptoms, ultimately this worsens their conditions over time. Although marijuana effects depend on the individual's endocannabinoid receptors (which control behavioral functions, like aggression) and the potency level of tetrahydrocannabinol (THC) in the drug, scientifically documented links between certain marijuana users and violence do exist. Wider public awareness of the risks and side effects of marijuana, as well as a more prudent health policy, and government agency monitoring of the drug's composition, creation, and distribution, are needed and recommended.

Keywords: marijuana; cannabis; tetrahydrocannabinol; THC; violence; law; paranoia; delusions; psychosis; public policies

1. Introduction

In the United States, ten states have legalized the recreational use of marijuana and over 20 states have decriminalized the recreational use of it. Recent reports suggest, however, that the increase of the recreational use of marijuana is causing detrimental effects to individuals, as well as the society as a whole [1–3]. These effects include, but are not limited to, the increase of violence, the increase of thriving underground marijuana markets, and increase in car accident claims after the legalization of marijuana where the recreational use of marijuana was legalized [1–3]. This is caused by lack of oversight. Marijuana is being legally sold with high THC concentration levels without taking into account its addictive qualities and adverse effects. On the other hand, and contrary to popular belief, marijuana is still illegal in the Netherlands and it is decriminalized. However, the consumption and storage of marijuana are limited by law and the approach taken by the Netherlands is to decriminalize the drug in order to be able to help individuals struggling with marijuana use. This prudent oversight has resulted in a decreased in violence and people are able to get the care they need to deal with addiction and become less prone to violence [1–3].

Furthermore, the consumption of marijuana is associated with an increase in violent behavior over the course of an individual's lifespan, a high risk of psychosis for frequent users, an increase

of cardiovascular diseases, and deterioration in health for individuals who have pre-existing mental health issues such as Post Traumatic Stress Disorder, social anxiety, and depression [4–6].

According to research studies, marijuana use causes aggressive behavior, causes or exacerbates psychosis, and produces paranoia. These effects have been illustrated through case studies of highly publicized incidents and heightened political profiles.

These cases contain examples of repeated illustrations of aggression, psychosis and paranoia by marijuana users and intoxication. Ultimately, without the use and intoxication of marijuana, the poor judgment and misperceptions displayed by these individuals would not have been present, reducing the risk for actions that result in senseless deaths.

Import to these assertions, is that the current marijuana is far more potent in THC concentrations, the psychoactive component. Accordingly, and demonstrated in direct studies, more potent marijuana results in a greater risk for paranoid thinking and psychosis. In turn, paranoid behavior increases the risk for paranoid behaviors and predictably associated with aggressive and violent behaviors.

1. Marijuana use causes violent behavior through increased aggressiveness, paranoia, and personality changes (more suspicious, aggressive, and anger).
2. Recent illicit and “medical marijuana” (especially grown by care givers for medical marijuana) is of much high potency and more likely to cause violent behavior.
3. Marijuana use and its adverse effects should be considered in cases of acts of violence as its role is properly assigned to its high association.
4. Recognize that high potency marijuana is a predictable and preventable cause of tragic violent consequences.

2. Case Presentation

2.1. Marijuana Violence

On March 13, 2019, Anthony Comello admitted to, and subsequently was charged for, the killing of Frank Cali, a senior leader of the Gambino family in Staten Island, New York. Both men were allegedly having an altercation over Comello’s romantic interest on one of Cali’s relatives. Although Comello had no previous criminal encounters with law enforcement, reports suggest that he drew the attention of authorities by acting strangely in a federal courthouse when he offered to perform a citizen’s arrest on New York City’s Mayor, Bill De Blasio. Previously, Comello sought a U.S. Marshal to inquire how to perform a citizen’s arrest on the United States Speaker of the House, Nancy Pelosi. Comello admitted that, at the time of Cali’s killing, he was high on marijuana and shot Cali because he feared that the senior leader had a gun and would shoot him during their altercation [4,7].

On February 10, 2019, a man killed his 13-year-old nephew with a knife in Rustavi, Georgia. The man had a history of marijuana use. For days leading up to the killing, he was complaining about having dizziness, headaches, general weakness, nausea, and insomnia. He would also occasionally suffer from anxiety, irritability, and loss of appetite. His wife stated that he consumed and was under the influence of marijuana, which made his symptoms worse. The day before the killing, he tried to go to a clinic. However, the clinic rejected treatment by telling him to go to a psychiatric hospital. However, under the influence of drugs, he simply went home hours before killing his nephew [8].

On February 1, 2018, Nikolas Cruz killed 17 students and staff at the Marjory Stoneman Douglas High School in Parkland, Florida, and injured 17 others. Cruz was diagnosed as developmentally delayed at age three and had numerous disciplinary issues dating to middle school. From a young age, he started consuming marijuana heavily. He accounts that he would frequently “hear demon voices” and would consume large amount of marijuana to try and silence those voices. He also attempted suicide. During an interview after his mass shooting, he stated that he used “a lot of marijuana” as well as prescription tranquilizer Xanax [9,10].

On November 5, 2017, Devin Patrick Kelley carried out the deadliest mass shooting in Texas’ history, resulting in the death of 27 people and injuries to 20 others, by opening fire at worshippers

who were attending regular Sunday Service at the First Baptist Church in Sutherland Springs. Kelley was later shot by bystanders and killed during a high-speed chase with law enforcement agencies. The autopsy on Kelley revealed that toxicology tests detected marijuana and anti-anxiety drugs in his system. A report from the Federal Bureau of Investigation revealed multiple past incidents where Kelley also been under the influence of marijuana. Kelley's first on-record interaction with law enforcement authorities was when he was arrested for possession of marijuana and, subsequently, expelled from his high school. Since then, the record shows that Kelley started using marijuana frequently, as well as developing mental health issues that would lead him to have problems in his employment with the United States Air Force and multiple instances where he abused his step-son and his wife at the time [11,12].

On May 22, 2017, a suicide bomber, Salaman Abedi, detonated an explosive device in an area of the Manchester Arena, United Kingdom. The blast killed over 20 people and injured over 100 others. Evidence shows that, from a very young age, Abedi was a "party animal" who heavily consumed marijuana. Furthermore, he was described as a person who would start fights in the street for no reason, would act rude, and would refuse to do his homework in school. He was also described as a "very slow, uneducated and passive person" who displayed aggressive tendencies. Eventually, he began shutting himself off from other people, started becoming more violent, and started showing paranoia by making statements against western societies and hanging out with dangerous crowds. Evidence suggests that this paranoia, furthered with aggressive tendencies, led to Abedi's suicide bombing attack that day [1,13].

On May 18, 2017, Richard Rojas purposely drove a car along three blocks of pavement in New York's Times Square, killing a teenager and injuring 22 other people. Evidence indicates that Rojas was a heavy marijuana user. He admitted on the consumption of spiced-up marijuana right before committing the attack. Further, the record show that Rojas suffered from paranoia and hallucination, which have led him to make odd statements and partake in actions that negatively affected him in the work place or while interacting with others. Paranoia and hallucination caused him to "hear voices" that led him to commit that attack [2,14].

On November 23, 2016, Arcan Cetin carried out a mass shooting that killed five people and injured many others at the Cascade Mall in Washington. Evidence indicates that Cetin was a heavy marijuana consumer. Further, he had a past of violent behavior, with some incidents including the consumption of marijuana. Although doctors prescribed him medicine for Attention Deficit Hyperactivity Disorder and other mental health issues such as Post Traumatic Stress Disorder, anxiety, and depression, he stopped taking the medicine and substituted it with by excessively consuming marijuana. This led to aggravate his mood swings and being more violent. Before the shooting, he had threatened an ex-girlfriend who lived out of state. Evidence indicates that at, while committing the attack, Cetin was shouting a woman's name [15–17].

On July 26, 2016, Satoshi Uematsu stabbed to death at least 19 people and injured at least 26 others at a care facility in Sagamihara, Japan. Months prior the shooting, Uematsu suddenly started talking and acting strangely to his coworkers, who feared he could harm someone. Consequently, Uematsu tested positive for marijuana and was diagnosed with marijuana-induced psychosis and paranoid disorder after he delivered an ominous euthanasia letter to a Japanese House of Representative and telling his co-workers and the police that he intended to kill disabled people. Although he planned the attack in detail, evidence suggests that he later seemed to showed remorse and stated that "There was something wrong with [him]". These kinds of behaviors suggest that he was suffering from psychosis and paranoia since he was in the delusion that his acts would contribute to the Japanese society and the world [18,19].

On November 27, 2015, Robert Dear killed three people and injured nine others when he carried out a mass shooting in a Planned Parenthood clinic in Colorado Springs. Dear, along with many other users, moved to Colorado after the state legalized the recreational use of marijuana. Dear was a heavy user who was described by family and friends as "an angry and occasionally violent", and "deeply

disturbed”, individual who suffered from paranoia and mood swings. Moreover, he was described as a lonely religious extremist who had a history of domestic violence against his ex-wives, who gambled, and who committed adultery on multiple occasions. About a year before the shooting, he moved to Colorado where he lived in dire conditions at a squalid trailer without running water or electricity [20–22].

On July 16, 2015, Muhammad Youssef Abdulazeez killed five people and injured a couple of others in his drive-by shooting at a military recruiting center in Chattanooga, Tennessee. Prone to depression and manic episodes, he started smoking marijuana heavily in high school. This addiction was going on for many years and led his mental state to deteriorate further and cause him to fail a drug test at work. Further, he started writing suicidal notes to himself and was pulled over by a police officer for driving under the influence of marijuana and alcohol. Up until the shooting, evidence indicates that Abdulazeez had a hard time keeping a job because of his manic depressive/bipolar disorder and drug use [23,24].

On June 17, 2015, 21-year-old Dylan Roof murdered nine people who were attending a prayer service in a Church in Charleston, South Carolina. He claimed that his intentions were to start a race war. His acts were preceded by years of drug abuse. Reports reveal that Roof’s drug abuse started when he was 12 years old when he would smoke marijuana three times a day. When he was 16 years old, he tried to stop smoking marijuana after telling people that his daily marijuana usage caused him to be paranoid and hear voices. According to experts, Roof started suffering panic attacks when he was 16. Nonetheless, multiple accounts claim that he kept smoking marijuana and started abusing other drugs and alcohol. During his arrest for the Charleston shooting, Roof told police officers that he abused drugs before committing such heinous act [5,25,26].

On August 9, 2014, Michael Brown was fatally shot after a physical altercation with a police officer in Ferguson, Missouri. The autopsy and toxicology report revealed that Michael Brown had THC concentration of marijuana in his blood and urine. He had five nanograms of THC on his system, which causes approximately the same level of impairment as a 0.08 percent of blood alcohol level. That much THC notably impairs someone’s judgment and perception of the surrounding environment, which may lead to anxiety and paranoia. Evidence indicates that Brown tried to reach for the officer’s gun during the altercations, which led to the officer shooting at him in close range. Thus, evidence suggests that Brown’s behavior was most likely caused by paranoia [27,28].

On April 15, 2013, Dzhokhar Tsarnaev and his brother Tamerlan, killed three people and injured over 250 by detonating homemade pressure cooker bombs near the finish line at the Boston marathon. Both brothers were heavy marijuana users since they were young teenagers. Tamerlan was killed in a police shootout following the bombings and Dzhokhar was eventually apprehended by law enforcement officers. Several acquaintances and friends knew about both brother’s marijuana consumption and sales. One of Dzhokhar friend testified that he sold marijuana to Tsarnaev days before the Boston Marathon Bombings. Unrelated to the bombings, one of Tamerlan’s friends implicated Tsarnaev in the killing of three men whose bodies were found sprinkled with marijuana. Multiple accounts noticed an increase of violent behavior from Dzhokhar for some time leading up to the bombings [29–32].

On January 8, 2011, Jared Loughner shot and killed six people, while also injuring 14 others at the then-US Representative Gabrielle Giffords’s constituent meeting held in Tucson, Arizona. Although friends and acquaintances described him as an “awkward but friendly” young man, they started noticing his behavior drastically change in college. In high school, Loughner smoked marijuana on most days. Moreover, he also started immersing himself in conspiracy theories displayed paranoia. He dropped out of high school during his final year, but was able to attend a community college. Some college peers described him becoming mentally unstable by saying and doing things that were frightening. Other peers feared that he would do something like what he actually did. He was suspended from college and never returned. Subsequently, he tried to join the army but he was rejected because he failed a drug test. Consequently, he engaged in paranoid behavior that led to him to

engage in anti-government speech and target then-Representative Giffords during her constituent meeting [33,34].

These are among the many nationally reported violent cases that have, among others factors, a common root to what led these young people to commit acts of violence at the detriment to society as a whole: the extensive use or abuse of marijuana. In recent years, many States within the United States, as well as some other countries around the world, have decriminalized or legalized the recreational use of marijuana [8,12,13,19].

2.2. Paranoia: Marijuana Induced

In the cases above mentioned, one of the recurring conditions that most likely led perpetrators to commit violence was paranoia. Paranoia is defined by the medical dictionary as “an unfounded or exaggerated distrust of others, sometimes reaching delusional proportions”. Paranoid perceptions can co-occur with various other mental conditions as well, such as depression and dementia, and can be divided in three different psychological disorders: paranoid schizophrenia, delusional disorder (persecutory type), and paranoid personality disorder (PPD). All three conditions are similar in the sense that they all contain an “unreasonable fear” or “unreasonable belief” as the root of each condition. Hallucinations are also a common symptom on individuals who suffer from paranoia. Nonetheless, paranoia is also a likely side effect deriving from the consumption of marijuana, as well as other drugs and alcohol [3,18,31,35].

In the cases above mentioned, one of the recurring conditions that most likely led perpetrators to commit violence was paranoia. Paranoia is defined by the medical dictionary as “an unfounded or exaggerated distrust of others, sometimes reaching delusional proportions”. Evidence suggests that paranoia was among the factors that contributed in the actions of Anthony Comello, Salem Abedi, Richard Rojas, Satoshi Uematsu, Robert Dear, Dylan Roof, Michael Brown, and Jared Lougher. Each one had, in respective degrees, unreasonable beliefs. Comello admittedly shot Cali because he feared Cali had a gun and was about to shoot him. Abedi displayed paranoid beliefs while making statements against Western societies. Rojas’ paranoia was displayed in his statements and action witnessed by his coworkers; also, he claims he heard voices that led him to commit the attack. Uematsu was diagnosed with Paranoid disorder and psychosis, which led him to have delusion beliefs that his despicable acts would make contributions to society. Dear was described as a lonely religious extremist but also had a history of domestic violence, gambling, and adultery. Roof wanted to start a race war. Brown was likely paranoid about his surroundings based on the report. Lougher was suffering from paranoia and was immersing himself with conspiracy theories. Many of these tragedies are committed by individuals who were paranoid and were consuming marijuana. It is very likely that marijuana played an active role in these people’s paranoia, considering that the chemical composition of the drug has compounds that alter a person’s perception of reality as mentioned below (Table 1, [17,36–38]).

Table 1. Personality change toward aggression or violence.

Paranoid Personality Disorder	
A pervasive distrust and suspiciousness of others such that their motives are interpreted as malevolent, beginning by early adulthood and present in a variety of contexts, as indicated by four (or more) of the following:	
1.	Suspects, without sufficient bases, that others are exploiting, harming, or deceiving him or her.
2.	Is preoccupied with unjustified doubts about the loyalty or trustworthiness of friends or associates.
3.	Is reluctant to confide in others because of unwarranted fear that the information will be used maliciously against him or her.
4.	Reads hidden demeaning or threatening meanings into benign remarks or events.
5.	Persistently bears grudges (i.e., is unforgiving of insults, injuries, or slights).
6.	Perceives attacks on his or her character or reputation that are not apparent to others and is quick to react angrily or to counterattack.
7.	Has recurrent suspicions, without justification, regarding fidelity of spouse or sexual partner.

2.3. Psychosis: Marijuana Induced

Another condition that is commonly present in cases like the above are psychotic conditions. Psychotic conditions affect an individual's mind in a way that causes that individual to experience loss of contact with reality. During a psychotic episode, the perception of reality is altered to the point where an individual is unable to distinguish reality from hallucinations. Psychotic individual can also experience delusions (false beliefs), incoherent speech, inappropriate behavior, depression, anxiety, sleep problems, social withdrawal, lack of motivation, and difficulty functioning overall [16,17,37].

In the above-mentioned cases, Uematsu was diagnosed with marijuana-induced psychosis. His coworkers' testimony that he would talk and act inappropriately, his paranoia, and his delusion that killing patient at a care facility would benefit the society as a whole, demonstrates that he was suffering from psychotic conditions that made him lose contact with reality and led him to commit such acts. Similar symptoms were also present in cases where perpetrators acted with delusional beliefs, such as: Abedi, who suddenly started making inappropriate statements against Western societies; Dear, who was a lonely religious extremist but also had a history of domestic violence, gambling, and adultery, which strongly indicates that he was delusional, incoherent, and lost contact with reality; Rojas, Cruz, and Roof who suffered from hallucinations while having consumed large amount of marijuana throughout their lives.

Often, individuals who suffer from pre-existing medical conditions use marijuana in an attempt to alleviate their conditions. The man in Rustavi, Cruz, Kelley, Cetin, Abdulazeez, and Cruz also consumed marijuana because they were under the illusion that it would help them cope with their conditions, whether those conditions were likely induced by marijuana or not. However, it ended up worsening their conditions as time went by. What individuals are unaware of when it comes to self-medicating, is that the marijuana they consume does not have compounds that alleviate their pain or conditions; the marijuana they consume has many compounds that negatively alter their perceptions, which leads to worse conditions (Tables 2 and 3, [2,9,10,12,39–41]).

Table 2. Psychosis.

Substance-Induced Psychotic Disorder
A. Presence of one or both of the following symptoms: Delusions. Hallucinations.
B. There is evidence from the history, physical examination, or laboratory findings of both (1) and (2): The symptoms in Criterion A developed during or soon after substance intoxication or withdrawal or after exposure to a medication.
The involved substance is capable of producing the symptoms in Criterion A.
C. The disturbance is not better explained by a psychotic disorder that is not substance-induced. Such evidence of an independent psychotic disorder could include the following:
The symptoms preceded the onset of the substance use; the symptoms persist for a substantial period of time (e.g., about 1 month) after the cessation of acute withdrawal or severe intoxication; or there is other evidence of an independent non-substance-induced psychotic disorder (e.g., a history of recurrent non-substance-related episodes).
D. The disturbance does not occur exclusively during the course of a delirium.
E. The disturbance causes clinically significant distress or impairment in social, occupational, or other important areas of functioning.

Table 3. Paranoia.

Subtypes Delusional Disorder
Grandiose type: This subtype applies when the central theme of the delusion is the conviction of having some great (but unrecognized) talent or insight or having made some important discovery.
Persecutory type: This subtype applies when the central theme of the delusion involves the individual's belief that he or she is being conspired against, cheated, spied on, followed, poisoned or drugged, maliciously maligned, harassed, or obstructed in the pursuit of long-term goals.

3. Discussion

3.1. Marijuana: General Facts

Marijuana is the most consumed illicit drug in the world, with cannabis use and dependence continuing to increase over the past two decades as the trend of legalization persists. According to the United Nations Office on Drug and Crime, over 192 million of users (ages 15–64) worldwide regularly consume marijuana, with a lifetime use of 20% of the World's population and a significant number of individuals regularly consuming the drug [42]. In a 2017 study by the Global Burden of Disease, it estimated the age-standardized rate of cannabis use disorder, or CUD, was 289.7 per 100,000 population (95% Uncertainty Interval (UI) 248.9–339.1), affecting 22.1 million people (95% UI 19.0–25.9 million) [42]. The United States and Canada were in fact found to have among the highest age-standardized rates of CUDs in the world [42].

Cannabis is a complex plant that is made up of 400 chemical entities of which more than 60 are cannabinoid compounds, with delta-9-tetrahydrocannabinol and cannabidiol being the major compounds. Some of those cannabinoid compounds tend to have opposing effects as they affect a very important neurotransmitter system called endocannabinoid system [2]. Moreover, some cannabinoids bind to central cannabinoid receptors to control many behavioral functions, such as aggression. Furthermore, the delta-9-tetrahydrocannabinol (THC) is the chemical responsible for the intoxicating effects on individuals who consume marijuana. The THC level determines the potency of marijuana and high levels of THC likely lead to higher negative health consequences [43–45].

Researchers refer to marijuana having a “high potency” when it has a THC level of more than 10%. In the past years, the THC of confiscated marijuana samples rose from 3% in 1980 to 12% in 2012. Moreover, adolescents between 15 and 17 years old have reported significantly higher ED visits from 2005 to 2010, which is likely caused by the increase of marijuana potency during that time period [7]. Although THC levels that exceed 10% most likely cause serious negative health consequences, it is not uncommon to find marijuana, which THC content exceeds 20% and occasionally 230%, to be sold in places where marijuana is legalized, such as the state of Colorado [7,8]. Furthermore, while daily users refer to high potency marijuana as “the good stuff”, it is reported that daily users are five times more likely to find themselves in the hospital for psychosis symptoms such as delusions and hallucinations caused after consuming marijuana. As this paper will mention in the following pages, however, delusions and hallucinations are not the only negative effects stemming from the consumption of marijuana. Cardiovascular diseases, depression, anxiety, and violence are also among the common negative effects of marijuana [13,14,27,34,46].

3.2. Mental and Behavioral Changes

We apply the results of the research regarding the role of marijuana in violence. We use concepts such as personality changes, perpetrator violence, and psychosis to establish our association of marijuana with the unfortunate cases. The purpose is to illustrate negative but preventable tragic outcomes due to marijuana and its role in violence. The overall objective is to identify the role of marijuana and to suggest it is avoidable and causal nature in inducing violence [47–49].

In all the cases selected, marijuana use was present. For some of the individuals, marijuana use was confirmed by a physical test. In other cases, marijuana was present on their person, identifying drug use. Moreover, some individuals of the case were identified as marijuana users by outside sources.

Present in all the cases, as a result of marijuana use, was the change in personality, aggressive behavior, paranoia, and/or psychosis. All these symptoms have been documented by scientific research to be the result of marijuana use and intoxication. Another symptom, victimization, has a positive correlation with cannabis use, and the cases illustrate marijuana users and victimization. In other words, marijuana users become victims of aggression in response to their perpetration under the influence of marijuana (Table 4, [50,51]).

Table 4. What did the cases have in common?

Cases of Marijuana Use and Symptoms	
Case	Symptom
Anthony Comello	Paranoia
Man in Rustavi	Aggressiveness, Personality Change
Nikolas Cruz	Psychosis, Hallucinations
Devin Patrick Kelley	Aggressiveness, Personality Change
Salaman Abedi	Aggressiveness, Personality Change, Paranoia
Richard Rojas	Paranoia, Hallucinations
Arcan Cetin	Aggressiveness, Personality Change
Stoshi Uematsu	Psychosis, Paranoia
Robert Dear	Aggressiveness, Paranoia
M.Y. Abdulazeez	Aggressiveness, Paranoia
Dylan Roof	Paranoia, Hallucinations
Michael Brown	Aggressiveness, Personality Change, Paranoia
Dzhokar Tsarnaev	Aggressiveness, Personality Change
Tamerlan Tsarnaev	Aggressiveness, Personality Change
Jared Loughner	Paranoia, Psychosis

The DSM V provides diagnostic categories for paranoid personality, paranoia and psychosis associated with marijuana use [52].

3.3. Marijuana and Violence

As mentioned above, some compounds found in marijuana have an effect on central endocannabinoid receptors that control many behavioral functions, including aggression. Although there are some instances where marijuana consumption causes mild euphoria and relaxation on users, adverse acute psychopharmacological effects are very likely to occur. A study that collected data from half a century points out that even a single dose of cannabis may cause “impairments in behavioral control that may underlie impulsive, violent behavior” by altering “the normal functioning of its underlying natural substrate, the ventrolateral prefrontal cortex in man”. Furthermore, the results collected in that study provide a strong indication that chronic marijuana use suggests a possible causal effect with predicting future violence. More studies have reported that panic attacks, confusion, hallucinations, suspiciousness, and paranoia often occur in chronic marijuana users, affecting their cognition in ways that enhance aggressive responses to perceived provocations. Further, recent studies have proven causal connections between marijuana and psychosis [38,39,53].

Studies Show Violence and Aggression Associated with Marijuana Use

Marijuana intoxication results in panic reactions and paranoid feelings whose symptoms lead to violence [49]. The sense of fear, loss of control, and panic is associated with violence [4,54,55]. Also marijuana use increases heart rate, which may be associated with violent behavior [34,47,56,57].

When people stop using marijuana they may experience a variety of withdrawal symptoms, including sleep disturbance, irritability or restlessness, loss of appetite, anxiety, and sweating [46,58]. Experiencing any of these symptoms can make a person angry, ranging from mild irritation to violent rage. Marijuana withdrawal can lead to intimidating violent or bullying behavior, endangering the perpetrator or other people and property [59].

In incarcerated subjects, studies found that one-third of the subjects that committed homicide had used marijuana twenty-four hours before the homicide. Further, three-quarters of those subjects were experiencing at least one mental or physical effect from marijuana intoxication when the homicide occurred.

Similarly, individuals in remote Aboriginal Australian Communities who reported current cannabis use were nearly four times more likely than nonusers to present at least once for violent

trauma. Homicide offenses have been repeatedly documented to be connected to drug use, and marijuana is often one of those drugs [60].

Marijuana use is also indicative of intimate partner violence [61]. Consistent use of marijuana during adolescence was the most predictive indicator of intimate partner violence [31]. Also, marijuana use during adolescence was associated with perpetration or both perpetration and victimization by an intimate partner in early adulthood [62].

There is also a positive association between peer victimization and cannabis use in adolescents. Cannabis use is likely to be associated with perpetrator victims, those who initiate violence while using marijuana and experience retaliation to their aggressive acts. This trend suggests that cannabis use might be strongly related to outward aggression by the user [1].

Cannabis use also increases an adolescent's own likelihood of being victimized by peers. In particular, mental effects of cannabis has the potential to decrease the ability to accurately identify, evaluate, or avoid potentially dangerous persons or situations [59].

3.4. Psychosis

Psychosis is defined by the medical journal as "a symptom or feature of mental illness typical characterized by radical changes in personality, impaired functioning, and a distorted or nonexistent sense of objective reality". Psychosis causes individuals to have an impaired perception of reality, consisting of hallucinations and paranoia [2,8,16]. Consumption of marijuana also proportionally increased the risk of other mental illnesses, such as schizophrenia and other types of psychoses. These marijuana use disorders are often associated with its dependence, since a user's brain requires more and more substance use to keep the desired euphoric effect in the brain. Thus, a user is most likely to experience withdrawal symptoms when not taking the drug. Irritability, anger, and aggression are common withdrawal symptoms that former marijuana users, or marijuana users who try to quit the consumption, experience [46]. Although marijuana advocates generally state that the consumption of the drug helps individuals who suffer from PTSD or other psychiatric conditions, studies suggest that the consumption of marijuana in patients with PTSD, and in patients following a psychiatric discharge, increases the likelihood of those patients being prone to violence compared to patients who do not consume the drug [4,37]. A 50 year-span study on adult patients in the United Kingdom indicated that continued cannabis use by an individual leads is associated with a 7-fold greater odds for commission of subsequent violent crimes. The authors of that study suggest that marijuana consumption would cause impairments in neurological circuits controlling behavior that makes a user prone to violent behavior [36].

Marijuana advocates downplay the risks associated with its unrestricted consumption by saying that the drug is safe, which is a similar approach adopted by Big Tobacco years ago to downplay the risks of smoking. Yet, despite tobacco being legal, people today are well aware of the risks associated with its consumption. Stating that consuming marijuana is safe goes against many studies and researches performed that prove negative health consequences associated with the consumption of marijuana due to the multitude of compounds present and high THC levels being consumed by individuals [9–11,19,21].

Studies Show Psychosis and Paranoia

Cannabis intoxication leads to acute psychosis in many individuals and can produce short-term exacerbations of preexisting psychotic diseases [63–66]. Cannabis use also causes symptoms of depersonalization, fear of dying, irrational panic and paranoid ideas which coincide with acute intoxication and remit quickly [67].

It was reported that 15% of cannabis users identified psychotic-like symptoms, the most common being hearing voices or having unwarranted feelings of intimidation and persecution or paranoid thoughts [38].

The potency of the marijuana has varying effects on users. A study analyzed the proportion of patients in South London with first episode psychosis attributable to high-potency cannabis use and found that the use of high-potency cannabis (skunk) confers an increased risk of psychosis compared with traditional low-potency cannabis (hash) [68].

The risk of individuals having a psychotic disorder showed a roughly three times increase in users of skunk-like cannabis (high-potency) compared with those who never used cannabis. Use of skunk-like cannabis everyday conferred the highest risk of psychotic disorders compared with no use of cannabis [69]. Potency in these studies is similar to marijuana currently available in the U.S. Direct administration of cannabis resulted in predictable increased occurrence of paranoia in comparison to those who received placebo.

Epidemiological studies showed that cannabis is the most frequently used drug among those diagnosed with bipolar disorder [70]. Studies have also shown that as the frequency of cannabis use increases, so does the risk for psychotic disorders, such as schizophrenia [71]. The investigators of Schizophrenia Commission concluded that cannabis use is the most preventable risk factor for psychosis [72–77]. High proportions of persons with schizophrenia report regular cannabis use and meet criteria for cannabis use disorder [78].

Findings suggest that activity in the basal lateral medulla is involved in marijuana-induced paranoia (state of becoming afraid of things that would normally trigger fear) [77]. That means marijuana is actually enhancing type of learning about fear, leading the brain to jump to conclusions about the mild experiences, perceiving them as scarier and more strongly connected to other scary situations than they are. This marijuana induced fear-based learning helps explain why marijuana users tend to see patterns in events that are not real, such as conspiracies [78].

In a study analyzing a college population, heavy users of marijuana displayed significantly greater impairment than light users on intentional/executive functions. This led to the conclusion that heavy marijuana use is associated with residual neuropsychological effects even after a day of supervised abstinence from the drug [53,79].

3.5. Public Policies

These negative effects of marijuana need to be taken into account for public policy in order to treat people with addiction and possibly avoid the tragedies above mentioned. The public should know the negative consequences associated with the compounds present within the marijuana products they consume. The current legalization push in the United States lacks prudent public policy and control over the process. A prudent public policy would be to decriminalize the drug and have its composition, creation, and distribution controlled by an agency that would keep THC levels at a minimum. Moreover, studies that try to find ways to treat individuals addicted to marijuana and ways to make the drug safer by pinpointing each compound and determine whether some compounds may indeed help people who have curable health conditions. This approach would reduce the negative effects of high THC on the human body and would decrease violence occurring during marijuana deals in the black market. Furthermore, this approach will likely decrease the violence caused by marijuana and, most importantly, it would prevent tragedies such as the ones mentioned above [8,13,31,80].

4. Conclusions

The main scope of this paper was to inform the general public about the relationships between marijuana and violence in the general population and in individuals with mental illnesses, as recent findings do link marijuana with cases where psychosis was present. This article is a case review and not a research study; therefore, the chief limitations regard inferences that can be made from a case study. However, the findings suggest a further need for research on marijuana and violence. The authors of this paper did not intend to take sides regarding the legalization of marijuana. The focus was public health in regards to marijuana [2,11,14,18,36].

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Marijuana Violence and Law

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Abstract

Marijuana is currently a growing risk to the public in the United States. Following expanding public opinion that marijuana provides little risk to health, state and federal legislatures have begun changing laws that will significantly increase accessibility of marijuana. Greater marijuana accessibility, resulting in more use, will lead to increased health risks in all demographic categories across the country. Violence is a well-publicized, prominent risk from the more potent, current marijuana available.

We present cases that are highly popularized storylines in which marijuana led to unnecessary violence, health risks, and, in many cases, both. Through the analysis of these cases, we will identify the adverse effects of marijuana use and the role it played in the tragic outcomes in these and other instances. In the analysis of these cases, we found marijuana as the single most common, correlative variable in otherwise diverse populations and circumstances surrounding the association of violence and marijuana.

Keywords: Marijuana; Bullying behaviour; Aggression; Intoxication; Cannabis use

Cases Reports

Michael Brown robbed a convenience store for a large box of cigarillos to smoke marijuana and assaulted the store clerk. Subsequently, the 18 year old Brown attacked police officer Darren Wilson without provocation, punching him in the face through the window of his police car, and attempting to grab his gun. Wilson shot and killed Brown as he tried to escape in a very agitated, paranoid, confused and aggressive state. Along with the cigarillos, marijuana was found in Brown's system at the time of death [1].

Trayvon Martin was shot and killed by George Zimmerman, a neighborhood watch volunteer. Marijuana was found in Martin's system the night he was shot [2]. He also had been suspended from school for possession of marijuana.

Laquan McDonald slashed a tire and damaged a police car. After ignoring verbal instruction to drop the knife, he was shot sixteen times. McDonald had used marijuana every day since the age of 10 or 11 years old [3].

Deven Guilford was shot and killed by a policeman during a traffic stop after becoming assaultive. He was a known marijuana user as he professed his "love" for marijuana on social media [4].

Freddie Gray fell into a coma while being transported after an arrest for possession of an illegal switchblade. At the time of his death, Gray tested positive for marijuana and heroin. Gray had multiple prior charges for marijuana possession [5].

Lakeisha Holloway drove her car onto a sidewalk on the Las Vegas strip, killing one and injuring over thirty-five others [6,7]. The

toxicology exam illustrated that Holloway had marijuana in her system at the time of the vicious attack [8].

Robert Lewis Dear shot three people and injured nine others at a Planned Parenthood Clinic in Colorado Springs, Colorado. He was a marijuana user and illustrated mental health issues [9].

Joseph Jesse Aldridge found his mother dead of natural causes and went on a shooting rampage, killing seven people and himself. In 2008, Aldridge had pled guilty to federal charges of possessing firearms while using marijuana. He was required to complete mental health and substance use counseling for marijuana [10].

Jared Lee Loughner shot Arizona Congresswomen Gabrielle Gifford and eighteen other, killing six. He was arrested in 2007 for marijuana possession and other paraphernalia. Friends and classmates knew him as a marijuana user. He was also diagnosed with paranoid schizophrenia [11].

The Tsarnaev brothers killed three and injured 264 others with bombs at the Boston Marathon on April 5, 2013. Friends say they were both heavy marijuana users. The wife of the older brother, Tamerlan, described a change in his attitude as he became violent toward her with his increasing marijuana use [12].

A Dearborn Heights man plotted ISIS attacks on church. In an affidavit filed in a criminal complaint on weapons and marijuana charge, Khalil Abu-Rayyan is described as being an ISIS supporter who talked about committing violent acts of terrorism, including shootings and beheadings [13].

Osama bin Laden became paranoid and obsessive in the days prior to his death. High-strength marijuana plants were found within bin Laden's compound in Pakistan [14].

Studies Show an Association between Marijuana and Mental or Physical Consequences

Studies show violence and aggression with marijuana use

Marijuana intoxication results in panic reactions and paranoid feelings whose symptoms lead to violence [15]. The sense of fear, loss of control, and panic is associated with violence [16-18]. Also marijuana use increases heart rate, which may be associated with violent behaviour [19-22].

When people stop using marijuana they may experience a variety of withdrawal symptoms, including sleep disturbance, irritability or restlessness, loss of appetite, anxiety, and sweating [23,24]. Experiencing any of these symptoms can make a person angry, ranging from mild irritation to violent rage. Marijuana withdrawal can lead to intimidating violent or bullying behavior, endangering the perpetrator or other people and property [25].

In incarcerated subjects, studies found that one-third of the subjects that committed homicide had used marijuana twenty-four hours before the homicide. Further, three-quarters of those subjects were experiencing at least one mental or physical effect from marijuana intoxication when the homicide occurred.

Similarly, individuals in remote Aboriginal Australian Communities who reported current cannabis use were nearly four times more likely than nonusers to present at least once for violent trauma. Homicide offenses have been repeatedly documented to be connected to drug use, and marijuana is often one of those drugs [26].

Marijuana use is also indicative of intimate partner violence [27]. Consistent use of marijuana during adolescence was the most predictive indicator of intimate partner violence [28]. Also, marijuana use during adolescence was associated with perpetration or both perpetration and victimization by an intimate partner in early adulthood [29].

There is also a positive association between peer victimization and cannabis use in adolescents. Cannabis use is likely to be associated with perpetrator victims, those who initiate violence while using marijuana and experience retaliation to their aggressive acts. This trend suggests that cannabis use might be strongly related to outward aggression by the user [30].

Cannabis use also increases an adolescent's own likelihood of being victimized by peers. In particular, mental effects of cannabis have the potential to decrease the ability to accurately identify, evaluate, or avoid potentially dangerous persons or situations [25].

Studies show psychosis and paranoia

Cannabis intoxication leads to acute psychosis in many individuals and can produce short-term exacerbations of pre-existing psychotic diseases [31-34]. Cannabis use also causes symptoms of depersonalization, fear of dying, irrational panic and paranoid ideas which coincide with acute intoxication and remit quickly [35].

It was reported that 15% of cannabis users identified psychotic-like symptoms, the most common being hearing voices or having unwarranted feelings of intimidation and persecution or paranoid thoughts [36].

The potency of the marijuana has varying effects on users. A study analyzed the proportion of patients in South London with first episode

psychosis attributable to high-potency cannabis use and found that the use of high-potency cannabis (skunk) confers an increased risk of psychosis compared with traditional low-potency cannabis (hash) [37].

The risk of individuals having a psychotic disorder showed a roughly three times increase in users of skunk-like cannabis (high-potency) compared with those who never used cannabis. Use of skunk-like cannabis everyday conferred the highest risk of psychotic disorders compared with no use of cannabis [6]. Potency in these studies is similar to marijuana currently available in the U.S. Direct administration of cannabis resulted in predictable increased occurrence of paranoia in comparison to those who received placebo.

Epidemiological studies showed that cannabis is the most frequently used drug among those diagnosed with bipolar disorder [5]. Studies have also shown that as the frequency of cannabis use increases, so does the risk for psychotic disorders, such as schizophrenia [38]. The investigators of Schizophrenia Commission concluded that cannabis use is the most preventable risk factor for psychosis [39-44]. High proportions of persons with schizophrenia report regular cannabis use and meet criteria for cannabis use disorder [45].

Findings suggest that activity in the basal lateral medulla is involved in marijuana-induced paranoia (state of becoming afraid of things that would normally trigger fear) [44]. That means marijuana is actually enhancing type of learning about fear, leading the brain to jump to conclusions about the mild experiences, perceiving them as scarier as and more strongly connected to other scary situations than they are. This marijuana induced fear-based learning helps explain why marijuana users tend to see patterns in events that are not real, such as conspiracies [45] (Table 1).

In a study analyzing a college population, heavy users of marijuana displayed significantly greater impairment than light users on intentional/executive functions. This led to the conclusion that heavy marijuana use is associated with residual neuropsychological effects even after a day of supervised abstinence from the drug [46,47].

What did the cases have in common?

Cases of Marijuana Use and Symptoms	
Case	Symptoms
Michael Brown	Aggressiveness, Personality Change, Paranoia
Trayvon Martin	Aggressiveness, Personality Change, Paranoia
Laquan McDonald	Aggressiveness, Personality Change
Devon Guilford	Aggressiveness, Personality Change
Freddie Gray	Paranoia
Lakeisha Holloway	Aggressiveness, Personality Change
Robert Lewis Dear	Psychosis
Joseph Jesse Aldridge	Psychosis
Gerard Lee Loughner	Aggressiveness, Personality Change, Psychosis
Tsarnaev Brothers	Aggressiveness, Personality Change
Khalil Abu-Rayyam	Psychosis

Osam bin Laden	Paranoia, Psychosis
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Table 1: Marijuana uses and symptoms.

Discussion

We apply the results of the research regarding the role of marijuana in violence. We use concepts such as personality changes, perpetrator violence, and psychosis to establish our association of marijuana with the unfortunate cases. The purpose is to illustrate negative but preventable tragic outcomes due to marijuana and its role in violence. The overall objective is to identify the role of marijuana and to suggest it is avoidable and causal nature in inducing violence [48-50].

In all the cases selected, marijuana use was present. For some of the individuals, marijuana use was confirmed by a physical test. In other cases, marijuana was present on their person, indentifying drug use. Moreover, some individuals of the case were identified as marijuana users by outside sources.

Personality change toward aggression or violence (Chart 1)

Paranoid Personality Disorder
A. A pervasive distrust and suspiciousness of others such that their motives are interpreted as malevolent, beginning by early adulthood and present in a variety of contexts, as indicated by four (or more) of the following:
Suspects, without sufficient bases, those others are exploiting, harming, or deceiving him or her.
Is preoccupied with unjustified doubts about the loyalty or trustworthiness of friends or associates.
Is reluctant to confide in others because of unwarranted fear that the information will be used maliciously against him or her.
Reads hidden demeaning or threatening meanings into benign remarks or events.
Persistently bears grudges (i.e., is unforgiving of insults, injuries, or slights).
Perceives attacks on his or her character or reputation that are not apparent to others and is quick to react angrily or to counterattack.
Have recurrent suspicions, without justification, regarding fidelity of spouse or sexual partner.

Chart 1: Paranoid personality disorder (PPD) symptoms.

Present in all the cases, as a result of marijuana use, was the change in personality, aggressive behavior, paranoia and/or psychosis. All these symptoms have been documented by scientific research to be the result of marijuana use and intoxication. Another symptom, victimization, has a positive correlation with cannabis use, and the cases illustrate marijuana users and victimization [51,52]. In other words, marijuana users become victims of aggression in response to their perpetration under the influence of marijuana.

DSM V provides diagnostic categories for paranoid personality, paranoia and psychosis associated with marijuana use [53].

Michael Brown was a marijuana user and it was found in his system at the time of death. Further, Brown illustrated aggressive tendencies and victimization, as he was reported to aggressively assault a store clerk prior to his aggression towards a police officer. These actions were contrary to non-aggressive tendencies purported by those closest

to Brown. Brown's intoxication of marijuana likely accounted for the aggression and assaults. While contributing factors such as race and poor police practices may have contributed to Brown's unfortunate death, Brown likely would have been alive had he not been a user of marijuana in this particular instance. Apparently he was acting under the influence in an uncharacteristically high risk manner.

Similar to Brown, Trayvon Martin was known to have used marijuana. He was suspended from school for marijuana use at the time of his altercation with Zimmerman. Under the influence of marijuana, Martin likely illustrated victim perpetration from marijuana which increased aggressive behavior through participation in the altercation with Zimmerman. This physical fight with Zimmerman was behavior is to the surprise of others who claimed Martin was mild mannered who likely would avoid such a confrontaion. Marijuana use likely created the fear and aggressive behavior due to poor judgment and threatening perceptions induced by marijuana, contribution to Martin's death [19,23].

Tamerlan Tsarnaev follows similar patterns. He was a known heavy marijuana user. There was a sharp change in his personality confirmed by his wife associated with very heavy use and involvement with marijuana, resulting in the violence towards his wife according to her. Likely, intoxication from marijuana created and contributed to the paranoid thoughts and poor judgment to detonate a bomb in a crowd of people [34,40].

Similarly, Laquan McDonald was a known marijuana user since 10 or 11 years old. The intoxication from the use of marijuana likely caused McDonald to slash a cop car's tire, as he was known to be respectful and reserved. His life would have been saved without marijuana induced aggressiveness and poor judgments, and senseless, high risk actions towards police [19,23].

Deven Guilford is another preventable but clear example high risk and poor judgement from marijuana use. After being stopped in his car, Guilford assaulted a police officer for unknown reasons and apparently paranoid reactions to police actions. Guilford was preoccupied with and user of marijuana at a relatively young age. His marijuana use likely contributed to the change in his personality to be aggressive and assaultive to provoke his death in a high risk police stop [19,23].

Similarly, Jared Lee Loughner was known to be a heavy marijuana user. People described a large personality change from his youth. Loughner went on a shooting spree, killing six people. Marijuana was likely a major contributor to the drastic change in personality toward violence. Had marijuana been identified as a problem, his aggressive and assaultive act may have been prevented and lives could have been saved [19,23].

Lakeisha Holloway shows another example of senseless loss. In contrast to her personality from her youth, she drove a car onto the sidewalk of the Las Vegas strip, killing one person and injuring others. Marijuana was in her system at the time of the attack and likely contributed to the lethal aggression exhibited, and likely, psychotic, paranoid thinking.

Psychosis (Chart 2)

Substance-Induced Psychotic Disorder
A. Presence of one or both of the following symptoms:
Delusions
Hallucinations
B. There is evidence from the history, physical examination, or laboratory findings of both (1) and (2):
The symptoms in Criterion A developed during or soon after substance intoxication or withdrawal or after exposure to a medication.
The involved substance is capable of producing the symptoms in Criterion A.
C. The disturbance is not better explained by a psychotic disorder that is not substance-induced. Such evidence of an independent psychotic disorder could include the following:
The symptoms preceded the onset of the substance use; the symptoms persist for a substantial period of time (e.g. about 1 month) after the cessation of acute withdrawal or severe intoxication; or there is other evidence of an independent non-substance-induced psychotic disorder (e.g. a history of recurrent non-substance-related episodes).
D. The disturbance does not occur exclusively during the course of a delirium.
E. The disturbance causes clinically significant distress or impairment in social, occupational or other

Chart 2: Substance-induced psychotic disorder symptoms.

Studies have illustrated the connection between cannabis use and psychosis [54]. Marijuana has been shown to increase the risk for psychotic disorders and/or exacerbate pre-existing psychotic diseases. Consistent with research, marijuana resulting in psychosis is illustrated in many of the cases described above. Joseph Jesse Aldridge, described as a recluse, went on a shooting rampage after finding his mother deceased. Aldridge was a known marijuana user and had history of psychosis. His marijuana use likely contributed to his psychosis, and a major factor for the shooting rampage [55,56].

Similar to Aldridge, Jared Lee Loughner was admittedly a marijuana user. He suffered from a mental illness of paranoid schizophrenia. Loughner then went on a shooting spree killing six people. His marijuana use likely exacerbated the psychosis, which was a high risk factor for the shootings [33,35,55].

Analogous to Aldridge and Loughner, Robert Lewis Dear went on a shooting spree in Colorado. Dear moved to Colorado for easier access to marijuana. Dear also exhibited signs of mental health illness, psychosis and paranoia, which caused or exacerbated by marijuana, which resulted in his shooting spree [18,31].

While Khalil Abu-Rayyan did not result in a shooting rampage, this case illustrates the same ideas as previous cases. Abu-Rayyan used marijuana. He illustrated signs of psychosis through the threats of terrorism and martyrdom. Abu-Rayyan obtained the instruments to carry out his plans. The psychosis, contributing to the terroristic thoughts, marijuana use contributed to and exacerbated his aggressive behaviour [31,36,55].

Similar to Abu-Rayyan, Osama bin Laden also had notorious terroristic and paranoid behavior. Bin Laden was a marijuana user, growing high strength plants within his compound in Pakistan. Unfortunately, bin Laden's psychosis, associated and exacerbated by

marijuana use, may have prompted him to carry out the most heinous terrorist attacks in history. Without marijuana use and subsequent psychosis, many deaths may not have occurred [31,55,56].

Paranoia (Chart 3)

Subtypes Delusional Disorder
Grandiose type: This subtype applies when the central theme of the delusion is the conviction of having some great (but unrecognized) talent or insight or having made some important discovery.
Persecutory type: This subtype applies when the central theme of the delusion involves the individual's belief that he or she is being conspired against, cheated, spied on, followed, poisoned or drugged, maliciously maligned, harassed or obstructed in the pursuit of long-term goals.

Chart 3: Types of delusional disorder (DD).

In addition to psychosis and aggression, paranoia has been connected to marijuana intoxication [57,58]. Studies have illustrated THC significantly increase paranoia through a physical pathway. The cases described above illustrate such paranoia in marijuana users. For instance, Freddie Gray was arrested after he fled on the mere sight of police officers. During his arrest in the intoxicated state, he was injured which resulted in his death. Gray was a known drug addict and user of marijuana. His marijuana use likely induced paranoia thinking and poor judgment which prompted him to flee from police, threatening to him. Without marijuana and other drug intoxication, his cooperation likely would have been different, and he would avoided his high risk apprehension, and death avoided [34,36,40].

Similarly, Trayvon Martin got into an altercation with a Neighborhood Watch guard. Martin, speaking to his girlfriend, stated that a "creepy" man was following him and that he tried to evade the follower. His description is characteristic of apprehensive beliefs, and a sign of paranoia thought. Otherwise, Martin according to his family would not have fought with Zimmerman, had masituation escalated due to the paranoia, caused by the use of marijuana [34,36,40].

Osama bin Laden also illustrated paranoia, in letters that were discovered after his death. Paranoia was caused by his frequent marijuana use. This paranoia resulted in his adverse view of the US government. Unfavorable views toward the US resulting from extreme paranoia, coupled with psychosis, resulted in his terrorist attacks. Marijuana abstinence could have prevented the death of thousands of people [34,36,40].

These cases contained diverse variables: encounters with police, race, altercations, confrontation and mental illness. Other drug use was present but not the same across all cases. However, marijuana and violence are the common denominators in all the cases. Many were not victims of police aggression, some perpetuated police responses, some not. Diverse races and cultures were represented, and no stereotype was evident among the cases of violence and marijuana use. The variables, marijuana and violence were present in all cases.

An extensive review of the scientific literature document a clear association between marijuana and violence, psychosis, personality changes, poor judgment, aggression, victim perpetration. There are other possibilities and contributing factors in the execution of the violent behaviors, though probably not present in all cases. The purpose of this case report is to illustrate the probable role of marijuana in violent behaviors.

The review does not prove a causal relationship between marijuana and violence in these cases. Rather it establishes a highly documented association between marijuana and violence. A legal standard used for causation can be applied to illustrate this association. A legal cause is “but for” the actions or circumstances, the result would not have occurred. A proximate cause is the result was “foreseeable” based on the facts and actions. The most likely legal and proximate cause of violence in these cases was the use and intoxication from marijuana. No other variables fulfill these requirements.

Conclusion

According to research studies, marijuana use causes aggressive behavior, causes or exacerbates psychosis and produce paranoid. These effects have been illustrated through case studies of highly publicized incidents and heightened political profiles.

These cases contain examples of repeated illustrations of aggression, psychosis and paranoia by marijuana users and intoxication. Ultimately, without the use and intoxication of marijuana, the poor judgment and misperceptions displayed by these individuals would not have been present, reducing the risk for actions that result in senseless deaths.

Import to these assertions, is that the current marijuana is far more potent in THC concentrations, the psychoactive component. Accordingly, and demonstrated in direct studies, more potent marijuana results in a greater risk for paranoid thinking and psychosis. In turn, paranoid behavior increases the risk for paranoid behaviors and predictably associated with aggressive and violent behaviors.

Marijuana use causes violent behavior through increased aggressiveness, paranoia and personality changes (more suspicious, aggressive and anger).

Recent illicit and “medical marijuana” (especially grown by care givers for medical marijuana) is of much high potency and more likely to cause violent behavior.

Marijuana use and its adverse effects should be considered in cases of acts of violence as its role is properly assigned to its high association.

Recognize that high potency marijuana is a predictable and preventable cause of tragic violent consequences.

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57. BJS: Bureau of Justice Statistics, Drug and Crime Facts.
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This article was originally published in a special issue, entitled: "**Marijuana: Clinical, Research, Policy**", Edited by Norman S Miller

From: [Ronald Kirkish](#)
To: [Christina Turner](#); [Rich Constantine](#); [Yvonne Martinez Beltran](#); [Rene Spring](#); [John McKay](#); [Shane Palsgrove](#); [Gino Borgioli](#)
Cc: [Bob Cooke](#); [Matt Wendt](#); [Chris Borello](#); [Terry Ratto](#); [Ladera Grill Dan](#); dave@lokeyfirearms.com; [Ladera Grill Morgan](#); [Mark Turner](#); trailblazer413@yahoo.com; ryan@lokeyfirearms.com
Subject: Marijuana business are a huge and dangerous target for criminal gangs
Date: Monday, March 22, 2021 2:21:00 PM

Dear All,

Marijuana dispensary's are a major crime target for gangs. Dispensaries up and down the State of California are being robbed by these criminal gangs not only for their money, but also to steal their product (marijuana) to be sold on the blackmarket.....robbing a dispensary of their marijuana is just as good if not better than stealing the money itself.

I'm sure your "**Chief of Police**" would prefer that the Morgan Hill city council not make decisions that would make his job, and the job for the men and women under his charge, more dangerous than it is already.

As these recent articles show, these marijuana businesses are a huge magnet for criminals and a city the size of Morgan Hill with a small public safety police force sure doesn't need the city council to make decisions that puts them [and the public] into additional danger.....we've already seen shootings in Morgan Hill lately, haven't we??

FYI, these are only a very few of the articles I could have posted; there are many more just like these.

God forbid that a resident in Morgan Hill gets maimed and/or killed because of a dangerous and ill-informed decision made by the city council, and making them complicit in the death(s). You can be sure the residents of Morgan Hill won't take it too kindly.

B/r,

Ronald L. Kirkish



1) THIEVES TARGET POT INDUSTRY ACROSS CALIFORNIA — AND L.A. — IN NEW CRIME WAVE

<https://www.laweekly.com/thieves-target-pot-industry-across-california-and-l->

[a-in-new-crime-wave/](#)

2) Why were dozens of Bay Area cannabis dispensaries recently robbed?

<https://www.sfgate.com/cannabis/slideshow/Cannabis-is-legal-so-why-were-dozens-of-Bay-Area-203926.php>

3) Oakland: ‘Caravan of armed robbers’ target cannabis businesses on Election Night, leaving suspect dead

<https://www.mercurynews.com/2020/11/04/person-shot-by-police-after-oakland-marijuana-business-robbed-officers-injured/>

4) Burglars, vandals hit cannabis businesses during protests, likely causing tens of thousands of dollars in losses

<https://mjbizdaily.com/robbers-vandals-hit-marijuana-businesses-during-protests/>

5) CANNABIS ROBBERIES NORTHWEST OF HOOPA CAUSED BY ORGANIZED CRIMINAL GANG, CLAIM FARMERS

<https://kymkemp.com/2019/11/06/cannabis-robberies-in-northeast-hoopa-caused-by-organized-criminal-gang-charge-farmers/>

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To: [Christina Turner](#); [Rich Constantine](#); [Yvonne Martinez Beltran](#); [Rene Spring](#); [John McKay](#); [Shane Palsgrove](#); [Gino Borgioli](#)
Cc: [Terry Ratto](#); [Ladera Grill Dan](#); dave@lokeyfirearms.com; [Matt Wendt](#); [Chris Borello](#); [Bob Cooke](#)
Subject: MARIJUANA IS THE COMMON WEB BETWEEN SO MANY MASS KILLERS
Date: Thursday, March 25, 2021 6:56:57 AM

MARIJUANA IS THE COMMON WEB BETWEEN SO MANY MASS KILLERS

<https://poppot.org/2018/07/03/marijuana-violence-know-connection/>

- **When Marijuana Use Leads to Acute or Chronic Psychosis**
- **The Teen Brain**
- **When Marijuana Psychosis Leads to Violence: Aurora, Arizona**
- **Solution to Cutting Down Mass Violence**

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Cc: [Matt Wendt](#); [Chris Borello](#); [Terry Ratto](#); dave@lokeyfirearms.com; ryan@lokeyfirearms.com; [Ladera Grill Dan](#); [Jane Howard](#); [Bob Cooke](#); [Ladera Grill Morgan](#)
Subject: More information why communities should not encourage marijuana businesses
Date: Tuesday, March 23, 2021 10:54:47 AM
Attachments: [Impacts marii dispens density on marii abuse and depend Mair 2015 Drug Alc Depend.pdf](#)
[Recreat cannab use impairs driving perf in absen acute intox Dahlgren 2020 Drug Alco Depend.pdf](#)
[jamapsychiatry_hines_2020_oj_200026_1601309834.63439.pdf](#)

Dear All,

For your interest.....here are three more studies showing how marijuana causes harm to communities and its residents.

Downtown businesses like restaurants are “not” fond of having a marijuana business located next to their’s.

B/r,

Ronald L. Kirkish

The impacts of marijuana dispensary density and neighborhood ecology on marijuana abuse and dependence

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Recreational cannabis use impairs driving performance in the absence of acute intoxication

Association of High-Potency Cannabis Use With Mental Health and Substance Use in Adolescence



Published in final edited form as:

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The impacts of marijuana dispensary density and neighborhood ecology on marijuana abuse and dependence

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Abstract

Background—As an increasing number of states liberalize cannabis use and develop laws and local policies, it is essential to better understand the impacts of neighborhood ecology and marijuana dispensary density on marijuana use, abuse, and dependence. We investigated associations between marijuana abuse/dependence hospitalizations and community demographic and environmental conditions from 2001–2012 in California, as well as cross-sectional associations between local and adjacent marijuana dispensary densities and marijuana hospitalizations.

Methods—We analyzed panel population data relating hospitalizations coded for marijuana abuse or dependence and assigned to residential ZIP codes in California from 2001 through 2012 (20,219 space-time units) to ZIP code demographic and ecological characteristics. Bayesian space-time misalignment models were used to account for spatial variations in geographic unit definitions over time, while also accounting for spatial autocorrelation using conditional autoregressive priors. We also analyzed cross-sectional associations between marijuana abuse/dependence and the density of dispensaries in local and spatially adjacent ZIP codes in 2012.

Results—An additional one dispensary per square mile in a ZIP code was cross-sectionally associated with a 6.8% increase in the number of marijuana hospitalizations (95% credible interval 1.033, 1.105) with a marijuana abuse/dependence code. Other local characteristics, such as the median household income and age and racial/ethnic distributions, were associated with marijuana hospitalizations in cross-sectional and panel analyses.

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Contributors Dr. Freisthler conceptualized the study, wrote sections of the introduction and discussion, and edited multiple drafts. Dr. Mair conducted analyses, interpreted results, and wrote a first draft of the manuscript. William Ponicki and Andrew Gaidus prepared data and edited multiple drafts. All authors contributed to and have approved the final manuscript.

Conflict of Interest No conflict declared.

Conclusions—Prevention and intervention programs for marijuana abuse and dependence may be particularly essential in areas of concentrated disadvantage. Policy makers may want to consider regulations that limit the density of dispensaries.

Keywords

marijuana abuse; marijuana dispensaries; marijuana hospitalizations

1. INTRODUCTION

The legal status and subsequent availability of marijuana for both medical and recreational use is rapidly changing in the United States. In 1996, California was the first state to legalize medical marijuana with the Compassionate Use Act, which allowed physicians to prescribe cannabis for medical purposes. Since then, 22 states and the District of Columbia have enacted similar laws. The vast majority of these laws allow marijuana to be sold through medical dispensaries. Despite the growing legal availability of marijuana for medical and recreational use, much remains unresolved about the relationships between marijuana use and related problems and the impacts of dispensaries on local communities (Gorman and Charles Huber, 2007; Lynne-Landsman et al., 2013).

Certain demographic groups are more likely to use marijuana for recreational and/or medical purposes. In California, more frequent marijuana users are more likely to be male, young adult, white, and have higher incomes (Freisthler and Gruenewald, 2014; Morrison et al., 2014). Medical marijuana users are also more likely to be male and white (O'Connell and Bou-Matar, 2007; Ogborne and Smart, 2000; Reiman, 2007; Swift et al., 2005; Ware et al., 2005), but are older than frequent users (mean around 40 years old) and have lower incomes (O'Connell and Bou-Matar, 2007; Ogborne and Smart, 2000; Reiman, 2007; Swift et al., 2005; Ware et al., 2005). Rates of marijuana abuse and dependence may be higher in areas with disproportionately greater numbers of these population subgroups, making them potential targets of prevention efforts to reduce costs related to marijuana abuse and dependence hospitalizations.

Some studies suggest that legalizing medical marijuana appears to be related to higher levels of use for adults and adolescents (Cerde et al., 2012; Harper et al., 2012; Wall et al., 2011), although states that legalize marijuana had higher rates of marijuana use before legalization—suggesting that norms around use of marijuana may be more lax in those states (Wall et al., 2011). However, these findings are not universal as other studies have found no difference in marijuana use among adolescents after enactment of medical marijuana laws (Khatapoush and Hallfors, 2004; Lynne-Landsman et al., 2013; Choo et al. 2014). No differences have been found in rates of marijuana abuse and dependence among marijuana users before and after enacting legislation in states that have liberalized marijuana policies in recent years (Cerde et al., 2012). Allowing medical marijuana to be distributed through dispensaries increases the likelihood of using marijuana in the past year and using marijuana more frequently (Freisthler and Gruenewald, 2014). Past-month marijuana use is higher in states that allow distribution of medical marijuana through store-front dispensaries (Pacula et al., 2013).

Very few studies have examined where dispensaries are located. Store-front dispensaries in Denver, Colorado tend to be located in neighborhoods with higher crime rates and a higher proportion of retail jobs (Boggess et al., 2014). In California, dispensaries were located in Census block groups with higher levels of marijuana use, lower median household incomes, higher percentages of male residents, and lower percentages of Asian American residents and residents aged 30 to 39 years (Morrison et al., 2014). Thus there is limited information that areas with some disadvantage (i.e., lower income, higher crime) have higher densities of dispensaries; however, how disadvantage and dispensary density are related to overall rates of marijuana abuse and dependence is unknown.

When considering the impacts of marijuana dispensaries on local use and abuse, about which little is known, the literature on alcohol outlets is potentially useful. Greater densities of alcohol outlets, another source of a potentially addictive substance, have been linked to a range of health consequences, including incidents of crime and violent assaults (Gorman et al., 2005; Lipton and Gruenewald, 2002; Livingston, 2008), drinking and driving (Ponicki et al., 2013), intimate partner violence (Cunradi et al., 2012), and other alcohol-related problems (Campbell et al., 2009; Freisthler et al., 2007). Alcohol outlets may increase availability, or areas of high alcohol outlet density may be characterized by other conditions which produce problems (e.g., low social capital, high deprivation) and density of outlets may be correlated with these conditions. Similar to the role of alcohol outlets in communities, marijuana dispensaries may increase local availability and subsequent use of marijuana and/or may be more likely to be located in socially disorganized neighborhoods.

There are several reasons to examine the impacts of medical marijuana dispensaries on local use using population-based geographic assessments. These methods allow us to address the spatial dependence of contiguous geographic units, without which there may be substantive bias in statistical tests of dispensary and other environmental effects. Furthermore, because dispensaries within an area may serve both local residents and customers from nearby areas and many areas have no dispensaries of their own, the spatial scale of dispensary effects may be larger than any single unit. Models that measure impacts only within local areas will therefore miss effects on marijuana use in neighboring areas, understating effects. These methods allow us to examine spatial spillover effects.

It is important for us to better understand the impacts of neighborhood ecology and marijuana dispensary density on use and abuse in California as an increasing number of states follow in California's footsteps and liberalize cannabis policies. Determining in what ways marijuana dispensaries function in roles similar to alcohol outlets and in what ways they differ is essential as other states and communities develop laws and local policies, such as zoning restrictions and limiting the number of dispensary permits. The purpose of this analysis is to first examine whether hospitalizations for marijuana abuse and dependence are related to community demographic and environmental conditions, and then to investigate cross-sectional associations between marijuana dispensary densities and hospitalizations in California.

2. MATERIAL AND METHODS

2.1 Data Sources and Variables

Annual data, including hospital discharges and Census-based registries, were aggregated over a 12-year period (2001 through 2012) across ZIP code polygon areas (ESRI, 2012) of California, for a total of 20,219 space-time units. Locations of marijuana dispensaries as of early 2012 were geocoded and aggregated to 1,702 statewide ZIP codes as defined in 2012. These data were used to conduct two population-level Bayesian analyses: (1) A space-time analysis of associations between marijuana abuse and dependence hospitalizations and ZIP code demographic and other characteristics, and (2) a cross-sectional analysis of associations between marijuana hospitalizations and marijuana dispensary densities.

2.1.1. Marijuana abuse and dependence hospitalizations—The primary outcome measure was the annual number of marijuana abuse or dependence hospitalizations per ZIP code, obtained from the California Office of Statewide Health Planning and Development patient discharge data. These records provide information on all discharges that result in at least one overnight hospital stay. We included discharges that had either a primary or secondary ICD-9 diagnostic code of 304.3 (cannabis dependence) or 305.2 (cannabis abuse). The number of such cases per year that required hospitalization with at least one overnight stay increased over the study period, from 17,469 in 2001 to 68,408 in 2012. The vast majority (>85%) of cannabis discharges were coded as abuse rather than dependence. In only 0.8% of cases was cannabis dependence/abuse the primary diagnosis; in the other 99.2% of cases the diagnosis was secondary to hospital discharge for some other medical or injury condition. The percent of primary diagnoses decreased over the study period, from 2.2% (n=427) in 2001 to 0.4% (n=294) in 2012. Each hospital discharge was linked to the ZIP code of the patient. 97.3% of all discharges included 5-digit patient ZIP codes—the remaining were homeless, lived in another state, were missing/unknown, or only provided ZIP codes masked to 3 digits due to small population sizes within their 5-digit ZIP code. These discharges were dropped from analyses.

2.1.2. Marijuana dispensary density—Locations of marijuana dispensaries were obtained from six different websites listing the information for these businesses in March–April, 2012. The six websites were chosen by conducting a comprehensive search of such databases available on the web and by asking dispensary owners where they advertise their services. These websites provide up-to-date information on locations of dispensaries, ensuring that we obtained information for newly opened dispensaries. Each dispensary was geocoded to its address and spatially joined to ZIP code polygons for the year 2012 (ESRI, 2012). Overall marijuana density estimates used in models were calculated as the number of dispensaries per square mile within each ZIP code. Dispensary densities in adjacent areas were also calculated. These densities were represented by the un-weighted averages of densities across ‘spatially lagged’ ZIP codes, those immediately adjacent to each ZIP code. Geographic adjacencies were defined as sharing a boundary or touching at a single point, allowing for a 0.5 meter tolerance to compensate for imprecision in boundary maps. The mean number of neighboring ZIP codes in 2012 was 5.6 (standard deviation 2.3), with six ZIP codes having zero neighbors.

2.1.3. Demographic and environmental covariates—Estimated annual ZIP code-level demographic data included percent white, percent Hispanic, percent African American, median household income (per \$10,000), age distribution categories (percent under age 19, 20–24, 25–44, 45–64), percent with less than a high school degree and percent with greater than a Bachelor’s degree, percent unemployed, and population density (per mile²). With the exception of income, these estimates were based on publically available inter-censal projections at the Census block group level supplied by Geolytics (Geolytics, 2011). Demographic variables were aggregated from Census block group boundaries up to year-specific ZIP codes. Because block groups are not nested within ZIP codes, demographic variables had to be estimated for block groups that cross ZIP code boundaries. In these cases, the block group demographic variables were weighted based on the portion of the captured block group centroid population that falls within each ZIP code. To account for spatially variant population growth, we linearly interpolated block population from 2000 to 2010 and used year-specific block populations when weighting demographic variables. Median household income data for 2000 were obtained at the block group level from the 2000 Census, while 2010 data were estimated using 2008–2012 averages from the American Community Survey. Inter-censal estimates were constructed by assuming that 2000–2010 changes were distributed across years in proportion to those of annual county-level income estimates (U.S. Census, 2014), while 2011 and 2012 estimates assumed equal proportional growth for all block groups within a county. These block-group income estimates were converted to 2012 dollars using the Consumer Price Index and reallocated to ZIP codes in the manner described above.

Other ZIP code characteristics included the overall hospitalization rate and the density of overall retail establishments. The overall hospitalization rate, calculated as the number of discharges regardless of diagnoses per 100 persons, was included as a covariate to control for differences in access to inpatient care. A measure of the density of overall retail establishments was derived from ZIP Code Business Patterns data (Census, 2013). Using North American Industry Classification System (NAICS) codes, counts of all “retail trade” (sectors 44, 45) and “accommodations and food service” (sector 72) establishments were tallied. Density was calculated as the number of retail establishments per 100 square miles of ZIP code area.

A measure of the geographic instability of a ZIP code’s population between consecutive years, calculated as the percentage of year-2000 Census block populations within a given year’s ZIP code definition that would not have fallen within the boundaries of the best-matched ZIP code in the prior year (range: 0–59%), was created. This instability measure tested the assumption that ZIP code boundary shifts did not substantively bias other effects estimates.

Roughly 2% of ZIP code polygons had population values of fewer than three residents, and these were assigned a minimal population of three to allow for non-zero population risks in all areas. Census-based rate variables (e.g., percent African American) were undefined in approximately 1% of ZIP codes and were thus assigned the California state average for the year. These missing Census values typically occurred in unpopulated areas, such as national forests.

2.2. Data Analysis

Panel analyses relied on a Bayesian Space-Time Misalignment Poisson model developed by Zhu et al. (Zhu et al., 2013). This model allows us to perform panel analyses using all ZIP codes in California over a period of 12 years despite frequent changes in the size and shape of these geographic units. This approach uses a separate conditional autoregressive (CAR) random effect for each year-specific map of spatial adjacencies to account for spatial autocorrelation, assumed to have mean zero and a common standard deviation. The model also allows for a second, separate, random effect that is not spatially autocorrelated.

The outcome measure is the annual count of marijuana abuse/dependence hospitalizations by ZIP code. Poisson models were used:

$$Y_{i,t}|\mu_{i,t} \sim \text{Poisson}(E_{i,t}\exp(\mu_{i,t}))$$

where Y_{it} represents the count of hospitalizations in ZIP code i during year t and $E_{i,t}$ denotes the expected number of hospitalization visits under the assumption that statewide marijuana hospitalizations are distributed among ZIP codes in direct proportion to population. The log-relative risk, $\mu_{i,t}$, is modeled linearly as:

$$\mu_{i,t} = \alpha_t + X'_{i,t}\beta + \theta_{i,t} + \phi_{i,t}$$

This is a linear combination of fixed covariate effects and random effects which may take account of spatial and/or temporal correlation. Vector α_t is a set of year-specific intercepts that control for statewide changes in marijuana hospitalization risks that are not explained by other covariates. Matrix X'_{it} contains space- and time-specific covariates and β is a vector of fixed-effects estimates of the impacts of those covariates. $\theta_{i,t}$ and $\phi_{i,t}$ denote the pair of random effects capturing spatially unstructured heterogeneity and CAR spatial dependence, respectively. Models included fixed effects for neighborhood demographics, overall hospitalization rates, population density, retail clutter, and ZIP code instability (misalignment). A similar model was used to estimate the impact of local and adjacent marijuana dispensaries on marijuana abuse/dependence hospitalizations, but this analysis included a single 2012 cross-sectional data set. Local and adjacent dispensary densities were entered simultaneously into the model.

Models were estimated using WinBUGS 1.4.3 software (Lunn et al., 2000). Uninformed priors were specified for all fixed and random effects. Models were allowed to burn-in for 50,000 Markov Chain Monte Carlo (MCMC) iterations, a sufficient number of iterations for all parameter estimates to stabilize and converge between two chains with different initial values. Posterior estimates were sampled for an additional 50,000 MCMC iterations to provide model results, until the ratio of the MC error to the standard deviation was less than 5%. Traces of MCMC iterations demonstrated good convergence for all parameters.

3. RESULTS

Table 1 presents descriptive statistics for ZIP codes in California from 2001 to 2012 (20,219 ZIP codes). The racial/ethnic distributions in average ZIP codes were 4.7% African American, 26.7% Hispanic, and 55.3% non-Hispanic white. The ranges of both population and square miles per ZIP code were large, with the resulting population density measure mean of 3,319 people/mile² (range: 0–56,482 people/mile²). There were 1,650 dispensaries in California in early 2012. The number of medical marijuana dispensaries per ZIP code ranged from 0 to 40, with an average of approximately one per ZIP code and 27.0% reporting at least one dispensary. The mean density of dispensaries in both local and adjacent ZIP codes was 0.22/mile², with a larger range for local ZIP codes (0–11 vs. 0–6). The mean density of dispensaries in ZIP codes with at least one dispensary was 0.83/100 mile². Overall, 65.6% of ZIP codes had a dispensary locally or in an adjacent spatial unit.

Table 2 shows results from the Bayesian Space-Time Misalignment Poisson model from 2001–2012 and presents posterior estimates of the effects of each fixed-effect variable, expressed as relative rates (calculated as $\text{Exp}[\text{raw coefficient}]$). Each relative rate is calculated from the median estimate from the sampled posterior distribution and is followed in parentheses by the 95% credible interval from that distribution. Greater retail density, lower median household income, and lower population density were all associated with greater rates of marijuana hospitalizations. ZIP codes with a higher percentage of residents with greater than a Bachelor's degree had fewer marijuana hospitalizations. The CAR spatial random effect explained 93% of the overall error variance in the model, indicating that there is substantial spatial autocorrelation. Year-specific intercepts were included in all models. There was a large and steady increase in the rates of marijuana abuse/dependence hospitalizations from 2001 to 2012 even after controlling for demographic and other environmental covariates.

Cross-sectional marijuana dispensary density results are displayed in Table 3. An additional one dispensary per square mile was associated with a 6.8% increase in the number of marijuana hospitalizations (95% credible interval 1.033, 1.105). The spatial lag effect was not well supported. Results for other covariates were generally consistent with the space-time results presented in Table 2, except that the association for unemployment was negative in the cross-sectional analyses.

4. DISCUSSION

The density of local marijuana dispensaries is associated with a greater number of hospitalizations with a primary or secondary marijuana abuse/dependence code. Furthermore, other local characteristics, such as the median household income and age and racial/ethnic distributions, are associated with marijuana hospitalizations. These local characteristics do not fully explain the increase in hospitalizations over time, although we were unable to longitudinally measure dispensary density. This is the first analysis of the statewide impact of marijuana dispensaries on marijuana abuse and dependence, as well as the first look at population characteristics associated with hospitalization rates.

Increased availability of marijuana in ZIP codes with a higher density of dispensaries remains a plausible explanation for the increased hospitalizations in dispensary-dense areas. This cross-sectional association remains after adjustment for other characteristics of ZIP codes. Indicators of social disorganization were associated with hospitalizations in both the cross-sectional and panel analyses. The direction of causation remains open to debate, however. It is possible that marijuana dispensaries are more likely to locate in socially disorganized neighborhoods with higher underlying rates of marijuana use and abuse, or that the presence of these dispensaries increases local use, or perhaps both. Previous research suggests that some indicators of disorganization are related to locations of dispensaries (Boggett et al., 2014; Morrison et al., 2014) but more work is needed to fully understand this relationship.

We found some of the same characteristics to be related to marijuana use and dependence at the population level as in individual models of use for medical or recreational purposes (e.g., white populations; Freisthler and Gruenewald, 2014; Morrison et al., 2014; O'Connell and Bou-Matar, 2007; Ogborne and Smart, 2000; Reiman, 2007 ; Swift et al., 2005; Ware et al., 2005). Our population estimates suggest marijuana abuse and dependence occur at higher rates in lower income areas, similar to associations seen in individuals who use medical marijuana (O'Connell and Bou-Matar, 2007; Ogborne and Smart, 2000; Reiman, 2007 ; Swift et al., 2005; Ware et al., 2005). While this study cannot suggest inferences about individual use and likelihood of marijuana abuse and dependence, the congruence of findings across individual and population levels suggest these might be some important areas to direct future research.

A number of limitations need to be noted. Population models have the advantage that they can comprehensively identify aggregate effects across diverse populations living in many different neighborhood conditions. As an aggregate population analysis, however, it is not possible to illuminate the connecting theory that leads from a global assessment of exposures to marijuana dispensaries and other neighborhood conditions to the individual behaviors that are affected by these exposures. For this purpose, multilevel contextual data and analysis models are required. Thus, the individual behavioral mechanisms that underlie the observed effects remain to be explored further. Other limitations of the current analyses include the cross-sectional nature of dispensary information. We cannot assess whether the increase in the number and density of dispensaries across the 12 year period partially or fully explains the dramatic increase in the number of marijuana hospitalizations. However, this is the first opportunity to examine dispensaries at a statewide level, and these cross-sectional findings indicate that dispensary density matters and should be examined longitudinally once such data are available. Furthermore, the vast majority of hospitalization codes are secondary diagnoses. This is not particularly surprising since acute marijuana poisoning/ overdose is quite rare. Finally, the procedure used to estimate ZIP code demographic estimates from available block-group level projections will introduce some noise in these covariates, and this would be expected to bias the associated parameters toward zero. Despite this, the association between dispensary density and hospitalizations was well-supported.

As the first study to examine population characteristics related to marijuana abuse and dependence, more work is needed to understand the exact mechanisms underlying these relationships. Future research incorporating dynamic models of dispensary effects as they evolve may lead to greater understanding of these processes over both short- and long-term periods and at smaller scales of geographic resolution. This work suggests prevention and intervention programs for marijuana abuse and dependence should be targeted in areas of concentrated disadvantage (as measured using such economic factors as unemployment, income, and education). Despite medical marijuana being allowed by California, local jurisdictions can ban dispensaries outright or place restrictions on their locations (such as not near where child and youth populations spend time). States may also place other restrictions on who can purchase marijuana at dispensaries (e.g., adults 21 years or older) to reduce access to populations who may be vulnerable to abuse or dependence. States that are considering passing laws allowing medical or recreational use of marijuana might consider regulations that limit the density of dispensaries, particularly in disadvantaged areas, or encourage provisions for localities to make their own regulations (including bans) to prevent problems in areas at risk for high rates of marijuana abuse and dependence.

Acknowledgments

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Highlights

- We examine marijuana dispensary density and marijuana hospitalizations
- We study marijuana hospitalizations and neighborhood ecology from 2001–2012
- Dispensaries were cross-sectionally associated with greater marijuana hospitalizations
- Indicators of concentrated disadvantage were associated with marijuana hospitalizations

Table 1

Descriptive statistics, ZIP codes in California 2001–2012 (n=20,219 ZIP codes)

	Mean	SD	Minimum	Maximum	Mean Change, 2012 vs. 2001
Population	21,630.46	21,834.58	3.00	126,941.40	1,353.19
Area (mile ²)	93.47	247.91	0.01	3,805.23	-2.47
Percent age 0–19	26.06	6.71	0.00	70.67	-4.03
Percent age 20–24	6.94	2.78	0.00	48.48	-0.01
Percent age 25–44	27.12	6.93	0.00	100.00	-3.96
Percent age 45–64	25.71	6.34	0.00	100.00	2.98
Retail Clutter/mile ²	24.76	96.11	0.00	2,246.50	0.46
Percent with less than high school degree	21.47	15.44	0.00	93.22	-0.27
Percent with greater than Bachelor's Degree	9.39	8.19	0.00	100.00	0.65
Median household Income (\$10,000)	6.74	2.86	0.00	24.23	0.02
Overall hospitalization rate (per 100 people)	22.22	228.78	0.00	14,800.00	-12.44
Percent African American	4.66	8.23	0.00	88.01	-1.24
Percent Hispanic	26.68	22.41	0.00	98.49	2.89
Percent white	55.29	25.33	0.00	100.00	-12.71
Unemployment (%)	9.67	9.56	0.00	100.00	7.16
Population Density (people/mile ²)	3,319.39	5,477.06	0.01	56,482.36	101.37
ZIP code instability	0.60	3.27	0.00	59.42	
Cannabis abuse/dependence hospitalizations	21.71	31.87	0.00	441.00	29.63
Marijuana Dispensary Densities (2012 only)					
Number of dispensaries	0.97	2.64	0.00	40.00	
Dispensaries/mile ²	0.22	0.87	0.00	15.48	
Spatially lagged dispensaries/mile ²	0.22	0.55	0.00	5.58	

Table 2

Relative Rates (95% credible intervals) and Ln (Relative Rates), marijuana abuse and dependence hospitalizations, Bayesian Spatial Misalignment Models (n=20,219 ZIP codes)

	Relative Rate (95% credible interval)	Ln (RR)
Demographic Characteristics		
Percent age 0–19	1.023 (1.019,1.028) ^a	0.0225
Percent age 20–24	0.981 (0.977,0.987) ^a	−0.0187
Percent age 25–44	0.994 (0.992,0.997) ^a	−0.0057
Percent age 45–64	1.030 (1.025,1.034) ^a	0.0291
Retail Clutter/mile ² (×100)	1.074 (1.062,1.086) ^a	0.0717
Percent with less than high school degree	1.001 (0.999,1.003)	0.0014
Percent with greater than Bachelor's Degree	0.992 (0.989,0.994) ^a	−0.0084
Median household Income (\$10,000)	0.879 (0.872,0.885) ^a	−0.1285
Overall hospitalization rate (per 100 people)	1.066 (1.061,1.071) ^a	0.0642
Percent African American	1.025 (1.023,1.026) ^a	0.0243
Percent Hispanic	1.003 (1.002,1.004) ^a	0.0032
Percent white	1.014 (1.013,1.015) ^a	0.0142
Unemployment (%)	1.001 (0.999,1.003)	0.0013
Population Density (people/mile ²) (×100)	0.897 (0.877,0.918) ^a	−0.1084
Misalignment Effects		
ZIP code instability	1.004(1.001,1.008)	0.0044
Random Effects		
	Median (95% Credible	
Spatial Random Effects (s.d. CAR process)	0.575 (0.560, 0.588)	
ZIP code-Level Random Effects (s.d.)	0.162 (0.144, 0.181)	
Proportion of error variance that is spatial	0.926 (0.907, 0.943)	

Iterations: 50,001–100,000

^a Indicates findings that are well-supported by the data as evidenced by credible intervals that exclude one for relative risks

Table 3

Relative Rates (95% credible intervals) and Ln (Relative Rates), marijuana abuse and dependence hospitalizations, 2012 cross-sectional analysis with marijuana dispensary density (n=1,702 ZIP codes)

	Relative Rate (95% credible interval)	Ln(RR)
<u>Marijuana Dispensary Density</u>		
Dispensaries/mile ²	1.068 (1.033,1.105) ^a	0.0655
Spatially lagged dispensaries/mile ²	1.034 (0.949,1.123)	0.0339
<u>Demographic Characteristics</u>		
Percent age 0–19	1.022 (1.010,1.033) ^a	0.0221
Percent age 20–24	1.028 (0.983,1.068)	0.0272
Percent age 25–44	0.991 (0.984,0.998) ^a	–0.0086
Percent age 45–64	1.031 (1.023,1.039) ^a	0.0307
Retail Clutter/mile ² (×100)	1.060 (1.019,1.101) ^a	0.0583
Percent with less than high school degree	1.004 (1.000,1.009) ^a	0.0044
Percent with greater than Bachelor's Degree	0.998 (0.992,1.005)	–0.0021
Median household Income (\$10,000)	0.863 (0.840,0.882) ^a	–0.1469
Overall hospitalization rate (/100 people)	1.806 (1.656,1.960) ^a	0.0046
Percent African American	1.022 (1.018,1.027) ^a	0.0218
Percent Hispanic	1.003 (0.999,1.006)	0.0027
Percent white	1.013 (1.010,1.015) ^a	0.0127
Unemployment (%)	0.988 (0.984,0.992) ^a	–0.0122
Population Density (people/mile ²) (×100)	0.862 (0.799,0.938) ^a	–0.0015
<u>Random Effects</u>		
	Median (95% Credible Interval)	
Spatial Random Effects (s.d. CAR process)	0.543 (0.502, 0.580)	
ZIP code-Level Random Effects (s.d.)	0.145 (0.072, 0.207)	
Proportion of error variance that is spatial	0.933 (0.861, 0.984)	

Iterations: 50,001–100,000

^aIndicates findings that are well-supported by the data as evidenced by credible intervals that exclude one for relative risks

Association of High-Potency Cannabis Use With Mental Health and Substance Use in Adolescence

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 Supplemental content

IMPORTANCE Cannabis use is consistently linked to poorer mental health outcomes, and there is evidence that use of higher-potency cannabis increases these risks. To date, no studies have described the association between cannabis potency and concurrent mental health in a general population sample or addressed confounding using longitudinal data.

OBJECTIVE To explore the association between cannabis potency and substance use and mental health outcomes, accounting for preceding mental health and frequency of cannabis use.

DESIGN, SETTING, AND PARTICIPANTS This cohort study used data from the Avon Longitudinal Study of Parents and Children, a UK birth cohort of participants born between April 1, 1991, and December 31, 1992. Present data on outcomes and exposures were collected between June 2015 and October 2017 from 1087 participants at 24 years of age who reported recent cannabis use.

EXPOSURES Self-reported type of cannabis most commonly used in the past year, coded to a binary exposure of use of high-potency cannabis or lower-potency cannabis.

MAIN OUTCOMES AND MEASURES Outcomes were reported frequency of cannabis use, reported cannabis use problems, recent use of other illicit drugs, tobacco dependence, alcohol use disorder, depression, generalized anxiety disorder, and psychotic-like experiences. The study used secondary data; consequently, the hypotheses were formulated after data collection.

RESULTS Past-year cannabis use was reported by 1087 participants (580 women; mean [SD] age at onset of cannabis use, 16.7 [3.0] years). Of these, 141 participants (13.0%) reported the use of high-potency cannabis. Use of high-potency cannabis was associated with increased frequency of cannabis use (adjusted odds ratio [AOR], 4.38; 95% CI, 2.89-6.63), cannabis problems (AOR, 4.08; 95% CI, 1.41-11.81), and increased likelihood of anxiety disorder (AOR, 1.92; 95% CI, 1.11-3.32). Adjustment for frequency of cannabis use attenuated the association with psychotic experiences (AOR 1.29; 95% CI, 0.67-2.50), tobacco dependence (AOR, 1.42; 95% CI, 0.89-2.27), and other illicit drug use (AOR, 1.29; 95% CI, 0.77-2.17). There was no evidence of association between the use of high-potency cannabis and alcohol use disorder or depression.

CONCLUSIONS AND RELEVANCE To our knowledge, this study provides the first general population evidence suggesting that the use of high-potency cannabis is associated with mental health and addiction. Limiting the availability of high-potency cannabis may be associated with a reduction in the number of individuals who develop cannabis use disorders, the prevention of cannabis use from escalating to a regular behavior, and a reduction in the risk of mental health disorders.

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Globally, cannabis is the most commonly used internationally regulated drug,¹ and policy on its use is becoming more liberal worldwide.² The primary psychoactive component of cannabis is Δ^9 -tetrahydrocannabinol (THC). The potency (concentration of THC) may be an important factor in the association between cannabis use and mental health. Experimental studies indicate that THC intoxication is dose dependent, with higher doses causing greater memory impairment and transient psychotic-like symptoms.³ Policy liberalization has been accompanied by proliferation of high-potency cannabis in legal markets,^{4,5} and THC concentrations have increased in markets where cannabis remains illegal.⁶

Cannabis use is consistently linked to poorer mental health outcomes,^{7,8} and there is evidence that higher-potency cannabis is associated with higher risks. A case-control study of first-episode psychosis in England found that those who self-reported using higher-potency cannabis were twice as likely to have a psychotic disorder, compared with participants who did not use cannabis.⁹ When the study was replicated in a multinational case-control study of first-episode psychosis across 11 sites in Europe and Brazil, the incidence of psychosis across sites was positively correlated with the prevalence of high-potency cannabis use in the site-specific control samples.¹⁰ In a self-selecting sample of people who use internationally regulated drugs, the use of high-potency strains of cannabis was associated with self-report of lifetime depression¹¹ and cannabis dependence.¹² These findings indicate that the availability of high-potency cannabis may increase risks of poorer mental health, addiction, and need for treatment among those who are using the drug.

The strength of association between the use of cannabis and mental health outcomes is increased when cannabis use is frequent; consequently, increased frequency of use may confound the association between cannabis potency and mental health outcomes.¹² Understanding the extent to which harms of high-potency cannabis are due to the THC content of the drug, and the extent to which these harms may be accounted for by increased frequency of use, is important for informing policy decisions around taxation and limits on drug potency.

To our knowledge, to date, no studies of the association between cannabis potency and mental health have been conducted in a general population sample. General population studies can provide a valid estimate of the association between mental health outcomes and cannabis potency at the population level, which may be crucial for informing policy makers and clinical service providers. We use data from the Avon Longitudinal Study of Parents and Children (ALSPAC), a large general population birth cohort where contemporaneous data were collected when participants were 24 years of age on cannabis potency, cannabis use frequency, and validated measures of mental health outcomes, and prospective measures of adolescent mental health were collected from participants up to 24 years of age.

The aims of our study were to (1) describe the use of different potencies of cannabis among a population of UK adolescents; (2) explore the association between cannabis potency and problems resulting from cannabis use, use and

Key Points

Question Does use of high-potency cannabis (compared with use of low-potency cannabis) increase risks for problems resulting from cannabis use, common mental disorders, and psychotic experiences after controlling for early-life mental health symptoms and frequency of use?

Findings In this cohort study of 1087 participants who reported cannabis use in the previous year, after adjusting for frequency of cannabis use and early adolescent mental health, use of high-potency cannabis was associated with a significant increase in the frequency of cannabis use, likelihood of cannabis problems, and likelihood of anxiety disorder. Those using high-potency cannabis had a small increase in the likelihood of psychotic experiences; however, this risk was attenuated after adjustment for frequency of cannabis use.

Meaning Risks for cannabis use problems and anxiety disorders are higher among those reporting use of high-potency cannabis; provision of public health messaging regarding the importance of reducing both frequency of cannabis use and the potency of the drug, as well as limiting the availability of high-potency cannabis, may be effective for reducing these risks.

disordered use of other substances, common mental disorders, and psychotic experiences (PEs) by comparing those who use high-potency cannabis with those who use lower potency cannabis; and (3) determine the extent to which such associations are explained by adolescent mental health at 12 to 13 years of age, age at onset of cannabis use, and current frequency of cannabis use.

Methods

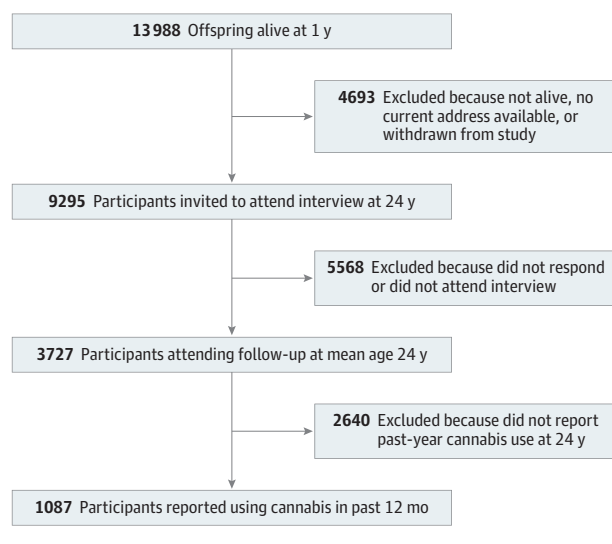
Study Population

ALSPAC is a UK population-based birth cohort, the methods of which have previously been outlined^{13,14} (see eAppendix 1 in the [Supplement](#) for full details). The sample for the present analyses comprised the 1087 participants who reported on their past-year cannabis use while attending the ALSPAC clinic between June 2015 and October 2017 at a mean (SD) age of 24.0 (0.8) years (**Figure 1**). Data on the 2085 individuals who participated in the assessment at 24 years of age but were excluded based on reporting no recent cannabis use are available in eTable 3 in the [Supplement](#) (see also eAppendix 1 in the [Supplement](#) for further details on all the measures described). Ethical approval for the study was obtained from the ALSPAC Ethics and Law Committee and the local Research Ethics Committees. Written informed consent for the use of data collected via questionnaires and clinics was obtained from participants following the recommendations of the ALSPAC Ethics and Law Committee at the time.

Exposure

Those who reported past-year cannabis use were asked “What type of cannabis have you most commonly used or taken in the last 12 months?” and were able to select from the following options: “herbal cannabis/marijuana,” “skunk/other stronger types of herbal cannabis,” “hashish/resin/solid,” “other,”

Figure 1. Flow Diagram Showing the Avon Longitudinal Study of Parents and Children Analysis Sample



or “don’t know.” Consistent with previous research that has validated self-reported data on 3 cannabis types against quantified concentrations of THC and cannabidiol among young UK cannabis users,¹⁵ we categorized cannabis as either high potency (typically $\geq 10\%$ THC; “skunk/other stronger types of herbal cannabis”) or low potency (typically $< 10\%$ THC; “herbal cannabis/marijuana,” “hashish/resin/solid,” or “other”).¹⁰

Outcomes

Cannabis Use Frequency at 24 Years of Age

Participants were asked “in the last 12 months, how often have you used cannabis?” This variable was dichotomized to “Monthly use or less” or “weekly/daily use.”

Problematic Cannabis Use at 24 Years of Age

Those who self-reported 2 or more items on the Cannabis Abuse Screening Test¹⁶ within the past year were classified as having recently experienced problems associated with their cannabis use.

Other Substance Use and Dependencies at 24 Years of Age

Participant self-report of the use of any illicit drugs in the past 12 months was categorized as recent other illicit drug use. The reference group was composed of those who reported no recent use of these other illicit drugs (including those who had never used these drugs). Participants were categorized as nicotine dependent if they self-reported daily nicotine use and reported 3 or more criteria on the Fagerström Test for Nicotine Dependence,¹⁷ indicating low, medium, high, or very high nicotine dependence. The reference group was composed of those who met criteria for very low dependence and those who were not using nicotine every day or had never smoked. The *DSM-5* criteria for alcohol use disorder (AUD)¹⁸ were used to identify participants experiencing alcohol use problems. Participants were categorized as experiencing moderate or severe AUD if they self-reported 4 or more of the AUD criteria. The refer-

ence group was composed of those who reported less than 4 of the AUD criteria (including individuals who had never drunk alcohol).

Mental Health at 24 Years of Age

Participants completed a self-administered computerized Clinical Interview Schedule-revised,¹⁹ a tool for lay interviewers to assess psychiatric disorders in the community. Participants who met the criteria for moderate or severe *DSM-IV*²⁰ major depressive disorder at time of the interview were categorized as experiencing depression. Participants who met *DSM-IV* criteria for generalized anxiety disorder²⁰ were categorized as experiencing anxiety. Participants were rated on PEs using the PLIKS (psychosis-like symptoms) semistructured interview administered by trained researchers.^{21,22} Those who were rated as having suspected or definite hallucinations, delusions, or thought interference in the past 12 months, which were either frequent (at least monthly) or caused them distress (reported as quite distressing or very distressing), were classified as having had a recent PE. For the purposes of these analyses, PEs were excluded if they happened only when the participant was either falling asleep or waking up, was ill with a high temperature, or within 2 hours of drinking alcohol or taking drugs.

Covariates

Prospective Measures From Early Childhood and Adolescence

Childhood socioeconomic position was assessed through measures from maternal questionnaires completed during pregnancy; variables were maternal educational attainment and parents’ occupation class. A child’s racial/ethnic background was derived from parents’ reported race/ethnicity (coded as white or black and minority ethnic group).

To account for mental health symptoms preceding the onset of cannabis use (mean age at onset of cannabis use in sample, 16.7 years; 95% CI, 16.5–16.9 years), a continuous score measure of depression symptoms at 13 years of age was included in analyses of major depressive disorder and generalized anxiety disorder. These symptoms were assessed through the self-completed Mood and Feelings Questionnaire at 13 years of age,²³ a tool for measuring depression in children and young people. The number of PEs (assessed by PLIKS²¹) reported at 12 years of age was included in the analysis of the outcome of PEs at 24 years of age.

Age at onset of cannabis use was self-reported in ALSPAC at 14, 15, 16, 18, 20, 22, and 24 years of age. Participants who reported lifetime use of cannabis at any of these points were asked at what age they first used cannabis. Participants’ earliest report of age at first cannabis use was used to derive a variable of age at onset of cannabis use.

Statistical Analysis

All analyses were conducted in Stata, version 15.1 (Stata Corp). The association between use of high-potency cannabis and substance use and mental health at 24 years of age was analyzed using univariable and multivariable logistic regression, with cannabis potency as the independent variable. Three separate multivariable models were performed for each outcome:

Table 1. Association Between Type of Cannabis and Demographic, Substance Abuse, and Mental Health Outcomes in 1087 Participants Who Reported Recent Cannabis Use

Characteristic	Cannabis use, % ^a		P value ^b
	High potency (n = 141)	Lower potency (n = 946)	
Regular cannabis use	56.8	17.6	≤.001
Cannabis use problems	10.1	0.8	≤.001
Use of other illicit drugs	82.9	66.5	≤.001
Tobacco dependence	37.0	15.1	≤.001
Alcohol use disorder	15.1	10.0	≤.001
Major depression (moderate or severe symptoms)	11.7	9.7	≤.001
Generalized anxiety disorder	19.1	11.6	≤.001
Psychotic-like experiences	12.4	7.1	≤.001
Male sex	71.6	43.4	≤.001
Low maternal educational level	19.2	13.1	≤.001
Lower parental occupational class	32.2	29.2	≤.001
Black or minority ethnic group	5.3	5.3	.94
Age at onset of cannabis use, mean (95% CI), y	14.7 (14.3-15.1)	16.9 (16.8-17.2)	NA
MFQ score at 13 y, mean (95% CI)	5.6 (4.65-6.49)	5.6 (5.26-5.95)	NA
No. PEs at 12 y, mean (95% CI)	0.33 (0.18-0.48)	0.20 (0.16-0.24)	NA

Abbreviations: MFQ, Mood and Feelings Questionnaire; NA, not applicable; PEs, psychotic experiences.

^a All numbers estimated from imputed proportions.

^b Determined by χ^2 test.

(1) adjusting for sex and childhood socioeconomic position; (2) additional adjustment for age at onset of cannabis use for models of substance use outcomes, depression symptom score at 13 years of age for models of major depressive disorder and generalized anxiety disorder outcomes, and PEs at 12 years of age for the model with PE as the outcome (time points selected to ensure mental health symptoms preceded onset of cannabis use); and (3) adjusted as in model 2, with inclusion of a categorical measure of cannabis use frequency. This measure allowed estimation of the extent to which preexisting symptoms of mental health disorders and the frequency of cannabis use explained any association between the use of high-potency cannabis and substance use and mental health outcomes. Results are presented as odds ratios (ORs) with 95% CIs. Propensity score models were applied to complete case data as a sensitivity test (eAppendix 2 and eTables 1 and 2 in the Supplement).

Missing Data and Imputation

As outcomes and exposures were collected at the same point, most missing data were in the covariates assessed at earlier ages (eAppendix 1 and eTable 3 in the Supplement). Missing data in all analysis variables (exposures, outcomes, and covariates) were addressed through multiple imputation using chained equations, which uses a series of univariate regression models to impute each incomplete variable sequentially. Each model included all other analysis variables, along with the following auxiliary variables: race/ethnicity, experiencing bullying up to 16 years of age, parental separation up to 16 years of age, parental mental health problems up to 16 years of age, parental substance use up to 16 years of age, Mood and Feelings Questionnaire score at 16 and 18 years of age, number of self-reported psychotic-like experiences at 14 years of age, and conduct disorder symptoms up to 13 years of age. Estimates were obtained by pooling results across 40 im-

puted data sets using the Rubin rules, and assessment of Monte Carlo variability confirmed this as a suitable number of imputations.²⁴

Results

Of the 1087 participants reporting past-year cannabis use at 24 years of age, 12.8% (number estimated from imputed proportions) reported the use of high-potency cannabis (Table 1). Use of lower-potency forms of cannabis was reported by 87.2% (number estimated from imputed proportions) of those who used cannabis in the past year (see eTable 3 in the Supplement for data on this and on all analysis variables). Use of high-potency cannabis was more common than use of lower-potency cannabis in those who were male (71.6% vs 43.3%) and those who reported regular cannabis use (56.8% vs 17.6%), recent cannabis use problems (10.1% vs 0.8%), recent use of other illicit drugs (82.9% vs 66.5%), tobacco dependence (37.0% vs 15.1%), AUD (15.1% vs 10.0%), depression (11.7% vs 9.7%), generalized anxiety disorder (19.1% vs 11.6%), and PE (12.4% vs 7.1%) (Table 1).

Cannabis Use Outcomes

There was an unadjusted association between the use of high-potency cannabis and frequency of cannabis use at 24 years of age (OR, 6.21; 95% CI, 4.24-9.11) (Table 2). This association was attenuated by adjustment for sociodemographic factors and by the age at onset of cannabis use, but those reporting use of high-potency cannabis remained more than 4 times as likely to report using cannabis at least weekly compared with those reporting use of lower-potency forms of cannabis (adjusted OR [AOR], 4.38; 95% CI, 2.89-6.63). There was also an unadjusted association between the use of high-potency cannabis and reporting recent can-

Table 2. Logistic Regression Analysis of the Association Between High-Potency Cannabis and Substance Use and Mental Health Outcomes^a

Outcome variable	Univariable OR (95% CI)	P value	Adjusted for childhood sociodemographic factors, AOR (95% CI)	P value	Adjusted for prospective mental health measures, AOR (95% CI)	P value	Adjusted for frequency of cannabis use, AOR (95% CI)	P value
Regular cannabis use	6.21 (4.24-9.11)	≤.001	5.81 (3.90-8.65)	≤.001	4.38 (2.89-6.63) ^b	≤.001	NA	NA
Recent cannabis use problems	13.17 (5.41-32.04)	≤.001	13.52 (5.28-34.60)	≤.001	8.45 (3.04-23.50) ^b	≤.001	4.08 (1.41-11.81)	.009
Recent use of other illicit drugs	2.47 (1.53-3.97)	≤.001	2.19 (1.35-3.56)	.002	1.50 (0.91-2.49) ^b	.11	1.29 (0.77-2.17)	.34
Tobacco dependence	3.31 (2.23-4.92)	≤.001	3.30 (2.18-4.99)	≤.001	2.05 (1.31-3.19) ^b	.002	1.42 (0.89-2.27)	.14
Alcohol use disorder	1.60 (0.94-2.73)	.08	1.49 (0.86-2.56)	.15	0.99 (0.56-1.76) ^b	.97	0.90 (0.49-1.64)	.73
Major depression (moderate or severe symptoms)	1.24 (0.70-2.18)	.46	1.61 (0.89-2.93)	.12	1.54 (0.84-2.82) ^c	.16	1.28 (0.68-2.32)	.44
Generalized anxiety disorder	1.77 (1.09-2.86)	.02	2.35 (1.41-3.92)	≤.001	2.28 (1.36-3.83) ^c	.002	1.92 (1.11-3.32)	.02
Psychotic-like experiences	1.81 (1.01-3.24)	.047	2.03 (1.10-3.73)	.02	1.86 (1.00-3.46) ^d	.05	1.29 (0.67-2.50)	.45

Abbreviations: AOR, adjusted odds ratio; NA, not applicable; OR, odds ratio.

^c Depression symptom score at 13 years of age.^a All results estimated from imputed data. Multivariable model adjustment is incremental.^d Number of psychotic experiences at 12 years of age.^b Age at onset of cannabis use.

nabis problems (OR, 13.17; 95% CI, 5.41-32.04). This association was attenuated by adjustment for age at onset of cannabis use and frequency of cannabis use, but people reporting the use of high-potency cannabis were still more than 4 times as likely to report having recently experienced problems associated with their cannabis use (AOR, 4.08; 95% CI, 1.41-11.81) (Table 2 and Figure 2).

Substance Use Outcomes

Those who reported the use of high-potency cannabis were more than twice as likely to report recent use of other illicit drugs within the past 12 months (OR, 2.47; 95% CI, 1.53-3.97) and more than 3 times as likely to report tobacco dependence (OR, 3.31; 95% CI, 2.23-4.92) (Table 2). These associations were largely attenuated by adjustment for sociodemographic factors, age at cannabis onset, and frequency of cannabis use (recent use of other illicit drugs: AOR, 1.29; 95% CI, 0.77-2.17; and tobacco dependence: AOR, 1.42; 95% CI, 0.89-2.27). There was little evidence of an elevation in the likelihood of AUD among participants who reported use of high-potency cannabis after adjustment for sociodemographic variables, age at onset of cannabis use, and frequency of cannabis use (AOR, 0.90; 95% CI, 0.49-1.64) (Table 2 and Figure 2).

Mental Health Outcomes

Depression was slightly more common in the high-potency cannabis group, but there was little statistical evidence that high potency was associated with depression (AOR, 1.28; 95% CI, 0.68-2.34) (Table 2). There was evidence that use of high-potency cannabis was associated with a moderate elevation in likelihood of generalized anxiety disorder (OR, 1.77; 95% CI, 1.09-2.86). The strength of this association was increased slightly after adjustment for sociodemographic variables, depression symptoms at 14 years of age, and frequency of cannabis use (AOR, 1.92; 95% CI, 1.11-3.32).

Participants reporting the use of high-potency cannabis were almost twice as likely to report frequent or distressing PEs (OR, 1.81; 95% CI, 1.01-3.24) (not occurring directly after drug use) (Table 2). However, evidence of association was weakened after adjustment for frequency of cannabis use (AOR, 1.29; 95% CI, 0.67-2.50) (Table 2 and Figure 2).

Discussion

The present study restricts analyses to individuals who have used different forms of cannabis to inform understanding of the implications of the proliferation of high-potency cannabis in legal markets.^{4,5} In a general population sample of young people in the UK, individuals who use high-potency cannabis (compared with those using lower-potency forms of cannabis) are more likely to be using cannabis regularly, more likely to report having recently experienced problems associated with their cannabis use, and more likely to concurrently be experiencing use of other illicit drugs, tobacco dependence, AUD, generalized anxiety disorder, and PEs. After adjustment for age at onset of cannabis use or for early adolescent measures of psychopathologic conditions and frequency of cannabis use, high-potency cannabis was associated with increases in the likelihood of frequent cannabis use, having recently experienced problems associated with cannabis use, and the likelihood of experiencing generalized anxiety disorder. The results provide a profile of individuals who use high-potency cannabis, indicating that this behavior is more common among individuals who are male, grow up in families with a low socioeconomic status, experience early PEs, and report early-onset cannabis use.

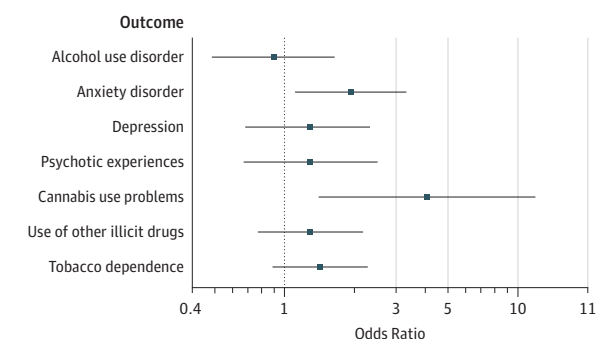
The outcomes regarding substance use and mental health may reflect shared predisposing risk factors that could also lead people to select the most potent drug available.²⁵ As the sample excluded those who had not used

cannabis, increases in risk for mental health outcomes associated with the use of high-potency cannabis are unlikely to be conflated by a shared liability to drug use and mental health disorders. However, evidence shows that shared risk factors underlie both exposure to cannabis and progression to development of dependence.²⁶ The profile of substance use outcomes and early-life experiences among those who use high-potency cannabis in the present study indicates that there may be overlapping risk factors between development of substance use and mental health disorders and the selection of higher-potency forms of cannabis. We have sought to adjust for these factors, but further consideration of the role of cannabis potency in the causal path to mental health disorders is warranted.

The estimate in the present study for the likelihood of depression among those using high-potency cannabis is similar to estimates observed in a previous study of a self-selecting sample of drug-using participants (OR, 1.18; 95% CI, 1.11-1.25).¹¹ However, the estimate in the present study demonstrating an increase in the likelihood of generalized anxiety disorder among those using high-potency cannabis is in contrast to the negligible increase in likelihood of lifetime anxiety disorder observed in a previous study (OR, 1.05; 95% CI, 0.98-1.12).¹¹ This discrepancy may be because the previous study relied on self-reported lifetime diagnosis,¹¹ whereas the present study used *DSM-IV*-validated measures of depression and generalized anxiety disorder at the time of assessment. A recent systematic review has indicated that cannabis use in adolescence is associated with an increased likelihood of lifetime depression and anxiety,⁸ although few studies had considered the potency or frequency of cannabis use.

A better understanding of the association between potency and frequency of cannabis use is required to gain a clearer understanding of the independent association of potency with mental health. We found similar effect sizes for the association between the use of high-potency cannabis and report of frequent or distressing PEs (not associated with drug use) as those observed in case-control studies of first-episode psychosis.^{9,10} However, in our study, we observed a substantial attenuation in effect size, by approximately 66%, after adjustment for frequency of cannabis use. The present findings on cannabis problems and frequency of use are consistent with previous evidence for a positive association between days of use of high-potency cannabis and severity of dependence.¹² In this previous study there was a linear association between number of days of high-potency cannabis use per month and severity of dependence score ($\beta = 0.15$; 95% CI, 0.02-0.28). Increased frequency of cannabis use could plausibly cause individuals to use higher-potency cannabis through the development of tolerance to the effects of cannabis; if so, then it is appropriate to consider cannabis use frequency as a confounding factor in the association with mental health. However, if the use of higher-potency cannabis leads to increased frequency of use, plausibly through high-potency cannabis delivering THC more efficiently than lower-potency cannabis, it would be more appropriate to explore the mediating effect of cannabis frequency.

Figure 2. Fully Adjusted Associations Between the Use of High-Potency Cannabis and Outcomes



Including fully adjusted associations for sociodemographics, longitudinal mental health, and frequency of use (see Methods). The horizontal bars indicate 95% CIs, and the dotted vertical line indicates the comparator group (individuals who reported use of lower-potency cannabis).

Strength and Limitations

This study has some strengths. To our knowledge, this study is the first to describe the association between cannabis potency and concurrent mental health and substance abuse in a general population sample, and the first to use longitudinal data to address confounding by early mental health symptoms and age at onset of cannabis use in this association.

This study also has some limitations. First, given that the data were collected in the context of an illegal cannabis market, we cannot be certain participants are accurately informed about the potency of the cannabis they are using. It is plausible that the ability to identify type of cannabis is higher among those frequently using the drug, although evidence suggests that frequency of use does not moderate the association between self-reported identification of cannabis type and actual THC concentration in young UK cannabis users.¹⁵

Second, the exposures and outcomes that we examined were cross-sectional. Because questions on the type of cannabis used were only asked at 24 years of age, it is plausible that the presence of anxiety disorder or PEs have led to the use of high-potency cannabis at 24 years of age. Adjusting for measures of psychopathologic conditions in adolescence had little effect on our estimates.

Third, recent use of high-potency cannabis was reported by only 12.8% of participants, which may result in some of the analyses being underpowered (eTable 3 in the Supplement). Fourth, as a result of attrition within ALSPAC, those who took part in the wave of the study that took place at 24 years of age were more likely to be white, female, and more affluent than the population from which the participants were originally drawn.¹⁴ In addition, because there is a dearth of nationally representative data on the demographics of those who use cannabis, we cannot be certain the present sample is representative of the population of cannabis users in the UK or globally. The analyses would benefit from replication in larger, representative samples, but to our knowledge, ALSPAC is the only longitudinal general population sample to include measures

of cannabis potency. Characteristics of those who did not report cannabis use at 24 years of age are in eTable 4 in the Supplement.

Conclusions

The use of high-potency cannabis may occur as part of a profile of other illicit drug use and substance dependency, likely owing to shared risk factors underlying these behaviors and

the selection of high-potency strains. The present study suggests that risks for cannabis use problems and anxiety disorders are further increased among those reporting the use of high-potency cannabis, even after accounting for sociodemographic factors, adolescent mental health, and frequency of cannabis use. Providing public health messaging regarding the importance of reducing both the frequency of cannabis use and the potency of the drug, as well as limiting the availability of high-potency cannabis, may be effective for reducing the harms associated with cannabis use.

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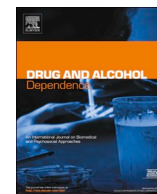
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Full length article

Recreational cannabis use impairs driving performance in the absence of acute intoxication



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ABSTRACT

Background: Across the nation, growing numbers of individuals are exploring the use of cannabis for medical or recreational purposes, and the proportion of cannabis-positive drivers involved in fatal crashes increased from 8 percent in 2013 to 17 percent in 2014, raising concerns about the impact of cannabis use on driving. Previous studies have demonstrated that cannabis use is associated with impaired driving performance, but thus far, research has primarily focused on the effects of *acute* intoxication.

Methods: The current study assessed the potential impact of cannabis use on driving performance using a customized driving simulator in *non-intoxicated*, heavy, recreational cannabis users and healthy controls (HCs) without a history of cannabis use.

Results: Overall, cannabis users demonstrated impaired driving relative to HC participants with increased accidents, speed, and lateral movement, and reduced rule-following. Interestingly, however, when cannabis users were divided into groups based on age of onset of regular cannabis use, significant driving impairment was detected and completely localized to those with early onset (onset before age 16) relative to the late onset group (onset ≥ 16 years old). Further, covariate analyses suggest that impulsivity had a significant impact on performance differences.

Conclusions: Chronic, heavy, recreational cannabis use was associated with worse driving performance in non-intoxicated drivers, and earlier onset of use was associated with greater impairment. These results may be related to other factors associated with early exposure such as increased impulsivity.

1. Introduction

To date, several countries, including Canada and Uruguay have completely legalized cannabis, while in the United States, recreational cannabis use is legal for adults in 11 US states and Washington DC; an additional 33 states have fully legalized medical cannabis programs (National Conference of State Legislatures NCSL, 2019). In the US, national surveys indicate that approximately 123.9 million people aged 12 or older have tried cannabis at least once, and 27.7 million report past month use (Substance Abuse and Mental Health Services Administration SAMHSA, 2019). In addition, a recent Canadian survey indicated that approximately 4.4 million Canadians aged 15 or older reported using cannabis at least once in the past year (Canadian Tobacco, Alcohol and Drugs Survey CTADS, 2019). Further, the most recent US National Roadside Survey, which collected data from 2013 to

2014, reported that cannabis is the second most commonly detected substance (second only to alcohol) in randomized, voluntary assessments of drivers; 12.6 % of weekend, night-time drivers aged 16 or older tested positive for cannabis, representing a 48 % increase from the last national survey performed in 2007 (Berning et al., 2015). Additional data from the US National Survey of Drug Use and Health collected between 2002 and 2014 indicates that 3.2 % of individuals aged 16–25 reported driving while intoxicated with cannabis (Azofeifa et al., 2015). Similarly, the Canadian Road Safety Monitor survey, which has gathered information on drugged driving since 2002, indicated that approximately 2.9 % of Canadians reporting driving within two hours of using cannabis (Robertson et al., 2017).

Significant evidence suggests that acute cannabis intoxication, the result of exposure to Δ -9 tetrahydrocannabinol (THC), the primary psychoactive constituent of the plant, is associated with impaired

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driving (reviewed in Hartman and Huestis, 2013; Compton, 2017), and higher blood serum concentrations of THC-related metabolites are associated with greater impairment (e.g., Khiabani et al., 2006; Ramaekers et al., 2004), although results are somewhat heterogeneous across studies. Specifically, driving under the influence of cannabis (DUIC) has been associated with slower driving in a number of investigations (e.g., Anderson et al., 2010; Lenné et al., 2010; Ronen et al., 2008, 2010); however, others did not observe this relationship (e.g., Liguori et al., 1998; Robbe, 1998). Acute cannabis intoxication has also been associated with increased lateral movement such as lane weaving in some studies (e.g., Lenné et al., 2010; Ronen et al., 2008; Robbe, 1998) but not others (e.g., Anderson et al., 2010; Ronen et al., 2010). Increased brake latency has been reported by Liguori et al. (1998), but a later study by this group did not replicate this finding (Liguori et al., 2002). In addition, some evidence suggests decreased response time while driving (e.g., Lenné et al., 2010), but this is not always observed (e.g., Liguori et al., 1998). Interestingly, in several studies, drivers demonstrated insight regarding their intoxication and reported adopting a slower driving style in an attempt to compensate for their impairment (reviewed in Sewell et al., 2009).

Further, several epidemiological studies have reported that DUIC significantly increases the odds of motor vehicle collisions (e.g., Asbridge et al., 2014; Bédard et al., 2007); however, some have suggested that once confounding variables (e.g., blood alcohol level) are controlled for, cannabis use no longer significantly impacts the odds of collision (e.g., Blows et al., 2005). Two meta-analyses reported that pooled odds ratios from these studies indicate a moderate to high risk of cannabis use on vehicle collisions (Asbridge et al., 2012; Li et al., 2012), but more recent meta-analyses indicate that publication bias may have inflated these numbers and that the increased risk may only be low to moderate, at an approximately 20–30 % higher likelihood (Elvik, 2013; Rogeberg and Elvik, 2016). Additionally, studies assessing driving after acute cannabis intoxication have reported increased collisions in some (e.g., Ronen et al., 2008, 2010) but not all studies (e.g., Anderson et al., 2010; Liguori et al., 1998).

Despite increasing numbers of cannabis consumers and research efforts focused on the relationship to driving performance, findings thus far remain limited. The cannabinoid metabolite examined in traditional assays (11-nor-9-carboxy-THC) has a long half-life, and the period of detection in biological samples can be several days or weeks after last use; accordingly, these assays do not provide accurate information regarding acute intoxication or recency of cannabis use. Further, in contrast to the alcohol *per se* limit in the US and Canada (≥ 0.08 % blood alcohol concentration), there is no currently accepted threshold for THC-related metabolites that indicates acute intoxication. Many roadside survey studies of DUIC continue to utilize these assays to determine intoxication status even though their limitations are well-known. Additionally, epidemiologic studies generally do not exclude individuals who use multiple substances, making it difficult to distinguish the specific impact of cannabis.

Experimental studies have primarily focused on the impact of *acute* cannabis intoxication on driving. Interestingly, while the effects of acute cannabis intoxication on driving performance have been studied extensively in regular cannabis users (e.g., Anderson et al., 2010; Lenné et al., 2010; Liguori et al., 1998, 2002; Robbe, 1998; Ronen et al., 2008, 2010) as well as in non-users (e.g., Robbe, 1998), to our knowledge, driving performance has never been assessed in cannabis users when they are *not acutely intoxicated*.

Further, previous studies examining the impact of recreational cannabis use on a range of outcome variables have emphasized the importance of thoroughly assessing cannabis use characteristics, particularly age of onset of cannabis use, as data suggest that adolescent onset of use is related to poorer cognitive performance and neurodevelopmental changes to both grey and white matter (reviewed in Gruber and Sagar, 2017; Lisdahl, 2013; Sagar and Gruber, 2018). Specifically, earlier onset of cannabis use is related to difficulties on

tasks of executive function while those with later cannabis onset appear more similar to control subjects (e.g., Battisti et al., 2010; Fontes et al., 2011; Gruber et al., 2012a). Additionally, earlier age of cannabis onset and increased frequency and magnitude of cannabis use have also been shown to *predict* greater impairment of executive function and vice versa in recreational cannabis users (e.g., Dahlgren et al., 2016; Squeglia et al., 2014). Importantly, these studies have demonstrated poorer cognitive performance in chronic recreational cannabis users, even in the *absence of acute intoxication*, suggesting there may be residual cognitive impairment associated with heavy cannabis use.

Given the increasing numbers of recreational and medical cannabis users, it is imperative to assess the potential residual impact of chronic, heavy cannabis use on driving performance, which has not thoroughly been addressed, as previous studies have primarily focused on impairments related to *acute* intoxication. Consistent with previous research on cannabis use and cognitive function, we hypothesized that heavy, recreational cannabis users would demonstrate impairment on a driving simulator task relative to healthy control participants, even in the absence of acute cannabis intoxication, and that impaired performance would be primarily localized to early onset cannabis users.

2. Materials and methods

2.1. Participants

As part of a larger comprehensive study, cannabis users ($n = 28$) and non-cannabis using, healthy control (HC) subjects ($n = 17$) were recruited from the Greater Boston Metropolitan area. Prior to participation in this study, all procedures were thoroughly explained to participants, including the voluntary nature of the study. Additionally, all participants were required to read and sign an informed consent form approved by the Partners Healthcare Institutional Review Board.

Cannabis users were defined as chronic, heavy, recreational users who used at least five of the last seven days, reported at least 1500 lifetime uses, and tested positive for urinary cannabinoids. Importantly, cannabis users abstained from cannabis use for at least 12 h before their study visit to ensure that they were not acutely intoxicated at the time of assessment. If any participant endorsed cannabis use within the 12-h abstinence period or appeared to be intoxicated, they were compensated for their time and rescheduled.

Upon arrival at the laboratory, all participants provided a urine sample that was tested using an in-house triage kit assessing for drugs of abuse (e.g., cocaine, opiates, cannabis, etc.). This procedure was required for three reasons: (a) to ensure negative drug status among all participants (except for THC-metabolites in the cannabis-using group); (b) to confirm the presence of THC-metabolites in the cannabis-using group; (c) and to encourage cannabis users to adhere to the 12-hr abstinence period, as cannabis users were led to believe that the urine sample could be used to determine compliance with the abstinence request, which is a method we have successfully utilized in the past (e.g., Gruber et al., 2014, 2012a; 2012b). A portion of the sample was sent to an outside laboratory for quantification of urinary THC-metabolite concentration with creatinine correction via gas chromatography-mass spectrometry.

In order to further explore the potential impact of age of onset of cannabis use on driving performance, the cannabis-using group was subdivided into two groups based on their age of onset of cannabis use, which was defined as the age of *consistent, regular* cannabis use (i.e., at least once per month). The early onset group included those with regular heavy cannabis use prior to or at age 16 ($n = 14$) while the late onset group included those with regular heavy cannabis use after age 16 ($n = 14$).

2.2. Assessments

Participants were administered the Structured Clinical Interview for

DSM-IV, Patient Edition (SCID; First et al., 1994) to ensure that no Axis I pathology was present other than cannabis abuse or dependence in the cannabis-using groups. Participants also completed the Wechsler Abbreviated Scale of Intelligence (Wechsler, 1999), which provides an estimate of IQ. Individuals were excluded from the study if they reported a significant head injury with loss of consciousness, history of any neurological disorder, estimated IQ < 75, current or previous use of psychotropic medication, current heavy alcohol use (regular consumption of > 20 drinks/week), binge drinking (defined by the National Institute on Alcohol Abuse and Addiction as when men consume ≥ 5 drinks in 2 h or when women consume ≥ 4 drinks in 2 h), or a history of illicit substance use (> 20 lifetime uses). In addition, HC participants were excluded if they reported more than 20 lifetime uses of cannabis. All participants had to be in possession of a valid driver's license and report driving regularly.

Cannabis use was assessed via a modified timeline follow-back procedure customized for cannabis use (TLFB; Sobell et al., 1998) to provide qualitative information regarding the type of products used (e.g., joint, blunt, edible, etc.) and mode of use (e.g., smoke, vape, ingest, etc.) as well as quantitative information regarding frequency (episodes/week) and magnitude (grams/week) of use. The SCID was used to confirm lifetime cannabis use information such as estimated lifetime uses and age of onset of regular use. Additionally, all cannabis users completed the Cannabis Use Disorder Identification Test-Revised (CUDIT-R; Adamson et al., 2010). As cannabis users were required to abstain from cannabis use for at least 12 h prior to completing the driving simulator paradigm, they completed a modified version of the Marijuana Withdrawal Checklist (MWC; Budney et al., 1999). The modified MWC is a 16-item self-report scale in which respondents rank symptoms associated with cannabis withdrawal (e.g., irritability, craving, etc.) as none, mild, moderate, or severe (numerically ranked from 0 to 3). The range of potential scores on this version of the MWC is 0–48.

Participants also completed the Barratt Impulsiveness Scale-11 (BIS; Patton et al., 1995), which is a self-report assessment that measures impulsivity across three domains: attention (e.g., “I don't pay attention”); motor (e.g., “I act on impulse”); and non-planning (e.g., “I say things without thinking”). A total score of all subscales was also calculated to reflect general impulsivity.

2.3. Driving simulator

Driving simulator paradigms allow for measurement of driving performance while minimizing actual risk to participants and others. The driving simulator used in the current study included a GTR simulator racing seat, Logitech G27 racing kit (dual-motor force feedback mechanism with quiet helical gearing; a six-speed shifter with push-down reverse gear; integrated RPM/shift indicator LEDs; an 11-inch leather-wrapped rim; and steel gas, brake, and clutch pedals), a 19-inch monitor, and surround sound speakers.

The driving simulator software and paradigm (STISIM Drive, Systems Technology Inc.) consists of 4.2 miles of simulated driving and takes approximately 10 min to complete. It includes both rural and urban driving conditions with road hazards, including stop signs, traffic lights, merges, turns, yielding to pedestrians, and reacting to other vehicles. Dependent variables on the task are grouped by subtype and include accidents (number of collisions, pedestrians hit, and off-road accidents); rule-following (number of missed stop signs, stops at red lights, and illegal turns); speed (number of speed exceedances, total run length, and percentage of distance driven over the speed limit); and lateral movement (number of centerline crossings, road edge excursions, and percentage of distance driven out of lane).

2.4. Statistical analyses

Driving simulator performance data was screened for outliers,

defined as values beyond the 1.5 interquartile range. One HC participant was removed from the analyses due to outlier driving simulator performance (final HC $n = 16$). One-way analyses of variance (ANOVAs) were used to assess between-group differences for two different analyses: two-group (HC versus all cannabis users) and three-group (HC versus early onset cannabis users versus late onset cannabis users). Scheffé post hoc comparisons were used to assess between-group differences for the three-group analyses. Additionally, if significant between-group differences were observed for any demographic variable (e.g., IQ, impulsivity, etc.), analyses of covariance (ANCOVAs) were conducted in order to control for these variables and assess their impact on driving simulator performance. Lastly, bivariate correlation analyses were conducted to further assess the relationship between driving performance and age of cannabis onset. Given substantial scientific evidence demonstrating adolescent onset of cannabis use is associated with poorer cognitive performance even in the absence of acute intoxication (reviewed in Gruber and Sagar, 2017; Lisdahl, 2013; Sagar and Gruber, 2018), one-tailed analyses were used for the current study.

3. Results

3.1. Two-group analyses: healthy controls versus all cannabis users

HC and all cannabis users were well-matched for age, IQ, and alcohol use (Table 1). With regard to impulsivity, the cannabis-using group reported significantly higher BIS scores on the attention and non-planning subscales as well as overall total BIS score (all $ps < .01$) compared to the HC group. No significant between-group differences were noted for the BIS motor subscale.

On the driving simulator task, the cannabis-using group exhibited significantly impaired performance compared to the HC group (Table 2; Fig. 1). Cannabis users hit significantly more pedestrians ($p = .03$), missed more stop signs ($p = .04$), made fewer stops at red lights ($p = .02$), had more speed exceedances ($p = .03$), drove a greater percentage of distance over the speed limit ($p = .04$), and made more centerline crossings ($p = .05$) relative to HC participants; there was also a non-significant trend for cannabis users to have a greater percentage of distance driven out of lane. The HC and cannabis-using groups had similar numbers of collisions, total run length, and road edge excursions. None of the participants in either the HC or cannabis-using groups had any off-road accidents or made any illegal turns.

Given significant between-group differences for impulsivity between HCs and cannabis users, ANCOVAs were also performed for driving simulator performance data. Once total BIS score was controlled for in the analyses, no significant differences between the HC and cannabis users remained for driving performance, other than a non-significant trend for cannabis users to make fewer stops at red lights ($p = .06$).

3.2. Three-group analyses: healthy controls versus early onset cannabis users versus late onset cannabis users

The three-group comparisons revealed that HC participants, early onset cannabis users, and late onset cannabis users were well-matched for age, IQ, and alcohol use (Table 3). In terms of cannabis use patterns, no significant differences were noted between early and late onset users for number of use episodes per week, total grams used per week, duration of use (yrs), urinary THC/creatinine ratio, or CUDIT-R scores. As expected, age of onset of cannabis use distinguished the two groups ($p < .01$). Further, both early and late onset users reported similar levels of withdrawal symptoms on the 16-item MWC ($M = 7.71$ and $M = 6.93$, respectively). Given that the range of possible scores on this version of the MWC is from 0 to 48, the group averages were very low, suggesting that the cannabis users did not experience many withdrawal symptoms despite at least 12 h of abstinence. With regard to impulsivity, significant differences emerged between the three groups for

Table 1
Demographic Information: Healthy Control (HC) versus Cannabis Users (CU).

Demographic Variables	HC <i>n</i> = 16	CU <i>n</i> = 28	ANOVA (2-tailed) ^a	
			<i>F</i>	<i>p</i> (η_p^2)
Sex	6M, 10F	23 M, 5F	–	–
Handedness	16R, 0L	27R, 1L	–	–
Age	22.94 ± 3.96	22.96 ± 5.56	< 0.01	.99 (< .01)
IQ: WASI ^b	123.55 ± 6.85	117.71 ± 10.11	3.08	.09 (.08)
Alcohol Use (days out of last 30) ^b	4.96 ± 4.50	6.52 ± 4.48	0.96	.33 (.03)
Cannabis Use Variables				
Age of Cannabis Onset ^c	–	15.95 ± 2.04	–	–
Cannabis Use Episodes/Week ^c	–	14.76 ± 12.34	–	–
Cannabis Grams Used/Week ^c	–	5.24 ± 6.42	–	–
Duration of Cannabis Use (yr) ^c	–	7.43 ± 6.45	–	–
Urinary THC/Creatinine Ratio (ng/ml) ^d	–	480.58 ± 663.56	–	–
CUDIT-R Score ^c	–	15.57 ± 5.30	–	–
MWC ^c	–	7.32 ± 3.67	–	–
Impulsiveness: BIS ^b				
Attention	13.00 ± 3.58	16.64 ± 3.12	9.93	< .01 (.21)
Motor	20.73 ± 4.92	23.14 ± 4.08	2.47	.13 (.06)
Non-Planning	18.46 ± 5.17	24.79 ± 5.02	12.36	< .01 (.25)
Total	52.18 ± 12.85	64.57 ± 9.23	11.35	< .01 (.24)

Abbreviations: Analysis of Variance (ANOVA); Barratt Impulsiveness Scale (BIS); Cannabis Use Disorder Identification Test-Revised (CUDIT-R); Marijuana Withdrawal Checklist (MWC); Tetrahydrocannabinol (THC); Wechsler Abbreviated Scale of Intelligence (WASI).

Notes:

Bold numbers are significant at $p \leq .05$ (2-tailed).

Italicized numbers are significant at $p \leq .10$ (2-tailed).

^a Degrees of Freedom (df) = 1,42 unless otherwise noted.

^b df = 1,37.

^c *n* = 28.

^d *n* = 26.

the attention and non-planning subscales, as well as BIS total (all $p \leq .01$), but no significant differences were noted on the motor subscale. Scheffé post hoc tests indicated that the HC group reported significantly lower BIS scores relative to early and late onset groups for the attention ($p = .03$ and $p = .04$) and non-planning subscales ($p = .01$ and $p = .07$) as well as total BIS scores ($p = .01$ and $p = .05$). No

significant differences were noted between the early and late cannabis onset groups on the BIS.

For the driving simulator data, omnibus ANOVAs revealed significant between-group differences for collisions ($p = .03$), missed stop signs ($p = .02$), stops at red lights ($p = .01$), and percentage of distance driven over the speed limit ($p = .05$; Table 4, Fig. 1). Additionally,

Table 2

Driving Simulator Performance: Healthy Control (HC) versus Cannabis Users (CU) Analyses of Variance (ANOVA) and Analyses of Covariance (ANCOVA) Controlling for Impulsivity.

Driving Simulator Variables	HC	CU	ANOVA (1-tailed) ^a		ANCOVA (1-tailed) ^b	
	<i>n</i> = 16	<i>n</i> = 28	<i>F</i>	<i>p</i> (<i>η</i> _{<i>p</i>} ²)	<i>F</i>	<i>p</i> (<i>η</i> _{<i>p</i>} ²)
Accidents						
# Pedestrians Hit	0.94 ± 0.93	1.57 ± 1.10	3.75	.03 (.08)	0.21	.33 (.01)
# Collisions	1.06 ± 0.85	1.21 ± 1.07	0.24	.32 (.01)	0.28	.30 (.01)
# Off-Road Accidents	0.00 ± 0.00	0.00 ± 0.00	–	–	–	–
Rule-Following						
# Missed Stop Signs	0.56 ± 0.73	1.04 ± 0.92	2.28	.04 (.07)	0.01	.47 (< .01)
# Stops at Red Lights	0.75 ± 0.77	0.36 ± 0.49	4.28	.02 (.09)	2.57	.06 (.07)
# Illegal Turns	0.00 ± 0.00	0.00 ± 0.00	–	–	–	–
Speed						
# Speed Exceedances	4.50 ± 3.33	6.64 ± 3.61	3.83	.03 (.08)	.41	.26 (.01)
Total Run Length (s)	585.91 ± 89.90	552.24 ± 88.69	1.45	.12 (.03)	< .01	.48 (< .01)
% Distance Over Speed Limit	7.50 ± 7.40	15.37 ± 16.66	3.18	.04 (.07)	0.48	.25 (.01)
Lateral Movement						
# Centerline Crossings	4.88 ± 1.75	6.00 ± 2.23	3.01	.05 (.07)	0.21	.33 (.01)
# Road Edge Excursions	3.38 ± 2.00	3.39 ± 1.45	< 0.01	.49 (< .01)	0.04	.42 (< .01)
% Distance Out of Lane	8.50 ± 3.01	9.30 ± 3.13	1.64	.10 (.04)	0.03	.43 (< .01)

Notes:

Bold numbers are significant at $p \leq .05$ (1-tailed).

Italicized numbers are significant at $p \leq .10$ (1-tailed).

^a Degrees of Freedom (df) = 1,42.

^b ANCOVA with Barratt Impulsiveness Scale (BIS) Total Score included as a covariate; df = 1,36.

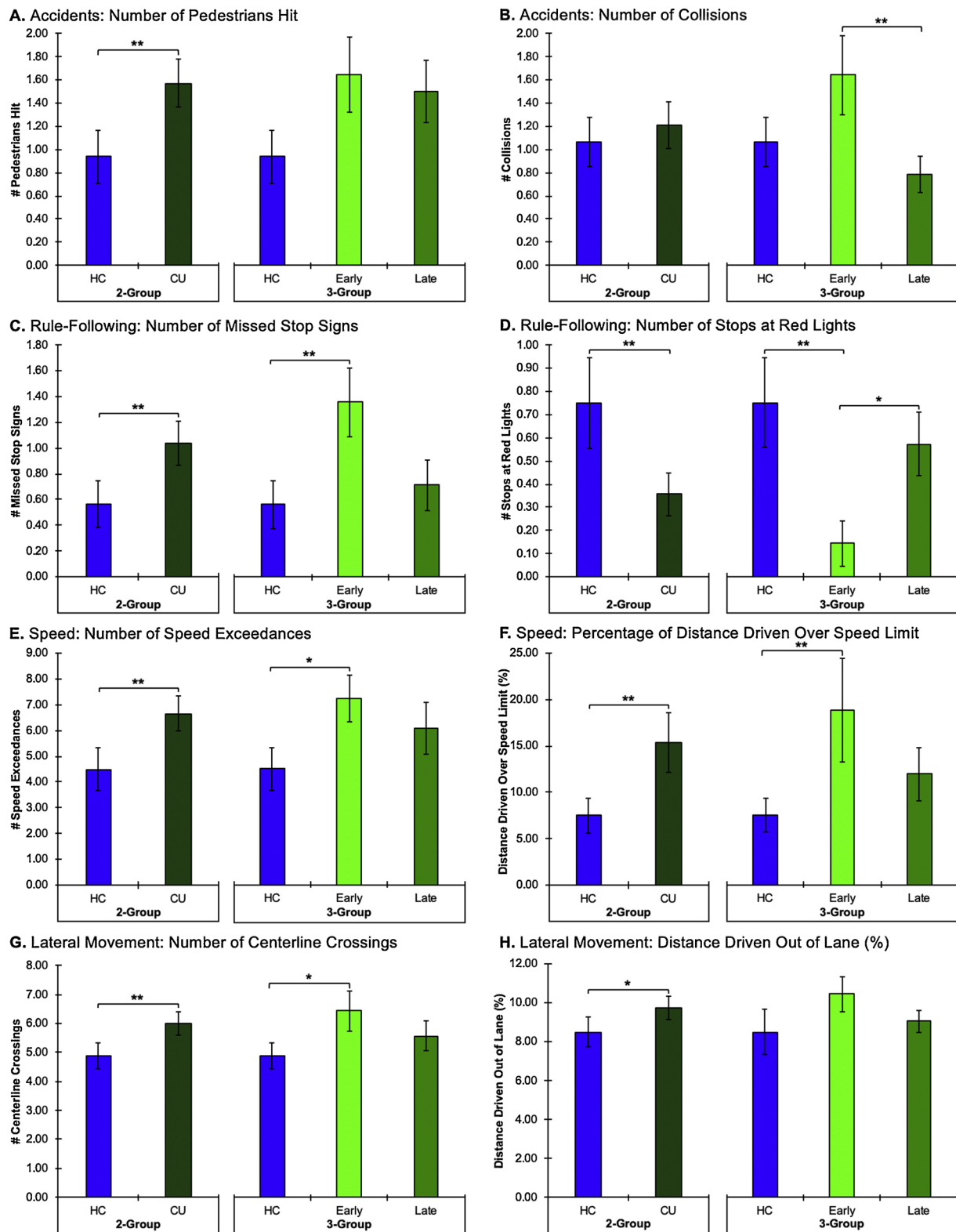


Fig. 1. Driving Simulator Performance Analyses. The two-group assessments comparing the healthy control (HC) participants to all chronic, heavy cannabis users (CU) are on the left side of the graphs. The three-group assessments comparing HC versus early onset cannabis users (Early) versus late onset cannabis users (Late) are on the right side of the graphs. Note: ** denotes significance at $p \leq .05$ and * denotes significance at $p \leq .10$ (1-tailed).

there were non-significant trends for between-group differences for number of pedestrians hit ($p = .08$), number of speed exceedances ($p = .06$), and number of centerline crossings ($p = .07$). No significant between-group differences were detected for total run length, number of road edge excursions or percentage of distance driven out of lane.

None of the participants in any of the groups had any off-road accidents or made any illegal turns.

Scheffé post hoc tests indicated that poorer task performance was primarily localized to the early onset cannabis group (Fig. 1). Specifically, the early onset cannabis group had significantly more collisions

Table 3

Demographic Information: Healthy Control (HC) versus Early Cannabis Onset versus Late Cannabis Onset.

Demographic Variables	HC <i>n</i> = 16	Early Onset <i>n</i> = 14	Late Onset <i>n</i> = 14	ANOVA (2-tailed) ^a	
				<i>F</i>	<i>p</i> (η_p^2)
Sex	6M, 10F	13 M, 1F	10 M, 4F	–	–
Handedness	16R, 0L	13R, 1L	14R, 0L	–	–
Age	22.94 ± 3.96	23.14 ± 7.07	22.79 ± 3.77	0.02	.98 (< .01)
IQ: WASI ^b	123.55 ± 6.85	116.00 ± 12.99	119.43 ± 6.11	2.01	.15 (.10)
Alcohol Use (days out of last 30) ^b	4.97 ± 4.50	5.82 ± 2.31	7.21 ± 5.94	0.81	.45 (.04)
Cannabis Use Variables					
Age of Cannabis Onset ^c	–	14.00 ± 1.04	17.36 ± 1.08	70.21	< .01 (.73)
Cannabis Use Episodes/Week ^c	–	11.88 ± 4.56	17.65 ± 16.66	1.56	.22 (.06)
Cannabis Grams Used/Week ^c	–	4.43 ± 2.66	6.05 ± 8.77	0.44	.51 (.02)
Duration of Cannabis Use (yr) ^c	–	9.57 ± 7.98	5.29 ± 3.58	3.36	.08 (.12)
Urinary THC/Creatinine Ratio ^d	–	408.43 ± 594.23	564.75 ± 754.35	0.35	.56 (.01)
CUDIT-R Score ^e	–	15.14 ± 4.59	16.00 ± 6.08	0.18	.68 (.01)
MWC (16-item) ^c	–	7.71 ± 4.14	6.93 ± 3.25	0.31	.58 (.01)
Impulsiveness: BIS					
Attention ^c	13.00 ± 3.58^{*,*}	16.79 ± 3.17[*]	16.50 ± 3.18[*]	4.87	.01 (.21)
Motor ^c	20.73 ± 4.92	23.00 ± 4.49	23.29 ± 3.79	1.22	.31 (.06)
Non-Planning ^c	18.46 ± 5.17^{*,**}	26.36 ± 4.27[*]	23.21 ± 5.37^{**}	7.91	< .01 (.31)
Total ^c	52.18 ± 12.85^{*,**}	66.14 ± 7.83[*]	63.00 ± 10.50[*]	5.94	.01 (.25)

Abbreviations: Analysis of Variance (ANOVA); Barratt Impulsiveness Scale (BIS); Cannabis Use Disorder Identification Test-Revised (CUDIT-R); Marijuana Withdrawal Checklist (MWC); Tetrahydrocannabinol (THC); Wechsler Abbreviated Scale of Intelligence (WASI).

Notes:

Bold numbers are significant at $p \leq .05$ (2-tailed).

Italicized numbers are significant at $p \leq .10$ (2-tailed).

* Scheffé Post Hoc Analyses indicated significant differences between pairs at $p \leq .10$ (2-tailed).

** Scheffé Post Hoc Analyses indicated significant differences between pairs at $p \leq .05$ (2-tailed).

^a Degrees of Freedom (df) = 2,41 unless otherwise noted.

^b df = 2,35.

^c df = 1,26.

^d df = 1,24.

^e df = 2,36.

Table 4

Driving Simulator Performance: Healthy Control (HC) versus Early versus Late Onset Cannabis Users Analyses of Variance (ANOVA) and Analyses of Covariance (ANCOVA) Controlling for Impulsivity.

Driving Simulator Variables	HC	Early Onset	Late Onset	ANOVA (1-tailed) ^a		ANCOVA (1-tailed) ^b	
	<i>n</i> = 16	<i>n</i> = 14	<i>n</i> = 14	<i>F</i>	<i>p</i> (<i>η_p</i> ²)	<i>F</i>	<i>p</i> (<i>η_p</i> ²)
Accidents							
# Pedestrians Hit	0.94 ± 0.93	1.64 ± 1.22	1.50 ± 1.02	1.90	.08 (.09)	0.12	.45 (.01)
# Collisions	1.06 ± 0.85	1.64 ± 1.28**	0.79 ± 0.58**	3.02	.03 (.13)	3.01	.03 (.15)
# Off-Road Accidents	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	–	–	–	–
Rule-Following							
# Missed Stop Signs	0.56 ± 0.73**	1.36 ± 0.101**	0.71 ± 0.73	3.79	.02 (.16)	1.65	.10 (.09)
# Stops at Red Lights	0.75 ± 0.78**	0.14 ± 0.36*,**	0.57 ± 0.51*	4.14	.01 (.17)	3.05	.03 (.15)
# Illegal Turns	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	–	–	–	–
Speed							
# Speed Exceedances	4.50 ± 3.33*	7.21 ± 3.42*	6.07 ± 3.77	2.28	.06 (.10)	0.44	.32 (.02)
Total Run Length (s)	585.91 ± 89.90	539.00 ± 105.32	565.49 ± 69.75	1.03	.18 (.05)	0.24	.40 (.01)
% Distance Over Speed Limit	7.50 ± 7.40**	18.79 ± 20.90**	11.94 ± 10.68	2.46	.05 (.11)	0.87	.22 (.05)
Lateral Movement							
# Centerline Crossings	4.88 ± 1.75*	6.43 ± 2.53*	5.57 ± 1.87	2.12	.07 (.09)	0.44	.32 (.03)
# Road Edge Excursions	3.38 ± 2.00	3.50 ± 1.56	3.29 ± 1.38	0.06	.47 (< .01)	0.10	.45 (.01)
% Distance Out of Lane	8.50 ± 3.01	10.44 ± 4.06	9.06 ± 1.78	1.54	.11 (.07)	0.51	.30 (.03)

Notes: **Bold** numbers are significant at $p \leq .05$ (1-tailed).

Italicized numbers are significant at $p \leq .10$ (1-tailed).

* Scheffé Post Hoc Analyses indicated significant differences between pairs at $p \leq .10$ (1-tailed).

** Scheffé Post Hoc Analyses indicated significant differences between pairs at $p \leq .05$ (1-tailed).

^a Degrees of Freedom (df) = 2,41.

^b ANCOVA with Barratt Impulsiveness Scale (BIS) Total Score included as a covariate; df = 1,36.

($p = .03$), more missed stop signs ($p = .02$), fewer stops at red lights ($p = .01$), and drove a greater percentage of distance over the speed limit ($p = .05$) relative to the HC group. Additionally, several non-significant trends were observed in which the early onset group had poorer performance relative to both the HC and late onset groups. The early onset cannabis group tended to make more speed exceedances ($p = .06$) and more centerline crossings ($p = .07$) than the HC group. Further, the early onset group tended to miss more stop signs ($p = .07$) and make fewer stops at red lights ($p = .08$) than the late cannabis onset group. While there was a non-significant trend for between-group differences on the number of pedestrians hit, none of the post hoc comparisons approached significance. Interestingly, no significant differences were noted between the HC and late cannabis onset groups for any of the driving simulator variables. Additionally, correlation analyses indicated that age of onset of cannabis use was negatively correlated with number of collisions ($r(26) = -.40$, $p = .02$) as well as missed stop signs ($r(26) = -.32$, $p = .05$), suggesting that earlier onset of cannabis use is associated with impaired driving skills, specifically increased collisions and missed stop signs; however, significant relationships were not detected between age of onset of cannabis use and other driving simulator variables. Interestingly, no significant relationships were observed between driving simulator performance and any of the other cannabis use variables.

Given significant between-group differences on the BIS, ANCOVAs controlling for total BIS impulsivity scores were completed. Interestingly, when total BIS score was included as a covariate, only the total number of collisions and stops at red lights (both $ps = .03$) remained significantly different between groups, with the early onset cannabis users demonstrating poorer performance; the remaining driving simulator variables were no longer significantly different after controlling for impulsivity.

4. Discussion

Data from the current study suggest that chronic cannabis use is associated with impaired driving performance even in the absence of acute intoxication. Poorer performance was observed in the cannabis-using group, with increased accidents, speeding, and lateral movement as well as decreased rule-following relative to HC participants. Importantly, when cannabis users were divided into those with early versus late onset, results revealed that impairment was primarily localized to the early onset group. These findings provide evidence that non-intoxicated early onset cannabis users demonstrate poorer driving performance, suggesting that there may be a residual impact of chronic, heavy, recreational cannabis use, particularly when regular use is initiated during early adolescence. However, it is important to note that when self-reported impulsivity was controlled for, most of the significant differences between the HC and cannabis users were no longer significant, suggesting that increased impulsivity within the cannabis users impacts, at least in part, the performance differences observed on the driving simulator.

The current study extends previous findings demonstrating that early cannabis onset is associated with a broad variety of cognitive decrements including poorer attention, visuospatial skills, verbal memory, and executive functioning (reviewed in Gruber and Sagar, 2017; Lisdahl, 2013; Sagar and Gruber, 2018) as well as alterations in functional brain activation (e.g., Hatchard et al., 2014; Sagar et al., 2015; Schweinsburg et al., 2008), and reduced integrity of white matter microstructure (e.g., Clark et al., 2012; Gruber et al., 2014). Further, findings related to increased number of collisions in non-intoxicated, early-onset cannabis users are similar to reports from acute intoxication studies demonstrating increased number of collisions (Ronen et al., 2008, 2010) as well as epidemiological studies indicating increased risk of motor vehicle collisions associated with DUIC (Asbridge et al., 2012; Elvik, 2013; Li et al., 2012; Rogeberg and Elvik, 2016). Additionally,

earlier age of onset was associated with poorer driving simulator performance; previous studies have also demonstrated a link between earlier age of onset and poorer cognitive performance (e.g., Dahlgren et al., 2016; Ehrenreich et al., 1999; Squeglia et al., 2014).

Results from the current study indicate an impulsive style of driving performance in *non-intoxicated* cannabis users, particularly in those with early onset of use, characterized by increased accidents, speeding, and lateral movement, and decreased rule-following. This is further underscored by the BIS data, with cannabis users reporting significantly higher levels of impulsivity relative to controls. Studies of acutely intoxicated individuals as well as DUIC have also shown impaired driving performance, but with a slightly different characterization than observed in the current study. Acute cannabis intoxication is associated with slower driving (e.g., Anderson et al., 2010; Lenné et al., 2010; Ronen et al., 2008, 2010); increased number of collisions (Ronen et al., 2008, 2010); increased lateral movement such as lane weaving (e.g., Lenné et al., 2010; Ronen et al., 2008; Robbe, 1998), increased brake latency (Liguori et al., 1998), and slower reaction time (e.g., Lenné et al., 2010). Interestingly, across several studies, drivers demonstrated insight regarding their intoxication and reported adopting a slower driving style in an attempt to compensate for impairment (reviewed in Sewell et al., 2009). The main difference between acute impairment/DUIC findings and results of the current study is driving speed; acute intoxication is associated with slower driving, whereas chronic use without acute intoxication is associated with faster driving. Taken together, the discrepancy between these findings suggests that acute cannabis intoxication results in a different type of driving impairment relative to residual impairment in the absence of acute cannabis intoxication, which appears to be associated with an impulsive style of driving.

One important question raised by current study is whether the observed driving impairment is *directly* related to early onset cannabis use or other mediating factors. Given the extensive literature demonstrating that early onset cannabis users demonstrate cognitive decrements relative to HC participants (reviewed in Gruber and Sagar, 2017; Lisdahl, 2013; Sagar and Gruber, 2018) as well as findings indicating that late onset cannabis users appear more similar to HC participants (e.g., Ehrenreich et al., 1999; Fontes et al., 2011; Gruber et al., 2012a; Schuster et al., 2016), it is possible that cannabis use during critical periods of neurodevelopment may mediate observed cognitive deficits. However, it is also possible that confounding factors (e.g., impulsivity, sensation seeking, etc.) associated with earlier onset of cannabis use may mediate these deficits. Several longitudinal studies have observed that behavioral problems, which may be an indicator of lack of inhibitory control, often precede cannabis use in adolescents (e.g., King et al., 2004; Fergusson et al., 2007; Griffith-Lendering et al., 2011; Pedersen et al., 2001). However, although cannabis users typically demonstrate significantly higher levels of impulsivity on self-report measures such as the BIS relative to control participants (reviewed in Wrege et al., 2014), performance deficits on neuropsychological assessments of inhibitory control are not always consistently observed (e.g., Griffith-Lendering et al., 2012; Gruber et al., 2012b; Harding et al., 2012). With regard to driving, earlier onset of cannabis use (Le Strat et al., 2015) as well as increased risk-taking behaviors and sensation-seeking (Bergeron and Paquette, 2014; Bergeron et al., 2014; Richer and Bergeron, 2009) have been shown to be associated with DUIC, suggesting that each of these variables may contribute to an overall reckless style of driving. In the current study, after controlling for differences in impulsivity, HC participants and cannabis users generally displayed similar driving simulator performance, indicating that impulsivity significantly influences these differences. Future investigations employing longitudinal designs, larger sample sizes, and multivariate modeling should further assess these overlapping variables to attempt to clarify and model the specific impact of each factor.

4.1. Limitations and future directions

Several limitations regarding the current study should be considered. First, the current study utilized a driving simulator in order to assess driving performance and may not be completely generalizable to actual driving performance. While real-world driving track paradigms may have better ecological validity than driving simulator paradigms, they also involve increased risk to both the participants and the researchers. Additionally, due to the cross-sectional design of the current study, it is not possible to determine whether driving simulator impairment or increased impulsivity precede or are a consequence of early cannabis exposure; longitudinal studies assessing these factors *before* initiation of cannabis use are necessary to address this question. In order to more fully investigate the specific impact of age of cannabis onset and impulsivity on driving, multivariate modeling and mediation analyses should be utilized; these statistical analyses require larger sample sizes than provided by the current study.

In the current study, all cannabis users were chronic, heavy, recreational users, with most endorsing daily or near-daily use; accordingly, these results may not be generalizable to individuals who use cannabis less frequently or importantly, to individuals using cannabis for medical purposes. Recreational users and medical cannabis (MC) patients differ in their motives for cannabis use, as recreational users generally aim to get “high,” while MC patients primarily use cannabis to achieve symptom alleviation. Accordingly, recreational users and MC patients are likely to differ on several characteristics of cannabis use including, but not limited to goal of use, product selection, overall exposure to specific cannabinoids, and age of onset of use. In fact, preliminary data from an ongoing, observational, longitudinal study of MC patients revealed improvement in some aspects of cognitive performance and brain function after initiation of MC treatment (Gruber et al., 2016, 2018). These findings are in stark contrast to the cognitive decrements and brain alterations often observed in recreational cannabis users and suggest that cannabis use is likely to confer distinct effects in MC patients relative to recreational users. Thus far, driving performance has not been assessed in MC patients; future studies are needed to address this gap in the scientific literature.

Additionally, to our knowledge, no other studies have examined the impact of chronic, heavy use of any other substances on driving performance in the absence of acute intoxication. Given that approximately 16.6 million Americans aged 12 or older reported heavy alcohol use in the past month (Substance Abuse and Mental Health Services Administration SAMHSA, 2019), it is of particular interest to assess whether chronic, heavy alcohol use results in similar driving impairment observed in the current study. Further, many of our study participants reported onset of cannabis use before age 16 (when most American teenagers learn to drive); therefore, it would be interesting to explore the potential impact of state-dependent learning effects on driving. Given that learning to drive is a highly supervised activity legally required to be overseen by an adult (typically a teacher or parent), it is unlikely that participants were acutely intoxicated for the duration of their training. However, future studies should directly assess this research question by collecting specific information related to cannabis use during driver education programs and training as well as potential factors that may influence this outcome.

5. Conclusions

The current study demonstrates residual driving impairment in non-intoxicated cannabis users, which appears specific to those with early onset cannabis use. Previous studies of acutely intoxicated individuals and DUI/C have observed a slower style of impaired driving behavior; conversely, the current study suggests that earlier onset users demonstrate an impulsive style of impaired driving, which may be related to characteristics inherent in individuals who engage in substance use at earlier ages such as increased impulsivity. Given increased legalization

of cannabis, growing numbers of cannabis consumers, and increased prevalence of drivers testing positive for cannabis metabolites, results from the current study underscore concerns about the impact of cannabis use on driving as a potential public safety issue.

Contributors

SG, the Principal Investigator of the current research study, developed the study concept. RTS performed all regulatory work including correspondence with the IRB. Neurocognitive testing and data collection were performed by KAS, RTS, AML, and MKK. MKD performed the data analysis and interpretation under the supervision of SG. MKD drafted the manuscript, and KAS and SG provided critical revisions. All authors have read and approved the final manuscript.

Funding

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Declaration of Competing Interest

None.

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From: [Ronald Kirkish](#)
To: [Christina Turner](#); [Rich Constantine](#); [Yvonne Martinez Beltran](#); [Rene Spring](#); [John McKay](#); [Shane Palsgrove](#); [Gino Borgioli](#)
Cc: [Matt Wendt](#); [Chris Borello](#); [Bob Cooke](#); [Terry Ratto](#); dave@lokeyfirearms.com; [Ladera Grill Dan](#)
Subject: NIDA's Dr. Nora Volkow Discusses Marijuana's Effects on the Brain, Body & Behavior
Date: Thursday, March 25, 2021 7:18:11 AM
Attachments: [7C97896E-3D54-41B9-BC9B-CE6E492DC06F.jpeg](#)



NATIONAL INSTITUTE OF DRUG ABUSE, DIRECTOR DR. NORA VOLKOW

NIDA's Dr. Nora Volkow Discusses Marijuana's Effects on the Brain, Body & Behavior

<https://www.youtube.com/watch?v=RSDnLSU3owc>

Hear a fascinating presentation by Dr. Nora Volkow, Director of the National Institute on Drug Abuse, about the effects of marijuana use on the brain, body and behavior. Dr. Volkow's remarks were given on Feb. 4th at CADCA's 24th National Leadership Forum.

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From: [Matt Wendt](#)
To: [Rene Spring](#); [Rich Constantine](#); [Gino Borgioli](#); [Christina Turner](#); [John McKay](#); [Yvonne Martinez Beltran](#)
Subject: No to Commercial Marijuana in our Town
Date: Thursday, March 18, 2021 10:07:04 AM

Council-members,

I personally ask and ask behalf of my family including my young kids that you don't bring an agenda item back that would bring commercial pot to Morgan Hill. Here is a US Congress study to support my position about the risk factors as well as a recent article by even the Denver Post about the negative impacts of Marijuana use in teens.

Regards,

Matt Wendt

Cannabis Policy: Public Health and Safety Issues and Recommendations

<https://www.drugcaucus.senate.gov/sites/default/files/02%20March%202021%20-%20Cannabis%20Policy%20Report%20-%20Final.pdf>

Editorial: Colorado should restrict the potency of marijuana concentrates, keep them away from teens

<https://www.denverpost.com/2021/02/28/colorado-marijuana-potency-restrictions/>

These concentrates must be regulated and kept out of Colorado schools

By **THE DENVER POST EDITORIAL BOARD** |
February 28, 2021 at 6:00 a.m.

Colorado doctors say they are seeing an alarming spike in patients suffering psychosis — a break from reality that comes with disorders like schizophrenia — especially in young patients using high-potency marijuana concentrates.

It's OK to be skeptical of that anecdote. We were too. After all, marijuana is a natural plant that has been used for centuries as a medicine and for fun. It gives users a mild, mostly benign, high from the compound Delta-9-tetrahydrocannabinol.

However, reading peer-reviewed research in top medical journals around the world has led us to conclude the risk of high-potency marijuana to Colorado's mental health is substantial. Marijuana must be regulated as any other harm-causing food, medicine or recreational drug. Products with high levels of caffeine are regulated for safety. Tobacco products come with warnings about cancer, and flavored cigarettes have long been banned. Grain alcohol like Everclear isn't sold in grocery stores or convenience stores for a reason.

And yet, a teen with a medical marijuana card is able to “loop purchase” — the act of going to several stores to purchase the maximum allowable amount multiple times — enough watermelon-flavored concentrate to have his or her entire senior class high for a week.

Chris Rogers, the medical director of child and adolescent services at The Medical Center of Aurora, has no doubt that high-potency marijuana concentrates are causing psychosis in the adolescent patients he treats.

“It has not been good for the kids of Colorado,” Rogers, the past-president of the Colorado Child and Adolescent Psychiatry Society, said. He said patients exhibit extreme paranoia and lose all touch with reality believing doctors and parents are out to get them or that food and

water are poison. “There’s no telling who comes back from this and who doesn’t. It can be recurrent, and it tends to get worse.”

This isn’t your grandma’s joint. This new age remix of chemically isolated THC in a crystal-like or liquid substance — shatter, oil or wax — is heated with a butane torch or vape pen and inhaled. It’s called dabbing. And the products contain 60% to 90% THC, generating a high described as mind-blowing in marijuana publications.

When Colorado voters approved the sale of marijuana for both medical and recreational use, many of us were sold on it being a holistic remedy for our aches, pains and anxiety. We still believe that is the case for many marijuana products on the market today.

But for a decade now peer-reviewed research in medical journals has been documenting the prevalence of marijuana use, particularly of these high-potency concentrates, among patients suffering psychosis. Studies in the Lancet Psychiatry, Neuropharmacology, Asian Journal of Psychiatry, American Journal of Psychiatry, The American Journal on Addictions and World Psychiatry, have explored the link.

There is some research suggesting that the link may be correlated and not causal – meaning those suffering from psychosis may be more likely to use cannabis and other drugs to self-medicate. But one study, in particular, found a higher rate of psychosis in cities with easy access to high-concentrate marijuana in addition to a high rate of concentrates use among those seeking treatment for psychosis.

Cannabis users need to know the risks. We learned from Big Tobacco the damage of waiting for scientifically proven causation.

Colorado lawmakers must take action this session. Legislation is being proposed that would cap the potency of marijuana products to something more reasonable like 30%, which is about the most that can be found in the actual non-refined flower product. Critically, the

legislation also must create a shared computer system for tracking purchases across multiple stores to prevent looping. And we must find a way to ensure teens with medical marijuana cards are getting the drug they need for medical purposes and that's all.

We aren't calling for the recriminalization of these drugs — putting teens behind bars for selling a legal product to their friends would do more harm than good. But shutting down the pipeline to our schools is essential for public health and safety, and there are reasonable measures we can put in place to protect teens.

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From: [Ronald Kirkish](#)
To: [Christina Turner](#); [Rich Constantine](#); [Yvonne Martinez Beltran](#); [Rene Spring](#); [John McKay](#); [Shane Palsgrove](#); [Gino Borgioli](#)
Cc: [Bob Cooke](#); [Matt Wendt](#); [Chris Borello](#); [Terry Ratto](#); dave@lokeyfirearms.com; [Ladera Grill Dan](#)
Subject: Northern California: High Intensity Drug Trafficking Area Drug Market Analysis
Date: Wednesday, March 24, 2021 5:06:41 PM

Dear All,

Should your elected's decide to allow marijuana dispensary's to operate in your community, they are wittingly or unwittingly inviting a whole host of other criminal syndicate activities to create a criminal hub in your jurisdiction to sell and distribute the whole smorgasbord of dangerous and illegal drugs into every nook and cranny of your neighborhoods and your neighboring communities.

Northern California: High Intensity Drug Trafficking Area Drug Market Analysis

<https://www.justice.gov/archive/ndic/pubs23/23934/23934p.pdf>

Ronald L. Kirkish
Retired Drug Prevention Officer, NCHIDTA-SF/NCRIC

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Angie Gonzalez

From: Ronald Kirkish <[REDACTED]>
Sent: Friday, March 19, 2021 4:38 PM
To: Christina Turner; Rich Constantine; Yvonne Martinez Beltran; Rene Spring; John McKay; Shane Palsgrove; Gino Borgioli
Cc: Bob Cooke; Terry Ratto; Ladera Grill Dan; Ladera Grill Morgan; Kevin A. Sabet; Monte Stiles; Roger Morgan; Carla Lowe; John Lovell; Scott Chipman; Paulette Nagle IFBC; HENRY LOZANO; Paul Chabot
Subject: [Men's Journal] Shocker: 20-Year Study Says That Marijuana Makes You Stupid

MEN'S JOURNAL

Shocker: 20-Year Study Says That Marijuana Makes You Stupid

<https://www.mensjournal.com/adventure/shocker-20-year-study-says-marijuana-makes-you-stupid/>

by Nikki Donnelly, March 19, 2021

Marijuana has adopted a relatively harmless reputation in recent years, but a [new 20-year study](#) published in the journal *Addiction* is calling BS.

Its authors suggest that marijuana is linked to decreased cognitive [function](#) and could potentially lead to a slew of mental disorders.

Though the short-term effects of marijuana are not particularly serious, the new study demonstrates that with chronic use, the drug could lead to schizophrenia as well as an increased risk of psychotic symptoms such as hallucinations.

The drug has been linked to reduced learning, memory, and attention, and could also be addictive for some people.

As if that weren't enough to keep you away, the study also found that after smoking marijuana, you're twice as likely to die from crashing your car.

Do yourself a favor and keep your body [clean](#) and drug-free.

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Angie Gonzalez

From: Ronald Kirkish <[REDACTED]>
Sent: Thursday, April 8, 2021 7:09 AM
To: Christina Turner; Rich Constantine; Yvonne Martinez Beltran; Rene Spring; John McKay; Shane Palsgrove; Gino Borgioli
Cc: Matt Wendt
Subject: [New York Daily News] Using weed while pregnant linked to psychotic-like behaviors in children: study

Dear All,

Marijuana dispensaries, Apothecary businesses, bud tender's, and their pro-pot advocates often advise pregnant mothers to abuse marijuana to alleviate their morning sickness and instructing them not to pay attention to the those who try to warn you that marijuana is bad for the developing baby in the womb.

Let's be frank, pro-pot folks could care less about the mother and the health of her baby, all they want is their money.

For your consideration and B/r,

Ronald L. Kirkish

[New York Daily News]Using weed while pregnant linked to psychotic-like behaviors in children: study

<https://www.nydailynews.com/news/national/ny-weed-use-pregnant-psychotic-behavior-children-study-20200923-f6rrqaqljhojaatudtwjdntcy-story.html>

By [DAVID MATTHEWS](#) - NEW YORK DAILY NEWS - SEP 23, 2020 AT 2:00 PM

Additional links:

- [CNN] Using weed during pregnancy linked to psychotic-like behaviors in children, study finds - <https://www.cnn.com/2020/09/23/health/weed-pregnancy-childhood-psychosis-trnd-wellness/index.html>
- [Miami CBS Local] Study: Marijuana Use During Pregnancy Linked To Psychotic-Like Behaviors In Kids - <https://miami.cbslocal.com/2020/09/24/study-marijuana-use-pregnancy-linked-psychotic-behaviors-children/>
- [CBS LOCAL] Using Weed During Pregnancy Linked To Psychotic-Like Behaviors In Children, Study Finds <https://baltimore.cbslocal.com/2020/09/23/using->

[weed-during-pregnancy-linked-to-psychotic-like-behaviors-in-children-study-finds/](https://whdh.com/news/using-weed-during-pregnancy-linked-to-psychotic-like-behaviors-in-children-study-finds/)

- [WHDT, Boston News 7] Using Weed During Pregnancy Linked To Psychotic-Like Behaviors In Children, Study Finds - <https://whdh.com/news/using-weed-during-pregnancy-linked-to-psychotic-like-behaviors-in-children-study-finds/>

A new study found that [using marijuana while pregnant](#) may increase psychotic-like behavior in children.

The study, published Wednesday in [JAMA Psychiatry](#), followed 11,489 children over a series of years and evaluated their cognitive and behavior patterns around their 9th birthdays.

Only 655 of those children were exposed to weed in utero, but the study found that those children were overwhelmingly more likely to have psychotic-like behaviors as well as more attention, social and sleep issues, as well as lesser cognitive abilities. While the vast majority used weed in their first trimester, the first trimester is arguably the most critical time for the fetus' developing brain.

According to the Centers for Disease Control and Prevention, previous studies have linked weed use to low birth weight, impulsivity, hyperactivity, and attention issues. Other studies have linked weed use to autism.

In 2019, the U.S. Surgeon General Jerome Adams warned against cannabis use by pregnant women.

“Recent increases in access to marijuana and in its potency, along with misperceptions of safety of marijuana endanger our most precious resource, our nation’s youth,” he said.

“THC has been found in breast milk for up to six days after the last recorded use,” the advisory states. “It may affect the newborn’s brain development and result in hyperactivity, poor cognitive function, and other long-term consequences.

“Additionally, marijuana smoke contains many of the same harmful components as tobacco smoke. No one should smoke marijuana or tobacco around a baby.

The problems were even more pronounced if the mother continued to use weed after learning she was pregnant.

A [recent study](#) from the National Institute on Drug Abuse found that marijuana use by pregnant women doubled between 2002 and 2017.

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Angie Gonzalez

From: Ronald Kirkish [REDACTED] >
Sent: Thursday, March 25, 2021 6:50 AM
To: Christina Turner; Rich Constantine; Yvonne Martinez Beltran; Rene Spring; John McKay; Shane Palsgrove; Gino Borgioli
Cc: Terry Ratto; Ladera Grill Dan; dave@lokeyfirearms.com; Matt Wendt; Chris Borello
Subject: [New York Post] The link between pot and mass shootings may be closer than we think

Dear all,

A lot has been learned about the link to marijuana's THC and mental illness.

This article in the New York Post shows us that many of the mass shootings are also linked to mental illness caused by the abuse of marijuana.

B/r,

Ronald L Kirkish



The link between pot and mass shootings may be closer than we think

<https://nypost.com/2019/08/07/the-link-between-pot-and-mass-shootings-may-be-closer-than-we-think/>

By [Miranda Devine](#) - August 7, 2019 | 9:26pm

You can't walk through the streets of Manhattan these days without smelling weed.

Even as evidence mounts of the health problems associated with marijuana, New York has insisted on joining other greedy states scrambling to legalize this deceptively dangerous drug.

It makes no sense at a time when American youth is suffering from an unprecedented mental health crisis.

And, in all honesty, we cannot rule out a connection between [increasing marijuana use](#), mental illness and the recent spate of mass shootings by disturbed young males.

We don't yet know much about the mental state or drug use of the El Paso or Dayton killers. But a former girlfriend of Dayton killer Connor Betts, 24, has [indicated he was mentally ill](#), and two of his friends interviewed by reporters this week mentioned his previous drug use.

Just last year, the Parents Opposed to Pot lobby group tried to sound the alarm on the link between marijuana and mass shootings, compiling a list of mass killers it claims were heavy users of marijuana from a young age, from Aurora, Colo., shooter James Holmes and Tucson, Ariz., shooter Jared Loughner to Chattanooga, Tenn., shooter Mohammad Abdulazeer.

Until we understand those links, it is nuts to enact lax laws that encourage more young people to use a drug proven to trigger mental illness.

President Trump was right to [highlight mental illness](#) in his remarks Wednesday on the El Paso and Dayton shootings, not that his unscrupulous critics will listen, so determined are they to brand him a white supremacist.

We know from a 2018 FBI report that 40% of "active shooters" in the US between 2008 and 2013 had been diagnosed with a mental illness before the attack and 70% had "mental health stressors" or "mental health concerning behaviors."

So for anyone actually interested in preventing future such massacres, the [so-called "red flag" legislation](#) Trump is advocating to deny people with mental illness access to firearms is the most logical measure and the one most likely to be embraced by both sides of politics.

But it also should apply to marijuana use, seeing as the two go hand in hand.

You can't address the youth mental health crisis without considering the effect of rising teen marijuana use.

Among American teenagers, the drug's "daily use has become as, or more, popular than daily cigarette smoking" according to the National Institute of Health's 2017 Monitoring the Future study.

We've successfully demonized cigarettes while new laws send kids the message that marijuana is harmless.

Yet we've known for more than a decade of the link between marijuana and psychosis, depression and schizophrenia.

In 2007 the prestigious medical journal Lancet recanted its previous benign view of marijuana, citing studies showing "an increase in risk of psychosis of about 40 percent."

A seminal long-term study of 50,465 Swedish army conscripts found those who had tried marijuana by age 18 had 2.4 times the risk of being diagnosed with schizophrenia in the following 15 years than those

who had never used the drug. Heavy users were 6.7 times more likely to be admitted to a hospital for schizophrenia.

Another study, of 1,037 people in New Zealand, found those who used cannabis at ages 15 and 18 had higher rates of psychotic symptoms at age 26 than non-users.

A 2011 study in the British Medical Journal of 2,000 teenagers found those who smoked marijuana were twice as likely to develop psychosis as those who didn't.

Another BMJ study estimated that "13 percent of cases of schizophrenia could be averted if all cannabis use were prevented."

That's more than 400,000 Americans who could be saved from a fate worse than death.

Young people and those with a genetic predisposition are most at risk, particularly during adolescence, when the brain is exquisitely vulnerable.

The evidence of harm is overwhelming, and it defies logic to [think that legalizing marijuana](#) won't increase the harm.

And yet marijuana activists pretend there is no problem and baby-boomer lawmakers, perhaps recalling their own youthful toking, ignore the science.

To make matters worse, the marijuana sold at legal dispensaries today is five times more potent than the pot of the 1970s and '80s, according to a thoroughly researched new book by former New York Times reporter Alex Berenson: "[Tell Your Children: The Truth About Marijuana, Violence and Mental Health](#)."

Berenson reports that the first four states to legalize marijuana, Alaska, Colorado, Oregon and Washington, have seen "sharp increases" in violent crime since 2014.

If we care about mental illness, which has been spiking up at an alarming rate in recent years among young people, especially teenage boys, we should care about the convincing evidence of marijuana-induced psychosis.

We didn't have to wait for three mass shootings in two weeks to know that young males are in crisis.

Youth suicide is at an all-time high and rates of serious mental illness in this country are on the rise, especially among people aged 18 to 25, the cohort most likely to use marijuana.

Young people born in 1999, the birth year of the El Paso shooter, were 50% more likely than those born in 1985 to report feeling "serious psychological distress" in the previous month, according to an alarming study published this year in the Journal of Abnormal Psychology.

With all we know, it's time to put the brakes on marijuana legalization before it's too late.

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Angie Gonzalez

From: Ronald Kirkish <[REDACTED]>
Sent: Wednesday, March 17, 2021 11:09 PM
To: Christina Turner; Rich Constantine; Yvonne Martinez Beltran; Rene Spring; John McKay; Shane Palsgrove; Gino Borgioli
Cc: Terry Ratto; Marsha Edick; Michael Lancaster; [REDACTED]; [REDACTED];
Ladera Grill Dan; Ladera Grill Morgan; Bob Cooke
Subject: 20210317_203614.pdf

Dear all,

You might want seriously reconsider it you should bring marijuana back up — you shouldn't want to open that can of worms, for a 3rd time again.

Best regards,

Ronald L. Kirkish

[Click to Download](#)

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From: [Ronald Kirkish](#)
To: [Christina Turner](#); [Rich Constantine](#); [Yvonne Martinez Beltran](#); [Rene Spring](#); [John McKay](#); [Shane Palsgrove](#); [Gino Borgioli](#)
Subject: ADHD numbers are rising and scientists are trying to understand why
Date: Sunday, April 4, 2021 8:14:48 AM

Dear All,

The frequency of ADHD has exploded since the 1990's as has the huge increase of the %THC in "Skunk marijuana"

NIDA's Dr. Nora Volkow's research shows that THC does damage to the human brain's white matter and the damage is substantial.

B/r

Ronald L. Kirkish

The Impact of ADHD Persistence, Recent Cannabis Use, and Age of Regular Cannabis Use Onset on Subcortical Volume and Cortical Thickness in Young Adults

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5289096/>

Results

ADHD numbers are rising and scientists are trying to understand why: In the late 1990s, 7.2 percent of non-Hispanic white children, 4.7 percent of non-Hispanic black children and 3.6 of Hispanic children were diagnosed with ADHD, according to the study. By 2016, it was 12 percent of white kids, 12.8 percent of blacks and 6.1 percent of Hispanics.

After controlling for age, gender, total brain volume, nicotine use, and past-year binge drinking, childhood ADHD diagnosis did not predict brain structure; however, persistence of ADHD was associated with **smaller left precentral/postcentral cortical thickness**.

Compared to all non-users, CAN users had decreased cortical thickness in right hemisphere superior frontal sulcus, anterior cingulate, and isthmus of cingulate gyrus regions and left hemisphere superior frontal sulcus and precentral gyrus regions. Early cannabis use age of onset (CUO) in those with ADHD predicted greater right hemisphere superior frontal and postcentral cortical thickness.



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From: [Ronald Kirkish](#)
To: [Christina Turner](#); [Rich Constantine](#); [Yvonne Martinez Beltran](#); [Rene Spring](#); [John McKay](#); [Shane Palsgrove](#); [Gino Borgioli](#)
Cc: [Matt Wendt](#); [Chris Borello](#)
Subject: Adolescent cannabis and tobacco use are associated with opioid use in young adulthood-12-year longitudinal study in an urban cohort
Date: Friday, March 19, 2021 5:24:50 PM

Dear All,

Advocates for the abuse of marijuana argue that their drug of choice isn't a gateway drug..... they are lying.

Ronald L. Kirkish

Adolescent cannabis and tobacco use are associated with opioid use in young adulthood-12-year longitudinal study in an urban cohort

PMID: 32692425 PMCID: PMC7855765 (available on 2022-03-01)

DOI: [10.1111/add.15183](https://doi.org/10.1111/add.15183)

Abstract

Background and aims: Cannabis, tobacco and alcohol use are prevalent among youth in the United States and may be risk factors for opioid use. The current study aimed at investigating associations between developmental trajectories of cannabis, tobacco and alcohol use in adolescence and opioid use in young adulthood in an urban cohort over the span of 12 years.

Design: Cohort study of adolescents originally recruited for a randomized prevention trial with yearly assessments into young adulthood.

Setting: Nine urban elementary schools in Baltimore, MD in the United States.

Participants: Participants (n = 583, 86.8% African American, 54.7% male) were originally recruited as first grade students.

Measurements: Cannabis, tobacco and alcohol use were assessed annually from ages

14-18 years and opioid use from ages 19-26. Socio-demographics were assessed at age 6. Intervention status was also randomly assigned at age 6. Gender, race, free/reduced-priced lunch and intervention status were included as covariates in individual and sequential growth models.

Findings: There were significant positive associations between the cannabis use intercept at age 14 and the opioid use intercept at age 19 (beta = 1.43; $P = 0.028$), the tobacco use intercept at age 14 and the opioid use intercept at age 19 (beta = 0.82; $P = 0.042$). Specifically, more frequent use of cannabis or tobacco at age 14 was associated with more frequent use of opioids at age 19.

Conclusions: Cannabis and tobacco use in early adolescence may be risk factors for opioid use in young adulthood among African Americans living in urban areas.

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From: [Ronald Kirkish](#)
To: [Christina Turner](#); [Rich Constantine](#); [Yvonne Martinez Beltran](#); [Rene Spring](#); [John McKay](#); [Shane Palsgrove](#); [Gino Borgioli](#)
Cc: [Matt Wendt](#); [Chris Borello](#); [Terry Ratto](#); dave@lokeyfirearms.com; [Ladera Grill Dan](#)
Subject: Amsterdam drugs: Tourists face ban from cannabis cafes
Date: Sunday, March 28, 2021 2:17:49 PM

Dear All,

Morgan Hill City **Councilman Rene Spring** originally immigrated to the United States from the European country of Switzerland to eventually settle in Morgan Hill and is an avid advocate for marijuana businesses including sales, distribution and growth.

However, unlike Councilman Spring, the Mecca of Europe for of all things pot, Amsterdam, Holland, their residents are demanding that the marijuana businesses go the way of the dinosaur's.....they want their city and nation back.

For decades, the City of Amsterdam, Holland, has been the recognized pioneer for all things marijuana and for these last several years that nation has been having to deal with all of the significant problems caused by their liberal views in regards to marijuana.

This BBC article, dated **January 30, 2021** shows you why [after several decades] Holland has been closing down their **"Coffee Shops"** all around their nation for several years now including and especially in Amsterdam, where marijuana has been typically served to their customers and now they are discussing to shut them all down, permanently; post the COVID shutdown.

You will learn that the indigenous residents of Amsterdam are completely fed up with all the horrid anti-social behaviors and criminal activity that the marijuana culture in Amsterdam encourages and that the residents of that city are insisting on closing it all down and take their city back.

Frankly, why in "Haiti's" would any sane resident of Morgan Hill and/or Gilroy even want to seriously consider allowing this business to operate within their jurisdiction knowing that the residents of Amsterdam, the Mecca for the Pot culture, want to closed it "all" down after suffering from it's depraved consequence's for several decades.

For your consideration and B/r,

Ronald L. Kirkish

Amsterdam drugs: Tourists face ban from cannabis cafes

<https://www.bbc.com/news/world-europe-55765554>

By Anna Holligan - BBC News, Amsterdam - Published 30 January, 2021

When international visitors are eventually able to return to the canals that crisscross the medieval streets of Amsterdam, they may find one of the Dutch capital's famous tourist attractions off limits.

Amsterdam Mayor Femke Halsema wants to ban foreign tourists from cannabis cafes **to tackle anti-social behaviour** and push the city upmarket.

Owners of Amsterdam's fabled coffee shops are pushing back. They have told the BBC that if tourists are banned from regulated establishments, they will be pushed into the hands of ruthless drug gangsters on the streets.

'They let go of all discipline'

Amsterdam is famous for an array of things, including its thriving nightlife - red light district, cannabis cafes and bars - attracting 20 million tourists per year.

Like the rest of the Netherlands, the capital is currently in lockdown.

Some of its 850,000 residents would prefer its post-Covid life to resemble its current state, rather than return to what it was. Bernadette de Wit wants to get rid of what she calls "low-value tourists", including young British women "dressed up as pink penises - they let go of all discipline".

Bernadette wobbles around to demonstrate how some visitors act from late morning onwards, **urinating in the street and vomiting in gardens.**

This is our home. This is a Unesco World Heritage Site. Rembrandt used to live in this neighbourhood you know?

Bernadette de Wit

Amsterdam resident

The mayor has a plan. Cutting off the lifeblood of cannabis tourism, she believes, will deter that type of visitor and reduce the kind of conduct often associated with them. Most of the Netherlands already requires visitors to coffee shops to show proof of residence, but the rule is not enforced in the capital.

The council has already tried other methods to reduce the pressure that comes with "over-tourism". Airbnb-style holiday rentals were recently banned from the historic centre, and the future of the red light district is under discussion with proposals to create a sex zone on the outskirts instead.

Coffee shops are the latest pleasure-seekers' pursuit to be targeted.

'Only eight coffee shops left'

Inside Joachim Helms' Greenhouse cafe, the walls are resplendent with photos of him hugging celebrity clientele, from Rihanna to Richard Branson, Snoop Dogg and Miley Cyrus.

"I've lived here all my life," the owner told me. "People who come to smoke weed aren't the ones causing the disturbance."

Taking the tourists out of coffee shops may be easier to enforce than tackling cheap flights and accommodation, but it is not the way to improve Amsterdam for the locals, he believes.

'Left behind' by Dutch cannabis laws

Contradictory Dutch regulations have created what's known as a "backdoor" policy: cannabis production is illegal, but [Dutch coffee shops are allowed to sell it](#). Even though that's technically a criminal offence, the sale of small quantities is "tolerated".

This policy means the coffee shops buy their stock from underground criminal growers, who mostly cultivate it illegally in the Netherlands or smuggle it in from places such as Morocco, Jamaica, Colombia and Thailand.

Joachim and other owners have told the BBC their reputation is being damaged by disjointed regulations. Experiments are under way in 10 cities that allow a small number of coffee shops to buy their products from authorised Dutch cannabis growers.

"We are seeing other cities going ahead while we are left behind. It's bad for Amsterdam - a liberal, tolerant city is actually going backwards," he complains.

Could tourists be targeted by street dealers?

The BBC asked Amsterdam's local authority what it made of the warning from coffee shop owners that banning visitors from their premises would merely move the issue on to the capital's streets.

In a statement, it said: "A growing cannabis market generating ever larger profits is increasingly vulnerable to criminal activity. The current tolerance policy makes it difficult, if not impossible, for coffee shop operators not to maintain ties with illegal suppliers."

But Mark Jacobs, who runs The Rookies Club on a narrow street in the shadow of the Rijksmuseum, believes the mayor's plans will fuel the very crime and anti-social behaviour the council is trying to combat.

"The hard dealers are the ones who will be happy: brutal guys, I already see it. At 01:00 I have to close my doors, then there are dealers waiting, they don't care what they sell you, or what happens to you.

"It won't be safe on the streets as it is now. You'll get the new Al Capones, the new dealers will emerge, thousands of them."

The coffee shops play an important role in protecting young people, according to Joachim Helms, who fears that otherwise they could end up as drug mules or selling drugs on the street.

Other small business owners have their own concerns.

But many residents do not see it the same way, and with police and prosecutors in favour of tighter controls, it is highly likely that foreign visitors will be barred from Amsterdam's cannabis cafes from next year.

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From: [Cari Farquhar](#)
To: [Christina Turner](#); [Rene Spring](#); [John McKay](#); [Yvonne Martinez Beltran](#); [Gino Borgioli](#); [Rich Constantine](#)
Subject: Commercial Marijuana in Morgan Hill
Date: Friday, March 19, 2021 3:33:27 PM

Hello Council,

I am writing to you today to stress my opposition to having commercial marijuana dispensaries in our city. Having this kind of a business which sells a drug that alters minds of our youth should not be readily accessible. Speaking to my neighbors, I found they were not against adults using marijuana, but did not want their children exposed to it. Last year former FDA head Scott Gottlieb warned of potential harm of the widespread use of cannabis and that we are “conducting a widespread experiment of THC on the public by making it broadly available.” I don’t want our children here in Morgan Hill along for this experiment, as I recognize that the adults who are pushing this on us will have no responsibility for the consequences. If necessary a person needing the drug can drive the short distance to another local city for purchase or have it delivered to their residence.

Thank you,
Cari Farquhar
Morgan Hill Resident for 28 years

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From: [Carol Lillig](#)
To: [Christina Turner](#)
Subject: Commercial marijuana in town
Date: Thursday, March 25, 2021 8:17:14 AM

Hi Ms. Turner,

I understand that there's a possibility of a council agenda item that would bring commercial marijuana to Morgan Hill. I understand that there are a variety of responses to issues like this but I wanted you to know that I would really prefer that this kind of business not be allowed in town. Folks can grow their own or purchase from delivery services so it seems that it wouldn't be an inconvenience for them to not have this establishment in town.

Just thought I'd let you know that, for me, this is an issue that I feel strongly about. I understand that others may feel differently, and I respect that. Just wanted to let my opinion be known.

Kind regards,
Carol Lillig

Carol Lillig

[REDACTED]

Morgan Hill, CA 95037

[REDACTED]

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From: [Ronald Kirkish](#)
To: [Christina Turner](#); [Rich Constantine](#); [Yvonne Martinez Beltran](#); [Rene Spring](#); [John McKay](#); [Shane Palsgrove](#); [Gino Borgioli](#)
Cc: [Matt Wendt](#); [Chris Borello](#); [Terry Ratto](#); [Ladera Grill Dan](#); [daniel harney](#); [Bob Cooke](#); [Marsha Edick](#); [Michael Lancaster](#); [REDACTED]
Subject: Don't allow Constantine & Spring to destroy Morgan Hill's wholesome culture
Date: Monday, March 22, 2021 10:29:58 AM

Dear All,

Morgan Hill's Mayor Rich Constantine and his cohort City Councilman Renee Spring are trying (for a 3rd time) to allow for the sales, distribution and growing of marijuana within the jurisdiction and city limits of Morgan Hill.

Twice already they have been denied but once again they are intending to stubbornly turn the wholesome culture of Morgan Hill into a culture of drug abuse; and into a crime syndicate hub for all criminal drug cartel activity which "will" include the smorgasbord of "all dangerous and illegal drugs" that come across our southern border with Mexico for the purpose of reaching their tentacles deep into every nook and cranny of your neighborhoods.

Instead of promoting Morgan Hill's famous kid sports programs like "Pony Baseball, Pop-Warner football, soccer, basketball, girls softball", these two gentlemen want to promote the abuse of drugs. Illegal and dangerous drugs are flooding across our Mexican border and into your own community, **if you allow it and make it easy for them.**

I received this information from a great friend and awesome human being who is friends with the gentleman [Robert Almonte] who is being interviewed on Fox News.....here is my friends remarks:

"Ron - Robert Almonte is a personal friend from Texas. He is a retired Deputy Chief from El Paso PD and former US Marshal. He teaches about Cartel violence all over the world. Feel free to post and share."

And, I strongly urge you all to also share this important information with others within your sphere's of influence. We "have" to get the truth, the facts, out to the residents of Morgan Hill that Mayor Constantine and Councilman Spring are intending to destroy the City of Morgan Hill and their kids with their pro-drug abuse agenda.

For your consideration and B/r, Ronald L. Kirkish.

[https://video.foxnews.com/v/6242611555001?](https://video.foxnews.com/v/6242611555001?fbclid=IwAR1coPCVKkFKE4DMpeQJQgBnur3F54vnpbQYJ2OI9Gb2I_LQds-vd1TCzxE#sp=show-clips)

[fbclid=IwAR1coPCVKkFKE4DMpeQJQgBnur3F54vnpbQYJ2OI9Gb2I_LQds-vd1TCzxE#sp=show-clips](https://video.foxnews.com/v/6242611555001?fbclid=IwAR1coPCVKkFKE4DMpeQJQgBnur3F54vnpbQYJ2OI9Gb2I_LQds-vd1TCzxE#sp=show-clips)

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From: [Ronald Kirkish](#)
To: [Christina Turner](#); [Rich Constantine](#); [Yvonne Martinez Beltran](#); [Rene Spring](#); [John McKay](#); [Shane Palsgrove](#); [Gino Borgioli](#)
Cc: [Matt Wendt](#); [Chris Borello](#); [Terry Ratto](#); dave@lokeyfirearms.com; [Ladera Grill Dan](#); [Ladera Grill Morgan](#); [Bob Cooke](#)
Subject: Drug abuse and the City of Santa Cruz, CA
Date: Wednesday, March 24, 2021 4:14:36 PM

Dear All,

The City of Santa Cruz, CA [just a few miles from Morgan Hill] is ground zero for drug abuse and the drug epidemic America is experiencing can be directly traced to this city.

When compared to the national averages for issues regarding drug abuse, the City of Santa Cruz far exceeds all others in all categories; why? Because of their many years of being soft on drug abuse policies

When we can see with our own eyes what has been happening in Santa Cruz, the rampant drug abuse among their youth, why would any other city, especially including Morgan Hill, want to walk in the same foot steps, steps that lead down the path to great harm and damage to their community and their children?

Ronald L. Kirkish.

Santa Cruz County Drug and Alcohol Abuse Statistics

<https://elevaterehab.org/santa-cruz-county-california-drug-alcohol-abuse-statistics/>

December 18, 2016

Drug and alcohol abuse is considered California's top premature killer. In California, 40,000 emergency room visits each year are drug-related.

Though illicit drug and alcohol abuse is a statewide problem, it is particularly prevalent in Santa Cruz County.

Unlike other areas that often see spikes of one particular drug, the area's abuse rates cover various drugs—from **marijuana** and cocaine to hallucinogens and prescription drugs.

The statistics offered by the Santa Cruz County Health Department show a large disparity between the state and the county.

The percentage of adults who need help for emotional/mental problems or drug and alcohol problems for California is 15 percent, and for just Santa Cruz County, it's 22 percent.

These numbers suggest that the county is fighting a larger battle against drugs than other areas in the state. The drug and alcohol issues of Santa Cruz County top the state.

How Commonly Abused Drugs Have Become More Dangerous

The problems of Santa Cruz County have recently become part of a national spotlight on the drug epidemic in the United States.

There have been at least four high-profile overdoses in Santa Cruz County that resulted in fatalities in 2015, all under the age of 25, and stem from a mix of drugs known as a cocktail.

The mixes of drugs vary; they can include:

- methadone
- xanax
- oxycodone
- allergy medication
- cocaine

Some of these drugs speed up the heart and nervous system, while others slow it down. The inclusion of alcohol adds an even higher level of danger to the drugs.

Some users will use one kind of drug to counteract the other's effects, assuming that they can be taken together because they both aren't downers, but combining any of them can be deadly.

According to the Santa Cruz Sentinel, part of the issue in Santa Cruz County is that many of these drugs have become more readily available.

Young adults and adolescents—people who aren't aware of how harmful it can be to mix drugs with alcohol or other substances—are the groups most likely to abuse drugs.

The Demographics and Substance Abuse in Santa Cruz County

Consider the following drug statistics:

- In 2013, about 23 percent of teens and young adults reported using an illegal drug within the past month.
- Of those, about 27 percent of females reported needing help due to illicit drug use.
- Only 18 percent of males reported needing help.
- In the entire state of California, only 18.5 percent of adults seek help for drug and alcohol abuse, causing the statistics significantly higher for Santa Cruz County.

Adolescent Drug And Alcohol Users

Though addiction at any age can be crippling, those who seem to struggle the most in this area are young.

Adolescents in Santa Cruz County are struggling with addiction at an alarming rate, which is a problem for many reasons.

The brain is still maturing during adolescence. The prefrontal lobe—which controls emotions, is not thoroughly developed, so this demographic doesn't fully appreciate the long-term consequences of drug use or the dangerous behaviors in which they may show while on drugs.

- About 40 percent of Santa Cruz County students report using **marijuana**, inhalants, or prescription drugs in the past year.
- **Marijuana** use is significantly higher for this county than in the rest of California.
- Though marijuana is now legal for California residents, users must be at least 21 years old— as with alcohol—which is also commonly and secretly abused by teens.

The Far-Reaching Effects Of Drug Abuse Among Adolescents

Recent studies, such as the California Healthy Kids Survey, concluded that:

- Ninth and eleventh graders are the two groups of high school students most likely to use drugs.
- Many of these students voluntarily report **marijuana** or alcohol use.
- In Santa Cruz County, one-third of the eleventh graders report binge drinking, and 30 percent say regular **marijuana** use.
- Nationwide, 1-in-5 high school juniors report binge drinking.
- Across California, only 20 percent of high school students report **marijuana** use.

Abusing Drugs and Alcohol While Driving

Most California students can begin driving during their sophomore year of high school. Because they are new to driving and somewhat because their brains are still developing, these drivers are already a risk on the roads.

The risks to themselves and others skyrocket if they abuse drugs or alcohol while driving.

Effects of Substance Abuse in Santa Cruz County

The number of alcohol-involved vehicle accidents for licensed drivers has climbed steadily in the past decade.

Accident numbers remain significantly higher for Santa Cruz County than the entire state of California.

When people are driving while under the influence of any drug or medicine, the consequences go far beyond themselves.

Traffic Accidents and Substance Abuse

Accidents involving people under the influence of drugs or alcohol often affect others. They must live with the aftermath of someone else's choice to drive while intoxicated.

The effects of substance abuse on those who use are countless and can be permanent. The results are heightened when the abuse starts young.

Risks of Drug and Alcohol Abuse in Santa Cruz

Teen and young adult drug users often experience emotional and behavioral problems; anxiety, depression, and suicidal thoughts are shared.

Drug abuse may mask an underlying mental disorder that causes these issues, such as bipolar disorder or major depressive disorder. These disorders can lead to fighting, stealing, and other negative behaviors.

Drug and alcohol abusers are more prone to engage in risky sexual behavior, which is especially true of adolescents who are likely engaging in sexual activity for the first time.

Unprotected sex is common, leading to higher incidences of sexually transmitted diseases (STDs). In Santa Cruz County and California, the risk of HIV and AIDS is down from 10 years ago.

However, drug-abusing teens and young adults remain at higher risk than those who don't engage in substance abuse. They are also at higher risk for Hepatitis B and C and other blood-borne infections.

Drug Abuse, Learning Issues, and Brain Damage

Drug and alcohol abuse damages short-term memory and can lead to long-term memory problems. This can cause long-term learning problems in teens and young adults.

In some cases, substance abuse masks learning disabilities. These disabilities include:

- dyslexia (general term for disorders that involve difficulty in learning to read or interpret words, letters, and other symbols)
- dyscalculia (a math learning disability that impairs an individual's ability to learn number-related concepts, perform accurate math calculations, reason and problem solve, and perform other necessary math skills)
- dysgraphia (a learning disability that affects writing abilities. It can manifest itself as difficulties with spelling, poor handwriting, and trouble putting thoughts on paper)

Substance abuse may be a way for individuals to self-medicate. For instance, those with undiagnosed ADHD may find certain drugs calm them or help them stay focused.

Drug abuse will continue to mask learning disabilities or other diagnoses from kids in this age group. Others will use drugs to dull their lives' difficulty that may involve family strife, bullying, or fear of failure.

If adolescent drug and alcohol use remains untreated, severe brain damage can occur.

Existing learning disabilities and other problems may become more severe. Over time, brain cells will shrink, further impairing decision-making and emotional control.

Some teens and young adults experience amnesia from drug use. Overdose is common because of adolescents' lack of decision-making skills at this age.

Other health risks include:

- seizures
- coma

potential death

In severe cases, someone may enter into a vegetative state. Some teens and young adults end up in nursing homes, needing full-time round the clock care.

Substance Abuse and Arrests for Adults and Juveniles

- Juvenile arrests had dropped 43 percent nationally in the early part of the decade. However, they are back up with the rise of abuse since 2013.
- Along with increased drug use comes a slight increase in truancy and alcohol or drug-related misdemeanor arrests. Despite an overall decrease in juvenile substance abuse arrests, juvenile detention rates remain high.
- Males and Latinos of both sexes remain overrepresented in California's youth justice system. There is less forgiveness in the judicial system for adult addicts.
- Incarceration is a real consequence of drug and alcohol abuse. It stops many from seeking the help they need.
- In 2012, about 45 percent of bookings into the Santa Cruz County Jail were alcohol-related.
- Many arrestees were dual diagnosis, suffering from mental disorders as well as substance abuse.
- The number of dual diagnosis arrestees has increased since 2012.

Because drug use may mask other disorders, statistics may under-represent the actual numbers.

The Corresponding Rise Of Substance Abuse and STIs

Teens are vulnerable to drug use, but the incidence among Santa Cruz County adults is also high.

Adult alcohol and drug treatment admissions are well above average in Santa Cruz County and have steadily increased since the early 2000s.

Unfortunately, cases of STDs seem to rise with increases in drug use. As of October 2016, cases of chlamydia, gonorrhea, and syphilis have increased.

Adults younger than 35 were particularly at risk; females were most at risk for chlamydia, and men having sex with men were most at risk for syphilis. One congenital case of syphilis was reported in October 2016.

Drug And Alcohol Abuse Statistics For Hospitals

There were about 845,000 drug and alcohol-related emergency department visits nationwide in 2011, according to the Substance Abuse and Mental Health Services Administration (SAMHSA) and the Drug Abuse Warning Network (DAWN).

That number has climbed since, particularly in states like California; more than 400 of those visits involved marijuana, and more than 300 involved alcohol mixed with drugs.

Most people brought to emergency departments for substance abuse are between the ages of 18 and 25.

Of these patients, most receive care due to addiction to marijuana or prescription painkillers.

Heroin—one the most addictive of all drugs—is the next most commonly used drug, with about 228 emergency department visits in 2011.

Hospital Discharges Involving Addiction

Drug-related hospital discharges in Santa Cruz County have been well above the national average for more than a decade.

Although this trend is declining, the rate can be as high as 10 percent of people per 100,000. Adverse events after hospital discharge are common for drug-abuse patients, too.

Adverse events include:

- non-permanent or permanent disability
- several days of ongoing symptoms
- continuing minor symptoms

In 2016, about 19 percent of patients in the US had an adverse event; most were preventable.

Currently, hospital discharge statistics only reflect injuries or illnesses directly attributed to substance abuse.

They do not include dual diagnoses or cases in which substance abuse is partially responsible for the onset of physical symptoms.

Thus, healthcare professionals find it more challenging to diagnose and treat substance abuse patients adequately. Only about 20 percent of drug abusers with health insurance will seek emergency treatment and rehabilitation. Even with insurance, few patients receive follow-up care.

Without adequate follow-up and rehabilitation, these patients are far less likely to stay sober.

Understanding the Drug Problem in Santa Cruz County, California

Several factors are contributing to Santa Cruz County's rise in drug abuse. The area—like other areas that struggle with drug addiction—also faces different challenges. Homelessness and transience are significant factors.

Though working hard to find answers, the county doesn't have the resources it needs to help all who suffer.

Additionally, it seems as if the rise in drug use has spread from those on the street to younger adults—those in high school and the nearby The University of California, Santa Cruz.

Substance abuse disorders and treatment cost Santa Cruz County about \$207 million per year. Only 3.3 percent of that total is spent on treatment.

Treatment quality always needs improvement, and access remains unavailable for a large number of users. Repeat offenders are another huge problem.

Healthcare professionals, drug treatment providers, and police often don't work together—healthcare professionals report treating the same people in their emergency departments, hospitals, and clinics. Many addicts are, sadly, simply lost in the shuffle.

Finally, dual diagnosis—the term used to describe those who have both a mental illness and a substance-abuse disorder—remains an obstacle for many substance abusers in Santa Cruz County.

The high rate of drug incidents involving younger users may be the focus. This might mean older adults who suffer from both mental health issues and substance abuse may not be getting attention or the correct diagnosis.

Identifying and Solving Substance Abuse in Santa Cruz County

The Santa Cruz County Health Services Agency and Board of Supervisors are enacting a multi-phase plan to help solve the area's drug and alcohol issues.

Strategic planning efforts began in June 2013. Phase 1, which started December 1 of that year, included gathering community input and identifying key issues, such as commonly used drugs and treatment access.

With this information, Santa Cruz County HSA was able to propose workable goals and outcomes.

Phase 2 began in February 2015. Its focus was reporting on current substance abuse disorders and evaluating current treatment programs.

During this phase, changes to the Drug Medi-Cal (DMC) program were proposed and made to provide more people with affordable treatment.

Short-and long-term financing for treatment facilities and other programs was examined during Phase 3, April – May 2015.

Better Treatment Opportunities For Substance Abuse

The good news is that people are seeking treatment. Since the HSA plan implementation, most treatment facilities around Santa Cruz County have increased their clientele.

Prevention coalitions, such as the United Way of Santa Cruz, also have seen an increase in

funding, which goes a long way to help those who are addicted and can't afford help.

Along with substance abuse treatment funding, mental health treatment funding has increased in Santa Cruz County this past year.

Finding Help for Drug Addiction in Santa Cruz County, California

Despite the risks associated with drug and alcohol use, many people do not receive treatment or even ask for help.

Across the US, statistics indicate 85 percent of drug users won't ask for the help they need.

Often, those addicted to drugs are reluctant to request help due to fear of legal repercussions. Even for those fighting addictions to legal substances, such as alcohol, there is still a stigma that prevents many from seeking help.

In other cases, though, there is a more concrete reason for not finding the appropriate help. Many drug users don't have health insurance that would cover addiction treatment.

Though the Affordable Care Act offers some help, many addicts have no type of insurance. Only about 35 percent of addicts without health coverage will ever seek treatment.

Severe drug and alcohol abuse impede the ability to meet this requirement. Under or unemployed substance abusers may not receive enough aid to pay for rehabilitation programs. The legal residency requirement may prevent some people from getting help.

Seeking Treatment for Substance Abuse and Alcohol Abuse in Santa Cruz County

Drug and alcohol abuse rates in Santa Cruz County are now at astounding levels, and residents of the area are eager to seek help to end their addictions.

At Elevate Addiction Services, we invite members of the Santa Cruz County community that are struggling with substance abuse, chemical dependency, and alcohol abuse to contact us and allow us to show you that there is hope for recovery.

We will work with you to achieve your recovery goals.

WARNING: This message is from an external user. Confidential information such as social security numbers, credit card numbers, bank routing numbers, gift card numbers, wire transfer information and other personally identifiable information should not be transmitted to this user. For question, please contact the Morgan Hill IT Department by opening a new helpdesk request online or call 408-909-0055.

From: Ronald Kirkish <[REDACTED]>

Sent: Thursday, April 1, 2021 2:29 PM

To: Christina Turner <Christina.Turner@morganhill.ca.gov>; Rich Constantine <Rich.Constantine@morganhill.ca.gov>; Yvonne Martinez Beltran <yvonne.martinezbeltran@morganhill.ca.gov>; Rene Spring <Rene.Spring@morganhill.ca.gov>; John McKay <john.mckay@morganhill.ca.gov>; Shane Palsgrove <Shane.Palsgrove@morganhill.ca.gov>; Gino Borgioli <Gino.Borgioli@morganhill.ca.gov>

Cc: Matt Wendt <[REDACTED]>; Chris Borello <[REDACTED]>; Terry Ratto <[REDACTED]>; Ladera Grill Dan <[REDACTED]>; Marsha Edick <[REDACTED]>; Bob Cooke <[REDACTED]>; Michael Lancaster <[REDACTED]>

Subject: Medical Associations [SCMA/AMA] wholeheartedly disagree with Morgan Hill's Apothecary owner, Ms. Malisha Kumar, regarding the compassionate use of medical marijuana

Dear All,

The owner of the owner of "The Apothecary at 875 Jarvis Drive #140 - Malisha Kumar" in Morgan Hill appears to be one of the more significant pot-advocates behind the scene's at Morgan Hill's City Hall and arguably carries significant influence with some of Morgan Hill's decision makers who rein on the City Council, as evidenced by two Council members third attempt to place the sales, distribution and growing of marijuana on the agenda for the city council to consider once again.

From information gleaned from her own "Apothecary Website, '**Morgan Hill...The Time is Now**' - November 3, 2019", Ms. Kumar claims she worked as a professional "**Bud Tender**" at a marijuana dispensary and during the time she was trimming marijuana buds there she allegedly asserts she gained enough of a **medical education** saying "**she saw a need to educate the public on the medical uses of cannabis**"

However, unlike Ms. Kumars recommendations, you can see from this letter from the South Carolina Medical Association [SCMA], dated March 30, 2021 (three days ago) that the SCMA & AMA [American Medical Association] do "NOT" recommend the "compassionate use of marijuana" for medical purposes, and they list the reasons for their reluctance.

I strongly urge those on the Bcc to share this information with others within your spheres of influence in the City of Morgan Hill.

For your consideration and B/r,

Ronald L. Kirkish



P.O. Box 11188
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Michael T. Finch, Jr., MD
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Chairman of the Board

March 30, 2021

Chairman Daniel Verdin, III Senate Medical Affairs Committee 412 Gressette Bldg.
Columbia 29201

Re: Senate Bill 150, the Compassionate Care Act

Dear Senator Verdin:

The South Carolina Medical Association (SCMA) writes to oppose Senate Bill 150, the Compassionate Care Act ("CCA"). Despite our position, the perception that physicians are not compassionate when it comes to patients' needs could not be further from the truth. Physicians care about patient safety, which is why this issue creates such passionate debate. The opposition from the SCMA stems from asking physicians, without the benefit of adequate clinical or academic research and/or FDA approval, to be the legal access point for marijuana and its derivatives in South Carolina. The American Medical Association (AMA) has a similar stance, urging legislatures to "delay legalizing cannabis until further research is completed on the public health, medical, economic, and social consequences of its use." (August 29, 2019, Pres. AMA Dr. Harris)

Physicians recommend treatments for patients based on clinical data explaining the efficacy in treatment, data showing usage and desultory, and data on potential side effects. Marijuana is a plant with over 400 compounds, with only one component being tetrahydrocannabinol (THC). This is what makes approval of marijuana in medicine form so difficult. This is not to say it is not possible; the FDA has approved a cannabis-derived drug product, Epidiolex (cannabidiol), and three synthetic cannabis-related drug products, Marinol (dronabinol), Syndros (dronabinol), and Cesamet (nabilone). We stand in full support of an FDA approved process that will provide clinical testing and medical derivatives physicians can prescribe.

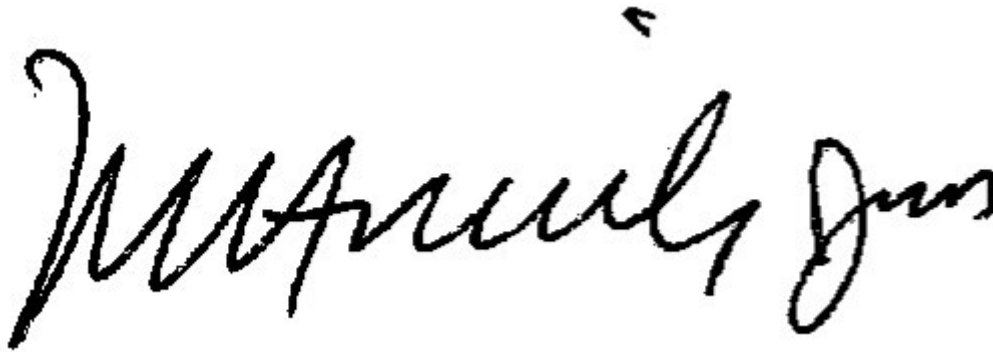
Senate Bill 150 provides that physicians and podiatrists may "recommend" marijuana for medical use. Aside from the unusual addition of podiatrists as an access point, providing a physician as the only other access point provides a false sense of security that the marijuana is a true medication and regulated. South Carolina's regulation of the marijuana plant will not equate to an FDA process, and does not provide the clinical evidence physicians rely on in prescribing medication. However, many citizens will believe that because it is accessed by a physician it is a safe, effective, clinically proven drug.

Chairman Daniel Verdin, III March 30, 2021
Page 2

We appreciate that many people are in support of medical marijuana. However, as we saw with the opioid epidemic, there can be deadly consequences even when medications are properly tested. The concentration of the psychoactive component THC is perhaps 10 times the concentration of marijuana from the 1970s, and it is a very addictive substance, affecting the brain's reward system just as other addictive drugs do. The newspapers show story after story of the problems other states face from allowing marijuana to be used as medicine. We ask that members consider that the two groups in charge of controlling medical marijuana, physicians and the South Carolina Law Enforcement Division (SLED), stand in opposition to passage of this bill.

Sincerely,

Michael T. Finch, Jr., MD President

A handwritten signature in black ink, reading "Michael T. Finch, Jr." in a cursive script. The signature is written on a white background.

cc: The Honorable Harvey S. Peeler, Jr.

From: [Ronald Kirkish](#)
To: [Rich Constantine](#); [Yvonne Martinez Beltran](#); [Rene Spring](#); [John McKay](#); [Shane Palsgrove](#); [Gino Borgioli](#); [Christina Turner](#)
Cc: [Bob Cooke](#); [Ladera Grill Dan](#); [Ladera Grill Morgan](#); [Terry Ratto](#)
Subject: From Argentine Shrine to Marijuana Corridor: The Story of Itatí (especially for Constantine, Spring and Borgioli)
Date: Friday, March 19, 2021 9:26:00 AM
Attachments: [1F69D574-CF37-4292-A3B3-5FC4BE67C553.jpeg](#)

Dear All,

This is a story about a “corrupt” **mayor** and **deputy mayor** who turned their once beautiful city [of Itatí, Argentina] into a criminal trafficking hub for spreading the drug cartels marijuana and other illegal drugs far and wide throughout South America.

This information is especially for the attention of: **Mayor Rich Constantine**, **Councilman Rene Spring** and **Councilman Gino Borgioli** (this will be the “**third**” attempt for Constantine and Spring to turn the city of Morgan Hill's beautiful wholesome culture into a culture of drug abuse and crime; becoming a hub of drug gang/cartel criminal activity for the South Santa Clara County communities of Gilroy, San Martin and of course Morgan Hill; hardly a neighborly thing to do.

B/r,

Ronald L. Kirkish

From Argentine Shrine to Marijuana Corridor: The Story of Itatí

<https://insightcrime.org/investigations/argentine-shrine-marijuana-corridor-story-itati/>

[ARGENTINA](#)/ 16 MAR 2021 BY JOSEFINA SALOMÓN*

An ambitious mayor, a well-connected deputy mayor, dirty cops, a corrupt judge, and a lot of marijuana. This is the story of Itatí, the sleepy town that went from religious hub to key stop on Argentina’s marijuana highway, and the mayor that helped make it happen.

The tears running down Natividad Terán’s face were a telling sign that this was not just another political scandal.

“People are praying for me,” Terán [told](#) a TV reporter, visibly shaking.

Terán was the mayor of Itatí, a small town of some 9,000 people on the northern corner of the Corrientes province, on the banks of the Paraná River. On the other side of the river is Paraguay, the top marijuana producer in Latin America and, depending on who you asked, the source of Terán’s pain or his power.

It was April 3, 2017. Just a couple of weeks earlier some 700 members of Argentina's gendarmerie [had rained on Itatí](#). The "Sapucay Operation," as it was called, was nothing short of an action-packed blockbuster. A special unit carried out 43 separate searches in residences where they found drugs, arms, mobile phones and cash in numerous currencies. They arrested 15 individuals suspected of being part of a sophisticated crime organization.

Terán was among them, accused of being the most important political cog in a translational criminal organization that used the town as its center of operations to move tons of drugs every year from Paraguay to Argentina's capital, Buenos Aires, and other cities.

Logically, the story was [top news](#) in Argentina. And so Terán was crying, protesting his innocence.

"I'm a nobody in this whole issue. I'm just a mayor that has no real power in these issues, but I trust justice will be served," [he told America TV](#), tears running down his face.

Small Towns, Big Networks

Itatí was long known for its imposing cathedral in the center of town, which houses the Our Lady of Itatí. The cathedral put the small border town on Argentina's religious map. Hordes of people travel to Itatí each year to visit the shrine, an annual pilgrimage slowed only by the coronavirus pandemic.

But Itatí also has a less desirable reputation for its role in Argentina's drug trafficking. The town is one of the many places where illegal drugs enter Argentina, a country that is one of the largest drug consumer markets in the world and is [a transit route](#) for some of the cocaine headed to Europe and other destinations.

Much of these drugs come from or via Paraguay. Argentina and Paraguay are separated by the Paraguay and Paraná rivers. Authorities claim there is little to no drug trafficking via rivers, but the lack of policing in the waters that separate the riverbanks of Paraguay and Argentina makes it relatively easy to smuggle anything.

And smugglers do, from clothes and electronics to illegal cigarettes. A number of journalists and experts interviewed in both countries also said vast quantities of drugs are smuggled along these fluvial highways, navigable all year round. Indeed, [seizures in Europe](#) indicate that large cocaine shipments have left from Asunción, moved along the Paraguay River to the Paraná River, and then shipped from Buenos Aires ports or Montevideo.

Further west, along the Bolivian border, cocaine trafficking is even more prolific. In Salta, along the so-called dry border, the Loza family began moving small amounts of cocaine in the 1980s. By the 1990s, the Lozas were wholesalers in Buenos Aires, and by the 2000s, they had begun moving cocaine to Europe on cargo ships via the "rip-on rip-off" method – sneaking drugs into containers without top-level collusion from the ship.

Alongside them was the Castedo clan. The Castedos acquired land on both sides of Salta's dry border in the city of Salvador Mazza and smuggled drugs through their private estates. Delfín Castedo, referred to as the "boss" of the border by media, [reportedly owned](#) as much as 25,000 hectares just on the Argentine side. Like the Lozas, the Castedos eventually moved to [shipping cocaine to Europe](#). Several sources insisted that the group was not the owner of the merchandise but was hired by European-based drug traffickers.

Like Itatí, Salta provided the perfect setting for these clans to grow. The Aguas Blancas border crossing, in the municipality of Orán, is a known [contraband hotbed](#) where large swathes of the population live off illegal economies. As much as a third of locals could live off contraband, a local [prosecutor estimated](#) in 2017.

Argentine counternarcotics officials told InSight Crime that drugs are smuggled by land through the Aguas Blancas and the Professor Salvador Mazza dry border areas in Salta, and in the La Quiaca area in the neighboring province of Jujuy in lesser quantities. Cocaine is also trafficked in large volumes by aerial drops in a zone that covers southern Salta and the northern part of the neighboring Santiago del Estero province, they added.

Along the northeastern border, marijuana is trafficked more often. One [recent report in La Nación](#) said cargo operators receive as much as \$10,000 to move marijuana along the riverine highways. In Argentina, where marijuana use has nearly doubled in the last 20 years, the drug could be more lucrative than cocaine.

It is little surprise then that around 20 percent of all illegal marijuana produced in Paraguay is transported to Argentina, much of it through towns like Itatí. Along the river, a collection of small islands scattered across the approximately three kilometers that separate both shores make for useful stop-off points. But once the drugs are in Argentina, they need storage and transport networks. That, judicial investigators say, is where politicians and small-town bureaucrats came into the picture.

The Itatí Network

Perhaps the most remarkable thing about Natividad Terán is that, until the day of his arrest, he [wasn't particularly remarkable](#). Before launching his political career as a local city councilor — an entry gate for politicians in many small towns across Argentina — the Paraguay-born 54-year-old turned Argentine national owned a local hardware store.

“Political figures from small border towns close to Paraguay are always under suspicion, but there was nothing that pointed to Terán in particular. He was a bit of an unknown figure until all this,” a former prosecutor in the case said.

His 12 years as city councilor for a Peronist political faction during the administration of César Torres were also unremarkable. Torres, who was from the center-right New Party (Partido Nuevo – PANU), was mayor of Itatí for [more than two decades](#) and dominated the local political scene.

But Terán, who was known more popularly by his nickname “Roger,” had higher ambitions, even if he didn’t show it. And so, prior to municipal elections in September 2013, he brokered a coalition with PANU and another party, Crecer con Todos (Grow with Everyone), to back his candidacy for mayor, which he won with more than [50 percent of the vote](#).

Then he set to work with his new colleagues. One of them was Fabián Aquino of the Crecer con Todos party, who became his deputy mayor. The two were close, investigators later said, and would eventually become the foundation of the drug trafficking scheme. (For his part, Aquino claimed Terán promised him a level of political participation that never materialized and that they “hardly spoke.”)

Authorities said Terán also became close with Luis Saucedo, a police inspector, who people referred to as “El Gordo” (the Fat One). Saucedo had begun working with City Hall in 2012, under the Torres administration. And by the time Terán took office, Saucedo already had a reputation for his connection to drug trafficking. Still, Terán left him in his job, perhaps because he was the logistical mastermind of the Argentine side of the network.



In fact, investigators say [it was Saucedo’s network](#) that extended to Paraguay. There, according to an anonymous witness who spoke to Argentine prosecutors, the police inspector worked closely with Hugo and Ariel Arce, brothers who transported marijuana by truck from the north of Paraguay to the city of Ayolas, just upriver from Itatí.

That is where Federico Marín, known as “Morenita” after a type of bait for fishing, would often take over. Marín was famous for his knowledge of the Paraná River and for the [high-quality marijuana](#) he provided his customers. He got the drugs to Itatí, often via speedboat.

“They have everything arranged with people from the coast guard, gendarmerie and the federal and local police. They load (the boats) up 100 meters from the Coast Guard,” one witness [declared](#).

The marijuana that arrived in Itatí was stored in sheds where the network relied on municipal authorities to hide and then move it. Saucedo, for instance, coordinated operations directly with Terán, who then passed on orders to his deputy mayor, Fabio Aquino. Aquino, in turn, was the link to local police Chief Osvaldo Ocampo Alvarenga, who, according to court files, was working with at least two members of Argentina’s Federal Police [stationed in Corrientes](#) and one member of the gendarmerie. They sometimes freelanced, authorities later claimed, stealing and reselling drugs to trafficking groups.

Except for the local priest, who was forced into exile due to [death threats](#), there was little resistance in the town. Money flowed easily, and it was injected into the local economy through car dealerships or horse racing. Even kids were employed as lookouts, their parents unaware or turning a blind eye.

The close family connections also made the network efficient as they ensured loyalty and agile communications. “Fish” was code word for marijuana. They used various species to indicate the quality of the drugs. The “golden key,” federal prosecutors told InSight Crime, was their connection within the top echelons of the judiciary.

Indeed, if anything went wrong, they had at least one judge working with them. Judge Carlos Soto Dávila had been dealing with [drug trafficking cases](#) in the province for more than two decades. The judge, prosecutors said, worked with two of his secretaries and five lawyers who used to represent individuals on drug trafficking charges. Together, they negotiated delays in [investigations](#) or secured reduced sentences in exchange for payments, prosecutors said.

Authorities, for example, say Soto Dávila [helped Saucedo](#) escape prosecution on several occasions. They also noted an anomaly in the statistics: the considerable number of seizures did not match the low number of arrests. One of the lawyers believed to have acted as an intermediary between the judge’s office and criminal groups, who has since become a key witness in the case, said they were frequently asked to “[collect money for the old man](#),” including from those in Terán’s organization.

Eventually, authorities said, the marijuana left the city and was transported to least seven distribution points across Argentina, including important consumption and distribution hubs such as Rosario and the poor neighborhoods in Buenos Aires. In all, investigators think the network was moving as much as 15 tons of marijuana per year worth millions of dollars.

A ‘Nobody’?

It was in Buenos Aires that investigators [caught wind](#) of the network. It happened because they were tracing the origin of the marijuana that three women were selling in a rundown area known as Villa 21. They tapped their phones, which at first led to a number of small wholesalers. Soon after, authorities arrested the women. The arrests and the wiretaps eventually led to the wider network.

The leader, authorities said, was Carlos Alberto Barreiro, a convicted drug trafficker who was operating from his jail cell in Chaco. Authorities said that locals called him “El Patrón,” an homage to a person they described as “the Pablo Escobar of Itatí.”

Barreiro’s connection to Itatí’s City Hall was personal. Deputy Mayor Aquino’s sister, María Emilia Aquino, had two children with Barreiro. Aquino later claimed that after the couple split, he cut all contact with Barreiro. But at some point, the sister got a loan to purchase a drug load, authorities would claim later. The load, they said, was captured and the sister was left owing the criminal group for the lost drugs and her loan.

“I’m not involved in anything strange, and neither is she,” Aquino told the courts, referring to his sister. “Many of these problems are happening because I wanted to become mayor. I used to help everybody, but I never did anything illegal.”

Aquino’s brother, Hernán, was also connected to the network. He was arrested on [drug trafficking charges](#). Judge Soto Dávila released him. One of Aquino’s other sisters was also linked to the network. A local police officer, she was allegedly responsible for alerting drug traffickers about upcoming raids or road checks.

Just what role Terán played in the network is still a matter of debate. Some paint Terán as a pawn in this scheme, and he would later famously say on TV that he was a “nobody.”

“This was a big organization, there is no doubt of that,” a former prosecutor from Corrientes told InSight Crime, speaking on the condition of anonymity because he was not authorized to speak about the case. “The arms they had access to and the kind of boats they used. That shows the power they had. Terán, the members of the security forces, the judge. They were just cogs in that network and paid for their favors.”

But prosecutors say Terán was a key member of the group, providing top-cover for its activities and connections to various parts of the wider network. Authorities also say Saucedo financed Terán’s campaign with drug money.

What’s more, some of Terán’s family were also tied to the scheme, including his daughter and son-in-law. The investigation into the two had begun in 2014, when 188 kilos of marijuana were found in their abandoned car after the car outraced authorities in a chase near Itatí. Both said their car had been stolen and that the drugs were not theirs.

Still, relations between the two became tense in the months afterwards. Authorities knew

because they were monitoring their communications.

“I can destroy your family,” he once told her on the telephone, “because we know where your money comes from.”

To be sure, authorities said the couple had a hard time explaining why they owned several SUVs and had as much as [\\$60,000 in jewelry](#) in the house. [On February 14, 2017](#), Terán’s daughter and son-in-law were arrested.

A week later, Hernán Aquino was arrested again, this time after he and the sister of a local city councilor were stopped on a highway with 500 kilos of marijuana.

The noose was tightening.

‘Operation Sapucay’

Around 5 a.m., on March 14, under the cover of darkness, the first teams of gendarmerie entered Itatí. They set up a communications hub at the entrance to the town, and then they began rustling up civilian witnesses in the neighborhoods where they were staging more than two dozen simultaneous search and seizures.

At 6 a.m., the teams hit 32 houses. In all, over 700 gendarmerie took part in the operation. The haul was monumental: motorcycles, boats, cars, trucks, drugs, weapons and 70 people [arrested](#), among them Mayor Terán, his deputy mayor, Fabio Aquino, and the police chief, Ocampo Alvarenga. In addition, the gendarmerie found marijuana bricks in the local jail cell and in Ocampo Alvarenga’s desk. All three were accused of various [crimes related to drug trafficking](#).

Others initially evaded capture. Even though there was an Interpol arrest warrant and a large reward for information hanging over his head, Saucedo managed to stay off the radar for more than two years until authorities caught up with him in the city of Pilar, Paraguay, where they arrested him in September 2019. They quickly extradited him to Argentina where he is now facing [charges](#) that include international drug trafficking, money laundering and falsification of documents.

Most damning in the case against Saucedo was his patrimony. Although Saucedo was receiving a municipal employee salary that his wife said was 10,000 pesos a month (approximately \$1,000 at the time), he had [23 luxury cars](#) and three properties, among other assets.

Marín also evaded authorities for years. He went into hiding before the first raids took place in Itatí in 2017, and it took authorities more than two years and an intense search across Argentina to find him. They finally caught up with him in October 2018, when he returned to Itatí to visit his five children and his wife, who was under house arrest at the time, serving out her own drug trafficking sentence.

Soto Dávila at first claimed he was innocent and that the charges against him were politically [motivated](#). However, as pressure around him built and after he was indicted in February 2019, he [resigned](#). He is now awaiting trial alongside the two secretaries and five lawyers who worked as [intermediaries](#).

Operation Sapucay was one of many that broke up long-time Argentine border trafficking networks during this same time period. In July 2016, [authorities captured](#) Delfin Castedo, the capo of the Castedo clan. [Other arrests](#) of key members of the organization followed.

In December 2018, [authorities hit](#) numerous Loza clan hideouts and properties, arresting four of the clan leaders. And in September 2019, [authorities seized](#) a record 800 million Argentine pesos from the clan (over \$13 million), 45 buildings and 30 vehicles just in Argentina.

The Never-ending Battle at the Border

Authorities in Argentina see these as success stories in the country's long fight against drug trafficking — an example of the results they yield from long investigations and efficient coordination between governmental institutions. Indeed, the country's Attorney General's Office reported that 40 individuals have already been sentenced in the Itatí case, and 36 more are awaiting trial. This includes Barreiro, who is accused of being one of the main leaders of the organization.

But many battles remain.

“The Itatí case is clearly just the tip of the iceberg,” the former prosecutor from the case told InSight Crime. “The network of connections between politicians, security forces and drug traffickers is a long-dated one and will continue to exist. You can cut some heads off, and others will quickly surface. As long as one has money and territorial control and the other, a need for campaign funds and votes, those relations will continue.”

Still, criminal organizations may be making some slight adjustments. Alfredo Zacarías, a journalist who has been investigating security issues in Corrientes for more than 30 years, said the traffickers are becoming more clandestine, moving drugs, for example, under the cover of darkness rather than during the day as they once did.

Controlling the waterways is extremely difficult at any time, he added, particularly given the limited resources the authorities have at their disposal. He also said that while the organization in Itatí was dismantled, the business hasn't been.

“The problem is that when they (authorities) dismantle an organization, the big bosses move to another area, where they find new partners, so the business continues,” he explained. “Itatí is not an exception. Since the ‘Sapucay Operation,’ everybody says there're no drugs in Itatí, but that is not true. It's just that the dynamics have changed.”

To Zacarías' point, the Paraguayan networks remain very much operational. And groups like the Castedos allegedly keep trafficking [operations going from prison](#). What's more, record loads of marijuana are still [being seized](#) in Itatí, even during the pandemic-induced [lockdown](#).



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From: [Rene Spring](#)
To: [Christina Turner](#)
Subject: Fwd: Capitola cannabis dispensaries
Date: Wednesday, April 14, 2021 4:02:15 PM

FYI

Sent from my iPhone

Begin forwarded message:

From: [REDACTED]
Date: March 30, 2021 at 10:11:43 AM PDT
To: Rene Spring <Rene.Spring@morganhill.ca.gov>, John McKay
<john.mckay@morganhill.ca.gov>, Rich Constantine
<Rich.Constantine@morganhill.ca.gov>, Yvonne Martinez Beltran
<yvonne.martinezbeltran@morganhill.ca.gov>, gino.borgiolli@morganhill.ca.gov
Subject: Capitola cannabis dispensaries

Dear City Council,

I spoke with Chief Andy of the City of Capitola police department. Capitola has two cannabis dispensaries, and their town is similar to Morgan Hill in that it has a somewhat conservative population. My conversation with Andy covered many aspects of Capitola's dispensary experience. The summary of our conversation was that the dispensaries were an overall positive addition to the community. They did see an increase in revenue, however not as much as some people had hoped. Also the related crime was relatively small - a break-in (and I don't think any cannabis was taken), and no real loitering, etc.. Capitola did much in advance to mitigate potential problems with dispensaries. I would highly recommend our City representatives talk with their government officials and police regarding how this could be a positive experience for Morgan Hill if it does get approved.

I recommend the City of Morgan Hill contact (as a team) not just Andy, but members of their Council, and visit their dispensaries.

Regards,

--

Steve Malech

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From: [Ronald Kirkish](#)
To: [Council Blankley](#); [Jimmy Forbis](#); [Shawna Freels](#); fred.tovar@cityofgilroy.org; dion.bracco@cityofgilroy.org; [Carol Marques](#); pedro.espinoza; suzanne.guzzetta@cityofgilroy.org; [Council Member Peter Leroy-Munoz](#); [Christina Turner](#); [Rich Constantine](#); [Yvonne Martinez Beltran](#); [Rene Spring](#); [John McKay](#); [Shane Palsgrove](#); [Gino Borgioli](#)
Cc: [Donald Gage](#); [jeanne Gage](#); [Mark Turner](#); [Eric Howard](#); [Jane Howard](#); [Matt Wendt](#); [Chris Borello](#); [Chris Vanni](#); [Jill Vanni](#); [Jeff Parks](#); [luigi Covelli](#); [Cristina Covelli](#); [Jack Fritch](#); [Jack Foley](#); [Michael Smith](#); [Mike Catena](#); [Susan Mister](#); [Georgine Scott](#); [diane nuno](#); [Robert Weaver](#); [Robert Witt](#); [Tom Cline](#); [Renee Lee](#); [Gary Walton](#); [John Taft](#); [Kurt Michielssen](#); [daniel harney](#); [Dan Mitchell](#); [Mark Stewart](#); [Bob Cooke](#); [Stephanie Bernal](#); [Jeff MacPhail](#); [\[REDACTED\]](#); [Greg Quirke](#); [Roger Morgan](#); [Monte Stiles](#); [Kevin A. Sabet](#); [Carla Lowe](#); [Scott Chipman](#); [Erik Chahoub](#); [Martin Cheek](#)
Subject: Marijuana and the Workplace; a true story
Date: Saturday, March 20, 2021 6:57:07 AM

Marijuana and the Workplace; a true story

During the early 1980's, marijuana's THC was much weaker (~2%) than today's which can range from 14% to over 80%. But even at 2%, marijuana abuse in the work place was causing a lot of problems for the semiconductor industry.

MANNY

As a Thin Film's process engineer and working at National Semiconductor (NSC) in the early 1980's at the time, I was asked to take over the Vapox Process as part of my Thin Films engineering responsibility's. The process was used to deposit an extremely thin layer (2um) of SiO2 (glass) in-between metal layers as an interlayer dielectric, and then as a cap layer over the whole wafer to protect the wafer from contamination during further processing to cut the wafer up into individual discrete integrated circuits.

Along with inheriting the Vapox process I inherited "**Manny**". Manny was young and a giant of a man and you didn't want to cross him; especially when you are only 5 foot 4 and 3/4in in height and weigh 145 pounds soaking wet.

Manny's job was to routinely clean the Vapox machine of the built up SiO2 which meant taking it apart and etching the parts in Hydrofluoric (HF) acid and rinsing in Deionized water for a few hours and then allowing the parts to dry before re-assembling.

While waiting for the parts to dry and putting the Vapox machine back together, Manny would go out to his car in the parking lot and smoke a couple of joints of marijuana.

Even though he was high as a kite, Manny could disguise his incapacitation pretty well except for the reeking smell of marijuana from his cloths underneath his cleanroom suit.

When he reassembled the machine, he would forget how the gas dispersion tubes were suppose to go back in (with the holes pointing up) and would install them with the holes pointing down. This was found when we ran a test to check uniformity of deposition and the test results came out bad, very bad. This meant the system had to be torn back down and reassembled properly which extended the downtime for when the system couldn't be used for production; a very costly enterprise; when product is forced to pile up and waiting to be processed.

When discovering he had installed the gas distribution tubes incorrectly, he stated, "**I will never do that again**", but unfortunately it did happen again on at least 3 more occasions and yes, he was stoned on every occasion.

Unfortunately for Manny, we eventually had to write him up and let him go and I heard he soon found another job as a bouncer at the “Pink Poodle” in San Jose, and he was very successful, according to his sister who also work at NSC.

When we hired a person to replace Manny, the company initiated the stipulation that a person must pass a drug test as a condition of employment.

This was when the strength of the THC for marijuana was only 2%....can you imagine what the today’s strength does to the brain and the havoc it is causing for the workforce for companies trying to find and hire folks who can pass a drug test?? Pretty hard.

And then you have to worry and wonder about a potential future President of the United States [Kamala Harris] who is a ardent advocate for marijuana and a self identified user.

And now you know a little about why I am so against the abuse of marijuana.

B/r,

Ronald L. Kirkish

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From: [Ronald Kirkish](#)
To: [Christina Turner](#); [Rich Constantine](#); [Yvonne Martinez Beltran](#); [Rene Spring](#); [John McKay](#); [Shane Palsgrove](#); [Gino Borgioli](#)
Cc: [Matt Wendt](#); [Chris Borello](#); [Bob Cooke](#); [Terry Ratto](#); [REDACTED]; [Ladera Grill Dan](#)
Subject: Marijuana and today's violence/anarchy
Date: Thursday, March 25, 2021 8:52:03 AM
Attachments: [2020 Marijuana and Violence.pdf](#)
[marijuana-violence-and-law-2017.pdf](#)

Dear All,

If you took the time to watch NIH/NIDA Director Nora Volkow's video's that I just sent you regarding how marijuana abuse permanently destroys very important components of the brain, the following articles (linked below) will make more sense why we are seeing so much violence and anarchy in our nation today; mostly perpetrated by the youth of our nation.

For your consideration & B/r,

Ronald L. Kirkish

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Review

A Review of Cases of Marijuana and Violence

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Abstract: Marijuana is the most consumed illicit drug in the world, with over 192 million users. Due to the current legalization push of marijuana in the United States, there has been a lack of oversight regarding its public health policies, as marijuana advocates downplay the drug's negative effects. This paper's approach is from a public health perspective, focusing specifically on the cases of violence amongst some marijuana users. Here, we present 14 cases of violence with chronic marijuana users that highlight reoccurring consequences of: marijuana induced paranoia (exaggerated, unfounded distrust) and marijuana induced psychosis (radical personality change, loss of contact with reality). When individuals suffering from pre-existing medical conditions use marijuana in an attempt to alleviate their symptoms, ultimately this worsens their conditions over time. Although marijuana effects depend on the individual's endocannabinoid receptors (which control behavioral functions, like aggression) and the potency level of tetrahydrocannabinol (THC) in the drug, scientifically documented links between certain marijuana users and violence do exist. Wider public awareness of the risks and side effects of marijuana, as well as a more prudent health policy, and government agency monitoring of the drug's composition, creation, and distribution, are needed and recommended.

Keywords: marijuana; cannabis; tetrahydrocannabinol; THC; violence; law; paranoia; delusions; psychosis; public policies

1. Introduction

In the United States, ten states have legalized the recreational use of marijuana and over 20 states have decriminalized the recreational use of it. Recent reports suggest, however, that the increase of the recreational use of marijuana is causing detrimental effects to individuals, as well as the society as a whole [1–3]. These effects include, but are not limited to, the increase of violence, the increase of thriving underground marijuana markets, and increase in car accident claims after the legalization of marijuana where the recreational use of marijuana was legalized [1–3]. This is caused by lack of oversight. Marijuana is being legally sold with high THC concentration levels without taking into account its addictive qualities and adverse effects. On the other hand, and contrary to popular belief, marijuana is still illegal in the Netherlands and it is decriminalized. However, the consumption and storage of marijuana are limited by law and the approach taken by the Netherlands is to decriminalize the drug in order to be able to help individuals struggling with marijuana use. This prudent oversight has resulted in a decreased in violence and people are able to get the care they need to deal with addiction and become less prone to violence [1–3].

Furthermore, the consumption of marijuana is associated with an increase in violent behavior over the course of an individual's lifespan, a high risk of psychosis for frequent users, an increase

of cardiovascular diseases, and deterioration in health for individuals who have pre-existing mental health issues such as Post Traumatic Stress Disorder, social anxiety, and depression [4–6].

According to research studies, marijuana use causes aggressive behavior, causes or exacerbates psychosis, and produces paranoia. These effects have been illustrated through case studies of highly publicized incidents and heightened political profiles.

These cases contain examples of repeated illustrations of aggression, psychosis and paranoia by marijuana users and intoxication. Ultimately, without the use and intoxication of marijuana, the poor judgment and misperceptions displayed by these individuals would not have been present, reducing the risk for actions that result in senseless deaths.

Import to these assertions, is that the current marijuana is far more potent in THC concentrations, the psychoactive component. Accordingly, and demonstrated in direct studies, more potent marijuana results in a greater risk for paranoid thinking and psychosis. In turn, paranoid behavior increases the risk for paranoid behaviors and predictably associated with aggressive and violent behaviors.

1. Marijuana use causes violent behavior through increased aggressiveness, paranoia, and personality changes (more suspicious, aggressive, and anger).
2. Recent illicit and “medical marijuana” (especially grown by care givers for medical marijuana) is of much high potency and more likely to cause violent behavior.
3. Marijuana use and its adverse effects should be considered in cases of acts of violence as its role is properly assigned to its high association.
4. Recognize that high potency marijuana is a predictable and preventable cause of tragic violent consequences.

2. Case Presentation

2.1. Marijuana Violence

On March 13, 2019, Anthony Comello admitted to, and subsequently was charged for, the killing of Frank Cali, a senior leader of the Gambino family in Staten Island, New York. Both men were allegedly having an altercation over Comello’s romantic interest on one of Cali’s relatives. Although Comello had no previous criminal encounters with law enforcement, reports suggest that he drew the attention of authorities by acting strangely in a federal courthouse when he offered to perform a citizen’s arrest on New York City’s Mayor, Bill De Blasio. Previously, Comello sought a U.S. Marshal to inquire how to perform a citizen’s arrest on the United States Speaker of the House, Nancy Pelosi. Comello admitted that, at the time of Cali’s killing, he was high on marijuana and shot Cali because he feared that the senior leader had a gun and would shoot him during their altercation [4,7].

On February 10, 2019, a man killed his 13-year-old nephew with a knife in Rustavi, Georgia. The man had a history of marijuana use. For days leading up to the killing, he was complaining about having dizziness, headaches, general weakness, nausea, and insomnia. He would also occasionally suffer from anxiety, irritability, and loss of appetite. His wife stated that he consumed and was under the influence of marijuana, which made his symptoms worse. The day before the killing, he tried to go to a clinic. However, the clinic rejected treatment by telling him to go to a psychiatric hospital. However, under the influence of drugs, he simply went home hours before killing his nephew [8].

On February 1, 2018, Nikolas Cruz killed 17 students and staff at the Marjory Stoneman Douglas High School in Parkland, Florida, and injured 17 others. Cruz was diagnosed as developmentally delayed at age three and had numerous disciplinary issues dating to middle school. From a young age, he started consuming marijuana heavily. He accounts that he would frequently “hear demon voices” and would consume large amount of marijuana to try and silence those voices. He also attempted suicide. During an interview after his mass shooting, he stated that he used “a lot of marijuana” as well as prescription tranquilizer Xanax [9,10].

On November 5, 2017, Devin Patrick Kelley carried out the deadliest mass shooting in Texas’ history, resulting in the death of 27 people and injuries to 20 others, by opening fire at worshippers

who were attending regular Sunday Service at the First Baptist Church in Sutherland Springs. Kelley was later shot by bystanders and killed during a high-speed chase with law enforcement agencies. The autopsy on Kelley revealed that toxicology tests detected marijuana and anti-anxiety drugs in his system. A report from the Federal Bureau of Investigation revealed multiple past incidents where Kelley also been under the influence of marijuana. Kelley's first on-record interaction with law enforcement authorities was when he was arrested for possession of marijuana and, subsequently, expelled from his high school. Since then, the record shows that Kelley started using marijuana frequently, as well as developing mental health issues that would lead him to have problems in his employment with the United States Air Force and multiple instances where he abused his step-son and his wife at the time [11,12].

On May 22, 2017, a suicide bomber, Salaman Abedi, detonated an explosive device in an area of the Manchester Arena, United Kingdom. The blast killed over 20 people and injured over 100 others. Evidence shows that, from a very young age, Abedi was a "party animal" who heavily consumed marijuana. Furthermore, he was described as a person who would start fights in the street for no reason, would act rude, and would refuse to do his homework in school. He was also described as a "very slow, uneducated and passive person" who displayed aggressive tendencies. Eventually, he began shutting himself off from other people, started becoming more violent, and started showing paranoia by making statements against western societies and hanging out with dangerous crowds. Evidence suggests that this paranoia, furthered with aggressive tendencies, led to Abedi's suicide bombing attack that day [1,13].

On May 18, 2017, Richard Rojas purposely drove a car along three blocks of pavement in New York's Times Square, killing a teenager and injuring 22 other people. Evidence indicates that Rojas was a heavy marijuana user. He admitted on the consumption of spiced-up marijuana right before committing the attack. Further, the record show that Rojas suffered from paranoia and hallucination, which have led him to make odd statements and partake in actions that negatively affected him in the work place or while interacting with others. Paranoia and hallucination caused him to "hear voices" that led him to commit that attack [2,14].

On November 23, 2016, Arcan Cetin carried out a mass shooting that killed five people and injured many others at the Cascade Mall in Washington. Evidence indicates that Cetin was a heavy marijuana consumer. Further, he had a past of violent behavior, with some incidents including the consumption of marijuana. Although doctors prescribed him medicine for Attention Deficit Hyperactivity Disorder and other mental health issues such as Post Traumatic Stress Disorder, anxiety, and depression, he stopped taking the medicine and substituted it with by excessively consuming marijuana. This led to aggravate his mood swings and being more violent. Before the shooting, he had threatened an ex-girlfriend who lived out of state. Evidence indicates that at, while committing the attack, Cetin was shouting a woman's name [15–17].

On July 26, 2016, Satoshi Uematsu stabbed to death at least 19 people and injured at least 26 others at a care facility in Sagamihara, Japan. Months prior the shooting, Uematsu suddenly started talking and acting strangely to his coworkers, who feared he could harm someone. Consequently, Uematsu tested positive for marijuana and was diagnosed with marijuana-induced psychosis and paranoid disorder after he delivered an ominous euthanasia letter to a Japanese House of Representative and telling his co-workers and the police that he intended to kill disabled people. Although he planned the attack in detail, evidence suggests that he later seemed to showed remorse and stated that "There was something wrong with [him]". These kinds of behaviors suggest that he was suffering from psychosis and paranoia since he was in the delusion that his acts would contribute to the Japanese society and the world [18,19].

On November 27, 2015, Robert Dear killed three people and injured nine others when he carried out a mass shooting in a Planned Parenthood clinic in Colorado Springs. Dear, along with many other users, moved to Colorado after the state legalized the recreational use of marijuana. Dear was a heavy user who was described by family and friends as "an angry and occasionally violent", and "deeply

disturbed”, individual who suffered from paranoia and mood swings. Moreover, he was described as a lonely religious extremist who had a history of domestic violence against his ex-wives, who gambled, and who committed adultery on multiple occasions. About a year before the shooting, he moved to Colorado where he lived in dire conditions at a squalid trailer without running water or electricity [20–22].

On July 16, 2015, Muhammad Youssef Abdulazeez killed five people and injured a couple of others in his drive-by shooting at a military recruiting center in Chattanooga, Tennessee. Prone to depression and manic episodes, he started smoking marijuana heavily in high school. This addiction was going on for many years and led his mental state to deteriorate further and cause him to fail a drug test at work. Further, he started writing suicidal notes to himself and was pulled over by a police officer for driving under the influence of marijuana and alcohol. Up until the shooting, evidence indicates that Abdulazeez had a hard time keeping a job because of his manic depressive/bipolar disorder and drug use [23,24].

On June 17, 2015, 21-year-old Dylan Roof murdered nine people who were attending a prayer service in a Church in Charleston, South Carolina. He claimed that his intentions were to start a race war. His acts were preceded by years of drug abuse. Reports reveal that Roof’s drug abuse started when he was 12 years old when he would smoke marijuana three times a day. When he was 16 years old, he tried to stop smoking marijuana after telling people that his daily marijuana usage caused him to be paranoid and hear voices. According to experts, Roof started suffering panic attacks when he was 16. Nonetheless, multiple accounts claim that he kept smoking marijuana and started abusing other drugs and alcohol. During his arrest for the Charleston shooting, Roof told police officers that he abused drugs before committing such heinous act [5,25,26].

On August 9, 2014, Michael Brown was fatally shot after a physical altercation with a police officer in Ferguson, Missouri. The autopsy and toxicology report revealed that Michael Brown had THC concentration of marijuana in his blood and urine. He had five nanograms of THC on his system, which causes approximately the same level of impairment as a 0.08 percent of blood alcohol level. That much THC notably impairs someone’s judgment and perception of the surrounding environment, which may lead to anxiety and paranoia. Evidence indicates that Brown tried to reach for the officer’s gun during the altercations, which led to the officer shooting at him in close range. Thus, evidence suggests that Brown’s behavior was most likely caused by paranoia [27,28].

On April 15, 2013, Dzhokhar Tsarnaev and his brother Tamerlan, killed three people and injured over 250 by detonating homemade pressure cooker bombs near the finish line at the Boston marathon. Both brothers were heavy marijuana users since they were young teenagers. Tamerlan was killed in a police shootout following the bombings and Dzhokhar was eventually apprehended by law enforcement officers. Several acquaintances and friends knew about both brother’s marijuana consumption and sales. One of Dzhokhar friend testified that he sold marijuana to Tsarnaev days before the Boston Marathon Bombings. Unrelated to the bombings, one of Tamerlan’s friends implicated Tsarnaev in the killing of three men whose bodies were found sprinkled with marijuana. Multiple accounts noticed an increase of violent behavior from Dzhokhar for some time leading up to the bombings [29–32].

On January 8, 2011, Jared Loughner shot and killed six people, while also injuring 14 others at the then-US Representative Gabrielle Giffords’s constituent meeting held in Tucson, Arizona. Although friends and acquaintances described him as an “awkward but friendly” young man, they started noticing his behavior drastically change in college. In high school, Loughner smoked marijuana on most days. Moreover, he also started immersing himself in conspiracy theories displayed paranoia. He dropped out of high school during his final year, but was able to attend a community college. Some college peers described him becoming mentally unstable by saying and doing things that were frightening. Other peers feared that he would do something like what he actually did. He was suspended from college and never returned. Subsequently, he tried to join the army but he was rejected because he failed a drug test. Consequently, he engaged in paranoid behavior that led to him to

engage in anti-government speech and target then-Representative Giffords during her constituent meeting [33,34].

These are among the many nationally reported violent cases that have, among others factors, a common root to what led these young people to commit acts of violence at the detriment to society as a whole: the extensive use or abuse of marijuana. In recent years, many States within the United States, as well as some other countries around the world, have decriminalized or legalized the recreational use of marijuana [8,12,13,19].

2.2. Paranoia: Marijuana Induced

In the cases above mentioned, one of the recurring conditions that most likely led perpetrators to commit violence was paranoia. Paranoia is defined by the medical dictionary as “an unfounded or exaggerated distrust of others, sometimes reaching delusional proportions”. Paranoid perceptions can co-occur with various other mental conditions as well, such as depression and dementia, and can be divided in three different psychological disorders: paranoid schizophrenia, delusional disorder (persecutory type), and paranoid personality disorder (PPD). All three conditions are similar in the sense that they all contain an “unreasonable fear” or “unreasonable belief” as the root of each condition. Hallucinations are also a common symptom on individuals who suffer from paranoia. Nonetheless, paranoia is also a likely side effect deriving from the consumption of marijuana, as well as other drugs and alcohol [3,18,31,35].

In the cases above mentioned, one of the recurring conditions that most likely led perpetrators to commit violence was paranoia. Paranoia is defined by the medical dictionary as “an unfounded or exaggerated distrust of others, sometimes reaching delusional proportions”. Evidence suggests that paranoia was among the factors that contributed in the actions of Anthony Comello, Salem Abedi, Richard Rojas, Satoshi Uematsu, Robert Dear, Dylan Roof, Michael Brown, and Jared Lougher. Each one had, in respective degrees, unreasonable beliefs. Comello admittedly shot Cali because he feared Cali had a gun and was about to shoot him. Abedi displayed paranoid beliefs while making statements against Western societies. Rojas’ paranoia was displayed in his statements and action witnessed by his coworkers; also, he claims he heard voices that led him to commit the attack. Uematsu was diagnosed with Paranoid disorder and psychosis, which led him to have delusion beliefs that his despicable acts would make contributions to society. Dear was described as a lonely religious extremist but also had a history of domestic violence, gambling, and adultery. Roof wanted to start a race war. Brown was likely paranoid about his surroundings based on the report. Lougher was suffering from paranoia and was immersing himself with conspiracy theories. Many of these tragedies are committed by individuals who were paranoid and were consuming marijuana. It is very likely that marijuana played an active role in these people’s paranoia, considering that the chemical composition of the drug has compounds that alter a person’s perception of reality as mentioned below (Table 1, [17,36–38]).

Table 1. Personality change toward aggression or violence.

Paranoid Personality Disorder	
A pervasive distrust and suspiciousness of others such that their motives are interpreted as malevolent, beginning by early adulthood and present in a variety of contexts, as indicated by four (or more) of the following:	
1.	Suspects, without sufficient bases, that others are exploiting, harming, or deceiving him or her.
2.	Is preoccupied with unjustified doubts about the loyalty or trustworthiness of friends or associates.
3.	Is reluctant to confide in others because of unwarranted fear that the information will be used maliciously against him or her.
4.	Reads hidden demeaning or threatening meanings into benign remarks or events.
5.	Persistently bears grudges (i.e., is unforgiving of insults, injuries, or slights).
6.	Perceives attacks on his or her character or reputation that are not apparent to others and is quick to react angrily or to counterattack.
7.	Has recurrent suspicions, without justification, regarding fidelity of spouse or sexual partner.

2.3. Psychosis: Marijuana Induced

Another condition that is commonly present in cases like the above are psychotic conditions. Psychotic conditions affect an individual's mind in a way that causes that individual to experience loss of contact with reality. During a psychotic episode, the perception of reality is altered to the point where an individual is unable to distinguish reality from hallucinations. Psychotic individual can also experience delusions (false beliefs), incoherent speech, inappropriate behavior, depression, anxiety, sleep problems, social withdrawal, lack of motivation, and difficulty functioning overall [16,17,37].

In the above-mentioned cases, Uematsu was diagnosed with marijuana-induced psychosis. His coworkers' testimony that he would talk and act inappropriately, his paranoia, and his delusion that killing patient at a care facility would benefit the society as a whole, demonstrates that he was suffering from psychotic conditions that made him lose contact with reality and led him to commit such acts. Similar symptoms were also present in cases where perpetrators acted with delusional beliefs, such as: Abedi, who suddenly started making inappropriate statements against Western societies; Dear, who was a lonely religious extremist but also had a history of domestic violence, gambling, and adultery, which strongly indicates that he was delusional, incoherent, and lost contact with reality; Rojas, Cruz, and Roof who suffered from hallucinations while having consumed large amount of marijuana throughout their lives.

Often, individuals who suffer from pre-existing medical conditions use marijuana in an attempt to alleviate their conditions. The man in Rustavi, Cruz, Kelley, Cetin, Abdulazeez, and Cruz also consumed marijuana because they were under the illusion that it would help them cope with their conditions, whether those conditions were likely induced by marijuana or not. However, it ended up worsening their conditions as time went by. What individuals are unaware of when it comes to self-medicating, is that the marijuana they consume does not have compounds that alleviate their pain or conditions; the marijuana they consume has many compounds that negatively alter their perceptions, which leads to worse conditions (Tables 2 and 3, [2,9,10,12,39–41]).

Table 2. Psychosis.

Substance-Induced Psychotic Disorder
A. Presence of one or both of the following symptoms: Delusions. Hallucinations.
B. There is evidence from the history, physical examination, or laboratory findings of both (1) and (2): The symptoms in Criterion A developed during or soon after substance intoxication or withdrawal or after exposure to a medication.
The involved substance is capable of producing the symptoms in Criterion A.
C. The disturbance is not better explained by a psychotic disorder that is not substance-induced. Such evidence of an independent psychotic disorder could include the following:
The symptoms preceded the onset of the substance use; the symptoms persist for a substantial period of time (e.g., about 1 month) after the cessation of acute withdrawal or severe intoxication; or there is other evidence of an independent non-substance-induced psychotic disorder (e.g., a history of recurrent non-substance-related episodes).
D. The disturbance does not occur exclusively during the course of a delirium.
E. The disturbance causes clinically significant distress or impairment in social, occupational, or other important areas of functioning.

Table 3. Paranoia.

Subtypes Delusional Disorder
Grandiose type: This subtype applies when the central theme of the delusion is the conviction of having some great (but unrecognized) talent or insight or having made some important discovery.
Persecutory type: This subtype applies when the central theme of the delusion involves the individual's belief that he or she is being conspired against, cheated, spied on, followed, poisoned or drugged, maliciously maligned, harassed, or obstructed in the pursuit of long-term goals.

3. Discussion

3.1. Marijuana: General Facts

Marijuana is the most consumed illicit drug in the world, with cannabis use and dependence continuing to increase over the past two decades as the trend of legalization persists. According to the United Nations Office on Drug and Crime, over 192 million of users (ages 15–64) worldwide regularly consume marijuana, with a lifetime use of 20% of the World's population and a significant number of individuals regularly consuming the drug [42]. In a 2017 study by the Global Burden of Disease, it estimated the age-standardized rate of cannabis use disorder, or CUD, was 289.7 per 100,000 population (95% Uncertainty Interval (UI) 248.9–339.1), affecting 22.1 million people (95% UI 19.0–25.9 million) [42]. The United States and Canada were in fact found to have among the highest age-standardized rates of CUDs in the world [42].

Cannabis is a complex plant that is made up of 400 chemical entities of which more than 60 are cannabinoid compounds, with delta-9-tetrahydrocannabinol and cannabidiol being the major compounds. Some of those cannabinoid compounds tend to have opposing effects as they affect a very important neurotransmitter system called endocannabinoid system [2]. Moreover, some cannabinoids bind to central cannabinoid receptors to control many behavioral functions, such as aggression. Furthermore, the delta-9-tetrahydrocannabinol (THC) is the chemical responsible for the intoxicating effects on individuals who consume marijuana. The THC level determines the potency of marijuana and high levels of THC likely lead to higher negative health consequences [43–45].

Researchers refer to marijuana having a “high potency” when it has a THC level of more than 10%. In the past years, the THC of confiscated marijuana samples rose from 3% in 1980 to 12% in 2012. Moreover, adolescents between 15 and 17 years old have reported significantly higher ED visits from 2005 to 2010, which is likely caused by the increase of marijuana potency during that time period [7]. Although THC levels that exceed 10% most likely cause serious negative health consequences, it is not uncommon to find marijuana, which THC content exceeds 20% and occasionally 230%, to be sold in places where marijuana is legalized, such as the state of Colorado [7,8]. Furthermore, while daily users refer to high potency marijuana as “the good stuff”, it is reported that daily users are five times more likely to find themselves in the hospital for psychosis symptoms such as delusions and hallucinations caused after consuming marijuana. As this paper will mention in the following pages, however, delusions and hallucinations are not the only negative effects stemming from the consumption of marijuana. Cardiovascular diseases, depression, anxiety, and violence are also among the common negative effects of marijuana [13,14,27,34,46].

3.2. Mental and Behavioral Changes

We apply the results of the research regarding the role of marijuana in violence. We use concepts such as personality changes, perpetrator violence, and psychosis to establish our association of marijuana with the unfortunate cases. The purpose is to illustrate negative but preventable tragic outcomes due to marijuana and its role in violence. The overall objective is to identify the role of marijuana and to suggest it is avoidable and causal nature in inducing violence [47–49].

In all the cases selected, marijuana use was present. For some of the individuals, marijuana use was confirmed by a physical test. In other cases, marijuana was present on their person, identifying drug use. Moreover, some individuals of the case were identified as marijuana users by outside sources.

Present in all the cases, as a result of marijuana use, was the change in personality, aggressive behavior, paranoia, and/or psychosis. All these symptoms have been documented by scientific research to be the result of marijuana use and intoxication. Another symptom, victimization, has a positive correlation with cannabis use, and the cases illustrate marijuana users and victimization. In other words, marijuana users become victims of aggression in response to their perpetration under the influence of marijuana (Table 4, [50,51]).

Table 4. What did the cases have in common?

Cases of Marijuana Use and Symptoms	
Case	Symptom
Anthony Comello	Paranoia
Man in Rustavi	Aggressiveness, Personality Change
Nikolas Cruz	Psychosis, Hallucinations
Devin Patrick Kelley	Aggressiveness, Personality Change
Salaman Abedi	Aggressiveness, Personality Change, Paranoia
Richard Rojas	Paranoia, Hallucinations
Arcan Cetin	Aggressiveness, Personality Change
Stoshi Uematsu	Psychosis, Paranoia
Robert Dear	Aggressiveness, Paranoia
M.Y. Abdulazeez	Aggressiveness, Paranoia
Dylan Roof	Paranoia, Hallucinations
Michael Brown	Aggressiveness, Personality Change, Paranoia
Dzhokar Tsarnaev	Aggressiveness, Personality Change
Tamerlan Tsarnaev	Aggressiveness, Personality Change
Jared Loughner	Paranoia, Psychosis

The DSM V provides diagnostic categories for paranoid personality, paranoia and psychosis associated with marijuana use [52].

3.3. Marijuana and Violence

As mentioned above, some compounds found in marijuana have an effect on central endocannabinoid receptors that control many behavioral functions, including aggression. Although there are some instances where marijuana consumption causes mild euphoria and relaxation on users, adverse acute psychopharmacological effects are very likely to occur. A study that collected data from half a century points out that even a single dose of cannabis may cause “impairments in behavioral control that may underlie impulsive, violent behavior” by altering “the normal functioning of its underlying natural substrate, the ventrolateral prefrontal cortex in man”. Furthermore, the results collected in that study provide a strong indication that chronic marijuana use suggests a possible causal effect with predicting future violence. More studies have reported that panic attacks, confusion, hallucinations, suspiciousness, and paranoia often occur in chronic marijuana users, affecting their cognition in ways that enhance aggressive responses to perceived provocations. Further, recent studies have proven causal connections between marijuana and psychosis [38,39,53].

Studies Show Violence and Aggression Associated with Marijuana Use

Marijuana intoxication results in panic reactions and paranoid feelings whose symptoms lead to violence [49]. The sense of fear, loss of control, and panic is associated with violence [4,54,55]. Also marijuana use increases heart rate, which may be associated with violent behavior [34,47,56,57].

When people stop using marijuana they may experience a variety of withdrawal symptoms, including sleep disturbance, irritability or restlessness, loss of appetite, anxiety, and sweating [46,58]. Experiencing any of these symptoms can make a person angry, ranging from mild irritation to violent rage. Marijuana withdrawal can lead to intimidating violent or bullying behavior, endangering the perpetrator or other people and property [59].

In incarcerated subjects, studies found that one-third of the subjects that committed homicide had used marijuana twenty-four hours before the homicide. Further, three-quarters of those subjects were experiencing at least one mental or physical effect from marijuana intoxication when the homicide occurred.

Similarly, individuals in remote Aboriginal Australian Communities who reported current cannabis use were nearly four times more likely than nonusers to present at least once for violent

trauma. Homicide offenses have been repeatedly documented to be connected to drug use, and marijuana is often one of those drugs [60].

Marijuana use is also indicative of intimate partner violence [61]. Consistent use of marijuana during adolescence was the most predictive indicator of intimate partner violence [31]. Also, marijuana use during adolescence was associated with perpetration or both perpetration and victimization by an intimate partner in early adulthood [62].

There is also a positive association between peer victimization and cannabis use in adolescents. Cannabis use is likely to be associated with perpetrator victims, those who initiate violence while using marijuana and experience retaliation to their aggressive acts. This trend suggests that cannabis use might be strongly related to outward aggression by the user [1].

Cannabis use also increases an adolescent's own likelihood of being victimized by peers. In particular, mental effects of cannabis has the potential to decrease the ability to accurately identify, evaluate, or avoid potentially dangerous persons or situations [59].

3.4. Psychosis

Psychosis is defined by the medical journal as "a symptom or feature of mental illness typical characterized by radical changes in personality, impaired functioning, and a distorted or nonexistent sense of objective reality". Psychosis causes individuals to have an impaired perception of reality, consisting of hallucinations and paranoia [2,8,16]. Consumption of marijuana also proportionally increased the risk of other mental illnesses, such as schizophrenia and other types of psychoses. These marijuana use disorders are often associated with its dependence, since a user's brain requires more and more substance use to keep the desired euphoric effect in the brain. Thus, a user is most likely to experience withdrawal symptoms when not taking the drug. Irritability, anger, and aggression are common withdrawal symptoms that former marijuana users, or marijuana users who try to quit the consumption, experience [46]. Although marijuana advocates generally state that the consumption of the drug helps individuals who suffer from PTSD or other psychiatric conditions, studies suggest that the consumption of marijuana in patients with PTSD, and in patients following a psychiatric discharge, increases the likelihood of those patients being prone to violence compared to patients who do not consume the drug [4,37]. A 50 year-span study on adult patients in the United Kingdom indicated that continued cannabis use by an individual leads is associated with a 7-fold greater odds for commission of subsequent violent crimes. The authors of that study suggest that marijuana consumption would cause impairments in neurological circuits controlling behavior that makes a user prone to violent behavior [36].

Marijuana advocates downplay the risks associated with its unrestricted consumption by saying that the drug is safe, which is a similar approach adopted by Big Tobacco years ago to downplay the risks of smoking. Yet, despite tobacco being legal, people today are well aware of the risks associated with its consumption. Stating that consuming marijuana is safe goes against many studies and researches performed that prove negative health consequences associated with the consumption of marijuana due to the multitude of compounds present and high THC levels being consumed by individuals [9–11,19,21].

Studies Show Psychosis and Paranoia

Cannabis intoxication leads to acute psychosis in many individuals and can produce short-term exacerbations of preexisting psychotic diseases [63–66]. Cannabis use also causes symptoms of depersonalization, fear of dying, irrational panic and paranoid ideas which coincide with acute intoxication and remit quickly [67].

It was reported that 15% of cannabis users identified psychotic-like symptoms, the most common being hearing voices or having unwarranted feelings of intimidation and persecution or paranoid thoughts [38].

The potency of the marijuana has varying effects on users. A study analyzed the proportion of patients in South London with first episode psychosis attributable to high-potency cannabis use and found that the use of high-potency cannabis (skunk) confers an increased risk of psychosis compared with traditional low-potency cannabis (hash) [68].

The risk of individuals having a psychotic disorder showed a roughly three times increase in users of skunk-like cannabis (high-potency) compared with those who never used cannabis. Use of skunk-like cannabis everyday conferred the highest risk of psychotic disorders compared with no use of cannabis [69]. Potency in these studies is similar to marijuana currently available in the U.S. Direct administration of cannabis resulted in predictable increased occurrence of paranoia in comparison to those who received placebo.

Epidemiological studies showed that cannabis is the most frequently used drug among those diagnosed with bipolar disorder [70]. Studies have also shown that as the frequency of cannabis use increases, so does the risk for psychotic disorders, such as schizophrenia [71]. The investigators of Schizophrenia Commission concluded that cannabis use is the most preventable risk factor for psychosis [72–77]. High proportions of persons with schizophrenia report regular cannabis use and meet criteria for cannabis use disorder [78].

Findings suggest that activity in the basal lateral medulla is involved in marijuana-induced paranoia (state of becoming afraid of things that would normally trigger fear) [77]. That means marijuana is actually enhancing type of learning about fear, leading the brain to jump to conclusions about the mild experiences, perceiving them as scarier and more strongly connected to other scary situations than they are. This marijuana induced fear-based learning helps explain why marijuana users tend to see patterns in events that are not real, such as conspiracies [78].

In a study analyzing a college population, heavy users of marijuana displayed significantly greater impairment than light users on intentional/executive functions. This led to the conclusion that heavy marijuana use is associated with residual neuropsychological effects even after a day of supervised abstinence from the drug [53,79].

3.5. Public Policies

These negative effects of marijuana need to be taken into account for public policy in order to treat people with addiction and possibly avoid the tragedies above mentioned. The public should know the negative consequences associated with the compounds present within the marijuana products they consume. The current legalization push in the United States lacks prudent public policy and control over the process. A prudent public policy would be to decriminalize the drug and have its composition, creation, and distribution controlled by an agency that would keep THC levels at a minimum. Moreover, studies that try to find ways to treat individuals addicted to marijuana and ways to make the drug safer by pinpointing each compound and determine whether some compounds may indeed help people who have curable health conditions. This approach would reduce the negative effects of high THC on the human body and would decrease violence occurring during marijuana deals in the black market. Furthermore, this approach will likely decrease the violence caused by marijuana and, most importantly, it would prevent tragedies such as the ones mentioned above [8,13,31,80].

4. Conclusions

The main scope of this paper was to inform the general public about the relationships between marijuana and violence in the general population and in individuals with mental illnesses, as recent findings do link marijuana with cases where psychosis was present. This article is a case review and not a research study; therefore, the chief limitations regard inferences that can be made from a case study. However, the findings suggest a further need for research on marijuana and violence. The authors of this paper did not intend to take sides regarding the legalization of marijuana. The focus was public health in regards to marijuana [2,11,14,18,36].

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Marijuana Violence and Law

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Abstract

Marijuana is currently a growing risk to the public in the United States. Following expanding public opinion that marijuana provides little risk to health, state and federal legislatures have begun changing laws that will significantly increase accessibility of marijuana. Greater marijuana accessibility, resulting in more use, will lead to increased health risks in all demographic categories across the country. Violence is a well-publicized, prominent risk from the more potent, current marijuana available.

We present cases that are highly popularized storylines in which marijuana led to unnecessary violence, health risks, and, in many cases, both. Through the analysis of these cases, we will identify the adverse effects of marijuana use and the role it played in the tragic outcomes in these and other instances. In the analysis of these cases, we found marijuana as the single most common, correlative variable in otherwise diverse populations and circumstances surrounding the association of violence and marijuana.

Keywords: Marijuana; Bullying behaviour; Aggression; Intoxication; Cannabis use

Cases Reports

Michael Brown robbed a convenience store for a large box of cigarillos to smoke marijuana and assaulted the store clerk. Subsequently, the 18 year old Brown attacked police officer Darren Wilson without provocation, punching him in the face through the window of his police car, and attempting to grab his gun. Wilson shot and killed Brown as he tried to escape in a very agitated, paranoid, confused and aggressive state. Along with the cigarillos, marijuana was found in Brown's system at the time of death [1].

Trayvon Martin was shot and killed by George Zimmerman, a neighborhood watch volunteer. Marijuana was found in Martin's system the night he was shot [2]. He also had been suspended from school for possession of marijuana.

Laquan McDonald slashed a tire and damaged a police car. After ignoring verbal instruction to drop the knife, he was shot sixteen times. McDonald had used marijuana every day since the age of 10 or 11 years old [3].

Deven Guilford was shot and killed by a policeman during a traffic stop after becoming assaultive. He was a known marijuana user as he professed his "love" for marijuana on social media [4].

Freddie Gray fell into a coma while being transported after an arrest for possession of an illegal switchblade. At the time of his death, Gray tested positive for marijuana and heroin. Gray had multiple prior charges for marijuana possession [5].

Lakeisha Holloway drove her car onto a sidewalk on the Las Vegas strip, killing one and injuring over thirty five others [6,7]. The

toxicology exam illustrated that Holloway had marijuana in her system at the time of the vicious attack [8].

Robert Lewis Dear shot three people and injured nine others at a Planned Parenthood Clinic in Colorado Springs, Colorado. He was a marijuana user and illustrated mental health issues [9].

Joseph Jesse Aldridge found his mother dead of natural causes and went on a shooting rampage, killing seven people and himself. In 2008, Aldridge had pled guilty to federal charges of possessing firearms while using marijuana. He was required to complete mental health and substance use counseling for marijuana [10].

Jared Lee Loughner shot Arizona Congresswomen Gabrielle Gifford and eighteen other, killing six. He was arrested in 2007 for marijuana possession and other paraphernalia. Friends and classmates knew him as a marijuana user. He was also diagnosed with paranoid schizophrenia [11].

The Tsarnaev brothers killed three and injured 264 others with bombs at the Boston Marathon on April 5, 2013. Friends say they were both heavy marijuana users. The wife of the older brother, Tamerlan, described a change in his attitude as he became violent toward her with his increasing marijuana use [12].

A Dearborn Heights man plotted ISIS attacks on church. In an affidavit filed in a criminal complaint on weapons and marijuana charge, Khalil Abu Rayyan is described as being an ISIS supporter who talked about committing violent acts of terrorism, including shootings and beheadings [13].

Osama bin Laden became paranoid and obsessive in the days prior to his death. High strength marijuana plants were found within bin Laden's compound in Pakistan [14].

Studies Show an Association between Marijuana and Mental or Physical Consequences

Studies show violence and aggression with marijuana use

Marijuana intoxication results in panic reactions and paranoid feelings whose symptoms lead to violence [15]. The sense of fear, loss of control, and panic is associated with violence [16-18]. Also marijuana use increases heart rate, which may be associated with violent behaviour [19-22].

When people stop using marijuana they may experience a variety of withdrawal symptoms, including sleep disturbance, irritability or restlessness, loss of appetite, anxiety, and sweating [23,24]. Experiencing any of these symptoms can make a person angry, ranging from mild irritation to violent rage. Marijuana withdrawal can lead to intimidating violent or bullying behavior, endangering the perpetrator or other people and property [25].

In incarcerated subjects, studies found that one third of the subjects that committed homicide had used marijuana twenty four hours before the homicide. Further, three quarters of those subjects were experiencing at least one mental or physical effect from marijuana intoxication when the homicide occurred.

Similarly, individuals in remote Aboriginal Australian Communities who reported current cannabis use were nearly four times more likely than nonusers to present at least once for violent trauma. Homicide offenses have been repeatedly documented to be connected to drug use, and marijuana is often one of those drugs [26].

Marijuana use is also indicative of intimate partner violence [27]. Consistent use of marijuana during adolescence was the most predictive indicator of intimate partner violence [28]. Also, marijuana use during adolescence was associated with perpetration or both perpetration and victimization by an intimate partner in early adulthood [29].

There is also a positive association between peer victimization and cannabis use in adolescents. Cannabis use is likely to be associated with perpetrator victims, those who initiate violence while using marijuana and experience retaliation to their aggressive acts. This trend suggests that cannabis use might be strongly related to outward aggression by the user [30].

Cannabis use also increases an adolescent's own likelihood of being victimized by peers. In particular, mental effects of cannabis have the potential to decrease the ability to accurately identify, evaluate, or avoid potentially dangerous persons or situations [25].

Studies show psychosis and paranoia

Cannabis intoxication leads to acute psychosis in many individuals and can produce short term exacerbations of pre existing psychotic diseases [31-34]. Cannabis use also causes symptoms of depersonalization, fear of dying, irrational panic and paranoid ideas which coincide with acute intoxication and remit quickly [35].

It was reported that 15% of cannabis users identified psychotic like symptoms, the most common being hearing voices or having unwarranted feelings of intimidation and persecution or paranoid thoughts [36].

The potency of the marijuana has varying effects on users. A study analyzed the proportion of patients in South London with first episode

psychosis attributable to high potency cannabis use and found that the use of high potency cannabis (skunk) confers an increased risk of psychosis compared with traditional low potency cannabis (hash) [37].

The risk of individuals having a psychotic disorder showed a roughly three times increase in users of skunk like cannabis (high potency) compared with those who never used cannabis. Use of skunk like cannabis everyday conferred the highest risk of psychotic disorders compared with no use of cannabis [6]. Potency in these studies is similar to marijuana currently available in the U.S. Direct administration of cannabis resulted in predictable increased occurrence of paranoia in comparison to those who received placebo.

Epidemiological studies showed that cannabis is the most frequently used drug among those diagnosed with bipolar disorder [5]. Studies have also shown that as the frequency of cannabis use increases, so does the risk for psychotic disorders, such as schizophrenia [38]. The investigators of Schizophrenia Commission concluded that cannabis use is the most preventable risk factor for psychosis [39-44]. High proportions of persons with schizophrenia report regular cannabis use and meet criteria for cannabis use disorder [45].

Findings suggest that activity in the basal lateral medulla is involved in marijuana induced paranoia (state of becoming afraid of things that would normally trigger fear) [44]. That means marijuana is actually enhancing type of learning about fear, leading the brain to jump to conclusions about the mild experiences, perceiving them as scarier and more strongly connected to other scary situations than they are. This marijuana induced fear based learning helps explain why marijuana users tend to see patterns in events that are not real, such as conspiracies [45] (Table 1).

In a study analyzing a college population, heavy users of marijuana displayed significantly greater impairment than light users on intentional/executive functions. This led to the conclusion that heavy marijuana use is associated with residual neuropsychological effects even after a day of supervised abstinence from the drug [46,47].

What did the cases have in common?

Cases of Marijuana Use and Symptoms	
Case	Symptoms
Michael Brown	Aggressiveness, Personality Change, Paranoia
Trayvon Martin	Aggressiveness, Personality Change, Paranoia
Laquan McDonald	Aggressiveness, Personality Change
Devon Guilford	Aggressiveness, Personality Change
Freddie Gray	Paranoia
Lakeisha Holloway	Aggressiveness, Personality Change
Robert Lewis Dear	Psychosis
Joseph Jesse Aldridge	Psychosis
Gerard Lee Loughner	Aggressiveness, Personality Change, Psychosis
Tsarnaev Brothers	Aggressiveness, Personality Change
Khalil Abu-Rayyam	Psychosis

Osam bin Laden	Paranoia, Psychosis
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Table 1: Marijuana uses and symptoms.

Discussion

We apply the results of the research regarding the role of marijuana in violence. We use concepts such as personality changes, perpetrator violence, and psychosis to establish our association of marijuana with the unfortunate cases. The purpose is to illustrate negative but preventable tragic outcomes due to marijuana and its role in violence. The overall objective is to identify the role of marijuana and to suggest it is avoidable and causal nature in inducing violence [48 50].

In all the cases selected, marijuana use was present. For some of the individuals, marijuana use was confirmed by a physical test. In other cases, marijuana was present on their person, indentifying drug use. Moreover, some individuals of the case were identified as marijuana users by outside sources.

Personality change toward aggression or violence (Chart 1)

Paranoid Personality Disorder
A. A pervasive distrust and suspiciousness of others such that their motives are interpreted as malevolent, beginning by early adulthood and present in a variety of contexts, as indicated by four (or more) of the following:
Suspects, without sufficient bases, those o hers are exploiting, harming, or deceiving him or her.
Is preoccupied with unjustified doubts about the loyalty or trustworthiness of friends or associates.
Is reluctant to confide in others because of unwarranted fear that the information will be used maliciously against him or her.
Reads hidden demeaning or threatening meanings into benign remarks or events.
Persistently bears grudges (i.e., is unforgiving of insults, injuries, or slights).
Perceives attacks on his or her character or reputation that are not apparent to others and is quick to react angrily or to counterattack.
Have recurrent suspicions, without justification, regarding fidelity of spouse or sexual partner.

Chart 1: Paranoid personality disorder (PPD) symptoms.

Present in all the cases, as a result of marijuana use, was the change in personality, aggressive behavior, paranoia and/or psychosis. All these symptoms have been documented by scientific research to be the result of marijuana use and intoxication. Another symptom, victimization, has a positive correlation with cannabis use, and the cases illustrate marijuana users and victimization [51,52]. In other words, marijuana users become victims of aggression in response to their perpetration under the influence of marijuana.

DSM V provides diagnostic categories for paranoid personality, paranoia and psychosis associated with marijuana use [53].

Michael Brown was a marijuana user and it was found in his system at the time of death. Further, Brown illustrated aggressive tendencies and victimization, as he was reported to aggressively assault a store clerk prior to his aggression towards a police officer. These actions were contrary to non aggressive tendencies purported by those closest

to Brown. Brown’s intoxication of marijuana likely accounted for the aggression and assaults. While contributing factors such as race and poor police practices may have contributed to Brown’s unfortunate death, Brown likely would have been alive had he not been a user of marijuana in this particular instance. Apparently he was acting under the influence in an uncharacteristically high risk manner.

Similar to Brown, Trayvon Martin was known to have used marijuana. He was suspended from school for marijuana use at the time of his altercation with Zimmerman. Under the influence of marijuana, Martin likely illustrated victim perpetration from marijuana which increased aggressive behavior through participation in the altercation with Zimmerman. This physical fight with Zimmerman was behavior is to the surprise of others who claimed Martin was mild mannered who likely would avoid such a confrontaion. Marijuana use likely created the fear and aggressive behavior due to poor judgment and threatening perceptions induced by marijuana, contribution to Martin’s death [19,23].

Tamerlan Tsarnaev follows similar patterns. He was a known heavy marijuana user. There was a sharp change in his personality confirmed by his wife associated with very heavy use and involvement with marijuana, resulting in the violence towards his wife according to her. Likely, intoxication from marijuana created and contributed to the paranoid thoughts and poor judgment to detonate a bomb in a crowd of people [34,40].

Similarly, Laquan McDonald was a known marijuana user since 10 or 11 years old. The intoxication from the use of marijuana likely caused McDonald to slash a cop car’s tire, as he was known to be respectful and reserved. His life would have been saved without marijuana induced aggressiveness and poor judgments, and senseless, high risk actions towards police [19,23].

Deven Guilford is another preventable but clear example high risk and poor judgement from marijuana use. After being stopped in his car, Guilford assaulted a police officer for unknown reasons and apparently paranoid reactions to police actions. Guilford was preoccupied with and user of marijuana at a relatively young age. His marijuana use likely contributed to the change in his personality to be aggressive and assaultive to provoke his death in a high risk police stop [19,23].

Similarly, Jared Lee Loughner was known to be a heavy marijuana user. People described a large personality change from his youth. Loughner went on a shooting spree, killing six people. Marijuana was likely a major contributor to the drastic change in personality toward violence. Had marijuana been identified as a problem, his aggressive and assaultive act may have been prevented and lives could have been saved [19,23].

Lakeisha Holloway shows another example of senseless loss. In contrast to her personality from her youth, she drove a car onto the sidewalk of the Las Vegas strip, killing one person and injuring others. Marijuana was in her system at the time of the attack and likely contributed to the lethal aggression exhibited, and likely, psychotic, paranoid thinking.

Psychosis (Chart 2)

Substance-Induced Psychotic Disorder
A. Presence of one or both of the following symptoms:
Delusions
Hallucinations
B. There is evidence from the history, physical examination, or laboratory findings of both (1) and (2):
The symptoms in Criterion A developed during or soon after substance intoxication or withdrawal or after exposure to a medication.
The involved substance is capable of producing the symptoms in Criterion A.
C. The disturbance is not better explained by a psychotic disorder that is not substance-induced. Such evidence of an independent psychotic disorder could include the following:
The symptoms preceded the onset of the substance use; the symptoms persist for a substantial period of time (e.g. about 1 month) after the cessation of acute withdrawal or severe intoxication; or there is other evidence of an independent non-substance-induced psychotic disorder (e.g. a history of recurrent non-substance-related episodes).
D. The disturbance does not occur exclusively during the course of a delirium.
E. The disturbance causes clinically significant distress or impairment in social, occupational or other

Chart 2: Substance induced psychotic disorder symptoms.

Studies have illustrated the connection between cannabis use and psychosis [54]. Marijuana has been shown to increase the risk for psychotic disorders and/or exacerbate pre existing psychotic diseases. Consistent with research, marijuana resulting in psychosis is illustrated in many of the cases described above. Joseph Jesse Aldridge, described as a recluse, went on a shooting rampage after finding his mother deceased. Aldridge was a known marijuana user and had history of psychosis. His marijuana use likely contributed to his psychosis, and a major factor for the shooting rampage [55,56].

Similar to Aldridge, Jared Lee Loughner was admittedly a marijuana user. He suffered from a mental illness of paranoid schizophrenia. Loughner then went on a shooting spree killing six people. His marijuana use likely exacerbated the psychosis, which was a high risk factor for the shootings [33,35,55].

Analogous to Aldridge and Loughner, Robert Lewis Dear went on a shooting spree in Colorado. Dear moved to Colorado for easier access to marijuana. Dear also exhibited signs of mental health illness, psychosis and paranoia, which caused or exacerbated by marijuana, which resulted in his shooting spree [18,31].

While Khalil Abu Rayyan did not result in a shooting rampage, this case illustrates the same ideas as previous cases. Abu Rayyan used marijuana. He illustrated signs of psychosis through the threats of terrorism and martyrdom. Abu Rayyan obtained the instruments to carry out his plans. The psychosis, contributing to the terroristic thoughts, marijuana use contributed to and exacerbated his aggressive behaviour [31,36,55].

Similar to Abu Rayyan, Osama bin Laden also had notorious terroristic and paranoid behavior. Bin Laden was a marijuana user, growing high strength plants within his compound in Pakistan. Unfortunately, bin Laden's psychosis, associated and exacerbated by

marijuana use, may have prompted him to carry out the most heinous terrorist attacks in history. Without marijuana use and subsequent psychosis, many deaths may not have occurred [31,55,56].

Paranoia (Chart 3)

Subtypes Delusional Disorder
Grandiose type: This subtype applies when the central theme of the delusion is the conviction of having some great (but unrecognized) talent or insight or having made some important discovery.
Persecutory type: This subtype applies when the central theme of the delusion involves the individual's belief that he or she is being conspired against, cheated, spied on, followed, poisoned or drugged, maliciously maligned, harassed or obstructed in the pursuit of long-term goals.

Chart 3: Types of delusional disorder (DD).

In addition to psychosis and aggression, paranoia has been connected to marijuana intoxication [57,58]. Studies have illustrated THC significantly increase paranoia through a physical pathway. The cases described above illustrate such paranoia in marijuana users. For instance, Freddie Gray was arrested after he fled on the mere sight of police officers. During his arrest in the intoxicated state, he was injured which resulted in his death. Gray was a known drug addict and user of marijuana. His marijuana use likely induced paranoia thinking and poor judgment which prompted him to flee from police, threatening to him. Without marijuana and other drug intoxication, his cooperation likely would have been different, and he would avoided his high risk apprehension, and death avoided [34,36,40].

Similarly, Trayvon Martin got into an altercation with a Neighborhood Watch guard. Martin, speaking to his girlfriend, stated that a "creepy" man was following him and that he tried to evade the follower. His description is characteristic of apprehensive beliefs, and a sign of paranoia thought. Otherwise, Martin according to his family would not have fought with Zimmerman, had masituation escalated due to the paranoia, caused by the use of marijuana [34,36,40].

Osama bin Laden also illustrated paranoia, in letters that were discovered after his death. Paranoia was caused by his frequent marijuana use. This paranoia resulted in his adverse view of the US government. Unfavorable views toward the US resulting from extreme paranoia, coupled with psychosis, resulted in his terrorist attacks. Marijuana abstinence could have prevented the death of thousands of people [34,36,40].

These cases contained diverse variables: encounters with police, race, altercations, confrontation and mental illness. Other drug use was present but not the same across all cases. However, marijuana and violence are the common denominators in all the cases. Many were not victims of police aggression, some perpetuated police responses, some not. Diverse races and cultures were represented, and no stereotype was evident among the cases of violence and marijuana use. The variables, marijuana and violence were present in all cases.

An extensive review of the scientific literature document a clear association between marijuana and violence, psychosis, personality changes, poor judgment, aggression, victim perpetration. There are other possibilities and contributing factors in the execution of the violent behaviors, though probably not present in all cases. The purpose of this case report is to illustrate the probable role of marijuana in violent behaviors.

The review does not prove a causal relationship between marijuana and violence in these cases. Rather it establishes a highly documented association between marijuana and violence. A legal standard used for causation can be applied to illustrate this association. A legal cause is “but for” the actions or circumstances, the result would not have occurred. A proximate cause is the result was “foreseeable” based on the facts and actions. The most likely legal and proximate cause of violence in these cases was the use and intoxication from marijuana. No other variables fulfill these requirements.

Conclusion

According to research studies, marijuana use causes aggressive behavior, causes or exacerbates psychosis and produce paranoid. These effects have been illustrated through case studies of highly publicized incidents and heightened political profiles.

These cases contain examples of repeated illustrations of aggression, psychosis and paranoia by marijuana users and intoxication. Ultimately, without the use and intoxication of marijuana, the poor judgment and misperceptions displayed by these individuals would not have been present, reducing the risk for actions that result in senseless deaths.

Import to these assertions, is that the current marijuana is far more potent in THC concentrations, the psychoactive component. Accordingly, and demonstrated in direct studies, more potent marijuana results in a greater risk for paranoid thinking and psychosis. In turn, paranoid behavior increases the risk for paranoid behaviors and predictably associated with aggressive and violent behaviors.

Marijuana use causes violent behavior through increased aggressiveness, paranoia and personality changes (more suspicious, aggressive and anger).

Recent illicit and “medical marijuana” (especially grown by care givers for medical marijuana) is of much high potency and more likely to cause violent behavior.

Marijuana use and its adverse effects should be considered in cases of acts of violence as its role is properly assigned to its high association.

Recognize that high potency marijuana is a predictable and preventable cause of tragic violent consequences.

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From: [Ronald Kirkish](#)
To: [Christina Turner](#); [Rich Constantine](#); [Yvonne Martinez Beltran](#); [Rene Spring](#); [John McKay](#); [Shane Palsgrove](#); [Gino Borgioli](#)
Cc: [Bob Cooke](#); [Matt Wendt](#); [Chris Borello](#); [Terry Ratto](#); [Ladera Grill Dan](#); dave@lokeyfirearms.com; [Ladera Grill Morgan](#); [Mark Turner](#); [REDACTED]
Subject: Marijuana business are a huge and dangerous target for criminal gangs
Date: Monday, March 22, 2021 2:21:00 PM

Dear All,

Marijuana dispensary's are a major crime target for gangs. Dispensaries up and down the State of California are being robbed by these criminal gangs not only for their money, but also to steal their product (marijuana) to be sold on the blackmarket.....robbing a dispensary of their marijuana is just as good if not better than stealing the money itself.

I'm sure your "**Chief of Police**" would prefer that the Morgan Hill city council not make decisions that would make his job, and the job for the men and women under his charge, more dangerous than it is already.

As these recent articles show, these marijuana businesses are a huge magnet for criminals and a city the size of Morgan Hill with a small public safety police force sure doesn't need the city council to make decisions that puts them [and the public] into additional danger.....we've already seen shootings in Morgan Hill lately, haven't we??

FYI, these are only a very few of the articles I could have posted; there are many more just like these.

God forbid that a resident in Morgan Hill gets maimed and/or killed because of a dangerous and ill-informed decision made by the city council, and making them complicit in the death(s). You can be sure the residents of Morgan Hill won't take it too kindly.

B/r,

Ronald L. Kirkish

◇◇◇◇◇◇◇◇◇◇

1) THIEVES TARGET POT INDUSTRY ACROSS CALIFORNIA — AND L.A. — IN NEW CRIME WAVE

<https://www.laweekly.com/thieves-target-pot-industry-across-california-and-l->

[a-in-new-crime-wave/](#)

2) Why were dozens of Bay Area cannabis dispensaries recently robbed?

<https://www.sfgate.com/cannabis/slideshow/Cannabis-is-legal-so-why-were-dozens-of-Bay-Area-203926.php>

3) Oakland: ‘Caravan of armed robbers’ target cannabis businesses on Election Night, leaving suspect dead

<https://www.mercurynews.com/2020/11/04/person-shot-by-police-after-oakland-marijuana-business-robbed-officers-injured/>

4) Burglars, vandals hit cannabis businesses during protests, likely causing tens of thousands of dollars in losses

<https://mjbizdaily.com/robbers-vandals-hit-marijuana-businesses-during-protests/>

5) CANNABIS ROBBERIES NORTHWEST OF HOOPA CAUSED BY ORGANIZED CRIMINAL GANG, CLAIM FARMERS

<https://kymkemp.com/2019/11/06/cannabis-robberies-in-northeast-hoopa-caused-by-organized-criminal-gang-charge-farmers/>

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To: [Christina Turner](#); [Rich Constantine](#); [Yvonne Martinez Beltran](#); [Rene Spring](#); [John McKay](#); [Shane Palsgrove](#); [Gino Borgioli](#)
Cc: [Terry Ratto](#); [Ladera Grill Dan](#); dave@lokeyfirearms.com; [Matt Wendt](#); [Chris Borello](#); [Bob Cooke](#)
Subject: MARIJUANA IS THE COMMON WEB BETWEEN SO MANY MASS KILLERS
Date: Thursday, March 25, 2021 6:56:57 AM

MARIJUANA IS THE COMMON WEB BETWEEN SO MANY MASS KILLERS

<https://poppot.org/2018/07/03/marijuana-violence-know-connection/>

- **When Marijuana Use Leads to Acute or Chronic Psychosis**
- **The Teen Brain**
- **When Marijuana Psychosis Leads to Violence: Aurora, Arizona**
- **Solution to Cutting Down Mass Violence**

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Cc: [Matt Wendt](#); [Chris Borello](#); [Terry Ratto](#); [REDACTED]; [Ladera Grill Dan](#); [Jane Howard](#); [Bob Cooke](#); [Ladera Grill Morgan](#)
Subject: More information why communities should not encourage marijuana businesses
Date: Tuesday, March 23, 2021 10:54:47 AM
Attachments: [Impacts marij dispens density on marij abuse and depend Mair 2015 Drug Alc Depend.pdf](#)
[Recreat cannab use impairs driving perf in absen acute intox Dahlgren 2020 Drug Alco Depend.pdf](#)
[jamapsychiatry_hines_2020_oj_200026_1601309834.63439.pdf](#)

Dear All,

For your interest.....here are three more studies showing how marijuana causes harm to communities and its residents.

Downtown businesses like restaurants are “not” fond of having a marijuana business located next to their’s.

B/r,

Ronald L. Kirkish

The impacts of marijuana dispensary density and neighborhood ecology on marijuana abuse and dependence

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Recreational cannabis use impairs driving performance in the absence of acute intoxication

Association of High-Potency Cannabis Use With Mental Health and Substance Use in Adolescence



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The impacts of marijuana dispensary density and neighborhood ecology on marijuana abuse and dependence

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Abstract

Background—As an increasing number of states liberalize cannabis use and develop laws and local policies, it is essential to better understand the impacts of neighborhood ecology and marijuana dispensary density on marijuana use, abuse, and dependence. We investigated associations between marijuana abuse/dependence hospitalizations and community demographic and environmental conditions from 2001–2012 in California, as well as cross-sectional associations between local and adjacent marijuana dispensary densities and marijuana hospitalizations.

Methods—We analyzed panel population data relating hospitalizations coded for marijuana abuse or dependence and assigned to residential ZIP codes in California from 2001 through 2012 (20,219 space-time units) to ZIP code demographic and ecological characteristics. Bayesian space-time misalignment models were used to account for spatial variations in geographic unit definitions over time, while also accounting for spatial autocorrelation using conditional autoregressive priors. We also analyzed cross-sectional associations between marijuana abuse/dependence and the density of dispensaries in local and spatially adjacent ZIP codes in 2012.

Results—An additional one dispensary per square mile in a ZIP code was cross-sectionally associated with a 6.8% increase in the number of marijuana hospitalizations (95% credible interval 1.033, 1.105) with a marijuana abuse/dependence code. Other local characteristics, such as the median household income and age and racial/ethnic distributions, were associated with marijuana hospitalizations in cross-sectional and panel analyses.

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Contributors Dr. Freisthler conceptualized the study, wrote sections of the introduction and discussion, and edited multiple drafts. Dr. Mair conducted analyses, interpreted results, and wrote a first draft of the manuscript. William Ponicki and Andrew Gaidus prepared data and edited multiple drafts. All authors contributed to and have approved the final manuscript.

Conflict of Interest No conflict declared.

Conclusions—Prevention and intervention programs for marijuana abuse and dependence may be particularly essential in areas of concentrated disadvantage. Policy makers may want to consider regulations that limit the density of dispensaries.

Keywords

marijuana abuse; marijuana dispensaries; marijuana hospitalizations

1. INTRODUCTION

The legal status and subsequent availability of marijuana for both medical and recreational use is rapidly changing in the United States. In 1996, California was the first state to legalize medical marijuana with the Compassionate Use Act, which allowed physicians to prescribe cannabis for medical purposes. Since then, 22 states and the District of Columbia have enacted similar laws. The vast majority of these laws allow marijuana to be sold through medical dispensaries. Despite the growing legal availability of marijuana for medical and recreational use, much remains unresolved about the relationships between marijuana use and related problems and the impacts of dispensaries on local communities (Gorman and Charles Huber, 2007; Lynne-Landsman et al., 2013).

Certain demographic groups are more likely to use marijuana for recreational and/or medical purposes. In California, more frequent marijuana users are more likely to be male, young adult, white, and have higher incomes (Freisthler and Gruenewald, 2014; Morrison et al., 2014). Medical marijuana users are also more likely to be male and white (O'Connell and Bou-Matar, 2007; Ogborne and Smart, 2000; Reiman, 2007; Swift et al., 2005; Ware et al., 2005), but are older than frequent users (mean around 40 years old) and have lower incomes (O'Connell and Bou-Matar, 2007; Ogborne and Smart, 2000; Reiman, 2007; Swift et al., 2005; Ware et al., 2005). Rates of marijuana abuse and dependence may be higher in areas with disproportionately greater numbers of these population subgroups, making them potential targets of prevention efforts to reduce costs related to marijuana abuse and dependence hospitalizations.

Some studies suggest that legalizing medical marijuana appears to be related to higher levels of use for adults and adolescents (Cerde et al., 2012; Harper et al., 2012; Wall et al., 2011), although states that legalize marijuana had higher rates of marijuana use before legalization—suggesting that norms around use of marijuana may be more lax in those states (Wall et al., 2011). However, these findings are not universal as other studies have found no difference in marijuana use among adolescents after enactment of medical marijuana laws (Khatapoush and Hallfors, 2004; Lynne-Landsman et al., 2013; Choo et al. 2014). No differences have been found in rates of marijuana abuse and dependence among marijuana users before and after enacting legislation in states that have liberalized marijuana policies in recent years (Cerde et al., 2012). Allowing medical marijuana to be distributed through dispensaries increases the likelihood of using marijuana in the past year and using marijuana more frequently (Freisthler and Gruenewald, 2014). Past-month marijuana use is higher in states that allow distribution of medical marijuana through store-front dispensaries (Pacula et al., 2013).

Very few studies have examined where dispensaries are located. Store-front dispensaries in Denver, Colorado tend to be located in neighborhoods with higher crime rates and a higher proportion of retail jobs (Boggess et al., 2014). In California, dispensaries were located in Census block groups with higher levels of marijuana use, lower median household incomes, higher percentages of male residents, and lower percentages of Asian American residents and residents aged 30 to 39 years (Morrison et al., 2014). Thus there is limited information that areas with some disadvantage (i.e., lower income, higher crime) have higher densities of dispensaries; however, how disadvantage and dispensary density are related to overall rates of marijuana abuse and dependence is unknown.

When considering the impacts of marijuana dispensaries on local use and abuse, about which little is known, the literature on alcohol outlets is potentially useful. Greater densities of alcohol outlets, another source of a potentially addictive substance, have been linked to a range of health consequences, including incidents of crime and violent assaults (Gorman et al., 2005; Lipton and Gruenewald, 2002; Livingston, 2008), drinking and driving (Ponicki et al., 2013), intimate partner violence (Cunradi et al., 2012), and other alcohol-related problems (Campbell et al., 2009; Freisthler et al., 2007). Alcohol outlets may increase availability, or areas of high alcohol outlet density may be characterized by other conditions which produce problems (e.g., low social capital, high deprivation) and density of outlets may be correlated with these conditions. Similar to the role of alcohol outlets in communities, marijuana dispensaries may increase local availability and subsequent use of marijuana and/or may be more likely to be located in socially disorganized neighborhoods.

There are several reasons to examine the impacts of medical marijuana dispensaries on local use using population-based geographic assessments. These methods allow us to address the spatial dependence of contiguous geographic units, without which there may be substantive bias in statistical tests of dispensary and other environmental effects. Furthermore, because dispensaries within an area may serve both local residents and customers from nearby areas and many areas have no dispensaries of their own, the spatial scale of dispensary effects may be larger than any single unit. Models that measure impacts only within local areas will therefore miss effects on marijuana use in neighboring areas, understating effects. These methods allow us to examine spatial spillover effects.

It is important for us to better understand the impacts of neighborhood ecology and marijuana dispensary density on use and abuse in California as an increasing number of states follow in California's footsteps and liberalize cannabis policies. Determining in what ways marijuana dispensaries function in roles similar to alcohol outlets and in what ways they differ is essential as other states and communities develop laws and local policies, such as zoning restrictions and limiting the number of dispensary permits. The purpose of this analysis is to first examine whether hospitalizations for marijuana abuse and dependence are related to community demographic and environmental conditions, and then to investigate cross-sectional associations between marijuana dispensary densities and hospitalizations in California.

2. MATERIAL AND METHODS

2.1 Data Sources and Variables

Annual data, including hospital discharges and Census-based registries, were aggregated over a 12-year period (2001 through 2012) across ZIP code polygon areas (ESRI, 2012) of California, for a total of 20,219 space-time units. Locations of marijuana dispensaries as of early 2012 were geocoded and aggregated to 1,702 statewide ZIP codes as defined in 2012. These data were used to conduct two population-level Bayesian analyses: (1) A space-time analysis of associations between marijuana abuse and dependence hospitalizations and ZIP code demographic and other characteristics, and (2) a cross-sectional analysis of associations between marijuana hospitalizations and marijuana dispensary densities.

2.1.1. Marijuana abuse and dependence hospitalizations—The primary outcome measure was the annual number of marijuana abuse or dependence hospitalizations per ZIP code, obtained from the California Office of Statewide Health Planning and Development patient discharge data. These records provide information on all discharges that result in at least one overnight hospital stay. We included discharges that had either a primary or secondary ICD-9 diagnostic code of 304.3 (cannabis dependence) or 305.2 (cannabis abuse). The number of such cases per year that required hospitalization with at least one overnight stay increased over the study period, from 17,469 in 2001 to 68,408 in 2012. The vast majority (>85%) of cannabis discharges were coded as abuse rather than dependence. In only 0.8% of cases was cannabis dependence/abuse the primary diagnosis; in the other 99.2% of cases the diagnosis was secondary to hospital discharge for some other medical or injury condition. The percent of primary diagnoses decreased over the study period, from 2.2% (n=427) in 2001 to 0.4% (n=294) in 2012. Each hospital discharge was linked to the ZIP code of the patient. 97.3% of all discharges included 5-digit patient ZIP codes—the remaining were homeless, lived in another state, were missing/unknown, or only provided ZIP codes masked to 3 digits due to small population sizes within their 5-digit ZIP code. These discharges were dropped from analyses.

2.1.2. Marijuana dispensary density—Locations of marijuana dispensaries were obtained from six different websites listing the information for these businesses in March–April, 2012. The six websites were chosen by conducting a comprehensive search of such databases available on the web and by asking dispensary owners where they advertise their services. These websites provide up-to-date information on locations of dispensaries, ensuring that we obtained information for newly opened dispensaries. Each dispensary was geocoded to its address and spatially joined to ZIP code polygons for the year 2012 (ESRI, 2012). Overall marijuana density estimates used in models were calculated as the number of dispensaries per square mile within each ZIP code. Dispensary densities in adjacent areas were also calculated. These densities were represented by the un-weighted averages of densities across ‘spatially lagged’ ZIP codes, those immediately adjacent to each ZIP code. Geographic adjacencies were defined as sharing a boundary or touching at a single point, allowing for a 0.5 meter tolerance to compensate for imprecision in boundary maps. The mean number of neighboring ZIP codes in 2012 was 5.6 (standard deviation 2.3), with six ZIP codes having zero neighbors.

2.1.3. Demographic and environmental covariates—Estimated annual ZIP code-level demographic data included percent white, percent Hispanic, percent African American, median household income (per \$10,000), age distribution categories (percent under age 19, 20–24, 25–44, 45–64), percent with less than a high school degree and percent with greater than a Bachelor’s degree, percent unemployed, and population density (per mile²). With the exception of income, these estimates were based on publically available inter-censal projections at the Census block group level supplied by Geolytics (Geolytics, 2011). Demographic variables were aggregated from Census block group boundaries up to year-specific ZIP codes. Because block groups are not nested within ZIP codes, demographic variables had to be estimated for block groups that cross ZIP code boundaries. In these cases, the block group demographic variables were weighted based on the portion of the captured block group centroid population that falls within each ZIP code. To account for spatially variant population growth, we linearly interpolated block population from 2000 to 2010 and used year-specific block populations when weighting demographic variables. Median household income data for 2000 were obtained at the block group level from the 2000 Census, while 2010 data were estimated using 2008–2012 averages from the American Community Survey. Inter-censal estimates were constructed by assuming that 2000–2010 changes were distributed across years in proportion to those of annual county-level income estimates (U.S. Census, 2014), while 2011 and 2012 estimates assumed equal proportional growth for all block groups within a county. These block-group income estimates were converted to 2012 dollars using the Consumer Price Index and reallocated to ZIP codes in the manner described above.

Other ZIP code characteristics included the overall hospitalization rate and the density of overall retail establishments. The overall hospitalization rate, calculated as the number of discharges regardless of diagnoses per 100 persons, was included as a covariate to control for differences in access to inpatient care. A measure of the density of overall retail establishments was derived from ZIP Code Business Patterns data (Census, 2013). Using North American Industry Classification System (NAICS) codes, counts of all “retail trade” (sectors 44, 45) and “accommodations and food service” (sector 72) establishments were tallied. Density was calculated as the number of retail establishments per 100 square miles of ZIP code area.

A measure of the geographic instability of a ZIP code’s population between consecutive years, calculated as the percentage of year-2000 Census block populations within a given year’s ZIP code definition that would not have fallen within the boundaries of the best-matched ZIP code in the prior year (range: 0–59%), was created. This instability measure tested the assumption that ZIP code boundary shifts did not substantively bias other effects estimates.

Roughly 2% of ZIP code polygons had population values of fewer than three residents, and these were assigned a minimal population of three to allow for non-zero population risks in all areas. Census-based rate variables (e.g., percent African American) were undefined in approximately 1% of ZIP codes and were thus assigned the California state average for the year. These missing Census values typically occurred in unpopulated areas, such as national forests.

2.2. Data Analysis

Panel analyses relied on a Bayesian Space-Time Misalignment Poisson model developed by Zhu et al. (Zhu et al., 2013). This model allows us to perform panel analyses using all ZIP codes in California over a period of 12 years despite frequent changes in the size and shape of these geographic units. This approach uses a separate conditional autoregressive (CAR) random effect for each year-specific map of spatial adjacencies to account for spatial autocorrelation, assumed to have mean zero and a common standard deviation. The model also allows for a second, separate, random effect that is not spatially autocorrelated.

The outcome measure is the annual count of marijuana abuse/dependence hospitalizations by ZIP code. Poisson models were used:

$$Y_{i,t}|\mu_{i,t} \sim \text{Poisson}(E_{i,t}\exp(\mu_{i,t}))$$

where Y_{it} represents the count of hospitalizations in ZIP code i during year t and $E_{i,t}$ denotes the expected number of hospitalization visits under the assumption that statewide marijuana hospitalizations are distributed among ZIP codes in direct proportion to population. The log-relative risk, $\mu_{i,t}$, is modeled linearly as:

$$\mu_{i,t} = \alpha_t + X'_{i,t}\beta + \theta_{i,t} + \phi_{i,t}$$

This is a linear combination of fixed covariate effects and random effects which may take account of spatial and/or temporal correlation. Vector α_t is a set of year-specific intercepts that control for statewide changes in marijuana hospitalization risks that are not explained by other covariates. Matrix X'_{it} contains space- and time-specific covariates and β is a vector of fixed-effects estimates of the impacts of those covariates. $\theta_{i,t}$ and $\phi_{i,t}$ denote the pair of random effects capturing spatially unstructured heterogeneity and CAR spatial dependence, respectively. Models included fixed effects for neighborhood demographics, overall hospitalization rates, population density, retail clutter, and ZIP code instability (misalignment). A similar model was used to estimate the impact of local and adjacent marijuana dispensaries on marijuana abuse/dependence hospitalizations, but this analysis included a single 2012 cross-sectional data set. Local and adjacent dispensary densities were entered simultaneously into the model.

Models were estimated using WinBUGS 1.4.3 software (Lunn et al., 2000). Uninformed priors were specified for all fixed and random effects. Models were allowed to burn-in for 50,000 Markov Chain Monte Carlo (MCMC) iterations, a sufficient number of iterations for all parameter estimates to stabilize and converge between two chains with different initial values. Posterior estimates were sampled for an additional 50,000 MCMC iterations to provide model results, until the ratio of the MC error to the standard deviation was less than 5%. Traces of MCMC iterations demonstrated good convergence for all parameters.

3. RESULTS

Table 1 presents descriptive statistics for ZIP codes in California from 2001 to 2012 (20,219 ZIP codes). The racial/ethnic distributions in average ZIP codes were 4.7% African American, 26.7% Hispanic, and 55.3% non-Hispanic white. The ranges of both population and square miles per ZIP code were large, with the resulting population density measure mean of 3,319 people/mile² (range: 0–56,482 people/mile²). There were 1,650 dispensaries in California in early 2012. The number of medical marijuana dispensaries per ZIP code ranged from 0 to 40, with an average of approximately one per ZIP code and 27.0% reporting at least one dispensary. The mean density of dispensaries in both local and adjacent ZIP codes was 0.22/mile², with a larger range for local ZIP codes (0–11 vs. 0–6). The mean density of dispensaries in ZIP codes with at least one dispensary was 0.83/100 mile². Overall, 65.6% of ZIP codes had a dispensary locally or in an adjacent spatial unit.

Table 2 shows results from the Bayesian Space-Time Misalignment Poisson model from 2001–2012 and presents posterior estimates of the effects of each fixed-effect variable, expressed as relative rates (calculated as $\text{Exp}[\text{raw coefficient}]$). Each relative rate is calculated from the median estimate from the sampled posterior distribution and is followed in parentheses by the 95% credible interval from that distribution. Greater retail density, lower median household income, and lower population density were all associated with greater rates of marijuana hospitalizations. ZIP codes with a higher percentage of residents with greater than a Bachelor's degree had fewer marijuana hospitalizations. The CAR spatial random effect explained 93% of the overall error variance in the model, indicating that there is substantial spatial autocorrelation. Year-specific intercepts were included in all models. There was a large and steady increase in the rates of marijuana abuse/dependence hospitalizations from 2001 to 2012 even after controlling for demographic and other environmental covariates.

Cross-sectional marijuana dispensary density results are displayed in Table 3. An additional one dispensary per square mile was associated with a 6.8% increase in the number of marijuana hospitalizations (95% credible interval 1.033, 1.105). The spatial lag effect was not well supported. Results for other covariates were generally consistent with the space-time results presented in Table 2, except that the association for unemployment was negative in the cross-sectional analyses.

4. DISCUSSION

The density of local marijuana dispensaries is associated with a greater number of hospitalizations with a primary or secondary marijuana abuse/dependence code. Furthermore, other local characteristics, such as the median household income and age and racial/ethnic distributions, are associated with marijuana hospitalizations. These local characteristics do not fully explain the increase in hospitalizations over time, although we were unable to longitudinally measure dispensary density. This is the first analysis of the statewide impact of marijuana dispensaries on marijuana abuse and dependence, as well as the first look at population characteristics associated with hospitalization rates.

Increased availability of marijuana in ZIP codes with a higher density of dispensaries remains a plausible explanation for the increased hospitalizations in dispensary-dense areas. This cross-sectional association remains after adjustment for other characteristics of ZIP codes. Indicators of social disorganization were associated with hospitalizations in both the cross-sectional and panel analyses. The direction of causation remains open to debate, however. It is possible that marijuana dispensaries are more likely to locate in socially disorganized neighborhoods with higher underlying rates of marijuana use and abuse, or that the presence of these dispensaries increases local use, or perhaps both. Previous research suggests that some indicators of disorganization are related to locations of dispensaries (Boggett et al., 2014; Morrison et al., 2014) but more work is needed to fully understand this relationship.

We found some of the same characteristics to be related to marijuana use and dependence at the population level as in individual models of use for medical or recreational purposes (e.g., white populations; Freisthler and Gruenewald, 2014; Morrison et al., 2014; O'Connell and Bou-Matar, 2007; Ogborne and Smart, 2000; Reiman, 2007 ; Swift et al., 2005; Ware et al., 2005). Our population estimates suggest marijuana abuse and dependence occur at higher rates in lower income areas, similar to associations seen in individuals who use medical marijuana (O'Connell and Bou-Matar, 2007; Ogborne and Smart, 2000; Reiman, 2007 ; Swift et al., 2005; Ware et al., 2005). While this study cannot suggest inferences about individual use and likelihood of marijuana abuse and dependence, the congruence of findings across individual and population levels suggest these might be some important areas to direct future research.

A number of limitations need to be noted. Population models have the advantage that they can comprehensively identify aggregate effects across diverse populations living in many different neighborhood conditions. As an aggregate population analysis, however, it is not possible to illuminate the connecting theory that leads from a global assessment of exposures to marijuana dispensaries and other neighborhood conditions to the individual behaviors that are affected by these exposures. For this purpose, multilevel contextual data and analysis models are required. Thus, the individual behavioral mechanisms that underlie the observed effects remain to be explored further. Other limitations of the current analyses include the cross-sectional nature of dispensary information. We cannot assess whether the increase in the number and density of dispensaries across the 12 year period partially or fully explains the dramatic increase in the number of marijuana hospitalizations. However, this is the first opportunity to examine dispensaries at a statewide level, and these cross-sectional findings indicate that dispensary density matters and should be examined longitudinally once such data are available. Furthermore, the vast majority of hospitalization codes are secondary diagnoses. This is not particularly surprising since acute marijuana poisoning/ overdose is quite rare. Finally, the procedure used to estimate ZIP code demographic estimates from available block-group level projections will introduce some noise in these covariates, and this would be expected to bias the associated parameters toward zero. Despite this, the association between dispensary density and hospitalizations was well-supported.

As the first study to examine population characteristics related to marijuana abuse and dependence, more work is needed to understand the exact mechanisms underlying these relationships. Future research incorporating dynamic models of dispensary effects as they evolve may lead to greater understanding of these processes over both short- and long-term periods and at smaller scales of geographic resolution. This work suggests prevention and intervention programs for marijuana abuse and dependence should be targeted in areas of concentrated disadvantage (as measured using such economic factors as unemployment, income, and education). Despite medical marijuana being allowed by California, local jurisdictions can ban dispensaries outright or place restrictions on their locations (such as not near where child and youth populations spend time). States may also place other restrictions on who can purchase marijuana at dispensaries (e.g., adults 21 years or older) to reduce access to populations who may be vulnerable to abuse or dependence. States that are considering passing laws allowing medical or recreational use of marijuana might consider regulations that limit the density of dispensaries, particularly in disadvantaged areas, or encourage provisions for localities to make their own regulations (including bans) to prevent problems in areas at risk for high rates of marijuana abuse and dependence.

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Highlights

- We examine marijuana dispensary density and marijuana hospitalizations
- We study marijuana hospitalizations and neighborhood ecology from 2001–2012
- Dispensaries were cross-sectionally associated with greater marijuana hospitalizations
- Indicators of concentrated disadvantage were associated with marijuana hospitalizations

Table 1

Descriptive statistics, ZIP codes in California 2001–2012 (n=20,219 ZIP codes)

	Mean	SD	Minimum	Maximum	Mean Change, 2012 vs. 2001
Population	21,630.46	21,834.58	3.00	126,941.40	1,353.19
Area (mile ²)	93.47	247.91	0.01	3,805.23	-2.47
Percent age 0–19	26.06	6.71	0.00	70.67	-4.03
Percent age 20–24	6.94	2.78	0.00	48.48	-0.01
Percent age 25–44	27.12	6.93	0.00	100.00	-3.96
Percent age 45–64	25.71	6.34	0.00	100.00	2.98
Retail Clutter/mile ²	24.76	96.11	0.00	2,246.50	0.46
Percent with less than high school degree	21.47	15.44	0.00	93.22	-0.27
Percent with greater than Bachelor's Degree	9.39	8.19	0.00	100.00	0.65
Median household Income (\$10,000)	6.74	2.86	0.00	24.23	0.02
Overall hospitalization rate (per 100 people)	22.22	228.78	0.00	14,800.00	-12.44
Percent African American	4.66	8.23	0.00	88.01	-1.24
Percent Hispanic	26.68	22.41	0.00	98.49	2.89
Percent white	55.29	25.33	0.00	100.00	-12.71
Unemployment (%)	9.67	9.56	0.00	100.00	7.16
Population Density (people/mile ²)	3,319.39	5,477.06	0.01	56,482.36	101.37
ZIP code instability	0.60	3.27	0.00	59.42	
Cannabis abuse/dependence hospitalizations	21.71	31.87	0.00	441.00	29.63
Marijuana Dispensary Densities (2012 only)					
Number of dispensaries	0.97	2.64	0.00	40.00	
Dispensaries/mile ²	0.22	0.87	0.00	15.48	
Spatially lagged dispensaries/mile ²	0.22	0.55	0.00	5.58	

Table 2

Relative Rates (95% credible intervals) and Ln (Relative Rates), marijuana abuse and dependence hospitalizations, Bayesian Spatial Misalignment Models (n=20,219 ZIP codes)

	Relative Rate (95% credible interval)	Ln (RR)
Demographic Characteristics		
Percent age 0–19	1.023 (1.019,1.028) ^a	0.0225
Percent age 20–24	0.981 (0.977,0.987) ^a	−0.0187
Percent age 25–44	0.994 (0.992,0.997) ^a	−0.0057
Percent age 45–64	1.030 (1.025,1.034) ^a	0.0291
Retail Clutter/mile ² (×100)	1.074 (1.062,1.086) ^a	0.0717
Percent with less than high school degree	1.001 (0.999,1.003)	0.0014
Percent with greater than Bachelor's Degree	0.992 (0.989,0.994) ^a	−0.0084
Median household Income (\$10,000)	0.879 (0.872,0.885) ^a	−0.1285
Overall hospitalization rate (per 100 people)	1.066 (1.061,1.071) ^a	0.0642
Percent African American	1.025 (1.023,1.026) ^a	0.0243
Percent Hispanic	1.003 (1.002,1.004) ^a	0.0032
Percent white	1.014 (1.013,1.015) ^a	0.0142
Unemployment (%)	1.001 (0.999,1.003)	0.0013
Population Density (people/mile ²) (×100)	0.897 (0.877,0.918) ^a	−0.1084
Misalignment Effects		
ZIP code instability	1.004(1.001,1.008)	0.0044
Random Effects		
	Median (95% Credible	
Spatial Random Effects (s.d. CAR process)	0.575 (0.560, 0.588)	
ZIP code-Level Random Effects (s.d.)	0.162 (0.144, 0.181)	
Proportion of error variance that is spatial	0.926 (0.907, 0.943)	

Iterations: 50,001–100,000

^a Indicates findings that are well-supported by the data as evidenced by credible intervals that exclude one for relative risks

Table 3

Relative Rates (95% credible intervals) and Ln (Relative Rates), marijuana abuse and dependence hospitalizations, 2012 cross-sectional analysis with marijuana dispensary density (n=1,702 ZIP codes)

	Relative Rate (95% credible interval)	Ln(RR)
<u>Marijuana Dispensary Density</u>		
Dispensaries/mile ²	1.068 (1.033,1.105) ^a	0.0655
Spatially lagged dispensaries/mile ²	1.034 (0.949,1.123)	0.0339
<u>Demographic Characteristics</u>		
Percent age 0–19	1.022 (1.010,1.033) ^a	0.0221
Percent age 20–24	1.028 (0.983,1.068)	0.0272
Percent age 25–44	0.991 (0.984,0.998) ^a	–0.0086
Percent age 45–64	1.031 (1.023,1.039) ^a	0.0307
Retail Clutter/mile ² (×100)	1.060 (1.019,1.101) ^a	0.0583
Percent with less than high school degree	1.004 (1.000,1.009) ^a	0.0044
Percent with greater than Bachelor's Degree	0.998 (0.992,1.005)	–0.0021
Median household Income (\$10,000)	0.863 (0.840,0.882) ^a	–0.1469
Overall hospitalization rate (/100 people)	1.806 (1.656,1.960) ^a	0.0046
Percent African American	1.022 (1.018,1.027) ^a	0.0218
Percent Hispanic	1.003 (0.999,1.006)	0.0027
Percent white	1.013 (1.010,1.015) ^a	0.0127
Unemployment (%)	0.988 (0.984,0.992) ^a	–0.0122
Population Density (people/mile ²) (×100)	0.862 (0.799,0.938) ^a	–0.0015
<u>Random Effects</u>		
	Median (95% Credible Interval)	
Spatial Random Effects (s.d. CAR process)	0.543 (0.502, 0.580)	
ZIP code-Level Random Effects (s.d.)	0.145 (0.072, 0.207)	
Proportion of error variance that is spatial	0.933 (0.861, 0.984)	

Iterations: 50,001–100,000

^aIndicates findings that are well-supported by the data as evidenced by credible intervals that exclude one for relative risks

Association of High-Potency Cannabis Use With Mental Health and Substance Use in Adolescence

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 Supplemental content

IMPORTANCE Cannabis use is consistently linked to poorer mental health outcomes, and there is evidence that use of higher-potency cannabis increases these risks. To date, no studies have described the association between cannabis potency and concurrent mental health in a general population sample or addressed confounding using longitudinal data.

OBJECTIVE To explore the association between cannabis potency and substance use and mental health outcomes, accounting for preceding mental health and frequency of cannabis use.

DESIGN, SETTING, AND PARTICIPANTS This cohort study used data from the Avon Longitudinal Study of Parents and Children, a UK birth cohort of participants born between April 1, 1991, and December 31, 1992. Present data on outcomes and exposures were collected between June 2015 and October 2017 from 1087 participants at 24 years of age who reported recent cannabis use.

EXPOSURES Self-reported type of cannabis most commonly used in the past year, coded to a binary exposure of use of high-potency cannabis or lower-potency cannabis.

MAIN OUTCOMES AND MEASURES Outcomes were reported frequency of cannabis use, reported cannabis use problems, recent use of other illicit drugs, tobacco dependence, alcohol use disorder, depression, generalized anxiety disorder, and psychotic-like experiences. The study used secondary data; consequently, the hypotheses were formulated after data collection.

RESULTS Past-year cannabis use was reported by 1087 participants (580 women; mean [SD] age at onset of cannabis use, 16.7 [3.0] years). Of these, 141 participants (13.0%) reported the use of high-potency cannabis. Use of high-potency cannabis was associated with increased frequency of cannabis use (adjusted odds ratio [AOR], 4.38; 95% CI, 2.89-6.63), cannabis problems (AOR, 4.08; 95% CI, 1.41-11.81), and increased likelihood of anxiety disorder (AOR, 1.92; 95% CI, 1.11-3.32). Adjustment for frequency of cannabis use attenuated the association with psychotic experiences (AOR 1.29; 95% CI, 0.67-2.50), tobacco dependence (AOR, 1.42; 95% CI, 0.89-2.27), and other illicit drug use (AOR, 1.29; 95% CI, 0.77-2.17). There was no evidence of association between the use of high-potency cannabis and alcohol use disorder or depression.

CONCLUSIONS AND RELEVANCE To our knowledge, this study provides the first general population evidence suggesting that the use of high-potency cannabis is associated with mental health and addiction. Limiting the availability of high-potency cannabis may be associated with a reduction in the number of individuals who develop cannabis use disorders, the prevention of cannabis use from escalating to a regular behavior, and a reduction in the risk of mental health disorders.

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Globally, cannabis is the most commonly used internationally regulated drug,¹ and policy on its use is becoming more liberal worldwide.² The primary psychoactive component of cannabis is Δ^9 -tetrahydrocannabinol (THC). The potency (concentration of THC) may be an important factor in the association between cannabis use and mental health. Experimental studies indicate that THC intoxication is dose dependent, with higher doses causing greater memory impairment and transient psychotic-like symptoms.³ Policy liberalization has been accompanied by proliferation of high-potency cannabis in legal markets,^{4,5} and THC concentrations have increased in markets where cannabis remains illegal.⁶

Cannabis use is consistently linked to poorer mental health outcomes,^{7,8} and there is evidence that higher-potency cannabis is associated with higher risks. A case-control study of first-episode psychosis in England found that those who self-reported using higher-potency cannabis were twice as likely to have a psychotic disorder, compared with participants who did not use cannabis.⁹ When the study was replicated in a multinational case-control study of first-episode psychosis across 11 sites in Europe and Brazil, the incidence of psychosis across sites was positively correlated with the prevalence of high-potency cannabis use in the site-specific control samples.¹⁰ In a self-selecting sample of people who use internationally regulated drugs, the use of high-potency strains of cannabis was associated with self-report of lifetime depression¹¹ and cannabis dependence.¹² These findings indicate that the availability of high-potency cannabis may increase risks of poorer mental health, addiction, and need for treatment among those who are using the drug.

The strength of association between the use of cannabis and mental health outcomes is increased when cannabis use is frequent; consequently, increased frequency of use may confound the association between cannabis potency and mental health outcomes.¹² Understanding the extent to which harms of high-potency cannabis are due to the THC content of the drug, and the extent to which these harms may be accounted for by increased frequency of use, is important for informing policy decisions around taxation and limits on drug potency.

To our knowledge, to date, no studies of the association between cannabis potency and mental health have been conducted in a general population sample. General population studies can provide a valid estimate of the association between mental health outcomes and cannabis potency at the population level, which may be crucial for informing policy makers and clinical service providers. We use data from the Avon Longitudinal Study of Parents and Children (ALSPAC), a large general population birth cohort where contemporaneous data were collected when participants were 24 years of age on cannabis potency, cannabis use frequency, and validated measures of mental health outcomes, and prospective measures of adolescent mental health were collected from participants up to 24 years of age.

The aims of our study were to (1) describe the use of different potencies of cannabis among a population of UK adolescents; (2) explore the association between cannabis potency and problems resulting from cannabis use, use and

Key Points

Question Does use of high-potency cannabis (compared with use of low-potency cannabis) increase risks for problems resulting from cannabis use, common mental disorders, and psychotic experiences after controlling for early-life mental health symptoms and frequency of use?

Findings In this cohort study of 1087 participants who reported cannabis use in the previous year, after adjusting for frequency of cannabis use and early adolescent mental health, use of high-potency cannabis was associated with a significant increase in the frequency of cannabis use, likelihood of cannabis problems, and likelihood of anxiety disorder. Those using high-potency cannabis had a small increase in the likelihood of psychotic experiences; however, this risk was attenuated after adjustment for frequency of cannabis use.

Meaning Risks for cannabis use problems and anxiety disorders are higher among those reporting use of high-potency cannabis; provision of public health messaging regarding the importance of reducing both frequency of cannabis use and the potency of the drug, as well as limiting the availability of high-potency cannabis, may be effective for reducing these risks.

disordered use of other substances, common mental disorders, and psychotic experiences (PEs) by comparing those who use high-potency cannabis with those who use lower potency cannabis; and (3) determine the extent to which such associations are explained by adolescent mental health at 12 to 13 years of age, age at onset of cannabis use, and current frequency of cannabis use.

Methods

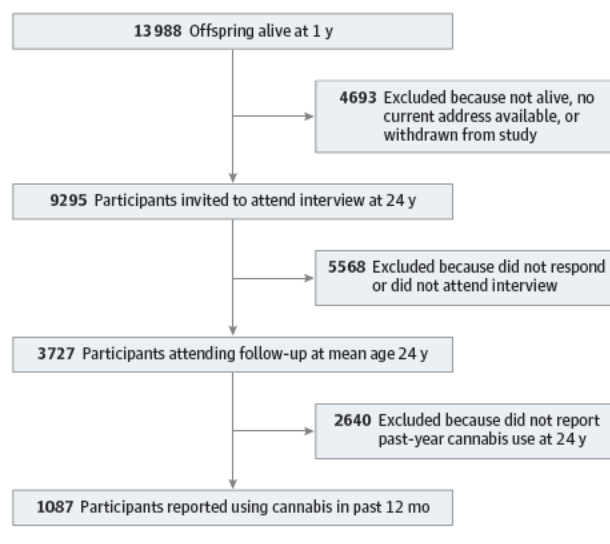
Study Population

ALSPAC is a UK population-based birth cohort, the methods of which have previously been outlined^{13,14} (see eAppendix 1 in the [Supplement](#) for full details). The sample for the present analyses comprised the 1087 participants who reported on their past-year cannabis use while attending the ALSPAC clinic between June 2015 and October 2017 at a mean (SD) age of 24.0 (0.8) years (**Figure 1**). Data on the 2085 individuals who participated in the assessment at 24 years of age but were excluded based on reporting no recent cannabis use are available in eTable 3 in the [Supplement](#) (see also eAppendix 1 in the [Supplement](#) for further details on all the measures described). Ethical approval for the study was obtained from the ALSPAC Ethics and Law Committee and the local Research Ethics Committees. Written informed consent for the use of data collected via questionnaires and clinics was obtained from participants following the recommendations of the ALSPAC Ethics and Law Committee at the time.

Exposure

Those who reported past-year cannabis use were asked “What type of cannabis have you most commonly used or taken in the last 12 months?” and were able to select from the following options: “herbal cannabis/marijuana,” “skunk/other stronger types of herbal cannabis,” “hashish/resin/solid,” “other,”

Figure 1. Flow Diagram Showing the Avon Longitudinal Study of Parents and Children Analysis Sample



or “don’t know.” Consistent with previous research that has validated self-reported data on 3 cannabis types against quantified concentrations of THC and cannabidiol among young UK cannabis users,¹⁵ we categorized cannabis as either high potency (typically $\geq 10\%$ THC; “skunk/other stronger types of herbal cannabis”) or low potency (typically $< 10\%$ THC; “herbal cannabis/marijuana,” “hashish/resin/solid,” or “other”).¹⁰

Outcomes

Cannabis Use Frequency at 24 Years of Age

Participants were asked “in the last 12 months, how often have you used cannabis?” This variable was dichotomized to “Monthly use or less” or “weekly/daily use.”

Problematic Cannabis Use at 24 Years of Age

Those who self-reported 2 or more items on the Cannabis Abuse Screening Test¹⁶ within the past year were classified as having recently experienced problems associated with their cannabis use.

Other Substance Use and Dependencies at 24 Years of Age

Participant self-report of the use of any illicit drugs in the past 12 months was categorized as recent other illicit drug use. The reference group was composed of those who reported no recent use of these other illicit drugs (including those who had never used these drugs). Participants were categorized as nicotine dependent if they self-reported daily nicotine use and reported 3 or more criteria on the Fagerström Test for Nicotine Dependence,¹⁷ indicating low, medium, high, or very high nicotine dependence. The reference group was composed of those who met criteria for very low dependence and those who were not using nicotine every day or had never smoked. The *DSM-5* criteria for alcohol use disorder (AUD)¹⁸ were used to identify participants experiencing alcohol use problems. Participants were categorized as experiencing moderate or severe AUD if they self-reported 4 or more of the AUD criteria. The refer-

ence group was composed of those who reported less than 4 of the AUD criteria (including individuals who had never drunk alcohol).

Mental Health at 24 Years of Age

Participants completed a self-administered computerized Clinical Interview Schedule-revised,¹⁹ a tool for lay interviewers to assess psychiatric disorders in the community. Participants who met the criteria for moderate or severe *DSM-IV*²⁰ major depressive disorder at time of the interview were categorized as experiencing depression. Participants who met *DSM-IV* criteria for generalized anxiety disorder²⁰ were categorized as experiencing anxiety. Participants were rated on PEs using the PLIKS (psychosis-like symptoms) semistructured interview administered by trained researchers.^{21,22} Those who were rated as having suspected or definite hallucinations, delusions, or thought interference in the past 12 months, which were either frequent (at least monthly) or caused them distress (reported as quite distressing or very distressing), were classified as having had a recent PE. For the purposes of these analyses, PEs were excluded if they happened only when the participant was either falling asleep or waking up, was ill with a high temperature, or within 2 hours of drinking alcohol or taking drugs.

Covariates

Prospective Measures From Early Childhood and Adolescence

Childhood socioeconomic position was assessed through measures from maternal questionnaires completed during pregnancy; variables were maternal educational attainment and parents’ occupation class. A child’s racial/ethnic background was derived from parents’ reported race/ethnicity (coded as white or black and minority ethnic group).

To account for mental health symptoms preceding the onset of cannabis use (mean age at onset of cannabis use in sample, 16.7 years; 95% CI, 16.5–16.9 years), a continuous score measure of depression symptoms at 13 years of age was included in analyses of major depressive disorder and generalized anxiety disorder. These symptoms were assessed through the self-completed Mood and Feelings Questionnaire at 13 years of age,²³ a tool for measuring depression in children and young people. The number of PEs (assessed by PLIKS²¹) reported at 12 years of age was included in the analysis of the outcome of PEs at 24 years of age.

Age at onset of cannabis use was self-reported in ALSPAC at 14, 15, 16, 18, 20, 22, and 24 years of age. Participants who reported lifetime use of cannabis at any of these points were asked at what age they first used cannabis. Participants’ earliest report of age at first cannabis use was used to derive a variable of age at onset of cannabis use.

Statistical Analysis

All analyses were conducted in Stata, version 15.1 (Stata Corp). The association between use of high-potency cannabis and substance use and mental health at 24 years of age was analyzed using univariable and multivariable logistic regression, with cannabis potency as the independent variable. Three separate multivariable models were performed for each outcome:

Table 1. Association Between Type of Cannabis and Demographic, Substance Abuse, and Mental Health Outcomes in 1087 Participants Who Reported Recent Cannabis Use

Characteristic	Cannabis use, % ^a		P value ^b
	High potency (n = 141)	Lower potency (n = 946)	
Regular cannabis use	56.8	17.6	≤.001
Cannabis use problems	10.1	0.8	≤.001
Use of other illicit drugs	82.9	66.5	≤.001
Tobacco dependence	37.0	15.1	≤.001
Alcohol use disorder	15.1	10.0	≤.001
Major depression (moderate or severe symptoms)	11.7	9.7	≤.001
Generalized anxiety disorder	19.1	11.6	≤.001
Psychotic-like experiences	12.4	7.1	≤.001
Male sex	71.6	43.4	≤.001
Low maternal educational level	19.2	13.1	≤.001
Lower parental occupational class	32.2	29.2	≤.001
Black or minority ethnic group	5.3	5.3	.94
Age at onset of cannabis use, mean (95% CI), y	14.7 (14.3-15.1)	16.9 (16.8-17.2)	NA
MFQ score at 13 y, mean (95% CI)	5.6 (4.65-6.49)	5.6 (5.26-5.95)	NA
No. PEs at 12 y, mean (95% CI)	0.33 (0.18-0.48)	0.20 (0.16-0.24)	NA

Abbreviations: MFQ, Mood and Feelings Questionnaire; NA, not applicable; PEs, psychotic experiences.

^a All numbers estimated from imputed proportions.

^b Determined by χ^2 test.

(1) adjusting for sex and childhood socioeconomic position; (2) additional adjustment for age at onset of cannabis use for models of substance use outcomes, depression symptom score at 13 years of age for models of major depressive disorder and generalized anxiety disorder outcomes, and PEs at 12 years of age for the model with PE as the outcome (time points selected to ensure mental health symptoms preceded onset of cannabis use); and (3) adjusted as in model 2, with inclusion of a categorical measure of cannabis use frequency. This measure allowed estimation of the extent to which preexisting symptoms of mental health disorders and the frequency of cannabis use explained any association between the use of high-potency cannabis and substance use and mental health outcomes. Results are presented as odds ratios (ORs) with 95% CIs. Propensity score models were applied to complete case data as a sensitivity test (eAppendix 2 and eTables 1 and 2 in the Supplement).

Missing Data and Imputation

As outcomes and exposures were collected at the same point, most missing data were in the covariates assessed at earlier ages (eAppendix 1 and eTable 3 in the Supplement). Missing data in all analysis variables (exposures, outcomes, and covariates) were addressed through multiple imputation using chained equations, which uses a series of univariate regression models to impute each incomplete variable sequentially. Each model included all other analysis variables, along with the following auxiliary variables: race/ethnicity, experiencing bullying up to 16 years of age, parental separation up to 16 years of age, parental mental health problems up to 16 years of age, parental substance use up to 16 years of age, Mood and Feelings Questionnaire score at 16 and 18 years of age, number of self-reported psychotic-like experiences at 14 years of age, and conduct disorder symptoms up to 13 years of age. Estimates were obtained by pooling results across 40 im-

puted data sets using the Rubin rules, and assessment of Monte Carlo variability confirmed this as a suitable number of imputations.²⁴

Results

Of the 1087 participants reporting past-year cannabis use at 24 years of age, 12.8% (number estimated from imputed proportions) reported the use of high-potency cannabis (Table 1). Use of lower-potency forms of cannabis was reported by 87.2% (number estimated from imputed proportions) of those who used cannabis in the past year (see eTable 3 in the Supplement for data on this and on all analysis variables). Use of high-potency cannabis was more common than use of lower-potency cannabis in those who were male (71.6% vs 43.3%) and those who reported regular cannabis use (56.8% vs 17.6%), recent cannabis use problems (10.1% vs 0.8%), recent use of other illicit drugs (82.9% vs 66.5%), tobacco dependence (37.0% vs 15.1%), AUD (15.1% vs 10.0%), depression (11.7% vs 9.7%), generalized anxiety disorder (19.1% vs 11.6%), and PE (12.4% vs 7.1%) (Table 1).

Cannabis Use Outcomes

There was an unadjusted association between the use of high-potency cannabis and frequency of cannabis use at 24 years of age (OR, 6.21; 95% CI, 4.24-9.11) (Table 2). This association was attenuated by adjustment for sociodemographic factors and by the age at onset of cannabis use, but those reporting use of high-potency cannabis remained more than 4 times as likely to report using cannabis at least weekly compared with those reporting use of lower-potency forms of cannabis (adjusted OR [AOR], 4.38; 95% CI, 2.89-6.63). There was also an unadjusted association between the use of high-potency cannabis and reporting recent can-

Table 2. Logistic Regression Analysis of the Association Between High-Potency Cannabis and Substance Use and Mental Health Outcomes^a

Outcome variable	Univariable OR (95% CI)	P value	Adjusted for childhood sociodemographic factors, AOR (95% CI)	P value	Adjusted for prospective mental health measures, AOR (95% CI)	P value	Adjusted for frequency of cannabis use, AOR (95% CI)	P value
Regular cannabis use	6.21 (4.24-9.11)	≤.001	5.81 (3.90-8.65)	≤.001	4.38 (2.89-6.63) ^b	≤.001	NA	NA
Recent cannabis use problems	13.17 (5.41-32.04)	≤.001	13.52 (5.28-34.60)	≤.001	8.45 (3.04-23.50) ^b	≤.001	4.08 (1.41-11.81)	.009
Recent use of other illicit drugs	2.47 (1.53-3.97)	≤.001	2.19 (1.35-3.56)	.002	1.50 (0.91-2.49) ^b	.11	1.29 (0.77-2.17)	.34
Tobacco dependence	3.31 (2.23-4.92)	≤.001	3.30 (2.18-4.99)	≤.001	2.05 (1.31-3.19) ^b	.002	1.42 (0.89-2.27)	.14
Alcohol use disorder	1.60 (0.94-2.73)	.08	1.49 (0.86-2.56)	.15	0.99 (0.56-1.76) ^b	.97	0.90 (0.49-1.64)	.73
Major depression (moderate or severe symptoms)	1.24 (0.70-2.18)	.46	1.61 (0.89-2.93)	.12	1.54 (0.84-2.82) ^c	.16	1.28 (0.68-2.32)	.44
Generalized anxiety disorder	1.77 (1.09-2.86)	.02	2.35 (1.41-3.92)	≤.001	2.28 (1.36-3.83) ^c	.002	1.92 (1.11-3.32)	.02
Psychotic-like experiences	1.81 (1.01-3.24)	.047	2.03 (1.10-3.73)	.02	1.86 (1.00-3.46) ^d	.05	1.29 (0.67-2.50)	.45

Abbreviations: AOR, adjusted odds ratio; NA, not applicable; OR, odds ratio.

^c Depression symptom score at 13 years of age.^a All results estimated from imputed data. Multivariable model adjustment is incremental.^d Number of psychotic experiences at 12 years of age.^b Age at onset of cannabis use.

nabis problems (OR, 13.17; 95% CI, 5.41-32.04). This association was attenuated by adjustment for age at onset of cannabis use and frequency of cannabis use, but people reporting the use of high-potency cannabis were still more than 4 times as likely to report having recently experienced problems associated with their cannabis use (AOR, 4.08; 95% CI, 1.41-11.81) (Table 2 and Figure 2).

Substance Use Outcomes

Those who reported the use of high-potency cannabis were more than twice as likely to report recent use of other illicit drugs within the past 12 months (OR, 2.47; 95% CI, 1.53-3.97) and more than 3 times as likely to report tobacco dependence (OR, 3.31; 95% CI, 2.23-4.92) (Table 2). These associations were largely attenuated by adjustment for sociodemographic factors, age at cannabis onset, and frequency of cannabis use (recent use of other illicit drugs: AOR, 1.29; 95% CI, 0.77-2.17; and tobacco dependence: AOR, 1.42; 95% CI, 0.89-2.27). There was little evidence of an elevation in the likelihood of AUD among participants who reported use of high-potency cannabis after adjustment for sociodemographic variables, age at onset of cannabis use, and frequency of cannabis use (AOR, 0.90; 95% CI, 0.49-1.64) (Table 2 and Figure 2).

Mental Health Outcomes

Depression was slightly more common in the high-potency cannabis group, but there was little statistical evidence that high potency was associated with depression (AOR, 1.28; 95% CI, 0.68-2.34) (Table 2). There was evidence that use of high-potency cannabis was associated with a moderate elevation in likelihood of generalized anxiety disorder (OR, 1.77; 95% CI, 1.09-2.86). The strength of this association was increased slightly after adjustment for sociodemographic variables, depression symptoms at 14 years of age, and frequency of cannabis use (AOR, 1.92; 95% CI, 1.11-3.32).

Participants reporting the use of high-potency cannabis were almost twice as likely to report frequent or distressing PEs (OR, 1.81; 95% CI, 1.01-3.24) (not occurring directly after drug use) (Table 2). However, evidence of association was weakened after adjustment for frequency of cannabis use (AOR, 1.29; 95% CI, 0.67-2.50) (Table 2 and Figure 2).

Discussion

The present study restricts analyses to individuals who have used different forms of cannabis to inform understanding of the implications of the proliferation of high-potency cannabis in legal markets.^{4,5} In a general population sample of young people in the UK, individuals who use high-potency cannabis (compared with those using lower-potency forms of cannabis) are more likely to be using cannabis regularly, more likely to report having recently experienced problems associated with their cannabis use, and more likely to concurrently be experiencing use of other illicit drugs, tobacco dependence, AUD, generalized anxiety disorder, and PEs. After adjustment for age at onset of cannabis use or for early adolescent measures of psychopathologic conditions and frequency of cannabis use, high-potency cannabis was associated with increases in the likelihood of frequent cannabis use, having recently experienced problems associated with cannabis use, and the likelihood of experiencing generalized anxiety disorder. The results provide a profile of individuals who use high-potency cannabis, indicating that this behavior is more common among individuals who are male, grow up in families with a low socioeconomic status, experience early PEs, and report early-onset cannabis use.

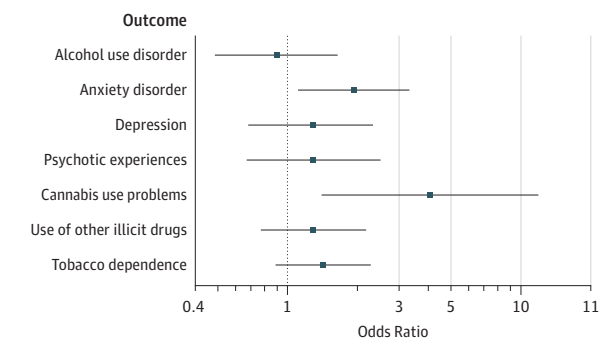
The outcomes regarding substance use and mental health may reflect shared predisposing risk factors that could also lead people to select the most potent drug available.²⁵ As the sample excluded those who had not used

cannabis, increases in risk for mental health outcomes associated with the use of high-potency cannabis are unlikely to be conflated by a shared liability to drug use and mental health disorders. However, evidence shows that shared risk factors underlie both exposure to cannabis and progression to development of dependence.²⁶ The profile of substance use outcomes and early-life experiences among those who use high-potency cannabis in the present study indicates that there may be overlapping risk factors between development of substance use and mental health disorders and the selection of higher-potency forms of cannabis. We have sought to adjust for these factors, but further consideration of the role of cannabis potency in the causal path to mental health disorders is warranted.

The estimate in the present study for the likelihood of depression among those using high-potency cannabis is similar to estimates observed in a previous study of a self-selecting sample of drug-using participants (OR, 1.18; 95% CI, 1.11-1.25).¹¹ However, the estimate in the present study demonstrating an increase in the likelihood of generalized anxiety disorder among those using high-potency cannabis is in contrast to the negligible increase in likelihood of lifetime anxiety disorder observed in a previous study (OR, 1.05; 95% CI, 0.98-1.12).¹¹ This discrepancy may be because the previous study relied on self-reported lifetime diagnosis,¹¹ whereas the present study used *DSM-IV*-validated measures of depression and generalized anxiety disorder at the time of assessment. A recent systematic review has indicated that cannabis use in adolescence is associated with an increased likelihood of lifetime depression and anxiety,⁸ although few studies had considered the potency or frequency of cannabis use.

A better understanding of the association between potency and frequency of cannabis use is required to gain a clearer understanding of the independent association of potency with mental health. We found similar effect sizes for the association between the use of high-potency cannabis and report of frequent or distressing PEs (not associated with drug use) as those observed in case-control studies of first-episode psychosis.^{9,10} However, in our study, we observed a substantial attenuation in effect size, by approximately 66%, after adjustment for frequency of cannabis use. The present findings on cannabis problems and frequency of use are consistent with previous evidence for a positive association between days of use of high-potency cannabis and severity of dependence.¹² In this previous study there was a linear association between number of days of high-potency cannabis use per month and severity of dependence score ($\beta = 0.15$; 95% CI, 0.02-0.28). Increased frequency of cannabis use could plausibly cause individuals to use higher-potency cannabis through the development of tolerance to the effects of cannabis; if so, then it is appropriate to consider cannabis use frequency as a confounding factor in the association with mental health. However, if the use of higher-potency cannabis leads to increased frequency of use, plausibly through high-potency cannabis delivering THC more efficiently than lower-potency cannabis, it would be more appropriate to explore the mediating effect of cannabis frequency.

Figure 2. Fully Adjusted Associations Between the Use of High-Potency Cannabis and Outcomes



Including fully adjusted associations for sociodemographics, longitudinal mental health, and frequency of use (see Methods). The horizontal bars indicate 95% CIs, and the dotted vertical line indicates the comparator group (individuals who reported use of lower-potency cannabis).

Strength and Limitations

This study has some strengths. To our knowledge, this study is the first to describe the association between cannabis potency and concurrent mental health and substance abuse in a general population sample, and the first to use longitudinal data to address confounding by early mental health symptoms and age at onset of cannabis use in this association.

This study also has some limitations. First, given that the data were collected in the context of an illegal cannabis market, we cannot be certain participants are accurately informed about the potency of the cannabis they are using. It is plausible that the ability to identify type of cannabis is higher among those frequently using the drug, although evidence suggests that frequency of use does not moderate the association between self-reported identification of cannabis type and actual THC concentration in young UK cannabis users.¹⁵

Second, the exposures and outcomes that we examined were cross-sectional. Because questions on the type of cannabis used were only asked at 24 years of age, it is plausible that the presence of anxiety disorder or PEs have led to the use of high-potency cannabis at 24 years of age. Adjusting for measures of psychopathologic conditions in adolescence had little effect on our estimates.

Third, recent use of high-potency cannabis was reported by only 12.8% of participants, which may result in some of the analyses being underpowered (eTable 3 in the Supplement). Fourth, as a result of attrition within ALSPAC, those who took part in the wave of the study that took place at 24 years of age were more likely to be white, female, and more affluent than the population from which the participants were originally drawn.¹⁴ In addition, because there is a dearth of nationally representative data on the demographics of those who use cannabis, we cannot be certain the present sample is representative of the population of cannabis users in the UK or globally. The analyses would benefit from replication in larger, representative samples, but to our knowledge, ALSPAC is the only longitudinal general population sample to include measures

of cannabis potency. Characteristics of those who did not report cannabis use at 24 years of age are in eTable 4 in the Supplement.

Conclusions

The use of high-potency cannabis may occur as part of a profile of other illicit drug use and substance dependency, likely owing to shared risk factors underlying these behaviors and

the selection of high-potency strains. The present study suggests that risks for cannabis use problems and anxiety disorders are further increased among those reporting the use of high-potency cannabis, even after accounting for sociodemographic factors, adolescent mental health, and frequency of cannabis use. Providing public health messaging regarding the importance of reducing both the frequency of cannabis use and the potency of the drug, as well as limiting the availability of high-potency cannabis, may be effective for reducing the harms associated with cannabis use.

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Full length article

Recreational cannabis use impairs driving performance in the absence of acute intoxication



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ABSTRACT

Background: Across the nation, growing numbers of individuals are exploring the use of cannabis for medical or recreational purposes, and the proportion of cannabis-positive drivers involved in fatal crashes increased from 8 percent in 2013 to 17 percent in 2014, raising concerns about the impact of cannabis use on driving. Previous studies have demonstrated that cannabis use is associated with impaired driving performance, but thus far, research has primarily focused on the effects of *acute* intoxication.

Methods: The current study assessed the potential impact of cannabis use on driving performance using a customized driving simulator in *non-intoxicated*, heavy, recreational cannabis users and healthy controls (HCs) without a history of cannabis use.

Results: Overall, cannabis users demonstrated impaired driving relative to HC participants with increased accidents, speed, and lateral movement, and reduced rule-following. Interestingly, however, when cannabis users were divided into groups based on age of onset of regular cannabis use, significant driving impairment was detected and completely localized to those with early onset (onset before age 16) relative to the late onset group (onset ≥ 16 years old). Further, covariate analyses suggest that impulsivity had a significant impact on performance differences.

Conclusions: Chronic, heavy, recreational cannabis use was associated with worse driving performance in non-intoxicated drivers, and earlier onset of use was associated with greater impairment. These results may be related to other factors associated with early exposure such as increased impulsivity.

1. Introduction

To date, several countries, including Canada and Uruguay have completely legalized cannabis, while in the United States, recreational cannabis use is legal for adults in 11 US states and Washington DC; an additional 33 states have fully legalized medical cannabis programs (National Conference of State Legislatures NCSL, 2019). In the US, national surveys indicate that approximately 123.9 million people aged 12 or older have tried cannabis at least once, and 27.7 million report past month use (Substance Abuse and Mental Health Services Administration SAMHSA, 2019). In addition, a recent Canadian survey indicated that approximately 4.4 million Canadians aged 15 or older reported using cannabis at least once in the past year (Canadian Tobacco, Alcohol and Drugs Survey CTADS, 2019). Further, the most recent US National Roadside Survey, which collected data from 2013 to

2014, reported that cannabis is the second most commonly detected substance (second only to alcohol) in randomized, voluntary assessments of drivers; 12.6 % of weekend, night-time drivers aged 16 or older tested positive for cannabis, representing a 48 % increase from the last national survey performed in 2007 (Berning et al., 2015). Additional data from the US National Survey of Drug Use and Health collected between 2002 and 2014 indicates that 3.2 % of individuals aged 16–25 reported driving while intoxicated with cannabis (Azofeifa et al., 2015). Similarly, the Canadian Road Safety Monitor survey, which has gathered information on drugged driving since 2002, indicated that approximately 2.9 % of Canadians reporting driving within two hours of using cannabis (Robertson et al., 2017).

Significant evidence suggests that acute cannabis intoxication, the result of exposure to Δ -9 tetrahydrocannabinol (THC), the primary psychoactive constituent of the plant, is associated with impaired

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driving (reviewed in Hartman and Huestis, 2013; Compton, 2017), and higher blood serum concentrations of THC-related metabolites are associated with greater impairment (e.g., Khiabani et al., 2006; Ramaekers et al., 2004), although results are somewhat heterogeneous across studies. Specifically, driving under the influence of cannabis (DUIC) has been associated with slower driving in a number of investigations (e.g., Anderson et al., 2010; Lenné et al., 2010; Ronen et al., 2008, 2010); however, others did not observe this relationship (e.g., Liguori et al., 1998; Robbe, 1998). Acute cannabis intoxication has also been associated with increased lateral movement such as lane weaving in some studies (e.g., Lenné et al., 2010; Ronen et al., 2008; Robbe, 1998) but not others (e.g., Anderson et al., 2010; Ronen et al., 2010). Increased brake latency has been reported by Liguori et al. (1998), but a later study by this group did not replicate this finding (Liguori et al., 2002). In addition, some evidence suggests decreased response time while driving (e.g., Lenné et al., 2010), but this is not always observed (e.g., Liguori et al., 1998). Interestingly, in several studies, drivers demonstrated insight regarding their intoxication and reported adopting a slower driving style in an attempt to compensate for their impairment (reviewed in Sewell et al., 2009).

Further, several epidemiological studies have reported that DUIC significantly increases the odds of motor vehicle collisions (e.g., Asbridge et al., 2014; Bédard et al., 2007); however, some have suggested that once confounding variables (e.g., blood alcohol level) are controlled for, cannabis use no longer significantly impacts the odds of collision (e.g., Blows et al., 2005). Two meta-analyses reported that pooled odds ratios from these studies indicate a moderate to high risk of cannabis use on vehicle collisions (Asbridge et al., 2012; Li et al., 2012), but more recent meta-analyses indicate that publication bias may have inflated these numbers and that the increased risk may only be low to moderate, at an approximately 20–30 % higher likelihood (Elvik, 2013; Rogeberg and Elvik, 2016). Additionally, studies assessing driving after acute cannabis intoxication have reported increased collisions in some (e.g., Ronen et al., 2008, 2010) but not all studies (e.g., Anderson et al., 2010; Liguori et al., 1998).

Despite increasing numbers of cannabis consumers and research efforts focused on the relationship to driving performance, findings thus far remain limited. The cannabinoid metabolite examined in traditional assays (11-nor-9-carboxy-THC) has a long half-life, and the period of detection in biological samples can be several days or weeks after last use; accordingly, these assays do not provide accurate information regarding acute intoxication or recency of cannabis use. Further, in contrast to the alcohol *per se* limit in the US and Canada (≥ 0.08 % blood alcohol concentration), there is no currently accepted threshold for THC-related metabolites that indicates acute intoxication. Many roadside survey studies of DUIC continue to utilize these assays to determine intoxication status even though their limitations are well-known. Additionally, epidemiologic studies generally do not exclude individuals who use multiple substances, making it difficult to distinguish the specific impact of cannabis.

Experimental studies have primarily focused on the impact of *acute* cannabis intoxication on driving. Interestingly, while the effects of acute cannabis intoxication on driving performance have been studied extensively in regular cannabis users (e.g., Anderson et al., 2010; Lenné et al., 2010; Liguori et al., 1998, 2002; Robbe, 1998; Ronen et al., 2008, 2010) as well as in non-users (e.g., Robbe, 1998), to our knowledge, driving performance has never been assessed in cannabis users when they are *not acutely intoxicated*.

Further, previous studies examining the impact of recreational cannabis use on a range of outcome variables have emphasized the importance of thoroughly assessing cannabis use characteristics, particularly age of onset of cannabis use, as data suggest that adolescent onset of use is related to poorer cognitive performance and neurodevelopmental changes to both grey and white matter (reviewed in Gruber and Sagar, 2017; Lisdahl, 2013; Sagar and Gruber, 2018). Specifically, earlier onset of cannabis use is related to difficulties on

tasks of executive function while those with later cannabis onset appear more similar to control subjects (e.g., Battisti et al., 2010; Fontes et al., 2011; Gruber et al., 2012a). Additionally, earlier age of cannabis onset and increased frequency and magnitude of cannabis use have also been shown to *predict* greater impairment of executive function and vice versa in recreational cannabis users (e.g., Dahlgren et al., 2016; Squeglia et al., 2014). Importantly, these studies have demonstrated poorer cognitive performance in chronic recreational cannabis users, even in the *absence of acute intoxication*, suggesting there may be residual cognitive impairment associated with heavy cannabis use.

Given the increasing numbers of recreational and medical cannabis users, it is imperative to assess the potential residual impact of chronic, heavy cannabis use on driving performance, which has not thoroughly been addressed, as previous studies have primarily focused on impairments related to *acute* intoxication. Consistent with previous research on cannabis use and cognitive function, we hypothesized that heavy, recreational cannabis users would demonstrate impairment on a driving simulator task relative to healthy control participants, even in the absence of acute cannabis intoxication, and that impaired performance would be primarily localized to early onset cannabis users.

2. Materials and methods

2.1. Participants

As part of a larger comprehensive study, cannabis users ($n = 28$) and non-cannabis using, healthy control (HC) subjects ($n = 17$) were recruited from the Greater Boston Metropolitan area. Prior to participation in this study, all procedures were thoroughly explained to participants, including the voluntary nature of the study. Additionally, all participants were required to read and sign an informed consent form approved by the Partners Healthcare Institutional Review Board.

Cannabis users were defined as chronic, heavy, recreational users who used at least five of the last seven days, reported at least 1500 lifetime uses, and tested positive for urinary cannabinoids. Importantly, cannabis users abstained from cannabis use for at least 12 h before their study visit to ensure that they were not acutely intoxicated at the time of assessment. If any participant endorsed cannabis use within the 12-h abstinence period or appeared to be intoxicated, they were compensated for their time and rescheduled.

Upon arrival at the laboratory, all participants provided a urine sample that was tested using an in-house triage kit assessing for drugs of abuse (e.g., cocaine, opiates, cannabis, etc.). This procedure was required for three reasons: (a) to ensure negative drug status among all participants (except for THC-metabolites in the cannabis-using group); (b) to confirm the presence of THC-metabolites in the cannabis-using group; (c) and to encourage cannabis users to adhere to the 12-hr abstinence period, as cannabis users were led to believe that the urine sample could be used to determine compliance with the abstinence request, which is a method we have successfully utilized in the past (e.g., Gruber et al., 2014, 2012a; 2012b). A portion of the sample was sent to an outside laboratory for quantification of urinary THC-metabolite concentration with creatinine correction via gas chromatography-mass spectrometry.

In order to further explore the potential impact of age of onset of cannabis use on driving performance, the cannabis-using group was subdivided into two groups based on their age of onset of cannabis use, which was defined as the age of *consistent, regular* cannabis use (i.e., at least once per month). The early onset group included those with regular heavy cannabis use prior to or at age 16 ($n = 14$) while the late onset group included those with regular heavy cannabis use after age 16 ($n = 14$).

2.2. Assessments

Participants were administered the Structured Clinical Interview for

DSM-IV, Patient Edition (SCID; First et al., 1994) to ensure that no Axis I pathology was present other than cannabis abuse or dependence in the cannabis-using groups. Participants also completed the Wechsler Abbreviated Scale of Intelligence (Wechsler, 1999), which provides an estimate of IQ. Individuals were excluded from the study if they reported a significant head injury with loss of consciousness, history of any neurological disorder, estimated IQ < 75, current or previous use of psychotropic medication, current heavy alcohol use (regular consumption of > 20 drinks/week), binge drinking (defined by the National Institute on Alcohol Abuse and Addiction as when men consume ≥ 5 drinks in 2 h or when women consume ≥ 4 drinks in 2 h), or a history of illicit substance use (> 20 lifetime uses). In addition, HC participants were excluded if they reported more than 20 lifetime uses of cannabis. All participants had to be in possession of a valid driver's license and report driving regularly.

Cannabis use was assessed via a modified timeline follow-back procedure customized for cannabis use (TLFB; Sobell et al., 1998) to provide qualitative information regarding the type of products used (e.g., joint, blunt, edible, etc.) and mode of use (e.g., smoke, vape, ingest, etc.) as well as quantitative information regarding frequency (episodes/week) and magnitude (grams/week) of use. The SCID was used to confirm lifetime cannabis use information such as estimated lifetime uses and age of onset of regular use. Additionally, all cannabis users completed the Cannabis Use Disorder Identification Test-Revised (CUDIT-R; Adamson et al., 2010). As cannabis users were required to abstain from cannabis use for at least 12 h prior to completing the driving simulator paradigm, they completed a modified version of the Marijuana Withdrawal Checklist (MWC; Budney et al., 1999). The modified MWC is a 16-item self-report scale in which respondents rank symptoms associated with cannabis withdrawal (e.g., irritability, craving, etc.) as none, mild, moderate, or severe (numerically ranked from 0 to 3). The range of potential scores on this version of the MWC is 0–48.

Participants also completed the Barratt Impulsiveness Scale-11 (BIS; Patton et al., 1995), which is a self-report assessment that measures impulsivity across three domains: attention (e.g., “I don't pay attention”); motor (e.g., “I act on impulse”); and non-planning (e.g., “I say things without thinking”). A total score of all subscales was also calculated to reflect general impulsivity.

2.3. Driving simulator

Driving simulator paradigms allow for measurement of driving performance while minimizing actual risk to participants and others. The driving simulator used in the current study included a GTR simulator racing seat, Logitech G27 racing kit (dual-motor force feedback mechanism with quiet helical gearing; a six-speed shifter with push-down reverse gear; integrated RPM/shift indicator LEDs; an 11-inch leather-wrapped rim; and steel gas, brake, and clutch pedals), a 19-inch monitor, and surround sound speakers.

The driving simulator software and paradigm (STISIM Drive, Systems Technology Inc.) consists of 4.2 miles of simulated driving and takes approximately 10 min to complete. It includes both rural and urban driving conditions with road hazards, including stop signs, traffic lights, merges, turns, yielding to pedestrians, and reacting to other vehicles. Dependent variables on the task are grouped by subtype and include accidents (number of collisions, pedestrians hit, and off-road accidents); rule-following (number of missed stop signs, stops at red lights, and illegal turns); speed (number of speed exceedances, total run length, and percentage of distance driven over the speed limit); and lateral movement (number of centerline crossings, road edge excursions, and percentage of distance driven out of lane).

2.4. Statistical analyses

Driving simulator performance data was screened for outliers,

defined as values beyond the 1.5 interquartile range. One HC participant was removed from the analyses due to outlier driving simulator performance (final HC $n = 16$). One-way analyses of variance (ANOVAs) were used to assess between-group differences for two different analyses: two-group (HC versus all cannabis users) and three-group (HC versus early onset cannabis users versus late onset cannabis users). Scheffé post hoc comparisons were used to assess between-group differences for the three-group analyses. Additionally, if significant between-group differences were observed for any demographic variable (e.g., IQ, impulsivity, etc.), analyses of covariance (ANCOVAs) were conducted in order to control for these variables and assess their impact on driving simulator performance. Lastly, bivariate correlation analyses were conducted to further assess the relationship between driving performance and age of cannabis onset. Given substantial scientific evidence demonstrating adolescent onset of cannabis use is associated with poorer cognitive performance even in the absence of acute intoxication (reviewed in Gruber and Sagar, 2017; Lisdahl, 2013; Sagar and Gruber, 2018), one-tailed analyses were used for the current study.

3. Results

3.1. Two-group analyses: healthy controls versus all cannabis users

HC and all cannabis users were well-matched for age, IQ, and alcohol use (Table 1). With regard to impulsivity, the cannabis-using group reported significantly higher BIS scores on the attention and non-planning subscales as well as overall total BIS score (all $ps < .01$) compared to the HC group. No significant between-group differences were noted for the BIS motor subscale.

On the driving simulator task, the cannabis-using group exhibited significantly impaired performance compared to the HC group (Table 2; Fig. 1). Cannabis users hit significantly more pedestrians ($p = .03$), missed more stop signs ($p = .04$), made fewer stops at red lights ($p = .02$), had more speed exceedances ($p = .03$), drove a greater percentage of distance over the speed limit ($p = .04$), and made more centerline crossings ($p = .05$) relative to HC participants; there was also a non-significant trend for cannabis users to have a greater percentage of distance driven out of lane. The HC and cannabis-using groups had similar numbers of collisions, total run length, and road edge excursions. None of the participants in either the HC or cannabis-using groups had any off-road accidents or made any illegal turns.

Given significant between-group differences for impulsivity between HCs and cannabis users, ANCOVAs were also performed for driving simulator performance data. Once total BIS score was controlled for in the analyses, no significant differences between the HC and cannabis users remained for driving performance, other than a non-significant trend for cannabis users to make fewer stops at red lights ($p = .06$).

3.2. Three-group analyses: healthy controls versus early onset cannabis users versus late onset cannabis users

The three-group comparisons revealed that HC participants, early onset cannabis users, and late onset cannabis users were well-matched for age, IQ, and alcohol use (Table 3). In terms of cannabis use patterns, no significant differences were noted between early and late onset users for number of use episodes per week, total grams used per week, duration of use (yrs), urinary THC/creatinine ratio, or CUDIT-R scores. As expected, age of onset of cannabis use distinguished the two groups ($p < .01$). Further, both early and late onset users reported similar levels of withdrawal symptoms on the 16-item MWC ($M = 7.71$ and $M = 6.93$, respectively). Given that the range of possible scores on this version of the MWC is from 0 to 48, the group averages were very low, suggesting that the cannabis users did not experience many withdrawal symptoms despite at least 12 h of abstinence. With regard to impulsivity, significant differences emerged between the three groups for

Table 1
Demographic Information: Healthy Control (HC) versus Cannabis Users (CU).

Demographic Variables	HC <i>n</i> = 16	CU <i>n</i> = 28	ANOVA (2-tailed) ^a	
			<i>F</i>	<i>p</i> (η_p^2)
Sex	6M, 10F	23 M, 5F	–	–
Handedness	16R, 0L	27R, 1L	–	–
Age	22.94 ± 3.96	22.96 ± 5.56	< 0.01	.99 (< .01)
IQ: WASI ^b	123.55 ± 6.85	117.71 ± 10.11	3.08	.09 (.08)
Alcohol Use (days out of last 30) ^b	4.96 ± 4.50	6.52 ± 4.48	0.96	.33 (.03)
Cannabis Use Variables				
Age of Cannabis Onset ^c	–	15.95 ± 2.04	–	–
Cannabis Use Episodes/Week ^c	–	14.76 ± 12.34	–	–
Cannabis Grams Used/Week ^c	–	5.24 ± 6.42	–	–
Duration of Cannabis Use (yr) ^c	–	7.43 ± 6.45	–	–
Urinary THC/Creatinine Ratio (ng/ml) ^d	–	480.58 ± 663.56	–	–
CUDIT-R Score ^c	–	15.57 ± 5.30	–	–
MWC ^c	–	7.32 ± 3.67	–	–
Impulsiveness: BIS ^b				
Attention	13.00 ± 3.58	16.64 ± 3.12	9.93	< .01 (.21)
Motor	20.73 ± 4.92	23.14 ± 4.08	2.47	.13 (.06)
Non-Planning	18.46 ± 5.17	24.79 ± 5.02	12.36	< .01 (.25)
Total	52.18 ± 12.85	64.57 ± 9.23	11.35	< .01 (.24)

Abbreviations: Analysis of Variance (ANOVA); Barratt Impulsiveness Scale (BIS); Cannabis Use Disorder Identification Test-Revised (CUDIT-R); Marijuana Withdrawal Checklist (MWC); Tetrahydrocannabinol (THC); Wechsler Abbreviated Scale of Intelligence (WASI).

Notes:

Bold numbers are significant at $p \leq .05$ (2-tailed).

Italicized numbers are significant at $p \leq .10$ (2-tailed).

^a Degrees of Freedom (df) = 1,42 unless otherwise noted.

^b df = 1,37.

^c *n* = 28.

^d *n* = 26.

the attention and non-planning subscales, as well as BIS total (all $p \leq .01$), but no significant differences were noted on the motor subscale. Scheffé post hoc tests indicated that the HC group reported significantly lower BIS scores relative to early and late onset groups for the attention ($p = .03$ and $p = .04$) and non-planning subscales ($p = .01$ and $p = .07$) as well as total BIS scores ($p = .01$ and $p = .05$). No

significant differences were noted between the early and late cannabis onset groups on the BIS.

For the driving simulator data, omnibus ANOVAs revealed significant between-group differences for collisions ($p = .03$), missed stop signs ($p = .02$), stops at red lights ($p = .01$), and percentage of distance driven over the speed limit ($p = .05$; Table 4, Fig. 1). Additionally,

Table 2

Driving Simulator Performance: Healthy Control (HC) versus Cannabis Users (CU) Analyses of Variance (ANOVA) and Analyses of Covariance (ANCOVA) Controlling for Impulsivity.

Driving Simulator Variables	HC	CU	ANOVA (1-tailed) ^a		ANCOVA (1-tailed) ^b	
	<i>n</i> = 16	<i>n</i> = 28	<i>F</i>	<i>p</i> (η_p^2)	<i>F</i>	<i>p</i> (η_p^2)
Accidents						
# Pedestrians Hit	0.94 ± 0.93	1.57 ± 1.10	3.75	.03 (.08)	0.21	.33 (.01)
# Collisions	1.06 ± 0.85	1.21 ± 1.07	0.24	.32 (.01)	0.28	.30 (.01)
# Off-Road Accidents	0.00 ± 0.00	0.00 ± 0.00	–	–	–	–
Rule-Following						
# Missed Stop Signs	0.56 ± 0.73	1.04 ± 0.92	2.28	.04 (.07)	0.01	.47 (< .01)
# Stops at Red Lights	0.75 ± 0.77	0.36 ± 0.49	4.28	.02 (.09)	2.57	.06 (.07)
# Illegal Turns	0.00 ± 0.00	0.00 ± 0.00	–	–	–	–
Speed						
# Speed Exceedances	4.50 ± 3.33	6.64 ± 3.61	3.83	.03 (.08)	.41	.26 (.01)
Total Run Length (s)	585.91 ± 89.90	552.24 ± 88.69	1.45	.12 (.03)	< .01	.48 (< .01)
% Distance Over Speed Limit	7.50 ± 7.40	15.37 ± 16.66	3.18	.04 (.07)	0.48	.25 (.01)
Lateral Movement						
# Centerline Crossings	4.88 ± 1.75	6.00 ± 2.23	3.01	.05 (.07)	0.21	.33 (.01)
# Road Edge Excursions	3.38 ± 2.00	3.39 ± 1.45	< 0.01	.49 (< .01)	0.04	.42 (< .01)
% Distance Out of Lane	8.50 ± 3.01	9.30 ± 3.13	1.64	.10 (.04)	0.03	.43 (< .01)

Notes:

Bold numbers are significant at $p \leq .05$ (1-tailed).

Italicized numbers are significant at $p \leq .10$ (1-tailed).

^a Degrees of Freedom (df) = 1,42.

^b ANCOVA with Barratt Impulsiveness Scale (BIS) Total Score included as a covariate; df = 1,36.

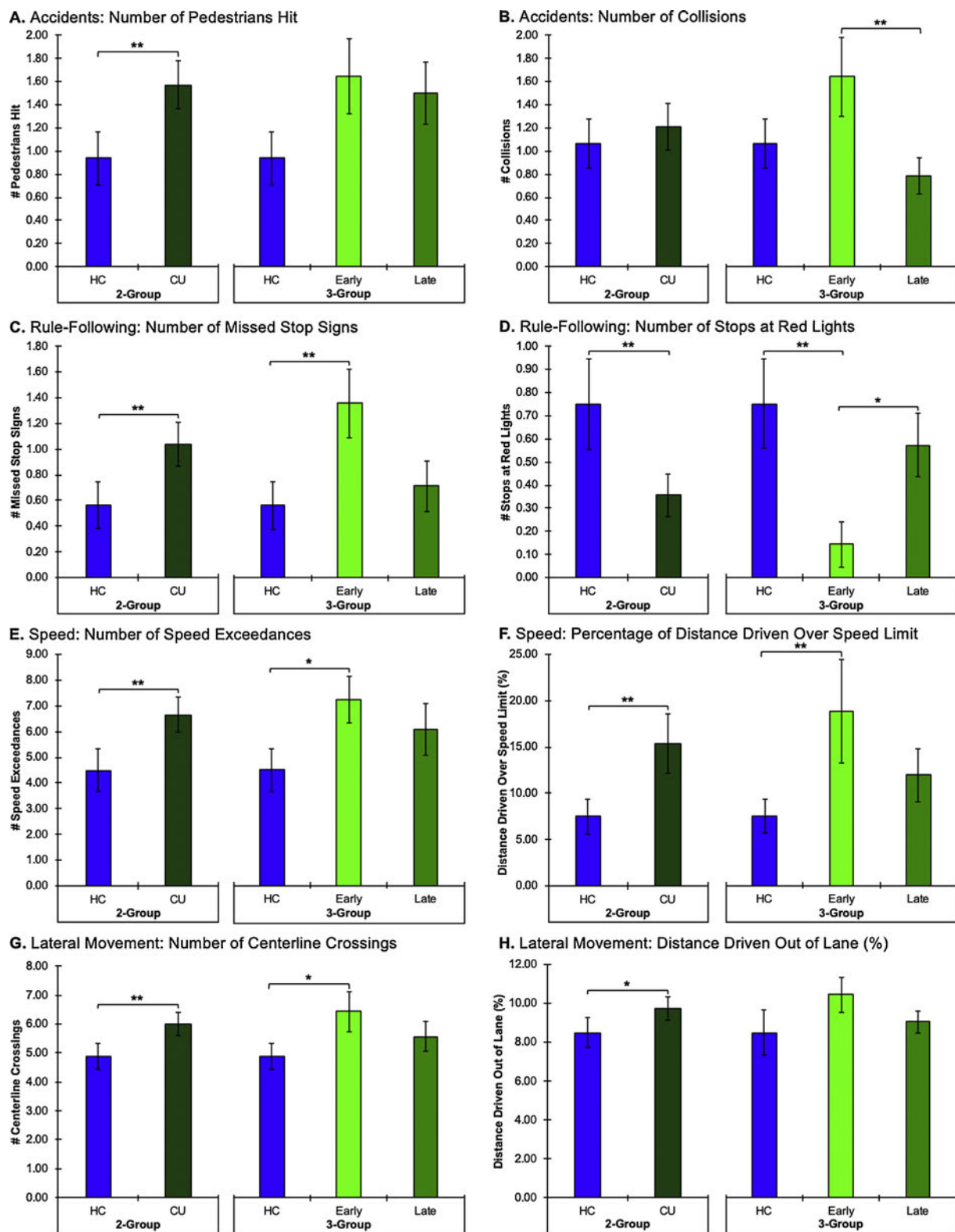


Fig. 1. Driving Simulator Performance Analyses. The two-group assessments comparing the healthy control (HC) participants to all chronic, heavy cannabis users (CU) are on the left side of the graphs. The three-group assessments comparing HC versus early onset cannabis users (Early) versus late onset cannabis users (Late) are on the right side of the graphs. Note: ** denotes significance at $p \leq .05$ and * denotes significance at $p \leq .10$ (1-tailed).

there were non-significant trends for between-group differences for number of pedestrians hit ($p = .08$), number of speed exceedances ($p = .06$), and number of centerline crossings ($p = .07$). No significant between-group differences were detected for total run length, number of road edge excursions or percentage of distance driven out of lane.

None of the participants in any of the groups had any off-road accidents or made any illegal turns.

Scheffé post hoc tests indicated that poorer task performance was primarily localized to the early onset cannabis group (Fig. 1). Specifically, the early onset cannabis group had significantly more collisions

Table 3

Demographic Information: Healthy Control (HC) versus Early Cannabis Onset versus Late Cannabis Onset.

Demographic Variables	HC <i>n</i> = 16	Early Onset <i>n</i> = 14	Late Onset <i>n</i> = 14	ANOVA (2-tailed) ^a	
				<i>F</i>	<i>p</i> (η_p^2)
Sex	6M, 10F	13 M, 1F	10 M, 4F	–	–
Handedness	16R, 0L	13R, 1L	14R, 0L	–	–
Age	22.94 ± 3.96	23.14 ± 7.07	22.79 ± 3.77	0.02	.98 (< .01)
IQ: WASI ^b	123.55 ± 6.85	116.00 ± 12.99	119.43 ± 6.11	2.01	.15 (.10)
Alcohol Use (days out of last 30) ^b	4.97 ± 4.50	5.82 ± 2.31	7.21 ± 5.94	0.81	.45 (.04)
Cannabis Use Variables					
Age of Cannabis Onset ^c	–	14.00 ± 1.04	17.36 ± 1.08	70.21	< .01 (.73)
Cannabis Use Episodes/Week ^c	–	11.88 ± 4.56	17.65 ± 16.66	1.56	.22 (.06)
Cannabis Grams Used/Week ^c	–	4.43 ± 2.66	6.05 ± 8.77	0.44	.51 (.02)
Duration of Cannabis Use (yr) ^c	–	9.57 ± 7.98	5.29 ± 3.58	3.36	.08 (.12)
Urinary THC/Creatinine Ratio ^d	–	408.43 ± 594.23	564.75 ± 754.35	0.35	.56 (.01)
CUDIT-R Score ^e	–	15.14 ± 4.59	16.00 ± 6.08	0.18	.68 (.01)
MWC (16-item) ^c	–	7.71 ± 4.14	6.93 ± 3.25	0.31	.58 (.01)
Impulsiveness: BIS					
Attention ^c	13.00 ± 3.58^{*,*}	16.79 ± 3.17[*]	16.50 ± 3.18[*]	4.87	.01 (.21)
Motor ^c	20.73 ± 4.92	23.00 ± 4.49	23.29 ± 3.79	1.22	.31 (.06)
Non-Planning ^c	18.46 ± 5.17^{*,**}	26.36 ± 4.27[*]	23.21 ± 5.37^{**}	7.91	< .01 (.31)
Total ^c	52.18 ± 12.85^{*,**}	66.14 ± 7.83[*]	63.00 ± 10.50[*]	5.94	.01 (.25)

Abbreviations: Analysis of Variance (ANOVA); Barratt Impulsiveness Scale (BIS); Cannabis Use Disorder Identification Test-Revised (CUDIT-R); Marijuana Withdrawal Checklist (MWC); Tetrahydrocannabinol (THC); Wechsler Abbreviated Scale of Intelligence (WASI).

Notes:

Bold numbers are significant at $p \leq .05$ (2-tailed).

Italicized numbers are significant at $p \leq .10$ (2-tailed).

* Scheffé Post Hoc Analyses indicated significant differences between pairs at $p \leq .10$ (2-tailed).

** Scheffé Post Hoc Analyses indicated significant differences between pairs at $p \leq .05$ (2-tailed).

^a Degrees of Freedom (df) = 2,41 unless otherwise noted.

^b df = 2,35.

^c df = 1,26.

^d df = 1,24.

^e df = 2,36.

Table 4

Driving Simulator Performance: Healthy Control (HC) versus Early versus Late Onset Cannabis Users Analyses of Variance (ANOVA) and Analyses of Covariance (ANCOVA) Controlling for Impulsivity.

Driving Simulator Variables	HC	Early Onset	Late Onset	ANOVA (1-tailed) ^a		ANCOVA (1-tailed) ^b	
	<i>n</i> = 16	<i>n</i> = 14	<i>n</i> = 14	<i>F</i>	<i>p</i> (<i>η</i> _{<i>p</i>} ²)	<i>F</i>	<i>p</i> (<i>η</i> _{<i>p</i>} ²)
Accidents							
# Pedestrians Hit	0.94 ± 0.93	1.64 ± 1.22	1.50 ± 1.02	1.90	.08 (.09)	0.12	.45 (.01)
# Collisions	1.06 ± 0.85	1.64 ± 1.28**	0.79 ± 0.58**	3.02	.03 (.13)	3.01	.03 (.15)
# Off-Road Accidents	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	–	–	–	–
Rule-Following							
# Missed Stop Signs	0.56 ± 0.73**	1.36 ± 0.101**	0.71 ± 0.73	3.79	.02 (.16)	1.65	.10 (.09)
# Stops at Red Lights	0.75 ± 0.78**	0.14 ± 0.36*,**	0.57 ± 0.51*	4.14	.01 (.17)	3.05	.03 (.15)
# Illegal Turns	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	–	–	–	–
Speed							
# Speed Exceedances	4.50 ± 3.33*	7.21 ± 3.42*	6.07 ± 3.77	2.28	.06 (.10)	0.44	.32 (.02)
Total Run Length (s)	585.91 ± 89.90	539.00 ± 105.32	565.49 ± 69.75	1.03	.18 (.05)	0.24	.40 (.01)
% Distance Over Speed Limit	7.50 ± 7.40**	18.79 ± 20.90**	11.94 ± 10.68	2.46	.05 (.11)	0.87	.22 (.05)
Lateral Movement							
# Centerline Crossings	4.88 ± 1.75*	6.43 ± 2.53*	5.57 ± 1.87	2.12	.07 (.09)	0.44	.32 (.03)
# Road Edge Excursions	3.38 ± 2.00	3.50 ± 1.56	3.29 ± 1.38	0.06	.47 (< .01)	0.10	.45 (.01)
% Distance Out of Lane	8.50 ± 3.01	10.44 ± 4.06	9.06 ± 1.78	1.54	.11 (.07)	0.51	.30 (.03)

Notes: **Bold** numbers are significant at $p \leq .05$ (1-tailed).

Italicized numbers are significant at $p \leq .10$ (1-tailed).

* Scheffé Post Hoc Analyses indicated significant differences between pairs at $p \leq .10$ (1-tailed).

** Scheffé Post Hoc Analyses indicated significant differences between pairs at $p \leq .05$ (1-tailed).

^a Degrees of Freedom (df) = 2,41.

^b ANCOVA with Barratt Impulsiveness Scale (BIS) Total Score included as a covariate; df = 1,36.

($p = .03$), more missed stop signs ($p = .02$), fewer stops at red lights ($p = .01$), and drove a greater percentage of distance over the speed limit ($p = .05$) relative to the HC group. Additionally, several non-significant trends were observed in which the early onset group had poorer performance relative to both the HC and late onset groups. The early onset cannabis group tended to make more speed exceedances ($p = .06$) and more centerline crossings ($p = .07$) than the HC group. Further, the early onset group tended to miss more stop signs ($p = .07$) and make fewer stops at red lights ($p = .08$) than the late cannabis onset group. While there was a non-significant trend for between-group differences on the number of pedestrians hit, none of the post hoc comparisons approached significance. Interestingly, no significant differences were noted between the HC and late cannabis onset groups for any of the driving simulator variables. Additionally, correlation analyses indicated that age of onset of cannabis use was negatively correlated with number of collisions ($r(26) = -.40$, $p = .02$) as well as missed stop signs ($r(26) = -.32$, $p = .05$), suggesting that earlier onset of cannabis use is associated with impaired driving skills, specifically increased collisions and missed stop signs; however, significant relationships were not detected between age of onset of cannabis use and other driving simulator variables. Interestingly, no significant relationships were observed between driving simulator performance and any of the other cannabis use variables.

Given significant between-group differences on the BIS, ANCOVAs controlling for total BIS impulsivity scores were completed. Interestingly, when total BIS score was included as a covariate, only the total number of collisions and stops at red lights (both $ps = .03$) remained significantly different between groups, with the early onset cannabis users demonstrating poorer performance; the remaining driving simulator variables were no longer significantly different after controlling for impulsivity.

4. Discussion

Data from the current study suggest that chronic cannabis use is associated with impaired driving performance even in the absence of acute intoxication. Poorer performance was observed in the cannabis-using group, with increased accidents, speeding, and lateral movement as well as decreased rule-following relative to HC participants. Importantly, when cannabis users were divided into those with early versus late onset, results revealed that impairment was primarily localized to the early onset group. These findings provide evidence that non-intoxicated early onset cannabis users demonstrate poorer driving performance, suggesting that there may be a residual impact of chronic, heavy, recreational cannabis use, particularly when regular use is initiated during early adolescence. However, it is important to note that when self-reported impulsivity was controlled for, most of the significant differences between the HC and cannabis users were no longer significant, suggesting that increased impulsivity within the cannabis users impacts, at least in part, the performance differences observed on the driving simulator.

The current study extends previous findings demonstrating that early cannabis onset is associated with a broad variety of cognitive decrements including poorer attention, visuospatial skills, verbal memory, and executive functioning (reviewed in Gruber and Sagar, 2017; Lisdahl, 2013; Sagar and Gruber, 2018) as well as alterations in functional brain activation (e.g., Hatchard et al., 2014; Sagar et al., 2015; Schweinsburg et al., 2008), and reduced integrity of white matter microstructure (e.g., Clark et al., 2012; Gruber et al., 2014). Further, findings related to increased number of collisions in non-intoxicated, early-onset cannabis users are similar to reports from acute intoxication studies demonstrating increased number of collisions (Ronen et al., 2008, 2010) as well as epidemiological studies indicating increased risk of motor vehicle collisions associated with DUIC (Asbridge et al., 2012; Elvik, 2013; Li et al., 2012; Rogeberg and Elvik, 2016). Additionally,

earlier age of onset was associated with poorer driving simulator performance; previous studies have also demonstrated a link between earlier age of onset and poorer cognitive performance (e.g., Dahlgren et al., 2016; Ehrenreich et al., 1999; Squeglia et al., 2014).

Results from the current study indicate an impulsive style of driving performance in *non-intoxicated* cannabis users, particularly in those with early onset of use, characterized by increased accidents, speeding, and lateral movement, and decreased rule-following. This is further underscored by the BIS data, with cannabis users reporting significantly higher levels of impulsivity relative to controls. Studies of acutely intoxicated individuals as well as DUIC have also shown impaired driving performance, but with a slightly different characterization than observed in the current study. Acute cannabis intoxication is associated with slower driving (e.g., Anderson et al., 2010; Lenné et al., 2010; Ronen et al., 2008, 2010); increased number of collisions (Ronen et al., 2008, 2010); increased lateral movement such as lane weaving (e.g., Lenné et al., 2010; Ronen et al., 2008; Robbe, 1998), increased brake latency (Liguori et al., 1998), and slower reaction time (e.g., Lenné et al., 2010). Interestingly, across several studies, drivers demonstrated insight regarding their intoxication and reported adopting a slower driving style in an attempt to compensate for impairment (reviewed in Sewell et al., 2009). The main difference between acute impairment/DUIC findings and results of the current study is driving speed; acute intoxication is associated with slower driving, whereas chronic use without acute intoxication is associated with faster driving. Taken together, the discrepancy between these findings suggests that acute cannabis intoxication results in a different type of driving impairment relative to residual impairment in the absence of acute cannabis intoxication, which appears to be associated with an impulsive style of driving.

One important question raised by current study is whether the observed driving impairment is *directly* related to early onset cannabis use or other mediating factors. Given the extensive literature demonstrating that early onset cannabis users demonstrate cognitive decrements relative to HC participants (reviewed in Gruber and Sagar, 2017; Lisdahl, 2013; Sagar and Gruber, 2018) as well as findings indicating that late onset cannabis users appear more similar to HC participants (e.g., Ehrenreich et al., 1999; Fontes et al., 2011; Gruber et al., 2012a; Schuster et al., 2016), it is possible that cannabis use during critical periods of neurodevelopment may mediate observed cognitive deficits. However, it is also possible that confounding factors (e.g., impulsivity, sensation seeking, etc.) associated with earlier onset of cannabis use may mediate these deficits. Several longitudinal studies have observed that behavioral problems, which may be an indicator of lack of inhibitory control, often precede cannabis use in adolescents (e.g., King et al., 2004; Fergusson et al., 2007; Griffith-Lendering et al., 2011; Pedersen et al., 2001). However, although cannabis users typically demonstrate significantly higher levels of impulsivity on self-report measures such as the BIS relative to control participants (reviewed in Wrege et al., 2014), performance deficits on neuropsychological assessments of inhibitory control are not always consistently observed (e.g., Griffith-Lendering et al., 2012; Gruber et al., 2012b; Harding et al., 2012). With regard to driving, earlier onset of cannabis use (Le Strat et al., 2015) as well as increased risk-taking behaviors and sensation-seeking (Bergeron and Paquette, 2014; Bergeron et al., 2014; Richer and Bergeron, 2009) have been shown to be associated with DUIC, suggesting that each of these variables may contribute to an overall reckless style of driving. In the current study, after controlling for differences in impulsivity, HC participants and cannabis users generally displayed similar driving simulator performance, indicating that impulsivity significantly influences these differences. Future investigations employing longitudinal designs, larger sample sizes, and multivariate modeling should further assess these overlapping variables to attempt to clarify and model the specific impact of each factor.

4.1. Limitations and future directions

Several limitations regarding the current study should be considered. First, the current study utilized a driving simulator in order to assess driving performance and may not be completely generalizable to actual driving performance. While real-world driving track paradigms may have better ecological validity than driving simulator paradigms, they also involve increased risk to both the participants and the researchers. Additionally, due to the cross-sectional design of the current study, it is not possible to determine whether driving simulator impairment or increased impulsivity precede or are a consequence of early cannabis exposure; longitudinal studies assessing these factors *before* initiation of cannabis use are necessary to address this question. In order to more fully investigate the specific impact of age of cannabis onset and impulsivity on driving, multivariate modeling and mediation analyses should be utilized; these statistical analyses require larger sample sizes than provided by the current study.

In the current study, all cannabis users were chronic, heavy, recreational users, with most endorsing daily or near-daily use; accordingly, these results may not be generalizable to individuals who use cannabis less frequently or importantly, to individuals using cannabis for medical purposes. Recreational users and medical cannabis (MC) patients differ in their motives for cannabis use, as recreational users generally aim to get “high,” while MC patients primarily use cannabis to achieve symptom alleviation. Accordingly, recreational users and MC patients are likely to differ on several characteristics of cannabis use including, but not limited to goal of use, product selection, overall exposure to specific cannabinoids, and age of onset of use. In fact, preliminary data from an ongoing, observational, longitudinal study of MC patients revealed improvement in some aspects of cognitive performance and brain function after initiation of MC treatment (Gruber et al., 2016, 2018). These findings are in stark contrast to the cognitive decrements and brain alterations often observed in recreational cannabis users and suggest that cannabis use is likely to confer distinct effects in MC patients relative to recreational users. Thus far, driving performance has not been assessed in MC patients; future studies are needed to address this gap in the scientific literature.

Additionally, to our knowledge, no other studies have examined the impact of chronic, heavy use of any other substances on driving performance in the absence of acute intoxication. Given that approximately 16.6 million Americans aged 12 or older reported heavy alcohol use in the past month (Substance Abuse and Mental Health Services Administration SAMHSA, 2019), it is of particular interest to assess whether chronic, heavy alcohol use results in similar driving impairment observed in the current study. Further, many of our study participants reported onset of cannabis use before age 16 (when most American teenagers learn to drive); therefore, it would be interesting to explore the potential impact of state-dependent learning effects on driving. Given that learning to drive is a highly supervised activity legally required to be overseen by an adult (typically a teacher or parent), it is unlikely that participants were acutely intoxicated for the duration of their training. However, future studies should directly assess this research question by collecting specific information related to cannabis use during driver education programs and training as well as potential factors that may influence this outcome.

5. Conclusions

The current study demonstrates residual driving impairment in non-intoxicated cannabis users, which appears specific to those with early onset cannabis use. Previous studies of acutely intoxicated individuals and DUI/C have observed a slower style of impaired driving behavior; conversely, the current study suggests that earlier onset users demonstrate an impulsive style of impaired driving, which may be related to characteristics inherent in individuals who engage in substance use at earlier ages such as increased impulsivity. Given increased legalization

of cannabis, growing numbers of cannabis consumers, and increased prevalence of drivers testing positive for cannabis metabolites, results from the current study underscore concerns about the impact of cannabis use on driving as a potential public safety issue.

Contributors

SG, the Principal Investigator of the current research study, developed the study concept. RTS performed all regulatory work including correspondence with the IRB. Neurocognitive testing and data collection were performed by KAS, RTS, AML, and MKK. MKD performed the data analysis and interpretation under the supervision of SG. MKD drafted the manuscript, and KAS and SG provided critical revisions. All authors have read and approved the final manuscript.

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Declaration of Competing Interest

None.

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From: [Ronald Kirkish](#)
To: [Christina Turner](#); [Rich Constantine](#); [Yvonne Martinez Beltran](#); [Rene Spring](#); [John McKay](#); [Shane Palsgrove](#); [Gino Borgioli](#)
Cc: [Matt Wendt](#); [Chris Borello](#); [Bob Cooke](#); [Terry Ratto](#); [REDACTED]; [Ladera Grill Dan](#)
Subject: NIDA's Dr. Nora Volkow Discusses Marijuana's Effects on the Brain, Body & Behavior
Date: Thursday, March 25, 2021 7:18:11 AM
Attachments: [7C97896E-3D54-41B9-BC9B-CE6E492DC06F.jpeg](#)



NATIONAL INSTITUTE OF DRUG ABUSE, DIRECTOR DR. NORA VOLKOW

NIDA's Dr. Nora Volkow Discusses Marijuana's Effects on the Brain, Body & Behavior

<https://www.youtube.com/watch?v=RSDnLSU3owc>

Hear a fascinating presentation by Dr. Nora Volkow, Director of the National Institute on Drug Abuse, about the effects of marijuana use on the brain, body and behavior. Dr. Volkow's remarks were given on Feb. 4th at CADCA's 24th National Leadership Forum.

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From: [Matt Wendt](#)
To: [Rene Spring](#); [Rich Constantine](#); [Gino Borgioli](#); [Christina Turner](#); [John McKay](#); [Yvonne Martinez Beltran](#)
Subject: No to Commercial Marijuana in our Town
Date: Thursday, March 18, 2021 10:07:04 AM

Council-members,

I personally ask and ask behalf of my family including my young kids that you don't bring an agenda item back that would bring commercial pot to Morgan Hill. Here is a US Congress study to support my position about the risk factors as well as a recent article by even the Denver Post about the negative impacts of Marijuana use in teens.

Regards,

Matt Wendt

Cannabis Policy: Public Health and Safety Issues and Recommendations

<https://www.drugcaucus.senate.gov/sites/default/files/02%20March%202021%20-%20Cannabis%20Policy%20Report%20-%20Final.pdf>

Editorial: Colorado should restrict the potency of marijuana concentrates, keep them away from teens

<https://www.denverpost.com/2021/02/28/colorado-marijuana-potency-restrictions/>

These concentrates must be regulated and kept out of Colorado schools

By **THE DENVER POST EDITORIAL BOARD** |
February 28, 2021 at 6:00 a.m.

Colorado doctors say they are seeing an alarming spike in patients suffering psychosis — a break from reality that comes with disorders like schizophrenia — especially in young patients using high-potency marijuana concentrates.

It's OK to be skeptical of that anecdote. We were too. After all, marijuana is a natural plant that has been used for centuries as a medicine and for fun. It gives users a mild, mostly benign, high from the compound Delta-9-tetrahydrocannabinol.

However, reading peer-reviewed research in top medical journals around the world has led us to conclude the risk of high-potency marijuana to Coloradan's mental health is substantial. Marijuana must be regulated as any other harm-causing food, medicine or recreational drug. Products with high levels of caffeine are regulated for safety. Tobacco products come with warnings about cancer, and flavored cigarettes have long been banned. Grain alcohol like Everclear isn't sold in grocery stores or convenience stores for a reason.

And yet, a teen with a medical marijuana card is able to “loop purchase” — the act of going to several stores to purchase the maximum allowable amount multiple times — enough watermelon-flavored concentrate to have his or her entire senior class high for a week.

Chris Rogers, the medical director of child and adolescent services at The Medical Center of Aurora, has no doubt that high-potency marijuana concentrates are causing psychosis in the adolescent patients he treats.

“It has not been good for the kids of Colorado,” Rogers, the past-president of the Colorado Child and Adolescent Psychiatry Society, said. He said patients exhibit extreme paranoia and lose all touch with reality believing doctors and parents are out to get them or that food and

water are poison. “There’s no telling who comes back from this and who doesn’t. It can be recurrent, and it tends to get worse.”

This isn’t your grandma’s joint. This new age remix of chemically isolated THC in a crystal-like or liquid substance — shatter, oil or wax — is heated with a butane torch or vape pen and inhaled. It’s called dabbing. And the products contain 60% to 90% THC, generating a high described as mind-blowing in marijuana publications.

When Colorado voters approved the sale of marijuana for both medical and recreational use, many of us were sold on it being a holistic remedy for our aches, pains and anxiety. We still believe that is the case for many marijuana products on the market today.

But for a decade now peer-reviewed research in medical journals has been documenting the prevalence of marijuana use, particularly of these high-potency concentrates, among patients suffering psychosis. Studies in the Lancet Psychiatry, Neuropharmacology, Asian Journal of Psychiatry, American Journal of Psychiatry, The American Journal on Addictions and World Psychiatry, have explored the link.

There is some research suggesting that the link may be correlated and not causal – meaning those suffering from psychosis may be more likely to use cannabis and other drugs to self-medicate. But one study, in particular, found a higher rate of psychosis in cities with easy access to high-concentrate marijuana in addition to a high rate of concentrates use among those seeking treatment for psychosis.

Cannabis users need to know the risks. We learned from Big Tobacco the damage of waiting for scientifically proven causation.

Colorado lawmakers must take action this session. Legislation is being proposed that would cap the potency of marijuana products to something more reasonable like 30%, which is about the most that can be found in the actual non-refined flower product. Critically, the

legislation also must create a shared computer system for tracking purchases across multiple stores to prevent looping. And we must find a way to ensure teens with medical marijuana cards are getting the drug they need for medical purposes and that's all.

We aren't calling for the recriminalization of these drugs — putting teens behind bars for selling a legal product to their friends would do more harm than good. But shutting down the pipeline to our schools is essential for public health and safety, and there are reasonable measures we can put in place to protect teens.

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From: [Ronald Kirkish](#)
To: [Christina Turner](#); [Rich Constantine](#); [Yvonne Martinez Beltran](#); [Rene Spring](#); [John McKay](#); [Shane Palsgrove](#); [Gino Borgioli](#)
Cc: [Bob Cooke](#); [Matt Wendt](#); [Chris Borello](#); [Terry Ratto](#); [REDACTED]; [Ladera Grill Dan](#)
Subject: Northern California: High Intensity Drug Trafficking Area Drug Market Analysis
Date: Wednesday, March 24, 2021 5:06:41 PM

Dear All,

Should your elected's decide to allow marijuana dispensary's to operate in your community, they are wittingly or unwittingly inviting a whole host of other criminal syndicate activities to create a criminal hub in your jurisdiction to sell and distribute the whole smorgasbord of dangerous and illegal drugs into every nook and cranny of your neighborhoods and your neighboring communities.

Northern California: High Intensity Drug Trafficking Area Drug Market Analysis

<https://www.justice.gov/archive/ndic/pubs23/23934/23934p.pdf>

Ronald L. Kirkish
Retired Drug Prevention Officer, NCHIDTA-SF/NCRIC

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From: [Tom Guinane](#)
To: [Christina Turner](#); [Rich Constantine](#); [Yvonne Martinez Beltran](#); [Rene Spring](#); [John McKay](#); [Shane Palsgrove](#); [Gino Borgioli](#)
Subject: Please do not allow the sale of marijuana in our city!
Date: Monday, March 22, 2021 12:43:01 PM

You all know the arguments. We do not need this in our city.

I applaud your efforts to curb tobacco use in our city. However, if you approve marijuana use, what conflicting message are you sending to our children:
Don't vape, toké instead?

We are better than this. Please do not allow the sale, distribution of growth of marijuana in Morgan Hill.

--

Thank you,
Tom Guinane

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From: [Wisejsm25](#)
To: [Rene Spring](#); [Rich Constantine](#); [John McKay](#); [Yvonne Martinez Beltran](#); [Gino Borgioli](#); [Christina Turner](#)
Subject: Proposed Commercial Marijuana Shops
Date: Friday, March 19, 2021 3:52:02 PM

As a Morgan Hill resident I am deeply concerned about the possibility of Marijuana Shops being proposed in our beautiful city.

As a retired nurse, the dangers of marijuana is something to be seriously respected. Marijuana can lead to long term drug usage.

The strength of marijuana is much stronger now compared to 20 years ago. The medicinal benefits are for a select cliental and can

be obtained with a short drive to San Jose. Morgan Hill needs to support it's small businesses and restaurants. To look at Marijuana

shops as possible tax revenue is short sighted for the long term recuperation post pandemic.

Jeanne Wise RN

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Review

A Review of Cases of Marijuana and Violence

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Abstract: Marijuana is the most consumed illicit drug in the world, with over 192 million users. Due to the current legalization push of marijuana in the United States, there has been a lack of oversight regarding its public health policies, as marijuana advocates downplay the drug's negative effects. This paper's approach is from a public health perspective, focusing specifically on the cases of violence amongst some marijuana users. Here, we present 14 cases of violence with chronic marijuana users that highlight reoccurring consequences of: marijuana induced paranoia (exaggerated, unfounded distrust) and marijuana induced psychosis (radical personality change, loss of contact with reality). When individuals suffering from pre-existing medical conditions use marijuana in an attempt to alleviate their symptoms, ultimately this worsens their conditions over time. Although marijuana effects depend on the individual's endocannabinoid receptors (which control behavioral functions, like aggression) and the potency level of tetrahydrocannabinol (THC) in the drug, scientifically documented links between certain marijuana users and violence do exist. Wider public awareness of the risks and side effects of marijuana, as well as a more prudent health policy, and government agency monitoring of the drug's composition, creation, and distribution, are needed and recommended.

Keywords: marijuana; cannabis; tetrahydrocannabinol; THC; violence; law; paranoia; delusions; psychosis; public policies

1. Introduction

In the United States, ten states have legalized the recreational use of marijuana and over 20 states have decriminalized the recreational use of it. Recent reports suggest, however, that the increase of the recreational use of marijuana is causing detrimental effects to individuals, as well as the society as a whole [1–3]. These effects include, but are not limited to, the increase of violence, the increase of thriving underground marijuana markets, and increase in car accident claims after the legalization of marijuana where the recreational use of marijuana was legalized [1–3]. This is caused by lack of oversight. Marijuana is being legally sold with high THC concentration levels without taking into account its addictive qualities and adverse effects. On the other hand, and contrary to popular belief, marijuana is still illegal in the Netherlands and it is decriminalized. However, the consumption and storage of marijuana are limited by law and the approach taken by the Netherlands is to decriminalize the drug in order to be able to help individuals struggling with marijuana use. This prudent oversight has resulted in a decreased in violence and people are able to get the care they need to deal with addiction and become less prone to violence [1–3].

Furthermore, the consumption of marijuana is associated with an increase in violent behavior over the course of an individual's lifespan, a high risk of psychosis for frequent users, an increase

of cardiovascular diseases, and deterioration in health for individuals who have pre-existing mental health issues such as Post Traumatic Stress Disorder, social anxiety, and depression [4–6].

According to research studies, marijuana use causes aggressive behavior, causes or exacerbates psychosis, and produces paranoia. These effects have been illustrated through case studies of highly publicized incidents and heightened political profiles.

These cases contain examples of repeated illustrations of aggression, psychosis and paranoia by marijuana users and intoxication. Ultimately, without the use and intoxication of marijuana, the poor judgment and misperceptions displayed by these individuals would not have been present, reducing the risk for actions that result in senseless deaths.

Import to these assertions, is that the current marijuana is far more potent in THC concentrations, the psychoactive component. Accordingly, and demonstrated in direct studies, more potent marijuana results in a greater risk for paranoid thinking and psychosis. In turn, paranoid behavior increases the risk for paranoid behaviors and predictably associated with aggressive and violent behaviors.

1. Marijuana use causes violent behavior through increased aggressiveness, paranoia, and personality changes (more suspicious, aggressive, and anger).
2. Recent illicit and “medical marijuana” (especially grown by care givers for medical marijuana) is of much high potency and more likely to cause violent behavior.
3. Marijuana use and its adverse effects should be considered in cases of acts of violence as its role is properly assigned to its high association.
4. Recognize that high potency marijuana is a predictable and preventable cause of tragic violent consequences.

2. Case Presentation

2.1. Marijuana Violence

On March 13, 2019, Anthony Comello admitted to, and subsequently was charged for, the killing of Frank Cali, a senior leader of the Gambino family in Staten Island, New York. Both men were allegedly having an altercation over Comello’s romantic interest on one of Cali’s relatives. Although Comello had no previous criminal encounters with law enforcement, reports suggest that he drew the attention of authorities by acting strangely in a federal courthouse when he offered to perform a citizen’s arrest on New York City’s Mayor, Bill De Blasio. Previously, Comello sought a U.S. Marshal to inquire how to perform a citizen’s arrest on the United States Speaker of the House, Nancy Pelosi. Comello admitted that, at the time of Cali’s killing, he was high on marijuana and shot Cali because he feared that the senior leader had a gun and would shoot him during their altercation [4,7].

On February 10, 2019, a man killed his 13-year-old nephew with a knife in Rustavi, Georgia. The man had a history of marijuana use. For days leading up to the killing, he was complaining about having dizziness, headaches, general weakness, nausea, and insomnia. He would also occasionally suffer from anxiety, irritability, and loss of appetite. His wife stated that he consumed and was under the influence of marijuana, which made his symptoms worse. The day before the killing, he tried to go to a clinic. However, the clinic rejected treatment by telling him to go to a psychiatric hospital. However, under the influence of drugs, he simply went home hours before killing his nephew [8].

On February 1, 2018, Nikolas Cruz killed 17 students and staff at the Marjory Stoneman Douglas High School in Parkland, Florida, and injured 17 others. Cruz was diagnosed as developmentally delayed at age three and had numerous disciplinary issues dating to middle school. From a young age, he started consuming marijuana heavily. He accounts that he would frequently “hear demon voices” and would consume large amount of marijuana to try and silence those voices. He also attempted suicide. During an interview after his mass shooting, he stated that he used “a lot of marijuana” as well as prescription tranquilizer Xanax [9,10].

On November 5, 2017, Devin Patrick Kelley carried out the deadliest mass shooting in Texas’ history, resulting in the death of 27 people and injuries to 20 others, by opening fire at worshippers

who were attending regular Sunday Service at the First Baptist Church in Sutherland Springs. Kelley was later shot by bystanders and killed during a high-speed chase with law enforcement agencies. The autopsy on Kelley revealed that toxicology tests detected marijuana and anti-anxiety drugs in his system. A report from the Federal Bureau of Investigation revealed multiple past incidents where Kelley also been under the influence of marijuana. Kelley's first on-record interaction with law enforcement authorities was when he was arrested for possession of marijuana and, subsequently, expelled from his high school. Since then, the record shows that Kelley started using marijuana frequently, as well as developing mental health issues that would lead him to have problems in his employment with the United States Air Force and multiple instances where he abused his step-son and his wife at the time [11,12].

On May 22, 2017, a suicide bomber, Salaman Abedi, detonated an explosive device in an area of the Manchester Arena, United Kingdom. The blast killed over 20 people and injured over 100 others. Evidence shows that, from a very young age, Abedi was a "party animal" who heavily consumed marijuana. Furthermore, he was described as a person who would start fights in the street for no reason, would act rude, and would refuse to do his homework in school. He was also described as a "very slow, uneducated and passive person" who displayed aggressive tendencies. Eventually, he began shutting himself off from other people, started becoming more violent, and started showing paranoia by making statements against western societies and hanging out with dangerous crowds. Evidence suggests that this paranoia, furthered with aggressive tendencies, led to Abedi's suicide bombing attack that day [1,13].

On May 18, 2017, Richard Rojas purposely drove a car along three blocks of pavement in New York's Times Square, killing a teenager and injuring 22 other people. Evidence indicates that Rojas was a heavy marijuana user. He admitted on the consumption of spiced-up marijuana right before committing the attack. Further, the record show that Rojas suffered from paranoia and hallucination, which have led him to make odd statements and partake in actions that negatively affected him in the work place or while interacting with others. Paranoia and hallucination caused him to "hear voices" that led him to commit that attack [2,14].

On November 23, 2016, Arcan Cetin carried out a mass shooting that killed five people and injured many others at the Cascade Mall in Washington. Evidence indicates that Cetin was a heavy marijuana consumer. Further, he had a past of violent behavior, with some incidents including the consumption of marijuana. Although doctors prescribed him medicine for Attention Deficit Hyperactivity Disorder and other mental health issues such as Post Traumatic Stress Disorder, anxiety, and depression, he stopped taking the medicine and substituted it with by excessively consuming marijuana. This led to aggravate his mood swings and being more violent. Before the shooting, he had threatened an ex-girlfriend who lived out of state. Evidence indicates that at, while committing the attack, Cetin was shouting a woman's name [15–17].

On July 26, 2016, Satoshi Uematsu stabbed to death at least 19 people and injured at least 26 others at a care facility in Sagamihara, Japan. Months prior the shooting, Uematsu suddenly started talking and acting strangely to his coworkers, who feared he could harm someone. Consequently, Uematsu tested positive for marijuana and was diagnosed with marijuana-induced psychosis and paranoid disorder after he delivered an ominous euthanasia letter to a Japanese House of Representative and telling his co-workers and the police that he intended to kill disabled people. Although he planned the attack in detail, evidence suggests that he later seemed to showed remorse and stated that "There was something wrong with [him]". These kinds of behaviors suggest that he was suffering from psychosis and paranoia since he was in the delusion that his acts would contribute to the Japanese society and the world [18,19].

On November 27, 2015, Robert Dear killed three people and injured nine others when he carried out a mass shooting in a Planned Parenthood clinic in Colorado Springs. Dear, along with many other users, moved to Colorado after the state legalized the recreational use of marijuana. Dear was a heavy user who was described by family and friends as "an angry and occasionally violent", and "deeply

disturbed”, individual who suffered from paranoia and mood swings. Moreover, he was described as a lonely religious extremist who had a history of domestic violence against his ex-wives, who gambled, and who committed adultery on multiple occasions. About a year before the shooting, he moved to Colorado where he lived in dire conditions at a squalid trailer without running water or electricity [20–22].

On July 16, 2015, Muhammad Youssef Abdulazeez killed five people and injured a couple of others in his drive-by shooting at a military recruiting center in Chattanooga, Tennessee. Prone to depression and manic episodes, he started smoking marijuana heavily in high school. This addiction was going on for many years and led his mental state to deteriorate further and cause him to fail a drug test at work. Further, he started writing suicidal notes to himself and was pulled over by a police officer for driving under the influence of marijuana and alcohol. Up until the shooting, evidence indicates that Abdulazeez had a hard time keeping a job because of his manic depressive/bipolar disorder and drug use [23,24].

On June 17, 2015, 21-year-old Dylan Roof murdered nine people who were attending a prayer service in a Church in Charleston, South Carolina. He claimed that his intentions were to start a race war. His acts were preceded by years of drug abuse. Reports reveal that Roof’s drug abuse started when he was 12 years old when he would smoke marijuana three times a day. When he was 16 years old, he tried to stop smoking marijuana after telling people that his daily marijuana usage caused him to be paranoid and hear voices. According to experts, Roof started suffering panic attacks when he was 16. Nonetheless, multiple accounts claim that he kept smoking marijuana and started abusing other drugs and alcohol. During his arrest for the Charleston shooting, Roof told police officers that he abused drugs before committing such heinous act [5,25,26].

On August 9, 2014, Michael Brown was fatally shot after a physical altercation with a police officer in Ferguson, Missouri. The autopsy and toxicology report revealed that Michael Brown had THC concentration of marijuana in his blood and urine. He had five nanograms of THC on his system, which causes approximately the same level of impairment as a 0.08 percent of blood alcohol level. That much THC notably impairs someone’s judgment and perception of the surrounding environment, which may lead to anxiety and paranoia. Evidence indicates that Brown tried to reach for the officer’s gun during the altercations, which led to the officer shooting at him in close range. Thus, evidence suggests that Brown’s behavior was most likely caused by paranoia [27,28].

On April 15, 2013, Dzhokhar Tsarnaev and his brother Tamerlan, killed three people and injured over 250 by detonating homemade pressure cooker bombs near the finish line at the Boston marathon. Both brothers were heavy marijuana users since they were young teenagers. Tamerlan was killed in a police shootout following the bombings and Dzhokhar was eventually apprehended by law enforcement officers. Several acquaintances and friends knew about both brother’s marijuana consumption and sales. One of Dzhokhar friend testified that he sold marijuana to Tsarnaev days before the Boston Marathon Bombings. Unrelated to the bombings, one of Tamerlan’s friends implicated Tsarnaev in the killing of three men whose bodies were found sprinkled with marijuana. Multiple accounts noticed an increase of violent behavior from Dzhokhar for some time leading up to the bombings [29–32].

On January 8, 2011, Jared Loughner shot and killed six people, while also injuring 14 others at the then-US Representative Gabrielle Giffords’s constituent meeting held in Tucson, Arizona. Although friends and acquaintances described him as an “awkward but friendly” young man, they started noticing his behavior drastically change in college. In high school, Loughner smoked marijuana on most days. Moreover, he also started immersing himself in conspiracy theories displayed paranoia. He dropped out of high school during his final year, but was able to attend a community college. Some college peers described him becoming mentally unstable by saying and doing things that were frightening. Other peers feared that he would do something like what he actually did. He was suspended from college and never returned. Subsequently, he tried to join the army but he was rejected because he failed a drug test. Consequently, he engaged in paranoid behavior that led to him to

engage in anti-government speech and target then-Representative Giffords during her constituent meeting [33,34].

These are among the many nationally reported violent cases that have, among others factors, a common root to what led these young people to commit acts of violence at the detriment to society as a whole: the extensive use or abuse of marijuana. In recent years, many States within the United States, as well as some other countries around the world, have decriminalized or legalized the recreational use of marijuana [8,12,13,19].

2.2. Paranoia: Marijuana Induced

In the cases above mentioned, one of the recurring conditions that most likely led perpetrators to commit violence was paranoia. Paranoia is defined by the medical dictionary as “an unfounded or exaggerated distrust of others, sometimes reaching delusional proportions”. Paranoid perceptions can co-occur with various other mental conditions as well, such as depression and dementia, and can be divided in three different psychological disorders: paranoid schizophrenia, delusional disorder (persecutory type), and paranoid personality disorder (PPD). All three conditions are similar in the sense that they all contain an “unreasonable fear” or “unreasonable belief” as the root of each condition. Hallucinations are also a common symptom on individuals who suffer from paranoia. Nonetheless, paranoia is also a likely side effect deriving from the consumption of marijuana, as well as other drugs and alcohol [3,18,31,35].

In the cases above mentioned, one of the recurring conditions that most likely led perpetrators to commit violence was paranoia. Paranoia is defined by the medical dictionary as “an unfounded or exaggerated distrust of others, sometimes reaching delusional proportions”. Evidence suggests that paranoia was among the factors that contributed in the actions of Anthony Comello, Salem Abedi, Richard Rojas, Satoshi Uematsu, Robert Dear, Dylan Roof, Michael Brown, and Jared Lougher. Each one had, in respective degrees, unreasonable beliefs. Comello admittedly shot Cali because he feared Cali had a gun and was about to shoot him. Abedi displayed paranoid beliefs while making statements against Western societies. Rojas’ paranoia was displayed in his statements and action witnessed by his coworkers; also, he claims he heard voices that led him to commit the attack. Uematsu was diagnosed with Paranoid disorder and psychosis, which led him to have delusion beliefs that his despicable acts would make contributions to society. Dear was described as a lonely religious extremist but also had a history of domestic violence, gambling, and adultery. Roof wanted to start a race war. Brown was likely paranoid about his surroundings based on the report. Lougher was suffering from paranoia and was immersing himself with conspiracy theories. Many of these tragedies are committed by individuals who were paranoid and were consuming marijuana. It is very likely that marijuana played an active role in these people’s paranoia, considering that the chemical composition of the drug has compounds that alter a person’s perception of reality as mentioned below (Table 1, [17,36–38]).

Table 1. Personality change toward aggression or violence.

Paranoid Personality Disorder	
A pervasive distrust and suspiciousness of others such that their motives are interpreted as malevolent, beginning by early adulthood and present in a variety of contexts, as indicated by four (or more) of the following:	
1.	Suspects, without sufficient bases, that others are exploiting, harming, or deceiving him or her.
2.	Is preoccupied with unjustified doubts about the loyalty or trustworthiness of friends or associates.
3.	Is reluctant to confide in others because of unwarranted fear that the information will be used maliciously against him or her.
4.	Reads hidden demeaning or threatening meanings into benign remarks or events.
5.	Persistently bears grudges (i.e., is unforgiving of insults, injuries, or slights).
6.	Perceives attacks on his or her character or reputation that are not apparent to others and is quick to react angrily or to counterattack.
7.	Has recurrent suspicions, without justification, regarding fidelity of spouse or sexual partner.

2.3. Psychosis: Marijuana Induced

Another condition that is commonly present in cases like the above are psychotic conditions. Psychotic conditions affect an individual's mind in a way that causes that individual to experience loss of contact with reality. During a psychotic episode, the perception of reality is altered to the point where an individual is unable to distinguish reality from hallucinations. Psychotic individual can also experience delusions (false beliefs), incoherent speech, inappropriate behavior, depression, anxiety, sleep problems, social withdrawal, lack of motivation, and difficulty functioning overall [16,17,37].

In the above-mentioned cases, Uematsu was diagnosed with marijuana-induced psychosis. His coworkers' testimony that he would talk and act inappropriately, his paranoia, and his delusion that killing patient at a care facility would benefit the society as a whole, demonstrates that he was suffering from psychotic conditions that made him lose contact with reality and led him to commit such acts. Similar symptoms were also present in cases where perpetrators acted with delusional beliefs, such as: Abedi, who suddenly started making inappropriate statements against Western societies; Dear, who was a lonely religious extremist but also had a history of domestic violence, gambling, and adultery, which strongly indicates that he was delusional, incoherent, and lost contact with reality; Rojas, Cruz, and Roof who suffered from hallucinations while having consumed large amount of marijuana throughout their lives.

Often, individuals who suffer from pre-existing medical conditions use marijuana in an attempt to alleviate their conditions. The man in Rustavi, Cruz, Kelley, Cetin, Abdulazeez, and Cruz also consumed marijuana because they were under the illusion that it would help them cope with their conditions, whether those conditions were likely induced by marijuana or not. However, it ended up worsening their conditions as time went by. What individuals are unaware of when it comes to self-medicating, is that the marijuana they consume does not have compounds that alleviate their pain or conditions; the marijuana they consume has many compounds that negatively alter their perceptions, which leads to worse conditions (Tables 2 and 3, [2,9,10,12,39–41]).

Table 2. Psychosis.

Substance-Induced Psychotic Disorder
A. Presence of one or both of the following symptoms: Delusions. Hallucinations.
B. There is evidence from the history, physical examination, or laboratory findings of both (1) and (2): The symptoms in Criterion A developed during or soon after substance intoxication or withdrawal or after exposure to a medication.
The involved substance is capable of producing the symptoms in Criterion A.
C. The disturbance is not better explained by a psychotic disorder that is not substance-induced. Such evidence of an independent psychotic disorder could include the following:
The symptoms preceded the onset of the substance use; the symptoms persist for a substantial period of time (e.g., about 1 month) after the cessation of acute withdrawal or severe intoxication; or there is other evidence of an independent non-substance-induced psychotic disorder (e.g., a history of recurrent non-substance-related episodes).
D. The disturbance does not occur exclusively during the course of a delirium.
E. The disturbance causes clinically significant distress or impairment in social, occupational, or other important areas of functioning.

Table 3. Paranoia.

Subtypes Delusional Disorder
Grandiose type: This subtype applies when the central theme of the delusion is the conviction of having some great (but unrecognized) talent or insight or having made some important discovery.
Persecutory type: This subtype applies when the central theme of the delusion involves the individual's belief that he or she is being conspired against, cheated, spied on, followed, poisoned or drugged, maliciously maligned, harassed, or obstructed in the pursuit of long-term goals.

3. Discussion

3.1. Marijuana: General Facts

Marijuana is the most consumed illicit drug in the world, with cannabis use and dependence continuing to increase over the past two decades as the trend of legalization persists. According to the United Nations Office on Drug and Crime, over 192 million of users (ages 15–64) worldwide regularly consume marijuana, with a lifetime use of 20% of the World's population and a significant number of individuals regularly consuming the drug [42]. In a 2017 study by the Global Burden of Disease, it estimated the age-standardized rate of cannabis use disorder, or CUD, was 289.7 per 100,000 population (95% Uncertainty Interval (UI) 248.9–339.1), affecting 22.1 million people (95% UI 19.0–25.9 million) [42]. The United States and Canada were in fact found to have among the highest age-standardized rates of CUDs in the world [42].

Cannabis is a complex plant that is made up of 400 chemical entities of which more than 60 are cannabinoid compounds, with delta-9-tetrahydrocannabinol and cannabidiol being the major compounds. Some of those cannabinoid compounds tend to have opposing effects as they affect a very important neurotransmitter system called endocannabinoid system [2]. Moreover, some cannabinoids bind to central cannabinoid receptors to control many behavioral functions, such as aggression. Furthermore, the delta-9-tetrahydrocannabinol (THC) is the chemical responsible for the intoxicating effects on individuals who consume marijuana. The THC level determines the potency of marijuana and high levels of THC likely lead to higher negative health consequences [43–45].

Researchers refer to marijuana having a “high potency” when it has a THC level of more than 10%. In the past years, the THC of confiscated marijuana samples rose from 3% in 1980 to 12% in 2012. Moreover, adolescents between 15 and 17 years old have reported significantly higher ED visits from 2005 to 2010, which is likely caused by the increase of marijuana potency during that time period [7]. Although THC levels that exceed 10% most likely cause serious negative health consequences, it is not uncommon to find marijuana, which THC content exceeds 20% and occasionally 230%, to be sold in places where marijuana is legalized, such as the state of Colorado [7,8]. Furthermore, while daily users refer to high potency marijuana as “the good stuff”, it is reported that daily users are five times more likely to find themselves in the hospital for psychosis symptoms such as delusions and hallucinations caused after consuming marijuana. As this paper will mention in the following pages, however, delusions and hallucinations are not the only negative effects stemming from the consumption of marijuana. Cardiovascular diseases, depression, anxiety, and violence are also among the common negative effects of marijuana [13,14,27,34,46].

3.2. Mental and Behavioral Changes

We apply the results of the research regarding the role of marijuana in violence. We use concepts such as personality changes, perpetrator violence, and psychosis to establish our association of marijuana with the unfortunate cases. The purpose is to illustrate negative but preventable tragic outcomes due to marijuana and its role in violence. The overall objective is to identify the role of marijuana and to suggest it is avoidable and causal nature in inducing violence [47–49].

In all the cases selected, marijuana use was present. For some of the individuals, marijuana use was confirmed by a physical test. In other cases, marijuana was present on their person, identifying drug use. Moreover, some individuals of the case were identified as marijuana users by outside sources.

Present in all the cases, as a result of marijuana use, was the change in personality, aggressive behavior, paranoia, and/or psychosis. All these symptoms have been documented by scientific research to be the result of marijuana use and intoxication. Another symptom, victimization, has a positive correlation with cannabis use, and the cases illustrate marijuana users and victimization. In other words, marijuana users become victims of aggression in response to their perpetration under the influence of marijuana (Table 4, [50,51]).

Table 4. What did the cases have in common?

Cases of Marijuana Use and Symptoms	
Case	Symptom
Anthony Comello	Paranoia
Man in Rustavi	Aggressiveness, Personality Change
Nikolas Cruz	Psychosis, Hallucinations
Devin Patrick Kelley	Aggressiveness, Personality Change
Salaman Abedi	Aggressiveness, Personality Change, Paranoia
Richard Rojas	Paranoia, Hallucinations
Arcan Cetin	Aggressiveness, Personality Change
Stoshi Uematsu	Psychosis, Paranoia
Robert Dear	Aggressiveness, Paranoia
M.Y. Abdulazeez	Aggressiveness, Paranoia
Dylan Roof	Paranoia, Hallucinations
Michael Brown	Aggressiveness, Personality Change, Paranoia
Dzhokar Tsarnaev	Aggressiveness, Personality Change
Tamerlan Tsarnaev	Aggressiveness, Personality Change
Jared Loughner	Paranoia, Psychosis

The DSM V provides diagnostic categories for paranoid personality, paranoia and psychosis associated with marijuana use [52].

3.3. Marijuana and Violence

As mentioned above, some compounds found in marijuana have an effect on central endocannabinoid receptors that control many behavioral functions, including aggression. Although there are some instances where marijuana consumption causes mild euphoria and relaxation on users, adverse acute psychopharmacological effects are very likely to occur. A study that collected data from half a century points out that even a single dose of cannabis may cause “impairments in behavioral control that may underlie impulsive, violent behavior” by altering “the normal functioning of its underlying natural substrate, the ventrolateral prefrontal cortex in man”. Furthermore, the results collected in that study provide a strong indication that chronic marijuana use suggests a possible causal effect with predicting future violence. More studies have reported that panic attacks, confusion, hallucinations, suspiciousness, and paranoia often occur in chronic marijuana users, affecting their cognition in ways that enhance aggressive responses to perceived provocations. Further, recent studies have proven causal connections between marijuana and psychosis [38,39,53].

Studies Show Violence and Aggression Associated with Marijuana Use

Marijuana intoxication results in panic reactions and paranoid feelings whose symptoms lead to violence [49]. The sense of fear, loss of control, and panic is associated with violence [4,54,55]. Also marijuana use increases heart rate, which may be associated with violent behavior [34,47,56,57].

When people stop using marijuana they may experience a variety of withdrawal symptoms, including sleep disturbance, irritability or restlessness, loss of appetite, anxiety, and sweating [46,58]. Experiencing any of these symptoms can make a person angry, ranging from mild irritation to violent rage. Marijuana withdrawal can lead to intimidating violent or bullying behavior, endangering the perpetrator or other people and property [59].

In incarcerated subjects, studies found that one-third of the subjects that committed homicide had used marijuana twenty-four hours before the homicide. Further, three-quarters of those subjects were experiencing at least one mental or physical effect from marijuana intoxication when the homicide occurred.

Similarly, individuals in remote Aboriginal Australian Communities who reported current cannabis use were nearly four times more likely than nonusers to present at least once for violent

trauma. Homicide offenses have been repeatedly documented to be connected to drug use, and marijuana is often one of those drugs [60].

Marijuana use is also indicative of intimate partner violence [61]. Consistent use of marijuana during adolescence was the most predictive indicator of intimate partner violence [31]. Also, marijuana use during adolescence was associated with perpetration or both perpetration and victimization by an intimate partner in early adulthood [62].

There is also a positive association between peer victimization and cannabis use in adolescents. Cannabis use is likely to be associated with perpetrator victims, those who initiate violence while using marijuana and experience retaliation to their aggressive acts. This trend suggests that cannabis use might be strongly related to outward aggression by the user [1].

Cannabis use also increases an adolescent's own likelihood of being victimized by peers. In particular, mental effects of cannabis has the potential to decrease the ability to accurately identify, evaluate, or avoid potentially dangerous persons or situations [59].

3.4. Psychosis

Psychosis is defined by the medical journal as "a symptom or feature of mental illness typical characterized by radical changes in personality, impaired functioning, and a distorted or nonexistent sense of objective reality". Psychosis causes individuals to have an impaired perception of reality, consisting of hallucinations and paranoia [2,8,16]. Consumption of marijuana also proportionally increased the risk of other mental illnesses, such as schizophrenia and other types of psychoses. These marijuana use disorders are often associated with its dependence, since a user's brain requires more and more substance use to keep the desired euphoric effect in the brain. Thus, a user is most likely to experience withdrawal symptoms when not taking the drug. Irritability, anger, and aggression are common withdrawal symptoms that former marijuana users, or marijuana users who try to quit the consumption, experience [46]. Although marijuana advocates generally state that the consumption of the drug helps individuals who suffer from PTSD or other psychiatric conditions, studies suggest that the consumption of marijuana in patients with PTSD, and in patients following a psychiatric discharge, increases the likelihood of those patients being prone to violence compared to patients who do not consume the drug [4,37]. A 50 year-span study on adult patients in the United Kingdom indicated that continued cannabis use by an individual leads is associated with a 7-fold greater odds for commission of subsequent violent crimes. The authors of that study suggest that marijuana consumption would cause impairments in neurological circuits controlling behavior that makes a user prone to violent behavior [36].

Marijuana advocates downplay the risks associated with its unrestricted consumption by saying that the drug is safe, which is a similar approach adopted by Big Tobacco years ago to downplay the risks of smoking. Yet, despite tobacco being legal, people today are well aware of the risks associated with its consumption. Stating that consuming marijuana is safe goes against many studies and researches performed that prove negative health consequences associated with the consumption of marijuana due to the multitude of compounds present and high THC levels being consumed by individuals [9–11,19,21].

Studies Show Psychosis and Paranoia

Cannabis intoxication leads to acute psychosis in many individuals and can produce short-term exacerbations of preexisting psychotic diseases [63–66]. Cannabis use also causes symptoms of depersonalization, fear of dying, irrational panic and paranoid ideas which coincide with acute intoxication and remit quickly [67].

It was reported that 15% of cannabis users identified psychotic-like symptoms, the most common being hearing voices or having unwarranted feelings of intimidation and persecution or paranoid thoughts [38].

The potency of the marijuana has varying effects on users. A study analyzed the proportion of patients in South London with first episode psychosis attributable to high-potency cannabis use and found that the use of high-potency cannabis (skunk) confers an increased risk of psychosis compared with traditional low-potency cannabis (hash) [68].

The risk of individuals having a psychotic disorder showed a roughly three times increase in users of skunk-like cannabis (high-potency) compared with those who never used cannabis. Use of skunk-like cannabis everyday conferred the highest risk of psychotic disorders compared with no use of cannabis [69]. Potency in these studies is similar to marijuana currently available in the U.S. Direct administration of cannabis resulted in predictable increased occurrence of paranoia in comparison to those who received placebo.

Epidemiological studies showed that cannabis is the most frequently used drug among those diagnosed with bipolar disorder [70]. Studies have also shown that as the frequency of cannabis use increases, so does the risk for psychotic disorders, such as schizophrenia [71]. The investigators of Schizophrenia Commission concluded that cannabis use is the most preventable risk factor for psychosis [72–77]. High proportions of persons with schizophrenia report regular cannabis use and meet criteria for cannabis use disorder [78].

Findings suggest that activity in the basal lateral medulla is involved in marijuana-induced paranoia (state of becoming afraid of things that would normally trigger fear) [77]. That means marijuana is actually enhancing type of learning about fear, leading the brain to jump to conclusions about the mild experiences, perceiving them as scarier and more strongly connected to other scary situations than they are. This marijuana induced fear-based learning helps explain why marijuana users tend to see patterns in events that are not real, such as conspiracies [78].

In a study analyzing a college population, heavy users of marijuana displayed significantly greater impairment than light users on intentional/executive functions. This led to the conclusion that heavy marijuana use is associated with residual neuropsychological effects even after a day of supervised abstinence from the drug [53,79].

3.5. Public Policies

These negative effects of marijuana need to be taken into account for public policy in order to treat people with addiction and possibly avoid the tragedies above mentioned. The public should know the negative consequences associated with the compounds present within the marijuana products they consume. The current legalization push in the United States lacks prudent public policy and control over the process. A prudent public policy would be to decriminalize the drug and have its composition, creation, and distribution controlled by an agency that would keep THC levels at a minimum. Moreover, studies that try to find ways to treat individuals addicted to marijuana and ways to make the drug safer by pinpointing each compound and determine whether some compounds may indeed help people who have curable health conditions. This approach would reduce the negative effects of high THC on the human body and would decrease violence occurring during marijuana deals in the black market. Furthermore, this approach will likely decrease the violence caused by marijuana and, most importantly, it would prevent tragedies such as the ones mentioned above [8,13,31,80].

4. Conclusions

The main scope of this paper was to inform the general public about the relationships between marijuana and violence in the general population and in individuals with mental illnesses, as recent findings do link marijuana with cases where psychosis was present. This article is a case review and not a research study; therefore, the chief limitations regard inferences that can be made from a case study. However, the findings suggest a further need for research on marijuana and violence. The authors of this paper did not intend to take sides regarding the legalization of marijuana. The focus was public health in regards to marijuana [2,11,14,18,36].

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Marijuana Violence and Law

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Abstract

Marijuana is currently a growing risk to the public in the United States. Following expanding public opinion that marijuana provides little risk to health, state and federal legislatures have begun changing laws that will significantly increase accessibility of marijuana. Greater marijuana accessibility, resulting in more use, will lead to increased health risks in all demographic categories across the country. Violence is a well-publicized, prominent risk from the more potent, current marijuana available.

We present cases that are highly popularized storylines in which marijuana led to unnecessary violence, health risks, and, in many cases, both. Through the analysis of these cases, we will identify the adverse effects of marijuana use and the role it played in the tragic outcomes in these and other instances. In the analysis of these cases, we found marijuana as the single most common, correlative variable in otherwise diverse populations and circumstances surrounding the association of violence and marijuana.

Keywords: Marijuana; Bullying behaviour; Aggression; Intoxication; Cannabis use

Cases Reports

Michael Brown robbed a convenience store for a large box of cigarillos to smoke marijuana and assaulted the store clerk. Subsequently, the 18 year old Brown attacked police officer Darren Wilson without provocation, punching him in the face through the window of his police car, and attempting to grab his gun. Wilson shot and killed Brown as he tried to escape in a very agitated, paranoid, confused and aggressive state. Along with the cigarillos, marijuana was found in Brown's system at the time of death [1].

Trayvon Martin was shot and killed by George Zimmerman, a neighborhood watch volunteer. Marijuana was found in Martin's system the night he was shot [2]. He also had been suspended from school for possession of marijuana.

Laquan McDonald slashed a tire and damaged a police car. After ignoring verbal instruction to drop the knife, he was shot sixteen times. McDonald had used marijuana every day since the age of 10 or 11 years old [3].

Deven Guilford was shot and killed by a policeman during a traffic stop after becoming assaultive. He was a known marijuana user as he professed his "love" for marijuana on social media [4].

Freddie Gray fell into a coma while being transported after an arrest for possession of an illegal switchblade. At the time of his death, Gray tested positive for marijuana and heroin. Gray had multiple prior charges for marijuana possession [5].

Lakeisha Holloway drove her car onto a sidewalk on the Las Vegas strip, killing one and injuring over thirty five others [6,7]. The

toxicology exam illustrated that Holloway had marijuana in her system at the time of the vicious attack [8].

Robert Lewis Dear shot three people and injured nine others at a Planned Parenthood Clinic in Colorado Springs, Colorado. He was a marijuana user and illustrated mental health issues [9].

Joseph Jesse Aldridge found his mother dead of natural causes and went on a shooting rampage, killing seven people and himself. In 2008, Aldridge had pled guilty to federal charges of possessing firearms while using marijuana. He was required to complete mental health and substance use counseling for marijuana [10].

Jared Lee Loughner shot Arizona Congresswomen Gabrielle Gifford and eighteen other, killing six. He was arrested in 2007 for marijuana possession and other paraphernalia. Friends and classmates knew him as a marijuana user. He was also diagnosed with paranoid schizophrenia [11].

The Tsarnaev brothers killed three and injured 264 others with bombs at the Boston Marathon on April 5, 2013. Friends say they were both heavy marijuana users. The wife of the older brother, Tamerlan, described a change in his attitude as he became violent toward her with his increasing marijuana use [12].

A Dearborn Heights man plotted ISIS attacks on church. In an affidavit filed in a criminal complaint on weapons and marijuana charge, Khalil Abu Rayyan is described as being an ISIS supporter who talked about committing violent acts of terrorism, including shootings and beheadings [13].

Osama bin Laden became paranoid and obsessive in the days prior to his death. High strength marijuana plants were found within bin Laden's compound in Pakistan [14].

Studies Show an Association between Marijuana and Mental or Physical Consequences

Studies show violence and aggression with marijuana use

Marijuana intoxication results in panic reactions and paranoid feelings whose symptoms lead to violence [15]. The sense of fear, loss of control, and panic is associated with violence [16-18]. Also marijuana use increases heart rate, which may be associated with violent behaviour [19-22].

When people stop using marijuana they may experience a variety of withdrawal symptoms, including sleep disturbance, irritability or restlessness, loss of appetite, anxiety, and sweating [23,24]. Experiencing any of these symptoms can make a person angry, ranging from mild irritation to violent rage. Marijuana withdrawal can lead to intimidating violent or bullying behavior, endangering the perpetrator or other people and property [25].

In incarcerated subjects, studies found that one third of the subjects that committed homicide had used marijuana twenty four hours before the homicide. Further, three quarters of those subjects were experiencing at least one mental or physical effect from marijuana intoxication when the homicide occurred.

Similarly, individuals in remote Aboriginal Australian Communities who reported current cannabis use were nearly four times more likely than nonusers to present at least once for violent trauma. Homicide offenses have been repeatedly documented to be connected to drug use, and marijuana is often one of those drugs [26].

Marijuana use is also indicative of intimate partner violence [27]. Consistent use of marijuana during adolescence was the most predictive indicator of intimate partner violence [28]. Also, marijuana use during adolescence was associated with perpetration or both perpetration and victimization by an intimate partner in early adulthood [29].

There is also a positive association between peer victimization and cannabis use in adolescents. Cannabis use is likely to be associated with perpetrator victims, those who initiate violence while using marijuana and experience retaliation to their aggressive acts. This trend suggests that cannabis use might be strongly related to outward aggression by the user [30].

Cannabis use also increases an adolescent's own likelihood of being victimized by peers. In particular, mental effects of cannabis have the potential to decrease the ability to accurately identify, evaluate, or avoid potentially dangerous persons or situations [25].

Studies show psychosis and paranoia

Cannabis intoxication leads to acute psychosis in many individuals and can produce short term exacerbations of pre existing psychotic diseases [31-34]. Cannabis use also causes symptoms of depersonalization, fear of dying, irrational panic and paranoid ideas which coincide with acute intoxication and remit quickly [35].

It was reported that 15% of cannabis users identified psychotic like symptoms, the most common being hearing voices or having unwarranted feelings of intimidation and persecution or paranoid thoughts [36].

The potency of the marijuana has varying effects on users. A study analyzed the proportion of patients in South London with first episode

psychosis attributable to high potency cannabis use and found that the use of high potency cannabis (skunk) confers an increased risk of psychosis compared with traditional low potency cannabis (hash) [37].

The risk of individuals having a psychotic disorder showed a roughly three times increase in users of skunk like cannabis (high potency) compared with those who never used cannabis. Use of skunk like cannabis everyday conferred the highest risk of psychotic disorders compared with no use of cannabis [6]. Potency in these studies is similar to marijuana currently available in the U.S. Direct administration of cannabis resulted in predictable increased occurrence of paranoia in comparison to those who received placebo.

Epidemiological studies showed that cannabis is the most frequently used drug among those diagnosed with bipolar disorder [5]. Studies have also shown that as the frequency of cannabis use increases, so does the risk for psychotic disorders, such as schizophrenia [38]. The investigators of Schizophrenia Commission concluded that cannabis use is the most preventable risk factor for psychosis [39-44]. High proportions of persons with schizophrenia report regular cannabis use and meet criteria for cannabis use disorder [45].

Findings suggest that activity in the basal lateral medulla is involved in marijuana induced paranoia (state of becoming afraid of things that would normally trigger fear) [44]. That means marijuana is actually enhancing type of learning about fear, leading the brain to jump to conclusions about the mild experiences, perceiving them as scarier as and more strongly connected to other scary situations than they are. This marijuana induced fear based learning helps explain why marijuana users tend to see patterns in events that are not real, such as conspiracies [45] (Table 1).

In a study analyzing a college population, heavy users of marijuana displayed significantly greater impairment than light users on intentional/executive functions. This led to the conclusion that heavy marijuana use is associated with residual neuropsychological effects even after a day of supervised abstinence from the drug [46,47].

What did the cases have in common?

Cases of Marijuana Use and Symptoms	
Case	Symptoms
Michael Brown	Aggressiveness, Personality Change, Paranoia
Trayvon Martin	Aggressiveness, Personality Change, Paranoia
Laquan McDonald	Aggressiveness, Personality Change
Devon Guilford	Aggressiveness, Personality Change
Freddie Gray	Paranoia
Lakeisha Holloway	Aggressiveness, Personality Change
Robert Lewis Dear	Psychosis
Joseph Jesse Aldridge	Psychosis
Gerard Lee Loughner	Aggressiveness, Personality Change, Psychosis
Tsarnaev Brothers	Aggressiveness, Personality Change
Khalil Abu-Rayyem	Psychosis

Osam bin Laden	Paranoia, Psychosis
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Table 1: Marijuana uses and symptoms.

Discussion

We apply the results of the research regarding the role of marijuana in violence. We use concepts such as personality changes, perpetrator violence, and psychosis to establish our association of marijuana with the unfortunate cases. The purpose is to illustrate negative but preventable tragic outcomes due to marijuana and its role in violence. The overall objective is to identify the role of marijuana and to suggest it is avoidable and causal nature in inducing violence [48-50].

In all the cases selected, marijuana use was present. For some of the individuals, marijuana use was confirmed by a physical test. In other cases, marijuana was present on their person, identifying drug use. Moreover, some individuals of the case were identified as marijuana users by outside sources.

Personality change toward aggression or violence (Chart 1)

Paranoid Personality Disorder
A. A pervasive distrust and suspiciousness of others such that their motives are interpreted as malevolent, beginning by early adulthood and present in a variety of contexts, as indicated by four (or more) of the following:
Suspects, without sufficient bases, those others are exploiting, harming, or deceiving him or her.
Is preoccupied with unjustified doubts about the loyalty or trustworthiness of friends or associates.
Is reluctant to confide in others because of unwarranted fear that the information will be used maliciously against him or her.
Reads hidden demeaning or threatening meanings into benign remarks or events.
Persistently bears grudges (i.e., is unforgiving of insults, injuries, or slights).
Perceives attacks on his or her character or reputation that are not apparent to others and is quick to react angrily or to counterattack.
Have recurrent suspicions, without justification, regarding fidelity of spouse or sexual partner.

Chart 1: Paranoid personality disorder (PPD) symptoms.

Present in all the cases, as a result of marijuana use, was the change in personality, aggressive behavior, paranoia and/or psychosis. All these symptoms have been documented by scientific research to be the result of marijuana use and intoxication. Another symptom, victimization, has a positive correlation with cannabis use, and the cases illustrate marijuana users and victimization [51,52]. In other words, marijuana users become victims of aggression in response to their perpetration under the influence of marijuana.

DSM V provides diagnostic categories for paranoid personality, paranoia and psychosis associated with marijuana use [53].

Michael Brown was a marijuana user and it was found in his system at the time of death. Further, Brown illustrated aggressive tendencies and victimization, as he was reported to aggressively assault a store clerk prior to his aggression towards a police officer. These actions were contrary to non-aggressive tendencies purported by those closest

to Brown. Brown's intoxication of marijuana likely accounted for the aggression and assaults. While contributing factors such as race and poor police practices may have contributed to Brown's unfortunate death, Brown likely would have been alive had he not been a user of marijuana in this particular instance. Apparently he was acting under the influence in an uncharacteristically high risk manner.

Similar to Brown, Trayvon Martin was known to have used marijuana. He was suspended from school for marijuana use at the time of his altercation with Zimmerman. Under the influence of marijuana, Martin likely illustrated victim perpetration from marijuana which increased aggressive behavior through participation in the altercation with Zimmerman. This physical fight with Zimmerman was behavior is to the surprise of others who claimed Martin was mild-mannered who likely would avoid such a confrontation. Marijuana use likely created the fear and aggressive behavior due to poor judgment and threatening perceptions induced by marijuana, contribution to Martin's death [19,23].

Tamerlan Tsarnaev follows similar patterns. He was a known heavy marijuana user. There was a sharp change in his personality confirmed by his wife associated with very heavy use and involvement with marijuana, resulting in the violence towards his wife according to her. Likely, intoxication from marijuana created and contributed to the paranoid thoughts and poor judgment to detonate a bomb in a crowd of people [34,40].

Similarly, Laquan McDonald was a known marijuana user since 10 or 11 years old. The intoxication from the use of marijuana likely caused McDonald to slash a cop car's tire, as he was known to be respectful and reserved. His life would have been saved without marijuana-induced aggressiveness and poor judgments, and senseless, high-risk actions towards police [19,23].

Deven Guilford is another preventable but clear example of high risk and poor judgment from marijuana use. After being stopped in his car, Guilford assaulted a police officer for unknown reasons and apparently paranoid reactions to police actions. Guilford was preoccupied with and user of marijuana at a relatively young age. His marijuana use likely contributed to the change in his personality to be aggressive and assaultive to provoke his death in a high-risk police stop [19,23].

Similarly, Jared Lee Loughner was known to be a heavy marijuana user. People described a large personality change from his youth. Loughner went on a shooting spree, killing six people. Marijuana was likely a major contributor to the drastic change in personality toward violence. Had marijuana been identified as a problem, his aggressive and assaultive act may have been prevented and lives could have been saved [19,23].

Lakeisha Holloway shows another example of senseless loss. In contrast to her personality from her youth, she drove a car onto the sidewalk of the Las Vegas strip, killing one person and injuring others. Marijuana was in her system at the time of the attack and likely contributed to the lethal aggression exhibited, and likely, psychotic, paranoid thinking.

Psychosis (Chart 2)

Substance-Induced Psychotic Disorder
A. Presence of one or both of the following symptoms:
Delusions
Hallucinations
B. There is evidence from the history, physical examination, or laboratory findings of both (1) and (2):
The symptoms in Criterion A developed during or soon after substance intoxication or withdrawal or after exposure to a medication.
The involved substance is capable of producing the symptoms in Criterion A.
C. The disturbance is not better explained by a psychotic disorder that is not substance-induced. Such evidence of an independent psychotic disorder could include the following:
The symptoms preceded he onset of the substance use; the symptoms persist for a substantial period of time (e.g. about 1 month) after the cessation of acute withdrawal or sever intoxication; or there is other evidence of an independent non-substance-induced psychotic disorder (e.g. a history of recurrent non-substance-related episodes).
D. The disturbance does not occur exclusively during the course of a delirium.
E. The disturbance causes clinically significant distress or impairment in social, occupational or other

Chart 2: Substance induced psychotic disorder symptoms.

Studies have illustrated the connection between cannabis use and psychosis [54]. Marijuana has been shown to increase the risk for psychotic disorders and/or exacerbate pre existing psychotic diseases. Consistent with research, marijuana resulting in psychosis is illustrated in many of the cases described above. Joseph Jesse Aldridge, described as a recluse, went on a shooting rampage after finding his mother deceased. Aldridge was a known marijuana user and had history of psychosis. His marijuana use likely contributed to his psychosis, and a major factor for the shooting rampage [55,56].

Similar to Aldridge, Jared Lee Loughner was admittedly a marijuana user. He suffered from a mental illness of paranoid schizophrenia. Loughner then went on a shooting spree killing six people. His marijuana use likely exacerbated the psychosis, which was a high risk factor for the shootings [33,35,55].

Analogous to Aldridge and Loughner, Robert Lewis Dear went on a shooting spree in Colorado. Dear moved to Colorado for easier access to marijuana. Dear also exhibited signs of mental health illness, psychosis and paranoia, which caused or exacerbated by marijuana, which resulted in his shooting spree [18,31].

While Khalil Abu Rayyan did not result in a shooting rampage, this case illustrates the same ideas as previous cases. Abu Rayyan used marijuana. He illustrated signs of psychosis through the threats of terrorism and martyrdom. Abu Rayyan obtained the instruments to carry out his plans. The psychosis, contributing to the terroristic thoughts, marijuana use contributed to and exacerbated his aggressive behaviour [31,36,55].

Similar to Abu Rayyan, Osama bin Laden also had notorious terroristic and paranoid behavior. Bin Laden was a marijuana user, growing high strength plants within his compound in Pakistan. Unfortunately, bin Laden's psychosis, associated and exacerbated by

marijuana use, may have prompted him to carry out the most heinous terrorist attacks in history. Without marijuana use and subsequent psychosis, many deaths may not have occurred [31,55,56].

Paranoia (Chart 3)

Subtypes Delusional Disorder
Grandiose type: This subtype applies when the central theme of the delusion is the conviction of having some great (but unrecognized) talent or insight or having made some important discovery.
Persecutory type: This subtype applies when he central heme of the delusion involves the individual's belief that he or she is being conspired against, cheated, spied on, followed, poisoned or drugged, maliciously maligned, harassed or obstructed in the pursuit of long-term goals.

Chart 3: Types of delusional disorder (DD).

In addition to psychosis and aggression, paranoia has been connected to marijuana intoxication [57,58]. Studies have illustrated THC significantly increase paranoia through a physical pathway. The cases described above illustrate such paranoia in marijuana users. For instance, Freddie Gray was arrested after he fled on the mere sight of police officers. During his arrest in the intoxicated state, he was injured which resulted in his death. Gray was a known drug addict and user of marijuana. His marijuana use likely induced paranoia thinking and poor judgment which prompted him to flee from police, threatening to him. Without marijuana and other drug intoxication, his cooperation likely would have been different, and he would avoided his high risk apprehension, and death avoided [34,36,40].

Similarly, Trayvon Martin got into an altercation with a Neighborhood Watch guard. Martin, speaking to his girlfriend, stated that a "creepy" man was following him and that he tried to evade the follower. His description is characteristic of apprehensive beliefs, and a sign of paranoia thought. Otherwise, Martin according to his family would not have fought with Zimmerman, had masituation escalated due to the paranoia, caused by the use of marijuana [34,36,40].

Osama bin Laden also illustrated paranoia, in letters that were discovered after his death. Paranoia was caused by his frequent marijuana use. This paranoia resulted in his adverse view of the US government. Unfavorable views toward the US resulting from extreme paranoia, coupled with psychosis, resulted in his terrorist attacks. Marijuana abstinence could have prevented the death of thousands of people [34,36,40].

These cases contained diverse variables: encounters with police, race, altercations, confrontation and mental illness. Other drug use was present but not the same across all cases. However, marijuana and violence are the common denominators in all the cases. Many were not victims of police aggression, some perpetuated police responses, some not. Diverse races and cultures were represented, and no stereotype was evident among the cases of violence and marijuana use. The variables, marijuana and violence were present in all cases.

An extensive review of the scientific literature document a clear association between marijuana and violence, psychosis, personality changes, poor judgment, aggression, victim perpetration. There are other possibilities and contributing factors in the execution of the violent behaviors, though probably not present in all cases. The purpose of this case report is to illustrate the probable role of marijuana in violent behaviors.

The review does not prove a causal relationship between marijuana and violence in these cases. Rather it establishes a highly documented association between marijuana and violence. A legal standard used for causation can be applied to illustrate this association. A legal cause is “but for” the actions or circumstances, the result would not have occurred. A proximate cause is the result was “foreseeable” based on the facts and actions. The most likely legal and proximate cause of violence in these cases was the use and intoxication from marijuana. No other variables fulfill these requirements.

Conclusion

According to research studies, marijuana use causes aggressive behavior, causes or exacerbates psychosis and produce paranoid. These effects have been illustrated through case studies of highly publicized incidents and heightened political profiles.

These cases contain examples of repeated illustrations of aggression, psychosis and paranoia by marijuana users and intoxication. Ultimately, without the use and intoxication of marijuana, the poor judgment and misperceptions displayed by these individuals would not have been present, reducing the risk for actions that result in senseless deaths.

Import to these assertions, is that the current marijuana is far more potent in THC concentrations, the psychoactive component. Accordingly, and demonstrated in direct studies, more potent marijuana results in a greater risk for paranoid thinking and psychosis. In turn, paranoid behavior increases the risk for paranoid behaviors and predictably associated with aggressive and violent behaviors.

Marijuana use causes violent behavior through increased aggressiveness, paranoia and personality changes (more suspicious, aggressive and anger).

Recent illicit and “medical marijuana” (especially grown by care givers for medical marijuana) is of much high potency and more likely to cause violent behavior.

Marijuana use and its adverse effects should be considered in cases of acts of violence as its role is properly assigned to its high association.

Recognize that high potency marijuana is a predictable and preventable cause of tragic violent consequences.

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From: [REDACTED]
To: [Rene Spring](#); [Rich Constantine](#); [John McKay](#); [Yvonne Martinez Beltran](#); [Gino Borgioli](#); [Christina Turner](#)
Subject: Proposed Commercial Marijuana Shops
Date: Friday, March 19, 2021 4:17:15 PM

I was a public school teacher for thirty-five years and I am very concerned about the well being of our youth.

If you Google the long term use of marijuana on the brain health of young men and woman you can see the serious effects on brain scans where whole brain areas are compromised and affected negatively. Also, the tars and residues from smoking marijuana can compromise the lungs and other areas of the body.. Let's not let the promise of increased revenue sell out the mental and emotional well being of our youth and potentially lead them to harder drugs.

Sincerely
Steve Wise

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From: [Ronald Kirkish](#)
To: [Christina Turner](#); [Rich Constantine](#); [Yvonne Martinez Beltran](#); [Rene Spring](#); [John McKay](#); [Shane Palsgrove](#); [Gino Borgioli](#)
Subject: Re: ADHD numbers are rising and scientists are trying to understand why
Date: Sunday, April 4, 2021 10:41:23 AM

This is an additional excerpt from the NCBI study linked below:

"With few exceptions investigations have reported structural abnormalities in regular CAN*-using youth in the frontal cortex (ACC, OFC, insula, paracentral gyrus), lingual temporal, inferior and superior parietal cortex, hippocampus, amygdala, nucleus accumbens, and cerebellum with the most prominent findings in the PFC and hippocampus areas that have high CB1 receptors density. Most studies in adult or young adult samples have demonstrated decreased volumes across brain regions in association with CAN use."

*CAN = Cannabis/Marijuana

B/r,

Ronald L. Kirkish

On Apr 4, 2021, at 8:14 AM, Ronald Kirkish <[REDACTED]> wrote:

Dear All,

The frequency of ADHD has exploded since the 1990's as has the huge increase of the %THC in "Skunk marijuana"

NIDA's Dr. Nora Volkow's research shows that THC does damage to the human brain's white matter and the damage is substantial.

B/r

Ronald L. Kirkish

The Impact of ADHD Persistence, Recent Cannabis Use, and Age of Regular Cannabis Use Onset on Subcortical Volume and Cortical Thickness in Young Adults

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5289096/>

Results

ADHD numbers are rising and scientists are trying to understand why: In the late 1990s, 7.2 percent of non-Hispanic white children, 4.7 percent of

non-Hispanic black children and 3.6 of Hispanic children were diagnosed with ADHD, according to the study. By 2016, it was 12 percent of white kids, 12.8 percent of blacks and 6.1 percent of Hispanics.

After controlling for age, gender, total brain volume, nicotine use, and past-year binge drinking, childhood ADHD diagnosis did not predict brain structure; however, persistence of ADHD was associated with **smaller left precentral/postcentral cortical thickness.**

Compared to all non-users, CAN users had decreased cortical thickness in right hemisphere superior frontal sulcus, anterior cingulate, and isthmus of cingulate gyrus regions and left hemisphere superior frontal sulcus and precentral gyrus regions. Early cannabis use age of onset (CUO) in those with ADHD predicted greater right hemisphere superior frontal and postcentral cortical thickness.

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From: [Ronald Kirkish](#)
To: [Christina Turner](#); [Rich Constantine](#); [Yvonne Martinez Beltran](#); [Rene Spring](#); [John McKay](#); [Shane Palsgrove](#); [Gino Borgioli](#)
Cc: [Matt Wendt](#); [Chris Borello](#); [Bob Cooke](#); [Terry Ratto](#); [REDACTED]; [Ladera Grill Dan](#)
Subject: Re: NIDA's Dr. Nora Volkow Discusses Marijuana's Effects on the Brain, Body & Behavior
Date: Thursday, March 25, 2021 7:49:39 AM

Dr. Nora Volkow's presentation includes information regarding how marijuana causes huge and permanent damage to the human brain, especially to very important components of the brain that controls behavior.

B/r,

Ronald L.Kirkish.

On Mar 25, 2021, at 7:17 AM, Ronald Kirkish [REDACTED] wrote:

<7C97896E-3D54-41B9-BC9B-CE6E492DC06F.jpeg>

**NATIONAL INSTITUTE OF DRUG ABUSE, DIRECTOR DR.
NORA VOLKOW**

NIDA's Dr. Nora Volkow Discusses Marijuana's Effects on the
Brain, Body & Behavior

<https://www.youtube.com/watch?v=RSDnLSU3owc>

Hear a fascinating presentation by Dr. Nora Volkow, Director of the National Institute on Drug Abuse, about the effects of marijuana use on the brain, body and behavior. Dr. Volkow's remarks were given on Feb. 4th at CADCA's 24th National Leadership Forum.

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From: [Ronald Kirkish](#)
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Cc: [Matt Wendt](#); [Chris Borello](#); [REDACTED]; [Ladera Grill Dan](#); [Bob Cooke](#)
Subject: Re: NIDA's Dr. Nora Volkow Discusses Marijuana's Effects on the Brain, Body & Behavior
Date: Thursday, March 25, 2021 8:00:22 AM

And if you have time, this is another NIH Dr. Nora Volkow video explaining how drugs hijack the brain, causing a person to become a drug addict; especially including marijuana.

<https://youtu.be/X1AEvkWxbLE>

Ronald L. Kirkish
[retired Drug Prevention Officer, NCRIC/SF-HIDTA]

On Mar 25, 2021, at 7:17 AM, Ronald Kirkish [REDACTED] > wrote:

<7C97896E-3D54-41B9-BC9B-CE6E492DC06F.jpeg>

**NATIONAL INSTITUTE OF DRUG ABUSE, DIRECTOR DR.
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From: [Ronald Kirkish](#)
To: [Christina Turner](#); [Rich Constantine](#); [Yvonne Martinez Beltran](#); [Rene Spring](#); [John McKay](#); [Shane Palsgrove](#); [Gino Borgioli](#)
Cc: [Bob Cooke](#); [Matt Wendt](#); [Chris Borello](#); [Ladera Grill Dan](#); [REDACTED] [Terry Ratto](#)
Subject: Re: Santa Cruz area residents 'blissfully unaware' of illegal drug trade in the forest
Date: Wednesday, March 31, 2021 11:02:00 AM

So, please ask yourselves folks, why are Mayor Constantine and Councilman Spring so interested in helping kids make such poor life choices? To destroy their lives, their futures.....why??

Ronald L. Kirkish

On Mar 31, 2021, at 10:47 AM, Ronald Kirkish [REDACTED] > wrote:

Dear All,

As in the City of Santa Cruz, CA, the City of Morgan Hill has at least two individuals sitting on Morgan Hill's City Council whose lax attitude towards drug abuse and whose agenda it is to advocate for permitting marijuana businesses to operate within the City Limits of Morgan Hill.

In a recent email, I shared my concerns that should these two individuals be successful in their 3rd attempt to aid and abet this business to open in MH, they would be turning their city into the likes of Santa Cruz, a horror story that has created a hell-hole of drug abuse for their community all because of their liberal drug laws.

For your consideration:

Santa Cruz area residents 'blissfully unaware' of illegal drug trade in the forest

<https://www.mercurynews.com/2010/05/21/santa-cruz-area-residents-blissfully-unaware-of-illegal-drug-trade-in-the-forest/>

The Citizens of Morgan Hill do not deserve to have their community turned into a community like Santa Cruz.

Ronald L. Kirkish

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From: [Ronald Kirkish](#)
To: [Christina Turner](#); [Rich Constantine](#); [Yvonne Martinez Beltran](#); [Rene Spring](#); [John McKay](#); [Shane Palsgrove](#); [Gino Borgioli](#)
Cc: [Bob Cooke](#); [Matt Wendt](#)
Subject: Santa Cruz Media Release: Narcotics and Weapons seizure [meth]
Date: Thursday, April 8, 2021 10:09:57 AM
Attachments: [UNADJUSTEDNONRAW_thumb_6dd.jpeg](#)

Dear All,

On more than a few occasions, I've tried to warn the elected's in the City of Morgan Hill, why it would be irresponsible for them to vote to approve allowing marijuana businesses in their city's jurisdiction.

I've warned that these businesses provide a hub for criminals to sell their whole smorgasbord of illegal and dangerous drugs, illegal guns and so much more; including blackmarket marijuana.

I have also used the City of Santa Cruz as the not so shining example for what **"happens"** when a city has politicians whose agenda is to be "soft on drugs"; especially marijuana.

Matt, if you agree, please consider share this important information with others within your sphere of influence and who reside in Morgan Hill.

For your consideration and B/r,

Ronald L.Kirkish



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From: [Nancy Benich](#)
To: [Rene Spring](#); [Rich Constantine](#); [John McKay](#); [Yvonne Martinez Beltran](#); [Gino Borgioli](#); [Christina Turner](#)
Subject: Smoke shops and marijuana dispensaries
Date: Wednesday, March 24, 2021 3:10:52 PM

Dear Sirs and Madam,

I highly object to encouraging Smoke Shops and or marijuana dispensaries to do business in Morgan Hill. Research has shown that many who frequent these shops obtain prescriptions illegally and do not have legitimate reasons for using medical marijuana. Research also shows that children sometimes obtain access to this addictive drug. Early use of pot can have severe long term effects on the human body. Please do not vote to allow these kinds of businesses in Morgan Hill.

Nancy Benich
Retired Teacher

Sent from my iPhone

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From: [Ronald Kirkish](#)
To: [Christina Turner](#); [Rich Constantine](#); [Yvonne Martinez Beltran](#); [Rene Spring](#); [John McKay](#); [Shane Palsgrove](#); [Gino Borgioli](#)
Cc: [Matt Wendt](#)
Subject: Title: Smokescreen (National Version)
Date: Tuesday, April 6, 2021 8:54:26 PM

Dear all,

You want to know the truth about pot?? Here it is for your consideration.

Don't be fooled by the medical marijuana smokescreen. Every state that has legalized recreational marijuana started by passing seemingly harmless “medical marijuana” laws

Title: Smokescreen (National Version)

<https://youtu.be/OKMMcritHb0>

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From: Fawn Myers <[REDACTED]>
Sent: Friday, April 16, 2021 5:40 PM
To: Michelle Bigelow <Michelle.Bigelow@morganhill.ca.gov>
Subject: Agenda for 4/21/21 - On retail cannabis

Dear City Clerk,

I have submitted the following to the Mayor, Mayor Pro Tem, and each council member:

Dear Council Member,

After a thorough discussion of allowing storefront retail of cannabis products in Morgan Hill, the City Council ultimately voted no.

Despite a robust discussion and community engagement on this topic in 2019, a council member has asked that the issue be brought forward again. As with many topics, there are competing interests and facts, and it behooves all of us within the community to ponder the motivation of those who are in favor of retail cannabis.

- **Interest:** Increase local tax base. **Competing facts:** Other communities have NOT experienced an increase in local tax revenue when adjusting for increased security and enforcement costs.
- **Interest:** Increase access for local residents to legalized cannabis products. **Competing facts:** Residents who are legally able to purchase already have access to legal products in nearby communities and by ordering online. Those who wish to purchase may already do so.
- **Interest:** Cannabis industry wants access to expand their market. **Competing facts:** Expanding the market may be good for the individual business owner but there are costs to the city (increased security and enforcement) and the larger community (increased product available for underage consumers) by increasing the amount of cannabis within the area.
- **Interest:** Elected officials may want to appease a portion of their constituents. **Competing facts:** Have any of the elected officials received a campaign contribution from the cannabis industry or from individual cannabis business owners who now expect to buy a favorable vote?

I share with you a recent editorial from Denver. Communities are struggling with legalization of cannabis and increased need for services and intervention for who abuse the products. We can learn from these communities. The concluding statement in this article is: "Shutting down the pipeline to our schools is essential for public health and safety."

THE DENVER POST EDITORIAL BOARD on February 28, 2021.

“Colorado doctors say they are seeing an alarming spike in patients suffering psychosis — a break from reality that comes with disorders like schizophrenia — especially in young patients using high-potency marijuana concentrates.

“It’s OK to be skeptical of that anecdote. We were too. After all, marijuana is a natural plant that has been used for centuries as a medicine and for fun. It gives users a mild, mostly benign, high from the compound Delta-9-tetrahydrocannabinol.

“However, reading peer-reviewed research in top medical journals around the world has led us to conclude the risk of high-potency marijuana to Coloradan’s mental health is substantial. Marijuana must be regulated as any other harm-causing food, medicine or recreational drug. Products with high levels of caffeine are regulated for safety. Tobacco products come with warnings about cancer, and flavored cigarettes have long been banned. Grain alcohol like Everclear isn’t sold in grocery stores or convenience stores for a reason.

“And yet, a teen with a medical marijuana card is able to “loop purchase” — the act of going to several stores to purchase the maximum allowable amount multiple times — enough watermelon-flavored concentrate to have his or her entire senior class high for a week.

“Chris Rogers, the medical director of child and adolescent services at The Medical Center of Aurora, has no doubt that high-potency marijuana concentrates are causing psychosis in the adolescent patients he treats.

“ ‘It has not been good for the kids of Colorado,’ Rogers, the past-president of the Colorado Child and Adolescent Psychiatry Society, said. He said patients exhibit extreme paranoia and lose all touch with reality believing doctors and parents are out to get them or that food and water are poison. “There’s no telling who comes back from this and who doesn’t. It can be recurrent, and it tends to get worse.”

“This isn’t your grandma’s joint. This new age remix of chemically isolated THC in a crystal-like or liquid substance — shatter, oil or wax — is heated with a butane torch or vape pen and inhaled. It’s called dabbing. And the products contain 60% to 90% THC, generating a high described as mind-blowing in marijuana publications.

“When Colorado voters approved the sale of marijuana for both medical and recreational use, many of us were sold on it being a holistic remedy for our aches, pains and anxiety. We still believe that is the case for many marijuana products on the market today.

“But for a decade now peer-reviewed research in medical journals has been documenting the prevalence of marijuana use, particularly of these high-potency concentrates, among patients suffering psychosis. Studies in the Lancet Psychiatry, Neuropharmacology, Asian Journal of Psychiatry, American Journal of Psychiatry, The American Journal on Addictions and World Psychiatry, have explored the link.

“There is some research suggesting that the link may be correlated and not causal – meaning those suffering from psychosis may be more likely to use cannabis and other drugs to self-medicate. But one study, in particular, found a higher rate of psychosis in cities with easy access to high-concentrate marijuana in addition to a high rate of concentrates use among those seeking treatment for psychosis.

“Cannabis users need to know the risks. We learned from Big Tobacco the damage of waiting for scientifically proven causation.

“Colorado lawmakers must take action this session. Legislation is being proposed that would cap the potency of marijuana products to something more reasonable like 30%, which is about the most that can be found in the actual non-refined flower product. Critically, the legislation also must

create a shared computer system for tracking purchases across multiple stores to prevent looping. And we must find a way to ensure teens with medical marijuana cards are getting the drug they need for medical purposes and that's all.

"We aren't calling for the recriminalization of these drugs — putting teens behind bars for selling a legal product to their friends would do more harm than good. But shutting down the pipeline to our schools is essential for public health and safety, and there are reasonable measures we can put in place to protect teens."

Respectfully,

Fawn

Fawn Myers
Assistant Superintendent of Human Resources
Morgan Hill Unified School District
15600 Concord Circle
Morgan Hill, CA 95037
408-201-6015 or ext. 51015
MyersF@mhusd.org

Input - Intellection - Learner - Context - Relator

"I define a leader as anyone who takes responsibility for finding the potential in people and processes, and who has the courage to develop that potential." Brené Brown, *Dare to Lead: Brave Work. Tough Conversations. Whole Hearts*

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From: [Tom Guinane](#)
To: [Christina Turner](#); [Rich Constantine](#); [Yvonne Martinez Beltran](#); [Rene Spring](#); [John McKay](#); [Shane Palsgrove](#); [Gino Borgioli](#)
Subject: Please do not allow the sale of marijuana in our city!
Date: Monday, March 22, 2021 12:43:01 PM

You all know the arguments. We do not need this in our city.

I applaud your efforts to curb tobacco use in our city. However, if you approve marijuana use, what conflicting message are you sending to our children:
Don't vape, toké instead?

We are better than this. Please do not allow the sale, distribution of growth of marijuana in Morgan Hill.

--

Thank you,
Tom Guinane

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From: [Wisejsm25](#)
To: [Rene Spring](#); [Rich Constantine](#); [John McKay](#); [Yvonne Martinez Beltran](#); [Gino Borgioli](#); [Christina Turner](#)
Subject: Proposed Commercial Marijuana Shops
Date: Friday, March 19, 2021 3:52:02 PM

As a Morgan Hill resident I am deeply concerned about the possibility of Marijuana Shops being proposed in our beautiful city.

As a retired nurse, the dangers of marijuana is something to be seriously respected. Marijuana can lead to long term drug usage.

The strength of marijuana is much stronger now compared to 20 years ago. The medicinal benefits are for a select cliental and can

be obtained with a short drive to San Jose. Morgan Hill needs to support it's small businesses and restaurants. To look at Marijuana

shops as possible tax revenue is short sighted for the long term recuperation post pandemic.

Jeanne Wise RN

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Review

A Review of Cases of Marijuana and Violence

Norman S. Miller ^{1,2,*}, Redon Ipeku ³ and Thersilla Oberbarnscheidt ⁴

¹ CEO of Health Advocates PLLC, East Lansing, MI 48823, USA

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³ College of Law, Michigan State University, East Lansing, MI 48823, USA; redon.ipeku@gmail.com

⁴ Department of Psychiatry, University of Pittsburgh Medical Center, Pittsburgh, PA 15213, USA; oberbarnscheidt@upmc.edu

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Received: 9 December 2019; Accepted: 25 February 2020; Published: 29 February 2020



Abstract: Marijuana is the most consumed illicit drug in the world, with over 192 million users. Due to the current legalization push of marijuana in the United States, there has been a lack of oversight regarding its public health policies, as marijuana advocates downplay the drug's negative effects. This paper's approach is from a public health perspective, focusing specifically on the cases of violence amongst some marijuana users. Here, we present 14 cases of violence with chronic marijuana users that highlight reoccurring consequences of: marijuana induced paranoia (exaggerated, unfounded distrust) and marijuana induced psychosis (radical personality change, loss of contact with reality). When individuals suffering from pre-existing medical conditions use marijuana in an attempt to alleviate their symptoms, ultimately this worsens their conditions over time. Although marijuana effects depend on the individual's endocannabinoid receptors (which control behavioral functions, like aggression) and the potency level of tetrahydrocannabinol (THC) in the drug, scientifically documented links between certain marijuana users and violence do exist. Wider public awareness of the risks and side effects of marijuana, as well as a more prudent health policy, and government agency monitoring of the drug's composition, creation, and distribution, are needed and recommended.

Keywords: marijuana; cannabis; tetrahydrocannabinol; THC; violence; law; paranoia; delusions; psychosis; public policies

1. Introduction

In the United States, ten states have legalized the recreational use of marijuana and over 20 states have decriminalized the recreational use of it. Recent reports suggest, however, that the increase of the recreational use of marijuana is causing detrimental effects to individuals, as well as the society as a whole [1–3]. These effects include, but are not limited to, the increase of violence, the increase of thriving underground marijuana markets, and increase in car accident claims after the legalization of marijuana where the recreational use of marijuana was legalized [1–3]. This is caused by lack of oversight. Marijuana is being legally sold with high THC concentration levels without taking into account its addictive qualities and adverse effects. On the other hand, and contrary to popular belief, marijuana is still illegal in the Netherlands and it is decriminalized. However, the consumption and storage of marijuana are limited by law and the approach taken by the Netherlands is to decriminalize the drug in order to be able to help individuals struggling with marijuana use. This prudent oversight has resulted in a decreased in violence and people are able to get the care they need to deal with addiction and become less prone to violence [1–3].

Furthermore, the consumption of marijuana is associated with an increase in violent behavior over the course of an individual's lifespan, a high risk of psychosis for frequent users, an increase

of cardiovascular diseases, and deterioration in health for individuals who have pre-existing mental health issues such as Post Traumatic Stress Disorder, social anxiety, and depression [4–6].

According to research studies, marijuana use causes aggressive behavior, causes or exacerbates psychosis, and produces paranoia. These effects have been illustrated through case studies of highly publicized incidents and heightened political profiles.

These cases contain examples of repeated illustrations of aggression, psychosis and paranoia by marijuana users and intoxication. Ultimately, without the use and intoxication of marijuana, the poor judgment and misperceptions displayed by these individuals would not have been present, reducing the risk for actions that result in senseless deaths.

Import to these assertions, is that the current marijuana is far more potent in THC concentrations, the psychoactive component. Accordingly, and demonstrated in direct studies, more potent marijuana results in a greater risk for paranoid thinking and psychosis. In turn, paranoid behavior increases the risk for paranoid behaviors and predictably associated with aggressive and violent behaviors.

1. Marijuana use causes violent behavior through increased aggressiveness, paranoia, and personality changes (more suspicious, aggressive, and anger).
2. Recent illicit and “medical marijuana” (especially grown by care givers for medical marijuana) is of much high potency and more likely to cause violent behavior.
3. Marijuana use and its adverse effects should be considered in cases of acts of violence as its role is properly assigned to its high association.
4. Recognize that high potency marijuana is a predictable and preventable cause of tragic violent consequences.

2. Case Presentation

2.1. Marijuana Violence

On March 13, 2019, Anthony Comello admitted to, and subsequently was charged for, the killing of Frank Cali, a senior leader of the Gambino family in Staten Island, New York. Both men were allegedly having an altercation over Comello’s romantic interest on one of Cali’s relatives. Although Comello had no previous criminal encounters with law enforcement, reports suggest that he drew the attention of authorities by acting strangely in a federal courthouse when he offered to perform a citizen’s arrest on New York City’s Mayor, Bill De Blasio. Previously, Comello sought a U.S. Marshal to inquire how to perform a citizen’s arrest on the United States Speaker of the House, Nancy Pelosi. Comello admitted that, at the time of Cali’s killing, he was high on marijuana and shot Cali because he feared that the senior leader had a gun and would shoot him during their altercation [4,7].

On February 10, 2019, a man killed his 13-year-old nephew with a knife in Rustavi, Georgia. The man had a history of marijuana use. For days leading up to the killing, he was complaining about having dizziness, headaches, general weakness, nausea, and insomnia. He would also occasionally suffer from anxiety, irritability, and loss of appetite. His wife stated that he consumed and was under the influence of marijuana, which made his symptoms worse. The day before the killing, he tried to go to a clinic. However, the clinic rejected treatment by telling him to go to a psychiatric hospital. However, under the influence of drugs, he simply went home hours before killing his nephew [8].

On February 1, 2018, Nikolas Cruz killed 17 students and staff at the Marjory Stoneman Douglas High School in Parkland, Florida, and injured 17 others. Cruz was diagnosed as developmentally delayed at age three and had numerous disciplinary issues dating to middle school. From a young age, he started consuming marijuana heavily. He accounts that he would frequently “hear demon voices” and would consume large amount of marijuana to try and silence those voices. He also attempted suicide. During an interview after his mass shooting, he stated that he used “a lot of marijuana” as well as prescription tranquilizer Xanax [9,10].

On November 5, 2017, Devin Patrick Kelley carried out the deadliest mass shooting in Texas’ history, resulting in the death of 27 people and injuries to 20 others, by opening fire at worshippers

who were attending regular Sunday Service at the First Baptist Church in Sutherland Springs. Kelley was later shot by bystanders and killed during a high-speed chase with law enforcement agencies. The autopsy on Kelley revealed that toxicology tests detected marijuana and anti-anxiety drugs in his system. A report from the Federal Bureau of Investigation revealed multiple past incidents where Kelley also been under the influence of marijuana. Kelley's first on-record interaction with law enforcement authorities was when he was arrested for possession of marijuana and, subsequently, expelled from his high school. Since then, the record shows that Kelley started using marijuana frequently, as well as developing mental health issues that would lead him to have problems in his employment with the United States Air Force and multiple instances where he abused his step-son and his wife at the time [11,12].

On May 22, 2017, a suicide bomber, Salaman Abedi, detonated an explosive device in an area of the Manchester Arena, United Kingdom. The blast killed over 20 people and injured over 100 others. Evidence shows that, from a very young age, Abedi was a "party animal" who heavily consumed marijuana. Furthermore, he was described as a person who would start fights in the street for no reason, would act rude, and would refuse to do his homework in school. He was also described as a "very slow, uneducated and passive person" who displayed aggressive tendencies. Eventually, he began shutting himself off from other people, started becoming more violent, and started showing paranoia by making statements against western societies and hanging out with dangerous crowds. Evidence suggests that this paranoia, furthered with aggressive tendencies, led to Abedi's suicide bombing attack that day [1,13].

On May 18, 2017, Richard Rojas purposely drove a car along three blocks of pavement in New York's Times Square, killing a teenager and injuring 22 other people. Evidence indicates that Rojas was a heavy marijuana user. He admitted on the consumption of spiced-up marijuana right before committing the attack. Further, the record show that Rojas suffered from paranoia and hallucination, which have led him to make odd statements and partake in actions that negatively affected him in the work place or while interacting with others. Paranoia and hallucination caused him to "hear voices" that led him to commit that attack [2,14].

On November 23, 2016, Arcan Cetin carried out a mass shooting that killed five people and injured many others at the Cascade Mall in Washington. Evidence indicates that Cetin was a heavy marijuana consumer. Further, he had a past of violent behavior, with some incidents including the consumption of marijuana. Although doctors prescribed him medicine for Attention Deficit Hyperactivity Disorder and other mental health issues such as Post Traumatic Stress Disorder, anxiety, and depression, he stopped taking the medicine and substituted it with by excessively consuming marijuana. This led to aggravate his mood swings and being more violent. Before the shooting, he had threatened an ex-girlfriend who lived out of state. Evidence indicates that at, while committing the attack, Cetin was shouting a woman's name [15–17].

On July 26, 2016, Satoshi Uematsu stabbed to death at least 19 people and injured at least 26 others at a care facility in Sagamihara, Japan. Months prior the shooting, Uematsu suddenly started talking and acting strangely to his coworkers, who feared he could harm someone. Consequently, Uematsu tested positive for marijuana and was diagnosed with marijuana-induced psychosis and paranoid disorder after he delivered an ominous euthanasia letter to a Japanese House of Representative and telling his co-workers and the police that he intended to kill disabled people. Although he planned the attack in detail, evidence suggests that he later seemed to showed remorse and stated that "There was something wrong with [him]". These kinds of behaviors suggest that he was suffering from psychosis and paranoia since he was in the delusion that his acts would contribute to the Japanese society and the world [18,19].

On November 27, 2015, Robert Dear killed three people and injured nine others when he carried out a mass shooting in a Planned Parenthood clinic in Colorado Springs. Dear, along with many other users, moved to Colorado after the state legalized the recreational use of marijuana. Dear was a heavy user who was described by family and friends as "an angry and occasionally violent", and "deeply

disturbed”, individual who suffered from paranoia and mood swings. Moreover, he was described as a lonely religious extremist who had a history of domestic violence against his ex-wives, who gambled, and who committed adultery on multiple occasions. About a year before the shooting, he moved to Colorado where he lived in dire conditions at a squalid trailer without running water or electricity [20–22].

On July 16, 2015, Muhammad Youssef Abdulazeez killed five people and injured a couple of others in his drive-by shooting at a military recruiting center in Chattanooga, Tennessee. Prone to depression and manic episodes, he started smoking marijuana heavily in high school. This addiction was going on for many years and led his mental state to deteriorate further and cause him to fail a drug test at work. Further, he started writing suicidal notes to himself and was pulled over by a police officer for driving under the influence of marijuana and alcohol. Up until the shooting, evidence indicates that Abdulazeez had a hard time keeping a job because of his manic depressive/bipolar disorder and drug use [23,24].

On June 17, 2015, 21-year-old Dylan Roof murdered nine people who were attending a prayer service in a Church in Charleston, South Carolina. He claimed that his intentions were to start a race war. His acts were preceded by years of drug abuse. Reports reveal that Roof’s drug abuse started when he was 12 years old when he would smoke marijuana three times a day. When he was 16 years old, he tried to stop smoking marijuana after telling people that his daily marijuana usage caused him to be paranoid and hear voices. According to experts, Roof started suffering panic attacks when he was 16. Nonetheless, multiple accounts claim that he kept smoking marijuana and started abusing other drugs and alcohol. During his arrest for the Charleston shooting, Roof told police officers that he abused drugs before committing such heinous act [5,25,26].

On August 9, 2014, Michael Brown was fatally shot after a physical altercation with a police officer in Ferguson, Missouri. The autopsy and toxicology report revealed that Michael Brown had THC concentration of marijuana in his blood and urine. He had five nanograms of THC on his system, which causes approximately the same level of impairment as a 0.08 percent of blood alcohol level. That much THC notably impairs someone’s judgment and perception of the surrounding environment, which may lead to anxiety and paranoia. Evidence indicates that Brown tried to reach for the officer’s gun during the altercations, which led to the officer shooting at him in close range. Thus, evidence suggests that Brown’s behavior was most likely caused by paranoia [27,28].

On April 15, 2013, Dzhokhar Tsarnaev and his brother Tamerlan, killed three people and injured over 250 by detonating homemade pressure cooker bombs near the finish line at the Boston marathon. Both brothers were heavy marijuana users since they were young teenagers. Tamerlan was killed in a police shootout following the bombings and Dzhokhar was eventually apprehended by law enforcement officers. Several acquaintances and friends knew about both brother’s marijuana consumption and sales. One of Dzhokhar friend testified that he sold marijuana to Tsarnaev days before the Boston Marathon Bombings. Unrelated to the bombings, one of Tamerlan’s friends implicated Tsarnaev in the killing of three men whose bodies were found sprinkled with marijuana. Multiple accounts noticed an increase of violent behavior from Dzhokhar for some time leading up to the bombings [29–32].

On January 8, 2011, Jared Loughner shot and killed six people, while also injuring 14 others at the then-US Representative Gabrielle Giffords’s constituent meeting held in Tucson, Arizona. Although friends and acquaintances described him as an “awkward but friendly” young man, they started noticing his behavior drastically change in college. In high school, Loughner smoked marijuana on most days. Moreover, he also started immersing himself in conspiracy theories displayed paranoia. He dropped out of high school during his final year, but was able to attend a community college. Some college peers described him becoming mentally unstable by saying and doing things that were frightening. Other peers feared that he would do something like what he actually did. He was suspended from college and never returned. Subsequently, he tried to join the army but he was rejected because he failed a drug test. Consequently, he engaged in paranoid behavior that led to him to

engage in anti-government speech and target then-Representative Giffords during her constituent meeting [33,34].

These are among the many nationally reported violent cases that have, among others factors, a common root to what led these young people to commit acts of violence at the detriment to society as a whole: the extensive use or abuse of marijuana. In recent years, many States within the United States, as well as some other countries around the world, have decriminalized or legalized the recreational use of marijuana [8,12,13,19].

2.2. Paranoia: Marijuana Induced

In the cases above mentioned, one of the recurring conditions that most likely led perpetrators to commit violence was paranoia. Paranoia is defined by the medical dictionary as “an unfounded or exaggerated distrust of others, sometimes reaching delusional proportions”. Paranoid perceptions can co-occur with various other mental conditions as well, such as depression and dementia, and can be divided in three different psychological disorders: paranoid schizophrenia, delusional disorder (persecutory type), and paranoid personality disorder (PPD). All three conditions are similar in the sense that they all contain an “unreasonable fear” or “unreasonable belief” as the root of each condition. Hallucinations are also a common symptom on individuals who suffer from paranoia. Nonetheless, paranoia is also a likely side effect deriving from the consumption of marijuana, as well as other drugs and alcohol [3,18,31,35].

In the cases above mentioned, one of the recurring conditions that most likely led perpetrators to commit violence was paranoia. Paranoia is defined by the medical dictionary as “an unfounded or exaggerated distrust of others, sometimes reaching delusional proportions”. Evidence suggests that paranoia was among the factors that contributed in the actions of Anthony Comello, Salem Abedi, Richard Rojas, Satoshi Uematsu, Robert Dear, Dylan Roof, Michael Brown, and Jared Lougher. Each one had, in respective degrees, unreasonable beliefs. Comello admittedly shot Cali because he feared Cali had a gun and was about to shoot him. Abedi displayed paranoid beliefs while making statements against Western societies. Rojas’ paranoia was displayed in his statements and action witnessed by his coworkers; also, he claims he heard voices that led him to commit the attack. Uematsu was diagnosed with Paranoid disorder and psychosis, which led him to have delusion beliefs that his despicable acts would make contributions to society. Dear was described as a lonely religious extremist but also had a history of domestic violence, gambling, and adultery. Roof wanted to start a race war. Brown was likely paranoid about his surroundings based on the report. Lougher was suffering from paranoia and was immersing himself with conspiracy theories. Many of these tragedies are committed by individuals who were paranoid and were consuming marijuana. It is very likely that marijuana played an active role in these people’s paranoia, considering that the chemical composition of the drug has compounds that alter a person’s perception of reality as mentioned below (Table 1, [17,36–38]).

Table 1. Personality change toward aggression or violence.

Paranoid Personality Disorder	
A pervasive distrust and suspiciousness of others such that their motives are interpreted as malevolent, beginning by early adulthood and present in a variety of contexts, as indicated by four (or more) of the following:	
1.	Suspects, without sufficient bases, that others are exploiting, harming, or deceiving him or her.
2.	Is preoccupied with unjustified doubts about the loyalty or trustworthiness of friends or associates.
3.	Is reluctant to confide in others because of unwarranted fear that the information will be used maliciously against him or her.
4.	Reads hidden demeaning or threatening meanings into benign remarks or events.
5.	Persistently bears grudges (i.e., is unforgiving of insults, injuries, or slights).
6.	Perceives attacks on his or her character or reputation that are not apparent to others and is quick to react angrily or to counterattack.
7.	Has recurrent suspicions, without justification, regarding fidelity of spouse or sexual partner.

2.3. Psychosis: Marijuana Induced

Another condition that is commonly present in cases like the above are psychotic conditions. Psychotic conditions affect an individual's mind in a way that causes that individual to experience loss of contact with reality. During a psychotic episode, the perception of reality is altered to the point where an individual is unable to distinguish reality from hallucinations. Psychotic individual can also experience delusions (false beliefs), incoherent speech, inappropriate behavior, depression, anxiety, sleep problems, social withdrawal, lack of motivation, and difficulty functioning overall [16,17,37].

In the above-mentioned cases, Uematsu was diagnosed with marijuana-induced psychosis. His coworkers' testimony that he would talk and act inappropriately, his paranoia, and his delusion that killing patient at a care facility would benefit the society as a whole, demonstrates that he was suffering from psychotic conditions that made him lose contact with reality and led him to commit such acts. Similar symptoms were also present in cases where perpetrators acted with delusional beliefs, such as: Abedi, who suddenly started making inappropriate statements against Western societies; Dear, who was a lonely religious extremist but also had a history of domestic violence, gambling, and adultery, which strongly indicates that he was delusional, incoherent, and lost contact with reality; Rojas, Cruz, and Roof who suffered from hallucinations while having consumed large amount of marijuana throughout their lives.

Often, individuals who suffer from pre-existing medical conditions use marijuana in an attempt to alleviate their conditions. The man in Rustavi, Cruz, Kelley, Cetin, Abdulazeez, and Cruz also consumed marijuana because they were under the illusion that it would help them cope with their conditions, whether those conditions were likely induced by marijuana or not. However, it ended up worsening their conditions as time went by. What individuals are unaware of when it comes to self-medicating, is that the marijuana they consume does not have compounds that alleviate their pain or conditions; the marijuana they consume has many compounds that negatively alter their perceptions, which leads to worse conditions (Tables 2 and 3, [2,9,10,12,39–41]).

Table 2. Psychosis.

Substance-Induced Psychotic Disorder
A. Presence of one or both of the following symptoms: Delusions. Hallucinations.
B. There is evidence from the history, physical examination, or laboratory findings of both (1) and (2): The symptoms in Criterion A developed during or soon after substance intoxication or withdrawal or after exposure to a medication.
The involved substance is capable of producing the symptoms in Criterion A.
C. The disturbance is not better explained by a psychotic disorder that is not substance-induced. Such evidence of an independent psychotic disorder could include the following:
The symptoms preceded the onset of the substance use; the symptoms persist for a substantial period of time (e.g., about 1 month) after the cessation of acute withdrawal or severe intoxication; or there is other evidence of an independent non-substance-induced psychotic disorder (e.g., a history of recurrent non-substance-related episodes).
D. The disturbance does not occur exclusively during the course of a delirium.
E. The disturbance causes clinically significant distress or impairment in social, occupational, or other important areas of functioning.

Table 3. Paranoia.

Subtypes Delusional Disorder
Grandiose type: This subtype applies when the central theme of the delusion is the conviction of having some great (but unrecognized) talent or insight or having made some important discovery.
Persecutory type: This subtype applies when the central theme of the delusion involves the individual's belief that he or she is being conspired against, cheated, spied on, followed, poisoned or drugged, maliciously maligned, harassed, or obstructed in the pursuit of long-term goals.

3. Discussion

3.1. Marijuana: General Facts

Marijuana is the most consumed illicit drug in the world, with cannabis use and dependence continuing to increase over the past two decades as the trend of legalization persists. According to the United Nations Office on Drug and Crime, over 192 million of users (ages 15–64) worldwide regularly consume marijuana, with a lifetime use of 20% of the World's population and a significant number of individuals regularly consuming the drug [42]. In a 2017 study by the Global Burden of Disease, it estimated the age-standardized rate of cannabis use disorder, or CUD, was 289.7 per 100,000 population (95% Uncertainty Interval (UI) 248.9–339.1), affecting 22.1 million people (95% UI 19.0–25.9 million) [42]. The United States and Canada were in fact found to have among the highest age-standardized rates of CUDs in the world [42].

Cannabis is a complex plant that is made up of 400 chemical entities of which more than 60 are cannabinoid compounds, with delta-9-tetrahydrocannabinol and cannabidiol being the major compounds. Some of those cannabinoid compounds tend to have opposing effects as they affect a very important neurotransmitter system called endocannabinoid system [2]. Moreover, some cannabinoids bind to central cannabinoid receptors to control many behavioral functions, such as aggression. Furthermore, the delta-9-tetrahydrocannabinol (THC) is the chemical responsible for the intoxicating effects on individuals who consume marijuana. The THC level determines the potency of marijuana and high levels of THC likely lead to higher negative health consequences [43–45].

Researchers refer to marijuana having a “high potency” when it has a THC level of more than 10%. In the past years, the THC of confiscated marijuana samples rose from 3% in 1980 to 12% in 2012. Moreover, adolescents between 15 and 17 years old have reported significantly higher ED visits from 2005 to 2010, which is likely caused by the increase of marijuana potency during that time period [7]. Although THC levels that exceed 10% most likely cause serious negative health consequences, it is not uncommon to find marijuana, which THC content exceeds 20% and occasionally 230%, to be sold in places where marijuana is legalized, such as the state of Colorado [7,8]. Furthermore, while daily users refer to high potency marijuana as “the good stuff”, it is reported that daily users are five times more likely to find themselves in the hospital for psychosis symptoms such as delusions and hallucinations caused after consuming marijuana. As this paper will mention in the following pages, however, delusions and hallucinations are not the only negative effects stemming from the consumption of marijuana. Cardiovascular diseases, depression, anxiety, and violence are also among the common negative effects of marijuana [13,14,27,34,46].

3.2. Mental and Behavioral Changes

We apply the results of the research regarding the role of marijuana in violence. We use concepts such as personality changes, perpetrator violence, and psychosis to establish our association of marijuana with the unfortunate cases. The purpose is to illustrate negative but preventable tragic outcomes due to marijuana and its role in violence. The overall objective is to identify the role of marijuana and to suggest it is avoidable and causal nature in inducing violence [47–49].

In all the cases selected, marijuana use was present. For some of the individuals, marijuana use was confirmed by a physical test. In other cases, marijuana was present on their person, identifying drug use. Moreover, some individuals of the case were identified as marijuana users by outside sources.

Present in all the cases, as a result of marijuana use, was the change in personality, aggressive behavior, paranoia, and/or psychosis. All these symptoms have been documented by scientific research to be the result of marijuana use and intoxication. Another symptom, victimization, has a positive correlation with cannabis use, and the cases illustrate marijuana users and victimization. In other words, marijuana users become victims of aggression in response to their perpetration under the influence of marijuana (Table 4, [50,51]).

Table 4. What did the cases have in common?

Cases of Marijuana Use and Symptoms	
Case	Symptom
Anthony Comello	Paranoia
Man in Rustavi	Aggressiveness, Personality Change
Nikolas Cruz	Psychosis, Hallucinations
Devin Patrick Kelley	Aggressiveness, Personality Change
Salaman Abedi	Aggressiveness, Personality Change, Paranoia
Richard Rojas	Paranoia, Hallucinations
Arcan Cetin	Aggressiveness, Personality Change
Stoshi Uematsu	Psychosis, Paranoia
Robert Dear	Aggressiveness, Paranoia
M.Y. Abdulazeez	Aggressiveness, Paranoia
Dylan Roof	Paranoia, Hallucinations
Michael Brown	Aggressiveness, Personality Change, Paranoia
Dzhokar Tsarnaev	Aggressiveness, Personality Change
Tamerlan Tsarnaev	Aggressiveness, Personality Change
Jared Loughner	Paranoia, Psychosis

The DSM V provides diagnostic categories for paranoid personality, paranoia and psychosis associated with marijuana use [52].

3.3. Marijuana and Violence

As mentioned above, some compounds found in marijuana have an effect on central endocannabinoid receptors that control many behavioral functions, including aggression. Although there are some instances where marijuana consumption causes mild euphoria and relaxation on users, adverse acute psychopharmacological effects are very likely to occur. A study that collected data from half a century points out that even a single dose of cannabis may cause “impairments in behavioral control that may underlie impulsive, violent behavior” by altering “the normal functioning of its underlying natural substrate, the ventrolateral prefrontal cortex in man”. Furthermore, the results collected in that study provide a strong indication that chronic marijuana use suggests a possible causal effect with predicting future violence. More studies have reported that panic attacks, confusion, hallucinations, suspiciousness, and paranoia often occur in chronic marijuana users, affecting their cognition in ways that enhance aggressive responses to perceived provocations. Further, recent studies have proven causal connections between marijuana and psychosis [38,39,53].

Studies Show Violence and Aggression Associated with Marijuana Use

Marijuana intoxication results in panic reactions and paranoid feelings whose symptoms lead to violence [49]. The sense of fear, loss of control, and panic is associated with violence [4,54,55]. Also marijuana use increases heart rate, which may be associated with violent behavior [34,47,56,57].

When people stop using marijuana they may experience a variety of withdrawal symptoms, including sleep disturbance, irritability or restlessness, loss of appetite, anxiety, and sweating [46,58]. Experiencing any of these symptoms can make a person angry, ranging from mild irritation to violent rage. Marijuana withdrawal can lead to intimidating violent or bullying behavior, endangering the perpetrator or other people and property [59].

In incarcerated subjects, studies found that one-third of the subjects that committed homicide had used marijuana twenty-four hours before the homicide. Further, three-quarters of those subjects were experiencing at least one mental or physical effect from marijuana intoxication when the homicide occurred.

Similarly, individuals in remote Aboriginal Australian Communities who reported current cannabis use were nearly four times more likely than nonusers to present at least once for violent

trauma. Homicide offenses have been repeatedly documented to be connected to drug use, and marijuana is often one of those drugs [60].

Marijuana use is also indicative of intimate partner violence [61]. Consistent use of marijuana during adolescence was the most predictive indicator of intimate partner violence [31]. Also, marijuana use during adolescence was associated with perpetration or both perpetration and victimization by an intimate partner in early adulthood [62].

There is also a positive association between peer victimization and cannabis use in adolescents. Cannabis use is likely to be associated with perpetrator victims, those who initiate violence while using marijuana and experience retaliation to their aggressive acts. This trend suggests that cannabis use might be strongly related to outward aggression by the user [1].

Cannabis use also increases an adolescent's own likelihood of being victimized by peers. In particular, mental effects of cannabis has the potential to decrease the ability to accurately identify, evaluate, or avoid potentially dangerous persons or situations [59].

3.4. Psychosis

Psychosis is defined by the medical journal as “a symptom or feature of mental illness typical characterized by radical changes in personality, impaired functioning, and a distorted or nonexistent sense of objective reality”. Psychosis causes individuals to have an impaired perception of reality, consisting of hallucinations and paranoia [2,8,16]. Consumption of marijuana also proportionally increased the risk of other mental illnesses, such as schizophrenia and other types of psychoses. These marijuana use disorders are often associated with its dependence, since a user's brain requires more and more substance use to keep the desired euphoric effect in the brain. Thus, a user is most likely to experience withdrawal symptoms when not taking the drug. Irritability, anger, and aggression are common withdrawal symptoms that former marijuana users, or marijuana users who try to quit the consumption, experience [46]. Although marijuana advocates generally state that the consumption of the drug helps individuals who suffer from PTSD or other psychiatric conditions, studies suggest that the consumption of marijuana in patients with PTSD, and in patients following a psychiatric discharge, increases the likelihood of those patients being prone to violence compared to patients who do not consume the drug [4,37]. A 50 year-span study on adult patients in the United Kingdom indicated that continued cannabis use by an individual leads is associated with a 7-fold greater odds for commission of subsequent violent crimes. The authors of that study suggest that marijuana consumption would cause impairments in neurological circuits controlling behavior that makes a user prone to violent behavior [36].

Marijuana advocates downplay the risks associated with its unrestricted consumption by saying that the drug is safe, which is a similar approach adopted by Big Tobacco years ago to downplay the risks of smoking. Yet, despite tobacco being legal, people today are well aware of the risks associated with its consumption. Stating that consuming marijuana is safe goes against many studies and researches performed that prove negative health consequences associated with the consumption of marijuana due to the multitude of compounds present and high THC levels being consumed by individuals [9–11,19,21].

Studies Show Psychosis and Paranoia

Cannabis intoxication leads to acute psychosis in many individuals and can produce short-term exacerbations of preexisting psychotic diseases [63–66]. Cannabis use also causes symptoms of depersonalization, fear of dying, irrational panic and paranoid ideas which coincide with acute intoxication and remit quickly [67].

It was reported that 15% of cannabis users identified psychotic-like symptoms, the most common being hearing voices or having unwarranted feelings of intimidation and persecution or paranoid thoughts [38].

The potency of the marijuana has varying effects on users. A study analyzed the proportion of patients in South London with first episode psychosis attributable to high-potency cannabis use and found that the use of high-potency cannabis (skunk) confers an increased risk of psychosis compared with traditional low-potency cannabis (hash) [68].

The risk of individuals having a psychotic disorder showed a roughly three times increase in users of skunk-like cannabis (high-potency) compared with those who never used cannabis. Use of skunk-like cannabis everyday conferred the highest risk of psychotic disorders compared with no use of cannabis [69]. Potency in these studies is similar to marijuana currently available in the U.S. Direct administration of cannabis resulted in predictable increased occurrence of paranoia in comparison to those who received placebo.

Epidemiological studies showed that cannabis is the most frequently used drug among those diagnosed with bipolar disorder [70]. Studies have also shown that as the frequency of cannabis use increases, so does the risk for psychotic disorders, such as schizophrenia [71]. The investigators of Schizophrenia Commission concluded that cannabis use is the most preventable risk factor for psychosis [72–77]. High proportions of persons with schizophrenia report regular cannabis use and meet criteria for cannabis use disorder [78].

Findings suggest that activity in the basal lateral medulla is involved in marijuana-induced paranoia (state of becoming afraid of things that would normally trigger fear) [77]. That means marijuana is actually enhancing type of learning about fear, leading the brain to jump to conclusions about the mild experiences, perceiving them as scarier and more strongly connected to other scary situations than they are. This marijuana induced fear-based learning helps explain why marijuana users tend to see patterns in events that are not real, such as conspiracies [78].

In a study analyzing a college population, heavy users of marijuana displayed significantly greater impairment than light users on intentional/executive functions. This led to the conclusion that heavy marijuana use is associated with residual neuropsychological effects even after a day of supervised abstinence from the drug [53,79].

3.5. Public Policies

These negative effects of marijuana need to be taken into account for public policy in order to treat people with addiction and possibly avoid the tragedies above mentioned. The public should know the negative consequences associated with the compounds present within the marijuana products they consume. The current legalization push in the United States lacks prudent public policy and control over the process. A prudent public policy would be to decriminalize the drug and have its composition, creation, and distribution controlled by an agency that would keep THC levels at a minimum. Moreover, studies that try to find ways to treat individuals addicted to marijuana and ways to make the drug safer by pinpointing each compound and determine whether some compounds may indeed help people who have curable health conditions. This approach would reduce the negative effects of high THC on the human body and would decrease violence occurring during marijuana deals in the black market. Furthermore, this approach will likely decrease the violence caused by marijuana and, most importantly, it would prevent tragedies such as the ones mentioned above [8,13,31,80].

4. Conclusions

The main scope of this paper was to inform the general public about the relationships between marijuana and violence in the general population and in individuals with mental illnesses, as recent findings do link marijuana with cases where psychosis was present. This article is a case review and not a research study; therefore, the chief limitations regard inferences that can be made from a case study. However, the findings suggest a further need for research on marijuana and violence. The authors of this paper did not intend to take sides regarding the legalization of marijuana. The focus was public health in regards to marijuana [2,11,14,18,36].

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Marijuana Violence and Law

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Abstract

Marijuana is currently a growing risk to the public in the United States. Following expanding public opinion that marijuana provides little risk to health, state and federal legislatures have begun changing laws that will significantly increase accessibility of marijuana. Greater marijuana accessibility, resulting in more use, will lead to increased health risks in all demographic categories across the country. Violence is a well-publicized, prominent risk from the more potent, current marijuana available.

We present cases that are highly popularized storylines in which marijuana led to unnecessary violence, health risks, and, in many cases, both. Through the analysis of these cases, we will identify the adverse effects of marijuana use and the role it played in the tragic outcomes in these and other instances. In the analysis of these cases, we found marijuana as the single most common, correlative variable in otherwise diverse populations and circumstances surrounding the association of violence and marijuana.

Keywords: Marijuana; Bullying behaviour; Aggression; Intoxication; Cannabis use

Cases Reports

Michael Brown robbed a convenience store for a large box of cigarillos to smoke marijuana and assaulted the store clerk. Subsequently, the 18 year old Brown attacked police officer Darren Wilson without provocation, punching him in the face through the window of his police car, and attempting to grab his gun. Wilson shot and killed Brown as he tried to escape in a very agitated, paranoid, confused and aggressive state. Along with the cigarillos, marijuana was found in Brown's system at the time of death [1].

Trayvon Martin was shot and killed by George Zimmerman, a neighborhood watch volunteer. Marijuana was found in Martin's system the night he was shot [2]. He also had been suspended from school for possession of marijuana.

Laquan McDonald slashed a tire and damaged a police car. After ignoring verbal instruction to drop the knife, he was shot sixteen times. McDonald had used marijuana every day since the age of 10 or 11 years old [3].

Deven Guilford was shot and killed by a policeman during a traffic stop after becoming assaultive. He was a known marijuana user as he professed his "love" for marijuana on social media [4].

Freddie Gray fell into a coma while being transported after an arrest for possession of an illegal switchblade. At the time of his death, Gray tested positive for marijuana and heroin. Gray had multiple prior charges for marijuana possession [5].

Lakeisha Holloway drove her car onto a sidewalk on the Las Vegas strip, killing one and injuring over thirty-five others [6,7]. The

toxicology exam illustrated that Holloway had marijuana in her system at the time of the vicious attack [8].

Robert Lewis Dear shot three people and injured nine others at a Planned Parenthood Clinic in Colorado Springs, Colorado. He was a marijuana user and illustrated mental health issues [9].

Joseph Jesse Aldridge found his mother dead of natural causes and went on a shooting rampage, killing seven people and himself. In 2008, Aldridge had pled guilty to federal charges of possessing firearms while using marijuana. He was required to complete mental health and substance use counseling for marijuana [10].

Jared Lee Loughner shot Arizona Congresswomen Gabrielle Gifford and eighteen other, killing six. He was arrested in 2007 for marijuana possession and other paraphernalia. Friends and classmates knew him as a marijuana user. He was also diagnosed with paranoid schizophrenia [11].

The Tsarnaev brothers killed three and injured 264 others with bombs at the Boston Marathon on April 5, 2013. Friends say they were both heavy marijuana users. The wife of the older brother, Tamerlan, described a change in his attitude as he became violent toward her with his increasing marijuana use [12].

A Dearborn Heights man plotted ISIS attacks on church. In an affidavit filed in a criminal complaint on weapons and marijuana charge, Khalil Abu-Rayyan is described as being an ISIS supporter who talked about committing violent acts of terrorism, including shootings and beheadings [13].

Osama bin Laden became paranoid and obsessive in the days prior to his death. High-strength marijuana plants were found within bin Laden's compound in Pakistan [14].

Studies Show an Association between Marijuana and Mental or Physical Consequences

Studies show violence and aggression with marijuana use

Marijuana intoxication results in panic reactions and paranoid feelings whose symptoms lead to violence [15]. The sense of fear, loss of control, and panic is associated with violence [16-18]. Also marijuana use increases heart rate, which may be associated with violent behaviour [19-22].

When people stop using marijuana they may experience a variety of withdrawal symptoms, including sleep disturbance, irritability or restlessness, loss of appetite, anxiety, and sweating [23,24]. Experiencing any of these symptoms can make a person angry, ranging from mild irritation to violent rage. Marijuana withdrawal can lead to intimidating violent or bullying behavior, endangering the perpetrator or other people and property [25].

In incarcerated subjects, studies found that one-third of the subjects that committed homicide had used marijuana twenty-four hours before the homicide. Further, three-quarters of those subjects were experiencing at least one mental or physical effect from marijuana intoxication when the homicide occurred.

Similarly, individuals in remote Aboriginal Australian Communities who reported current cannabis use were nearly four times more likely than nonusers to present at least once for violent trauma. Homicide offenses have been repeatedly documented to be connected to drug use, and marijuana is often one of those drugs [26].

Marijuana use is also indicative of intimate partner violence [27]. Consistent use of marijuana during adolescence was the most predictive indicator of intimate partner violence [28]. Also, marijuana use during adolescence was associated with perpetration or both perpetration and victimization by an intimate partner in early adulthood [29].

There is also a positive association between peer victimization and cannabis use in adolescents. Cannabis use is likely to be associated with perpetrator victims, those who initiate violence while using marijuana and experience retaliation to their aggressive acts. This trend suggests that cannabis use might be strongly related to outward aggression by the user [30].

Cannabis use also increases an adolescent's own likelihood of being victimized by peers. In particular, mental effects of cannabis have the potential to decrease the ability to accurately identify, evaluate, or avoid potentially dangerous persons or situations [25].

Studies show psychosis and paranoia

Cannabis intoxication leads to acute psychosis in many individuals and can produce short-term exacerbations of pre-existing psychotic diseases [31-34]. Cannabis use also causes symptoms of depersonalization, fear of dying, irrational panic and paranoid ideas which coincide with acute intoxication and remit quickly [35].

It was reported that 15% of cannabis users identified psychotic-like symptoms, the most common being hearing voices or having unwarranted feelings of intimidation and persecution or paranoid thoughts [36].

The potency of the marijuana has varying effects on users. A study analyzed the proportion of patients in South London with first episode

psychosis attributable to high-potency cannabis use and found that the use of high-potency cannabis (skunk) confers an increased risk of psychosis compared with traditional low-potency cannabis (hash) [37].

The risk of individuals having a psychotic disorder showed a roughly three times increase in users of skunk-like cannabis (high-potency) compared with those who never used cannabis. Use of skunk-like cannabis everyday conferred the highest risk of psychotic disorders compared with no use of cannabis [6]. Potency in these studies is similar to marijuana currently available in the U.S. Direct administration of cannabis resulted in predictable increased occurrence of paranoia in comparison to those who received placebo.

Epidemiological studies showed that cannabis is the most frequently used drug among those diagnosed with bipolar disorder [5]. Studies have also shown that as the frequency of cannabis use increases, so does the risk for psychotic disorders, such as schizophrenia [38]. The investigators of Schizophrenia Commission concluded that cannabis use is the most preventable risk factor for psychosis [39-44]. High proportions of persons with schizophrenia report regular cannabis use and meet criteria for cannabis use disorder [45].

Findings suggest that activity in the basal lateral medulla is involved in marijuana-induced paranoia (state of becoming afraid of things that would normally trigger fear) [44]. That means marijuana is actually enhancing type of learning about fear, leading the brain to jump to conclusions about the mild experiences, perceiving them as scarier as and more strongly connected to other scary situations than they are. This marijuana induced fear-based learning helps explain why marijuana users tend to see patterns in events that are not real, such as conspiracies [45] (Table 1).

In a study analyzing a college population, heavy users of marijuana displayed significantly greater impairment than light users on intentional/executive functions. This led to the conclusion that heavy marijuana use is associated with residual neuropsychological effects even after a day of supervised abstinence from the drug [46,47].

What did the cases have in common?

Cases of Marijuana Use and Symptoms	
Case	Symptoms
Michael Brown	Aggressiveness, Personality Change, Paranoia
Trayvon Martin	Aggressiveness, Personality Change, Paranoia
Laquan McDonald	Aggressiveness, Personality Change
Devon Guilford	Aggressiveness, Personality Change
Freddie Gray	Paranoia
Lakeisha Holloway	Aggressiveness, Personality Change
Robert Lewis Dear	Psychosis
Joseph Jesse Aldridge	Psychosis
Gerard Lee Loughner	Aggressiveness, Personality Change, Psychosis
Tsarnaev Brothers	Aggressiveness, Personality Change
Khalil Abu-Rayyam	Psychosis

Osam bin Laden	Paranoia, Psychosis
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Table 1: Marijuana uses and symptoms.

Discussion

We apply the results of the research regarding the role of marijuana in violence. We use concepts such as personality changes, perpetrator violence, and psychosis to establish our association of marijuana with the unfortunate cases. The purpose is to illustrate negative but preventable tragic outcomes due to marijuana and its role in violence. The overall objective is to identify the role of marijuana and to suggest it is avoidable and causal nature in inducing violence [48-50].

In all the cases selected, marijuana use was present. For some of the individuals, marijuana use was confirmed by a physical test. In other cases, marijuana was present on their person, indentifying drug use. Moreover, some individuals of the case were identified as marijuana users by outside sources.

Personality change toward aggression or violence (Chart 1)

Paranoid Personality Disorder
A. A pervasive distrust and suspiciousness of others such that their motives are interpreted as malevolent, beginning by early adulthood and present in a variety of contexts, as indicated by four (or more) of the following:
Suspects, without sufficient bases, those others are exploiting, harming, or deceiving him or her.
Is preoccupied with unjustified doubts about the loyalty or trustworthiness of friends or associates.
Is reluctant to confide in others because of unwarranted fear that the information will be used maliciously against him or her.
Reads hidden demeaning or threatening meanings into benign remarks or events.
Persistently bears grudges (i.e., is unforgiving of insults, injuries, or slights).
Perceives attacks on his or her character or reputation that are not apparent to others and is quick to react angrily or to counterattack.
Have recurrent suspicions, without justification, regarding fidelity of spouse or sexual partner.

Chart 1: Paranoid personality disorder (PPD) symptoms.

Present in all the cases, as a result of marijuana use, was the change in personality, aggressive behavior, paranoia and/or psychosis. All these symptoms have been documented by scientific research to be the result of marijuana use and intoxication. Another symptom, victimization, has a positive correlation with cannabis use, and the cases illustrate marijuana users and victimization [51,52]. In other words, marijuana users become victims of aggression in response to their perpetration under the influence of marijuana.

DSM V provides diagnostic categories for paranoid personality, paranoia and psychosis associated with marijuana use [53].

Michael Brown was a marijuana user and it was found in his system at the time of death. Further, Brown illustrated aggressive tendencies and victimization, as he was reported to aggressively assault a store clerk prior to his aggression towards a police officer. These actions were contrary to non-aggressive tendencies purported by those closest

to Brown. Brown's intoxication of marijuana likely accounted for the aggression and assaults. While contributing factors such as race and poor police practices may have contributed to Brown's unfortunate death, Brown likely would have been alive had he not been a user of marijuana in this particular instance. Apparently he was acting under the influence in an uncharacteristically high risk manner.

Similar to Brown, Trayvon Martin was known to have used marijuana. He was suspended from school for marijuana use at the time of his altercation with Zimmerman. Under the influence of marijuana, Martin likely illustrated victim perpetration from marijuana which increased aggressive behavior through participation in the altercation with Zimmerman. This physical fight with Zimmerman was behavior is to the surprise of others who claimed Martin was mild mannered who likely would avoid such a confrontaion. Marijuana use likely created the fear and aggressive behavior due to poor judgment and threatening perceptions induced by marijuana, contribution to Martin's death [19,23].

Tamerlan Tsarnaev follows similar patterns. He was a known heavy marijuana user. There was a sharp change in his personality confirmed by his wife associated with very heavy use and involvement with marijuana, resulting in the violence towards his wife according to her. Likely, intoxication from marijuana created and contributed to the paranoid thoughts and poor judgment to detonate a bomb in a crowd of people [34,40].

Similarly, Laquan McDonald was a known marijuana user since 10 or 11 years old. The intoxication from the use of marijuana likely caused McDonald to slash a cop car's tire, as he was known to be respectful and reserved. His life would have been saved without marijuana induced aggressiveness and poor judgments, and senseless, high risk actions towards police [19,23].

Deven Guilford is another preventable but clear example high risk and poor judgement from marijuana use. After being stopped in his car, Guilford assaulted a police officer for unknown reasons and apparently paranoid reactions to police actions. Guilford was preoccupied with and user of marijuana at a relatively young age. His marijuana use likely contributed to the change in his personality to be aggressive and assaultive to provoke his death in a high risk police stop [19,23].

Similarly, Jared Lee Loughner was known to be a heavy marijuana user. People described a large personality change from his youth. Loughner went on a shooting spree, killing six people. Marijuana was likely a major contributor to the drastic change in personality toward violence. Had marijuana been identified as a problem, his aggressive and assaultive act may have been prevented and lives could have been saved [19,23].

Lakeisha Holloway shows another example of senseless loss. In contrast to her personality from her youth, she drove a car onto the sidewalk of the Las Vegas strip, killing one person and injuring others. Marijuana was in her system at the time of the attack and likely contributed to the lethal aggression exhibited, and likely, psychotic, paranoid thinking.

Psychosis (Chart 2)

Substance-Induced Psychotic Disorder
A. Presence of one or both of the following symptoms:
Delusions
Hallucinations
B. There is evidence from the history, physical examination, or laboratory findings of both (1) and (2):
The symptoms in Criterion A developed during or soon after substance intoxication or withdrawal or after exposure to a medication.
The involved substance is capable of producing the symptoms in Criterion A.
C. The disturbance is not better explained by a psychotic disorder that is not substance-induced. Such evidence of an independent psychotic disorder could include the following:
The symptoms preceded the onset of the substance use; the symptoms persist for a substantial period of time (e.g. about 1 month) after the cessation of acute withdrawal or severe intoxication; or there is other evidence of an independent non-substance-induced psychotic disorder (e.g. a history of recurrent non-substance-related episodes).
D. The disturbance does not occur exclusively during the course of a delirium.
E. The disturbance causes clinically significant distress or impairment in social, occupational or other

Chart 2: Substance-induced psychotic disorder symptoms.

Studies have illustrated the connection between cannabis use and psychosis [54]. Marijuana has been shown to increase the risk for psychotic disorders and/or exacerbate pre-existing psychotic diseases. Consistent with research, marijuana resulting in psychosis is illustrated in many of the cases described above. Joseph Jesse Aldridge, described as a recluse, went on a shooting rampage after finding his mother deceased. Aldridge was a known marijuana user and had history of psychosis. His marijuana use likely contributed to his psychosis, and a major factor for the shooting rampage [55,56].

Similar to Aldridge, Jared Lee Loughner was admittedly a marijuana user. He suffered from a mental illness of paranoid schizophrenia. Loughner then went on a shooting spree killing six people. His marijuana use likely exacerbated the psychosis, which was a high risk factor for the shootings [33,35,55].

Analogous to Aldridge and Loughner, Robert Lewis Dear went on a shooting spree in Colorado. Dear moved to Colorado for easier access to marijuana. Dear also exhibited signs of mental health illness, psychosis and paranoia, which caused or exacerbated by marijuana, which resulted in his shooting spree [18,31].

While Khalil Abu-Rayyan did not result in a shooting rampage, this case illustrates the same ideas as previous cases. Abu-Rayyan used marijuana. He illustrated signs of psychosis through the threats of terrorism and martyrdom. Abu-Rayyan obtained the instruments to carry out his plans. The psychosis, contributing to the terroristic thoughts, marijuana use contributed to and exacerbated his aggressive behaviour [31,36,55].

Similar to Abu-Rayyan, Osama bin Laden also had notorious terroristic and paranoid behavior. Bin Laden was a marijuana user, growing high strength plants within his compound in Pakistan. Unfortunately, bin Laden's psychosis, associated and exacerbated by

marijuana use, may have prompted him to carry out the most heinous terrorist attacks in history. Without marijuana use and subsequent psychosis, many deaths may not have occurred [31,55,56].

Paranoia (Chart 3)

Subtypes Delusional Disorder
Grandiose type: This subtype applies when the central theme of the delusion is the conviction of having some great (but unrecognized) talent or insight or having made some important discovery.
Persecutory type: This subtype applies when the central theme of the delusion involves the individual's belief that he or she is being conspired against, cheated, spied on, followed, poisoned or drugged, maliciously maligned, harassed or obstructed in the pursuit of long-term goals.

Chart 3: Types of delusional disorder (DD).

In addition to psychosis and aggression, paranoia has been connected to marijuana intoxication [57,58]. Studies have illustrated THC significantly increase paranoia through a physical pathway. The cases described above illustrate such paranoia in marijuana users. For instance, Freddie Gray was arrested after he fled on the mere sight of police officers. During his arrest in the intoxicated state, he was injured which resulted in his death. Gray was a known drug addict and user of marijuana. His marijuana use likely induced paranoia thinking and poor judgment which prompted him to flee from police, threatening to him. Without marijuana and other drug intoxication, his cooperation likely would have been different, and he would avoided his high risk apprehension, and death avoided [34,36,40].

Similarly, Trayvon Martin got into an altercation with a Neighborhood Watch guard. Martin, speaking to his girlfriend, stated that a "creepy" man was following him and that he tried to evade the follower. His description is characteristic of apprehensive beliefs, and a sign of paranoia thought. Otherwise, Martin according to his family would not have fought with Zimmerman, had masituation escalated due to the paranoia, caused by the use of marijuana [34,36,40].

Osama bin Laden also illustrated paranoia, in letters that were discovered after his death. Paranoia was caused by his frequent marijuana use. This paranoia resulted in his adverse view of the US government. Unfavorable views toward the US resulting from extreme paranoia, coupled with psychosis, resulted in his terrorist attacks. Marijuana abstinence could have prevented the death of thousands of people [34,36,40].

These cases contained diverse variables: encounters with police, race, altercations, confrontation and mental illness. Other drug use was present but not the same across all cases. However, marijuana and violence are the common denominators in all the cases. Many were not victims of police aggression, some perpetuated police responses, some not. Diverse races and cultures were represented, and no stereotype was evident among the cases of violence and marijuana use. The variables, marijuana and violence were present in all cases.

An extensive review of the scientific literature document a clear association between marijuana and violence, psychosis, personality changes, poor judgment, aggression, victim perpetration. There are other possibilities and contributing factors in the execution of the violent behaviors, though probably not present in all cases. The purpose of this case report is to illustrate the probable role of marijuana in violent behaviors.

The review does not prove a causal relationship between marijuana and violence in these cases. Rather it establishes a highly documented association between marijuana and violence. A legal standard used for causation can be applied to illustrate this association. A legal cause is “but for” the actions or circumstances, the result would not have occurred. A proximate cause is the result was “foreseeable” based on the facts and actions. The most likely legal and proximate cause of violence in these cases was the use and intoxication from marijuana. No other variables fulfill these requirements.

Conclusion

According to research studies, marijuana use causes aggressive behavior, causes or exacerbates psychosis and produce paranoid. These effects have been illustrated through case studies of highly publicized incidents and heightened political profiles.

These cases contain examples of repeated illustrations of aggression, psychosis and paranoia by marijuana users and intoxication. Ultimately, without the use and intoxication of marijuana, the poor judgment and misperceptions displayed by these individuals would not have been present, reducing the risk for actions that result in senseless deaths.

Import to these assertions, is that the current marijuana is far more potent in THC concentrations, the psychoactive component. Accordingly, and demonstrated in direct studies, more potent marijuana results in a greater risk for paranoid thinking and psychosis. In turn, paranoid behavior increases the risk for paranoid behaviors and predictably associated with aggressive and violent behaviors.

Marijuana use causes violent behavior through increased aggressiveness, paranoia and personality changes (more suspicious, aggressive and anger).

Recent illicit and “medical marijuana” (especially grown by care givers for medical marijuana) is of much high potency and more likely to cause violent behavior.

Marijuana use and its adverse effects should be considered in cases of acts of violence as its role is properly assigned to its high association.

Recognize that high potency marijuana is a predictable and preventable cause of tragic violent consequences.

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This article was originally published in a special issue, entitled: "**Marijuana: Clinical, Research, Policy**", Edited by Norman S Miller

From: wiseguyart@aol.com
To: [Rene Spring](#); [Rich Constantine](#); [John McKay](#); [Yvonne Martinez Beltran](#); [Gino Borgioli](#); [Christina Turner](#)
Subject: Proposed Commercial Marijuana Shops
Date: Friday, March 19, 2021 4:17:15 PM

I was a public school teacher for thirty-five years and I am very concerned about the well being of our youth.

If you Google the long term use of marijuana on the brain health of young men and woman you can see the serious effects on brain scans where whole brain areas are compromised and affected negatively. Also, the tars and residues from smoking marijuana can compromise the lungs and other areas of the body.. Let's not let the promise of increased revenue sell out the mental and emotional well being of our youth and potentially lead them to harder drugs.

Sincerely
Steve Wise

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From: [Ronald Kirkish](#)
To: [Christina Turner](#); [Rich Constantine](#); [Yvonne Martinez Beltran](#); [Rene Spring](#); [John McKay](#); [Shane Palsgrove](#); [Gino Borgioli](#)
Subject: Re: ADHD numbers are rising and scientists are trying to understand why
Date: Sunday, April 4, 2021 10:41:23 AM

This is an additional excerpt from the NCBI study linked below:

"With few exceptions investigations have reported structural abnormalities in regular CAN*-using youth in the frontal cortex (ACC, OFC, insula, paracentral gyrus), lingual temporal, inferior and superior parietal cortex, hippocampus, amygdala, nucleus accumbens, and cerebellum with the most prominent findings in the PFC and hippocampus areas that have high CB1 receptors density. Most studies in adult or young adult samples have demonstrated decreased volumes across brain regions in association with CAN use."

*CAN = Cannabis/Marijuana

B/r,

Ronald L. Kirkish

On Apr 4, 2021, at 8:14 AM, Ronald Kirkish <hykirkish@charter.net> wrote:

Dear All,

The frequency of ADHD has exploded since the 1990's as has the huge increase of the %THC in "Skunk marijuana"

NIDA's Dr. Nora Volkow's research shows that THC does damage to the human brain's white matter and the damage is substantial.

B/r

Ronald L. Kirkish

The Impact of ADHD Persistence, Recent Cannabis Use, and Age of Regular Cannabis Use Onset on Subcortical Volume and Cortical Thickness in Young Adults

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5289096/>

Results

ADHD numbers are rising and scientists are trying to understand why: In the late 1990s, 7.2 percent of non-Hispanic white children, 4.7 percent of

non-Hispanic black children and 3.6 of Hispanic children were diagnosed with ADHD, according to the study. By 2016, it was 12 percent of white kids, 12.8 percent of blacks and 6.1 percent of Hispanics.

After controlling for age, gender, total brain volume, nicotine use, and past-year binge drinking, childhood ADHD diagnosis did not predict brain structure; however, persistence of ADHD was associated with **smaller left precentral/postcentral cortical thickness.**

Compared to all non-users, CAN users had decreased cortical thickness in right hemisphere superior frontal sulcus, anterior cingulate, and isthmus of cingulate gyrus regions and left hemisphere superior frontal sulcus and precentral gyrus regions. Early cannabis use age of onset (CUO) in those with ADHD predicted greater right hemisphere superior frontal and postcentral cortical thickness.

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From: [Ronald Kirkish](#)
To: [Christina Turner](#); [Rich Constantine](#); [Yvonne Martinez Beltran](#); [Rene Spring](#); [John McKay](#); [Shane Palsgrove](#); [Gino Borgioli](#)
Cc: [Matt Wendt](#); [Chris Borello](#); [Bob Cooke](#); [Terry Ratto](#); dave@lokeyfirearms.com; [Ladera Grill Dan](#)
Subject: Re: NIDA's Dr. Nora Volkow Discusses Marijuana's Effects on the Brain, Body & Behavior
Date: Thursday, March 25, 2021 7:49:39 AM

Dr. Nora Volkow's presentation includes information regarding how marijuana causes huge and permanent damage to the human brain, especially to very important components of the brain that controls behavior.

B/r,

Ronald L.Kirkish.

On Mar 25, 2021, at 7:17 AM, Ronald Kirkish <hykirkish@charter.net> wrote:

<7C97896E-3D54-41B9-BC9B-CE6E492DC06F.jpeg>

**NATIONAL INSTITUTE OF DRUG ABUSE, DIRECTOR DR.
NORA VOLKOW**

NIDA's Dr. Nora Volkow Discusses Marijuana's Effects on the
Brain, Body & Behavior

<https://www.youtube.com/watch?v=RSDnLSU3owc>

Hear a fascinating presentation by Dr. Nora Volkow, Director of the National Institute on Drug Abuse, about the effects of marijuana use on the brain, body and behavior. Dr. Volkow's remarks were given on Feb. 4th at CADCA's 24th National Leadership Forum.

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From: [Ronald Kirkish](#)
To: [Christina Turner](#); [Rich Constantine](#); [Yvonne Martinez Beltran](#); [Rene Spring](#); [John McKay](#); [Shane Palsgrove](#); [Gino Borgioli](#)
Cc: [Matt Wendt](#); [Chris Borello](#); dave@lokeyfirearms.com; [Ladera Grill Dan](#); [Bob Cooke](#)
Subject: Re: NIDA's Dr. Nora Volkow Discusses Marijuana's Effects on the Brain, Body & Behavior
Date: Thursday, March 25, 2021 8:00:22 AM

And if you have time, this is another NIH Dr. Nora Volkow video explaining how drugs hijack the brain, causing a person to become a drug addict; especially including marijuana.

<https://youtu.be/X1AEvkWxbLE>

Ronald L. Kirkish
[retired Drug Prevention Officer, NCRIC/SF-HIDTA]

On Mar 25, 2021, at 7:17 AM, Ronald Kirkish <hykirkish@charter.net> wrote:

<7C97896E-3D54-41B9-BC9B-CE6E492DC06F.jpeg>

**NATIONAL INSTITUTE OF DRUG ABUSE, DIRECTOR DR.
NORA VOLKOW**

NIDA's Dr. Nora Volkow Discusses Marijuana's Effects on the
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Hear a fascinating presentation by Dr. Nora Volkow, Director of the National Institute on Drug Abuse, about the effects of marijuana use on the brain, body and behavior. Dr. Volkow's remarks were given on Feb. 4th at CADCA's 24th National Leadership Forum.

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From: [Ronald Kirkish](#)
To: [Christina Turner](#); [Rich Constantine](#); [Yvonne Martinez Beltran](#); [Rene Spring](#); [John McKay](#); [Shane Palsgrove](#); [Gino Borgioli](#)
Cc: [Bob Cooke](#); [Matt Wendt](#); [Chris Borello](#); [Ladera Grill Dan](#); dave@lokeyfirearms.com; [Terry Ratto](#)
Subject: Re: Santa Cruz area residents 'blissfully unaware' of illegal drug trade in the forest
Date: Wednesday, March 31, 2021 11:02:00 AM

So, please ask yourselves folks, why are Mayor Constantine and Councilman Spring so interested in helping kids make such poor life choices? To destroy their lives, their futures.....why??

Ronald L. Kirkish

On Mar 31, 2021, at 10:47 AM, Ronald Kirkish <hykirkish@charter.net> wrote:

Dear All,

As in the City of Santa Cruz, CA, the City of Morgan Hill has at least two individuals sitting on Morgan Hill's City Council whose lax attitude towards drug abuse and whose agenda it is to advocate for permitting marijuana businesses to operate within the City Limits of Morgan Hill.

In a recent email, I shared my concerns that should these two individuals be successful in their 3rd attempt to aid and abet this business to open in MH, they would be turning their city into the likes of Santa Cruz, a horror story that has created a hell-hole of drug abuse for their community all because of their liberal drug laws.

For your consideration:

Santa Cruz area residents 'blissfully unaware' of illegal drug trade in the forest

<https://www.mercurynews.com/2010/05/21/santa-cruz-area-residents-blissfully-unaware-of-illegal-drug-trade-in-the-forest/>

The Citizens of Morgan Hill do not deserve to have their community turned into a community like Santa Cruz.

Ronald L. Kirkish

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From: [Ronald Kirkish](#)
To: [Christina Turner](#); [Rich Constantine](#); [Yvonne Martinez Beltran](#); [Rene Spring](#); [John McKay](#); [Shane Palsgrove](#); [Gino Borgioli](#)
Cc: [Bob Cooke](#); [Matt Wendt](#)
Subject: Santa Cruz Media Release: Narcotics and Weapons seizure [meth]
Date: Thursday, April 8, 2021 10:09:57 AM
Attachments: [UNADJUSTEDNONRAW_thumb_6dd.jpeg](#)

Dear All,

On more than a few occasions, I've tried to warn the elected's in the City of Morgan Hill, why it would be irresponsible for them to vote to approve allowing marijuana businesses in their city's jurisdiction.

I've warned that these businesses provide a hub for criminals to sell their whole smorgasbord of illegal and dangerous drugs, illegal guns and so much more; including blackmarket marijuana.

I have also used the City of Santa Cruz as the not so shining example for what **"happens"** when a city has politicians whose agenda is to be "soft on drugs"; especially marijuana.

Matt, if you agree, please consider share this important information with others within your sphere of influence and who reside in Morgan Hill.

For your consideration and B/r,

Ronald L.Kirkish



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From: [Nancy Benich](#)
To: [Rene Spring](#); [Rich Constantine](#); [John McKay](#); [Yvonne Martinez Beltran](#); [Gino Borgioli](#); [Christina Turner](#)
Subject: Smoke shops and marijuana dispensaries
Date: Wednesday, March 24, 2021 3:10:52 PM

Dear Sirs and Madam,

I highly object to encouraging Smoke Shops and or marijuana dispensaries to do business in Morgan Hill. Research has shown that many who frequent these shops obtain prescriptions illegally and do not have legitimate reasons for using medical marijuana. Research also shows that children sometimes obtain access to this addictive drug. Early use of pot can have severe long term effects on the human body. Please do not vote to allow these kinds of businesses in Morgan Hill.

Nancy Benich
Retired Teacher

Sent from my iPhone

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From: [Ronald Kirkish](#)
To: [Christina Turner](#); [Rich Constantine](#); [Yvonne Martinez Beltran](#); [Rene Spring](#); [John McKay](#); [Shane Palsgrove](#); [Gino Borgioli](#)
Cc: [Matt Wendt](#)
Subject: Title: Smokescreen (National Version)
Date: Tuesday, April 6, 2021 8:54:26 PM

Dear all,

You want to know the truth about pot?? Here it is for your consideration.

Don't be fooled by the medical marijuana smokescreen. Every state that has legalized recreational marijuana started by passing seemingly harmless “medical marijuana” laws

Title: Smokescreen (National Version)

<https://youtu.be/OKMMcritHb0>

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Exhibit B

Year 1		Year 2		Year 3	
Monthly	total	Monthly	Total	Monthly	Total
\$ 27,750.00	\$ 333,000.00	\$ 28,582.50	\$ 342,990.00	\$ 29,439.98	\$ 353,279.70
				3 Year Total	\$ 1,029,269.70

Note: a 3% increase is included in Years 2 and 3

Exhibit C

This Agreement shall cover services rendered from the Effective Date of this Agreement until August 31, 2024 at which time CONSULTANT'S services shall be completed. The City Manager is authorized to extend the term of this Agreement for a maximum period of one year. Any such extension shall be in writing and signed by both Parties to this Agreement.

CONSULTANT AGREEMENT

THIS AGREEMENT is entered into and becomes effective on _____ (Effective Date), by and between the CITY OF MORGAN HILL, a municipal corporation, ("CITY"), and CIVIC FOUNDRY, LLC a California limited liability company ("CONSULTANT") hereinafter referred to collectively as "Parties." In consideration of the promises and the mutual covenants contained in this Agreement, the Parties agree as follows:

1. **City Authority.** This Agreement is entered into pursuant to the action of the Morgan Hill City Council taken on _____, _____, 20____.
2. **Term of Agreement.** This Agreement shall cover services rendered from the Effective Date of this Agreement until August 31, 2024 at which time CONSULTANT'S services shall be completed. The City Manager is authorized to extend the term of this Agreement for a maximum period of one year. Any such extension shall be in writing and signed by both Parties to this Agreement.
3. **Scope of Service.** The services to be performed by CONSULTANT shall be Information Technology Services as further described in **Exhibit A.**
4. **Compensation.** CONSULTANT shall be compensated as follows:
 - 4.1. **Amount.** \$1,029,269.70. Total compensation to CONSULTANT under this Agreement during its initial term set forth in Section 2 above shall not exceed one million, twenty nine thousand two hundred sixty nine and 70/100 dollars and shall be billed based on the rate and basis set forth in **Exhibit B.** If the City Manager extends the term of this Agreement for up to one year pursuant to the provisions of Section 2 above, the City Manager shall have the authority to increase the maximum compensation allowed to be paid to CONSULTANT during that extended term period, so long as City Council has appropriated sufficient funds therefor, the Parties mutually agree to such amount in a writing signed by both Parties to this Agreement and provided further that in no event shall such maximum compensation allowed for the extended term exceed the City Manager's authority pursuant to Chapter 3.04 of the Morgan Hill Municipal Code, unless otherwise authorized by City Council.
 - 4.2. **Billing.** CONSULTANT shall provide CITY with an invoice containing the dated, detailed, and itemized descriptions of all services performed and expenses incurred (if such expenses are reimbursable pursuant to Exhibit B) by CONSULTANT on a monthly basis unless otherwise specified in Exhibit B. All invoices shall be sent to the CITY addressed to the department head or project manager identified below in Section 13 Notices. Any rate charged shall be prorated where services are interrupted or not provided for any rate period (for example, any monthly rate charge should be prorated when services were interrupted or provided for only part of the month). For services billed on an hourly rate, the minimum unit of billed time shall not exceed one tenth of one hour. CITY shall pay for services and expenses (if so provided in Exhibit B) up to the limit of compensation set forth above, that in the CITY's judgment were necessary and reasonable. Services for work performed and expenses incurred in excess of the total compensation set forth in paragraph 4.1 above shall be at no cost to CITY.
5. **Termination.** CITY or CONSULTANT shall have the right to terminate this Agreement, without cause, by giving thirty (30) days' written notice or less under urgent circumstances. Upon such termination, CONSULTANT shall submit to CITY an itemized statement of services performed for which compensation has not been paid. CITY may require CONSULTANT to complete certain work product or documents and

CONSULTANT shall deliver to CITY all documents in its possession without additional compensation to CONSULTANT. The City Manager of CITY is authorized to terminate this Agreement, in whole or in part, on behalf of CITY.

- 5.1. **Non-Appropriations.** Notwithstanding anything contained in this Agreement to the contrary, if insufficient funds are appropriated, or funds are otherwise unavailable in the budget for CITY for any reason whatsoever in any fiscal year, for payments due under this Agreement, CITY will immediately notify CONSULTANT of such occurrence, and this Agreement shall terminate after the last day during the fiscal year for which appropriations shall have been budgeted for CITY or are otherwise available for payments.

6. **Performance of Work.** CONSULTANT represents that it is qualified by virtue of experience, training, education, and expertise to accomplish these services. Services shall be performed by CONSULTANT in accordance with professional practices in a manner consistent with a level of care, competence and skill exercised by qualified members of the CONSULTANT'S profession. By delivery of completed work, CONSULTANT certifies that the work conforms to the requirements of this Agreement and all applicable federal, state and local laws. CONSULTANT shall perform all work and services under this Agreement in conformance with the time schedule set forth on Exhibit C, "Schedule of Performance," attached hereto and incorporated herein by this reference. CITY's City Manager is authorized on behalf of CITY to modify the timeframes set forth on the Schedule of Performance within the term of this Agreement. If CONSULTANT desires to leave or store any of CONSULTANT's equipment at a CITY site while CONSULTANT is performing work or service pursuant to this Agreement, CONSULTANT will first obtain the consent of CITY's City Manager, or his/her delegate, to do so, and any such storage shall occur only in the manner and location allowed by such CITY official and entirely at CONSULTANT's sole risk.

7. **Insurance Requirements.** CONSULTANT shall procure and provide proof of the insurance coverage required by this section in the form of certificates and endorsements. The required insurance must cover the activities of CONSULTANT, including its subcontractors, employees and agents, relating to or arising from the performance of any work or service under this Agreement, and must remain in full force and effect at all times during the period covered by this Agreement. The coverages may be arranged under a single policy for the full limits required or by a combination of underlying policies with the balance provided by excess or "umbrella" policies, provided each such policy complies with the requirements set forth herein. Any deductibles or self-insured retentions must be declared to and approved by City. CONSULTANT further understands that the CITY reserves the right to modify the insurance requirements set forth herein, with thirty (30) days' notice provided to CONSULTANT, at any time as deemed necessary to protect the interests of the CITY.

7.1. **Insurance Types and Amounts.**

7.1.1. **Commercial General Liability (CGL).** CONSULTANT shall maintain CGL against claims and liabilities for personal injury, death, or property damage providing protection in the minimum amount of: (i) one million dollars (\$1,000,000.00) combined single limit for any one accident or occurrence, or (ii) the maximum amount of such insurance available to CONSULTANT under CONSULTANT's combined insurance policies (including any excess or "umbrella" policies), whichever is greater.

7.1.2. **Automobile Liability.** CONSULTANT shall maintain Automobile Liability covering all owned, non-owned and hired automobiles (if CONSULTANT does not own automobiles, then CONSULTANT shall maintain Hired/Non-owned Automobile Liability) against claims and liabilities for personal injury, death, or property damage providing protection in the minimum amount of: (i) one million dollars (\$1,000,000.00)

combined single limit for any one accident or occurrence, or (ii) the maximum amount of such insurance available to CONSULTANT under CONSULTANT's combined insurance policies (including any excess or "umbrella" policies), whichever is greater.

7.1.3. Workers' Compensation Insurance and Employer's Liability. CONSULTANT shall maintain Workers Compensation coverage, as required by law, in the minimum amount of: (i) one million dollars (\$1,000,000.00) for any one accident or occurrence, or (ii) the maximum amount of such insurance available to CONSULTANT under CONSULTANT's combined insurance policies (including any excess or "umbrella" policies), whichever is greater. If CONSULTANT is self-insured, CONSULTANT shall provide its Certificate of Permission to Self-Insure, duly authorized by the Department of Industrial Relations.

7.1.4. Pollution (Environmental) Liability. If the performance of CONSULTANT'S work or service under this Agreement involves hazardous materials, contaminated soil disposal, and/or a risk of accidental release of fuel oil, chemicals or other toxic gases or hazardous materials, CONSULTANT shall procure and maintain Pollution Liability covering the CONSULTANT'S liability for bodily injury, property damage and environmental damage resulting from pollution and related cleanup costs arising out of the work or services to be performed under this Agreement. Coverage shall be provided for both work performed on site, as well as during the transport of hazardous materials. Such coverage shall be in the minimum amount of: (i) one million dollars (\$1,000,000.00) for any one accident or occurrence, or (ii) the maximum amount of such insurance available to CONSULTANT under CONSULTANT's combined insurance policies (including any excess or "umbrella" policies), whichever is greater.

7.1.5. Professional Liability.

7.1.5.1. If the performance of CONSULTANT's work or service under this Agreement involves professional and/or technical services (examples include, but are not limited to, architects, engineers, land surveyors, and appraisers), CONSULTANT shall procure and maintain either a claims made or occurrence Errors and Omission liability insurance in the minimum amount of: (i) one million dollars (\$1,000,000.00) each claim, or (ii) the maximum amount of such insurance available to CONSULTANT under CONSULTANT's combined insurance policies (including any excess or "umbrella" policies), whichever is greater. Further, if CONSULTANT maintains a claims-made policy, CONSULTANT shall provide written evidence of such insurance to the CITY for at least five (5) years after the completion of work performed under this Agreement.

7.1.5.2. If the performance of CONSULTANT's work or service under this Agreement relates to Information Technology or related services (examples include, but are not limited to computer programmers, software designers, hardware engineers, or other systems consultants), CONSULTANT shall procure and maintain a claims made Errors and Omission liability insurance, including Cyber Liability and Data Breach, in the minimum amount of: (i) one million dollars (\$1,000,000.00) each claim, or (ii) the maximum amount of such insurance available to CONSULTANT under CONSULTANT's combined insurance policies (including any excess or "umbrella" policies), whichever is greater.

- 7.1.6. **Sexual Abuse/Molestation Liability (SML)**: If the performance of CONSULTANT's work or service under this Agreement involves contact with minors, CONSULTANT shall procure and maintain Sexual Abuse and Molestation insurance in the minimum amount of: (i) two hundred thousand dollars (\$200,000.00) each claim, or (ii) the maximum amount of such insurance available to CONSULTANT under CONSULTANT's combined insurance policies (including any excess or "umbrella" policies), whichever is greater.
- 7.2. **Endorsements**. CONSULTANT shall provide proof of the following endorsements, listed for each policy for which endorsements are required, as outlined below:
- 7.2.1. **General Liability and pollution liability (when pollution liability applies)**.
- 7.2.1.1. The City of Morgan Hill, its elected or appointed officials, boards, agencies, officers, agents, employees, and volunteers are named as additional insureds;
- 7.2.1.2. the insurer waives the right of subrogation against the City of Morgan Hill and the CITY's elected or appointed officials, boards, agencies, officers, agents, employees, and volunteers; and,
- 7.2.1.3. insurance shall be primary non-contributing.
- 7.2.2. **Workers Compensation**.
- If the performance of CONSULTANT'S work or service under this Agreement involves access to or activity on any property or premises owned or occupied by the CITY, including, but not limited to, CONSULTANT'S presence during site visits and meetings, then insurer waives the right of subrogation against the City of Morgan Hill and the CITY's elected or appointed officials, boards, agencies, officers, agents, employees, and volunteers.
- 7.3. **Qualification of Insurers**. All insurance required pursuant to this Agreement must be issued by a company licensed and admitted, or otherwise legally authorized to carry out insurance business in the State of California, and each insurer must have a current A.M. Best's financial strength rating of "A" or better and a financial size rating of "VII" or better.
- 7.4. **Certificates**. CONSULTANT shall furnish CITY of Morgan Hill with copies of all certificates as outlined herein, whether new or modified, promptly upon receipt. In the event of a claim or legal action, CONSULTANT shall promptly furnish CITY of Morgan Hill with copies of all policies outlined herein. No policy subject to the CONSULTANT's agreement with the CITY shall be canceled or materially changed except after thirty (30) days' notice by the insurer to CITY. Certificates, including renewal certificates, may be mailed electronically to riskmgmt@morganhill.ca.gov or delivered to the Certificate Holder address provided herein

Certificate Holder address:

City of Morgan Hill
Attn: Risk Management
17575 Peak Avenue
Morgan Hill, CA 95037

8. **Non-Liability of Officials and Employees of the CITY.** No official or employee of CITY shall be personally liable for any default or liability under this Agreement.

9. **Compliance with Law.**

9.1. CONSULTANT and its officers, employees, agents, and subcontractors shall comply with all applicable laws, ordinances, administrative regulations, and permitting requirements in carrying out their obligations under this Agreement. CONSULTANT and its officers, employees, agents, and subcontractors covenant there shall be no discrimination based upon race, color, creed, religion, gender, marital status, age, sexual orientation, national origin, mental disability, physical disability, medical condition, or ancestry, in any activity pursuant to this Agreement.

9.2. Compliance with Wage and Hour Laws: Consultant, and any subcontractor it employs to complete work under this Agreement, shall comply with all applicable federal, state and local wage and hour laws. Applicable laws may include, but are not limited to, the Federal Fair Labor Standards Act and the California Labor Code.

Final Judgments, Decisions, and Orders: For purposes of this Section, a “final judgment, decision, or order” refers to one for which all appeals have been exhausted or the time to appeal has expired. Relevant investigatory government agencies include: the federal Department of Labor, the California Division of Labor Standards Enforcement, or any other governmental entity or division tasked with the investigation and enforcement of wage and hour laws.

Prior Judgments against CONSULTANT and/or its Subcontractors: BY SIGNING THIS AGREEMENT, CONSULTANT AFFIRMS THAT IT HAS DISCLOSED ANY FINAL JUDGMENTS, DECISIONS OR ORDERS FROM A COURT OR INVESTIGATORY GOVERNMENT AGENCY FINDING – IN THE FIVE (5) YEARS PRIOR TO EXECUTING THIS AGREEMENT – THAT CONSULTANT OR ITS SUBCONTRACTOR(S) HAS VIOLATED ANY APPLICABLE WAGE AND HOUR LAWS. CONSULTANT FURTHER AFFIRMS THAT IT OR ITS SUBCONTRACTOR(S) HAS SATISFIED AND COMPLIED WITH – OR HAS REACHED AGREEMENT WITH THE CITY REGARDING THE MANNER IN WHICH IT WILL SATISFY – ANY SUCH JUDGMENTS, DECISIONS OR ORDERS.

Judgments or Decisions During Term of Contract: If at any time during the term of this Agreement, a court or investigatory government agency issues a final judgment, decision or order finding that CONSULTANT or an subcontractor it employs to perform work under this Agreement has violated any applicable wage and hour law, or CONSULTANT learns of such a judgment, decision, or order that was not previously disclosed, CONSULTANT shall inform the City Attorney, no more than fifteen (15) days after the judgment, decision or order becomes final or of learning of the final judgment, decision or order. CONSULTANT and its subcontractors shall promptly satisfy and comply with any such judgment, decision, or order, and shall provide the City Attorney with documentary evidence of compliance with the final judgment, decision or order within five (5) days of satisfying the final judgment, decision or order. The City reserves the right to require CONSULTANT to enter into an agreement with the City regarding the manner in which any such final judgment, decision, or order will be satisfied.

City’s Right to Withhold Payment: Where CONSULTANT or any subcontractor it employs to perform work under this Agreement has been found in violation of any applicable wage and

hour law by a final judgment, decision or order of a court or government agency, the City reserves the right to withhold payment to CONSULTANT until such judgment, decision or order has been satisfied in full.

Material Breach: Failure to comply with any part of this Section constitutes a material breach of this Agreement. Such breach may serve as a basis for immediate termination of this Agreement and/or any other remedies available under this Agreement and/or law.

Notice to City Related to Wage Theft Prevention: Notice provided to the City Attorney as required under this Section shall be addressed to: City Attorney, City of Morgan Hill, 17575 Peak Avenue, Morgan Hill, CA 95037. The Notice provisions of this Section are separate from any other notice provisions in this Agreement and, accordingly, only notice provided to the above address satisfies the notice requirements in this Section.

10. **Independent Contractor**. CONSULTANT is an independent contractor and not an agent or employee of CITY.

11. **Confidentiality**. All data, documents, or other information received by CONSULTANT from CITY or prepared in connection with CONSULTANT'S services under this Agreement are deemed confidential and shall not be disclosed to any third party by CONSULTANT without prior written consent by CITY.

12. **Conflict of Interest and Reporting**. CONSULTANT shall at all times avoid conflict of interest or appearance of conflict of interest in performance of this Agreement.

13. **Notices**. All notices shall be personally delivered or mailed, via first class mail to the below listed address. These addresses shall be used for delivery of service of process. Notices shall be effective five (5) days after date of mailing, or upon date of personal delivery.

Address of CONSULTANT is as follows:

Civic Foundry, LLC
PO Box 5541
San Jose, CA 95150

Address of CITY is as follows:

Shane Palsgrove	with a copy to:
City of Morgan Hill	City Clerk
17575 Peak Avenue	City of Morgan Hill
Morgan Hill, CA 95037	17575 Peak Avenue
	Morgan Hill, CA 95037

14. **Licenses, Permits and Fees**. CONSULTANT shall obtain a City of Morgan Hill Business License, all permits and licenses to the extent required by ordinances, codes and regulations of the federal, state and local government.

15. **Consultant's Proposal**. If applicable, this Agreement shall include CONSULTANT'S proposal or bid which is incorporated herein. In the event of any inconsistency between the terms of the proposal and this Agreement, this Agreement shall govern.

16. **Maintenance of Records.**

- 16.1. **Maintenance.** CONSULTANT shall prepare, maintain, and preserve all reports and records that may be required by federal, state, and CITY rules and ordinances related to services provided under this Agreement. CONSULTANT shall maintain records for a period of at least 3 years after receipt of final payment under this Agreement. If any litigation, claim, negotiation, audit exception, or other action relating to this Agreement is pending at the end of the 3-year period, then CONSULTANT shall retain said records until such action is resolved.
- 16.2. **Access to and Audit of Records.** The CITY shall have the right to examine, monitor and audit all records, documents, conditions, and activities of the CONSULTANT and its subcontractors related to services under this Agreement. Pursuant to Government Code Section 8546.7, if this Agreement involves the expenditure of public funds in excess of \$10,000, the Parties to this Agreement may be subject, at the request of the CITY or as part of any audit of the CITY, to the examination and audit of the State Auditor pertaining to matters connected with the performance of this Agreement for a period of three years after final payment under the Agreement.
- 16.3. **Ownership of Work Product.** All documents or other information developed or received by CONSULTANT for work performed under this Agreement shall be the property of CITY. CONSULTANT shall provide CITY with copies of these items upon demand or upon termination of this Agreement.

17. **Familiarity with Work.** By executing this Agreement, CONSULTANT represents that: (1) it has investigated the work to be performed; (2) it has investigated the site of the work and is aware of all conditions there; and (3) it understands the difficulties and restrictions of the work under this Agreement. Should CONSULTANT discover any conditions materially differing from those inherent in the work or as represented by CITY, it shall immediately inform CITY and shall not proceed, except at CONSULTANT'S risk, until written instructions are received from CITY.

18. **Time of Essence.** Time is of the essence in the performance of this Agreement.

19. **No Assignment.** Neither this Agreement nor any portion shall be assigned by CONSULTANT, without prior written consent of CITY. Any attempted assignment not first approved by CITY shall be void and, at CITY's option, shall terminate this Agreement effective as of the date of such attempted assignment.

20. **Attorney Fees.** In any legal action, dispute or arbitration arising out of or relating to this Agreement, the prevailing party shall be entitled to an award of its reasonable attorney fees, costs and expenses incurred.

21. **Defense and Indemnification.**

21.1. **Defense and Indemnification.** CONSULTANT shall, to the fullest extent permitted by law, indemnify, defend and hold harmless CITY, its elected or appointed officials, boards, agencies, officers, agents, employees, and volunteers ("INDEMNITEES") from and against any and all claims, liabilities, expenses, liens, or damages of any nature, including liability for bodily injury, property damage or personal injury, and including reasonable attorneys' fees and expenses, that arise out of, pertain to, or relate to the performance of this Agreement or the failure to comply with any obligations contained in this Agreement by CONSULTANT, and/or its agents, officers, employees, subcontractors, or independent contractors ("CLAIM").

21.2. Exceptions. CONSULTANT is not required to indemnify INDEMNITEES against liability for bodily injury, property damage or personal injury, or any other loss, damage or expense arising from the sole negligence or willful misconduct of the CITY.

21.3. Not limited by insurance. The indemnity, defense and hold harmless provisions of this Agreement apply to all CLAIMs alleged against an INDEMNITEE, regardless of whether any insurance policies are applicable. Policy limits do not act as a limitation upon the amount of indemnification or defense to be provided by CONSULTANT.

21.4. Right to Offset. CITY shall have the right to offset against any compensation due CONSULTANT under this Agreement any amount due CITY from CONSULTANT as a result of CONSULTANT's failure to pay CITY promptly any indemnification arising under this Section (21) and any amount due CITY from CONSULTANT arising from CONSULTANT's failure either to (i) pay taxes on amounts received pursuant to this Agreement or (ii) comply with applicable workers' compensation laws.

21.5. Interpretation. This Section shall constitute an agreement or contract of indemnity, incorporating the interpretations under California Civil Code Section 2778. It is expressly understood and agreed that the obligation of the CONSULTANT to indemnify the INDEMNITEE shall be as broad and inclusive as permitted by the laws of the State of California and shall survive termination of this Agreement.

22. **Entire Agreement; Modification; Conflicting Provisions.** This Agreement constitutes the entire Agreement between the Parties and supersedes any previous agreements, oral or written. This Agreement may be modified or provisions waived only by a subsequent mutual written agreement executed by CITY and CONSULTANT. If the provisions contained in the main body of this Agreement conflict with any provision contained in an exhibit to this Agreement, the provisions of the main body of this Agreement shall govern and control over any provision contained in an exhibit to this Agreement.

23. **Governing Law and Venue.** This Agreement shall be construed in accordance with the laws of the State of California. This Agreement was entered into and is to be performed in the County of Santa Clara. Any action or dispute arising out of this Agreement shall only be brought in Santa Clara County.

24. **Interpretation.** This Agreement is a negotiated document and shall be deemed to have been drafted jointly by the Parties, and no rule of construction or interpretation shall apply against any particular Party based on a contention that the Agreement was drafted by one of the Parties including, but not limited to, California Civil Code § 1654, the provisions of which are hereby waived. This Agreement shall be construed and interpreted in a neutral manner.

25. **Preservation of Agreement.** If any term, provision, covenant, or condition of this Agreement is held by a court of competent jurisdiction to be invalid or unenforceable, the rest of the Agreement shall remain in full force and effect and shall in no way be affected or invalidated.

26. **Binding Agreement.** Notwithstanding the provisions of Section 19 above, this Agreement shall bind any and all successors in interest, legal representatives and/or other permitted assignees or transferees of CONSULTANT in the same manner as if those successors in interest, legal representatives or other permitted assignees or transferees had entered into this Agreement originally.

27. ☐ **Data Sharing.** This Agreement requires access by CONSULTANT to CITY's Geographic Information System (GIS) DATA for CONSULTANT to perform the work. CITY agrees to provide the GIS

DATA to CONSULTANT solely for the purpose of performance of contracted work with the CITY upon the terms and conditions specified in Exhibit D, incorporated herein by this reference.

[Signatures on Next Page]

28. **Authority to Execute.** Those individuals who are signing this Agreement on behalf of entities represent and warrant that they are, respectively, duly authorized to sign on behalf of the entities and to bind the entities fully to each and all of the obligations set forth in this Agreement.

IN WITNESS THEREOF, these Parties have executed this Agreement on the day and year shown below.

AS SET FORTH IN CA. CORP. CODE § 313, TWO SIGNATURES ARE REQUIRED FOR CALIFORNIA CORPORATIONS:

- (1) CHAIRPERSON OF THE BOARD, PRESIDENT, OR VICE PRESIDENT; AND
(2) SECRETARY, ASSISTANT SECRETARY, CHIEF FINANCIAL OFFICER OR ASSISTANT TREASURER.

ATTEST:

CITY OF MORGAN HILL

City Clerk/Deputy City Clerk

City Manager

Michelle Bigelow
Print Name

Christina J. Turner
Print Name

Date: _____

Date: _____

APPROVED AS TO FORM:



City Attorney

By: _____

Donald A. Larkin
Print Name

Vijay Sammeta , CEO

Print Name and Title of Signer.

If Corporate: Chairman, President or
Vice President

Date: _____

Date: 4/1/2021

By: _____

Print Name and Title of Signer.

If Corporate: Secretary, Assistant
Secretary, Chief Financial Officer or
Assistant Treasurer

Date: _____

EXHIBIT A
SCOPE OF SERVICES

EXHIBIT B
SCHEDULE OF COMPENSATION RATES

EXHIBIT C
SCHEDULE OF PERFORMANCE



March 30, 2021

Shane Palsgrove
Chief of Police
City of Morgan Hill
16200 Vineyard Blvd.
Morgan Hill, CA 95037

Dear Chief Palsgrove,

As we approach the end of the Civic Foundry's current service agreement with the City of Morgan Hill, we want to take the opportunity to align the scope of services for our next proposal with the changing technology support needs of the City. We have been proud to serve the City as its strategic leader for information services over the past two years. Together we faced some major issues such as successfully pivoting the City to a mobile workforce due to a global pandemic, and modernizing much of the underlying technical infrastructure while managing through major power outages and fiber breaks.

It has become increasingly evident that the City's lack of in-house network engineering or modern server skill sets is hindering its ability to maintain stability, reliability, and security of the organization's data and technical infrastructure. The need for these skills will undoubtedly grow as the City will soon be required to address a number of remediation items as a result of upcoming security, PCI, and DOJ assessments. This proposal will begin to address the backlog of requirements within the budget constraints of the City. However, one position will not comprehensively address *all* of the engineering needs of the City, nor will it be able to launch and maintain an ongoing information security program as required by regulatory compliance associated with taking credit cards, or DOJ and general controls associated with financial risk by government agencies.

To provide the City with resources in the most cost-effective manner, we propose that the City continue to receive IT leadership from Civic Foundry but at a reduced service level to create capacity to address the backlog of engineering services that the City critically needs through the addition of a Network/Server Engineer. Under this proposed model, the IS Department's Programmer Analyst would address all application services and customer requests as defined by the City's classification description. The City's IS Technician would continue to provide tier one support for public safety and address more advanced desktop support and helpdesk issues, as well as basic server requests, escalating more complex network and server issues to the Civic Foundry Engineer. In addition, Civic Foundry would continue to augment the IS helpdesk through an IT Support Specialist. The Police Department will continue to directly manage City IS staff (i.e., Programmer Analyst and IS Technician) and Civic Foundry will continue to provide IS

Department leadership and supervision of its own staff (i.e. Network/Server Engineer and IT Support Specialist).

Below is the proposed scope of services to be provided under a new agreement:

- Provide executive level technology leadership to the City organization
- Provide equivalent of one server engineer resource
- Provide equivalent of one on-site helpdesk technician for a live-answer helpdesk
- Provide tier-one troubleshooting of helpdesk requests
- Provide daily maintenance and administration of the City's network
- Provide daily maintenance and administration of the City's wired and wireless networks
- Administer and maintain the City's firewalls
- Provide daily maintenance and administration of the City's servers (moves, adds, changes, upgrades, etc.)
- Perform server patching
- Provide network support for public safety systems and to City's IS technician
- Plan cooperatively with the City and begin remediation efforts of findings on security audits
- Scope network projects for time, resources, and funding
- Draft hardware specifications for technology purchases and/or budget forecasting
- Draft budget proposals for future IT investments that maximize the City's return-on-investments or address critical infrastructure or security needs
- Draft a five-year strategic plan for technology

The proposed cost for continued executive level management and leadership services, IT Support Specialist position for the Helpdesk, and the addition of a Network/Server Engineer is \$333,000 per year, payable in twelve equal payments of \$27,750 on the first day of each month. This proposed scope of work is for a period of one year, with the option to renew for two additional years at an increased annual cost of three percent (3%).

We look forward to discussing this proposal with you at your earliest convenience.



Vijay Sammeta
Chief Executive Officer
Civic Foundry, LLC

cc: Patti Yinger

CONSULTANT AGREEMENT

THIS AGREEMENT is entered into and becomes effective on _____ (Effective Date), by and between the CITY OF MORGAN HILL, a municipal corporation, ("CITY"), and CIVIC FOUNDRY, LLC a California limited liability company ("CONSULTANT") hereinafter referred to collectively as "Parties." In consideration of the promises and the mutual covenants contained in this Agreement, the Parties agree as follows:

1. **City Authority.** This Agreement is entered into pursuant to the action of the Morgan Hill City Council taken on _____, _____, 20____.
2. **Term of Agreement.** This Agreement shall cover services rendered from the Effective Date of this Agreement until August 31, 2024 at which time CONSULTANT'S services shall be completed. The City Manager is authorized to extend the term of this Agreement for a maximum period of one year. Any such extension shall be in writing and signed by both Parties to this Agreement.
3. **Scope of Service.** The services to be performed by CONSULTANT shall be Information Technology Services as further described in **Exhibit A.**
4. **Compensation.** CONSULTANT shall be compensated as follows:
 - 4.1. **Amount.** \$1,029,269.70. Total compensation to CONSULTANT under this Agreement during its initial term set forth in Section 2 above shall not exceed one million, twenty nine thousand two hundred sixty nine and 70/100 dollars and shall be billed based on the rate and basis set forth in **Exhibit B.** If the City Manager extends the term of this Agreement for up to one year pursuant to the provisions of Section 2 above, the City Manager shall have the authority to increase the maximum compensation allowed to be paid to CONSULTANT during that extended term period, so long as City Council has appropriated sufficient funds therefor, the Parties mutually agree to such amount in a writing signed by both Parties to this Agreement and provided further that in no event shall such maximum compensation allowed for the extended term exceed the City Manager's authority pursuant to Chapter 3.04 of the Morgan Hill Municipal Code, unless otherwise authorized by City Council.
 - 4.2. **Billing.** CONSULTANT shall provide CITY with an invoice containing the dated, detailed, and itemized descriptions of all services performed and expenses incurred (if such expenses are reimbursable pursuant to Exhibit B) by CONSULTANT on a monthly basis unless otherwise specified in Exhibit B. All invoices shall be sent to the CITY addressed to the department head or project manager identified below in Section 13 Notices. Any rate charged shall be prorated where services are interrupted or not provided for any rate period (for example, any monthly rate charge should be prorated when services were interrupted or provided for only part of the month). For services billed on an hourly rate, the minimum unit of billed time shall not exceed one tenth of one hour. CITY shall pay for services and expenses (if so provided in Exhibit B) up to the limit of compensation set forth above, that in the CITY's judgment were necessary and reasonable. Services for work performed and expenses incurred in excess of the total compensation set forth in paragraph 4.1 above shall be at no cost to CITY.
5. **Termination.** CITY or CONSULTANT shall have the right to terminate this Agreement, without cause, by giving thirty (30) days' written notice or less under urgent circumstances. Upon such termination, CONSULTANT shall submit to CITY an itemized statement of services performed for which compensation has not been paid. CITY may require CONSULTANT to complete certain work product or documents and

CONSULTANT shall deliver to CITY all documents in its possession without additional compensation to CONSULTANT. The City Manager of CITY is authorized to terminate this Agreement, in whole or in part, on behalf of CITY.

- 5.1. **Non-Appropriations.** Notwithstanding anything contained in this Agreement to the contrary, if insufficient funds are appropriated, or funds are otherwise unavailable in the budget for CITY for any reason whatsoever in any fiscal year, for payments due under this Agreement, CITY will immediately notify CONSULTANT of such occurrence, and this Agreement shall terminate after the last day during the fiscal year for which appropriations shall have been budgeted for CITY or are otherwise available for payments.

6. **Performance of Work.** CONSULTANT represents that it is qualified by virtue of experience, training, education, and expertise to accomplish these services. Services shall be performed by CONSULTANT in accordance with professional practices in a manner consistent with a level of care, competence and skill exercised by qualified members of the CONSULTANT'S profession. By delivery of completed work, CONSULTANT certifies that the work conforms to the requirements of this Agreement and all applicable federal, state and local laws. CONSULTANT shall perform all work and services under this Agreement in conformance with the time schedule set forth on Exhibit C, "Schedule of Performance," attached hereto and incorporated herein by this reference. CITY's City Manager is authorized on behalf of CITY to modify the timeframes set forth on the Schedule of Performance within the term of this Agreement. If CONSULTANT desires to leave or store any of CONSULTANT's equipment at a CITY site while CONSULTANT is performing work or service pursuant to this Agreement, CONSULTANT will first obtain the consent of CITY's City Manager, or his/her delegate, to do so, and any such storage shall occur only in the manner and location allowed by such CITY official and entirely at CONSULTANT's sole risk.

7. **Insurance Requirements.** CONSULTANT shall procure and provide proof of the insurance coverage required by this section in the form of certificates and endorsements. The required insurance must cover the activities of CONSULTANT, including its subcontractors, employees and agents, relating to or arising from the performance of any work or service under this Agreement, and must remain in full force and effect at all times during the period covered by this Agreement. The coverages may be arranged under a single policy for the full limits required or by a combination of underlying policies with the balance provided by excess or "umbrella" policies, provided each such policy complies with the requirements set forth herein. Any deductibles or self-insured retentions must be declared to and approved by City. CONSULTANT further understands that the CITY reserves the right to modify the insurance requirements set forth herein, with thirty (30) days' notice provided to CONSULTANT, at any time as deemed necessary to protect the interests of the CITY.

7.1. **Insurance Types and Amounts.**

7.1.1. **Commercial General Liability (CGL).** CONSULTANT shall maintain CGL against claims and liabilities for personal injury, death, or property damage providing protection in the minimum amount of: (i) one million dollars (\$1,000,000.00) combined single limit for any one accident or occurrence, or (ii) the maximum amount of such insurance available to CONSULTANT under CONSULTANT's combined insurance policies (including any excess or "umbrella" policies), whichever is greater.

7.1.2. **Automobile Liability.** CONSULTANT shall maintain Automobile Liability covering all owned, non-owned and hired automobiles (if CONSULTANT does not own automobiles, then CONSULTANT shall maintain Hired/Non-owned Automobile Liability) against claims and liabilities for personal injury, death, or property damage providing protection in the minimum amount of: (i) one million dollars (\$1,000,000.00)

combined single limit for any one accident or occurrence, or (ii) the maximum amount of such insurance available to CONSULTANT under CONSULTANT's combined insurance policies (including any excess or "umbrella" policies), whichever is greater.

7.1.3. Workers' Compensation Insurance and Employer's Liability. CONSULTANT shall maintain Workers Compensation coverage, as required by law, in the minimum amount of: (i) one million dollars (\$1,000,000.00) for any one accident or occurrence, or (ii) the maximum amount of such insurance available to CONSULTANT under CONSULTANT's combined insurance policies (including any excess or "umbrella" policies), whichever is greater. If CONSULTANT is self-insured, CONSULTANT shall provide its Certificate of Permission to Self-Insure, duly authorized by the Department of Industrial Relations.

7.1.4. Pollution (Environmental) Liability. If the performance of CONSULTANT'S work or service under this Agreement involves hazardous materials, contaminated soil disposal, and/or a risk of accidental release of fuel oil, chemicals or other toxic gases or hazardous materials, CONSULTANT shall procure and maintain Pollution Liability covering the CONSULTANT'S liability for bodily injury, property damage and environmental damage resulting from pollution and related cleanup costs arising out of the work or services to be performed under this Agreement. Coverage shall be provided for both work performed on site, as well as during the transport of hazardous materials. Such coverage shall be in the minimum amount of: (i) one million dollars (\$1,000,000.00) for any one accident or occurrence, or (ii) the maximum amount of such insurance available to CONSULTANT under CONSULTANT's combined insurance policies (including any excess or "umbrella" policies), whichever is greater.

7.1.5. Professional Liability.

7.1.5.1. If the performance of CONSULTANT's work or service under this Agreement involves professional and/or technical services (examples include, but are not limited to, architects, engineers, land surveyors, and appraisers), CONSULTANT shall procure and maintain either a claims made or occurrence Errors and Omission liability insurance in the minimum amount of: (i) one million dollars (\$1,000,000.00) each claim, or (ii) the maximum amount of such insurance available to CONSULTANT under CONSULTANT's combined insurance policies (including any excess or "umbrella" policies), whichever is greater. Further, if CONSULTANT maintains a claims-made policy, CONSULTANT shall provide written evidence of such insurance to the CITY for at least five (5) years after the completion of work performed under this Agreement.

7.1.5.2. If the performance of CONSULTANT's work or service under this Agreement relates to Information Technology or related services (examples include, but are not limited to computer programmers, software designers, hardware engineers, or other systems consultants), CONSULTANT shall procure and maintain a claims made Errors and Omission liability insurance, including Cyber Liability and Data Breach, in the minimum amount of: (i) one million dollars (\$1,000,000.00) each claim, or (ii) the maximum amount of such insurance available to CONSULTANT under CONSULTANT's combined insurance policies (including any excess or "umbrella" policies), whichever is greater.

- 7.1.6. **Sexual Abuse/Molestation Liability (SML)**: If the performance of CONSULTANT's work or service under this Agreement involves contact with minors, CONSULTANT shall procure and maintain Sexual Abuse and Molestation insurance in the minimum amount of: (i) two hundred thousand dollars (\$200,000.00) each claim, or (ii) the maximum amount of such insurance available to CONSULTANT under CONSULTANT's combined insurance policies (including any excess or "umbrella" policies), whichever is greater.
- 7.2. **Endorsements**. CONSULTANT shall provide proof of the following endorsements, listed for each policy for which endorsements are required, as outlined below:
- 7.2.1. **General Liability and pollution liability (when pollution liability applies)**.
- 7.2.1.1. The City of Morgan Hill, its elected or appointed officials, boards, agencies, officers, agents, employees, and volunteers are named as additional insureds;
- 7.2.1.2. the insurer waives the right of subrogation against the City of Morgan Hill and the CITY's elected or appointed officials, boards, agencies, officers, agents, employees, and volunteers; and,
- 7.2.1.3. insurance shall be primary non-contributing.
- 7.2.2. **Workers Compensation**.
- If the performance of CONSULTANT'S work or service under this Agreement involves access to or activity on any property or premises owned or occupied by the CITY, including, but not limited to, CONSULTANT'S presence during site visits and meetings, then insurer waives the right of subrogation against the City of Morgan Hill and the CITY's elected or appointed officials, boards, agencies, officers, agents, employees, and volunteers.
- 7.3. **Qualification of Insurers**. All insurance required pursuant to this Agreement must be issued by a company licensed and admitted, or otherwise legally authorized to carry out insurance business in the State of California, and each insurer must have a current A.M. Best's financial strength rating of "A" or better and a financial size rating of "VII" or better.
- 7.4. **Certificates**. CONSULTANT shall furnish CITY of Morgan Hill with copies of all certificates as outlined herein, whether new or modified, promptly upon receipt. In the event of a claim or legal action, CONSULTANT shall promptly furnish CITY of Morgan Hill with copies of all policies outlined herein. No policy subject to the CONSULTANT's agreement with the CITY shall be canceled or materially changed except after thirty (30) days' notice by the insurer to CITY. Certificates, including renewal certificates, may be mailed electronically to riskmgmt@morganhill.ca.gov or delivered to the Certificate Holder address provided herein

Certificate Holder address:

City of Morgan Hill
Attn: Risk Management
17575 Peak Avenue
Morgan Hill, CA 95037

8. **Non-Liability of Officials and Employees of the CITY.** No official or employee of CITY shall be personally liable for any default or liability under this Agreement.

9. **Compliance with Law.**

9.1. CONSULTANT and its officers, employees, agents, and subcontractors shall comply with all applicable laws, ordinances, administrative regulations, and permitting requirements in carrying out their obligations under this Agreement. CONSULTANT and its officers, employees, agents, and subcontractors covenant there shall be no discrimination based upon race, color, creed, religion, gender, marital status, age, sexual orientation, national origin, mental disability, physical disability, medical condition, or ancestry, in any activity pursuant to this Agreement.

9.2. Compliance with Wage and Hour Laws: Consultant, and any subcontractor it employs to complete work under this Agreement, shall comply with all applicable federal, state and local wage and hour laws. Applicable laws may include, but are not limited to, the Federal Fair Labor Standards Act and the California Labor Code.

Final Judgments, Decisions, and Orders: For purposes of this Section, a “final judgment, decision, or order” refers to one for which all appeals have been exhausted or the time to appeal has expired. Relevant investigatory government agencies include: the federal Department of Labor, the California Division of Labor Standards Enforcement, or any other governmental entity or division tasked with the investigation and enforcement of wage and hour laws.

Prior Judgments against CONSULTANT and/or its Subcontractors: BY SIGNING THIS AGREEMENT, CONSULTANT AFFIRMS THAT IT HAS DISCLOSED ANY FINAL JUDGMENTS, DECISIONS OR ORDERS FROM A COURT OR INVESTIGATORY GOVERNMENT AGENCY FINDING – IN THE FIVE (5) YEARS PRIOR TO EXECUTING THIS AGREEMENT – THAT CONSULTANT OR ITS SUBCONTRACTOR(S) HAS VIOLATED ANY APPLICABLE WAGE AND HOUR LAWS. CONSULTANT FURTHER AFFIRMS THAT IT OR ITS SUBCONTRACTOR(S) HAS SATISFIED AND COMPLIED WITH – OR HAS REACHED AGREEMENT WITH THE CITY REGARDING THE MANNER IN WHICH IT WILL SATISFY – ANY SUCH JUDGMENTS, DECISIONS OR ORDERS.

Judgments or Decisions During Term of Contract: If at any time during the term of this Agreement, a court or investigatory government agency issues a final judgment, decision or order finding that CONSULTANT or an subcontractor it employs to perform work under this Agreement has violated any applicable wage and hour law, or CONSULTANT learns of such a judgment, decision, or order that was not previously disclosed, CONSULTANT shall inform the City Attorney, no more than fifteen (15) days after the judgment, decision or order becomes final or of learning of the final judgment, decision or order. CONSULTANT and its subcontractors shall promptly satisfy and comply with any such judgment, decision, or order, and shall provide the City Attorney with documentary evidence of compliance with the final judgment, decision or order within five (5) days of satisfying the final judgment, decision or order. The City reserves the right to require CONSULTANT to enter into an agreement with the City regarding the manner in which any such final judgment, decision, or order will be satisfied.

City's Right to Withhold Payment: Where CONSULTANT or any subcontractor it employs to perform work under this Agreement has been found in violation of any applicable wage and

hour law by a final judgment, decision or order of a court or government agency, the City reserves the right to withhold payment to CONSULTANT until such judgment, decision or order has been satisfied in full.

Material Breach: Failure to comply with any part of this Section constitutes a material breach of this Agreement. Such breach may serve as a basis for immediate termination of this Agreement and/or any other remedies available under this Agreement and/or law.

Notice to City Related to Wage Theft Prevention: Notice provided to the City Attorney as required under this Section shall be addressed to: City Attorney, City of Morgan Hill, 17575 Peak Avenue, Morgan Hill, CA 95037. The Notice provisions of this Section are separate from any other notice provisions in this Agreement and, accordingly, only notice provided to the above address satisfies the notice requirements in this Section.

10. **Independent Contractor**. CONSULTANT is an independent contractor and not an agent or employee of CITY.

11. **Confidentiality**. All data, documents, or other information received by CONSULTANT from CITY or prepared in connection with CONSULTANT'S services under this Agreement are deemed confidential and shall not be disclosed to any third party by CONSULTANT without prior written consent by CITY.

12. **Conflict of Interest and Reporting**. CONSULTANT shall at all times avoid conflict of interest or appearance of conflict of interest in performance of this Agreement.

13. **Notices**. All notices shall be personally delivered or mailed, via first class mail to the below listed address. These addresses shall be used for delivery of service of process. Notices shall be effective five (5) days after date of mailing, or upon date of personal delivery.

Address of CONSULTANT is as follows:

Civic Foundry, LLC
PO Box 5541
San Jose, CA 95150

Address of CITY is as follows:

Shane Palsgrove	with a copy to:
City of Morgan Hill	City Clerk
17575 Peak Avenue	City of Morgan Hill
Morgan Hill, CA 95037	17575 Peak Avenue
	Morgan Hill, CA 95037

14. **Licenses, Permits and Fees**. CONSULTANT shall obtain a City of Morgan Hill Business License, all permits and licenses to the extent required by ordinances, codes and regulations of the federal, state and local government.

15. **Consultant's Proposal**. If applicable, this Agreement shall include CONSULTANT'S proposal or bid which is incorporated herein. In the event of any inconsistency between the terms of the proposal and this Agreement, this Agreement shall govern.

16. **Maintenance of Records.**

- 16.1. **Maintenance.** CONSULTANT shall prepare, maintain, and preserve all reports and records that may be required by federal, state, and CITY rules and ordinances related to services provided under this Agreement. CONSULTANT shall maintain records for a period of at least 3 years after receipt of final payment under this Agreement. If any litigation, claim, negotiation, audit exception, or other action relating to this Agreement is pending at the end of the 3-year period, then CONSULTANT shall retain said records until such action is resolved.
- 16.2. **Access to and Audit of Records.** The CITY shall have the right to examine, monitor and audit all records, documents, conditions, and activities of the CONSULTANT and its subcontractors related to services under this Agreement. Pursuant to Government Code Section 8546.7, if this Agreement involves the expenditure of public funds in excess of \$10,000, the Parties to this Agreement may be subject, at the request of the CITY or as part of any audit of the CITY, to the examination and audit of the State Auditor pertaining to matters connected with the performance of this Agreement for a period of three years after final payment under the Agreement.
- 16.3. **Ownership of Work Product.** All documents or other information developed or received by CONSULTANT for work performed under this Agreement shall be the property of CITY. CONSULTANT shall provide CITY with copies of these items upon demand or upon termination of this Agreement.

17. **Familiarity with Work.** By executing this Agreement, CONSULTANT represents that: (1) it has investigated the work to be performed; (2) it has investigated the site of the work and is aware of all conditions there; and (3) it understands the difficulties and restrictions of the work under this Agreement. Should CONSULTANT discover any conditions materially differing from those inherent in the work or as represented by CITY, it shall immediately inform CITY and shall not proceed, except at CONSULTANT'S risk, until written instructions are received from CITY.

18. **Time of Essence.** Time is of the essence in the performance of this Agreement.

19. **No Assignment.** Neither this Agreement nor any portion shall be assigned by CONSULTANT, without prior written consent of CITY. Any attempted assignment not first approved by CITY shall be void and, at CITY's option, shall terminate this Agreement effective as of the date of such attempted assignment.

20. **Attorney Fees.** In any legal action, dispute or arbitration arising out of or relating to this Agreement, the prevailing party shall be entitled to an award of its reasonable attorney fees, costs and expenses incurred.

21. **Defense and Indemnification.**

21.1. **Defense and Indemnification.** CONSULTANT shall, to the fullest extent permitted by law, indemnify, defend and hold harmless CITY, its elected or appointed officials, boards, agencies, officers, agents, employees, and volunteers ("INDEMNITEES") from and against any and all claims, liabilities, expenses, liens, or damages of any nature, including liability for bodily injury, property damage or personal injury, and including reasonable attorneys' fees and expenses, that arise out of, pertain to, or relate to the performance of this Agreement or the failure to comply with any obligations contained in this Agreement by CONSULTANT, and/or its agents, officers, employees, subcontractors, or independent contractors ("CLAIM").

21.2. Exceptions. CONSULTANT is not required to indemnify INDEMNITEES against liability for bodily injury, property damage or personal injury, or any other loss, damage or expense arising from the sole negligence or willful misconduct of the CITY.

21.3. Not limited by insurance. The indemnity, defense and hold harmless provisions of this Agreement apply to all CLAIMs alleged against an INDEMNITEE, regardless of whether any insurance policies are applicable. Policy limits do not act as a limitation upon the amount of indemnification or defense to be provided by CONSULTANT.

21.4. Right to Offset. CITY shall have the right to offset against any compensation due CONSULTANT under this Agreement any amount due CITY from CONSULTANT as a result of CONSULTANT's failure to pay CITY promptly any indemnification arising under this Section (21) and any amount due CITY from CONSULTANT arising from CONSULTANT's failure either to (i) pay taxes on amounts received pursuant to this Agreement or (ii) comply with applicable workers' compensation laws.

21.5. Interpretation. This Section shall constitute an agreement or contract of indemnity, incorporating the interpretations under California Civil Code Section 2778. It is expressly understood and agreed that the obligation of the CONSULTANT to indemnify the INDEMNITEE shall be as broad and inclusive as permitted by the laws of the State of California and shall survive termination of this Agreement.

22. **Entire Agreement; Modification; Conflicting Provisions.** This Agreement constitutes the entire Agreement between the Parties and supersedes any previous agreements, oral or written. This Agreement may be modified or provisions waived only by a subsequent mutual written agreement executed by CITY and CONSULTANT. If the provisions contained in the main body of this Agreement conflict with any provision contained in an exhibit to this Agreement, the provisions of the main body of this Agreement shall govern and control over any provision contained in an exhibit to this Agreement.

23. **Governing Law and Venue.** This Agreement shall be construed in accordance with the laws of the State of California. This Agreement was entered into and is to be performed in the County of Santa Clara. Any action or dispute arising out of this Agreement shall only be brought in Santa Clara County.

24. **Interpretation.** This Agreement is a negotiated document and shall be deemed to have been drafted jointly by the Parties, and no rule of construction or interpretation shall apply against any particular Party based on a contention that the Agreement was drafted by one of the Parties including, but not limited to, California Civil Code § 1654, the provisions of which are hereby waived. This Agreement shall be construed and interpreted in a neutral manner.

25. **Preservation of Agreement.** If any term, provision, covenant, or condition of this Agreement is held by a court of competent jurisdiction to be invalid or unenforceable, the rest of the Agreement shall remain in full force and effect and shall in no way be affected or invalidated.

26. **Binding Agreement.** Notwithstanding the provisions of Section 19 above, this Agreement shall bind any and all successors in interest, legal representatives and/or other permitted assignees or transferees of CONSULTANT in the same manner as if those successors in interest, legal representatives or other permitted assignees or transferees had entered into this Agreement originally.

27. ☐ **Data Sharing.** This Agreement requires access by CONSULTANT to CITY's Geographic Information System (GIS) DATA for CONSULTANT to perform the work. CITY agrees to provide the GIS

DATA to CONSULTANT solely for the purpose of performance of contracted work with the CITY upon the terms and conditions specified in Exhibit D, incorporated herein by this reference.

[Signatures on Next Page]

28. **Authority to Execute.** Those individuals who are signing this Agreement on behalf of entities represent and warrant that they are, respectively, duly authorized to sign on behalf of the entities and to bind the entities fully to each and all of the obligations set forth in this Agreement.

IN WITNESS THEREOF, these Parties have executed this Agreement on the day and year shown below.

AS SET FORTH IN CA. CORP. CODE § 313, TWO SIGNATURES ARE REQUIRED FOR CALIFORNIA CORPORATIONS:

- (1) CHAIRPERSON OF THE BOARD, PRESIDENT, OR VICE PRESIDENT; AND
(2) SECRETARY, ASSISTANT SECRETARY, CHIEF FINANCIAL OFFICER OR ASSISTANT TREASURER.

ATTEST:

CITY OF MORGAN HILL

City Clerk/Deputy City Clerk

City Manager

Michelle Bigelow
Print Name

Christina J. Turner
Print Name

Date: _____

Date: _____

APPROVED AS TO FORM:



City Attorney

By: _____

Donald A. Larkin
Print Name

Vijay Sammeta , CEO

Print Name and Title of Signer.

If Corporate: Chairman, President or
Vice President

Date: _____

Date: 4/1/2021

By: _____

Print Name and Title of Signer.

If Corporate: Secretary, Assistant
Secretary, Chief Financial Officer or
Assistant Treasurer

Date: _____

EXHIBIT A
SCOPE OF SERVICES

EXHIBIT B
SCHEDULE OF COMPENSATION RATES

EXHIBIT C
SCHEDULE OF PERFORMANCE



March 30, 2021

Shane Palsgrove
Chief of Police
City of Morgan Hill
16200 Vineyard Blvd.
Morgan Hill, CA 95037

Dear Chief Palsgrove,

As we approach the end of the Civic Foundry's current service agreement with the City of Morgan Hill, we want to take the opportunity to align the scope of services for our next proposal with the changing technology support needs of the City. We have been proud to serve the City as its strategic leader for information services over the past two years. Together we faced some major issues such as successfully pivoting the City to a mobile workforce due to a global pandemic, and modernizing much of the underlying technical infrastructure while managing through major power outages and fiber breaks.

It has become increasingly evident that the City's lack of in-house network engineering or modern server skill sets is hindering its ability to maintain stability, reliability, and security of the organization's data and technical infrastructure. The need for these skills will undoubtedly grow as the City will soon be required to address a number of remediation items as a result of upcoming security, PCI, and DOJ assessments. This proposal will begin to address the backlog of requirements within the budget constraints of the City. However, one position will not comprehensively address *all* of the engineering needs of the City, nor will it be able to launch and maintain an ongoing information security program as required by regulatory compliance associated with taking credit cards, or DOJ and general controls associated with financial risk by government agencies.

To provide the City with resources in the most cost-effective manner, we propose that the City continue to receive IT leadership from Civic Foundry but at a reduced service level to create capacity to address the backlog of engineering services that the City critically needs through the addition of a Network/Server Engineer. Under this proposed model, the IS Department's Programmer Analyst would address all application services and customer requests as defined by the City's classification description. The City's IS Technician would continue to provide tier one support for public safety and address more advanced desktop support and helpdesk issues, as well as basic server requests, escalating more complex network and server issues to the Civic Foundry Engineer. In addition, Civic Foundry would continue to augment the IS helpdesk through an IT Support Specialist. The Police Department will continue to directly manage City IS staff (i.e., Programmer Analyst and IS Technician) and Civic Foundry will continue to provide IS

Department leadership and supervision of its own staff (i.e. Network/Server Engineer and IT Support Specialist).

Below is the proposed scope of services to be provided under a new agreement:

- Provide executive level technology leadership to the City organization
- Provide equivalent of one server engineer resource
- Provide equivalent of one on-site helpdesk technician for a live-answer helpdesk
- Provide tier-one troubleshooting of helpdesk requests
- Provide daily maintenance and administration of the City's network
- Provide daily maintenance and administration of the City's wired and wireless networks
- Administer and maintain the City's firewalls
- Provide daily maintenance and administration of the City's servers (moves, adds, changes, upgrades, etc.)
- Perform server patching
- Provide network support for public safety systems and to City's IS technician
- Plan cooperatively with the City and begin remediation efforts of findings on security audits
- Scope network projects for time, resources, and funding
- Draft hardware specifications for technology purchases and/or budget forecasting
- Draft budget proposals for future IT investments that maximize the City's return-on-investments or address critical infrastructure or security needs
- Draft a five-year strategic plan for technology

The proposed cost for continued executive level management and leadership services, IT Support Specialist position for the Helpdesk, and the addition of a Network/Server Engineer is \$333,000 per year, payable in twelve equal payments of \$27,750 on the first day of each month. This proposed scope of work is for a period of one year, with the option to renew for two additional years at an increased annual cost of three percent (3%).

We look forward to discussing this proposal with you at your earliest convenience.



Vijay Sammeta
Chief Executive Officer
Civic Foundry, LLC

cc: Patti Yinger

Exhibit B

Year 1		Year 2		Year 3	
Monthly	total	Monthly	Total	Monthly	Total
\$ 27,750.00	\$ 333,000.00	\$ 28,582.50	\$ 342,990.00	\$ 29,439.98	\$ 353,279.70
				3 Year Total	\$ 1,029,269.70

Note: a 3% increase is included in Years 2 and 3

Exhibit C

This Agreement shall cover services rendered from the Effective Date of this Agreement until August 31, 2024 at which time CONSULTANT'S services shall be completed. The City Manager is authorized to extend the term of this Agreement for a maximum period of one year. Any such extension shall be in writing and signed by both Parties to this Agreement.



Special - Regular Meeting Agenda
City Council

Rich Constantine - Mayor
John McKay - Mayor Pro Tem
Gino Borgioli - Council Member
Yvonne Martinez Beltran - Council Member
Rene Spring - Council Member

Wednesday, April 21, 2021 5:30 p.m.

Virtual Meeting

VIRTUAL MEETING GUIDELINES AND PUBLIC COMMENT

In accordance with Executive Order N-25-20 and guidance from the California Department of Public Health on gatherings, remote public participation is allowed. Physical meetings will not be in the City Council Chamber until further notice.

City Council meetings will be live streamed on Channel 17, on the City's website and on the City's Facebook page. Those members of the community that would like to participate in the meetings remotely may do so by joining the virtual meeting at: <https://bit.ly/MHCityCouncilMeeting> or by calling in to: (669) 900-9128, then enter the webinar id: 873 3200 8380#.

Public comment may be provided in the following ways:

- Join the virtual City Council meeting via the link above, when public comment is opened, raise your virtual hand and be called upon to speak for up to 3 minutes
- Join the virtual meeting by calling in to the number above, dial *9 to raise your hand and be called upon to speak for up to 3 minutes
- Send public comments in writing to the City Clerk at ccpubliccomment@morganhill.ca.gov <<mailto:ccpubliccomment@morganhill.ca.gov>>

* Please note that comments made on Facebook are not considered public comment.

SPECIAL/REGULAR MEETING

A special meeting of the City Council is called at 5:30 p.m. for the purpose of conducting a closed session and commission interviews.

5:30 p.m. Closed Session/Commission Interviews

7:00 p.m. Regular Meeting

SPECIAL MEETING

5:30 p.m. Closes session/Commission Interviews

CALL TO ORDER

Mayor Constantine

ROLL CALL ATTENDANCE

City Clerk Michelle Bigelow

DECLARATION OF POSTING AGENDA

Per Government Code Section 54954.2
City Clerk Michelle Bigelow

CLOSED SESSION

OPPORTUNITY FOR PUBLIC COMMENT

ADJOURN TO CLOSED SESSION

CONFERENCE WITH LEGAL COUNSEL--ANTICIPATED LITIGATION:

Significant exposure to litigation pursuant to § 54956.9(b)

One case

COMMISSION INTERVIEWS

1. CONDUCT INTERVIEWS TO FILL ONE (1) VACANCY ON THE LIBRARY, CULTURE, AND ARTS COMMISSION

Recommendation:

1. Discuss the characteristics/traits that a successful applicant would possess;
2. Conduct interviews;
3. Identify top applicant and provide recommendation to the Mayor; and
4. Discuss and/or appoint applicant.

REGULAR MEETING

7:00 p.m.

The City Council has adopted a policy that regular meetings shall not continue beyond 11:00 p.m. unless extended by a majority of the City Council.

PRESENTATIONS

PROCLAMATIONS

Proclaiming the week of April 11- 17, 2021 as Telecommunicator's Week
Proclaiming the month of May, 2021 and Monarch Month

April 21, 2021

CITY COUNCIL REPORTS

Council Member Spring

CITY MANAGER'S REPORT

City Manager Christina Turner

CITY ATTORNEY'S REPORT

City Attorney Donald Larkin

OTHER REPORTS

PUBLIC COMMENT

Members of the public are entitled to address the City Council concerning any item within the Morgan Hill City Council's subject matter jurisdiction. Public comments are limited to no more than three minutes. Except for certain specific exceptions, the City Council is prohibited from discussing or taking action on any item not appearing on the posted agenda. (See additional noticing at the end of this agenda)

ADOPTION OF AGENDA

CONSENT CALENDAR

Items appearing on the Consent Calendar are considered routine and may be approved by one motion. Pursuant to City Council Policies and Procedures (CP 97-01), any member of the Council or public may request to have an item removed from the Consent Calendar for comment and action.

Time Estimate for Consent Calendar: 1 - 10 Minutes

2. APPROVE NEW UTILITY BOX ART

Recommendation:

1. Approve public art at one new utility box location; and
2. Authorize the City Manager to enter and administer necessary agreements to complete the project.

3. APPROVE THE APRIL 7, 2021 MEETING MINUTES

Recommendation:

Approve Minutes.

4. APPROVE AGREEMENT WITH CIVIC FOUNDRY, LLC FOR INFORMATION TECHNOLOGY SERVICES

Recommendation:

Approve and authorize the City Manager to execute and administer consultant agreement with Civic Foundry, LLC for an amount not to exceed \$1,029,269 over three years.

5. APPROVE COUNTYWIDE AB 939 AND HOUSEHOLD HAZARDOUS WASTE COLLECTION AGREEMENTS

Recommendation:

Authorize the City Manager to execute the Countywide AB 939 and Household Hazardous Waste Collection agreements.

6. APPROVE A GOVERNMENT CODE 65915 DENSITY BONUS AT 80 PERCENT AND FOUR CONCESSIONS FOR A 100 PERCENT AFFORDABLE HOUSING PROJECT (SR2021-0005 MONTEREY-FIRST COMMUNITY HOUSING (MAGNOLIAS))

Recommendation:

Adopt resolution approving the request for the following, pursuant to Government Code 65915:

1. Density bonus at 80 percent.
2. Affordable housing concessions to the Residential Development Design and Development Standards:
 - a. Design Standard No. 26: Exterior Treatments and Materials;
 - b. Design Standard No. 30: Building Colors;
 - c. Design Standard No. 31: Window Design; and
 - d. Design Standard No. 39: Multi-family roof form.

7. APPROVE A GOVERNMENT CODE 65915 DENSITY BONUS AT 80 PERCENT AND THREE CONCESSIONS FOR A 100 PERCENT AFFORDABLE HOUSING PROJECT (SR2020-0027 MONTEREY-MINER (JEMCOR))

Recommendation:

Adopt resolution approving the request for the following, pursuant to Government Code 65915:

1. Density bonus at 80 percent.
2. Affordable housing concessions:
 - a. Reduced parking space dimensions for enclosed garages;
 - b. Eliminate requirement for covered bicycle parking and long-term bicycle storage; and
 - c. Reduction in use of decorative pavement material.

8. RATIFY COMMUNITY POWER RESILIENCY GRANT ACCEPTANCE IN THE AMOUNT OF \$300,000 FROM STATE OF CALIFORNIA OFFICE OF EMERGENCY SERVICES FOR THE CENTENNIAL RECREATION CENTER BATTERY BACKUP PROJECT

Recommendation:

1. Ratify acceptance of Community Power Resiliency Grant from the State of California Office of Emergency Services (CalOES) in the amount of \$300,000; and
2. Authorize the City Manager to execute and administer all related documents.

OTHER BUSINESS

9. DEVELOPMENT PROJECT UPDATE

Recommendation: Receive Update

Estimated Time: 30 Minutes

10. RECEIVE MONTHLY BUDGET UPDATE, MARCH 2021 FINANCIAL AND INVESTMENT REPORTS, AND CITY MANAGER AUTHORITY REPORTS

Recommendation:

Accept and file report.

Estimated Time: 15 Minutes

11. CONSIDER COUNCIL INITIATED AGENDA ITEM TO REVISIT COMMERCIAL CANNABIS SALES

Recommendation:

Consider whether to direct staff to return with a Council Agenda Item on the sale of commercial cannabis in Morgan Hill City limits.

Estimated Time: 10 Minutes

FUTURE COUNCIL INITIATED AGENDA ITEMS

Note: in accordance with Government Code Section 54954.2(a), there shall be no discussion, debate and/or action taken on any request other than providing direction to staff to place the matter of business on a future agenda.

ADJOURNMENT

NOTICE

Any documents produced by the City and distributed to the majority of the City Council less than 72 hours prior to an open meeting, will be made available for public inspection at the City Clerk's Counter at City Hall located at 17575 Peak Avenue, Morgan Hill, CA, 95037 and at the Morgan Hill Public Library located at 660 West Main Avenue, Morgan Hill, California, 95037 during normal business hours. (Pursuant to Government Code 54957.5)

PUBLIC COMMENT

Members of the Public are entitled to directly address the City Council concerning any item that is described in the notice of this meeting, before or during consideration of that item. If you wish to address the Council on any issue that is on this agenda, please complete a speaker request card located in the foyer of the Council Chambers and deliver it to the Minutes Clerk prior to discussion of the item. You are not required to give your name on the speaker card in order to speak to the Council, but it is very helpful. When you are called, proceed to the podium and the Mayor will recognize you. If you wish to address the City Council on any other item of interest to the public, you may do so during the public comment portion of the meeting following the same procedure described above. Please limit your comments to three (3) minutes or less.

Please submit written correspondence to the Minutes Clerk, who will distribute correspondence to the City Council.

Persons interested in proposing an item for the City Council agenda should contact a member of the City Council who may plan an item on the agenda for a future City Council meeting. Should your comments require Council action, your request may be placed on the next appropriate agenda. Council discussion or action may not be taken until your item appears on an agenda. This procedure is in compliance with the California Public Meeting Law (Brown Act) Government Code §54950.

City Council Policies and Procedures (CP 03-01) outlines the procedure for the conduct of public hearings. Notice is given, pursuant to Government Code Section 65009, that any challenge of Public Hearing Agenda items in court, may be limited to raising only those issues raised by you or on your behalf at the Public Hearing described in this notice, or in written correspondence delivered to the City Council at, or prior to the Public Hearing on these matters.

The time within which judicial review must be sought of the action by the City Council, which acted upon any matter appearing on this agenda is governed by the provisions of Section 1094.6 of the California Code of Civil Procedure.

For a copy of City Council Policies and Procedures CP 97-01, please contact the City Clerk's office (408) 779-7259, (408) 779-3117 (fax) or by email cityclerk@morganhill.ca.gov.

AMERICANS WITH DISABILITIES ACT (ADA)

In compliance with the Americans with Disabilities Act, if you are a disabled person and you need a disability-related modification or accommodation to participate in this meeting, please contact the City Clerk's Office at (408)779-7259, (408)779-3117 (fax) or by email cityclerk@morganhill.ca.gov. Requests must be made as early as possible and at least two-full business days before the start of the meeting.

SUSTAINABLE MORGAN HILL



VISION

To sustain a safe, equitable, inclusive, socially responsible, environmentally conscious, and economically sound community

Choose Morgan Hill

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2020-2021 Strategic Priorities

- **Fiscal Sustainability**
- Affordable Housing and Homelessness
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- Transportation



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Special - Regular Meeting Agenda

City Council

Rich Constantine - Mayor
John McKay - Mayor Pro Tem
Gino Borgioli - Council Member
Yvonne Martinez Beltran - Council Member
Rene Spring - Council Member

Wednesday, April 21, 2021 5:30 p.m.

Virtual Meeting

VIRTUAL MEETING GUIDELINES AND PUBLIC COMMENT

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5:30 p.m. Closed Session
6:00 p.m. Commission Interviews
7:00 p.m. Regular Meeting

SPECIAL MEETING

5:30 p.m. Closes session
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CALL TO ORDER

Mayor Constantine

ROLL CALL ATTENDANCE

City Clerk Michelle Bigelow

DECLARATION OF POSTING AGENDA

Per Government Code Section 54954.2
City Clerk Michelle Bigelow

CLOSED SESSION

OPPORTUNITY FOR PUBLIC COMMENT

ADJOURN TO CLOSED SESSION

CONFERENCE WITH LEGAL COUNSEL--ANTICIPATED LITIGATION:

Significant exposure to litigation pursuant to § 54956.9(b)
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COMMISSION INTERVIEWS

1. CONDUCT INTERVIEWS TO FILL ONE (1) VACANCY ON THE LIBRARY, CULTURE, AND ARTS COMMISSION

Recommendation:

1. Discuss the characteristics/traits that a successful applicant would possess;
2. Conduct interviews;
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REGULAR MEETING

7:00 p.m.

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Time Estimate for Consent Calendar: 1 - 10 Minutes

2. APPROVE NEW UTILITY BOX ART

Recommendation:

1. Approve public art at one new utility box location; and
2. Authorize the City Manager to enter and administer necessary agreements to complete the project.

3. APPROVE THE APRIL 7, 2021 MEETING MINUTES

Recommendation:

Approve Minutes.

4. APPROVE AGREEMENT WITH CIVIC FOUNDRY, LLC FOR INFORMATION TECHNOLOGY SERVICES

Recommendation:

Approve and authorize the City Manager to execute and administer consultant agreement with Civic Foundry, LLC for an amount not to exceed \$1,029,269 over three years.

5. APPROVE COUNTYWIDE AB 939 AND HOUSEHOLD HAZARDOUS WASTE COLLECTION AGREEMENTS

Recommendation:

Authorize the City Manager to execute the Countywide AB 939 and Household Hazardous Waste Collection agreements.

6. APPROVE A GOVERNMENT CODE 65915 DENSITY BONUS AT 80 PERCENT AND FOUR CONCESSIONS FOR A 100 PERCENT AFFORDABLE HOUSING PROJECT (SR2021-0005 MONTEREY-FIRST COMMUNITY HOUSING (MAGNOLIAS))

Recommendation:

Adopt resolution approving the request for the following, pursuant to Government Code 65915:

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 - a. Design Standard No. 26: Exterior Treatments and Materials;
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2. Affordable housing concessions:
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8. RATIFY COMMUNITY POWER RESILIENCY GRANT ACCEPTANCE IN THE AMOUNT OF \$300,000 FROM STATE OF CALIFORNIA OFFICE OF EMERGENCY SERVICES FOR THE CENTENNIAL RECREATION CENTER BATTERY BACKUP PROJECT

Recommendation:

1. Ratify acceptance of Community Power Resiliency Grant from the State of California Office of Emergency Services (CalOES) in the amount of \$300,000; and
2. Authorize the City Manager to execute and administer all related documents.

OTHER BUSINESS

9. DEVELOPMENT PROJECT UPDATE

Recommendation: Receive update.

Estimated Time: 30 Minutes

10. RECEIVE MONTHLY BUDGET UPDATE, MARCH 2021 FINANCIAL AND INVESTMENT REPORTS, AND CITY MANAGER AUTHORITY REPORTS

Recommendation:

Accept and file report.

Estimated Time: 15 Minutes

11. CONSIDER COUNCIL INITIATED AGENDA ITEM TO REVISIT COMMERCIAL CANNABIS SALES

Recommendation:

Consider whether to direct staff to return with a Council Agenda Item to discuss allowing commercial cannabis in Morgan Hill City limits.

Estimated Time: 10 Minutes

FUTURE COUNCIL INITIATED AGENDA ITEMS

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Mayor Constantine

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Recommendation:

Approve Minutes.

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OTHER BUSINESS

8. UPDATE ON SIGNIFICANT DEVELOPMENT PROJECTS

Recommendation: Receive update.

Estimated Time: 30 Minutes

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Recommendation:

Accept and file report.

Estimated Time: 15 Minutes

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Recommendation:

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OTHER BUSINESS

8. RECEIVE UPDATE ON SIGNIFICANT DEVELOPMENT PROJECTS

Recommendation:

Receive update.

Estimated Time: 45 Minutes

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2020-2021 Strategic Priorities

- **Fiscal Sustainability**
- Affordable Housing and Homelessness
- Community Outreach, Engagement, and Messaging
- Economic Development
- Transportation



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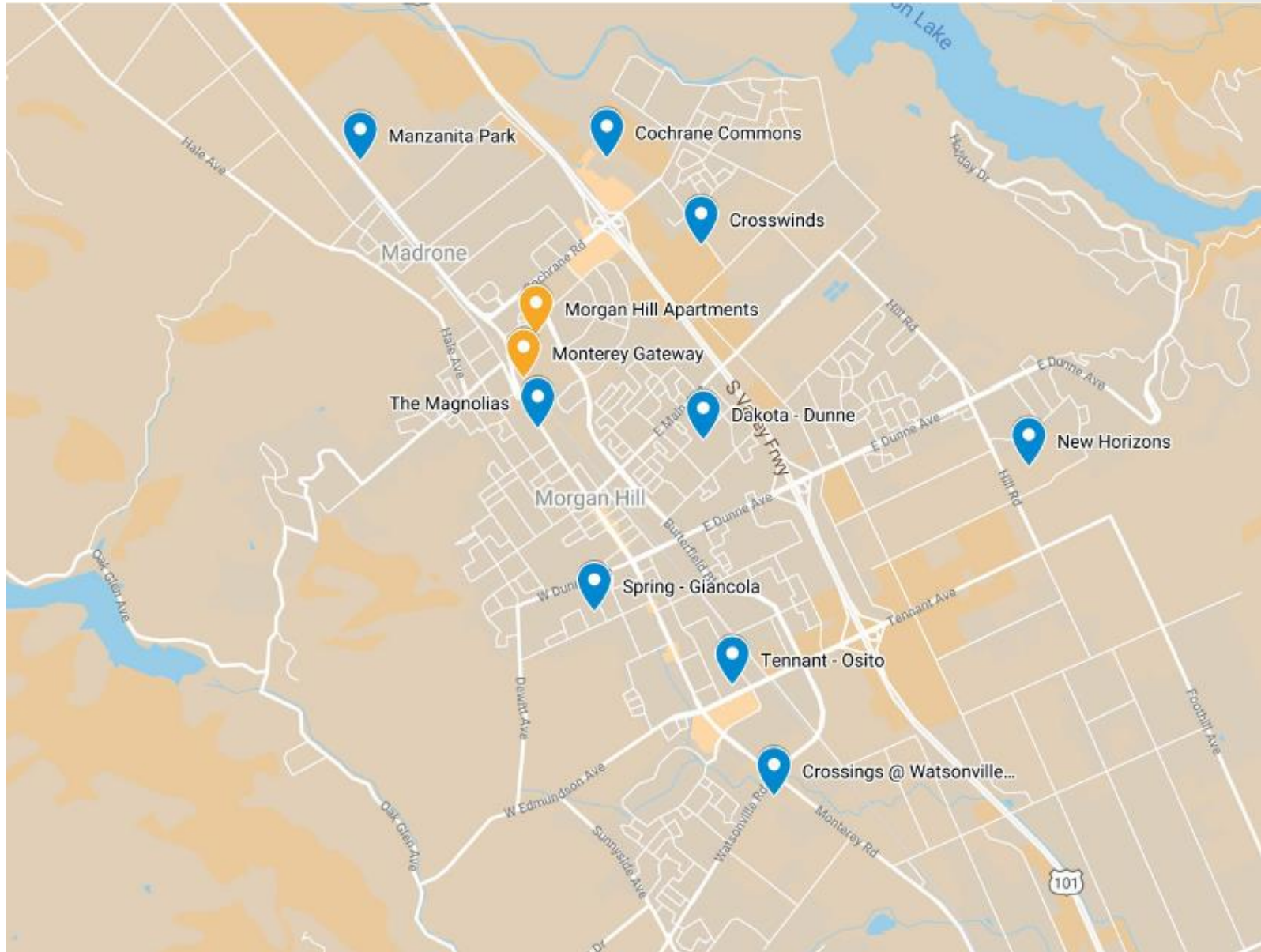
Significant Project Updates -April 2021-



Housing Projects Underway

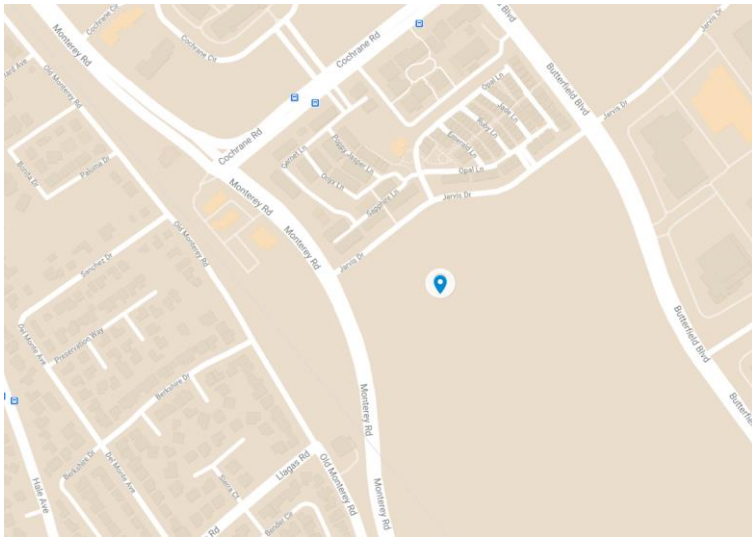


Housing Projects



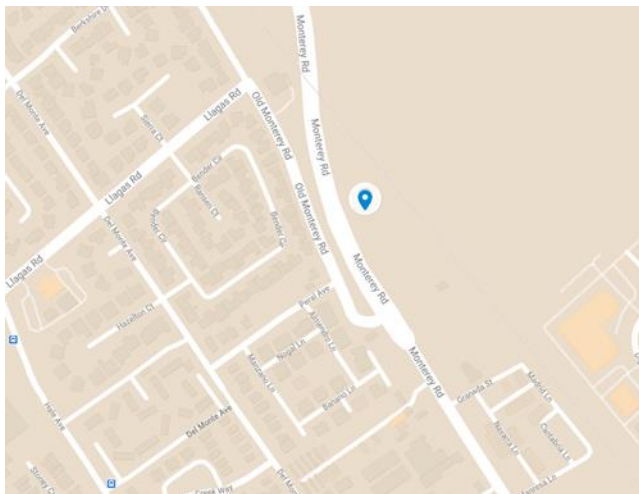
Morgan Hill Apartments (Braddock and Logan)

- 389 Apartments, including 78 very low-income
- Design Permit approved, grading underway
- <http://www.morgan-hill.ca.gov/1959/Morgan-Hill-Apartments>



Monterey Gateway (City Ventures)

- 101 Townhomes
- Design Permit and Building Permits approved
- Construction underway
- <http://www.morgan-hill.ca.gov/1978/Monterey---City-Ventures>



Housing Projects Submitted or Pending



Monterey-Madrone (Jemcor)

- 249 units - 100% Affordable – Density Bonus & SB330
- Application Complete – next step CEQA review
- <http://www.morgan-hill.ca.gov/2096/Monterey-Madrone-Affordable-Housing-Deve>



Crossings at Watsonville Road (UHC)

- 73 units - 100% Affordable – Density Bonus & SB330 (no density bonus, only concessions)
- Application Complete – CEQA underway
- <http://www.morgan-hill.ca.gov/2082/Watsonville-Hordness-Crossings-at-Monter>



The Magnolias (First Community Housing)

- 66 units - 100% Affordable – Density Bonus and SB330
- Application under review - next step CEQA review
- <http://www.morgan-hill.ca.gov/2142/Monterey---First-Community-Housing-Magno>



Monterey-Manzanita Park (Dividend)

- 67 units
- Application Complete – CEQA review underway
- <http://www.morgan-hill.ca.gov/2074/Manzanita-Park>



Morgan Hill Senior Housing (Beacon)

- 82 units – 100% affordable - low-income senior apartments
- Design Permit Approved
- Demolition Permit approved
- <http://www.morgan-hill.ca.gov/2016/Morgan-Hill-Senior-Housing>



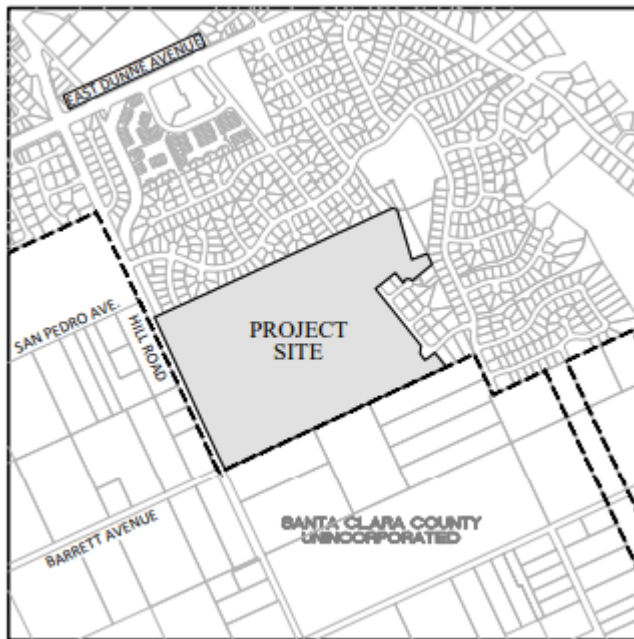
Crosswinds (Dividend)

- 269 units
- Environmental review underway
- <http://www.morgan-hill.ca.gov/2042/Half-Dividend-Crosswinds-Residential-Dev>



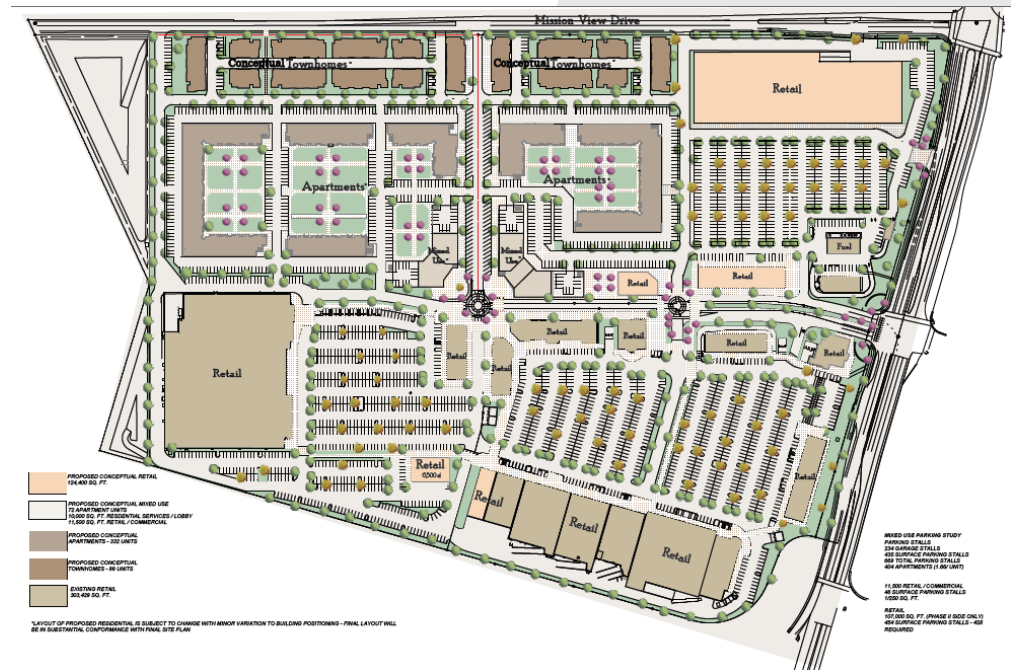
New Horizons (Morgan Hill Devco)

- Proposed General Plan & Zoning amendments
- Environmental underway
- <http://www.morgan-hill.ca.gov/2041/Hill---Morgan-Hill-Devco-LLC>



Cochrane Shopping Center (Browman Development)

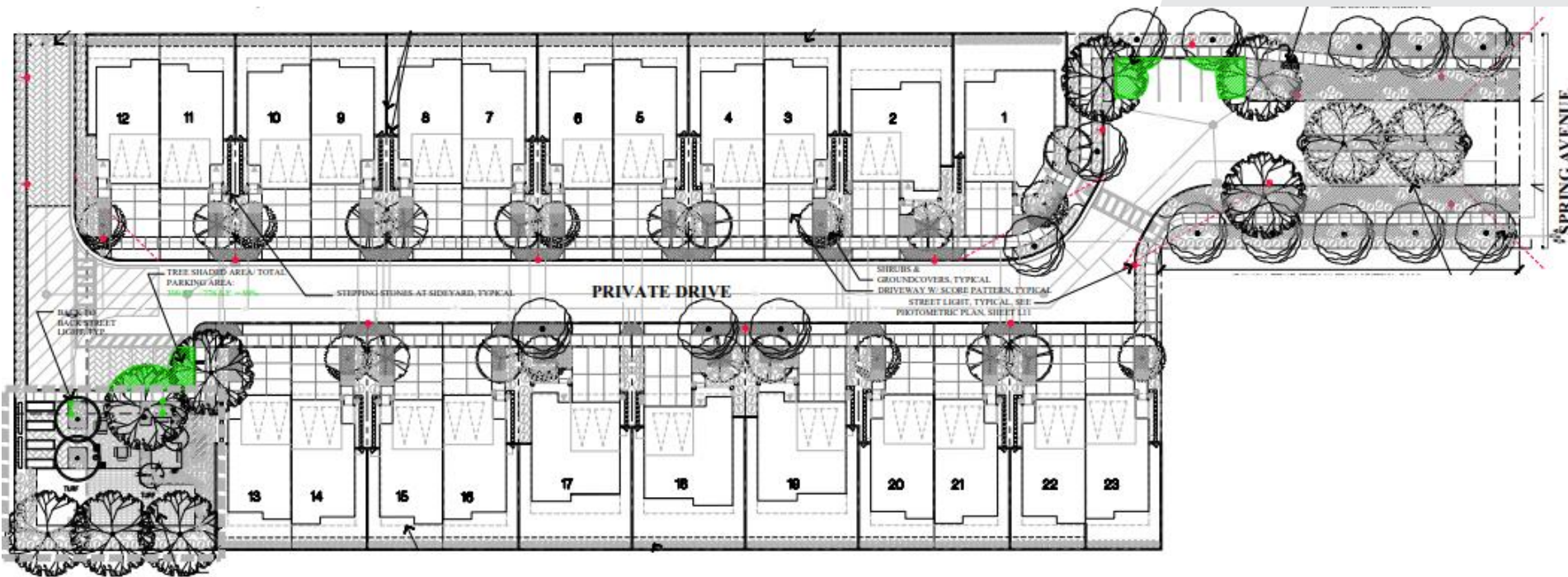
- Proposed General Plan amendment and additional housing units as part of Planned Development Amendment for Phase 2
- Environmental Review underway



• <http://www.morgan-hill.ca.gov/2069/Cochrane-Commons>

Spring - Giancola

- 23 units
- Application Incomplete



Tennant - Osito

- 16 units
- Design Permit approved
- <http://www.morgan-hill.ca.gov/2066/Tennant-Osito>



Other Housing Projects



Dakota-Dunne – 4 units

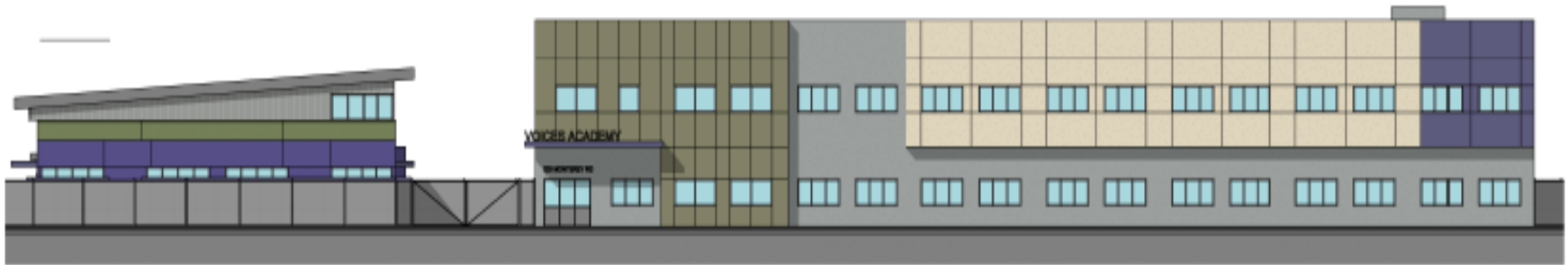
- Application pending

Projects Currently Processing



Voices Charter School

- Approved Conditional Use Permit
- Approved Design Permit
- Building Permit issued
- Modular Construction
- <http://www.morgan-hill.ca.gov/1962/Voices-Charter-School>



DePaul Center

De Paul Health Center opened December 2020 to treat non-acute step-down patients during the current Covid-19 surge.



Redwood Tech 101

- Five (5) industrial buildings totaling 501K SF on 29 acres
- Application for Design Review Permit and Vesting Tentative Map complete
- Proposal conforms to what is allowed in Zoning Code – no zoning or General Plan changes proposed
- <http://www.morgan-hill.ca.gov/2128/Redwood-Tech-at-101>



Golden State Assembly Expansion



- 40K SF
- Manufacturing, warehouse, and distribution
- Grading completed, finalizing building permits



Techcon

- 45,000 SF R&D, manufacturing and office facility
- Approved Design Permit
- Building permit processing
- <http://www.morgan-hill.ca.gov/1963/Cochrane-Monument-Land-Co-Techcon>



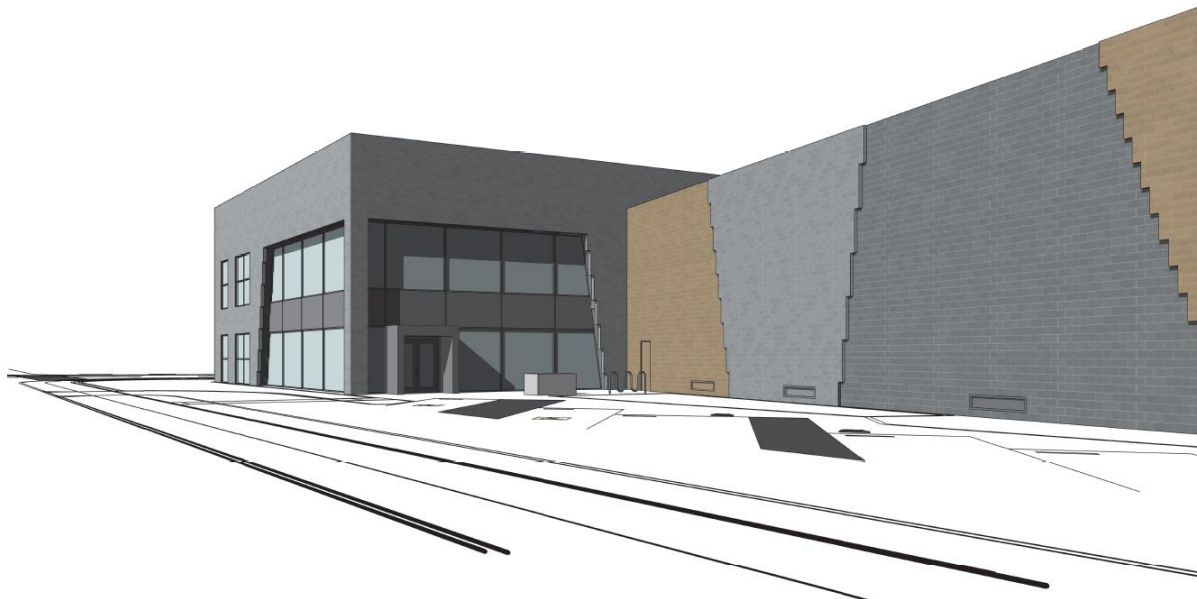
Lillian Commons

- Proposal includes a 55-bed hospital, a 10,000 SF medical office building, a 4,000 SF urgent care facility, 10,000 SF of retail space, open space and up to 150 multifamily units
- PC Reviewed September/October
- City Council approved December 2020
- <http://www.morgan-hill.ca.gov/1961/Lillian-Commons>



Level 10 Construction

- 79K SF Office and Warehouse building
- Approved Design permit
- Demolition Permit issued for existing building
- Building permit processing
- <http://www.morgan-hill.ca.gov/2055/Railroad-Level-10-Construction>



Cardinale Automotive

- Temporary Use operational
- Design Permit amendment and Building Permit for permanent structure processing



Railroad - Goyal

- 22.4K SF
- 2 Industrial buildings
- Approved Conditional Use Permit
- Approved Design Permit
- Building permit under review
- <http://www.morgan-hill.ca.gov/2018/Railroad---Goyal>



Downtown Gallery – W. 2nd St.

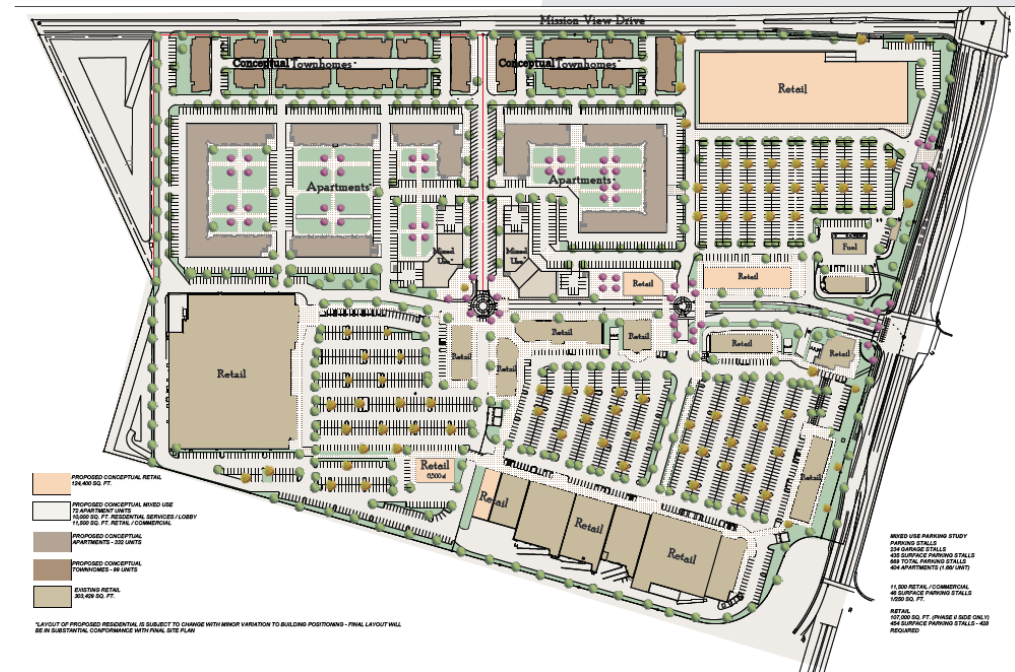


- Approved Design Permit
- 2-story Gallery



Cochrane Commons Shopping Center Phase II

- Re-positioning as “lifestyle” center
(formerly approved for 500,000 retail/multi-screen theater)
- General Plan amendment submitted as part of updated application for Planned Development Amendment for Phase 2



• <http://www.morgan-hill.ca.gov/2069/Cochrane-Commons>

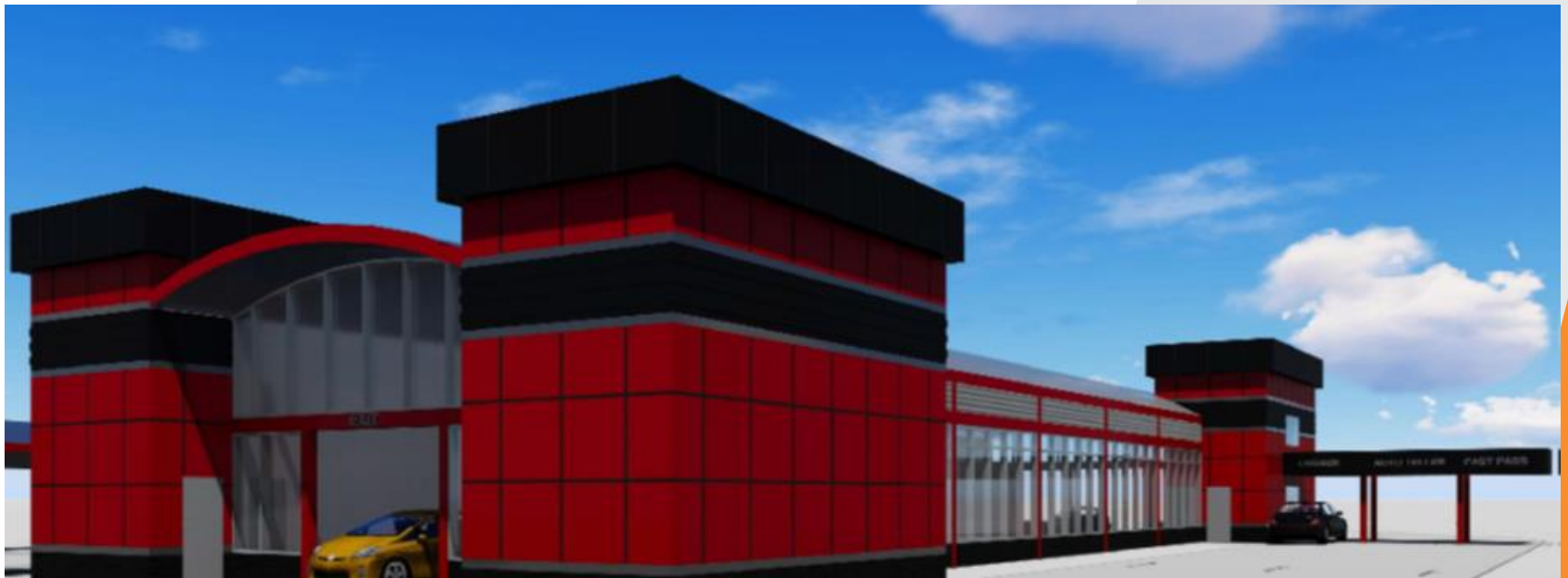
Depot-Latale/The Lumber Yard

- Approved Design permit
- Final street improvement design underway



Zip Thru Car Wash

- Approved Design permit
- Approved Conditional Use Permit
- Building permit processing



Coming Soon...



- Redeveloped World Oil site at Monterey and San Pedro
- 965 San Pedro – 8 Single Story building business park

Projects Under Construction



Butterfield Technology Park



- 600K SF Industrial Park
- Five (5) industrial buildings totaling 410K SF
- Design Permit approved
- Construction underway
- <http://www.morgan-hill.ca.gov/2087/Butterfield-Technology-Park>



Shoe Palace Expansion

- 503K SF
- Shoe Palace Headquarters
- Shell construction complete, landscaping complete, tenant improvements underway
- <http://www.morgan-hill.ca.gov/1960/Shoe-Palace>



Granada Hotel and Market Hall



- 60-Room Boutique Hotel, Market Hall, Spa
- Phase I concrete construction complete
- Phase II framing last 2 floors of construction delayed by COVID 19



Silicon Valley Glass Relocation

- 31K SF new industrial building
- Under construction



Applied Motion Products

- 24K SF Phase I
- Office, R&D, Manufacturing and Assembly
- Under construction



Carpenters Training Center Expansion

- 55K SF Training facility
- Under construction



Evergreen Village Shopping Center



- 20-Acre Commercial Development
- Hotel, Gas Station, Skilled Nursing approved
- Entitlements processing for retail/food
- Developer working with potential future tenants
- Off site improvements completed
- <http://www.morgan-hill.ca.gov/2068/Evergreen-Village>



Recently Completed Projects



Sunsweet Mixed-Use Project

- 83-market rate apartments
- 8K SF of retail
- Construction complete, leasing underway



Depot Station Mixed-Use Project



- 29 Housing Units and 8K SF of Retail Condominiums
- Construction complete



Granary Expansion

- 5K SF Retail space
- Construction complete



Ceballos Construction

- 17K SF Industrial Building
- Construction complete





Special - Regular Meeting Agenda
City Council

Rich Constantine - Mayor
John McKay - Mayor Pro Tem
Gino Borgioli - Council Member
Yvonne Martinez Beltran - Council Member
Rene Spring - Council Member

Wednesday, April 21, 2021 5:30 p.m.

Virtual Meeting

VIRTUAL MEETING GUIDELINES AND PUBLIC COMMENT

In accordance with Executive Order N-25-20 and guidance from the California Department of Public Health on gatherings, remote public participation is allowed. Physical meetings will not be in the City Council Chamber until further notice.

City Council meetings will be live streamed on Channel 17, on the City's website and on the City's Facebook page. Those members of the community that would like to participate in the meetings remotely may do so by joining the virtual meeting at: <https://bit.ly/MHCityCouncilMeeting> or by calling in to: (669) 900-9128, then enter the webinar id: 873 3200 8380#.

Public comment may be provided in the following ways:

- Join the virtual City Council meeting via the link above, when public comment is opened, raise your virtual hand and be called upon to speak for up to 3 minutes
 - In order to speak, please be sure that your version of Zoom is up to date.
- Join the virtual meeting by calling in to the number above, dial *9 to raise your hand and be called upon to speak for up to 3 minutes
- Send public comments in writing to the City Clerk at ccpubliccomment@morganhill.ca.gov [<mailto:ccpubliccomment@morganhill.ca.gov>](mailto:ccpubliccomment@morganhill.ca.gov)

* Please note that comments made on Facebook are not considered public comment.

SPECIAL/REGULAR MEETING

A special meeting of the City Council is called at 5:30 p.m. for the purpose of conducting a closed session and commission interviews.

5:30 p.m. Closed Session
6:00 p.m. Commission Interviews
7:00 p.m. Regular Meeting

SPECIAL MEETING

5:30 p.m. Closed session
6:00 p.m. Commission Interviews

CALL TO ORDER

Mayor Constantine

ROLL CALL ATTENDANCE

City Clerk Michelle Bigelow

DECLARATION OF POSTING AGENDA

Per Government Code Section 54954.2
City Clerk Michelle Bigelow

CLOSED SESSION

OPPORTUNITY FOR PUBLIC COMMENT

ADJOURN TO CLOSED SESSION

CONFERENCE WITH LEGAL COUNSEL--ANTICIPATED LITIGATION:

Significant exposure to litigation pursuant to § 54956.9(b)

One case

COMMISSION INTERVIEWS

1. CONDUCT INTERVIEWS TO FILL ONE (1) VACANCY ON THE LIBRARY, CULTURE, AND ARTS COMMISSION

Recommendation:

1. Discuss the characteristics/traits that a successful applicant would possess;
2. Conduct interviews;
3. Identify top applicant and provide recommendation to the Mayor; and
4. Discuss and/or appoint applicant.

REGULAR MEETING

7:00 p.m.

The City Council has adopted a policy that regular meetings shall not continue beyond 11:00 p.m. unless extended by a majority of the City Council.

PROCLAMATIONS

Proclaiming the week of April 11- 17, 2021 as Telecommunicators Week
Proclaiming the month of May, 2021 as Monarch Month

CITY COUNCIL REPORTS

Council Member Spring

CITY MANAGER'S REPORT

City Manager Christina Turner

CITY ATTORNEY'S REPORT

City Attorney Donald Larkin

OTHER REPORTS

PUBLIC COMMENT

Members of the public are entitled to address the City Council concerning any item within the Morgan Hill City Council's subject matter jurisdiction. Public comments are limited to no more than three minutes. Except for certain specific exceptions, the City Council is prohibited from discussing or taking action on any item not appearing on the posted agenda. (See additional noticing at the end of this agenda)

ADOPTION OF AGENDA

CONSENT CALENDAR

Items appearing on the Consent Calendar are considered routine and may be approved by one motion. Pursuant to City Council Policies and Procedures (CP 97-01), any member of the Council or public may request to have an item removed from the Consent Calendar for comment and action.

Time Estimate for Consent Calendar: 1 - 10 Minutes

2. APPROVE NEW UTILITY BOX ART

Recommendation:

1. Approve public art at one new utility box location; and
2. Authorize the City Manager to enter and administer necessary agreements to complete the project.

3. APPROVE THE APRIL 7, 2021 MEETING MINUTES

Recommendation:

Approve Minutes.

4. APPROVE AGREEMENT WITH CIVIC FOUNDRY, LLC FOR INFORMATION TECHNOLOGY SERVICES

Recommendation:

Approve and authorize the City Manager to execute and administer consultant agreement with Civic Foundry, LLC for an amount not to exceed \$1,029,269 over three years.

5. APPROVE COUNTYWIDE AB 939 AND HOUSEHOLD HAZARDOUS WASTE COLLECTION AGREEMENTS

Recommendation:

Authorize the City Manager to execute the Countywide AB 939 and Household Hazardous Waste Collection agreements.

6. APPROVE A GOVERNMENT CODE 65915 DENSITY BONUS AT 80 PERCENT AND FOUR CONCESSIONS FOR A 100 PERCENT AFFORDABLE HOUSING PROJECT (SR2021-0005 MONTEREY-FIRST COMMUNITY HOUSING (MAGNOLIAS))

Recommendation:

Adopt resolution approving the request for the following, pursuant to Government Code 65915:

1. Density bonus at 80 percent.
2. Affordable housing concessions to the Residential Development Design and Development Standards:
 - a. Design Standard No. 26: Exterior Treatments and Materials;
 - b. Design Standard No. 30: Building Colors;
 - c. Design Standard No. 31: Window Design; and
 - d. Design Standard No. 39: Multi-family roof form.

7. APPROVE A GOVERNMENT CODE 65915 DENSITY BONUS AT 80 PERCENT AND THREE CONCESSIONS FOR A 100 PERCENT AFFORDABLE HOUSING PROJECT (SR2020-0027 MONTEREY-MINER (JEMCOR))

Recommendation:

Adopt resolution approving the request for the following, pursuant to Government Code 65915:

1. Density bonus at 80 percent.
2. Affordable housing concessions:
 - a. Reduced parking space dimensions for enclosed garages;
 - b. Eliminate requirement for covered bicycle parking and long-term bicycle storage; and
 - c. Reduction in use of decorative pavement material.

OTHER BUSINESS

8. RECEIVE UPDATE ON SIGNIFICANT DEVELOPMENT PROJECTS

Recommendation:

Receive update

Estimated Time: 45 Minutes

9. RECEIVE MONTHLY BUDGET UPDATE, MARCH 2021 FINANCIAL AND INVESTMENT REPORTS, AND CITY MANAGER AUTHORITY REPORTS

Recommendation:

Accept and file report.

Estimated Time: 15 Minutes

10. CONSIDER COUNCIL INITIATED AGENDA ITEM TO REVISIT COMMERCIAL CANNABIS

Recommendation:

Consider whether to direct staff to return with a Council Agenda Item to discuss allowing commercial cannabis in Morgan Hill City limits.

Estimated Time: 45 Minutes

FUTURE COUNCIL INITIATED AGENDA ITEMS

Note: in accordance with Government Code Section 54954.2(a), there shall be no discussion, debate and/or action taken on any request other than providing direction to staff to place the matter of business on a future agenda.

ADJOURNMENT

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- **Fiscal Sustainability**
- Affordable Housing and Homelessness
- Community Outreach, Engagement, and Messaging
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- Transportation



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CITY COUNCIL STAFF REPORT

MEETING DATE: April 21, 2021

PREPARED BY: Angie Gonzalez, Council Services Assistant
APPROVED BY: City Manager

CONDUCT INTERVIEWS TO FILL ONE (1) VACANCY ON THE LIBRARY, CULTURE, AND ARTS COMMISSION

RECOMMENDATION(S)

1. Discuss the characteristics/traits that a successful applicant would possess;
2. Conduct interviews;
3. Identify top applicant and provide recommendation to the Mayor; and
4. Discuss and/or appoint applicant.

COUNCIL PRIORITIES, GOALS & STRATEGIES

Ongoing Priorities

Supporting Our Youth
Seniors
and Entire Community
Fostering a Positive Organizational Culture
Preserving and Cultivating Public Trust
Preserving Our Community History
Enhancing Equity
Diversity and Inclusiveness

2020-2021 Strategic Priorities

Community Outreach
Engagement and Messaging

REPORT NARRATIVE:

There is one seat on the Library, Culture, and Arts Commission (LCAC) with a term that ended April 1, 2021. Current Commissioner Jake Thompson notified staff that he would not seek reappointment. Recruitment efforts were conducted, and the process resulted in the receipt of five applications for the LCAC. We received applications from Jessica Arciga, Darcy Foster, John Kelly, Amanda Santiago, and Thomas Spitters.

All applicants have been invited to interview before the City Council on April 21, 2021. Their applications are attached for Council consideration.

COMMUNITY ENGAGEMENT: Involve

Recruitment efforts were undertaken to encourage citizens to apply for City Council appointment consideration to the Library, Culture & Arts Commission via the Morgan Hill Times, City Website, Government Access Channel, and social media.

ALTERNATIVE ACTIONS:

The City Council may choose to make an appointment to fill the vacant seat or direct staff to continue with the recruitment process.

PRIOR CITY COUNCIL AND COMMISSION ACTIONS:

Recruitment efforts are conducted each year to maintain the seven (7) member Commissions.

On February 2, 2020, Council approved the request by the (LCAC) to extend future terms for members of the Commission from two years to four years. The transition to four-year terms will be as follows:

- Terms that expired in 2020 were filled with two-year terms that expire in 2022.
- Terms expiring in 2021 will be filled for three-year terms to 2024.
- Terms expiring in 2022 will be filled for four-year terms to 2026.
- Terms expiring in 2024 will be filled for four-year terms to 2028.
- Future terms would all be 4-year terms.

On March 17, 2021, the City Council reappointed Commissioners Poonam Chabra, Suman Ganapathy, and Katie Khera to three-year terms ending June 1, 2024.

FISCAL AND RESOURCE IMPACT:

There is no fiscal impact associated with the actions to interview and appoint, as the recruitment and appointment process is accommodated in the operating budget.

CEQA (California Environmental Quality Act):

Filling City Council vacancies is an administrative activity and, as such, is not a project.

LINKS/ATTACHMENTS:

1. Chapter 2.68 Library, Culture & Arts Commission (weblink)
2. Arciga, Jessica
3. Foster, Darcy
4. Kelly, John
5. Santiago, Amanda
6. Spitters, Thomas H.

Print**Commission Application - Submission #24592****Date Submitted: 4/2/2021****First Name**

Jessica

Last Name

Arciga

Address1

[REDACTED]

Address2

[REDACTED]

City

Morgan hill

State

California

Zip

95037

Home Phone Number

[REDACTED]

Cell Phone Number**email address**

[REDACTED]

Occupation

Community leader/facilitator

Are you a registered voter?

yes

Please list any properties you own in Morgan Hill

[REDACTED]

Do you have any relatives currently employed by the City of Morgan Hill?

No

Attachment: Arciga, Jessica (3012 : Interviews to Fill LCAC vacancy)

If yes, please provide name

Visit the link below for information on the Planning Commission

[Planning Commission](#)

Visit the link below for information on the Parks and Recreation Commission

[Parks and Recreation Commission](#)

Visit the link below for information on the Library, Culture, and Arts Commission

[Library, Culture, and Arts Commission](#)

Please select the commission you are interested in serving on

Library, Culture, and Arts Commission ▼

Please select the commission that would be your second choice. If you do not have a second choice, please move on to the next question.

Please upload a letter of interest or cover letter*

Jessica Arciga.pdf

Please upload a resume*

Jessica Arciga.pdf

Have you ever served on any other citizen advisory commission or committee? If yes, please list and briefly explain the purpose of each one.*

I was the migrant education liaison for Gilroy Unified School District where I created the agenda and later wrote the minutes for the meeting.

What skills and/or experience do you possess that would be important to your role as a commissioner?*

I am a great listener, innovative, bilingual individual. I will strive to brainstorm ideas and be of help to the committee.

What do you understand the role of the commission to be and why would you like to serve on this commission?*

I am understanding the commission is a liaison between the library and the city council. I would like to serve to help my community in any way I can and expand my public speaking skills.

What would you like to accomplish as a commissioner?*

I would like to make our community feel safe and happy to live in Morgan hill.

What are the greatest opportunities facing the community in regards to this commission?*

The greatest opportunities are bringing life through art where possible.

Attachment: Arciga, Jessica (3012 : Interviews to Fill LCAC vacancy)

If you are an incumbent seeking reappointment:**Are you next in line to serve as Chair or Vice-Chair?**

- ☐ Yes
☐ No

Are you currently serving on a committee

- ☐ Yes
☐ No

Are you assigned to a special project?

- ☐ Yes
☐ No

If you are assigned to a special project, please describe the project.**Please review the City Council Ethics Policy**[City Council Ethics Policy](#)

Please type name to sign. By my signature, I agree to comply with all government regulations, should I be appointed to serve on a City of Morgan Hill Commission or Committee and confirm that I have read the attached Ethics Policy and that I do subscribe to this Policy; that I will apply it to the specific responsibilities s which I may be assigned; and that I will practice the core values set forth in this Policy in my public service for the City of Morgan Hill. Additionally, I commit to attend and participate in all Commission and Committee meetings to which I am appointed, unless excused by the Chair.*

Jessica Arciga

Date*

4/2/2021

4:15 PM

Attachment: Arciga, Jessica (3012 : Interviews to Fill LCAC vacancy)

Jessica Arciga

[REDACTED]
Morgan hill, CA 95037
[REDACTED]

March 29, 2021

City Council

City of Morgan Hill
17575 Peak Avenue
Morgan Hill, CA 95037

Dear Morgan Hill City council,

I came across the vacant commission seat through the Morgan Hill city newsletter. I was drawn to apply to help my community. In the past, I was a liaison for Gilroy Unified school district and migrant families. I know how important and beneficial it is to listen to our community.

My experience as a liaison has instilled this role into my personal life. I like to listen to others and take into account their needs to form my opinions and help my community.

I am currently a community leader for Resilient families south county- a parenting group that strives to help parents manage stress. This group allows me to exercise my listening and leadership skills. My experience and passion to build community make me an exceptional candidate to the library, culture, and arts committee. I have included my resume and look forward to hearing back via email at [REDACTED]

Warm regards,

Jessica Arciga

Attachment: Arciga, Jessica (3012 : Interviews to Fill LCAC vacancy)

Jessica Arciga

[REDACTED]
Morgan hill, CA 95037
[REDACTED]
[REDACTED]

Objective

Trustworthy, innovative individual looking to join the Morgan Hill City library, art, and culture committee.

Qualifications

- Bilingual English/Spanish
- Creative
- Excellent communication
- Highly organized
- Detail oriented
- Punctual
- Efficient listening
- Problem solving
- Multitask and prioritize

Experience

November 2018 - Present

Sacred heart community center, San Jose, CA – *Community leader/facilitator*

- Participate in monthly support groups while inviting community speakers to educate us on a desired topic for the group
- Lead workshops, attend group meetings, and coordinate meetings with parents

November 2017 - July 2019

Gilroy Unified School District, Gilroy, CA – *Migrant Community liaison*

- Advocating for migrant students and families year round as they need support
- Organize, outreach, and facilitate parent committee meetings
- Provide services for migrant students including: backpacks, tutoring referrals, food, health clinic referrals, and glasses referrals

December 2015

University of California, Santa Cruz, CA – *Student Community Advocate*

- Acted as a liaison between the underprivileged community and the city
- Informed the public about a community cause by going door to door, making phone calls, mailing and facilitating community gatherings
- Translated public messages at high profile gatherings and one on one meetings

Education

August 2012-December 2015

University of California Santa Cruz-Environmental studies

References

Available upon requests

Print**Commission Application - Submission #24145****Date Submitted: 3/5/2021****First Name**

Darcy

Last Name

Foster

Address1**Address2****City**

MORGAN HILL

State

CA

Zip

95037

Home Phone Number**Cell Phone Number****email address****Occupation**

Retired Teacher

Are you a registered voter?

yes

**Please list any properties you own in Morgan Hill****Do you have any relatives currently employed by the City of Morgan Hill?**

No



Attachment: Foster, Darcy (3012 : Interviews to Fill LCAC vacancy)

If yes, please provide name

Visit the link below for information on the Planning Commission

[Planning Commission](#)

Visit the link below for information on the Parks and Recreation Commission

[Parks and Recreation Commission](#)

Visit the link below for information on the Library, Culture, and Arts Commission

[Library, Culture, and Arts Commission](#)

Please select the commission you are interested in serving on

Library, Culture, and Arts Commission ▼

Please select the commission that would be your second choice. If you do not have a second choice, please move on to the next question.

Please upload a letter of interest or cover letter*

Arts Commission Letter.docx

Please upload a resume*

Operations-Communication 3-2021.DOC

Have you ever served on any other citizen advisory commission or committee? If yes, please list and briefly explain the purpose of each one.*

Leadership Morgan Hill, Class of 2020 - Children's garden; Fire Service station service area committee

What skills and/or experience do you possess that would be important to your role as a commissioner?*

Knowledge of the city; love of this town; former high school teacher; see resume for other skills

What do you understand the role of the commission to be and why would you like to serve on this commission?*

To provide research and advice to the City Council and general public regarding the specific areas covered by the commission

What would you like to accomplish as a commissioner?*

Continue the excellent guidance that has been provided to this town by previous commissioners.

What are the greatest opportunities facing the community in regards to this commission?*

Showcasing the impact of our library; expanding our cultural events; enhancing enrichment activities for our youth and small children and senior citizens alike!!

Attachment: Foster, Darcy (3012 : Interviews to Fill LCAC vacancy)

If you are an incumbent seeking reappointment:**Are you next in line to serve as Chair or Vice-Chair?**

- ☐ Yes
☐ No

Are you currently serving on a committee

- ☐ Yes
☐ No

Are you assigned to a special project?

- ☐ Yes
☐ No

If you are assigned to a special project, please describe the project.**Please review the City Council Ethics Policy**[City Council Ethics Policy](#)

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Darcy Foster

Date*

3/5/2021

11:30 AM

Attachment: Foster, Darcy (3012 : Interviews to Fill LCAC vacancy)

To Whom It May Concern;

I am applying for a position on the Library, Culture and Arts Commission with the city. I previously was on the Fire Service Commission tasked with identifying locations for needed fire stations in the city. I enjoyed that assignment very much.

I have been a resident of Morgan Hill since 1977 and have loved this town ever since. I have volunteered for many projects in the city. Believe it or not, I worked the 1st Mushroom Hill Mardi Gras! I enjoy giving time to endeavors that benefit the wellbeing and future of this town. I believe one of our greatest strengths is our community commitment and use of the arts to engage our residents. As a member of this commission, I would seek to continue this commitment for our citizens; looking to enhance our outreach in the arena of library, culture and the arts.

I feel that the Morgan Hill library provides a major resource to our town and is well respected as a meeting place, cultural hub and excellent learning environment for our community.

Our cultural events are always extremely well attended and anticipated each year. Our use of the CCC to bring residents together for entertainment, education and even medical events (current COVID vaccinations) is a nod to the foresight of the city to anticipate the success of such a facility.

I would welcome the opportunity to participate in this commission and continue to keep Morgan Hill a destination for cultural and arts events and to showcase our state of the art library!

Thank you,

Darcy Foster

DARCY E. FOSTER
 [REDACTED]
 Morgan Hill, CA 95037
 [REDACTED] [REDACTED]

OPERATIONS/COMMUNICATION/HUMAN RESOURCES

QUALIFICATIONS

- Human Resources management experience including performance planning and standards development to support corporate objectives and federal, state and local requirements
- IT management
- Extensive presentation experience
- In-depth process analysis and development
- Strong organizational/facilitation skills
- Demonstrated leadership ability
- Extensive experience working with students with disabilities and other learning challenges
- Financial database development and budget management
- Demonstrated accounting skills
- In-depth writing in a variety of disciplines
- State of California Secondary Teaching Credentials in two major subject areas
- State of California certification for Hazardous Materials, Technician level
- CPR/First Aid certifications - current

SIGNIFICANT PROFESSIONAL ACCOMPLISHMENTS

- Planning and management of all student activities for a high school with a population of over 1300.
- Secondary education teacher with responsibility for 170+ students.
- Demonstrated ability to interface with high school, district level administration and city agencies.
- Development and implementation of first ever all-company salary review and benchmarking for a company staff of 60 employees, 200 part-time and 200 volunteer staff.
- Planning and execution of company-wide staff development training session.
- Establishment of full-up company-wide database access telecommuting program.
- Reevaluation and implementation of revised performance appraisal system.

PROFESSIONAL EXPERIENCE

High School Teacher, Foreign Language, English & History 7-12 **2002 - 2019**

Morgan Hill School District

*(*Concurrent with following responsibilities)*

Cheer Coach, JV and Varsity, Live Oak High School* **2008 - Present**

Director of Student Activities, Live Oak High School* **2007- 2011**

Coordinator for all student activities on campus

Director, Business Operations **July 2000 - July 2001**

San Jose Convention & Visitors Bureau

Management of all business operations for Bureau. Duties included **direct management** of:

- | | |
|---|--------------------------------------|
| • Human Resources | • Executive Assistant to the CEO |
| • Management Information Systems | • Office Services and Administration |
| • Operational Budget | |
| • Building logistics, including: lease; capital equipment purchase; facilities management; safety and security. | |

Attachment: Foster, Darcy (3012 : Interviews to Fill LCAC vacancy)

DARCY E. FOSTER

PROFESSIONAL EXPERIENCE (Continued)**Manager, Information Systems****October 1998-July, 2000***San Jose Convention & Visitors Bureau*

Manager overseeing all aspects of network administration and PC platform for company, including

- Backup and integrity of the Bureau's databases and files
- Establishment of computer training programs for all employees
- Support and analysis of marketing reports for all departments
- Management of computer vendors and administration of computer related services
- Budget of computer improvements and maintenance
- Research, plan, budget and implementation of changes to computer systems
- Security of systems

(Continued)

Staff Financial Analyst**1995 - 1998***UDLP, (formerly FMC Corp.) San Jose, CA (R&D, Prototype and Manufacture)*

Operational and financial analyst. Duties included:

- New business process analysis and contract negotiation; department budget
- Supervision and training of department support staff
- Management of financial and customer audit databases and including contract labor payroll and expenses

Division Senior Policy Analyst**1981 - 1995***UDLP, (formerly FMC Corp.) San Jose, CA*

Responsibilities included:

- Coordinated project management activities for the Management Directives department.
- Performed identification, process analysis and implementation of division (manufacturing and personnel) policies and practices.
- Managed department budget and standing obligations.
- Developed and produced wide array of user manuals.
- Provided research and in-house consulting regarding business and personnel practices.
- Managed personnel development and appraisal planning.
- Performed correspondent duties for weekly company newspaper.

Policies and Procedures Analyst**1979 - 1981***Bank of the West - San Jose, CA*

Project Analyst assigned to develop corporate guidelines for administration of banking regulations, perform analysis of competitive products and services, develop training manuals and programs, and administer of training programs.

EDUCATION AND CERTIFICATIONS

CPR/Aid certifications	Current
California Teaching Credentials (2) - Secondary Education Foreign Language & Social Science	
State of California Office of Emergency Services (OES)	
Certification #89994 for Hazardous Materials, Technician.	(1995, 1996, 1997, 1998)
State of California Governors Office of Emergency Services	
First Responder Operational certification -#OR60243	1993, 1994, 1995
Mission College - Fire Technology Program Certificate -	1991, 1992, 1993
University of California, Santa Cruz, CLAD Certification	2009
University of Michigan, Ann Arbor, Michigan Secondary Teaching Credentials	1975
University of Michigan, Ann Arbor, Michigan - Bachelor of Arts	1974

RELATED AFFILIATIONS

Graduate, Leadership Morgan Hill Class of 2020; Former volunteer trainer for Morgan Hill Community Emergency Response Team (CERT) program and Fire Task Force Member; Member AARP, Youth program advisor, Community volunteer.

Attachment: Foster, Darcy (3012 : Interviews to Fill LCAC vacancy)

Print**Commission Application - Submission #24139****Date Submitted: 3/4/2021****First Name**

john

Last Name

Kelley

Address1**Address2****City**

San Martin

State

CA

Zip

95046

Home Phone Number**Cell Phone Number****email address****Occupation**

Project Management Construcrtion Biotech

Are you a registered voter?

yes

Please list any properties you own in Morgan Hill

None, my wife (Bonni Kelley) and i own and operate Pono Wellness Spa in down town Morgan Hill behind Maurizio's Restaurant

Do you have any relatives currently employed by the City of Morgan Hill?

No

Attachment: Kelly, John (3012 : Interviews to Fill LCAC vacancy)

If yes, please provide name

Visit the link below for information on the Planning Commission

[Planning Commission](#)

Visit the link below for information on the Parks and Recreation Commission

[Parks and Recreation Commission](#)

Visit the link below for information on the Library, Culture, and Arts Commission

[Library, Culture, and Arts Commission](#)

Please select the commission you are interested in serving on

Library, Culture, and Arts Commission ▼

Please select the commission that would be your second choice. If you do not have a second choice, please move on to the next question.

Parks and Recreation Commission ▼

Please upload a letter of interest or cover letter*

Library Cultural Arts Commission.docx

Please upload a resume*

John Kelley Resume March 2021(2).doc

Have you ever served on any other citizen advisory commission or committee? If yes, please list and briefly explain the purpose of each one.*

I am the current President of the Sister Cities Morgan Hill committee. Sister Cities promotes the social and business interaction with our Morgan Hill Sister cities around the World.
I am a citizen member of an Animal research facility over site committee (IACUC- Institutional Animal Care and Use Committee) in San Jose for the past 6 years

What skills and/or experience do you possess that would be important to your role as a commissioner?*

I have been an avid Library user and recognize it as a critical asset of the community which can and does engage the community in many ways. I have been impressed with its breath of offerings to the community and would like to continue to support its contribution to the city. I enjoy being an audience participant of our civic theater and our various festivals through out the year. I have taken my roles on the Committees seriously and make my contribution in a timely manner coming to meetings well prepared to effectively provide feed back and being an active and informed member of the Committee. I growing up I lived in South America, Mexico and across Europe giving me an appreciation for the cultures of these regions.

What do you understand the role of the commission to be and why would you like to serve on this commission?*

I see the role of the Commission as an enabler and guide to the various projects that the individual organizations bring to Commission. The Commission needs to be made up of individuals who are engaged with the community so as to provide informed support and guidance to the organizations it oversees.

Attachment: Kelly, John (3012 : Interviews to Fill LCAC vacancy)

What would you like to accomplish as a commissioner?*

I want to ensure the successful reintegration of our Library and cultural events back into a mainstream status as we migrate through the COVID impact. I see the unique ways the organizations have continued to remain relevant to the community during the COVID restrictions. These new outreach efforts may well be opportunities that could continue or evolve so as to broaden their outreach out into the community.

What are the greatest opportunities facing the community in regards to this commission?*

The outreach that has occurred during the COVID restrictions may well serve as continuing activities in some form. Secondly, the commission will need to support the face to face reengagement of the community. Thirdly, expand the engagement and outreach to the Latinx community.

If you are an incumbent seeking reappointment:**Are you next in line to serve as Chair or Vice-Chair?**

- ☐ Yes
☒ No

Are you currently serving on a committee

- ☐ Yes
☒ No

Are you assigned to a special project?

- ☐ Yes
☒ No

If you are assigned to a special project, please describe the project.**Please review the City Council Ethics Policy**

[City Council Ethics Policy](#)

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John Kelley

Date*

3/4/2021

12:15 PM

Attachment: Kelly, John (3012 : Interviews to Fill LCAC vacancy)

Library, Culture and Arts Commission
City Council Members
Morgan Hill, Ca

Dear City Council Members,

I have considered Morgan Hill my home since 1984 when I first moved to the city. I currently live in San Martin, however, Morgan Hill is my town. My wife, Bonni Kelley, and I own a business in Morgan Hill, Pono Wellness Spa and are invested members of Morgan Hill. I would like to support the cultural aspects of Morgan Hill that makes it such a wonderful town to live in. We have a wonderful community driven list of assets that have evolved over the years from the best library in Santa Clara County to the Civic Theater, festivals, and local art displays.

I have the time and ability to become a contributing member of Morgan Hill and want to offer my support in continuing its growth as a family centered town. We are known as such and I would like to support the continued growth as well as supporting the current program's migration back into place as we move past the COVID imposed restrictions. Outreach and continued support from the Commission and the city will be needed.

Morgan Hill has evolved over the last 30 years and it remains a wonderful, family centered town with a dynamic Library, year-round cultural activities, and diverse artistic presence in the community. I would like to contribute to its continuance as a place we all are proud to call our town.

Sincerely,

John kelley

[REDACTED]
San Martin, CA
95046
[REDACTED]

Attachment: Kelly, John (3012 : Interviews to Fill LCAC vacancy)



John Kelley

Professional Experience

39 years experience directing biotechnology facility design, construction and management. Demonstrated strength in multitask project management, laboratory design and construction management, space planning, directing corporate relocations, purchasing, managing fiscal control.

Senior Project Manager, CBRE, July 2018 to present (Gilead Sciences, Foster City, CA.)

- Construction Project Manager, 350,000 sq. ft. R&D building with a focus on managing interior casework design and installation, office furniture and AV installation, shell and utilities installation. Coordinated installation of new scientific equipment installation, member of move team focusing on supporting utility driven equipment relocation.

Senior Project Manager, Kelly Services, July 2017 to present (Gilead Sciences, Foster City, CA.)

- Construction Project Manager, 350,000 sq. ft. R&D building with a focus on managing interior casework design and installation, office furniture and AV installation, shell and utilities installation.

Senior Project Manager, IPS-Integrated Project Services, Blue Bell, PA. June 2016 to May 2017 (IMPAX labs, Hayward, CA.)

- Project Manager, Category 3 Potent Compound isolator design and manufacturer, managed and developed qualification documentation.

Senior Project Manager, Genentech, South San Francisco, CA. September 2004 to present Reporting to Ali Afghan, Associate Director PTAA-P

- Project Manager, 3B Potent Compound Small Molecule Final Product and API Development lab and GMP Production - \$69M and \$29M. Powder formulation, reactor systems housed in isolators, highly contained processing suites.
- B9 Seismic Retrofit Project – \$18M, Manage the structural retrofit of continuously operating GMP warehouse housing raw material, raw product and final project.
- B43 GMP Milling and Encapsulation small molecule suite - \$2.8M.
- B20 lab to office conversion - 44,000 sq ft, \$17.9 M.
- B85 Resource Call Center - \$25M, 5 floor design, construction of resource call center.
- B41.1 Research laboratory-. - \$15M, 25,000 sq ft gRED biology research space.

- B43 gRED 4 floor lab building - \$65M biology, small molecule API and Formulations.
- B29 cGMP warehouse - \$13M Converted existing warehouse into GMP shipping and receiving warehouse to include a 7,000 sq ft GMP cold room.

Senior Project Manager, Facilicorp, San Jose, CA, November 2001 to Sept 2004
Reporting to Megan Lovelace, President.

Project Management as consultant at Genentech. Projects included

- B37 parking structure - \$12M, project taken through Conceptual Design.
- B28 Warehouse - \$4.5M, Design, retrofitted main shipping and receiving warehouse.
- Multi Building Code Upgrade Project - \$12M.
- Validated cGMP Packaging Project - \$6M.

Project Manager, Therma Corp, San Jose, CA, September 2000 to September 2001,
Reporting to Scott Mechenstock, Team Leader.

- Projects included validated medical device manufacturing suites, research and production laboratories, offices, wet and dry mechanical system installations.

Strategic Projects Coordinator, Hathaway Dinwiddie, Santa Clara, CA April, 2000
June, 2000, Reporting to Steve McCoid, Executive Vice President.

- Wrote a white paper focused on developing a strategy aimed at increasing the growth in biotech construction projects awarded to Hathaway Dinwiddie.

Facilities Director, Affymax Research Institute, Palo Alto, CA, 1996 – 2000
Reporting to Emily Kelley, Vice President Human Resources and Operations.

- Responsible for two R&D buildings, one in Palo Alto and one in Santa Clara totaling 155, 000 square feet, with a budget of \$5.2 M and a staff of 12. Responsible for new construction, long term real-estate planning, maintenance, security, service contracts, landlord relations, real estate, telecommunications, reception.

Special Projects Coordinator, Genencor International, Palo Alto, CA, 1995-1996
Reporting to Frank rice, Director of Business Development.

- Relocated Genencor from South San Francisco to Palo Alto retrofitting reactor tanks

Director Operations, ESCAgnetics, San Carlos, CA, 1989 – 1995
Reporting to Bill Koenig, Chief Financial Officer.

- Directed corporate physical operations of 55,000 square feet of research laboratories, administrative offices, green houses, realestate, purchasing office and provided support for local and overseas farming and tissue culture laboratory operations.

Manager Operations, Sungene Technologies, San Jose, CA, 1987 – 1989
Reporting to William Hoskins, President. Plant Biotechnology Company.

- Managed physical operations of research laboratories, purchasing, safety, HR.

Education

Master of Science, Horticulture, Oregon State University.

Bachelor of Science cum laude, Horticulture, Texas A&M University.

Professional Associations

- ISPE Bay Area Chapter Board member 2000, 2001, 2002, 2003, 2004 Secretary,
- ISPE Bay Area Chapter President 2008.

Print**Commission Application - Submission #24563****Date Submitted: 4/1/2021****First Name**

Amanda

Last Name

Santiago

Address1**Address2****City**

Morgan Hill

State

Ca

Zip

95037

Home Phone Number**Cell Phone Number****email address****Occupation**

Hobby Lobby - Framer of Art

Are you a registered voter?

yes

Please list any properties you own in Morgan Hill**Do you have any relatives currently employed by the City of Morgan Hill?**

No

Attachment: Santiago, Amanda (3012 : Interviews to Fill LCAC vacancy)

If yes, please provide name

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[Planning Commission](#)

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[Parks and Recreation Commission](#)

Visit the link below for information on the Library, Culture, and Arts Commission

[Library, Culture, and Arts Commission](#)

Please select the commission you are interested in serving on

Library, Culture, and Arts Commission ▼

Please select the commission that would be your second choice. If you do not have a second choice, please move on to the next question.

Please upload a letter of interest or cover letter*

MHCoverLeterAmandaSantiago.doc

Please upload a resume*

Amanda Santiago Resume.doc

Have you ever served on any other citizen advisory commission or committee? If yes, please list and briefly explain the purpose of each one.*

No, although I am a GSA Silver Award Recipient and Leadership Award Recipient

What skills and/or experience do you possess that would be important to your role as a commissioner?*

I am a local artist and resident of Morgan Hill and a Live Oak Graduate. I have extensive experience working with most traditional and some non traditional mediums; including but not limited to acrylic, watercolor, gauche and oil on different mediums. (Canvas, paper, concrete pavers for the Community Garden Project) I have participated in many local art and poster contests, taking second place in 2019 for the Gilroy Rodeo Poster Contest and entered the Wine Stroll Poster Art Contest. Some of my art was recently auctioned in the WERC Online Auction Fundraiser. (Crow Dances)

I also use soft pastel, oil pastel, color pencil, charcoal and chalk in sketch and design.

I work as a framer for Hobby Lobby, a local business which gives me the opportunity to see and frame the work of many of our amazing local artists. I have had my mind blown repeatedly seeing some really incredible landscapes and portraits. I also have daily contact with the materials that are used in the making of art and a strong knowledge of the appropriate materials and processes for projects large and small.

This has caused me to think there are some great projects we could plan to promote these local artists who often get very little recognition and validation. We can feature their work locally in ways that improve their artistic goals and our community.

Attachment: Santiago, Amanda (3012 : Interviews to Fill LCAC vacancy)

What do you understand the role of the commission to be and why would you like to serve on this commission?*

I understand the role to be acting as a liaison between artists and the city to bring their talents to the community for the betterment of both.

I would like to create those opportunities for the artists whose work I get to see as a framer and I would like to get to know the artists who maybe haven't thought their work was "good enough"

Artists are everyone. I would like to try to use art as an outreach tool in our town that could give people some hope. Its been a trying year. We need to inspire.

What would you like to accomplish as a commissioner?*

I would like to facilitate the process of taking projects from ideas to completion. I would like to facilitate success on all levels. I'd like to meet some new people and reconnect with the community through taking on a place where I can do something meaningful that will outlast me.

What are the greatest opportunities facing the community in regards to this commission?*

I'd like to try some homelessness outreach. I'd like to reach unseen artists and give them a process to go from dream to reality. I'd like to promote the young artist, the older artist and give some connection to those who might be feeling isolated.

If you are an incumbent seeking reappointment:**Are you next in line to serve as Chair or Vice-Chair?**☐ Yes☒ No**Are you currently serving on a committee**☐ Yes☒ No**Are you assigned to a special project?**☐ Yes☒ No**If you are assigned to a special project, please describe the project.****Please review the City Council Ethics Policy**

[City Council Ethics Policy](#)

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Amanda Santiago

Date*

4/1/2021

2:00 PM

Attachment: Santiago, Amanda (3012 : Interviews to Fill LCAC vacancy)

Good Afternoon,

My name is Amanda Santiago and I would like to be considered for a position on the Library, Culture and Arts Commission.

I am a local artist and longtime resident with deep connections to our local art community. I am a Live Oak Graduate and Britton Parent. I have participated in many local projects, most recently painting pavers for the Morgan Hill Community Garden in partnership with the City's Leadership Program and have had my art auctioned in fundraisers for local organizations such as Werc and entering local poster contests for events like the Wildflower Run and the Wine Stroll.

I look forward to the opportunity to bring these same kinds of opportunities to other artists who might not know who to get in touch with to bring their art to their community or even where to begin to participate.

Thank you,
Amanda(Mandi) Santiago
[REDACTED]

Attachment: Santiago, Amanda (3012 : Interviews to Fill LCAC vacancy)

Amanda Santiago

[REDACTED], Morgan Hill, Ca 95037

Success Facilitation for the Project Process

Administrative Support

Answering phones
Scan/ fax/ copy
Mail delivery/ correspondence/ e-mail
Create/format/ file multi-media documents
Detail oriented proof reading
Coordinate meetings and special events
Meeting minutes
Travel arrangements
Confidentiality

General Office Management

Purchasing supplies/ inventory
Material organization
Managing vendors
Scheduling
Shipping/ Receiving/ Mailing
Invoicing/ Receipt
Technical support
Office maintenance
Communications

Computer Skills

High learning curve, tech support background, 60WPM+ 10 key by touch, high accuracy.

Software-

Microsoft Office, Word, Excel, Power Point, Outlook, Windows, Quickbooks, Vista, Heavy Job/Bid, Peoplesoft, Adobe Photoshop, Corel Draw/ PaintShop Pro.

Hardware-

Installation, maintenance and troubleshooting of office technology, printers, laptops and desk tops and other communication devices.

OMT Construction

Office Manager/Administrative Assistant
408-706-3112
2011-2013

JBK Aire

Administrative Assistant
408-656-0424
2009-2010

Pinnacle Frames and Accent

Executive Assistant - Temp to hire
512-506-3900
2007-2009

BT Commercial Real Estate

Tech Support/ Agent Assistant
Office Closed
1999-2003

Education

Gavilan College
Live Oak High School

Professional Associations

American/ International Mensa
30 Year Member
1122123

Attachment: Santiago, Amanda (3012 : Interviews to Fill LCAC vacancy)

Current Job Functions and Responsibilities

Data collection, organization, entry and management

WIP – PM, dates, category, location, scope, owner and material code

USA – all functions related to the creation and maintenance of USA Dig Request Tickets

Heavybid – Job Entry/ Numbering

Heavyjob – Time card entry of hourly employees

No Park List/San Jose Snapshot – Job locations by USA and No Park status

TMI Confirmations and cancellations

Garage – Truck Damage and Repair Reporting, Mechanics Daily Work Logs, Invoices and Bills of Lading

- Creation of job folders
 - Printing, numbering and entry in heavy bid, WIP and server entry, USA Ticket and Before Images, Clearances in job folder
- Closeout Functions
 - As Built assembly and submission by area and type – EC Tag, Electrical Underground, Emergency. Tag, completed images, construction drawings, and PGE Checklists properly completed by Foremen, filing and file maintenance of hard copies
- Weekly Review of Job Packs, Friday for valid USA and last minute changes
- Calling in City permits by Project Manager Request
- Printing and sorting AFW Clearances against existing job boards, notifying Project Manager of new clearances or changes to the existing schedule, updating folders for most current clearances
- No Park List
 - Assembly via job packs, USA/ Pre-field photographs, communication with foremen, job status and Project Manager Request.
- Traffic Control – weekly list and database
 - Assembly via job packs, traffic control plans, USA and Pre-field photographs, and Project Manager Request.
 - Maintaining searchable database of confirmations and cancellations
 - Obtaining invoices upon request
- Site Services and United Rentals
 - Ordering and removal of shores and plates upon request, obtaining invoices upon request
 - Ordering and removal of restrooms/ facilities upon request, obtaining invoices upon request
- Printing, Scanning, E-mailing and Data-basing of information
 - Garage – EPA, Hazardous materials pick up, Vehicle Damage/Reporting, Mechanics Work Reports and BIT Logs.
 - Office – Receipts, Deliveries, HR/ Payroll Requests, Project and Project Manager Requests, Vista, Epson Scan, PDF Writer
- Printers and technical support
 - Facilitation of exchange of Samsung printer
 - Coordination of lease return of Ricoh Printer and delivery and installation of New Printer.
 - Ordering, inventory and installation of toner cartridges and architectural paper and inks.
- Inventory and ordering of supplies
 - Uline
 - Staples – paper, paper products, cleaning supplies
 - Snacks and Coffee
 - Keurig Coup – 88 cents to .08 cents, with a savings of 90% Weekly spending reduced by over \$80.00.

Print**Commission Application - Submission #24320****Date Submitted: 3/17/2021****First Name**

Thomas

Last Name

Spitters

Address1

[REDACTED]

Address2

[REDACTED]

City

Morgan Hill

State

CA

Zip

95037

Home Phone Number

[REDACTED]

Cell Phone Number

[REDACTED]

email address

[REDACTED]

Occupation

Consultant -- Accountant

Are you a registered voter?

yes

Please list any properties you own in Morgan Hill

N / A.

Do you have any relatives currently employed by the City of Morgan Hill?

No

Attachment: Spitters, Thomas H. (3012 : Interviews to Fill LCAC vacancy)

If yes, please provide name

Visit the link below for information on the Planning Commission

[Planning Commission](#)

Visit the link below for information on the Parks and Recreation Commission

[Parks and Recreation Commission](#)

Visit the link below for information on the Library, Culture, and Arts Commission

[Library, Culture, and Arts Commission](#)

Please select the commission you are interested in serving on

Library, Culture, and Arts Commission ▼

Please select the commission that would be your second choice. If you do not have a second choice, please move on to the next question.

Planning Commission ▼

Please upload a letter of interest or cover letter*

Profile.pdf

Please upload a resume*

Letter.2021.03.txt

Have you ever served on any other citizen advisory commission or committee? If yes, please list and briefly explain the purpose of each one.*

N / A.

What skills and/or experience do you possess that would be important to your role as a commissioner?*

VARIOUS ADMINISTRATIVE, NETWORKING, SALES, SYSTEMS, FINANCIAL, PEOPLE (AS LEARNED) SKILLS.

What do you understand the role of the commission to be and why would you like to serve on this commission?*

IN ORDER TO MORE FULLY IMPLEMENT THE POLICIES OF CITY HALL AND THE MAYORALTY WITH RESPECT TO THE PURPOSE OF THE COMMISSION AND ITS AGENDA AS SET DOWN, AGAIN BY POLICY.

What would you like to accomplish as a commissioner?*

SUBJECT TO APPROVAL OF THE MAYOR AND CITY COUNCIL, AND OTHER OVERSIGHT, AN IMPLEMENTATION OF A POLICY AGENDA TO NORMALIZE AND TO ENHANCE THE DUTIES OF THE COMMISSION.

What are the greatest opportunities facing the community in regards to this commission?*

THE GREATEST OPPORTUNITIES FACING THE COMMUNITY IN REGARDS TO THIS COMMISSION HAVE MOSTLY TO DO WITH ENHANCING THE SCOPE AND SCALE OF THE COMMISSION IN VIEW OF CIVIC AND REGIONAL GROWTH AND LAND AND OTHER RESOURCES MANAGEMENT.

Attachment: Spitters, Thomas H. (3012 : Interviews to Fill LCAC vacancy)

If you are an incumbent seeking reappointment:**Are you next in line to serve as Chair or Vice-Chair?**☐ Yes☐ No**Are you currently serving on a committee**☐ Yes☒ No**Are you assigned to a special project?**☐ Yes☒ No**If you are assigned to a special project, please describe the project.**

N / A.

Please review the City Council Ethics Policy[City Council Ethics Policy](#)

Please type name to sign. By my signature, I agree to comply with all government regulations, should I be appointed to serve on a City of Morgan Hill Commission or Committee and confirm that I have read the attached Ethics Policy and that I do subscribe to this Policy; that I will apply it to the specific responsibilities s which I may be assigned; and that I will practice the core values set forth in this Policy in my public service for the City of Morgan Hill. Additionally, I commit to attend and participate in all Commission and Committee meetings to which I am appointed, unless excused by the Chair.*

THOMAS HEATON SPITTERS

Date*

3/17/2021

11:45 PM

Attachment: Spitters, Thomas H. (3012 : Interviews to Fill LCAC vacancy)

CITY OF MORGAN HILL
17575 PEAK AVENUE
MORGAN HILL, CA 95037

TO WHOM IT MAY CONCERN :

THIS BRIEF NOTE IS TO SUBMIT SUBJECT TO YOUR REVIEW MY APPLICATION TO THE LIBRARY, CULTURE AND ARTS COMMISSION AND SECONDARILY THE PLANNING COMMISSION OF MORGAN HILL, CALIFORNIA. HAVING LIVED IN TOWN FOR MORE THAN TEN YEARS NOW, AND HAVING LIVED AND SEEN MANY BENEFICIAL CHANGES FOR THE MORGAN HILL COMMUNITY GIVEN THE GOOD WORKS OF ITS CIVIL SERVANTS, I KNOW IT IS MY TIME AT THIS JUNCTURE TO SERVE IN KIND WITH THE CURRENT MAYORALTY AND WITH ITS VISION FOR FUTURE GROWTH OF THE MORGAN HILL COMMUNITY IN CONSTRUCTIVE AND WELL - PLANNED, WELL IMPLEMENTED POLICIES AND RELATED PROJECTS AND ACTIVITIES. IN THE EVENT YOU HAVE ADDITIONAL QUESTIONS AS TO THE PURPOSES OF MY SUBMISSION HERE AND CANDIDACY FOR THESE COMMISSIONS, PLEASE CONTACT ME GIVEN THE DETAILS BELOW. IT IS A PRIVILEGE TO CONTINUE TO LIVE IN TOWN AS IT CONTINUES GROWING AND ADDING NEW PEOPLE, AND I DO REMAIN

SINCERELY YOURS,

THOMAS H. SPITTERS

[REDACTED] MORGAN HILL, CA 95037

TELEPHONE : [REDACTED]

E - MAIL : [REDACTED]

Attachment: Spitters, Thomas H. (3012 : Interviews to Fill LCAC vacancy)

Contact

<http://www.facebook.com/labsclr>

<https://www.facebook.com/baumeverlag>

www.linkedin.com/in/abccconsulting
(LinkedIn)
www.facebook.com/thomas.spitters
(Personal)
amazon.com/author/spitters (Blog)

Top Skills

Accounting / IS / CLR
People
Marketing

Languages

French, some Russian, Chinese

Certifications

CompTIA Security SYO-401
SCU International Business Cert.
Various Software Development / End
- user / Functional.

Honors-Awards

NRCC Business Award

Publications

SAP FI Fieldbook (English.) -
Accounting.
Various
Various

Thomas H. Spitters

Consultant, C.P.A.
San Francisco

Summary

See specialities. Seeking cross - border experience. Seeking additional computer language / software development experience.

Specialities: Over ten years' accounting experience including taxation, attestation, transactions, information technology and business integration.

Experience

Accountancy - California

Accountant

2004 - Present (17 years)

Licensed Accounting Practitioner

C.P.A. -- Various -- www.consultancy.yahoosites.com

CompTIA, CISSP, Information Security -- <http://www.itsmfusa.org/member/spitters>

Consulting

SYSTEMS / AUDITING / ACCOUNTING / IT CONSULTING

January 2001 - Present (20 years 3 months)

<http://www.amazon.com/author/spitters>

A business providing accounting support including SAP as well as accounting compliance, attestation, information technology, and tax and business planning services.

Santa Clara University

Student / Political (Policy) Activist / (Sports) Education Development Worker

1989 - Present (32 years)

Dui Hua Foundation

Contributor

2003 - 2020 (17 years)

Documentary (and other) Contributor.

China SF
Consultant - Attendee
2016 - 2018 (2 years)

Churchill Club
Attendee
1999 - 2016 (17 years)

Various events.

Silicon Valley Asia Business Forum
Attendee - Accountant / Consultant
2014 - 2015 (1 year)

Phillip Goodman Accountancy Corporation
Senior Staff accounting
August 1999 - January 2001 (1 year 6 months)

in a public tax practice and in a number of attestation engagements.

Various.

Bookkeeping / Accounting
June 1993 - November 1999 (6 years 6 months)

General accounting and bookkeeping for a variety of growing businesses including insurance and employee benefits, hospitality, real estate and some investments / securities.

various
Accounting / Bookkeeping
May 1997 - July 1999 (2 years 3 months)
Accounting.

NORTHWESTERN MUTUAL LIFE INSURANCE COMPANY
Agency Accountant
May 1995 - November 1996 (1 year 7 months)

Duties included all critical business aspects of accounting and bookkeeping for a growing financial services agency.

SEQUOIA RESEARCH
Consultant
June 1994 - May 1995 (1 year)

A firm established in 1994 to serve small businesses in the formulation of business plans including capital budgeting, marketing plans, and accounting and bookkeeping.

Education

VARIOUS OnLine

Certificates -- CompTia, CISSP, CISA, Computer and Information Systems Security/Information Assurance · (2016 - 2020)

Université de Paris

Certificat, Cours du Chinois Fondamental. · (1981 - 2020)

Tulane University Law School

Program, Corporate · (2005 - 2006)

San Jose State University

· (2000 - 2003)

Santa Clara University

Masters; Bachelor; Certification, Business Administration; Arts; French; International Business Program · (1989 - 1993)



CITY COUNCIL STAFF REPORT

MEETING DATE: April 21, 2021

PREPARED BY: Chris Ghione, Public Services Director
APPROVED BY: City Manager

APPROVE NEW UTILITY BOX ART

RECOMMENDATION(S)

1. Approve public art at one new utility box location; and
2. Authorize the City Manager to enter and administer necessary agreements to complete the project.

COUNCIL PRIORITIES, GOALS & STRATEGIES

Ongoing Priorities

Supporting Our Youth
Seniors
and Entire Community

REPORT NARRATIVE:

Ten City owned traffic signal utility boxes were painted by artists through a project by Leadership Morgan Hill in 2018. Following the initial program by Leadership Morgan Hill, the Library, Culture and Arts Commission developed a program to pair sponsors with local artists to continue painting additional utility boxes within the City. Recently local artist Lina Velasquez has proposed painting an additional traffic signal utility box. Lina had previously painted two boxes, one at Main Avenue & Monterey Road and one at Main Avenue & Butterfield Boulevard. Although there is currently no funding for the program, Lina has proactively found a sponsor for a new box to be located at the Butterfield and East Dunne Intersection. The City has received payment for the sponsorship from Johnson Lumber to fund the box.

Per the City's Public Art Policy, the Library, Culture and Arts Commission must make a recommendation to the City Council for the approval of the public art. The art proposal is included as Attachment 1 for review by the Council. In addition to the artwork, the box will include the inspirational words "Love our Planet." The Commission reviewed the proposal on April 6, 2021 and recommended approval.

COMMUNITY ENGAGEMENT: Empower

The program has been primarily managed by the volunteers on the Commission and the project was brought forward by a local artist who identified a sponsor for the work.

ALTERNATIVE ACTIONS:

The City Council could choose to not approve the project, provide for direction on changes to the artwork, or provide other alternate direction to staff and the Commission.

PRIOR CITY COUNCIL AND COMMISSION ACTIONS:

The Library, Culture and Arts Commission has recommended approval of the artwork. The City Council previously approved artwork for the initial Utility Box Art Program on July 25, 2018.

FISCAL AND RESOURCE IMPACT:

The project will be funded by the \$800 sponsorship provided by Johnson Lumber. This will include payment to the artist and funding of the anti-graffiti coating over the artwork. The implementation of a utility box art program is in the approved Library, Culture and Arts Commission Work Plan, with planned support from Community Services Department staff.

CEQA (California Environmental Quality Act): Categorical Exemption

The planned maintenance and management of city facilities falls within the CEQA categorical exemption of Class 1, Existing Facilities.

LINKS/ATTACHMENTS:

1. Attachment 1 - Proposal

Artwork Description:

Inspirational message:

2. LOVE OUR PLANET IT'S OUR HOME

Description of artwork interpreting the message:

It is a tree that grows from the ocean expands it's branches around the electric box. The background is the Universe. The trunk of the tree depict a human body hugging a heart shaped Earth.

Box Location Preference (Mark 1 as the highest, 6 as the lowest)

- 6 _____ Monterey Rd & Old Monterey Rd (near the old fire station)
- 5 _____ Monterey Rd & Wright Ave
- 4 _____ Monterey Rd & Madrone Pkwy
- 3 _____ Monterey Rd & Spring Ave
- 2 _____ Butterfield Blvd Avenue & Dunne (near Frank's Plumbing)
- 1 _____ Butterfield Blvd & Diana Ave (near the courthouse)

Additional Documents:

The following documents should be included and attached in PDF format.

1. Box Template with Artwork Design (Required)
2. PDF of images of prior artwork by artist

Agreement to terms of Artist Agreements:

I understand that if selected that prior to commencing work on the Utility Box Art Program I will be required to sign and execute the City of Morgan Hill Artist Agreement. I further understand that during the selection and review process the materials I have submitted will be made public through the review process.

Lina Velasquez

Artist Signature

5 /1/2020

Date

Attachment: Attachment 1 - Proposal (3053 : APPROVAL OF NEW UTILITY BOX ART)

Proposed Design Template

Sketch: Love the planet.

Actual utility boxes vary in size, shape and have various vents, seams, doors and handles. Be prepared to adjust art work to fit a unique utility box.

Size: Main - 33" x 24" (width) x 64" (height) 2.5" base (approx, for designing purposes. Measure actual boxes individually.)

TOP



Example of Main Box in Morgan Hill



SIDE



DRAFT



Meeting Minutes City Council

Rich Constantine - Mayor
John McKay - Mayor Pro Tem
Gino Borgioli - Council Member
Yvonne Martinez Beltran - Council Member
Rene Spring - Council Member

Wednesday, April 7, 2021 5:00 pm

Virtual Meeting

SPECIAL/REGULAR MEETING

A special meeting of the City Council was called at 5:00 p.m. for the purpose of conducting a workshop.

5:00 p.m. Workshop

7:00 p.m. Regular Meeting

SPECIAL MEETING

5:00 p.m. Workshop

CALL TO ORDER

Mayor Constantine called the meeting to order at 5:00 pm.

ROLL CALL ATTENDANCE

City Clerk Michelle Bigelow called the roll.

Attendee Name	Title	Status	Arrived
Rich Constantine	Mayor	Remote	
John McKay	Mayor Pro Tem	Remote	
Gino Borgioli	Council Member	Remote	

Minutes Acceptance: Minutes of Apr 7, 2021 5:00 PM (CONSENT CALENDAR)

Yvonne Martinez Beltran	Council Member	Remote	
Rene Spring	Council Member	Remote	

DECLARATION OF POSTING AGENDA

City Clerk Michelle Bigelow declared the posting of the agenda.

WORKSHOP

WORKSHOP PRESENTATION

WORKSHOP SUPPLEMENT 1

City Council Workshop to discuss the Morgan Hill Responsible Growth Coalition's (MHRGC) Initiative Petition, which was certified for sufficiency on March 3, 2021 by the City Council, review Initiative's impact report and a new collaborative ordinance that could replace the MHRGC Initiative and further protect Morgan Hill from potential large truck/high traffic uses. The collaborative ordinance could eventually substitute for the MHRGC Initiative on the November 2022 ballot.

City Manager Christina Turner introduced the workshop and turned the presentation over to Development Services Director Jennifer Carman, Economic Development Manager John Lang, and City Attorney Donald Larkin.

Public comment opened at 6:02 pm. The following people were called to speak:

Scott Unger spoke on behalf of Toray

Eric Wallace

Carig Erb

Miguel Jimenez (Linda Nowlen and John Williams ceded their time)

Joe Baranowski (Bryan Espiritu and Terry Williams ceded their time)

Tadon Christopher

There being no further requests to speak, public comment closed.

The meeting recessed at 6:57 pm and reconvened at 7:00 pm.

REGULAR MEETING

7:00 p.m.

CITY COUNCIL REPORTS

Council Member Martinez Beltran spoke regarding her efforts regarding COVID. She has focused her time doing the press conferences, getting the word out that when it is your turn, please get vaccinated. We have had a shortage in vaccines and the County and City have been working continuously on that effort. We recently had over 1,000 farm workers vaccinated at Monterey Mushrooms. This was a first of its kind vaccination event in the County and it was right here in Morgan Hill. Volunteers are eager to come and help at these events. So many people are thankful for these events. There will be one more vaccine event Thursday April 8th, if anyone is an agricultural worker or lives with an agricultural worker you are eligible for the vaccine at Monterey Mushrooms. She concluded by recognizing Albertson's and the School District for providing the vaccines for the events at Sobrato High School.

CITY MANAGER'S REPORT

TEAMMATE RECOGNITIONS

City Manager Christina Turner announced that today, April 7th, CalFire started providing vaccines to home bound residents. Residents can email covidvaxhome@phd.sccgov.org <mailto:covidvaxhome@phd.sccgov.org> or call 408-971-2818 for more information or to register.

Town Hall Thursday, April 8, 2021 at 5:30 pm -

Silicon Valley Clean Energy Authority will be coming to talk about the time of use rate changes.

She concluded by recognizing new, promoted, and retired teammates.

CITY ATTORNEY'S REPORT

City Attorney Donald Larkin provided an update on PLAN JPA. The insurance market is not financially good for the City right now. On the liability side, our City and Risk pool is doing very well but because we are part of the larger insurance market, there have been some huge payouts by other agencies that have affected the insurance companies that would insure us at those upper levels. It is at the point now that we are looking at potentially joining other public pools in order to insure at a higher level. This means that once again, our budget for insurance liability is going to be significantly higher than it would be in normal years. There was a billion-dollar payout by USC that impacts the overall insurance market.

Similarly, on the property damage side, climate change and extreme weather events have led to huge property losses. Not just in California where we have had some large fires, but also more intense and more frequent hurricanes, tornados, and other weather events in other parts of the country have led to significant impacts on property insurance. Our smallest impact, because we pay a very small premium, is for cyber liability insurance. In this last year, nationwide, the claims paid out of cyber liability insurance have been 150% of the premiums which means that the insurers have lost about half of what they took in. We are looking at about a 100% increase in our cyber liability premium. Fortunately, our share of that premium is about \$15,000. This will be presented to the City Council in more detail when we go over the budget.

OTHER REPORTS

Mayor Pro Tem John McKay recognized former City Council Member Larry Carr for his efforts to bring COVID Vaccines to our community. The vaccine series at Sobrato High School and at our Community and Cultural Center were sponsored by Safeway/Albertsons Co. They are in our community because former City Council Member Larry Carr was able to bring those doses to Morgan Hill. We may have lost Mr. Carr from the Council, but he is still working diligently for our community. We can thank him for bringing about 6,000 doses in the last month to Morgan Hill.

PUBLIC COMMENT

Public comment opened at 7:14 pm.

Craig Erb was called to speak

There being no further requests to speak, public comment closed.

PUBLIC COMMENT SUPPLEMENT 1

ADOPTION OF AGENDA

MOTION:

Adopting the agenda as posted.

RESULT:	ADOPTED [UNANIMOUS]
MOVER:	Rene Spring, Council Member
SECONDER:	John McKay, Mayor Pro Tem
AYES:	Constantine, McKay, Borgioli, Martinez Beltran, Spring

CONSENT CALENDAR**MOTION:**

Approving consent calendar items 1, 2, and 4 through 8.

RESULT:	APPROVED [UNANIMOUS]
MOVER:	Yvonne Martinez Beltran, Council Member
SECONDER:	John McKay, Mayor Pro Tem
AYES:	Constantine, McKay, Borgioli, Martinez Beltran, Spring

1. ACCEPT 2020 PAVEMENT RESURFACING PROJECT

Recommendation:

1. Accept as complete, the 2020 Pavement Resurfacing Project, in the final amount of \$1,955,908;
2. Authorize the City Engineer to sign the Notice of Completion; and
3. Direct the City Clerk to file the Notice of Completion with the County Recorder's Office.

2. ACCEPT UPDATE REGARDING PAVEMENT REHABILITATION PLANNING

Recommendation:

Receive update on pavement rehabilitation planning.

3. ITEM PULLED FOR DISCUSSION**4. APPROVE PURCHASE OF UTILITIES REPLACEMENT VEHICLES AND EQUIPMENT**

Recommendation:

1. Approve the purchase of four (4) Utility Division trucks from National Auto Fleet Group in the amount of \$218,411 through a Sourcewell cooperative bid contract;
2. Approve the purchase of a trash pump from Thompson Pump in the amount of \$46,027 through a Sourcewell cooperative bid contract;
3. Authorize City Manager to approve a purchase order in the amount of \$218,411 with National Auto Fleet Group and a separate purchase order in the amount of \$46,027 to Thompson Pump;
4. Declare vehicles U07114, U07137, W07115, W08115, and equipment W97335 to be surplus; and
5. Authorize the disposal of the surplus vehicles and equipment in accordance with Section 3.04.400 of the City of Morgan Hill Municipal Code.

5. APPROVE THE MARCH 17, 2021 MEETING MINUTES

Recommendation:

Approve Minutes.

6. APPROVE THE MARCH 24, 2021 MEETING MINUTES

Recommendation:

Approve Minutes.

7. AWARD AQUATICS CENTER POOL DECK RESURFACING AND REPAIR PROJECT TO FLEXGROUND SURFACES, INC.

Recommendation:

1. Award contract to Flexground Surfaces, Inc. in the amount of \$69,360; and authorize the expenditure of contingency funds not to exceed \$6,936 for a total authorization of \$76,296; and
2. Authorize the City Manager to approve the sole source selection of Flexground Surfaces, Inc., and execute and administer that certain contract with Flexground Surfaces, Inc.

8. RATIFY COMMUNITY POWER RESILIENCY GRANT ACCEPTANCE IN THE AMOUNT OF \$300,000 FROM STATE OF CALIFORNIA OFFICE OF EMERGENCY SERVICES FOR THE CENTENNIAL RECREATION CENTER BATTERY BACKUP PROJECT

Recommendation:

1. Ratify acceptance of Community Power Resiliency Grant from the State of California Office of Emergency Services (CalOES) in the amount of \$300,000; and
2. Authorize the City Manager to execute and administer all related documents.

ITEMS PULLED FOR DISCUSSION**3. APPROVE URBAN FOREST MANAGEMENT PLAN**

Recommendation:

Approve the Urban Forest Management Plan.

Public Comment opened at 7:24 pm. There being no requests to speak, public comment closed.

MOTION:

Approving the recommended action.

RESULT:	APPROVED [UNANIMOUS]
MOVER:	John McKay, Mayor Pro Tem
SECONDER:	Gino Borgioli, Council Member
AYES:	Constantine, McKay, Borgioli, Martinez Beltran, Spring

PUBLIC HEARING**9. APPROVE SOLID WASTE MANAGEMENT RATE ADJUSTMENT FOR 2021**

Recommendation:

Minutes Acceptance: Minutes of Apr 7, 2021 5:00 PM (CONSENT CALENDAR)

Adopt resolution approving an adjustment in the maximum allowable solid waste charges effective July 1, 2021.

Program Administrator Anthony Eulo provided the report.

The public hearing opened at 7:30 pm. There being no request to speak, the public hearing closed.

The public hearing was re-opened at 7:34 pm

Terry Williams was called to speak.

There being no further requests to speak, the public hearing closed.

MOTION:

Approving the recommended action.

RESULT:	ADOPTED [UNANIMOUS]
MOVER:	Rene Spring, Council Member
SECONDER:	John McKay, Mayor Pro Tem
AYES:	Constantine, McKay, Borgioli, Martinez Beltran, Spring

OTHER BUSINESS

10. ADOPT RESOLUTION PLACING THE MORGAN HILL RESPONSIBLE GROWTH COALITION INITIATIVE PETITION ON THE NOVEMBER 2022 BALLOT AND ADOPT URGENCY ORDINANCE REGULATING DOCK-HIGH-DOORS ON BUILDINGS WITH OVER 75,000 SQUARE FEET OF FLOOR AREA AND CEILING HEIGHT GREATER THAN 34 FEET

Recommendation:

1. Adopt resolution placing Initiative Petition Titled: Citizens' initiative changing zoning regulations throughout the city of Morgan Hill to prohibit certain new storage and distribution uses in all areas of the City and amending the review process for large-scale development projects on the November 2022 ballot;
2. Adopt the alternative ordinance as an urgency ordinance; and
3. Direct the Planning Commission to make recommendations for permanent ordinance regulating large building design, including maximum dock-door-ratios for certain buildings, and consider placement of the alternative ordinance on the November 2022 ballot.

Development Services Director Jennifer Carman provided a presentation and report.

Public comment opened at 7:40 pm.

Bryan Espiritu

Joe Baranowski

Brittney Sherman

John Williams

Carol Coursey

Miguel Jimenez

Terry Williams

There being no further requests to speak, public comment closed.

MOTION:

Adopting resolution placing Initiative Petition Titled: Citizens' initiative changing zoning regulations throughout the City of Morgan Hill to prohibit certain new storage and distribution uses in all areas of the City and amending the review process for large-scale development projects on the November 2022 ballot

RESULT: ADOPTED [UNANIMOUS]
MOVER: Yvonne Martinez Beltran, Council Member
SECONDER: John McKay, Mayor Pro Tem
AYES: Constantine, McKay, Borgioli, Martinez Beltran, Spring

MOTION:

Adopting the alternative ordinance as an urgency ordinance, directing the Planning Commission to make recommendations for permanent ordinance regulating large building design, including maximum dock-door-ratios for certain buildings, and consider placement of the alternative ordinance on the November 2022 ballot and Directing City staff to engage with the business community including working with the Chamber of Commerce moving forward.

RESULT: ADOPTED [UNANIMOUS]
MOVER: Gino Borgioli, Council Member
SECONDER: John McKay, Mayor Pro Tem
AYES: Constantine, McKay, Borgioli, Martinez Beltran, Spring

FUTURE COUNCIL INITIATED AGENDA ITEMS

Council Member Martinez Beltran requested a City campaign to buy online at local retailers to create sales tax revenue.

Mayor Pro Tem McKay requested that staff review Assembly Bill (AB) 125.

CLOSED SESSION

City Attorney Donald Larkin announced the closed session item.

OPPORTUNITY FOR PUBLIC COMMENT

Public comment opened at 8:06 pm. There being no requests to speak, public comment closed.

ADJOURN TO CLOSED SESSION

The meeting adjourned to closed session at 8:06 pm.

REAL PROPERTY NEGOTIATIONS

Pursuant to: Government Code Section 54956.8
 Property: APN 726-13-052
 Agency Negotiators: Christina Turner, Chris Ghione, and John Lang
 Negotiating Parties: Compass Management
 Under Negotiation: Price and Terms of Sale or Lease

ADJOURNMENT

The meeting adjourned at 8:57 pm.

MINUTES PREPARED BY:

Michelle Bigelow, City Clerk



CITY COUNCIL STAFF REPORT

MEETING DATE: April 21, 2021

PREPARED BY: Patti Yinger, Support Services Manager
APPROVED BY: City Manager

APPROVE AGREEMENT WITH CIVIC FOUNDRY, LLC FOR INFORMATION TECHNOLOGY SERVICES

RECOMMENDATION(S)

Approve and authorize the City Manager to execute and administer consultant agreement with Civic Foundry, LLC for an amount not to exceed \$1,029,269 over three years.

COUNCIL PRIORITIES, GOALS & STRATEGIES

Ongoing Priorities

Enhancing Public Safety
Maintaining Infrastructure
Fostering a Positive Organizational Culture

2020-2021 Strategic Priorities

Fiscal Sustainability

REPORT NARRATIVE:

In September 2019, Civic Foundry, LLC (Civic Foundry) began providing daily technology leadership for the City. At that time, the Information Technology Director (IT) position was vacant and a recruitment had been unsuccessful. Since then, Civic Foundry has provided executive level technology leadership to the City as well as provided the day-to-day activities of the Information Services Department (IS). In January 2021, the City entered into a short-term agreement with Civic Foundry to provide an Information Services Technician due to an ongoing vacancy. Over the course of the previous fiscal year, Civic Foundry has addressed several recommendations from previous IS assessments, enhanced and enabled organization wide mobile computing capability in response to COVID-19, and replaced core network infrastructure.

Staff believes that in order to provide the City with the most cost effective Information Services, the City should continue to receive IS leadership, network engineering and help desk support from Civic Foundry. It is recommended that the City enter into a three-year agreement with Civic Foundry to facilitate completion of crucial projects already underway that will enhance security protocols and minimize risks and vulnerabilities.

The cost for continued executive level management and leadership services, IT Support Specialist position for the Helpdesk, and the addition of a Network/Server Engineer is \$333,000 for the first year, or \$27,750 per month. The annual cost increases 3% each year.

COMMUNITY ENGAGEMENT: Inform

This staff report informs the community about the intended actions over the next three years for city wide information technology leadership.

ALTERNATIVE ACTIONS:

The Council could choose to not approve the agreement and request staff to pursue a request for proposals for services or conduct another recruitment for the position of Information Technology Director.

PRIOR CITY COUNCIL AND COMMISSION ACTIONS:

At its meeting of September 4, 2019, the City Council approved the previous Civic Foundry Agreement due to end on August 31, 2021.

FISCAL AND RESOURCE IMPACT:

Civic Foundry services will be invoiced monthly beginning September 2, 2021 through August 31, 2024. There are sufficient funds in the Information Services Department FY2021-22 operating budget for this agreement (Fund 730). Funds for years 2 and 3 will be included in the FY2022-24 two-year budget development process.

Year 1		Year 2		Year 3	
Monthly	total	Monthly	Total	Monthly	Total
\$ 27,750.00	\$ 333,000.00	\$ 28,582.50	\$ 342,990.00	\$ 29,439.98	\$ 353,279.70
				3 Year Total	\$ 1,029,269.70

Note: a 3% increase is included in Years 2 and 3

CEQA (California Environmental Quality Act):

Not a Project

This Agreement falls under continuing administrative or maintenance activities, such as purchases for supplies, personnel-related actions, general policy, and procedure making and is therefore categorically exempt.

LINKS/ATTACHMENTS:

1. Civic Foundry Contract

CONSULTANT AGREEMENT

THIS AGREEMENT is entered into and becomes effective on _____ (Effective Date), by and between the CITY OF MORGAN HILL, a municipal corporation, ("CITY"), and CIVIC FOUNDRY, LLC a California limited liability company ("CONSULTANT") hereinafter referred to collectively as "Parties." In consideration of the promises and the mutual covenants contained in this Agreement, the Parties agree as follows:

1. **City Authority.** This Agreement is entered into pursuant to the action of the Morgan Hill City Council taken on _____, _____, 20____.
2. **Term of Agreement.** This Agreement shall cover services rendered from the Effective Date of this Agreement until August 31, 2024 at which time CONSULTANT'S services shall be completed. The City Manager is authorized to extend the term of this Agreement for a maximum period of one year. Any such extension shall be in writing and signed by both Parties to this Agreement.
3. **Scope of Service.** The services to be performed by CONSULTANT shall be Information Technology Services as further described in **Exhibit A.**
4. **Compensation.** CONSULTANT shall be compensated as follows:
 - 4.1. **Amount.** \$1,029,269.70. Total compensation to CONSULTANT under this Agreement during its initial term set forth in Section 2 above shall not exceed one million, twenty nine thousand two hundred sixty nine and 70/100 dollars and shall be billed based on the rate and basis set forth in **Exhibit B.** If the City Manager extends the term of this Agreement for up to one year pursuant to the provisions of Section 2 above, the City Manager shall have the authority to increase the maximum compensation allowed to be paid to CONSULTANT during that extended term period, so long as City Council has appropriated sufficient funds therefor, the Parties mutually agree to such amount in a writing signed by both Parties to this Agreement and provided further that in no event shall such maximum compensation allowed for the extended term exceed the City Manager's authority pursuant to Chapter 3.04 of the Morgan Hill Municipal Code, unless otherwise authorized by City Council.
 - 4.2. **Billing.** CONSULTANT shall provide CITY with an invoice containing the dated, detailed, and itemized descriptions of all services performed and expenses incurred (if such expenses are reimbursable pursuant to Exhibit B) by CONSULTANT on a monthly basis unless otherwise specified in Exhibit B. All invoices shall be sent to the CITY addressed to the department head or project manager identified below in Section 13 Notices. Any rate charged shall be prorated where services are interrupted or not provided for any rate period (for example, any monthly rate charge should be prorated when services were interrupted or provided for only part of the month). For services billed on an hourly rate, the minimum unit of billed time shall not exceed one tenth of one hour. CITY shall pay for services and expenses (if so provided in Exhibit B) up to the limit of compensation set forth above, that in the CITY's judgment were necessary and reasonable. Services for work performed and expenses incurred in excess of the total compensation set forth in paragraph 4.1 above shall be at no cost to CITY.
5. **Termination.** CITY or CONSULTANT shall have the right to terminate this Agreement, without cause, by giving thirty (30) days' written notice or less under urgent circumstances. Upon such termination, CONSULTANT shall submit to CITY an itemized statement of services performed for which compensation has not been paid. CITY may require CONSULTANT to complete certain work product or documents and

CONSULTANT shall deliver to CITY all documents in its possession without additional compensation to CONSULTANT. The City Manager of CITY is authorized to terminate this Agreement, in whole or in part, on behalf of CITY.

- 5.1. **Non-Appropriations.** Notwithstanding anything contained in this Agreement to the contrary, if insufficient funds are appropriated, or funds are otherwise unavailable in the budget for CITY for any reason whatsoever in any fiscal year, for payments due under this Agreement, CITY will immediately notify CONSULTANT of such occurrence, and this Agreement shall terminate after the last day during the fiscal year for which appropriations shall have been budgeted for CITY or are otherwise available for payments.

6. **Performance of Work.** CONSULTANT represents that it is qualified by virtue of experience, training, education, and expertise to accomplish these services. Services shall be performed by CONSULTANT in accordance with professional practices in a manner consistent with a level of care, competence and skill exercised by qualified members of the CONSULTANT'S profession. By delivery of completed work, CONSULTANT certifies that the work conforms to the requirements of this Agreement and all applicable federal, state and local laws. CONSULTANT shall perform all work and services under this Agreement in conformance with the time schedule set forth on Exhibit C, "Schedule of Performance," attached hereto and incorporated herein by this reference. CITY's City Manager is authorized on behalf of CITY to modify the timeframes set forth on the Schedule of Performance within the term of this Agreement. If CONSULTANT desires to leave or store any of CONSULTANT's equipment at a CITY site while CONSULTANT is performing work or service pursuant to this Agreement, CONSULTANT will first obtain the consent of CITY's City Manager, or his/her delegate, to do so, and any such storage shall occur only in the manner and location allowed by such CITY official and entirely at CONSULTANT's sole risk.

7. **Insurance Requirements.** CONSULTANT shall procure and provide proof of the insurance coverage required by this section in the form of certificates and endorsements. The required insurance must cover the activities of CONSULTANT, including its subcontractors, employees and agents, relating to or arising from the performance of any work or service under this Agreement, and must remain in full force and effect at all times during the period covered by this Agreement. The coverages may be arranged under a single policy for the full limits required or by a combination of underlying policies with the balance provided by excess or "umbrella" policies, provided each such policy complies with the requirements set forth herein. Any deductibles or self-insured retentions must be declared to and approved by City. CONSULTANT further understands that the CITY reserves the right to modify the insurance requirements set forth herein, with thirty (30) days' notice provided to CONSULTANT, at any time as deemed necessary to protect the interests of the CITY.

7.1. **Insurance Types and Amounts.**

7.1.1. **Commercial General Liability (CGL).** CONSULTANT shall maintain CGL against claims and liabilities for personal injury, death, or property damage providing protection in the minimum amount of: (i) one million dollars (\$1,000,000.00) combined single limit for any one accident or occurrence, or (ii) the maximum amount of such insurance available to CONSULTANT under CONSULTANT's combined insurance policies (including any excess or "umbrella" policies), whichever is greater.

7.1.2. **Automobile Liability.** CONSULTANT shall maintain Automobile Liability covering all owned, non-owned and hired automobiles (if CONSULTANT does not own automobiles, then CONSULTANT shall maintain Hired/Non-owned Automobile Liability) against claims and liabilities for personal injury, death, or property damage providing protection in the minimum amount of: (i) one million dollars (\$1,000,000.00)

combined single limit for any one accident or occurrence, or (ii) the maximum amount of such insurance available to CONSULTANT under CONSULTANT's combined insurance policies (including any excess or "umbrella" policies), whichever is greater.

7.1.3. Workers' Compensation Insurance and Employer's Liability. CONSULTANT shall maintain Workers Compensation coverage, as required by law, in the minimum amount of: (i) one million dollars (\$1,000,000.00) for any one accident or occurrence, or (ii) the maximum amount of such insurance available to CONSULTANT under CONSULTANT's combined insurance policies (including any excess or "umbrella" policies), whichever is greater. If CONSULTANT is self-insured, CONSULTANT shall provide its Certificate of Permission to Self-Insure, duly authorized by the Department of Industrial Relations.

7.1.4. Pollution (Environmental) Liability. If the performance of CONSULTANT'S work or service under this Agreement involves hazardous materials, contaminated soil disposal, and/or a risk of accidental release of fuel oil, chemicals or other toxic gases or hazardous materials, CONSULTANT shall procure and maintain Pollution Liability covering the CONSULTANT'S liability for bodily injury, property damage and environmental damage resulting from pollution and related cleanup costs arising out of the work or services to be performed under this Agreement. Coverage shall be provided for both work performed on site, as well as during the transport of hazardous materials. Such coverage shall be in the minimum amount of: (i) one million dollars (\$1,000,000.00) for any one accident or occurrence, or (ii) the maximum amount of such insurance available to CONSULTANT under CONSULTANT's combined insurance policies (including any excess or "umbrella" policies), whichever is greater.

7.1.5. Professional Liability.

7.1.5.1. If the performance of CONSULTANT's work or service under this Agreement involves professional and/or technical services (examples include, but are not limited to, architects, engineers, land surveyors, and appraisers), CONSULTANT shall procure and maintain either a claims made or occurrence Errors and Omission liability insurance in the minimum amount of: (i) one million dollars (\$1,000,000.00) each claim, or (ii) the maximum amount of such insurance available to CONSULTANT under CONSULTANT's combined insurance policies (including any excess or "umbrella" policies), whichever is greater. Further, if CONSULTANT maintains a claims-made policy, CONSULTANT shall provide written evidence of such insurance to the CITY for at least five (5) years after the completion of work performed under this Agreement.

7.1.5.2. If the performance of CONSULTANT's work or service under this Agreement relates to Information Technology or related services (examples include, but are not limited to computer programmers, software designers, hardware engineers, or other systems consultants), CONSULTANT shall procure and maintain a claims made Errors and Omission liability insurance, including Cyber Liability and Data Breach, in the minimum amount of: (i) one million dollars (\$1,000,000.00) each claim, or (ii) the maximum amount of such insurance available to CONSULTANT under CONSULTANT's combined insurance policies (including any excess or "umbrella" policies), whichever is greater.

- 7.1.6. **Sexual Abuse/Molestation Liability (SML)**: If the performance of CONSULTANT's work or service under this Agreement involves contact with minors, CONSULTANT shall procure and maintain Sexual Abuse and Molestation insurance in the minimum amount of: (i) two hundred thousand dollars (\$200,000.00) each claim, or (ii) the maximum amount of such insurance available to CONSULTANT under CONSULTANT's combined insurance policies (including any excess or "umbrella" policies), whichever is greater.
- 7.2. **Endorsements**. CONSULTANT shall provide proof of the following endorsements, listed for each policy for which endorsements are required, as outlined below:
- 7.2.1. **General Liability and pollution liability (when pollution liability applies)**.
- 7.2.1.1. The City of Morgan Hill, its elected or appointed officials, boards, agencies, officers, agents, employees, and volunteers are named as additional insureds;
- 7.2.1.2. the insurer waives the right of subrogation against the City of Morgan Hill and the CITY's elected or appointed officials, boards, agencies, officers, agents, employees, and volunteers; and,
- 7.2.1.3. insurance shall be primary non-contributing.
- 7.2.2. **Workers Compensation**.
- If the performance of CONSULTANT'S work or service under this Agreement involves access to or activity on any property or premises owned or occupied by the CITY, including, but not limited to, CONSULTANT'S presence during site visits and meetings, then insurer waives the right of subrogation against the City of Morgan Hill and the CITY's elected or appointed officials, boards, agencies, officers, agents, employees, and volunteers.
- 7.3. **Qualification of Insurers**. All insurance required pursuant to this Agreement must be issued by a company licensed and admitted, or otherwise legally authorized to carry out insurance business in the State of California, and each insurer must have a current A.M. Best's financial strength rating of "A" or better and a financial size rating of "VII" or better.
- 7.4. **Certificates**. CONSULTANT shall furnish CITY of Morgan Hill with copies of all certificates as outlined herein, whether new or modified, promptly upon receipt. In the event of a claim or legal action, CONSULTANT shall promptly furnish CITY of Morgan Hill with copies of all policies outlined herein. No policy subject to the CONSULTANT's agreement with the CITY shall be canceled or materially changed except after thirty (30) days' notice by the insurer to CITY. Certificates, including renewal certificates, may be mailed electronically to riskmgmt@morganhill.ca.gov or delivered to the Certificate Holder address provided herein

Certificate Holder address:

City of Morgan Hill
Attn: Risk Management
17575 Peak Avenue
Morgan Hill, CA 95037

8. **Non-Liability of Officials and Employees of the CITY.** No official or employee of CITY shall be personally liable for any default or liability under this Agreement.

9. **Compliance with Law.**

- 9.1. CONSULTANT and its officers, employees, agents, and subcontractors shall comply with all applicable laws, ordinances, administrative regulations, and permitting requirements in carrying out their obligations under this Agreement. CONSULTANT and its officers, employees, agents, and subcontractors covenant there shall be no discrimination based upon race, color, creed, religion, gender, marital status, age, sexual orientation, national origin, mental disability, physical disability, medical condition, or ancestry, in any activity pursuant to this Agreement.
- 9.2. Compliance with Wage and Hour Laws: Consultant, and any subcontractor it employs to complete work under this Agreement, shall comply with all applicable federal, state and local wage and hour laws. Applicable laws may include, but are not limited to, the Federal Fair Labor Standards Act and the California Labor Code.

Final Judgments, Decisions, and Orders: For purposes of this Section, a “final judgment, decision, or order” refers to one for which all appeals have been exhausted or the time to appeal has expired. Relevant investigatory government agencies include: the federal Department of Labor, the California Division of Labor Standards Enforcement, or any other governmental entity or division tasked with the investigation and enforcement of wage and hour laws.

Prior Judgments against CONSULTANT and/or its Subcontractors: BY SIGNING THIS AGREEMENT, CONSULTANT AFFIRMS THAT IT HAS DISCLOSED ANY FINAL JUDGMENTS, DECISIONS OR ORDERS FROM A COURT OR INVESTIGATORY GOVERNMENT AGENCY FINDING – IN THE FIVE (5) YEARS PRIOR TO EXECUTING THIS AGREEMENT – THAT CONSULTANT OR ITS SUBCONTRACTOR(S) HAS VIOLATED ANY APPLICABLE WAGE AND HOUR LAWS. CONSULTANT FURTHER AFFIRMS THAT IT OR ITS SUBCONTRACTOR(S) HAS SATISFIED AND COMPLIED WITH – OR HAS REACHED AGREEMENT WITH THE CITY REGARDING THE MANNER IN WHICH IT WILL SATISFY – ANY SUCH JUDGMENTS, DECISIONS OR ORDERS.

Judgments or Decisions During Term of Contract: If at any time during the term of this Agreement, a court or investigatory government agency issues a final judgment, decision or order finding that CONSULTANT or an subcontractor it employs to perform work under this Agreement has violated any applicable wage and hour law, or CONSULTANT learns of such a judgment, decision, or order that was not previously disclosed, CONSULTANT shall inform the City Attorney, no more than fifteen (15) days after the judgment, decision or order becomes final or of learning of the final judgment, decision or order. CONSULTANT and its subcontractors shall promptly satisfy and comply with any such judgment, decision, or order, and shall provide the City Attorney with documentary evidence of compliance with the final judgment, decision or order within five (5) days of satisfying the final judgment, decision or order. The City reserves the right to require CONSULTANT to enter into an agreement with the City regarding the manner in which any such final judgment, decision, or order will be satisfied.

City's Right to Withhold Payment: Where CONSULTANT or any subcontractor it employs to perform work under this Agreement has been found in violation of any applicable wage and

hour law by a final judgment, decision or order of a court or government agency, the City reserves the right to withhold payment to CONSULTANT until such judgment, decision or order has been satisfied in full.

Material Breach: Failure to comply with any part of this Section constitutes a material breach of this Agreement. Such breach may serve as a basis for immediate termination of this Agreement and/or any other remedies available under this Agreement and/or law.

Notice to City Related to Wage Theft Prevention: Notice provided to the City Attorney as required under this Section shall be addressed to: City Attorney, City of Morgan Hill, 17575 Peak Avenue, Morgan Hill, CA 95037. The Notice provisions of this Section are separate from any other notice provisions in this Agreement and, accordingly, only notice provided to the above address satisfies the notice requirements in this Section.

10. **Independent Contractor**. CONSULTANT is an independent contractor and not an agent or employee of CITY.
11. **Confidentiality**. All data, documents, or other information received by CONSULTANT from CITY or prepared in connection with CONSULTANT'S services under this Agreement are deemed confidential and shall not be disclosed to any third party by CONSULTANT without prior written consent by CITY.
12. **Conflict of Interest and Reporting**. CONSULTANT shall at all times avoid conflict of interest or appearance of conflict of interest in performance of this Agreement.
13. **Notices**. All notices shall be personally delivered or mailed, via first class mail to the below listed address. These addresses shall be used for delivery of service of process. Notices shall be effective five (5) days after date of mailing, or upon date of personal delivery.

Address of CONSULTANT is as follows:

Civic Foundry, LLC
PO Box 5541
San Jose, CA 95150

Address of CITY is as follows:

Shane Palsgrove	with a copy to:
City of Morgan Hill	City Clerk
17575 Peak Avenue	City of Morgan Hill
Morgan Hill, CA 95037	17575 Peak Avenue
	Morgan Hill, CA 95037

14. **Licenses, Permits and Fees**. CONSULTANT shall obtain a City of Morgan Hill Business License, all permits and licenses to the extent required by ordinances, codes and regulations of the federal, state and local government.
15. **Consultant's Proposal**. If applicable, this Agreement shall include CONSULTANT'S proposal or bid which is incorporated herein. In the event of any inconsistency between the terms of the proposal and this Agreement, this Agreement shall govern.

16. **Maintenance of Records.**

16.1. **Maintenance.** CONSULTANT shall prepare, maintain, and preserve all reports and records that may be required by federal, state, and CITY rules and ordinances related to services provided under this Agreement. CONSULTANT shall maintain records for a period of at least 3 years after receipt of final payment under this Agreement. If any litigation, claim, negotiation, audit exception, or other action relating to this Agreement is pending at the end of the 3-year period, then CONSULTANT shall retain said records until such action is resolved.

16.2. **Access to and Audit of Records.** The CITY shall have the right to examine, monitor and audit all records, documents, conditions, and activities of the CONSULTANT and its subcontractors related to services under this Agreement. Pursuant to Government Code Section 8546.7, if this Agreement involves the expenditure of public funds in excess of \$10,000, the Parties to this Agreement may be subject, at the request of the CITY or as part of any audit of the CITY, to the examination and audit of the State Auditor pertaining to matters connected with the performance of this Agreement for a period of three years after final payment under the Agreement.

16.3. **Ownership of Work Product.** All documents or other information developed or received by CONSULTANT for work performed under this Agreement shall be the property of CITY. CONSULTANT shall provide CITY with copies of these items upon demand or upon termination of this Agreement.

17. **Familiarity with Work.** By executing this Agreement, CONSULTANT represents that: (1) it has investigated the work to be performed; (2) it has investigated the site of the work and is aware of all conditions there; and (3) it understands the difficulties and restrictions of the work under this Agreement. Should CONSULTANT discover any conditions materially differing from those inherent in the work or as represented by CITY, it shall immediately inform CITY and shall not proceed, except at CONSULTANT'S risk, until written instructions are received from CITY.

18. **Time of Essence.** Time is of the essence in the performance of this Agreement.

19. **No Assignment.** Neither this Agreement nor any portion shall be assigned by CONSULTANT, without prior written consent of CITY. Any attempted assignment not first approved by CITY shall be void and, at CITY's option, shall terminate this Agreement effective as of the date of such attempted assignment.

20. **Attorney Fees.** In any legal action, dispute or arbitration arising out of or relating to this Agreement, the prevailing party shall be entitled to an award of its reasonable attorney fees, costs and expenses incurred.

21. **Defense and Indemnification.**

21.1. **Defense and Indemnification.** CONSULTANT shall, to the fullest extent permitted by law, indemnify, defend and hold harmless CITY, its elected or appointed officials, boards, agencies, officers, agents, employees, and volunteers ("INDEMNITEES") from and against any and all claims, liabilities, expenses, liens, or damages of any nature, including liability for bodily injury, property damage or personal injury, and including reasonable attorneys' fees and expenses, that arise out of, pertain to, or relate to the performance of this Agreement or the failure to comply with any obligations contained in this Agreement by CONSULTANT, and/or its agents, officers, employees, subcontractors, or independent contractors ("CLAIM").

21.2. **Exceptions.** CONSULTANT is not required to indemnify INDEMNITEES against liability for bodily injury, property damage or personal injury, or any other loss, damage or expense arising from the sole negligence or willful misconduct of the CITY.

21.3. **Not limited by insurance.** The indemnity, defense and hold harmless provisions of this Agreement apply to all CLAIMs alleged against an INDEMNITEE, regardless of whether any insurance policies are applicable. Policy limits do not act as a limitation upon the amount of indemnification or defense to be provided by CONSULTANT.

21.4. **Right to Offset.** CITY shall have the right to offset against any compensation due CONSULTANT under this Agreement any amount due CITY from CONSULTANT as a result of CONSULTANT's failure to pay CITY promptly any indemnification arising under this Section (21) and any amount due CITY from CONSULTANT arising from CONSULTANT's failure either to (i) pay taxes on amounts received pursuant to this Agreement or (ii) comply with applicable workers' compensation laws.

21.5. **Interpretation.** This Section shall constitute an agreement or contract of indemnity, incorporating the interpretations under California Civil Code Section 2778. It is expressly understood and agreed that the obligation of the CONSULTANT to indemnify the INDEMNITEE shall be as broad and inclusive as permitted by the laws of the State of California and shall survive termination of this Agreement.

22. **Entire Agreement; Modification; Conflicting Provisions.** This Agreement constitutes the entire Agreement between the Parties and supersedes any previous agreements, oral or written. This Agreement may be modified or provisions waived only by a subsequent mutual written agreement executed by CITY and CONSULTANT. If the provisions contained in the main body of this Agreement conflict with any provision contained in an exhibit to this Agreement, the provisions of the main body of this Agreement shall govern and control over any provision contained in an exhibit to this Agreement.

23. **Governing Law and Venue.** This Agreement shall be construed in accordance with the laws of the State of California. This Agreement was entered into and is to be performed in the County of Santa Clara. Any action or dispute arising out of this Agreement shall only be brought in Santa Clara County.

24. **Interpretation.** This Agreement is a negotiated document and shall be deemed to have been drafted jointly by the Parties, and no rule of construction or interpretation shall apply against any particular Party based on a contention that the Agreement was drafted by one of the Parties including, but not limited to, California Civil Code § 1654, the provisions of which are hereby waived. This Agreement shall be construed and interpreted in a neutral manner.

25. **Preservation of Agreement.** If any term, provision, covenant, or condition of this Agreement is held by a court of competent jurisdiction to be invalid or unenforceable, the rest of the Agreement shall remain in full force and effect and shall in no way be affected or invalidated.

26. **Binding Agreement.** Notwithstanding the provisions of Section 19 above, this Agreement shall bind any and all successors in interest, legal representatives and/or other permitted assignees or transferees of CONSULTANT in the same manner as if those successors in interest, legal representatives or other permitted assignees or transferees had entered into this Agreement originally.

27. ☐ **Data Sharing.** This Agreement requires access by CONSULTANT to CITY's Geographic Information System (GIS) DATA for CONSULTANT to perform the work. CITY agrees to provide the GIS

DATA to CONSULTANT solely for the purpose of performance of contracted work with the CITY upon the terms and conditions specified in Exhibit D, incorporated herein by this reference.

[Signatures on Next Page]

28. **Authority to Execute.** Those individuals who are signing this Agreement on behalf of entities represent and warrant that they are, respectively, duly authorized to sign on behalf of the entities and to bind the entities fully to each and all of the obligations set forth in this Agreement.

IN WITNESS THEREOF, these Parties have executed this Agreement on the day and year shown below.

AS SET FORTH IN CA. CORP. CODE § 313, TWO SIGNATURES ARE REQUIRED FOR CALIFORNIA CORPORATIONS:

- (1) CHAIRPERSON OF THE BOARD, PRESIDENT, OR VICE PRESIDENT; AND
 (2) SECRETARY, ASSISTANT SECRETARY, CHIEF FINANCIAL OFFICER OR ASSISTANT TREASURER.

ATTEST:

CITY OF MORGAN HILL

 City Clerk/Deputy City Clerk

 City Manager

 Michelle Bigelow
 Print Name

 Christina J. Turner
 Print Name

Date: _____

Date: _____

APPROVED AS TO FORM:



 City Attorney

By:

 Donald A. Larkin
 Print Name

 Vijay Sammeta , CEO

Print Name and Title of Signer.

If Corporate: Chairman, President or Vice President

Date: _____

Date: 4/1/2021

 By:

 Print Name and Title of Signer.

If Corporate: Secretary, Assistant Secretary, Chief Financial Officer or Assistant Treasurer

Date: _____

**EXHIBIT A
SCOPE OF SERVICES**

Attachment: Civic Foundry Contract (3044 : Information Technology Services Agreement)



March 30, 2021

Shane Palsgrove
Chief of Police
City of Morgan Hill
16200 Vineyard Blvd.
Morgan Hill, CA 95037

Dear Chief Palsgrove,

As we approach the end of the Civic Foundry's current service agreement with the City of Morgan Hill, we want to take the opportunity to align the scope of services for our next proposal with the changing technology support needs of the City. We have been proud to serve the City as its strategic leader for information services over the past two years. Together we faced some major issues such as successfully pivoting the City to a mobile workforce due to a global pandemic, and modernizing much of the underlying technical infrastructure while managing through major power outages and fiber breaks.

It has become increasingly evident that the City's lack of in-house network engineering or modern server skill sets is hindering its ability to maintain stability, reliability, and security of the organization's data and technical infrastructure. The need for these skills will undoubtedly grow as the City will soon be required to address a number of remediation items as a result of upcoming security, PCI, and DOJ assessments. This proposal will begin to address the backlog of requirements within the budget constraints of the City. However, one position will not comprehensively address *all* of the engineering needs of the City, nor will it be able to launch and maintain an ongoing information security program as required by regulatory compliance associated with taking credit cards, or DOJ and general controls associated with financial risk by government agencies.

To provide the City with resources in the most cost-effective manner, we propose that the City continue to receive IT leadership from Civic Foundry but at a reduced service level to create capacity to address the backlog of engineering services that the City critically needs through the addition of a Network/Server Engineer. Under this proposed model, the IS Department's Programmer Analyst would address all application services and customer requests as defined by the City's classification description. The City's IS Technician would continue to provide tier one support for public safety and address more advanced desktop support and helpdesk issues, as well as basic server requests, escalating more complex network and server issues to the Civic Foundry Engineer. In addition, Civic Foundry would continue to augment the IS helpdesk through an IT Support Specialist. The Police Department will continue to directly manage City IS staff (i.e., Programmer Analyst and IS Technician) and Civic Foundry will continue to provide IS

Department leadership and supervision of its own staff (i.e. Network/Server Engineer and IT Support Specialist).

Below is the proposed scope of services to be provided under a new agreement:

- Provide executive level technology leadership to the City organization
- Provide equivalent of one server engineer resource
- Provide equivalent of one on-site helpdesk technician for a live-answer helpdesk
- Provide tier-one troubleshooting of helpdesk requests
- Provide daily maintenance and administration of the City's network
- Provide daily maintenance and administration of the City's wired and wireless networks
- Administer and maintain the City's firewalls
- Provide daily maintenance and administration of the City's servers (moves, adds, changes, upgrades, etc.)
- Perform server patching
- Provide network support for public safety systems and to City's IS technician
- Plan cooperatively with the City and begin remediation efforts of findings on security audits
- Scope network projects for time, resources, and funding
- Draft hardware specifications for technology purchases and/or budget forecasting
- Draft budget proposals for future IT investments that maximize the City's return-on-investments or address critical infrastructure or security needs
- Draft a five-year strategic plan for technology

The proposed cost for continued executive level management and leadership services, IT Support Specialist position for the Helpdesk, and the addition of a Network/Server Engineer is \$333,000 per year, payable in twelve equal payments of \$27,750 on the first day of each month. This proposed scope of work is for a period of one year, with the option to renew for two additional years at an increased annual cost of three percent (3%).

We look forward to discussing this proposal with you at your earliest convenience.



Vijay Sammeta
Chief Executive Officer
Civic Foundry, LLC

cc: Patti Yinger

**EXHIBIT B
SCHEDULE OF COMPENSATION RATES**

Attachment: Civic Foundry Contract (3044 : Information Technology Services Agreement)

Exhibit B

Year 1		Year 2		Year 3	
Monthly	total	Monthly	Total	Monthly	Total
\$ 27,750.00	\$ 333,000.00	\$ 28,582.50	\$ 342,990.00	\$ 29,439.98	\$ 353,279.70
				3 Year Total	\$ 1,029,269.70

Note: a 3% increase is included in Years 2 and 3

EXHIBIT C
SCHEDULE OF PERFORMANCE

Exhibit C

This Agreement shall cover services rendered from the Effective Date of this Agreement until August 31, 2024 at which time CONSULTANT'S services shall be completed. The City Manager is authorized to extend the term of this Agreement for a maximum period of one year. Any such extension shall be in writing and signed by both Parties to this Agreement.



CITY COUNCIL STAFF REPORT

MEETING DATE: April 21, 2021

PREPARED BY: Anthony Eulo, Program Administrator
APPROVED BY: City Manager

APPROVE COUNTYWIDE AB 939 AND HOUSEHOLD HAZARDOUS WASTE COLLECTION AGREEMENTS

RECOMMENDATION(S)

Authorize the City Manager to execute the Countywide AB 939 and Household Hazardous Waste Collection agreements.

COUNCIL PRIORITIES, GOALS & STRATEGIES

Ongoing Priorities

Protecting the Environment and Preserving
Open Space and Agricultural Land
Maintaining Infrastructure

REPORT NARRATIVE:

The purpose of this City Council report is to request authorization for the City Manager to execute the Countywide AB 939 Fee Agreement (Attachment 1) and the Countywide Household Hazardous Waste (HHW) Collection Agreement (Attachment 2).

Countywide AB 939 Fee Agreement

For well over 20 years, Santa Clara County has collected a fee to offset each jurisdiction's solid waste management and HHW management expenses. Named after the State bill that required all jurisdictions to establish recycling programs, the Countywide AB 939 Fee is collected at waste transfer and disposal facilities by facility operators and remitted to the County quarterly. In order for the fee to be practically enforced, every jurisdiction in the County must approve the same agreement.

The AB 939 Fee has two components. The first component, the Program Fee of \$1.50 per ton, is charged to assist in funding integrated waste management activities. The County transfers Program Fee revenues to each jurisdiction quarterly based on the waste tonnage emanating from the jurisdiction. The second component, the HHW Fee of \$2.60 per ton, is held by the County and used to directly offset the HHW program costs associated with the use of the program by each jurisdiction's residents. If HHW Fee revenues exceed a jurisdiction's HHW program costs at the end of the fiscal year, the remaining funds are transferred to the jurisdictions to be used to promote or support HHW management costs.

Countywide HHW Collection Agreement

For decades, the City has met its obligation to provide for HHW management by

participating in the Countywide Collection Program. This popular program provides City residents with the opportunity to participate in several collection events each month. The permanent collection center in San Martin has improved the convenience associated with these services. Over 1,000 Morgan Hill households participated in collection events in FY 19/20 despite many canceled events during the pandemic.

The HHW Agreement includes a base assumption that 4% of each jurisdiction's households will participate in the program annually. Since nearly 10% of the City's households are anticipated to participate, an augmentation to the 4% base assumption must be specified in Section 16 of the Agreement. Based on staff's anticipated participation by City residents, an augmentation of \$55,000 is recommended. As discussed below in the fiscal impact section, this amount should be nearly completely offset by the revenues collection by the Countywide AB 939 Fee. Note that this is less than the augmentation amount recommended by the County and contained in Attachment A to the agreement. Since staff believes that City resident participation will be lower than estimated and that the County's costs will be lower than estimated, a lower augmentation is recommended.

COMMUNITY ENGAGEMENT: Inform

The recommended action is an extension of a long-standing program with no changes proposed so no engagement activities were conducted prior to presenting the amendment for Council consideration. Should the HHW Agreement be approved, staff will continue to inform the public about the availability of the County program.

ALTERNATIVE ACTIONS:

The Council could decide to not approve the HHW Collection Agreement and direct staff to further evaluate the provision of these services. There is not a viable alternative to approving the AB 939 Fee Agreement as this is a single countywide agreement that must be approved by every jurisdiction in the County.

PRIOR CITY COUNCIL AND COMMISSION ACTIONS:

The Countywide AB 939 Fee Agreement is typically approved by the Council once every three years and the Agreement currently in place was approved on May 2, 2018. The prior Countywide HHW Agreement was approved by the City Council on May 2, 2018 and was amended in 2019 and 2020 to reflect the annual allocation amount and collection dates. The Council has historically acted annually on either an HHW agreement or an amendment to the agreement for over 20 years.

FISCAL AND RESOURCE IMPACT:

AB 939 PROGRAM FEE REVENUES: AB 939 Program Fee revenues of \$69,000 are anticipated for the 2021/22 Fiscal Year.

HHW FEE REVENUES AND PROGRAM COSTS: It is estimated that providing HHW collection services to Morgan Hill residents participating in the County program will cost approximately \$125,000 in Fiscal Year 2021/22. Since the HHW Fee revenues credited to Morgan Hill for this purpose should total approximately \$120,000, a small subsidy from the Environmental Services budget of the General Fund (010.5800) will be

required. Funding for this subsidy will be included in the Fiscal Year 2021/22 Recommended Budget so no budget amendment or appropriation is required at this time. If City participation is lower than anticipated, any HHW Fee revenues remaining in the City's credit with the County, will be refunded to the City for use in promoting the program. If participation exceeds expectations, staff will return to the Council to request an additional augmentation and appropriation.

CEQA (California Environmental Quality Act): Categorical Exemption

Approval of the Amendment is categorically exempt from environmental review under the Section 15308 (Actions by Regulatory Agencies for Protection of the Environment) of the CEQA guidelines.

LINKS/ATTACHMENTS:

1. Attachment 1: AB 939 Implementation Fee Agreement FY2022_FY2024
2. Attachment 2: Household Hazardous Waste Agreement

AGREEMENT FOR COUNTYWIDE AB939 IMPLEMENTATION FEE

This Agreement is made by and among the Cities and Towns of Campbell, Cupertino, Gilroy, Los Altos, Los Altos Hills, Los Gatos, Milpitas, Morgan Hill, Monte Sereno, Mountain View, Palo Alto, San Jose, Santa Clara, Saratoga, and Sunnyvale (CITIES) and the County of Santa Clara (COUNTY) on the _____ day of _____ 2021. The term CITIES may refer to CITIES collectively or individually.

RECITALS

WHEREAS, pursuant to Public Resources Code Section 41901, a city, county, or city and county may impose fees in amounts sufficient to pay the costs of preparing, adopting, and implementing a countywide integrated waste management plan;

WHEREAS, State law, Public Resource Code Section 41750, requires that the countywide integrated waste management plans contain a household hazardous waste (“HHW”) element for each city within the county as well as for the unincorporated area of the county;

WHEREAS, the County of Santa Clara Board of Supervisors (“Board”) has imposed a Countywide AB939 Implementation Fee (“Fee”) since July 1, 1992 to pay for the costs of preparing, adopting, and implementing integrated waste management plans and programs, including HHW program elements;

WHEREAS, the Board has approved reimposing the Fee for Fiscal Years 2022, 2023, and 2024 (July 1, 2021 through June 30, 2024) at \$4.10 per ton of waste landfilled or incinerated in the County; received at any nondisposal or collection facility located within the County and subsequently transported for disposal or incineration outside of the County; collected from any location within the County by a solid waste hauler operating pursuant to a franchise, contract, license, or permit issued by any local jurisdiction and subsequently transported for disposal or incineration outside of the County; and removed from any location in the County by any person or business for disposal or incineration outside the County;

WHEREAS, HHW programs provide household hazardous waste management services to residents of Santa Clara County and are necessary to meet HHW planning and management requirements under State law;

WHEREAS, jurisdictions in Santa Clara County desire to provide safe, convenient, and economical means for residents to properly dispose of household hazardous wastes in an environmentally safe manner in order to avoid unauthorized or improper disposal in the garbage, sanitary sewer, storm drain system, or on the ground or in any other manner which creates a health or environmental hazard. These wastes include, but are not limited to, common household products such as household cleaning products, spot remover, furniture polish, solvents, oven cleaner, pesticides, oil based paints, motor oil, antifreeze, fluorescent lamps, and batteries; and

WHEREAS, the County will collect the Fee on behalf of the fifteen cities and for the unincorporated area of the County and will apportion the Fee according to the terms of this Agreement.

NOW THEREFORE, CITIES and COUNTY AGREE AS FOLLOWS:

1. PURPOSE

The purpose of this Agreement is to state the terms and conditions under which the COUNTY will collect and distribute the Fee of \$4.10 per ton of waste to be disposed in Fiscal Years 2022, 2023 and 2024. The Fee is divided into two parts: 1) a Program Fee of \$1.50 per ton to assist in funding the costs of preparing, adopting, and implementing the integrated waste management plan in the fifteen cities and the unincorporated area of the County; and 2) a Household Hazardous Waste Fee of \$2.60 per ton to provide funding to implement the Countywide HHW Program. The Program Fee will be allocated among the CITIES and COUNTY as described in Exhibit B, attached hereto and incorporated herein. The HHW Fee will be allocated to the COUNTY, CITIES, and Countywide HHW Program as described in Exhibit C, attached hereto and incorporated herein. The Fee shall be imposed on each ton of waste landfilled or incinerated within the County; received at any non-disposal or collection facility located within the County and subsequently transported for disposal or incineration outside of the County; collected from any location within the County by a solid waste hauler operating pursuant to a franchise, contract, license, or permit issued by any local jurisdiction and subsequently transported for disposal or incineration outside of the County; or removed from any location in the County by any person or business for disposal or incineration outside the County. Non-Disposal Facilities are defined as those facilities included in the County of Santa Clara Non-Disposal Facility Element (and subsequent amendments to that Element) and are listed in Exhibit A, attached hereto and incorporated herein.

2. SERVICES PROVIDED BY COUNTY

COUNTY will collect and distribute the Fee. COUNTY will collect the Fee from landfills and non-disposal facilities listed in Exhibit A, and any landfill or non-disposal facility subsequently permitted, on a quarterly basis using data from tonnage reports filed by landfill and non-disposal facility operators with the County Recycling and Waste Reduction Division. COUNTY shall require each landfill and non-disposal facility to submit required payment, documentation of tonnages disposed, and state-mandated Disposal Reporting System Reports on a quarterly basis, within 45 days of the end of each calendar quarter. Late submissions and/or payments shall be subject to a late filing penalty and delinquent penalties. COUNTY will research Santa Clara County tonnage reported to COUNTY by landfills outside the COUNTY in significant amounts to determine the identity of the hauler. That hauler will subsequently be billed in the same fashion subject to the same penalties as mentioned above. Collected funds and any late filing payments and delinquency penalties shall be distributed to CITIES and Countywide HHW Program based on the formula set forth in Exhibits B and C. COUNTY shall not be obligated to distribute funds that COUNTY has been unable to collect from landfill or non-disposal facility operators.

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3. ROLE OF CITIES

CITIES shall review the Disposal Reporting System Reports as prepared and submitted by the COUNTY and within 30 days of receipt shall report to COUNTY, with appropriate documentation, errors in waste allocations among jurisdictions.

4. COLLECTION AND USE OF FEE

Each ton of waste will be subject to the fee if it is landfilled or incinerated in the County; received at any non-disposal facility or collection facility in the County and subsequently transported for disposal or incineration outside the County; collected from any location within the County by a solid waste hauler operating under franchise, contract, license, or permit issued by a local jurisdiction and subsequently transported for disposal or incineration outside the County; or removed from any location in the County by any person or business for disposal or incineration outside the County. Best efforts will be made to prevent tonnage from being assessed a double fee (for instance, once at a non-disposal facility and again at a landfill within Santa Clara County). The Program Fee funding share paid to CITIES shall be used to assist in funding the CITIES' costs of preparing, adopting, and implementing the integrated waste management plan of each of the CITIES and the unincorporated area of the COUNTY. The HHW Fee portion shall be applied to fund the costs of CITIES' share of Countywide Household Hazardous Waste services; any HHW fees directly disbursed to CITIES as provided in this Agreement shall be used to fund the costs of preparing, adopting, and implementing the jurisdiction's HHW element of the Countywide integrated waste management plan, including providing HHW services to residents.

5. INSURANCE

Each party shall maintain its own insurance coverage, through third party insurance, self-insurance or a combination thereof, against any claim, expense, cost, damage or liability arising out of the performance of its responsibilities pursuant to this Agreement. CITIES agree to provide evidence of such insurance to COUNTY via Certificate of Insurance or other documentation acceptable to the COUNTY upon request.

6. INDEMNIFICATION

In lieu of and notwithstanding the pro rata risk allocation which might otherwise be imposed between CITIES and COUNTY pursuant to Government Code Section 895.6, the parties agree that all losses or liabilities incurred by a party shall not be shared pro rata but instead the parties agree that each of the parties hereto shall fully indemnify and hold each of the other parties harmless from any claim, expense or cost, damage or liability arising out of, or in connection with, performance of its responsibilities pursuant to this Agreement and as described in Exhibit D.

Additionally, CITIES shall indemnify, hold harmless, and defend COUNTY, its officers, agents, and employees with respect to any loss, damage, liability, cost or expenses, including attorney fees and court costs, arising from any misuse of the Fee distributed to CITIES. COUNTY shall indemnify, hold harmless, and defend CITIES, its officers, agents, and

employees with respect to any loss, damage, liability, cost or expenses, including attorney fees and court costs, brought by third parties based on COUNTY's sole negligence in the collection or distribution of said Fees.

7. DISTRIBUTION OF FEE

COUNTY shall distribute the AB939 Program Fee to CITIES and the HHW Program Fee to the Countywide HHW Program pursuant to the formulas described in Exhibits B and C within 45 days of receipt of landfill and non-disposal facility payments and disposal documentation required for calculation of Fee distribution amounts. Distributions shall begin December 15, 2021, and continue quarterly through October 15, 2024.

8. PARTICIPATION IN THE COUNTYWIDE HHW PROGRAM

CITIES, at their option, may individually participate in the Countywide HHW Program by entering into the AGREEMENT FOR COUNTYWIDE HOUSEHOLD HAZARDOUS WASTE COLLECTION PROGRAM.

9. LATE PAYMENTS

If Fee payments and disposal documentation are not received from landfill or non-disposal facility operators prior to scheduled distribution of payments to CITIES and the Countywide HHW Program, payment distribution shall be calculated on a pro rata share of monies received. Upon collection, late payments and accrued delinquent penalties, if any, shall be distributed among CITIES and the Countywide HHW Program according to the formula in Exhibits B and C.

10. ACCOUNTING

COUNTY shall maintain records of all transactions related to collection, use and distribution of the Fee for at least five (5) years after the termination date of this Agreement, unless otherwise required by law to retain such records for a longer period. Such records will be available for inspection upon written request by CITIES, and will include but not be limited to tonnage reports submitted by landfills and non-disposal facilities, waste stream documentation provided by cities, payments made by the landfills and non-disposal facilities to the COUNTY and by the COUNTY to CITIES, and expenditures for programmatic and overhead costs.

11. REQUEST FOR REVIEW

In the event CITIES have a dispute regarding the calculation of its share of the Fee or the distribution or use of the Fee, CITIES may request in writing a review by COUNTY within 10 days of receipt of their Fee allocation. The review shall be performed within 30 days of request and results shall be reported to CITIES in writing.

12. EFFECTIVE DATE OF AGREEMENT

This agreement is effective upon approval by all fifteen CITIES and the COUNTY.

13. AMENDMENT

This Agreement may be amended only by an instrument signed by all fifteen CITIES and the COUNTY.

14. INDEPENDENT CONTRACTOR

Each party shall perform responsibilities and activities described herein as an independent contractor and not as an officer, agent, servant or employee of any of the parties hereto. Each party shall be solely responsible for the acts and omissions of its officers, agents, employees, contractors and subcontractors, if any. Nothing herein shall be considered as creating a partnership or joint venture between the parties.

15. TERM OF AGREEMENT

The term of this Agreement shall be from July 1, 2021 to June 30, 2024, or until all funds from the last quarter's Fee payments have been distributed, whichever is later. COUNTY shall bill the operators of the landfills and non-disposal facilities listed in Exhibit A for the Fee commencing with the Quarter ending September 30, 2021. Said landfills and non-disposal facilities will be billed for the Fee through June 30, 2024.

16. NOTICES

All notices required by this Agreement will be deemed given when in writing and delivered personally or deposited in the United States mail, postage prepaid, return receipt requested, addressed to the other party at the address set forth below or at such address as the party may designate in writing in accordance with this section.

City of _____
 Contact: _____
 Title: _____
 Address: _____

County of Santa Clara
 Contact: Recycling and Waste Reduction Program Manager
 Recycling and Waste Reduction Division
 Address: 1555 Berger Drive, Suite 300
 San Jose, CA 95112

17. CONTROLLING LAW

This Agreement shall be governed and construed in accordance with the laws of the State of California.

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18. ENTIRE AGREEMENT

This document embodies the entire Agreement between the parties with respect to the subject matter hereof. No modification of this Agreement shall be effective unless and until modification is evidenced by writing signed by all parties or their assigned designees.

19. COUNTERPARTS

This Agreement may be executed in one or more counterparts, each of which shall be deemed to be an original, but all of which together shall constitute one and the same instrument.

20. CONTRACT EXECUTION

Unless otherwise prohibited by law or County policy, the parties agree that an electronic copy of a signed contract, or an electronically signed contract, has the same force and legal effect as a contract executed with an original ink signature. The term “electronic copy of a signed contract” refers to a transmission by facsimile, electronic mail, or other electronic means of a copy of an original signed contract in a portable document format. The term “electronically signed contract” means a contract that is executed by applying an electronic signature using technology approved by the County.

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IN WITNESS WHEREOF, the parties have executed this AGENCY AGREEMENT FOR COUNTYWIDE AB939 IMPLEMENTATION FEE on the dates as stated below:

Date: _____

COUNTY OF SANTA CLARA

MIKE WASSERMAN, President
Board of Supervisors

Date: _____

“CITY”

CITY/TOWN OF _____
Title _____
A municipal corporation

Signed and certified that a copy of this document has been delivered by electronic or other means to the President, Board of Supervisors
ATTEST:

MEGAN DOYLE
Clerk of the Board of Supervisors

APPROVED AS TO FORM AND LEGALITY:

STEPHANIE SAFDI
Deputy County Counsel

EXHIBIT A**LANDFILLS LOCATED IN SANTA CLARA COUNTY**

Guadalupe Rubbish Disposal Site
 Kirby Canyon Sanitary Landfill
 Newby Island Sanitary Landfill
 Zanker Materials Processing Facility
 Zanker Road Landfill

**NON-DISPOSAL FACILITIES AND TRANSFER STATIONS LOCATED IN
SANTA CLARA COUNTY**

California Waste Solutions Recycling & Transfer Station
 City of Palo Alto Green Composting Facility
 Environmental Resource Recovery, Inc. (Valley Recycling)
 Green Earth Management LLC Kings Row Recycling Facility
 Green Waste Materials Facility and Transfer Station
 Green Waste Recovery Facility
 GreenTeam of San Jose Material Recovery Facility and Transfer Station
 Guadalupe Landfill
 Lam Hauling Inc. Chipping and Grinding
 Lam Hauling Inc. Inert Debris Type A
 Leo Recycle
 Material Recovery Systems Facility
 Mission Trail Waste Systems, Inc.
 Newby Island Compost Facility
 Pacheco Pass Transfer Station
 Pacific Coast Recycling, Inc.
 Premier Recycle Facility
 Recology Silicon Valley Processing and Transfer Facility
 The Recyclery at Newby Island
 San Martin Transfer Station
 Smurfit-Stone Recycling San Jose Facility
 South Valley Organics
 Stanford Recycling Center and Direct Transfer Facility
 Sunnyvale Materials Recovery and Transfer Station (SMaRT Station)
 Valley Recycling San Jose CDI Processing/Transfer Facility
 Wood Processing Facility at Recology Pacheco Pass
 Z-Best Composting Facility
 Zanker Materials Processing Facility
 Zanker Road Class III Landfill
 Zero Waste Energy Development Company Anaerobic Digestion Facility

EXHIBIT B**FORMULA FOR DISTRIBUTION OF AB939 PROGRAM FEE**

Each of the CITIES, and the COUNTY for its unincorporated area, will receive \$1.50 per ton of solid waste disposed of in landfills or taken to non-disposal facilities located in Santa Clara County that originates from that jurisdiction, as documented in quarterly reports submitted by the County to the State Disposal Reporting System.

Fees collected from undocumented disposed tonnage, or tonnage originating outside of Santa Clara County, will be distributed according to each jurisdiction's percent of countywide population, according to the latest available population report issued by the California Department of Finance.

EXHIBIT C

COUNTYWIDE HOUSEHOLD HAZARDOUS WASTE PROGRAM FEE (HHW Fee)

1. PROGRAM FUNDING SOURCE

HHW Program services are mandated by State law, Public Resources Code Section 41500 et seq. Public Resources Code Section 41901 authorizes imposition of a fee to support planning and implementation of integrated waste management programs, including their HHW elements. The HHW Fee, of \$2.60 per ton, collected as part of the AB939 Implementation Fee, will be the primary source of funding for Countywide Household Hazardous Waste Collection Program (CoHHW Program) services.

Funds derived from the HHW Fee will be allocated among five types of CoHHW Program service costs as follows:

- A. Fixed Program Costs will be apportioned based on the number of households in each participating jurisdiction. The number of households will be determined at the beginning of each Fiscal Year by statistics compiled by the California Department of Finance, Demographic Research Unit from their most recent Report, "Population Estimates for California Cities and Counties."
- B. San Jose Facility Use Surcharge will be apportioned based on CITIES' anticipated participation at the County Household Hazardous Waste Collection Facility located at 1608 Las Plumas Avenue, San Jose.
- C. Variable Cost Per Car is the cost associated with labor, waste disposal, transportation, and other services provided to residents at the County HHW Collection Facilities and at temporary HHW collection events. The Variable Cost Per Car is based on the estimated cost of providing a base level service to 4% of households in all participating jurisdictions. The number of households will be determined at the beginning of each Fiscal Year by statistics compiled by the California Department of Finance, Demographic Research Unit from their most recent Report, "Population Estimates for California Cities and Counties."
- D. Available Discretionary Funding is allocated based on tonnage generated per participating jurisdiction, and after allocation of Fixed Program Costs, San Jose Facility Use Surcharge, and Variable Cost Per Car allocation.
- E. Abandoned Waste Disposal Costs will fund disposal of HHW illegally abandoned at Nonprofit Charitable Reuser organizations as defined in Public Resources Code Section 41904.

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2. FIXED PROGRAM COST

Funds shall be allocated on a per household basis for Fixed Program Costs at the conclusion of each Fiscal Year. This portion of the funds shall be distributed directly to the Countywide HHW Program to pay for HHW Program costs. Fixed Program Costs funding shall be calculated shall not exceed \$3.75 per household in Fiscal Years 2022, 2023, and 2024. Fixed Program Costs may include, but are not limited to eleven (11) CoHHW Program staff members, facility leasing costs, vehicle lease costs, office rent, office supplies, county administrative overhead, county legal counsel, training costs, equipment and facility maintenance, and union negotiated salary and benefit changes.

3. ABANDONED WASTE DISPOSAL COST

The Abandoned Waste Disposal Cost will fund disposal of HHW illegally abandoned at Nonprofit Charitable Reuser organizations. The Abandoned Waste Disposal Cost is based on the cost to the County to dispose of abandoned waste allocated among participating jurisdictions based on their proportional share of the County population and shall not exceed \$0.05 per household. Projected Abandoned Waste Disposal Costs to the CITY based on a charge of \$.05 per household are set forth in Attachment A, attached hereto and incorporated herein. Any existing unexpended non-profit abandoned waste fund balance may be allocated toward funding of disposal of HHW illegally abandoned at nonprofit charitable reuser organizations as defined in Public Resources Code Section 41904.

For the purposes of this agreement, a nonprofit charitable reuse organization has the definition provided in Public Resources Code Section 41904 as follows: “Nonprofit charitable reuser” means a charitable organization, as defined in Section 501(c)(3) of the federal Internal Revenue Code, or a distinct operating unit or division of the charitable organization, that reuses and recycles donated goods or materials and receives more than 50 percent of its revenues from the handling and sale of those donated goods or materials.

4. SAN JOSE FACILITY USE SURCHARGE

The total San José Facility Use Surcharge for CITY will be based on CITY residents’ proportional participation at the County Household Hazardous Waste Collection Facility located at 1608 Las Plumas Avenue, San José. The San José Facility Use Surcharge will vary depending on facility usage but will not exceed \$8.29 per car for Fiscal Years 2022, 2023, and 2024. The total San Jose Facility Use Surcharge for CITY will be based on CITY’s participation at the County Household Hazardous Waste Collection Facility located at 1608 Las Plumas Avenue, San Jose.

5. VARIABLE COST PER CAR

The Variable Cost Per Car is the cost associated with actual labor, waste disposal, transportation and other services provided to the residents at the County HHW Collection Facilities and Temporary Events. This portion of the funds shall be distributed directly to the Countywide HHW Program. The Variable Cost Per Car is estimated to be \$58.20 per car for

Fiscal Years 2022, 2023, and 2024. The estimated cost per car will be adjusted annually to reflect actual service costs. After fixed costs and San Jose Facility Use Surcharge are allocated on a per household basis, the variable cost per car will be used to calculate the costs to service 4% of households across all participating jurisdictions. If the level of 4% of households is not reached, the Countywide HHW Program will use the remaining balance of funds, in cooperation with the CITIES, to increase public outreach and/or provide additional services in that jurisdiction where the level of 4% is not reached the following year.

6. AVAILABLE DISCRETIONARY FUNDING

The Available Discretionary Funding portion will be allocated based on the tons of waste generated within each jurisdiction and after allocation of Fixed Program Cost, San Jose Facility Use Surcharge, and Variable Per Car Cost. Available Discretionary Funds must be used for HHW purposes. Options for how to spend these funds include, but are not limited to, increasing the number of residents served in the jurisdiction by the Countywide HHW Program, universal waste collection, emergency HHW services, funding HHW public education, the support of capital infrastructure projects to accommodate HHW drop-off and collection events, or providing special programs such as retail collection of certain waste and/or door-to-door collection of HHW for the elderly and/or persons with disabilities and neighborhood clean-up events. CITIES authorize the COUNTY to determine appropriate uses of available discretionary funding and to use CITIES' Available Discretionary Funding portion of the AB939 HHW Fee to provide for additional HHW services requested by the CITIES.

7. PROGRAM FUNDING PASS-THROUGH

Annual funding calculations include HHW Fees collected on behalf of all jurisdictions in the County. CITIES, at their option, may participate in the Countywide HHW Program by entering into the AGREEMENT FOR COUNTYWIDE HOUSEHOLD HAZARDOUS WASTE COLLECTION PROGRAM. If CITIES elect to participate in the Countywide HHW Program, their pro-rata share of the HHW Fee shall be retained by the County to utilize for HHW Program costs, as provided in this Agreement and the Agreement for Countywide Household Hazardous Waste Collection Program. The COUNTY will distribute to CITIES not participating in the Countywide Household Hazardous Waste Collection Program their pro-rata share of funding received by the COUNTY from the HHW Fee, except that the COUNTY may retain and expend that portion of the non-participating CITIES' fee attributable to Abandoned Waste Disposal Costs.

If CITIES not participating in the AGREEMENT FOR COUNTYWIDE HOUSEHOLD HAZARDOUS WASTE COLLECTION PROGRAM desire to allow residents to participate in HHW Program services on an emergency basis, then services to these residents will be provided on a cost recovery basis. A charge equal to the established rates charged by the Countywide HHW Program to Conditionally Exempt Small Quantity Generators will be billed to the CITIES. A CITIES' representative must call the Countywide HHW Program appointment line to schedule an appointment for the resident. Liability shall be apportioned as provided in Exhibit D to this Agreement.

EXHIBIT D

SECTION 28 OF AGENCY AGREEMENT FOR COUNTYWIDE HOUSEHOLD HAZARDOUS WASTE COLLECTION PROGRAM

HOLD HARMLESS AND INDEMNIFICATION

In lieu of and notwithstanding the pro rata risk allocation which might otherwise be imposed between CITY and COUNTY pursuant to Government Code Section 895.6, the parties agree that all losses or liabilities incurred by a party shall not be shared pro rata but instead COUNTY and CITY agree that pursuant to Government Code Section 895.4, each of the parties hereto shall fully indemnify and hold each of the other parties, their officers, board members, employees and agents, harmless from any claim, expense or cost, damage or liability imposed for injury (as defined by Government Code Section 810.8) occurring by reason of the negligent acts or omissions or willful misconduct of the indemnifying party, its officers, employees or agents, under or in connection with or arising out of any work, authority or jurisdiction delegated to such party under this Agreement. No party, nor any officer, board member, employee or agent thereof shall be responsible for any damage or liability occurring by reason of the negligent acts or omissions or willful misconduct of the other parties hereto, their officers, board members, employees or agents, under or in connection with or arising out of any work authority or jurisdiction delegated to such other parties under this Agreement.

Additionally, CITY shall indemnify COUNTY for CITY's apportioned share of any liability incurred and attributed to the Countywide HHW Program for the transportation, treatment, or disposal of the household hazardous waste, once the waste has been accepted by a licensed hazardous waste hauler. Apportionment for disposal liability shall be determined by each participating jurisdiction's pro rata proportion of household participation in the Program. Apportionment for transportation and treatment liability shall be determined by each participating jurisdiction's pro rata household participation at the event where the waste was generated. COUNTY will use reasonable efforts to obtain recovery from all available resources, including insurance, of any liable hauler or liable disposal facility operator. No liability shall be apportioned to CITY for transportation, treatment or disposal in any case where COUNTY has contracted for such services and has failed to require the contractor to maintain the insurance requirements set forth in Section 23 of the AGREEMENT FOR COUNTYWIDE HOUSEHOLD HAZARDOUS WASTE COLLECTION PROGRAM.

CITY shall further indemnify COUNTY for CITY's apportioned share of liability incurred and attributed to the Countywide HHW Program for the transportation, treatment or disposal of household hazardous waste at corporate sponsored events where non-county resident employees of the corporate sponsor are authorized to participate in the event. Liability for the nonresident portion of the disposal of waste shall be shared by the cities and the county as described above. The nonresident portion shall be determined by calculating the percentage of nonresidents participating in the event. This percentage will then be subtracted from the total liability for the household hazardous waste prior to assessing CITY's apportioned share of any liability for the household hazardous waste.

COUNTY shall require Conditionally Exempt Small Quantity Generators (“CESQG”) and Nonprofit Charitable Reusers to indemnify COUNTY for, at minimum, their apportioned share of any liability incurred and attributed to the Countywide HHW Program for the transportation, treatment, or disposal of their hazardous waste, once the waste has been accepted by a licensed hazardous waste hauler. The CESQG and Nonprofit Charitable Reuser portion of the waste shall be determined by calculating the percentage, by weight, of the total household hazardous waste accepted by the CoHHW Program. This percentage will be used to calculate the portion of liability attributed to CESQGs and Nonprofit Charitable Reusers and will be subtracted from the total liability prior to assessing CITY’s apportioned share of any liability for household hazardous waste.

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AGREEMENT FOR COUNTYWIDE HOUSEHOLD HAZARDOUS WASTE COLLECTION PROGRAM

This Agreement is made by and between the City of Morgan Hill (CITY) and the County of Santa Clara (COUNTY) on the _____ day of _____ 2021.

RECITALS

WHEREAS, the County Board of Supervisors has approved a Countywide Household Hazardous Waste Collection Program whereby residents of the County and cities and towns participating in the Countywide program will have an opportunity to safely dispose of household hazardous wastes (HHW), regardless of the specific location at which the collection has been scheduled; and

WHEREAS, CITY desires to provide residents with convenient opportunities to safely dispose of their HHW in order to encourage the proper disposal of toxic products, and avoid unauthorized or improper disposal in the garbage, sanitary sewer, storm drain system, or on the ground, in a manner which creates a health or environmental hazard; and

WHEREAS, CITY desires to provide a safe, convenient, and economical means for residents to dispose of HHW. These wastes include, but are not limited to, common household products such as household cleaning products, furniture polish, solvents, oven cleaner, pesticides, oil based paints, motor oil, antifreeze, car batteries, mercury thermostats, fluorescent lamps, household batteries, and electronic waste; and

WHEREAS, CITY desires to schedule Household Hazardous Waste Collection Events (Events) for residents for FY 2022 through FY 2024 (July 1, 2021 – June 30, 2024); and

WHEREAS, CITY desires to provide household hazardous waste collection services to a minimum of 4% of the households per fiscal year in its jurisdiction; and

WHEREAS, CITY desires to participate in the Countywide Household Hazardous Waste Collection Program to meet these objectives; and

WHEREAS, pursuant to Public Resources Code Section 41901, the County Board of Supervisors has approved the collection of a \$4.10 per ton Countywide AB939 Implementation fee, including a \$2.60 per ton Household Hazardous Waste Fee (AB939 HHW Fee), for FY 2022 through FY 2024 (July 1, 2021 – June 30, 2024) on all wastes landfilled or incinerated within the County, received at any non-disposal or collection facility located within the County and subsequently transported for disposal or incineration outside of the County, collected from any location within the County by a solid waste hauler operating pursuant to a franchise, contract, license, or permit issued by any local jurisdiction and subsequently transported for disposal or incineration outside of the County, or removed from any location in the county by any person or business for disposal or incineration outside the County; and

WHEREAS, the AB939 HHW Fee is allocated to the Countywide Household Hazardous Waste Program and participating jurisdictions to fund HHW program costs in accordance with the terms of the Countywide AB939 Implementation Fee Agreement; and

WHEREAS, CITY desires for COUNTY to utilize CITY's share of the AB939 HHW Fee to provide HHW services for CITY residents.

NOW THEREFORE, CITY and COUNTY AGREE AS FOLLOWS:

1. PURPOSE

The purpose of this Agreement is to state the terms and conditions under which CITY will participate in the Countywide Household Hazardous Waste Collection Program (CoHHW Program) available to its residents. Participating jurisdictions are those jurisdictions that enter into an AGREEMENT FOR COUNTYWIDE HOUSEHOLD HAZARDOUS WASTE COLLECTION PROGRAM with the County.

2. PROGRAM FUNDING SOURCE

HHW Program services are mandated by State law, Public Resources Code Section 41500 et seq. State law authorizes cities and counties to impose fees in amounts sufficient to support planning and implementation of integrated waste management programs, including HHW elements. The AB939 HHW Fee, of \$2.60 per ton, imposed by the County as part of the AB939 Implementation Fee and collected and distributed in accordance with the AGREEMENT FOR COUNTYWIDE AB939 IMPLEMENTATION FEE will be the primary source of funding for CoHHW Program services. CITY agrees that COUNTY may utilize CITY's share of the AB939 HHW fee to provide HHW Program services in accordance with the terms and conditions of this Agreement.

Funds derived from the AB939 HHW Fee will be allocated among five types of CoHHW Program service costs as follows:

- A. Fixed Program Costs will be apportioned based on the number of households in each participating jurisdiction. The number of households will be determined at the beginning of each Fiscal Year by statistics compiled by the California Department of Finance, Demographic Research Unit from their most recent Report, "Population Estimates for California Cities and Counties."
- B. San José Facility Use Surcharge will be apportioned based on CITY residents' participation at the County Household Hazardous Waste Collection Facility located at 1608 Las Plumas Avenue, San José, CA 95133.
- C. Variable Cost Per Car is the cost associated with labor, waste disposal, transportation, and other services provided to residents at the County HHW Collection Facilities and at temporary HHW collection events. The Variable Cost Per Car is based on the estimated cost of providing a base level service to 4% of

households in all participating jurisdictions. The number of households will be determined at the beginning of each Fiscal Year by statistics compiled by the California Department of Finance, Demographic Research Unit from their most recent Report, "Population Estimates for California Cities and Counties."

- D. Available Discretionary Funding is allocated based on tonnage generated per participating jurisdiction, and after allocation of Fixed Program Costs, San Jose Facility Use Surcharge, and Variable Cost Per Car allocation.
- E. Abandoned Waste Disposal Costs will fund disposal of HHW illegally abandoned at Nonprofit Charitable Reuser organizations as defined in Public Resources Code Section 41904.

The projected AB939 HHW Fee Allocation by jurisdiction is set out in Attachment A, attached hereto and incorporated herein.

3. FIXED PROGRAM COST

Estimated HHW Fixed Program Costs are projected in Attachment B, attached hereto and incorporated herein. Fixed Program Costs are allocated to CITY at the conclusion of each fiscal year based on CITY's proportional share of the County population and will not exceed \$3.75 per household for Fiscal Years 2022, 2023, and 2024. Fixed Program Costs may include, but are not limited to, up to eleven (11) County HHW Program staff members, facility lease costs, vehicle lease costs, office rent, office supplies, county administrative overhead, county legal counsel, training costs, equipment and facility maintenance and union negotiated salary and benefit changes.

4. ABANDONED WASTE DISPOSAL COST

The Abandoned Waste Disposal Cost will fund disposal of HHW illegally abandoned at Nonprofit Charitable Reuser organizations. The Abandoned Waste Disposal Cost is based on the cost to the County to dispose of abandoned waste allocated among participating jurisdictions based on their proportional share of the County population and shall not exceed \$0.05 per household. Projected Abandoned Waste Disposal Costs to the CITY based on a charge of \$.05 per household are set forth in Attachment A, attached hereto and incorporated herein.

For the purposes of this Agreement, "Nonprofit Charitable Reuser Organization" is defined in accordance with Public Resources Code Section 41904 as follows: a charitable organization, as defined in Section 501(c)(3) of the federal Internal Revenue Code, or a distinct operating unit or division of the charitable organization, that reuses and recycles donated goods or materials and receives more than 50 percent of its revenues from the handling and sale of those donated goods or materials.

5. SAN JOSÉ FACILITY USE SURCHARGE

The total San José Facility Use Surcharge for CITY will be based on CITY residents' proportional participation at the County Household Hazardous Waste Collection Facility located

at 1608 Las Plumas Avenue, San José. Estimated San José Facility Use Surcharges are projected in Attachment A, attached hereto and incorporated herein. The San José Facility Use Surcharge will vary depending on facility usage but will not exceed \$8.29 per car for Fiscal Years 2022, 2023, and 2024.

6. VARIABLE COST PER CAR

The Variable Cost Per Car is the cost associated with actual labor, waste disposal, transportation and other services provided to the residents at the County Household Hazardous Waste Collection Facilities (CoHHWCF) and at Temporary Events. The Variable Cost Per Car is estimated to be approximately \$58.20 per participating resident car for Fiscal Years 2022, 2023 and 2024. The estimated cost per car will be adjusted to reflect actual service costs. After Fixed Program Costs and San José Facility Use Surcharge are allocated on a per household basis, the Variable Cost Per Car will be used to calculate the costs to service 4% of households across all participating jurisdictions. If the level of 4% of households is not reached in the CITY, the CoHHW Program may use the remaining balance of funds, in cooperation with the CITY, to increase public outreach and/or provide additional services in that jurisdiction the following year.

7. AVAILABLE DISCRETIONARY FUNDING

The Available Discretionary Funding portion of the AB939 HHW Fee will be allocated based on the tons of waste generated within each jurisdiction, and after allocation of Fixed Program Costs, San José Facility Use Surcharge, and Variable Cost Per Car allocation. Available Discretionary Funds must be used for HHW purposes. Options for how to spend these funds include, but are not limited to, increasing the number of residents served in that jurisdiction by the CoHHW Program, subsidizing curbside used motor oil collection, electronic waste (e-waste) collection, universal waste collection, emergency HHW services, funding HHW public education, the support of capital infrastructure projects to accommodate HHW drop-off and collection events, or providing special programs such as retail collection of certain waste and/or door-to-door collection of HHW for the elderly and/or persons with disabilities and neighborhood clean-up events. COUNTY has discretion to determine appropriate uses of Available Discretionary Funding in accordance with the terms and conditions in this Agreement, and to apply the funding toward those uses.

8. ADMINISTRATION AND PAYMENT OF THE AB939 HHW FEE

The County of Santa Clara Recycling and Waste Reduction Division will administer the AB939 HHW Fee, as part of the existing online disposal reporting and payment system. Administration and payment will be made in accordance with the AGREEMENT FOR COUNTYWIDE AB939 IMPLEMENTATION FEE and this Agreement. Notwithstanding the foregoing, the COUNTY shall maintain records of the amount, use, and distribution of Fixed Program Cost expenditures for at least five (5) years after the termination date of this Agreement, unless otherwise required by law to retain such records for a longer period. CITY may request in writing a review by COUNTY of the Fixed Program Cost records. The review shall be performed within 30 days of request and results shall be reported to participating cities in writing.

9. PROGRAM PUBLICITY

The CoHHW Program shall produce and make available to the public an HHW brochure for distribution. The brochure will be made available at various events, including but not limited to, environmental events and community fairs. The brochure may also be distributed, upon request, to cities within the County and to County residents and businesses. The CITY shall be responsible for developing and coordinating citywide awareness of the HHW Program. The CoHHW Program shall be responsible for Countywide public education for used oil recycling. CoHHW Program public awareness responsibilities shall include, but not be limited to, the following activities:

- Serving as the formal contact to the local media such as local newspapers and television news stations;
- Providing participating jurisdictions with educational materials developed for the CoHHW Program;
- Promoting oil and oil filter recycling by developing, purchasing, and distributing educational materials, media relations materials, basic art work and camera ready advertising materials for distribution countywide and for use by jurisdictions;
- Representing the program through educational presentations at schools and businesses and attendance at community events such as local fairs and festivals; and
- Providing participating jurisdictions opportunities to review and comment on the development of countywide outreach materials.

CITY's public awareness responsibilities, at the sole discretion of the CITY, shall include, but not be limited to, the following activities:

- Providing a copy of HHW promotional materials to the CoHHW Program for review for accuracy and completeness, prior to publication;
- Developing and distributing HHW promotion communications to residents for local and CITY newsletters, newspapers and to the electronic media;
- Providing the CoHHW Program with a copy of HHW promotion materials produced by the CITY; and,
- Conducting and supporting outreach and publicity to attain the goal of 4% of households in the CITY participating in the CoHHW Program.

10. TEMPORARY HHW EVENTS

COUNTY shall conduct Temporary HHW Events at various sites located in Santa Clara County. COUNTY shall obtain all necessary permits and licenses required for the Temporary HHW Events and shall provide or contract for the services of properly trained, qualified personnel and hazardous waste haulers, and shall provide or secure suitable equipment and supplies to properly receive, package, label, haul, recycle and dispose of the household hazardous wastes collected at the Temporary HHW Events.

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11. HOUSEHOLD HAZARDOUS WASTE COLLECTION FACILITIES

COUNTY shall conduct collection operations at two County Household Hazardous Waste Collection Facilities (CoHHWCF).

The CoHHWCF are located at:

- ♦ *San Martin, 13055 Murphy Avenue, San Martin, CA 95046*
- ♦ *San José, 1608 Las Plumas, San José, CA 95133*

The COUNTY shall obtain all necessary permits and licenses required for the CoHHWCF and shall provide or contract for services, equipment, and supplies to properly receive, package, label, haul, recycle and dispose of wastes collected.

12. SMALL BUSINESS RECYCLING AND DISPOSAL PROGRAM

COUNTY will provide services to accept hazardous waste from Conditionally Exempt Small Quantity Generators (CESQG) in accordance with California Health and Safety Code Section 25218.3, as amended from time to time. Eligible businesses within the County will be allowed to bring their hazardous waste to CoHHWCF. These services to businesses located within the CITY will be provided on a cost recovery basis, which will include program administration, on-site collection, transportation, and disposal costs. COUNTY will assume responsibility for fee collection from participating businesses. The CITY may choose to pay for services for CESQG's within the City of San José and will notify the COUNTY in writing with 30-day advance notice in order to exercise this option. If the CITY exercises this option, the COUNTY will invoice the CITY for all costs associated with CSQG's within the CITY. If CITY has available Discretionary Funding, COUNTY may use this funding to pay for CESQG costs. For purposes of this Agreement, CESQG has the meaning provided by Health and Safety Code Section 25218.1.

13. ABANDONED HOUSEHOLD HAZARDOUS WASTE

The CoHHW Program will allow for the disposal of abandoned HHW by government agencies and qualified nonprofit charitable reusers. Abandoned HHW means HHW left at a property by an unknown party. Abandoned household hazardous waste does not include waste generated by a known organization or agency in the course of normal business operations such as, but not limited to, the assembly or manufacture of products from new or used materials or the provision of charitable services such as classroom education, meal preparation, and shelter, or the provision of services for a fee.

A) GOVERNMENT AGENCIES

Government agencies shall be charged for disposal of abandoned HHW according to the CoHHW Program's published rates for CESQGs.

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B) NONPROFIT CHARITABLE REUSER

In order to qualify as a Nonprofit Charitable Reuser, the business must submit to the County Executive a request to be so designated. The County Executive shall review the request and supporting documentation and shall make a final decision on the designation. COUNTY will accept abandoned HHW from Nonprofit Charitable Reusers and will waive disposal fees on the cost of disposal of the abandoned HHW in an annual amount not to exceed funds available from the existing unexpended abandoned waste fund. Funding for disposal available to Nonprofit Charitable Reuser shall be on a first come first serve basis. Once the cost for disposal of the abandoned HHW from Nonprofit Charitable Reusers is equal to the available funds, disposal fees shall no longer be waived, and Nonprofit Charitable Reusers shall be charged for disposal of abandoned HHW according to the CoHHW Program's published rates for CESQGs. No additional costs shall be applied to the budget of the CITY or any other participating jurisdiction.

14. HOUSEHOLD HAZARDOUS WASTES ACCEPTED

HHW accepted by the CoHHW Program shall be limited to those materials that qualify as Hazardous Waste under Health and Safety Code Section 25218.1, as amended from time to time. These materials include, but are not limited to, automotive fluids, automotive and other types of batteries, latex and oil paint, oil filters, garden chemicals, household cleaners, pool chemicals, mercury thermostats, fluorescent lamps containing mercury, household batteries, e-waste and other common hazardous consumer products.

15. WASTES NOT ACCEPTED

Certain hazardous wastes shall not be accepted for collection and disposal. These include, but are not limited to, compressed gas cylinders larger than 5 gallons, radioactive materials, and explosives. Other wastes not accepted by the CoHHW Program are wastes generated as part of operating a business, including a home operated business, except that waste from CESQGs as provided for in Section 12 of this Agreement shall be accepted.

16. ADDITIONAL SERVICES UNDER THIS AGREEMENT

CITY must augment funding provided under this Agreement to cover the cost of a minimum participation level of 4% of CITY households; CITY may also elect to augment funding to provide additional services to increase CITY participation beyond the 4% minimum participation level. Additional services shall be made available upon written agreement between the CITY's authorized representative and the County Executive Officer or designee. Additional services may include, but are not limited to, additional appointments (charged at the Variable Cost Per Car rate), door-to-door HHW collection, used oil filter collection, universal waste collection, electronic waste collection, and abandoned waste collection.

CITY agrees to augment up to an additional \$ 55,000 to the Countywide HHW Program during Fiscal Year 2022 for the purpose of attaining or increasing CITY household participation above the 4% minimum participation level at the scheduled collection dates listed in Attachment C, attached hereto and incorporated herein. Augmentation will be calculated, where applicable, at the Variable Cost Per Car rate. Other services will be charged based on a cost recovery basis. CITY authorizes the COUNTY to use CITY'S Available Discretionary Funding portion of the AB939 HHW Fee, if available, to offset the above agreed additional augmentation amount.

At the end of each fiscal year, a final annual cost statement shall be prepared by COUNTY and issued to CITY by November 30th. The annual cost statement will take into consideration costs incurred on behalf of CITY for additional services and all payments made by CITY to COUNTY. If any balance is owed to COUNTY, it will be due within 30 days following receipt of the annual cost statement. If any credit is owed to CITY, COUNTY will refund that amount to CITY within 30 days following delivery of the annual cost statement.

17. INFORMATION AND APPOINTMENT LINE

COUNTY will operate a telephone information and appointment desk Monday through Friday, from the hours of 9:00 a.m. to 5:00 p.m. The information service will register residents for the Temporary HHW Events and the collections at CoHHWCF. The information service will provide information about hazardous household materials. CITY will be notified immediately if resident participation approaches a level of service that may not be supported by available funding.

18. SCHEDULING AND SITE SELECTION

COUNTY shall work with CITY to determine the date(s) of Temporary Events and collections at the CoHHWCF. CITY shall coordinate with COUNTY in locating and securing sites for Temporary HHW Events. It is recognized that some of the jurisdictions participating in the CoHHW Program may not have appropriate sites available. A proposed HHW schedule for Fiscal Year 2022 of Temporary Events and collections at CoHHWCF is included as Attachment C. COUNTY will schedule an adequate number of collection days to serve the 4% level of service. The COUNTY determines the adequate number of collection days by tracking attendance at each event.

19. OUTSIDE FUNDING

During the term of this Agreement, COUNTY may seek outside funding sources for services that would supplement existing HHW services such as permanent collection sites, equipment, retail take-back collection and operational funding. If outside funding is obtained, the CoHHW Program will, at COUNTY's discretion, proceed with development of additional programs using that outside funding without drawing on CITY's funding provided under this Agreement.

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20. REGIONAL GRANT AND OIL PAYMENT PROGRAM PARTICIPATION

The CITY authorizes the CoHHW Program to apply for lead agency grants, including but not limited to Used Oil Payment Program grants, from the California Department of Resources Recycling and Recovery (CalRecycle), on behalf of participating jurisdictions. The CoHHW Program will act on behalf of all participating jurisdictions, as the lead applicant and administrator. The CoHHW Program will oversee how the moneys are used and work in cooperation with CITY as to how the funds will be spent. Nothing in this section shall preclude the COUNTY or a participating jurisdiction from applying for grant funds in any case where the CoHHW Program does not apply for the grant opportunity.

21. EMERGENCY SERVICES

Participating jurisdictions, at their option, may desire to provide residents with convenient emergency opportunities to safely dispose of their HHW in the event of a disaster. The purpose of this emergency planning for HHW is to minimize potential public health and safety impacts, as well as to minimize costs and confusion. Attachment D sets out CITY and COUNTY responsibilities for the collection of household hazardous wastes in response to an emergency. CITY shall make good faith efforts to provide the public with information related to the problems associated with HHW. Upon the decision to hold an emergency collection event, it is CITY's responsibility to make a good faith effort to prepare and disseminate the necessary outreach to notify the public of an emergency collection event. An emergency collection event shall be initiated by a written request from CITY to COUNTY. Emergency collection events can be scheduled in as little as ten (10) working days of CITY's written request or at an agreed upon date thereafter. The emergency collection plan is set out in Attachment D, Household Hazardous Waste Emergency Collection Plan.

COUNTY agrees to conduct the Emergency Collection Event at a mutually agreeable site and time. The COUNTY will obtain the necessary permit from the State Department of Toxic Substances Control and will handle wastes in accordance with State law. COUNTY will bill CITY for all Emergency Collection Events on a cost recovery basis and all payments shall be due COUNTY within thirty days following the receipt of the invoice.

22. PRIVATE SPONSORED EVENTS

COUNTY may also secure funding from corporations or agencies to conduct HHW Collection Events for corporate employees and residents of participating jurisdictions and to pay for special programs such as Universal Waste collection at retail locations. The transportation, treatment and disposal liability for nonresident employee participation in these events shall be shared by all participating jurisdictions, including the CITY, and the COUNTY, as described in Section 26 of this Agreement. Summary information concerning these corporate sponsored events, if any, will be included in the CoHHW Program's annual report to the participating jurisdictions.

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23. INSURANCE REQUIREMENTS

Contractors who provide hazardous waste transportation, treatment, or disposal services shall have the required insurance as outlined in Attachment E, Exhibit B-2D (revised) Insurance Requirements for Environmental Services Contract. Other contractors shall have insurance in amounts to be determined by COUNTY Insurance Manager, after consultation with CITY. COUNTY shall obtain insurance certificates from each of the contractors prior to the contractor providing service to the program naming the COUNTY as an additional insured.

24. WASTE TRACKING AND REPORTING

COUNTY will provide a mid-year report to CITY regarding participation rates from each participating jurisdiction by March 15 of each year. Mid-year and year end reports will outline the types and quantities of waste collected, the amount of waste diverted for reuse or recycling and the waste management method for each waste stream and associated costs for services. COUNTY will prepare a report summarizing program activities which will be delivered to the participating jurisdictions no later than six months after the end of COUNTY's fiscal year.

It will be assumed for cost and reporting purposes that each participating jurisdiction is contributing to the waste stream in proportion to the number of its residents who directly participate.

COUNTY shall take steps to assure that the bi-annual statements to jurisdictions reflect the funds necessary to cover costs for CITY participation in services scheduled during the next quarter.

25. PARTICIPATION REPORTING

COUNTY shall employ means necessary to verify the place of residence of all participants in the CoHHW Program.

26. HOLD HARMLESS AND INDEMNIFICATION

In lieu of and notwithstanding the pro rata risk allocation which might otherwise be imposed between CITY and COUNTY pursuant to Government Code Section 895.6, the parties agree that all losses or liabilities incurred by a party shall not be shared pro rata but instead COUNTY and CITY agree that pursuant to Government Code Section 895.4, each of the parties hereto shall fully indemnify and hold each of the other parties, their officers, board members, employees and agents, harmless from any claim, expense or cost, damage or liability imposed for injury (as defined by Government Code Section 810.8) occurring by reason of the negligent acts or omissions or willful misconduct of the indemnifying party, its officers, employees or agents, under or in connection with or arising out of any work, authority or jurisdiction delegated to such party under this Agreement. No party, nor any officer, board member, employee or agent thereof shall be responsible for any damage or liability occurring by reason of the negligent acts or omissions or willful misconduct of the other parties hereto, their officers, board members, employees or agents, under or in connection with or arising out of any work authority or jurisdiction delegated to such other parties under this Agreement.

Additionally, CITY shall indemnify COUNTY for CITY's apportioned share of any liability incurred and attributed to the Countywide HHW Program for the transportation, treatment, or disposal of the household hazardous waste, once the waste has been accepted by a licensed hazardous waste hauler. Apportionment for disposal liability shall be determined by each participating jurisdiction's pro rata proportion of household participation in the Program. Apportionment for transportation and treatment liability shall be determined by each participating jurisdiction's pro rata household participation at the event where the waste was generated. COUNTY will use reasonable efforts to obtain recovery from all available resources, including insurance, of any liable hauler or liable disposal facility operator. No liability shall be apportioned to CITY for transportation, treatment or disposal in any case where COUNTY has contracted for such services and has failed to require the contractor to maintain the insurance requirements set forth in Section 23 above.

CITY shall further indemnify COUNTY for CITY's apportioned share of liability incurred and attributed to the Countywide HHW Program for the transportation, treatment or disposal of household hazardous waste at corporate sponsored events where non-county resident employees of the corporate sponsor are authorized to participate in the event. Liability for the nonresident portion of the disposal of waste shall be shared by the cities and the COUNTY as described above. The nonresident portion shall be determined by calculating the percentage of nonresidents participating in the event. This percentage will then be subtracted from the total liability for the household hazardous waste prior to assessing CITY's apportioned share of any liability for the household hazardous waste.

COUNTY shall require CESQGs and Nonprofit Charitable Reusers to indemnify COUNTY, at minimum, for their apportioned share of any liability incurred and attributed to the Countywide HHW Program for the transportation, treatment, or disposal of their hazardous waste, once the waste has been accepted by a licensed hazardous waste hauler. The CESQG and Nonprofit Charitable Reuser portion of the waste shall be determined by calculating the percentage, by weight, of the total household hazardous waste accepted by the CoHHW Program. This percentage will be used to calculate the portion of liability attributed to CESQGs and Nonprofit Charitable Reusers and will be subtracted from the total liability prior to assessing CITY's apportioned share of any liability for household hazardous waste.

27. TERMINATION

This Agreement may be terminated by either the COUNTY or CITY upon thirty (30) days written notice given by the terminating party.

28. TERM OF AGREEMENT

The term of this Agreement shall be from July 1, 2021 to June 30, 2024, or until all revenue from the last quarter's AB939 fee payments have expended and/or distributed, whichever is later.

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29. INDEPENDENT CONTRACTOR

Each party shall perform responsibilities and activities described herein as an independent contractor and not as an officer, agent, servant or employee of any of the parties hereto. Each party shall be solely responsible for the acts and omissions of its officers, agents, employees, contractors and subcontractors, if any. Nothing herein shall be considered as creating a partnership or joint venture between the parties.

30. EXECUTION BY COUNTERPART

This Agreement may be executed in any number of counterparts, each of which shall for all purposes be deemed an original and all of which shall together constitute one and the same instrument.

31. CONTROLLING LAW

This Agreement shall be governed and construed in accordance with the laws of the State of California.

32. ENTIRE AGREEMENT

This document embodies the entire Agreement between the parties with respect to the subject matter hereof. No modification of this Agreement shall be effective unless and until modification is evidenced by writing signed by all parties or their assigned designates.

33. NOTICES

All notices and communications herein required shall be in writing to the other party as follows, unless expressly changed in writing:

CITY of <u>Morgan Hill</u>	City Representative <u>Christina Turner</u>
	Representative's Title <u>City Manager</u>
	City Address <u>17575 Peak Ave.</u>
	<u>Morgan Hill, CA 95037</u>
	<u></u>

Santa Clara County

Director
Consumer and Environmental Protection Agency
1553 Berger Drive
San José, California 95112

34. CONTRACT EXECUTION

Unless otherwise prohibited by law or County policy, the parties agree that an electronic copy of a signed contract, or an electronically signed contract, has the same force and legal effect

as a contract executed with an original ink signature. The term “electronic copy of a signed contract” refers to a transmission by facsimile, electronic mail, or other electronic means of a copy of an original signed contract in a portable document format. The term “electronically signed contract” means a contract that is executed by applying an electronic signature using technology approved by the County.

IN WITNESS WHEREOF, the parties have executed this AGREEMENT FOR COUNTYWIDE HOUSEHOLD HAZARDOUS WASTE COLLECTION PROGRAM on the dates as stated below:

Date: _____

COUNTY OF SANTA CLARA

JEFFREY V. SMITH
County Executive

Date: _____

“CITY”

CITY/TOWN OF Morgan Hill
Title City Manager
A municipal corporation

APPROVED AS TO FORM AND LEGALITY:

STEPHANIE SAFDI
Deputy County Counsel

DON LARKIN
City Attorney

Attachments:

- A Projected Fiscal Years 2022, 2023, and 2024 AB939 HHW Fee Funding Allocation by Jurisdiction
- B Estimated HHW Program Fixed Costs for Fiscal Years 2022, 2023, and 2024
- C HHW Schedule of Collection Events for Fiscal Year 2022
- D Household Hazardous Waste Emergency Collection Plan
- E Exhibit B-2D (revised) Insurance Requirements for Environmental Services Contracts

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ATTACHMENT A: PROJECTED FISCAL YEARS 2022-2024 ANNUAL HHW FEE FUNDING ALLOCATION BY JURISDICTION

Cities	No of Households	4% of Households	Disposal Tonnage	AB939 HHW Fee \$2.60 per Ton	Fixed Cost \$3.75 per HH	SJ Facility \$8.29 Surcharge	Variable Cost \$58.20 per Car	Abandoned Waste Disposal Cost \$.05 per Household	Discretionary Fund	Estimated Augmentation	Anticipated Participation	Anticipated Participation at SJ Facility
Campbell	18,158	726	40,970	\$ 106,521	\$ 68,093	\$ 7,162	\$ 42,272	\$ 908	\$ (11,913)	\$ 45,525	1,268	1,221
Cupertino	21,050	842	41,603	\$ 108,168	\$ 78,938	\$ 4,242	\$ 49,004	\$ 1,053	\$ (25,068)	\$ 36,963	1,034	723
Gilroy	16,676	667	53,681	\$ 139,571	\$ 62,535	\$ 1,086	\$ 38,822	\$ 834	\$ 36,295	\$ 23,027	1,038	185
Los Altos	11,677	467	17,678	\$ 45,963	\$ 43,789	\$ 4,188	\$ 27,184	\$ 584	\$ (29,781)	\$ 90,803	1,451	714
Los Altos Hills	3,180	127	9,303	\$ 24,188	\$ 11,925	\$ 958	\$ 7,403	\$ 159	\$ 3,743	\$ 4,413	259	163
Los Gatos	13,637	545	25,338	\$ 65,878	\$ 51,139	\$ 6,784	\$ 31,747	\$ 682	\$ (24,474)	\$ 66,018	1,216	1,157
Milpitas	22,553	902	100,225	\$ 260,586	\$ 84,574	\$ 5,247	\$ 52,503	\$ 1,128	\$ 117,135	\$ 24,851	1,303	895
Monte Sereno	1,383	55	1,278	\$ 3,323	\$ 5,186	\$ 789	\$ 3,220	\$ 69	\$ (5,941)	\$ 11,138	139	135
Morgan Hill	15,350	614	43,759	\$ 113,774	\$ 57,563	\$ 2,252	\$ 35,735	\$ 768	\$ 17,456	\$ 78,579	1,881	384
Mountain View	36,727	1,469	77,033	\$ 200,285	\$ 137,726	\$ 4,700	\$ 85,500	\$ 1,836	\$ (29,478)	\$ 39,356	1,628	802
Palo Alto	29,298	0	63,437	\$ 164,936		\$ -	\$ -	\$ 1,465	\$ 163,471			
San Jose	336,507	13,460	810,331	\$ 2,106,860	\$ 1,261,901	\$ 114,172	\$ 783,388	\$ 16,825	\$ (69,427)	\$ 476,507	20,026	19,470
Santa Clara	48,975	1,959	160,175	\$ 416,455	\$ 183,656	\$ 9,178	\$ 114,014	\$ 2,449	\$ 107,157	\$ 121,604	3,920	1,565
Saratoga	11,301	452	19,996	\$ 51,990	\$ 42,379	\$ 4,458	\$ 26,309	\$ 565	\$ (21,720)	\$ 45,244	831	760
Sunnyvale	60,273	2,411	116,128	\$ 301,932	\$ 226,024	\$ 6,717	\$ 140,316	\$ 3,014	\$ (74,138)	\$ 152,321	3,672	1,145
Unincorporated	18,558	742	38,112	\$ 99,092	\$ 69,593	\$ 4,640	\$ 43,203	\$ 928	\$ (19,271)	\$ 57,932	1,677	791
Total	665,303	25,440	1,619,047	\$ 4,209,522	\$ 2,385,019	\$ 176,572	\$ 1,480,620	\$ 33,265	\$ 134,047	\$ 1,274,282	41,345	30,110

Notes: Number of HH and Disposal tonnage are based on FY2019-2020 actuals. Anticipated participation and anticipated participation at SJ facility are based on 15% increase from FY2018-2019 actual participation.

Attachment: Attachment 2: Household Hazardous Waste Agreement (3052 : AB 939 & HHW Agreements)

**ATTACHMENT B: ESTIMATED ANNUAL HHW PROGRAM FIXED COSTS
FOR FISCAL YEARS 2022, 2023, AND 2024**

FIXED COST		
Staff Salary and Benefits		\$1,568,216
County Admin Overhead		\$421,899
County Counsel		\$13,650
Phones and Communications		\$10,605
Facilities Lease Costs	San Jose	\$176,572
Vehicle Costs		\$34,125
Office Supplies and postage		\$1,916
Maintenance, Software		\$115,500
HHW Hotline		\$50,000
Garbage & Utilities		\$36,488
Membership & Dues		\$15,750
Training & Conference		\$5,250
Safety Wear		\$21,840
Printing		\$13,583
Other Services & Supplies		\$56,175
ESTIMATED ANNUAL TOTAL		\$2,541,568

Attachment: Attachment 2: Household Hazardous Waste Agreement (3052 : AB 939 & HHW Agreements)

ATTACHMENT C: HHW SCHEDULE OF PERMANENT & TEMPORARY COLLECTION EVENTS FOR FISCAL YEAR 2021-2022*

2021/Month	Day	Date	Location	Type of Event	County Holidays/ Notes
July	Thurs,Fri	1,2	San Jose	Permanent	
	Saturday	3	No Event	No Event	4th OF JULY WEEK
	Wed,Thurs,Fri,Sat	7,8,9,10	San Jose	Permanent	
	Fri,Sat	9,10	San Martin	Permanent	
	Thurs,Fri,Sat	15,16,17	San Jose	Permanent	
	Saturday	17	Sunnyvale	Temporary	TBD
	Wed,Thurs,Fri,Sat	21,22,23,24	San Jose	Permanent	
	Thurs,Fri,Sat	29,30,31	San Jose	Permanent	
August	Wed,Thurs,Fri,Sat	4,5,6,7	San Jose	Permanent	
	Fri,Sat	6,7	San Martin	Permanent	
	Thurs,Fri,Sat	12,13,14	San Jose	Permanent	
	Saturday	14	Mountain View	Temporary	TBD
	Wed,Thurs,Fri,Sat	18,19,20,21	San Jose	Permanent	
	Thurs,Fri,Sat	26,27,28	San Jose	Permanent	
September	Wed,Thurs,Fri	1,2,3	San Jose	Permanent	
	Saturday	4	No Event	No Event	LABOR DAY WEEKEND
	Thurs,Fri,Sat	9,10,11	San Jose	Permanent	
	Fri,Sat	10,11	San Martin	Permanent	
	Wed,Thurs,Fri,Sat	15,16,17,18	San Jose	Permanent	
	Saturday	18	Santa Clara	Temporary	TBD
	Wed,Thurs,Fri,Sat	22,23,24,25	San Jose	Permanent	
	Thursday	30	San Jose	Permanent	
October	Fri,Sat	1,2	San Jose	Permanent	
	Fri, Sat	1,2	San Martin	Permanent	
	Wed,Thurs,Fri,Sat	6,7,8,9	San Jose	Permanent	
	Thurs,Fri,Sat	14,15,16	San Jose	Permanent	
	Saturday	16	Sunnyvale	Temporary	TBD
	Wed,Thurs,Fri,Sat	20,21,22,23	San Jose	Permanent	
	Thurs,Fri,Sat	28,29,30	San Jose	Permanent	
November	Wed,Thurs,Fri,Sat	3,4,5,6	San Jose	Permanent	
	Fri, Sat	5,6	San Martin	Permanent	
	Fri,Sat	12,13	San Jose	Permanent	
	Wed,Thurs,Fri,Sat	17,18,19,20	San Jose	Permanent	
	Tuesday	23	San Jose	Permanent	
	Thurs,Fri,Sat	25,26,27	No Event	No Event	THANKSGIVING
December	Wed,Thurs,Fri,Sat	1,2,3,4	San Jose	Permanent	
	Fri, Sat	3,4	San Martin	Permanent	
	Wed,Thurs,Fri,Sat	8,9,10,11	San Jose	Permanent	
	Thurs,Fri,Sat	16,17,18	San Jose	Permanent	
	Tues,Wed,Thurs	21,22,23	San Jose	Permanent	
	Fri,Sat	24,25	No Event	No Event	CHRISTMAS
	Tues,Wed,Thurs	28,29,30	San Jose	Permanent	
	Friday	31	No Event	No Event	NEW YEAR's DAY

Attachment: Attachment 2: Household Hazardous Waste Agreement (3052 : AB 939 & HHW Agreements)

**ATTACHMENT C: HHW SCHEDULE OF PERMANENT & TEMPORARY
COLLECTION EVENTS FOR FISCAL YEAR 2021-2022* (Continued)**

2022/Month	Day	Date	Location	Type of Event	County Holidays/ Notes
2022/Jan	Saturday	1	No Event	No Event	NEW YEAR's DAY
	Thurs,Fri,Sat	6,7,8	San Jose	Permanent	
	Fri, Sat	7,8	San Martin	Permanent	
	Wed,Thurs,Fri,Sat	12,13,14,15	San Jose	Permanent	
	Saturday	15	Sunnyvale	Temporary	TBD
	Wed,Thurs,Fri,Sat	19,20,21,22	San Jose	Permanent	
	Thurs,Fri,Sat	27,28,29	San Jose	Permanent	
	Saturday	29	Santa Clara	Temporary	TBD
February	Wed,Thurs,Fri,Sat	2,3,4,5	San Jose	Permanent	
	Fri, Sat	4,5	San Martin	Permanent	
	Thurs,Fri,Sat	10,11,12	San Jose	Permanent	
	Wed,Thurs,Fri,Sat	16,17,18,19	San Jose	Permanent	
	Thurs,Fri,Sat	24,25,26	San Jose	Permanent	
March	Wed,Thurs,Fri,Sat	2,3,4,5	San Jose	Permanent	
	Fri, Sat	4,5	San Martin	Permanent	
	Thurs,Fri,Sat	10,11,12	San Jose	Permanent	
	Wed,Thurs,Fri,Sat	16,17,18,19	San Jose	Permanent	
	Wed,Thurs,Fri,Sat	23,24,25,26	San Jose	Permanent	
April	Fri,Sat	1,2	San Jose	Permanent	
	Fri, Sat	1,2	San Martin	Permanent	
	Wed,Thurs,Fri,Sat	6,7,8,9	San Jose	Permanent	
	Saturday	9	Los Altos	Temporary	TBD
	Thurs,Fri,Sat	14,15,16	San Jose	Permanent	
	Saturday	16	Sunnyvale	Temporary	TBD
	Wed,Thurs,Fri,Sat	20,21,22,23	San Jose	Permanent	
	Thurs,Fri,Sat	28,29,30	San Jose	Permanent	
	Saturday	30	Santa Clara	Temporary	TBD
May	Wed,Thurs,Fri,Sat	4,5,6,7	San Jose	Permanent	
	Fri, Sat	6,7	San Martin	Permanent	
	Thurs,Fri,Sat	12,13,14	San Jose	Permanent	
	Wed,Thurs,Fri,Sat	18,19,20,21	San Jose	Permanent	
	Thurs,Fri	26,27	San Jose	Permanent	
	Saturday	28	No Event	No Event	MEMORIAL DAY WEEKEND
June	Wed,Thurs,Fri,Sat	1,2,3,4	San Jose	Permanent	
	Fri, Sat	3,4	San Martin	Permanent	
	Thurs,Fri,Sat	9,10,11	San Jose	Permanent	
	Wed,Thurs	15,16	San Jose	Permanent	
	Friday	17	No Event	No Event	JUNETEENTH DAY
	Saturday	18	San Jose	Permanent	
	Saturday	25	Milpitas	Temporary	TBD
	Thurs,Fri,Sat	23,24,25	San Jose	Permanent	
	Wed,Thurs	29,30	San Jose	Permanent	
*SUBJECT TO CHANGE					

Attachment: Attachment 2: Household Hazardous Waste Agreement (3052 : AB 939 & HHW Agreements)

ATTACHMENT D:**COUNTY HOUSEHOLD HAZARDOUS WASTE
EMERGENCY COLLECTION PLAN****1. PURPOSE**

The purpose of the Household Hazardous Waste Emergency Collection Plan is to minimize potential public health and safety impacts, as well as to minimize costs and confusion during an emergency or disaster. This Attachment describes the services the County can provide and the responsibilities of each party for the collection of household hazardous wastes (HHW) in response to an emergency as defined by the local jurisdiction.

Jurisdictions should contact local emergency agencies, the Governor's Office of Emergency Services (OES), and the Department of Toxic Substances Control (DTSC) for more specific information on hazardous materials emergency response.

2. Timing of HHW

While it is important to have special collection opportunities for disaster-related HHW as soon as possible to avoid illegal disposal or harm to people and/or the environment, having an event or service too soon after a disaster may result in low participation. Sufficient public notification, assessment and monitoring of the disaster and cleanup process by the designated City HHW Coordinator(s) is essential.

3. Public Information/Notification:

Cities should be prepared to provide the public with information related to the problems associated with HHW along with information about special collection events and services. Upon the decision to hold an emergency collection event, it is the City's responsibility to prepare and deliver the necessary public outreach to notify the public of an upcoming event. A City's public outreach program should evaluate all forms of media including: newspaper ads, posters, flyers, press releases, banners, door-to-door notices, roadside signs, signs on dumpsters, radio public service announcements, social media outlets and television public access stations. Be aware of communities where multiple language outreach efforts will be necessary.

4. State HHW Collection Permits

The State Department of Toxic Substances Control (DTSC) is responsible for issuing the necessary state permits for HHW collection facilities. During an emergency, the County will obtain the necessary emergency permit for special collection of household hazardous waste from DTSC through their expedited approval process.

5. Collection Events

Temporary collection events can be set-up at various sites including parking lots, city maintenance yards, within neighborhoods needing service, and at landfills or a centralized location to service larger segments of the population. Waste collected will be transported with a transportation vehicle provided by the HHW Program. In addition, events can be scheduled at the two existing Countywide Household Hazardous Waste Collection Facilities (CoHHWCF). The following options are available to each participating City.

- Neighborhood Drop-off Events: The County is able to provide localized service to specific areas in need of household hazardous waste collection services. The County will work with City Solid Waste Coordinators to conduct coordinated efforts to residents in the affected area. After a specific event, waste will be transported by County staff or a hazardous waste contractor to an appropriate facility.
- Mobile HHW Event: The County conducts Household Hazardous Waste Collection Event (Events) at various sites located in Santa Clara County throughout the year. Events will be expanded to give priority to disaster victims when requested by the City. The County shall obtain all necessary permits and licenses required for the events and shall provide and/or contract for the services of properly trained personnel and hazardous waste haulers. The County shall also provide or secure suitable equipment and supplies to properly receive, package, label, haul, recycle and dispose of the household hazardous wastes collected at events.
- CoHHWCF: The County operates two permitted HHW collection facilities for the collection and storage of HHW. The County shall provide or contract for services, equipment, and supplies to properly receive, package, label, haul, recycle and dispose of wastes collected at the CoHHWCF.

The CoHHWCF are located at:

- *San Martin, 13055 Murphy Ave, San Martin*
- *San Jose, 1608 Las Plumas, San Jose*

6. Costs, Documentation, and Reimbursements

Cities will be billed on a cost recovery basis. Costs of emergency events will be tracked and billed separately. Emergency funding applications pending from the State or Federal government for reimbursements in no way relieves the City of responsibility to make timely payment to the County in accordance with the terms of the AGENCY AGREEMENT FOR COUNTYWIDE HOUSEHOLD HAZARDOUS WASTE COLLECTION PROGRAM.

The County agrees to provide the City with a detailed accounting of services provided for an emergency collection. Documentation will track the time and materials of staff, outside contractor expenses, and quantities and types of waste collected to demonstrate that the wastes were generated above and beyond existing collection programs.

Services to businesses will be provided on a cost recovery basis and according to Section 12 of the AGENCY AGREEMENT FOR COUNTYWIDE HOUSEHOLD HAZARDOUS WASTE COLLECTION PROGRAM, which includes program administration, on-site collection,

transportation, and disposal costs. The County will assume responsibility for collecting fees from participating businesses.

7. State and Federal Assistance and Funds

It is the City responsibility to pursue reimbursement from State or Federal agencies.

State Office of Emergency Services (OES)

The OES is responsible for requesting assistance on behalf of local jurisdictions for resources beyond the capability of the jurisdiction. State assistance may include assistance available from State, Federal, or private sources. If a local jurisdiction is declared a state disaster area, and the local jurisdiction deems that the needs of the disaster response are beyond its capabilities, then the local jurisdiction can request assistance and reimbursement of costs from OES.

Follow Standardized Emergency Management System (SEMS)

All requests and emergency responses must be in accordance with the SEMS. The State Department of Toxic Substances Control may have funding available for hazardous waste response and collection.

Federal Assistance

If a state disaster area is declared a federal disaster, then federal funding assistance may be available through the State OES. Funding and assistance may be available from Federal agencies such as FEMA and the U.S. EPA.

Damage estimates: The city should provide to the State OES estimates of damages and a "scope of work requested." It is recommended that the local HHW coordinator meet ahead of time with local emergency agencies or State OES contacts regarding the proper procedures and wording of requests for assistance.

Funding Process: The funding process may vary depending on the unique circumstances of the disaster. The process can either be the traditional FEMA reimbursement process, or by direct assistance from EPA.

REFERENCES

California Integrated Waste Management Board, Integrated Waste Management Disaster Plan: Guidance for local government on disaster debris management, January 1997.

Emergency Planning Contacts and Personnel

Primary County Contact: County of Santa Clara
 Consumer and Environmental Protection Agency
 Recycling and Waste Reduction Division
 Household Hazardous Waste Program
 ATTN: Hazardous Materials Program Manager
 (408)-918-1967

For Non-Emergency after-hours, contact County Communications at: (408) 977-3220

Responsibility: Coordinate and establish proper collection and disposal methods for household hazardous waste. Assess the need for HHW and CESQG services in consultation with the City and other operations.

Cal OES Public Safety Communications Main Office

601 & 630 Sequoia Pacific Boulevard
 Sacramento, CA 95811
 (916) 657-9494

Cal OES

3650 Schriever Avenue
 Mather, CA 95655-4203
 (916) 845-8510

CHEMTREC Emergency number, (800) 424-9300
 Non-emergency (800) 262-8200

Chemtrec is a public service established by the Chemical Manufacturers Association. The Center was developed as a resource for obtaining immediate emergency response information to mitigate accidental chemical releases, and as a means for emergency responders to obtain technical assistance from chemical industry product safety specialists, emergency response coordinators, toxicologists, physicians, and other industry experts to safely mitigate incidents involving chemicals.

EXHIBIT B-2D (revised)

INSURANCE REQUIREMENTS FOR
ENVIRONMENTAL SERVICES CONTRACTS

(Hazardous Waste Disposal, Remediation Services, Environmental Consulting, etc.)

Indemnity

The Contractor shall indemnify, defend, and hold harmless the County of Santa Clara (hereinafter "County"), its officers, agents and employees from any claim, liability, loss, injury or damage arising out of, or in connection with, performance of this Agreement by Contractor and/or its agents, employees or sub-contractors, excepting only loss, injury or damage caused by the sole negligence or willful misconduct of personnel employed by the County. It is the intent of the parties to this Agreement to provide the broadest possible coverage for the County. The Contractor shall reimburse the County for all costs, attorneys' fees, expenses and liabilities incurred with respect to any litigation in which the Contractor contests its obligation to indemnify, defend and/or hold harmless the County under this Agreement and does not prevail in that contest.

Insurance

Without limiting the Contractor's indemnification of the County, the Contractor shall provide and maintain at its own expense, during the term of this Agreement, or as may be further required herein, the following insurance coverages and provisions:

A. Evidence of Coverage

Prior to commencement of this Agreement, the Contractor shall provide a Certificate of Insurance certifying that coverage as required herein has been obtained. Individual endorsements executed by the insurance carrier shall accompany the certificate. In addition, a certified copy of the policy or policies shall be provided by the Contractor upon request.

This verification of coverage shall be sent to the requesting County department, unless otherwise directed. The Contractor shall not receive a Notice to Proceed with the work under the Agreement until it has obtained all insurance required and such insurance has been approved by the County. This approval of insurance shall neither relieve nor decrease the liability of the Contractor.

B. Qualifying Insurers

All coverages, except surety, shall be issued by companies which hold a current policy holder's alphabetic and financial size category rating of not less than A- V, according to the current Best's Key Rating Guide or a company of equal financial stability that is approved by the County's Insurance Manager.

EXHIBIT B-2D (revised)

C. Notice of Cancellation

All coverage as required herein shall not be canceled or changed so as to no longer meet the specified County insurance requirements without 30 days' prior written notice of such cancellation or change being delivered to the County of Santa Clara or their designated agent.

D. Insurance Required

1. Commercial General Liability Insurance - for bodily injury (including death) and property damage which provides limits as follows:
 - a. Each occurrence - \$1,000,000
 - b. General aggregate - \$2,000,000
 - c. Products/Completed Operations aggregate - \$2,000,000
 - d. Personal Injury - \$1,000,000
2. General liability coverage shall include:
 - a. Premises and Operations
 - b. Products/Completed
 - c. Personal Injury liability
 - d. Severability of interest
3. General liability coverage shall include the following endorsement, a copy of which shall be provided to the County:

Additional Insured Endorsement, which shall read:

“County of Santa Clara, and members of the Board of Supervisors of the County of Santa Clara, and the officers, agents, and employees of the County of Santa Clara, individually and collectively, as additional insureds.”

Insurance afforded by the additional insured endorsement shall apply as primary insurance, and other insurance maintained by the County of Santa Clara, its officers, agents, and employees shall be excess only and not contributing with insurance provided under this policy. Public Entities may also be added to the

EXHIBIT B-2D (revised)

additional insured endorsement as applicable and the contractor shall be notified by the contracting department of these requirements.

4. Automobile Liability Insurance

For bodily injury (including death) and property damage which provides total limits of not less than one million dollars (\$1,000,000) combined single limit per occurrence applicable to all owned, non-owned and hired vehicles. Coverage shall include Environmental Impairment Liability Endorsement MCS90 for contracts requiring the transportation of hazardous materials/wastes.

4a. Aircraft/Watercraft Liability Insurance (Required if Contractor or any of its agents or subcontractors will operate aircraft or watercraft in the scope of the Agreement)

For bodily injury (including death) and property damage which provides total limits of not less than one million dollars (\$1,000,000) combined single limit per occurrence applicable to all owned, non-owned and hired aircraft/watercraft.

5. Workers' Compensation and Employer's Liability Insurance

- a. Statutory California Workers' Compensation coverage including broad form all-states coverage.
- b. Employer's Liability coverage for not less than one million dollars (\$1,000,000) per occurrence.

6. Contractors Pollution Liability Insurance

Coverage shall provide a minimum of not less than five million dollars (\$5,000,000) per occurrence and aggregate for bodily injury, personal injury, property damage and cleanup costs both on and offsite.

7. Professional Errors and Omissions Liability Insurance (required for contractors providing professional services, such as through a professional engineer, registered geologist, etc.)

- a. Coverage shall be in an amount of not less than one million dollars (\$1,000,000) per occurrence/aggregate.
- b. If coverage contains a deductible or self-retention, it shall not be greater than fifty thousand dollars (\$50,000) per occurrence/event.

EXHIBIT B-2D (revised)

- c. Coverage as required herein shall be maintained for a minimum of two years following termination or completion of this Agreement.

8. Claims Made Coverage

If coverage is written on a claims made basis, the Certificate of Insurance shall clearly state so. In addition to coverage requirements above, such policy shall provide that:

- a. Policy retroactive date coincides with or precedes the Consultant's start of work (including subsequent policies purchased as renewals or replacements).
- b. Policy allows for reporting of circumstances or incidents that might give rise to future claims.

E. Special Provisions

The following provisions shall apply to this Agreement:

1. The foregoing requirements as to the types and limits of insurance coverage to be maintained by the Contractor and any approval of said insurance by the County or its insurance consultant(s) are not intended to and shall not in any manner limit or qualify the liabilities and obligations otherwise assumed by the Contractor pursuant to this Agreement, including but not limited to the provisions concerning indemnification.
2. The County acknowledges that some insurance requirements contained in this Agreement may be fulfilled by self-insurance on the part of the Contractor. However, this shall not in any way limit liabilities assumed by the Contractor under this Agreement. Any self-insurance shall be approved in writing by the County upon satisfactory evidence of financial capacity. Contractors obligation hereunder may be satisfied in whole or in part by adequately funded self-insurance programs or self-insurance retentions.
3. Should any of the work under this Agreement be sublet, the Contractor shall require each of its subcontractors of any tier to carry the aforementioned coverages, or Contractor may insure subcontractors under its own policies.
4. The County reserves the right to withhold payments to the Contractor in the event of material noncompliance with the insurance requirements outlined above.

F. Fidelity Bonds (Required only if contractor will be receiving advanced funds or payments)

Before receiving compensation under this Agreement, Contractor will furnish County with evidence that all officials, employees, and agents handling or having access to funds received or disbursed under this Agreement, or authorized to sign or

EXHIBIT B-2D (revised)

countersign checks, are covered by a BLANKET FIDELITY BOND in an amount of AT LEAST fifteen percent (15%) of the maximum financial obligation of the County cited herein. If such bond is canceled or reduced, Contractor will notify County immediately, and County may withhold further payment to Contractor until proper coverage has been obtained. Failure to give such notice may be cause for termination of this Agreement, at the option of County.



CITY COUNCIL STAFF REPORT

MEETING DATE: April 21, 2021

PREPARED BY: Gina Paolini, Interim Principal Planner
APPROVED BY: City Manager

APPROVE A GOVERNMENT CODE 65915 DENSITY BONUS AT 80 PERCENT AND FOUR CONCESSIONS FOR A 100 PERCENT AFFORDABLE HOUSING PROJECT (SR2021-0005 MONTEREY-FIRST COMMUNITY HOUSING (MAGNOLIAS))

RECOMMENDATION(S)

Adopt resolution approving the request for the following, pursuant to Government Code 65915:

1. Density bonus at 80 percent.
2. Affordable housing concessions to the Residential Development Design and Development Standards:
 - a. Design Standard No. 26: Exterior Treatments and Materials;
 - b. Design Standard No. 30: Building Colors;
 - c. Design Standard No. 31: Window Design; and
 - d. Design Standard No. 39: Multi-family roof form.

COUNCIL PRIORITIES, GOALS & STRATEGIES

Ongoing Priorities

Enhancing Equity
Diversity and Inclusiveness

2020-2021 Strategic Priorities

Affordable Housing and Homelessness

GUIDING DOCUMENTS

Morgan Hill 2035 General Plan

REPORT NARRATIVE:

Background

California's density bonus law was enacted in 1979. Density bonus law is intended to support the construction of affordable housing by offering developers the ability to construct additional housing units above an agency's otherwise applicable density range. The ability to construct additional units is offered to help offset a developer's costs to subsidize affordable housing units in a project. Generally, density bonus law operates as an incentive to provide affordable housing units. The state density bonus law is codified in California Government Code Section 65915.

The density bonus law was substantively amended in 2019 by Assembly Bill (AB) 1763. AB1763 added new affordability categories and substantially increased density bonuses for certain projects. Staff briefed the City Council on all the new housing laws that were moving forward in late 2019/early 2020.

State law identifies specific levels of density bonus which are applicable to a housing development project which includes affordable housing units. In accordance with Government Code Section 65915, a housing development project which includes affordable units is eligible for a sliding scale of percentage bonus based on the number of affordable units proposed in the development and the level of affordability (from moderate to extremely low income). Until January of 2020, the maximum percentage of density bonus which could be achieved by a proposed project was a 35% bonus. However, AB 1763, substantially increased the maximum bonus which could be achieved by certain affordable projects. In accordance with AB 1763, a project proposed as a 100% affordable project with at least 80% of the units reserved for lower income households and 20% of the total units reserved for moderate-income households is entitled to a density bonus of 80%.

Project Description

First Community Housing has submitted a Design Permit application for a 66-unit affordable housing development to be developed along the east side of Monterey Road across from the Morgan Hill Community Adult School. The project would include 16 studios, 16 one-bedroom units, 17 two-bedroom units and 17 three-bedroom units. There will be one three-bedroom unit reserved for on-site staff.

State law requires that when calculating each component of any density calculation, including base density and bonus density, resulting in fractional units, the fractional units shall be separately rounded up to the next whole number (Government Code Section 65915 (q)). The site General Plan land use designation (Mixed Use Flex) allows for a maximum of 37 units; however, the project is proposing 66 units, as permitted by Government Code 65915 – the State Affordable Housing Density Bonus program. The project is seeking a density bonus of 80 percent.

When a project seeks a density bonus for a housing development in accordance with Government Code 65915, the project is entitled to receive incentives or concessions based on the affordability level of the project. First Community Housing plans for half of the project units to be a combination of permanent supportive housing (PSH) and rapid rehousing (RRH) units, restricted for households at 30 percent Area Median Income (AMI), and for which the County will provide rental subsidies and case management services. The remaining 50 percent of the units would be targeted to families earning up to 60 percent AMI.

In accordance with State Density Bonus requirements (Government Code Section 65915(p)(4)), if the project consists solely of rental units, exclusive of a manager's unit, with an affordable housing cost to lower income families and the development is for a supportive housing development, the City cannot impose any minimum vehicular parking requirement. The project does plan to provide 67 parking spaces onsite. Separate from the concession request to be considered by the City Council, the applicant has requested waivers and reductions to development standards that include, reducing the ratio of replacement trees onsite, increase in the Floor Area Ratio,

increase in building height to 68 feet, and reduced setback along Monterey Road. Details regarding the project have been provided (Attachment 1).

Density Bonus

In accordance with Government Code Section 65915, the City shall grant one density bonus to any project that requests a density bonus and qualifies under the state program. Morgan Hill Municipal Code Section 18.48.040 (Density Bonuses) reflects the requirements of Government Code Section 65915 and requires the City Council approve an increase in the number of dwelling units permitted in a project when the density bonus is consistent with the number and degree of affordable units as specified in Government Code Section 65915. The proposed project is 100% affordable and qualifies for the 80 percent density bonus.

Concession Request

Government Code Section 65915(d)(2)(D) requires the City to grant four incentives or concessions for projects that are 100 percent affordable for lower income houses (excluding managers unit), except that up to 20 percent of the total units in the development may be for moderate-income households. Concessions are considered reductions in development standards, or modification of zoning code requirements or architectural design requirements that exceed the minimum building standards. This project is entitled to four concessions or incentives, and has requested the following four concessions:

- a. Design Standard No. 26- Exterior Treatments and Materials: The Residential Development Design and Development Standards require projects to provide a minimum of two materials on any one building façade, and that any one material must comprise at least 20 percent of the façade. The project cannot comply with this requirement and is using variations in color and surface orientation to provide cost-effective visual breaks to help break down the scale of the building;
- b. Design Standard No. 30- Building Colors: The Residential Development Design and Development Standards limit the number of colors appearing on any building exterior to no more than four. The project proposes a color scheme of three colors of various tones, and one neutral light gray, for a total of nine total proposed individual colors. The light gray is the primary field color, with others used as accent or secondary colors. No more than four secondary, plus the primary color, is ever used on any individual building façade;
- c. Design Standard No. 31- Window Design: The Residential Development Design and Development Standards require window recesses, trim and other window elements be designed to be substantial in depth to create shadows. The design proposal provides a trim-less window detailing. Due to the chosen modular construction method the depth of wall characteristic of the modules will not allow a full 6" depth to the glass surface; and,
- d. Design Standard No. 39- Multi-family Roof Form: The Residential Development Design and Development Standards require the roof element of the multi-family

project be designed such that no more than two side-by-side units are covered by one unarticulated roof. The proposed design reflects contemporary design without the use of more traditional roof types (such as gable, hip, shed, etc.). To take advantage of the modular building techniques used in the proposed design, a flat roof with parapets has been selected.

A link to the site plan and elevations for the project has been provided to demonstrate how the project has been designed with the requested concessions (Attachment 2).

Pursuant to Government Code 65915 (d)(1) the City must grant the concessions or incentives unless the City makes written findings, based upon substantial evidence, of any of the following:

- a. The concession or incentive does not result in identifiable and actual cost reductions, consistent with subdivision (k), to provide for affordable housing costs, as defined in Section 50052.5 of the Health and Safety Code, or for rents of the targeted units to be set as specified in subdivision (c).
- b. The concession or incentive would have a specific, adverse impact, as defined in paragraph 2) of subdivision (d) of Section 65589.5, upon public health and safety or the physical environment or on any real property that is listed in the California Register of Historical Resources and for which there is no feasible method to satisfactorily mitigate or avoid the specific, adverse impact without rendering the development unaffordable to low-income and moderate-income households.
- c. The concession or incentive would be contrary to state or federal law.

Specific, "adverse impact" is defined as a significant, quantifiable, direct, and unavoidable impact, based on objective, identified written public health or safety standards, policies, or conditions as they existed on the date the application was deemed complete. The following shall not constitute a specific, adverse impact upon the public health or safety:

- (A) Inconsistency with the zoning ordinance or general plan land use designation.
- (B) The eligibility to claim a welfare exemption under subdivision (g) of Section 214 of the Revenue and Taxation Code. (Property not subject to property taxes)

These findings cannot be made for the project; therefore, the concession request should be granted by the City Council (Attachment 3).

COMMUNITY ENGAGEMENT: Inform

A project development web page has been created on the City website to inform the public of the project application. A site plan and project elevations have been provided for public review. The City will continue to inform the public through the public engagement process as the Design Review permit is processed.

ALTERNATIVE ACTIONS:

Government Code Section 65915(d)(2)(D) requires the City to grant four incentives or concessions for projects that are 100 percent affordable unless findings for denial can be made. For this project, findings for denial cannot be made; therefore, there is no alternative action.

PRIOR CITY COUNCIL AND COMMISSION ACTIONS:

None.

FISCAL AND RESOURCE IMPACT:

The City development review functions are cost-recovery, with the fees collected from applicants to cover cost of services. These fees have been collected.

California Environmental Quality Act (CEQA):

A project level environmental assessment will be prepared for the project in conformance with the California Environmental Quality Act. The environmental analysis will be considered during the Design Review permit phase of the project. Next steps will involve preparing a scope for the environmental review process.

LINKS/ATTACHMENTS:

1. Project Narrative
2. Project Plans (weblink)
3. Resolution

The Magnolias – Project Narrative



Date 2021.02.10
Project Name The Magnolias
Project Number 1903082
Attention Gina Paolini, City of Morgan Hill

Subject Project Narrative

The Magnolias – SB330 Project Narrative

Part I. - The Magnolias - Project Description

A. Project Site

The 1.5 acre site is located at 17965 Monterey Street in Morgan Hill (APN 764-12-006), a 6-minute drive after exiting US-101. Just north of Downtown Morgan Hill, the site, zoned MU-F, sits in a mixed-use but mostly residential, developing neighborhood. There are small vacant structures that will be demolished, and minor grading will be required due to flood plain requirements.

Two grocery stores are located within 1 mile of the site; Morgan Hill Community Adult School is across the street; Walgreens is 1.5 miles away; and Morgan Hill Library and City offices are less than a mile away. The Hale & Hillwood bus stop is a half mile away with service by bus route 68 between Gilroy and San Jose, which has a frequency of 15 minutes during commute times. The Morgan Hill Caltrain station is 0.6 mile away, with weekday commute service to and from San Francisco.

B. Population Served

First Community Housing (FCH) plans to build 66 units of multifamily housing for households earning 30% to 60% AMI. Currently, the project consists of 16 studios, 16 one-bedroom units, 17 two-bedroom units, and 17 three-bedroom units. One three-bedroom unit will be reserved for on-site staff. Half of the project units are planned to be a combination of permanent supportive housing (PSH) and rapid rehousing (RRH) units, restricted for households at 30% AMI, and for which the County will provide rental subsidies and case management services. The remaining 50% of units would target families earning up to 60% AMI.

C. Building Description

The project is anticipated to be five stories. The building will be employing modular construction. Common areas will include the Property Management and Social Service Coordinator's offices, open lounge/seating areas, a central laundry facility, indoor and outdoor play spaces for kids of all ages, secured bicycle storage, and a community garden area. Parking will be provided at a rate of 1 space per unit in a surface lot behind the building. FCH also plans to include pet relieving and washing areas on the property. The project consists of the ground-up construction and development of a 66 unit affordable housing project at the site of 17965 Monterey Rd, Morgan Hill, CA 95037. This work includes the architectural design, landscape design, civil design, structural design, and MEP/FP design of all elements of the building and site for an assumed construction cost that is yet to be confirmed.

The building consists of a Type IA ground floor housing on-site amenities such as community rooms, bike parking and administrative offices, and 4 levels of housing units of Type VA construction above. Level 5 also has two amenity unenclosed roof decks for tenant use.

Upper level construction is intended to be completed in a modular manner offsite at a local special modular manufacturing plant. The modular scope is to be performed by the Modular Builder, which has a

design assist contract with the Owner, and a supplier contract with the General Contractor. SERA, under its contract with the Owner has agreed to perform design work for the housing unit sector of the scope (the portions of the building above the Type 1A podium) in accordance with the limitations of the Modular Builder's system.

Parking: 67 stalls at ground level.

Areas:

Level 1: 15,960 SF

Levels 2-5: 73,840

Total: 89,800

Lot re-grading, storm water mitigation, and floodplain design is carefully considered to keep the project safe and to avoid spillage to adjacent properties.

D. Applicant Description

FCH is a recognized leader in creating highly sustainable, affordable housing and like FCH's other new construction projects, this development will be designed as a LEED Platinum project. In addition to sustainable building strategies such as selecting healthy building materials, incorporating water and energy efficient measures, and providing each household with free Eco Passes, FCH will seek out innovative new technologies to showcase in this signature building.

Part II – Design

The design development of the project is driven primarily by three design imperatives:

Design Charter:

1. Provide Positive Vision of Community
2. Express Habitation and Diversity
3. Express Identity in Environmental Responsibility

Inside and out, all decisions are driven and checked against this Design Charter with the intent on providing high-quality, beautiful, affordable place to live to a historically under-served population. At the same time the project must prove to be an asset and enhancement to the City of Morgan Hill.

It is difficult for a population to develop a sense of identity with their home, just as it is difficult for a community to identify with their City, if that place does not have its own sense of identity. Inhabitants should feel they have a level of ownership and responsibility for that place. They should feel that their city, and their habitation represents a portion of their own identity. The Magnolias is designed so that tenants can identify their own units from a distance by presenting unique features such as differing balcony treatments, window treatments, or different color accents. The unique, yet harmonious identity of the development within the context of the City should be a source of pride to the families calling it home.

Environmental sustainability is a prime factor in all projects by First Community Housing. Leading by example, The Magnolias seeks to illustrate and educate the basic lesson that sustainability can be beautiful. From its early inception, the project has based every decision on the question of environmental impact. The building roof is vegetated to mitigate the urban heat island effect and to pre-treat rainwater runoff. Large, prominent PV arrays display the aspirations of renewable energy. Several Electric Vehicle charging stations support the effort towards a future with clean energy. Material selections prioritize long-lasting, high-quality, healthy, sustainably resourced, options over first-cost considerations. Invisible to the naked eye, but just as important, the building's mechanical, electrical, and plumbing systems are designed for the highest-efficiency, lowest power and water consumption, longest life cycle possible. Reduction in consumption is still the most effective strategy in mitigating ecological degradation and global warming.

Positive vision of community starts with being a good neighbor, and a providing positive influence on the municipal culture. It is no doubt that this project will be a prominent presence in the neighborhood, due to its relative size alone. The challenge is to create something which contributes to fabric of Morgan Hill in a

positive, beautiful, and harmonious way. Towards this end, The Magnolias has utilized multiple architectural strategies resulting in a proposal Morgan Hill will find to be an asset to the City for decades to come. The primary inspiration for the project comes directly from the natural beauty of the Santa Clara Valley. The exterior undulations of the facades are meant to convey the natural mountainous formations nearby, including the El Toro, which is visible from this site.. The color palette along this façade is also inspired by El Toro, as its grasses change colors across the changes in the seasons. The south-side forms are inspired by the dynamic mountain water habitats of the local ecology, especially the waterfalls and creeks of Uvas Canyon. The rippling wave forms of the building offer a cool refreshing display for the arid hot months in Morgan Hill. All along the roof line, parapets vary in height and pitch to create an engaging, optimistic skyline that reflects the rippling streambed at the South façade, and the mountain ridges at the North facade. Building masses have been strategically broken up to diminish the relative size. Exterior stairways, open-air hallways with projecting balconies, glassy lobbies, and step-downs of the massing at the East and West to roof top terraces provide breaks in the massing. Diminishing the scale in this way allows the building read as if it were multiple, smaller buildings.

Positive vision of community also extends internally. The project is supportive housing for underserved family populations in the area. This project fosters and strengthens community by promoting support and stewardship of our fellow humans. Many on-site amenities are provided to tenants to encourage social bonds and strong community and family ties. The south-side yard provides sporting and play opportunities for all ages in a safe, stimulating environment. Padded play areas help keep tots safe, while the court provides half-court basketball, futsal, or other court sports. Community garden plots encourage agrarian education and supports the green thumbs. Community rooms provide opportunities for larger gatherings. The clubhouse contains a full demonstration kitchen for cooking classes, or simply to prep for the picnic. The open barbeque area rounds out the list of family-friendly necessities. In the front lobby, lounge areas are intermixed with free-access computers. The two generous Level 5 outdoor plazas look out over the beautiful Morgan Hill scenery. Tenants and families can gather in these safe, attractive amenities to visit and bond. Inside and out, or from down Monterrey Road, opportunities for gathering and sharing promote community bonding so necessary to transform a mere place to live into a home. Happy healthy residents make good neighbors. And good neighbors make a good city.

Part III – Entitlement Narrative

A. Density Bonus:

Under State Density Bonus Law, Section 65915, the project - as 100% lower income households, defined by Section 50079.5 of the Health and Safety Code – qualifies for an 80% Density bonus over that maximum allowed by the Development Standards.

1.53 acres x 24 du/acre allowed = 36.72 units allowed under Morgan Hill Zoning Code for Zone MU-F.
36.72 units x 80% density bonus = 66 allowable units with density bonus. (30 bonus units)

Parking:

Per. 65915.p.3.B.4, 100% low-income supportive housing - as defined in Section 50675.14 of the Health and Safety Code – qualifies for no minimum vehicular parking requirements.

Parking provided:

Standard: 46

Compact: 16

Accessible: 5

EV: 5

Accessible EV:2

Total: 67 spaces

B. Concessions to Development Standards:

Per 65915.d.2.D, 100% low-income supportive housing qualifies for **four** incentives or concessions to the City's Development Standards.

As defined by the City of Morgan Hill: *Concession* or *incentive* means any of the following, if they result in

the actual and identifiable cost reductions to providing for affordable housing, as defined in Section 50052.5 of the Health and Safety Code, or for rents for the targeted units to be set as specified in subdivision (c). :

- A reduction in site development standards
- A modification of zoning code requirements or
- A modification of architectural design requirements that exceed the minimum building standards.

In order to provide the proposed affordable housing at a cost and density threshold that is feasible, the following concessions to Morgan Hill's Development and Design Standards are requested.

1. **Design Standard #26: Exterior Treatments and Materials:** The design standard requires minimum of two materials to be used on any one building façade, and that each material shall comprise at least 20% of the façade. Though it approaches those requirements, the proposal can not meet the requirements and maintain the financial viability of the project, or meet the design intent. Each façade is comprised of fiber cement panel (or cementitious plaster), concrete and wood lattice in a balanced ratio averaging 74%, 14%, 12%, respectively. Variations in color and surface orientation provide cost-effective visual breaks to enliven the facades and help break down the scale of the building. The introduction of additional materials would incur undue expense that would necessitate a reduction in density in order to maintain the budget.
2. **Design Standard #30: Building Colors:** The number of colors appearing on any building exterior is limited to no more than four colors. The proposed color scheme presents (3) colors of various tones, and one neutral light gray, for a total of (9) total proposed individual colors. The light gray is the primary field color, with others used primarily as accent or secondary colors. No more than four secondary, plus the primary color is ever used on any individual building façade. The colors have been carefully selected to reflect the colors found in the natural beauty of the Santa Clara Valley ecosystem, which is the main inspiration for the architecture. They have been applied to the façade in complimentary locations to tell a story about the colors of the changing seasons, and the natural features of the valley. A significant reduction in the color palette to four hinders the rich palette of the building and runs the risk of appearing monotonous and massive. Due to the size, and prominent silhouette of the building, the color variations are a complimentary and necessary architectural component providing a delicate gradient of visual relief. The use of color was selected to achieve design goals without introducing more expensive mixes of materials that this affordable housing project cannot support. Though the intent of this design standard is fulfilled, a concession of the prescriptive standard is requested to maintain project cost feasibility with the target density. A reduction in the color variety of the project would cause the project to adopt more expensive materials or construction methods in order to provide the visual quality required of a building of this size which would reduce the cost feasibility of the project.
3. **Design Standard #31: Window Design:** Due to the contemporary architectural language of the proposed design, it is not clear if the windows meet the letter of the standards; however, every effort has been made to meet the intent. The design proposal provides a trim-less window detailing. Due to the chosen modular construction method the depth of wall characteristic of the modules will not allow a full 6" depth to the glass surface. Many selected windows are equipped with solar shades in a decorative trim. Others are recessed fully in recessed and shaded balconies. In addition to the varied façade articulations and elevations setbacks, these provisions enrich the shadow play and surface plane variety characteristics at the heart of the intent of this

standard. Though the intent of the standard is fulfilled, a concession of the prescriptive standard is requested to maintain project cost feasibility with the target density.

4. **Design Standard #39. Multi-family roof form:** Due to the contemporary architectural language of the proposed design, it is not clear if the roofline meets the letter of the standards; however, every effort has been made to meet the intent. The proposed design reflects contemporary design without the use of more traditional roof types (such as gable, hip, shed, etc.) To take advantage of the modular building techniques used in the proposed design, a flat roof with parapets has been selected. Various heights and slopes have been introduced to the profile of the parapets to add variety and visual interest to the silhouette of the building at the skyline. True to the intent, the variations in the parapet heights and slopes do not extend beyond more than two side-by-side units. Towards the goal of breaking down the building massing to human-scale volumes, significant façade features have been incorporated, such as façade articulations, recessed balconies, extended balconies, selected window shade treatments and shade trellises. Though the intent of the standard is fulfilled, a waiver of the prescriptive standard is requested to maintain project cost feasibility with the target density.

C. Design Waivers:

As described by the City of Morgan Hill, Waivers to Design or Development standards may be requested if those standards physically prevent the development of the housing at the density allowed?

Per the provisions of 65915.e, the following Design Waivers to the Morgan Hill Residential Development Design and Development Standards are requested in order to maintain project financial feasibility, and to provide the target density on the project site.

1. **Design Standard #12: Trees:** The lot at 17965 Monterrey Road has been historically undeveloped and partially wooded. The backlot is overgrown with both indigenous and non-indigenous trees in the significant and non-protected range. Due to the heavy tree load on this site, the project team has determined that replacement of significant trees as a 2:1 ratio is not feasible, though a strategy exceeding 1:1 replacement ratio is proposed. (8) significant indigenous trees to be removed + (10) significant non-indigenous trees to be removed = (18) total significant trees to be removed. At the 2:1 replacement ratio, (36) new trees are required. The current proposal provides (20) new trees on site, (6) new trees in the median and (2) in the park strip for a total of (28) new trees. The difference is a shortfall of (8) trees. Upon careful consideration, the provision for (36) trees would prove physically infeasible within the lot area without removing required amenities and reducing the density of the project.
2. **Development Standard F.A.R.:** Allowed F.A.R. for Zone MU-F: 0.5. Proposed F.A.R.: 1.4
3. **Development Standard Building Height:** Allowed Building Height for Zone MU-F: 45'-0". Proposed Building Height: 68'-0"
4. **Development Standard Front Setback:** Min Allowed for Zone MU-F, Res.: 15'-0". Proposed: 10'-0".

D. Conditional Use Permit:**Parking Area Landscaping:**

Per Morgan Hill Municipal Code Section 18.72.070, parking lots providing over 60 spaces require a 20% dedication of area to landscaping. The design team has provided the maximum landscaping feasible on site without reducing parking spaces below client requirements or reducing the density of the project. Per 18.72.070.H Green Parking Exemptions, parking lots incorporating solar panels, bioswales and other similar green features are eligible for reduced parking lot landscaping requirements. Towards that end, the project provides both bioswales and solar PV canopies.

Total Area of Parking Lot: 26,056 sf

Required Area of Landscaping (20% Parking Lot): 5,212 sqft

Provided Area of Landscaping: 3,370 sqft

Provided Area of Bioswale: 2,899 sqft

Provided Area of Photovoltaic Canopy: TBD – Canopy over parking in selected areas.

RESOLUTION NO.

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF MORGAN HILL GRANTING AN 80 PERCENT DENSITY BONUS AND FOUR CONCESSIONS FOR MONTEREY – FIRST COMMUNITY HOUSING (MAGNOLIAS) FOR A 66-UNIT AFFORDABLE HOUSING DEVELOPMENT TO BE LOCATED ALONG MONTEREY ROAD EAST OF THE MORGAN HILL COMMUNITY ADULT SCHOOL (APN: 764-12-006).

WHEREAS, First Community Housing has requested an 80 percent density bonus and four affordable housing concessions to the Residential Development Design and Development Standards including Design Standard No. 26 (Exterior Treatments and Materials), Design Standard No. 30 (Building Colors), Design Standard No. 31 (Window Design) and Design Standard No. 39 (Multi-family Roof Form).

WHEREAS, the Project is an affordable housing development project that includes 100 percent affordable rental units for lower income houses (excluding managers unit).

WHEREAS, pursuant to Government Code Section 65915(f)(3)(D)(i), the Project is entitled to a density bonus of 80 percent of the number of units for lower income households.

WHEREAS, pursuant to Government Code Section 65915(d)(2)(D), the Project is allowed up to four concessions.

WHEREAS, none of the findings for denial of the concessions required by Government Code Section 65915(d)(1) are supported by substantial evidence.

WHEREAS, the Monterey-First Community Housing (Magnolias) project to be located along Monterey Road, east of the Morgan Hill Community Adult School and identified by Assessor's Parcel Number 76-12-006 will provide a public benefit of 100 percent affordable housing and will be deed restricted for 55 years, or the density bonus and four concessions granted to Design Standard No. 26 (Exterior Treatments and Materials), Design Standard No. 30 (Building Colors), Design Standard No. 31 (Window Design) and Design Standard No. 39 (Multi-family Roof Form) will become null and void.

NOW THEREFORE, THE CITY COUNCIL OF THE CITY OF MORGAN HILL DOES HEREBY FIND, DETERMINE, RESOLVE AND ORDER AS FOLLOWS:

Section 1. The City Council does hereby find that the foregoing recitals are true and correct.

Section 2. The Project is consistent with the Zoning Ordinance and General Plan.

Section 3. The City Council of the City of Morgan Hill hereby grants the density bonus and the four concessions for the Monterey-First Community Housing (Magnolias) project.

Section 4. This resolution shall take effect immediately upon adoption.

PASSED, APPROVED, AND ADOPTED by the City Council of the City of Morgan Hill at its meeting held on this 21st day of April 2021 by the following vote:

AYES: COUNCIL MEMBERS:
NOES: COUNCIL MEMBERS:
ABSTAIN: COUNCIL MEMBERS:
ABSENT: COUNCIL MEMBERS:

APPROVED:

ATTEST:

RICH CONSTANTINE, Mayor

MICHELLE BIGELOW, City Clerk

∞ CERTIFICATION ∞

I, Michelle Bigelow, City Clerk of the City of Morgan Hill, California, do hereby certify that the foregoing is a true and correct copy of Resolution No.21-XXX, adopted by the City Council at the meeting held on April 21, 2021.

WITNESS MY HAND AND THE SEAL OF THE CITY OF MORGAN HILL.

DATE: _____

MICHELLE BIGELOW, City Clerk



CITY COUNCIL STAFF REPORT

MEETING DATE: April 21, 2021

PREPARED BY: Gina Paolini, Interim Principal Planner
APPROVED BY: City Manager

APPROVE A GOVERNMENT CODE 65915 DENSITY BONUS AT 80 PERCENT AND THREE CONCESSIONS FOR A 100 PERCENT AFFORDABLE HOUSING PROJECT (SR2020-0027 MONTEREY-MINER (JEMCOR))

RECOMMENDATION(S)

Adopt resolution approving the request for the following, pursuant to Government Code 65915:

1. Density bonus at 80 percent.
2. Affordable housing concessions:
 - a. Reduced parking space dimensions for enclosed garages;
 - b. Eliminate requirement for covered bicycle parking and long-term bicycle storage; and
 - c. Reduction in use of decorative pavement material.

COUNCIL PRIORITIES, GOALS & STRATEGIES

Ongoing Priorities

Enhancing Equity
Diversity and Inclusiveness

2020-2021 Strategic Priorities

Affordable Housing and Homelessness

GUIDING DOCUMENTS

Morgan Hill 2035 General Plan

REPORT NARRATIVE:

Background:

California's density bonus law was enacted in 1979. Density bonus law is intended to support the construction of affordable housing by offering developers the ability to construct additional housing units above an agency's otherwise applicable density range. The ability to construct additional units is offered to help off-set a developer's costs to subsidize affordable housing units in a project. Generally, density bonus law operates as an incentive to provide affordable housing units. The state density bonus law is codified in California Government Code Section 65915.

The density bonus law was substantively amended in 2019 by Assembly Bill (AB) 1763. AB1763 added new affordability categories and substantially increased density bonuses for certain projects. Staff briefed the City Council on all the new housing laws that were moving forward in late 2019/early 2020.

State law identifies specific levels of density bonus which are applicable to a housing development project which includes affordable housing units. In accordance with Government Code Section 65915, a housing development project which includes affordable units is eligible for a sliding scale of percentage bonus based on the number of affordable units proposed in the development and the level of affordability (from moderate to extremely low income). Until January of 2020, the maximum percentage of density bonus which could be achieved by a proposed project was a 35% bonus. However, AB 1763, substantially increased the maximum bonus which could be achieved by certain affordable projects. In accordance with AB 1763, a project proposed as a 100% affordable project with at least 80% of the units reserved for lower income households and 20% of the total units reserved for moderate-income households is entitled to a density bonus of 80%.

Project Description

Jemcor Development Partners has submitted a Design Permit application for a 249-unit 100% affordable housing development to be developed at the northeast corner of Monterey Road and Madrone Parkway. The project would include 246 affordable rental units and three manager units.

State law requires that when calculating each component of any density calculation, including base density and bonus density, resulting in fractional units, the fractional units shall be separately rounded up to the next whole number (Government Code Section 65915 (q)). The site has a split General Plan land use designation (Mixed Use Flex and Residential Attached Low) which allows for a maximum of 140 units; however, the project is proposing 249 units, as permitted by Government Code 65915 – the State Affordable Housing Density Bonus program. The project is seeking a density bonus of 80 percent.

When a project seeks a density bonus for a housing development in accordance with Government Code 65915, the project is entitled to receive incentives or concessions based on the affordability level of the project – the law provides for a sliding scale with 100% affordable projects receiving the most incentives or concessions. The Applicant anticipates the project financing will include an allocation of Low Income Housing Tax Credits from the California Tax Credit Allocation Committee (“TCAC”), and that the project will be subject to a 55-year regulatory agreement with TCAC. Consistent with its additional requirements pursuant to State Density Bonus Law and the Morgan Hill Inclusionary Housing Ordinance, the project will also be subject to the City regulatory agreement to provide rental housing to lower income households, with the exception that 7.5 percent of the affordable units (19 in total) will be restricted to very low-income households.

In accordance with State Density Bonus requirements (Government Code Section 65915(p)(1)), the project will provide one parking space for each one-bedroom unit and two parking spaces for the two and three-bedroom units. Separate from the concession request to be considered by the City Council, the applicant has requested waivers and reductions to development standards that include a three foot increase in building height to 38 feet (35 feet allowed), increase in the Floor Area Ratio and reduced setback along

Taylor Avenue. Details regarding the project have been provided (Attachment 1). Waivers are automatically allowed if they are necessary to achieve the full density allowed under the State Density Bonus Law.

Density Bonus

In accordance with Government Code Section 65915, the City shall grant a density bonus to any project that requests a density bonus and qualifies under the state program. Morgan Hill Municipal Code Section 18.48.040 (Density Bonuses) reflects the requirements of Government Code Section 65915 and requires the City Council to approve an increase in the number of dwelling units permitted in a project when the density bonus is consistent with the number and degree of affordable units as specified in state law. The proposed project is 100% affordable and qualifies for the 80 percent density bonus.

Concession Request

Government Code Section 65915(d)(2)(D) requires the City to grant four incentives or concessions for projects that are 100 percent affordable for lower income households (excluding managers unit), except that up to 20 percent of the total units in the development may be for moderate-income households. Concessions are considered reductions in development standards, or modifications of zoning code requirements or of architectural design requirements that exceed the minimum building standards. This project is entitled to four concessions or incentives, and has requested the following three concessions:

- a. Parking Space Dimensions: Reduce the size of the garage tandem parking spaces to 10 feet by 18 feet (the Morgan Hill Municipal Code requires 10 feet by 20 feet);
- b. Bicycle Parking and Storage: Eliminate covered and long-term bicycle parking require by the Morgan Hill Municipal Code (86 spaces required); and,
- c. Design Standard No. 38- Pavement Design: The Residential Development Design and Development Standards requires projects to incorporate decorative, pervious paving into paved and landscaped areas by 10 percent to reduce the visual impact of paved surfaces. The project has reduced decorative pavement material to 2 percent.

A link to the site plan and elevations for the project has been provided to demonstrate how the project has been designed with the requested concessions (Attachment 2).

Pursuant to Government Code 65915 (d)(1) the City must grant the concessions or incentives unless the City makes written findings, based upon substantial evidence, of any of the following:

- a. The concession or incentive does not result in identifiable and actual cost reductions, consistent with subdivision (k), to provide for affordable housing costs, as defined in Section 50052.5 of the Health and Safety Code, or for rents

of the targeted units to be set as specified in subdivision (c).

- b. The concession or incentive would have a specific, adverse impact, as defined in paragraph 2) of subdivision (d) of Section 65589.5, upon public health and safety or the physical environment or on any real property that is listed in the California Register of Historical Resources and for which there is no feasible method to satisfactorily mitigate or avoid the specific, adverse impact without rendering the development unaffordable to low-income and moderate-income households.
- c. The concession or incentive would be contrary to state or federal law.

Specific, “adverse impact” is defined as a significant, quantifiable, direct, and unavoidable impact, based on objective, identified written public health or safety standards, policies, or conditions as they existed on the date the application was deemed complete. The following shall not constitute a specific, adverse impact upon the public health or safety:

(A) Inconsistency with the zoning ordinance or general plan land use designation.

(B) The eligibility to claim a welfare exemption under subdivision (g) of Section 214 of the Revenue and Taxation Code. (Property not subject to property taxes)

These findings for denial cannot be made for the project; therefore, the concession request should be granted by the City Council (Attachment 3).

COMMUNITY ENGAGEMENT: Inform

A project development web page has been created on the City website to inform the public of the project application. A site plan and project elevations have been provided for public review. The City Planning and Housing teams met with the neighboring property owners along Taylor Avenue on April 14, 2021 to answer questions regarding the project. The neighboring property owners have concerns with how the project may impact parking along Taylor Avenue and traffic throughout the neighborhood. The City will continue to inform the public through the public engagement process as the Design Review permit is processed.

ALTERNATIVE ACTIONS:

Government Code Section 65915(d)(2)(D) requires the City to grant four incentives or concessions for projects that are 100 percent affordable unless findings for denial can be made. For this project, findings for denial cannot be made; therefore, there is no alternative action.

PRIOR CITY COUNCIL AND COMMISSION ACTIONS:

None.

FISCAL AND RESOURCE IMPACT:

The City development review functions are cost-recovery, with the fees collected from applicants to cover cost of services. These fees have been collected.

California Environmental Quality Act (CEQA):

A project level environmental assessment will be prepared for the project in conformance with the California Environmental Quality Act. Upon granting of the concession request, the project description will be finalized, and an Initial Study (IS) will be prepared. The purpose of the IS is to provide information to use as the basis for deciding whether to prepare an EIR or mitigated negative declaration (MND) for the project. A determination regarding whether an EIR or MND will be prepared will occur in late May 2021. Following completion of the environmental document for the project, a hearing with the Planning Commission will be scheduled for consideration of the Design Review permit application, along with the environmental document. For an MND, the project would likely be considered in September 2021. If an EIR is prepared, the project would be considered in May 2022.

LINKS/ATTACHMENTS:

1. Monterey-Madrone - Request Letter
2. Project Plans (weblink)
3. Resolution



March 17, 2021

[Sent via email]

Jennifer Carman and Gina Paolini
Development Services Department – Planning Division
City of Morgan Hill
17575 Peak Avenue
Morgan Hill, California 95037

RE: SB 330 and REVISED STATE DENSITY BONUS LAW SUBMITTAL
Proposed Affordable Housing Apartment Community
NE Corner of Monterey Road and Madrone Parkway
Santa Clara County APN 726-36-059

Dear Ms. Carmen and Ms. Paolini:

On behalf of JEMCOR (Applicant) for the proposed affordable housing apartment community at the Northeast corner of Monterey Road and Madrone Parkway (“Project”), we continue to request that this submittal be recognized and considered pursuant to SB 330 and State Density Bonus Law as a 100% deed-restricted affordable rental housing development, with requests refined as described in this letter.

SB 330

As previously identified, as an eligible housing development project, the Applicant intends to seek SB 330 processing. This letter follows the submittal of the preliminary application on June 26, 2020 pursuant to Government Code Section 65941.1.1(a). It is further noted that preliminary application submittal establishes a form of “vesting” such that an application is deemed complete for the purposes of the Housing Accountability Act as of the date that the preliminary application was submitted. (Govt. Code §65589.5(h)(5))

This letter follows the full development application previously submitted on October 6, 2020 and revisions submitted on November 4, 2020 and January 20, 2021, pursuant to Government Code Section 65941.1(d). Now that the City has had an opportunity to identify incomplete items, we look forward to the determination within 30 days of whether the revised application package includes the information required by the incomplete list and the conclusion of the completeness process pursuant to SB 330. (Govt. § 65943(a),(b))

PROJECT SUMMARY

State Density Bonus Law – Election of Evaluation Criteria

The Applicant requests that Staff evaluate any Project requests related to State Density Bonus Law (Govt Code 65915 and AB 1763) and as specifically subject to Government Code Section 65915(b)(1)(G) and (c)(1)(B)(ii) for 100% affordable rental housing projects with an allocation of federal low-income housing tax credits. The Project will be 100% affordable rental housing exclusive of the manager units.

100% Affordable Rental Housing

The proposed project would include 249 total units, comprising 246 affordable units and 3 manager units. The Applicant anticipates the project financing will include an allocation of Low Income Housing Tax Credits from the California Tax Credit Allocation Committee (“TCAC”), and that the project will be subject to a 55-year regulatory agreement with TCAC, which will satisfy the requirements set forth in Government Code section 65915(c)(1)(A). The regulatory agreement shall include the household income eligibility restrictions identified in Government Code section 65915(b)(1)(G) and the rent restrictions set forth in Government Code section 65915(c)(1)(B)(ii).

The terms of the regulatory agreement will also address and satisfy the obligations under Chapter 14.04 of the Morgan Hill Municipal Code (“Inclusionary Requirement”). Specifically, any maximum rent restrictions placed on the project by the City pursuant to the Inclusionary Requirement will be satisfied within (not in addition to) the 20 percent of lower income unit rent restrictions described in Government Code section 65915(c)(1)(B)(ii)(I), with the remaining 80 percent of lower income rents restricted solely as described in Government Code section 65915(c)(1)(B)(ii)(II).

The statements above supersede any prior references to the project’s “Very Low Income” or “Low Income” units or rents. In addition, the Applicant makes no representation to the City as to the applicability of the project to any requirement the City may have regarding its regional housing needs requirements.

Primary Objectives

The Applicant’s primary objective is to optimize the site’s ability to contribute quality new affordable housing stock to the City of Morgan Hill, the County of Santa Clara, and the State of California.

The Applicant has worked with its architect and civil engineer to ensure a total unit count sufficient to make a meaningful contribution to the ongoing need for affordable housing, while also working to ensure that the project remains financially feasible with no requirement for subsidy funds from public agencies, including the City of Morgan Hill. To the extent the site’s specific physical, land use, or statutory requirements would impair the project’s ability to meet its primary objective, we respectfully request that the City appreciate the balance the Applicant is trying to create to the benefit of all parties and to the community at large.

While working to be compliant wherever possible with objective standards established by the City’s Residential Development Design and Development Standards (December 2019), the Applicant has also relied on features of SB 330, California’s Density Bonus law (including AB 1763), and the Housing Accountability Act to inform and guide specific design and engineering solutions.

State Density Bonus Law Requests

In the spirit of collaboration, the specific concession or waiver requests provided by State Density Bonus Law have been further revised from those included in prior submission letters dated October 6, 2020, November 4, 2020, and January 20, 2021. Throughout the process, several project modifications have been made to reduce the number of requests under the State Density Bonus Law; however, the Applicant reserves the right to make further requests in the future.

Allowable Density Calculation Before and After Utilization of the State Density Bonus

Given the site's split General Plan land use designations, the maximum density allowed before any density bonus is applied can be calculated by combining separate calculations for each designation. In our estimation, the City's General Plan Land Use Map (dated December 6, 2017) identifies approximately 70% of the site area as Residential Attached Low (6 – 16 Du/Ac) and approximately 30% of the site area as Mixed-Use Flex (7 – 24 Du/Ac). To the Applicant's knowledge there is no more precise delineation of land use designation shares for the site.

Prior to the application of any State Density Bonus, then, the land use split above provides a base allowed total unit count of 139 units. Because the proposed project will be 100% deed-restricted affordable housing for lower income households, it is eligible by right to utilize an 80% density bonus (Govt. Code § 65915(f)(3)(D)(i)) (adopted pursuant to AB 1763)) above the base density. Utilizing the full allowance of this density bonus would yield a total unit count of 250 units (139 units x 180%). *Please see Appendix A to this letter for a detailed account of these calculations.*

Required Parking Ratio in Compliance with State Density Bonus

In accordance with current State Density Bonus requirements (Govt. Code § 65915(p)(l)), the proposed project will provide one parking space per one bedroom unit and two parking spaces per two or three bedroom unit (inclusive of ADA and guest parking). As proposed, the project meets this standard as shown in the table below.

Parking:		
Unit Type	Req'd Ratio	Req'd Parking
1 Bedroom	1 sp/DU	70 spaces
2 Bedroom	2 sp/DU	232 spaces
3 Bedroom	2 sp/DU	126 spaces
Total Required		±428 (1.7 spaces per unit)
Parking Type	Provided Parking	
Tandem Carport Spaces	260 spaces	
Single Carport Spaces	5 spaces	
Standard Open Spaces	14 spaces	
Compact Open Spaces	98 spaces	
ADA Open Spaces	8 spaces	
EV-Ready Spaces	43 spaces	
Total Provided	±428 (1.7 spaces per unit)	

Despite not seeking the maximum allowable density per the State Density Bonus Law, the Applicant remains eligible to utilize the balance of tools the State Density Bonus Law provides to aid the production of new affordable housing.

Anticipated Applicant Requests for Concessions or Design Standard Waivers

Incentives or Concessions: Because the project will be 100% deed-restricted affordable housing, a total of 4 concessions or incentives may be requested by the Applicant (Govt. Code § 65915(d)(2)(D)) (adopted pursuant to AB 1763)). Incentives or concessions may include reductions in development or architectural design standards intended to reduce the cost of construction in to facilitate the development of affordable housing (Govt. Code § 65915(k)(1)).

The Applicant currently requests the following three concessions and reserves the right to alter its requested concessions if needed as the project is further refined following the City's official response to this application:

- Parking Space Dimensions (RDDS § 15; Morgan Hill Municipal Code § 18.72.060.B.2 and §18.108.070.B.1.f):* The proposed project meets the City's requirement in all cases other than the use of a partial compact dimension within the enclosed garage spaces, where instead of each tandem garage space measuring 10' x 20', two tandem spaces are each proposed at 10' by 18'. As proposed, the project provides only the 428 parking spaces required, with no surplus parking area to convert to other uses, and with no other surplus land area sufficient to otherwise repurpose without significantly reducing or eliminating open space and amenity areas, creating conflicts with other elements of the Morgan Hill RDDS, or violating other zoning or fire code requirements. Specifically, the project architect estimates that at 50-60 vehicle parking spaces would need to be removed to increase tandem garage space depths from 36' to 40'. Deepening these garage space depths would expand the building footprints of every building by 4', which would then reduce adjacent drive aisle widths below those required by the Morgan Hill Fire Department. Rather than reduce drive aisle depths, the additional 4' of garage bay depth would instead need to come from a significant reduction in the depth of adjacent open vehicle parking spaces, which would effectively eliminate those parking spaces as they would also then fall short of their minimum required depth of standard or compact spaces as required by the Morgan Hill zoning code. The net result would equate to the loss of approximately 50 – 60 open vehicle parking spaces which, at a required 1.7 spaces/unit parking ratio, would equal a loss of approximately 30 - 35 units from the site's maximum allowable density (please see Attachment 2 to Applicant's Response dated March 17, 2021 to City Notice of Application Incompleteness dated February 19, 2021). While this item is appropriately categorized as a waiver, the Applicant is willing to allow the City to evaluate this item as a concession per Staff's request. Taken as a concession request, the additional cost burden that compliance with this item would create (while otherwise maintaining the existing unit mix in compliance with all other requirements of the Morgan Hill or California design standards or building codes) would be to construct subterranean vehicle parking spaces to replace the surface-level vehicle parking spaces lost to accommodate standard parking space dimensions. A conservative estimate to construct subterranean parking for this purpose would likely add \$50K - \$70K of additional cost per vehicle parking stall. Taken against the estimated 50 - 60 surface spaces required to meet standard parking space dimensions for both tandem spaces (see notes above), compliance with this item would therefore add several million dollars of cost that the project economics are unable to feasibly support.
- Bicycle Parking and Storage (Morgan Hill RDDS § 17):* While the project does meet the City's quantitative requirement for short-term bicycle parking (56 total), it will not meet the City's requirement for covered bicycle parking or provide any long-term bicycle parking. The Applicant's consultants have estimated that the land area required to provide covered short-term bicycle parking per City standards would require twice the land area required for uncovered short-term bicycle parking, removing 8–12 vehicle parking spaces from the balance of the project, while providing long-term bicycle parking spaces per City standards would further reduce vehicle parking by an additional 5 spaces. Taken separately or together, these changes would require either a substantial reduction in surface parking spaces from the greater project, physically precluding and thereby reducing the quantity of affordable housing units that can be built due to required parking ratios (please see Attachment 1 to Applicant's Response dated March 17, 2021 to City Notice of Application Incompleteness dated February 19, 2021). While this item is appropriately categorized as a waiver, the Applicant is willing

to allow the City to evaluate this item as a concession per Staff's request. Taken as a concession request, the additional cost burden that compliance with this item would create (while otherwise maintaining the existing unit mix in compliance with all other requirements of the Morgan Hill or California design standards or building codes) would be to construct subterranean vehicle parking spaces to replace the surface-level vehicle parking spaces lost to provide long-term bicycle storage lockers. A conservative estimate to construct subterranean parking for this purpose would likely add \$50K - \$70K of additional cost per vehicle parking stall. Taken against the estimated 8 – 12 surface spaces required to meet the long-term bicycle requirement (see notes above), compliance with this item would therefore add several hundred thousand dollars of cost that the project economics are unable to feasibly support.

- *Pavement Design (Morgan Hill RDDS § 38):* We understand there is a new requirement that 10% of the paved surface area are composed of decorative paving material. The project provides decorative paving materials for a total of 2% of its paved areas. Given the size of the site, increasing what has been provided by 5x would add significant and unnecessary additional cost burden to the property that affordable housing economics are not designed to support. As we understand that the 10% paving requirement has recently been adopted, the proposed project, with the requested concession, will not differ from recently completed communities in the city. The cost difference between pavement and a decorative concrete or paver is 4-5x higher.

Waivers or Reductions of Development Standards: Separate from requests for incentives/concessions, the State Density Bonus Law allows a qualifying Applicant to request a waiver or reduction of development standards. Government Code Section 65915(e) provides that no city shall “apply any development standard that will have the effect of physically precluding the construction of a development meeting the [affordable housing] criteria at the densities or with the concessions or incentives permitted by [the SDBL].”

For ease of reference, the State Density Bonus Law reads as follows relative to reductions or waivers from development standards:

“Development standard' includes a site or construction condition, including, but not limited to, a height limitation, a setback requirement, a floor area ratio, an onsite open-space requirement, or a parking ratio that applies to a residential development pursuant to any ordinance, general plan element, specific plan, charter, or other local condition, policy, resolution, or regulation.” (Govt. Code 65915(o)(1))

“A proposal for the waiver or reduction of development standards pursuant to this subdivision shall neither reduce nor increase the number of incentives or concessions to which the Applicant is entitled.” (Govt. Code 65915(e)(2))

The Applicant requests the following reductions or waivers of development standards and reserves the right to request additional reductions or waivers if needed as the project is further refined:

- *Building Height (Morgan Hill Zoning Code Table 18.22-2):* In its letter dated December 18, 2020, the City requested an explanation as to how the maximum building height of the project (38') complies within a zoning district with a 35' height limit. After accounting for required drive aisle widths, pedestrian access paths, open space and amenity requirements, and the California Fire Code, the site lacks any meaningful surplus land area to accommodate mechanical equipment on the ground without also reducing the project density or, further, without violating Morgan Hill RDDS § 34, which requires that all mechanical equipment

(specifically, “all roof mounted equipment”) be screened in a manner that “so as not to be visible from the public right-of-way, common areas, or contained within an enclosed structure”. As elsewhere in the project planning, the project architect has sought the most appropriate balance of RDDS requirements and optimal density wherever possible. To specifically ensure compliance with Morgan Hill RDDS § 34, a 4:2 roof pitch has been designed such that all roof mounted equipment (to include HVAC condenser dimensions consistent with this product type) should not be visible from a public right-of-way while also accounting for the 30’ maximum roof access height required by the California Fire Code (please see Figure 1 below). However, the architect also notes that the ultimate roof height of any given residential building may be closer to 35’ than 38’ given conditions that may be clarified during the permitting or construction stages of the project development. The Applicant’s request for a 3’ waiver allowance in this regard is intended to allow a reasonable amount of variance from the 35’ standard where necessary to accommodate the balance of objectives outlined herein.

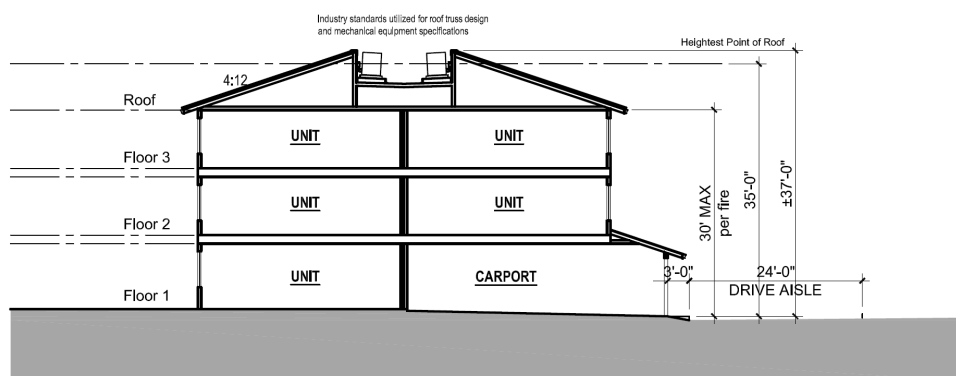


Figure 1

Further, the Applicant notes that Building 12 and Building 13 were voluntarily and deliberately designed as two-story structures to soften the transition between the project and the existing single-family homes east and north of the property on Taylor Avenue. While not a requirement of the RDDS or State Density Bonus Law, the Applicant feels this was a common-sense approach to balancing optimal density, project viability, and the RDDS while also trying to be thoughtful about the project’s single-family neighbors.

- FAR Requirement within the MU-F Portion of the Site (Morgan Hill Zoning Code Table 18.22-2):* As you know, the project site has two zoning designations. The MU-F zoning carries a 0.5 Floor Area Ratio (FAR) limit. However, it is the Applicant’s understanding that the FAR standard applies to any nonresidential projects/components as separate “residential density” (24 du/ac) standards are provided for residential development (Table 18.22-2). Further, the definition of Floor Area Ratio includes references to “nonresidential” components. (Zoning Code 18.128.050). For the sake of information, if FAR were calculated for the portion of the site within the MU-F, it would be 0.8 FAR. This would conflict with the density allowed by the 24 du/ac standard. Any zoning requirement (FAR, Du/Ac, et cetera) that would otherwise reduce the maximum allowable density provided under the General Plan land use element (in this case, 24 Du/Ac before density bonus) should be disregarded as provided by Govt. Code § 65915(o)(2), which states that:

"Maximum Allowable Density" means the density allowed under the zoning ordinance and

land use element of the general plan, or, if a range of density is permitted, means the maximum allowable density for the specific zoning range and land use element of the general plan applicable to the project. If the density allowed under the zoning ordinance is inconsistent with the density allowed under the land use element of the general plan, the general plan density shall prevail."

- *Front Setbacks Along Taylor Avenue (Morgan Hill Zoning Code Table 18.22-3):* Given a slight angle to the parcel boundary, the northeastern site boundary (the 'front setback' of the RAL 3,500 portion of the site) along Taylor Avenue requires a reduction in design standards against the RAL zoning requirement for a 20' front setback. At its narrowest point, the front setback along Taylor Avenue will be approximately 15.7'. The Applicant requests a reduction in setback standards to maintain allowable density while also providing for adequate drive aisle widths and resident parking spaces behind Building 12. Accommodating a continuous 20' setback at this point of the site would require a reduction in surface parking spaces from the greater project (physically precluding and thereby reducing the quantity of affordable housing units that can be built due to required parking ratios) or the construction of subterranean parking, which would add an insupportable cost burden to the project.

The Applicant has otherwise worked to be compliant with Morgan Hill's Residential Development Design and Development Standards (December 2019) wherever possible. Based on our current understanding of the City's standards, the Applicant believes the proposed project complies with all other objective requirements not otherwise addressed in this letter.

Please contact us with questions you may have. We look forward to moving this project ahead.

APPENDIX A

Calculation of Maximum Allowable Density Per the Morgan Hill General Plan Land Use Map (December 2017)

MONTEREY-MADRONE SITE (APN 726-36-059)

Total Site Acres	7.536
General Plan Land Use Designation	Residential Attached Low (6 - 16 Du/Ac), Mixed-Use Flex (24 Du/Ac)
Maximum DU Allowed After State Density Bonus	250
Maximum Density Allowed After State Density Bonus	33.12 Du/Ac

RESIDENTIAL ATTACHED LOW PORTION			
Share of Total Land Area Shaded as RAL on GP Land Use Map	70%		
Total Land Acres Designated RAL	5.28		
	Du/Ac Allowed	Before 80% SDB ¹	After 80% SDB ¹
		DU Allowed	DU Allowed
DU Allowed Per General Plan	16	84	152
Maximum DU Allowed - Residential Attached Low Portion			152

MIXED-USE FLEX PORTION			
Share of Total Land Area Shaded as MU-F on GP Land Use Map	30%		
Total Land Acres Designated MU-F	2.26		
	Du/Ac Allowed	Before 80% SDB ¹	After 80% SDB ¹
		Du Allowed	DU Allowed
DU Allowed Per General Plan	24	54	98
Maximum DU Allowed - Mixed-Use Flex Portion			98

¹ Because the proposed project will be 100% deed-restricted affordable housing for Very Low Income and Low Income households, it is eligible by right to utilize an 80% density bonus above the base density (Govt. Code § 65915(f)(3)(D)(i)) and AB 1763.

RESOLUTION NO.

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF MORGAN HILL GRANTING AN 80 PERCENT DENSITY BONUS AND THREE CONCESSIONS FOR MONTEREY – MINER (JEMCOR) FOR A 249-UNIT AFFORDABLE HOUSING DEVELOPMENT TO BE LOCATED AT THE NORTHEAST CORNER OF MONTEREY ROAD AND MADRONE PARKWAY (APN: 726-36-059).

WHEREAS, Jemcor Development Partners has requested an 80 percent density bonus and three concessions for the affordable housing development including reduced parking space dimensions for enclosed garages, the elimination of covered and long-term bicycle storage and the reduction of decorative pavement.

WHEREAS, the Project is an affordable housing development project that includes 100 percent affordable rental units for lower income houses (excluding managers unit).

WHEREAS, pursuant to Government Code Section 65915(f)(3)(D)(i), the Project is entitled to a density bonus of 80 percent of the number of units for lower income households.

WHEREAS, pursuant to Government Code Section 65915(d)(2)(D), the Project is allowed up to four concessions.

WHEREAS, none of the findings for denial of the concessions required by Government Code Section 65915(d)(1) are supported by substantial evidence.

WHEREAS, the Monterey-Miner (Jemcor) project to be located at the northeast corner of Monterey Road and Madrone Parkway and identified by Assessor's Parcel Number 726-36-059 will provide a public benefit of a 100 percent affordable housing and will be deed restricted for 55 years, or the density bonus and three concessions granted for the reduced parking space dimensions for enclosed garages, the elimination of covered and long-term bicycle storage and the reduction of decorative pavement will become null and void.

NOW THEREFORE, THE CITY COUNCIL OF THE CITY OF MORGAN HILL DOES HEREBY FIND, DETERMINE, RESOLVE AND ORDER AS FOLLOWS:

Section 1. The City Council does hereby find that the foregoing recitals are true and correct.

Section 2. The Project is consistent with the Zoning Ordinance and General Plan.

Section 3. The City Council of the City of Morgan Hill hereby grants the density bonus and the three concessions for the Monterey-Miner (Jemcor) project.

Section 4. This resolution shall take effect immediately upon adoption.

PASSED, APPROVED, AND ADOPTED by the City Council of the City of Morgan Hill at its meeting held on this 21st day of April 2021 by the following vote:

AYES: **COUNCIL MEMBERS:**
NOES: **COUNCIL MEMBERS:**
ABSTAIN: **COUNCIL MEMBERS:**
ABSENT: **COUNCIL MEMBERS:**

APPROVED:

ATTEST:

RICH CONSTANTINE, Mayor

MICHELLE BIGELOW, City Clerk

∞ **CERTIFICATION** ∞

I, Michelle Bigelow, City Clerk of the City of Morgan Hill, California, do hereby certify that the foregoing is a true and correct copy of Resolution No.21-xxx, adopted by the City Council at the meeting held on April 21, 2021.

WITNESS MY HAND AND THE SEAL OF THE CITY OF MORGAN HILL.

DATE: _____

MICHELLE BIGELOW, City Clerk

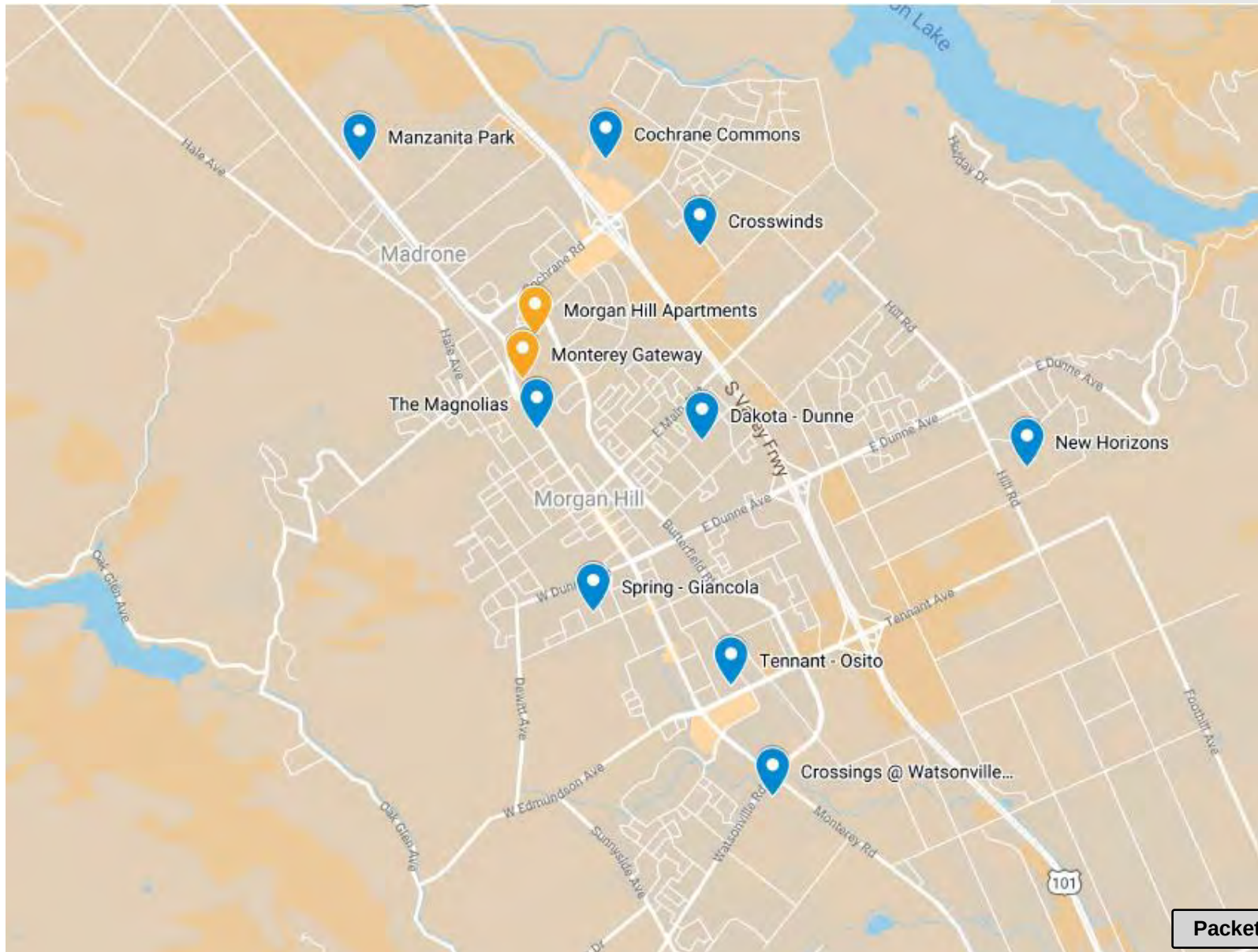
Significant Project Updates -April 2021-



Housing Projects Underway

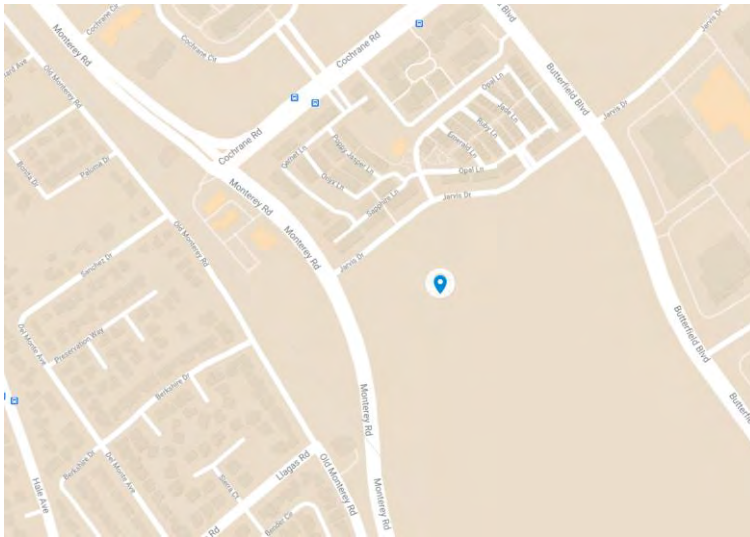


Housing Projects



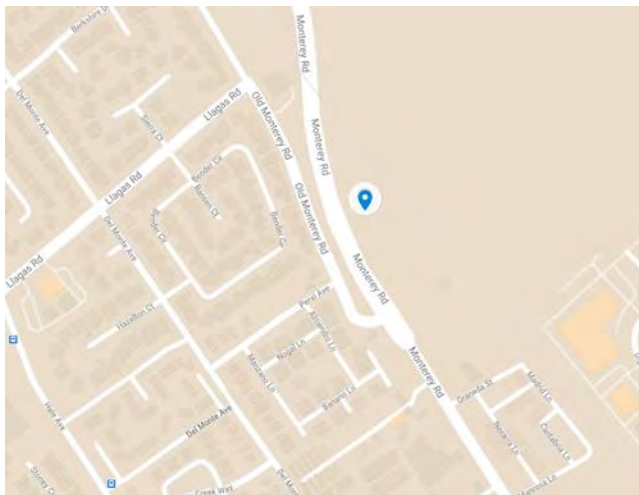
Morgan Hill Apartments (Braddock and Logan)

- 389 Apartments, including 78 very low-income
- Design Permit approved, grading underway
- <http://www.morgan-hill.ca.gov/1959/Morgan-Hill-Apartments>



Monterey Gateway (City Ventures)

- 101 Townhomes
- Design Permit and Building Permits approved
- Construction underway
- <http://www.morgan-hill.ca.gov/1978/Monterey---City-Ventures>



Housing Projects Submitted or Pending



Monterey-Madrone (Jemcor)

- 249 units - 100% Affordable – Density Bonus & SB330
- Application Complete – next step CEQA review
- <http://www.morgan-hill.ca.gov/2096/Monterey-Madrone-Affordable-Housing-Deve>



Crossings at Watsonville Road (UHC)

- 73 units - 100% Affordable – Density Bonus & SB330 (no density bonus, only concessions)
- Application Complete – CEQA underway
- <http://www.morgan-hill.ca.gov/2082/Watsonville-Hordness-Crossings-Updated-Monter>



The Magnolias

(First Community Housing)

- 66 units - 100% Affordable – Density Bonus and SB350
- Application under review - next step CEQA review
- <http://www.morgan-hill.ca.gov/2142/Monterey---First-Community-Housing-Magno>



Monterey-Manzanita Park (Dividend)

- 67 units
- Application Complete – CEQA review underway
- <http://www.morgan-hill.ca.gov/2074/Manzanita-Park>



Morgan Hill Senior Housing (Beacon)

- 82 units – 100% affordable - low-income senior apartment
- Design Permit Approved
- Demolition Permit approved
- <http://www.morgan-hill.ca.gov/2016/Morgan-Hill-Senior-Housing>



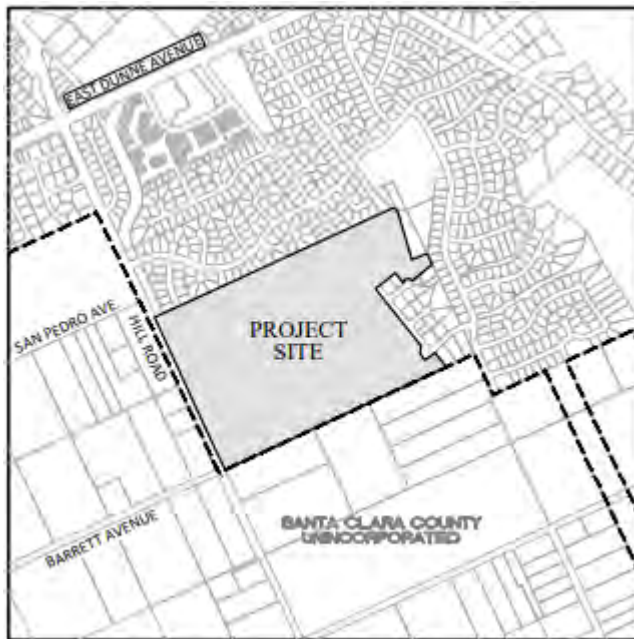
Crosswinds (Dividend)

- 269 units
- Environmental review underway
- <http://www.morgan-hill.ca.gov/2042/Half-Dividend-Crosswinds-Residential-Dev>

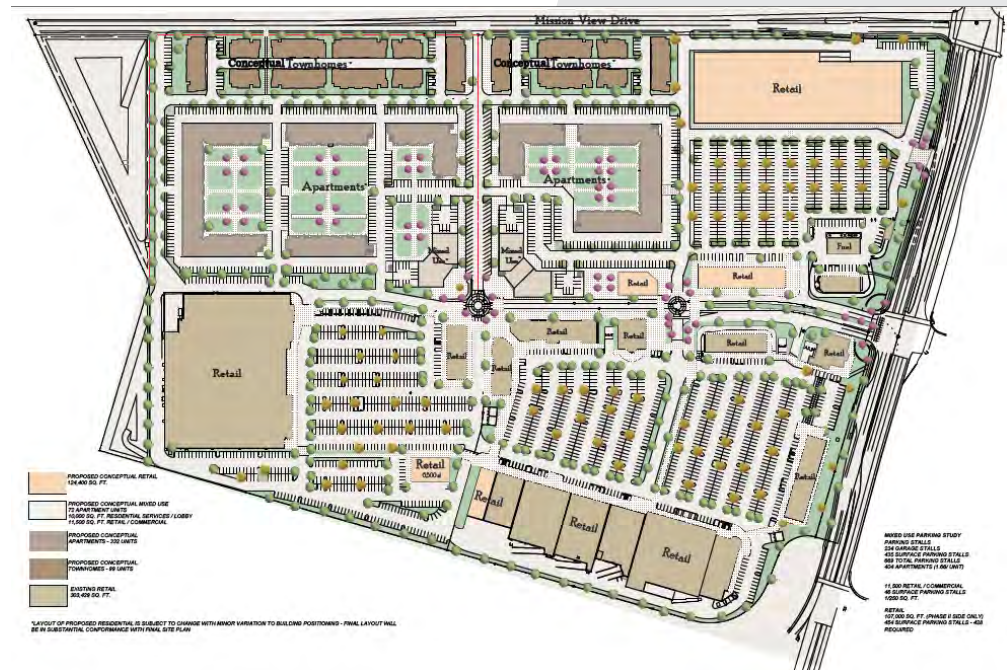


New Horizons (Morgan Hill Devco)

- Proposed General Plan & Zoning amendments
- Environmental underway
- <http://www.morgan-hill.ca.gov/2041/Hill---Morgan-Hill-Devco-LLC>



- Proposed General Plan amendment and additional housing units as part of Planned Development Amendment for Phase 2
- Environmental Review underway

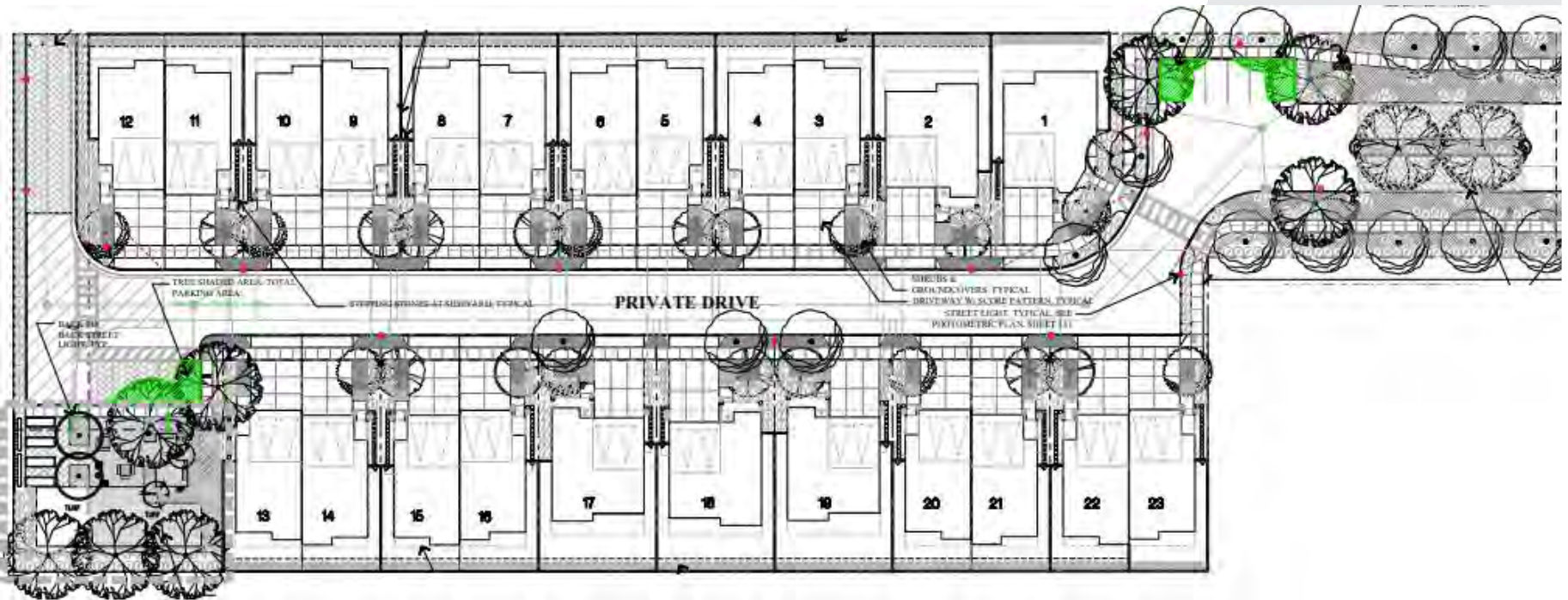


Communication: RECEIVE UPDATE ON SIGNIFICANT DEVELOPMENT PROJECTS

- <http://www.morgan-hill.ca.gov/2069/Cochrane-Commons>

Spring - Giancola

- 23 units
- Application Incomplete



Tennant - Osito

- 16 units
- Design Permit approved
- <http://www.morgan-hill.ca.gov/2066/Tennant-Osito>



Other Housing Projects

Dakota-Dunne – 4 units

- Application pending

Projects Currently Processing



Voices Charter School

- Approved Conditional Use Permit
- Approved Design Permit
- Building Permit issued
- Modular Construction
- <http://www.morgan-hill.ca.gov/1962/Voices-Charter-School>



DePaul Center

De Paul Health Center opened December 2020 to treat non-acute step-down patients during the current Covid-19 surge.



Redwood Tech 101

- Five (5) industrial buildings totaling 501K SF on 29 acres
- Application for Design Review Permit and Vesting Tentative Map complete
- Proposal conforms to what is allowed in Zoning Code – no zoning or General Plan changes proposed
- <http://www.morgan-hill.ca.gov/2128/Redwood-Tech-at-101>



Golden State Assembly Expansion

- 40K SF
- Manufacturing, warehouse, and distribution
- Grading completed, finalizing building permits



Techcon

- 45,000 SF R&D, manufacturing and office facility
- Approved Design Permit
- Building permit processing
- <http://www.morgan-hill.ca.gov/1963/Cochrane-Monument-Land-Co-Techcon>



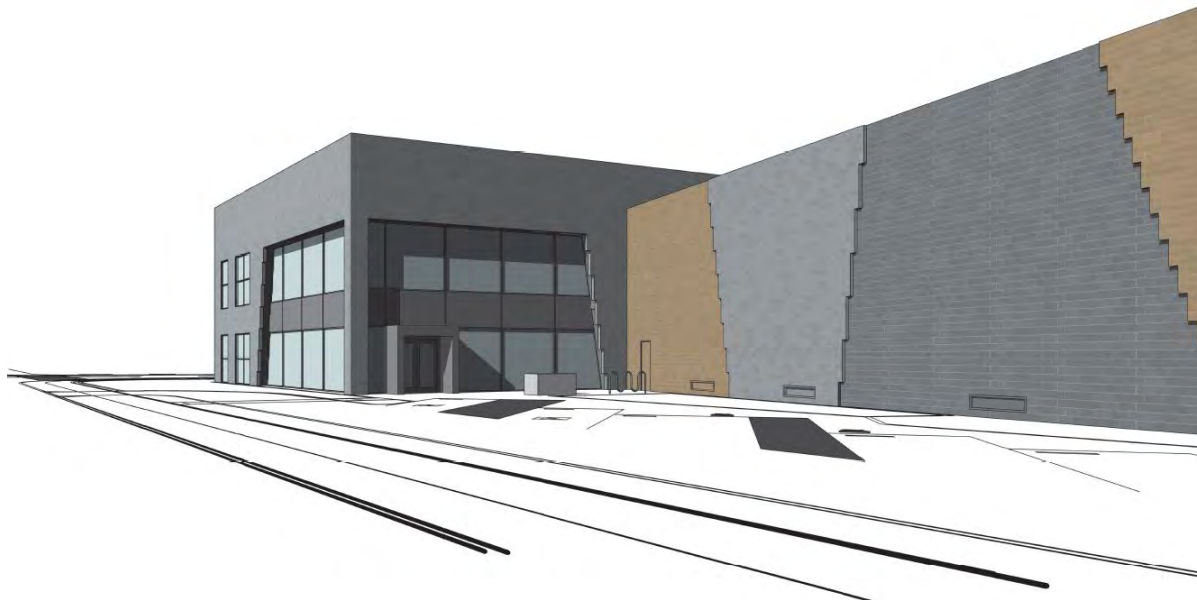
Lillian Commons

- Proposal includes a 55-bed hospital, a 10,000 SF medical office building, a 4,000 SF urgent care facility, 10,000 SF of retail space, open space and up to 150 multifamily units
- PC Reviewed September/October
- City Council approved December 2020
- <http://www.morgan-hill.ca.gov/1961/Lillian-Commons>



Level 10 Construction

- 79K SF Office and Warehouse building
- Approved Design permit
- Demolition Permit issued for existing building
- Building permit processing
- <http://www.morgan-hill.ca.gov/2055/Railroad-Level-10-Construction>



Cardinale Automotive

- Temporary Use operational
- Design Permit amendment and Building Permit for permanent structure processing



Railroad - Goyal

- 22.4K SF
- 2 Industrial buildings
- Approved Conditional Use Permit
- Approved Design Permit
- Building permit under review
- <http://www.morgan-hill.ca.gov/2018/Railroad---Goyal>



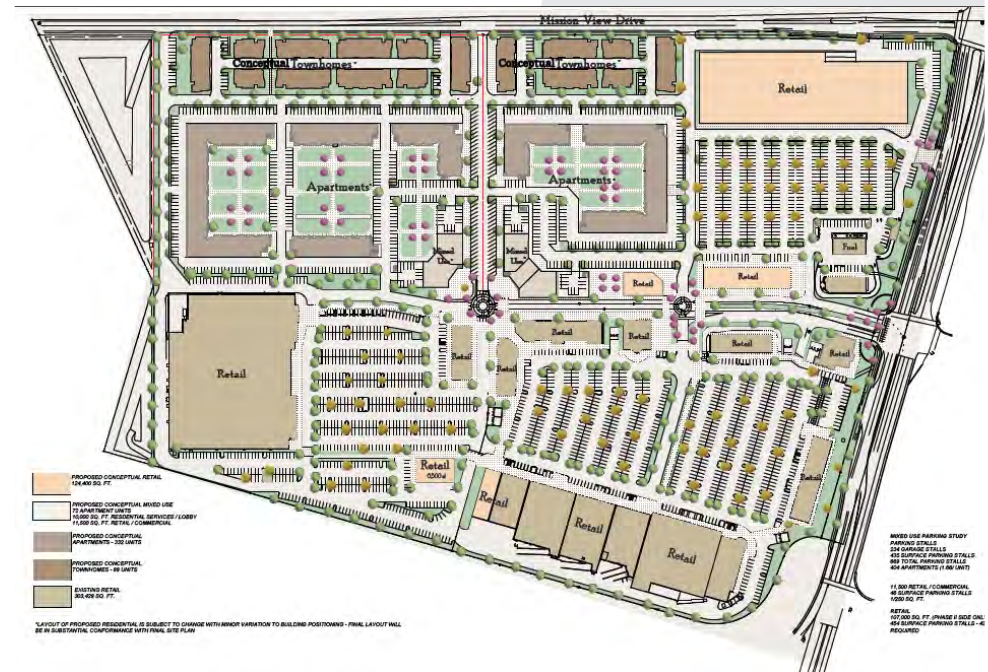
Downtown Gallery – W. 2nd St.

- Approved Design Permit
- 2-story Gallery



- Re-positioning as “lifestyle” center
(formerly approved for 500,000 retail/multi-screen theater)

- General Plan amendment submitted as part of updated application for Planned Development Amendment for Phase 2



- <http://www.morgan-hill.ca.gov/2069/Cochrane-Commons>

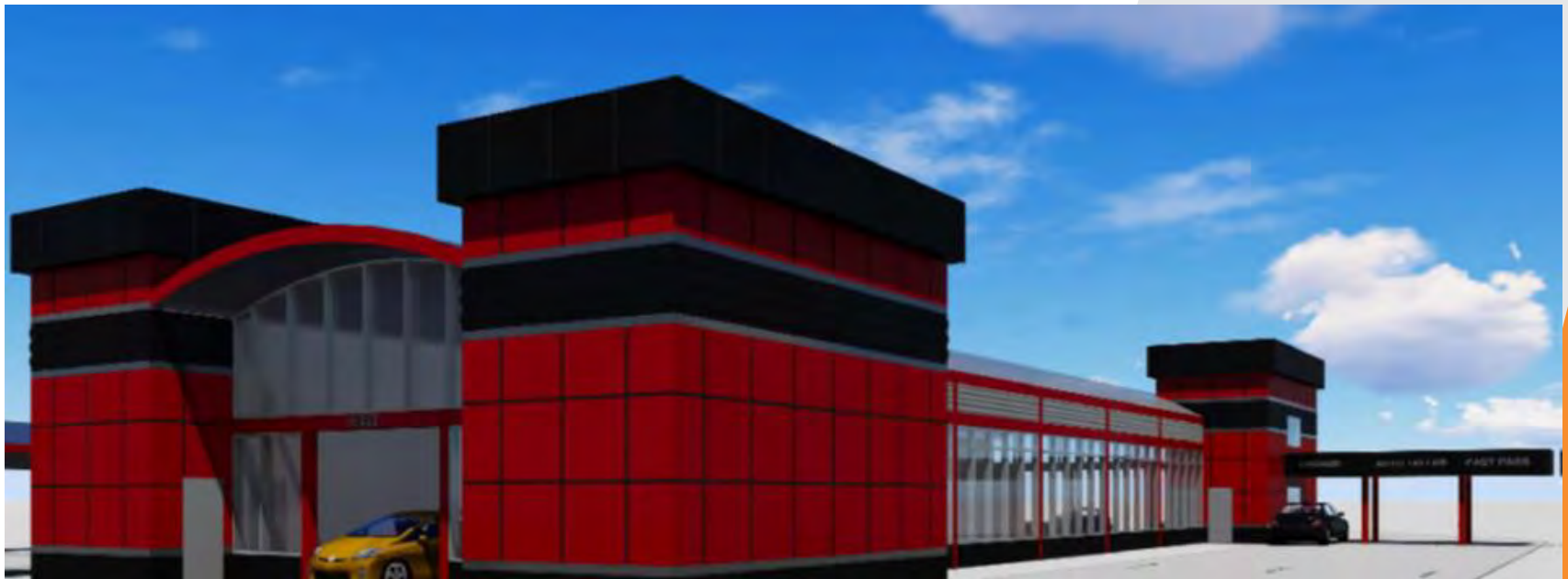
Depot-Latale/The Lumber Yard

- Approved Design permit
- Final street improvement design underway



Zip Thru Car Wash

- Approved Design permit
- Approved Conditional Use Permit
- Building permit processing



Coming Soon...

- Redeveloped World Oil site at Monterey and San Pedro
- 965 San Pedro – 8 Single Story building business park

Projects Under Construction



Butterfield Technology Park

- 600K SF Industrial Park
- Five (5) industrial buildings totaling 410K SF
- Design Permit approved
- Construction underway
- <http://www.morgan-hill.ca.gov/2087/Butterfield-Technology-Park>



Shoe Palace Expansion

- 503K SF
- Shoe Palace Headquarters
- Shell construction complete, landscaping complete, tenant improvements underway
- <http://www.morgan-hill.ca.gov/1960/Shoe-Palace>



Granada Hotel and Market Hall

- 60-Room Boutique Hotel, Market Hall, Spa
- Phase I concrete construction complete
- Phase II framing last 2 floors of construction delayed by COVID 19



Silicon Valley Glass Relocation

- 31K SF new industrial building
- Under construction



Applied Motion Products

- 24K SF Phase I
- Office, R&D, Manufacturing and Assembly
- Under construction



Carpenters Training Center Expansion

- 55K SF Training facility
- Under construction



Evergreen Village Shopping Center

- 20-Acre Commercial Development
- Hotel, Gas Station, Skilled Nursing approved
- Entitlements processing for retail/food
- Developer working with potential future tenants
- Off site improvements completed
- <http://www.morgan-hill.ca.gov/2068/Evergreen-Village>



Recently Completed Projects



Sunsweet Mixed-Use Project

- 83-market rate apartments
- 8K SF of retail
- Construction complete, leasing underway



Depot Station Mixed-Use Project



- 29 Housing Units and 8K SF of Retail Condominiums
- Construction complete



Granary Expansion

- 5K SF Retail space
- Construction complete



Ceballos Construction

- 17K SF Industrial Building
- Construction complete





CITY COUNCIL STAFF REPORT

MEETING DATE: April 21, 2021

PREPARED BY: Dat Nguyen, Finance Director
APPROVED BY: City Manager

RECEIVE MONTHLY BUDGET UPDATE, MARCH 2021 FINANCIAL AND INVESTMENT REPORTS, AND CITY MANAGER AUTHORITY REPORTS

RECOMMENDATION(S)

Accept and file report.

COUNCIL PRIORITIES, GOALS & STRATEGIES

Ongoing Priorities

Maintaining Infrastructure
Preserving and Cultivating Public Trust

2020-2021 Strategic Priorities

Community Outreach
Engagement and Messaging
Fiscal Sustainability

REPORT NARRATIVE:

As part of the City Council's expectation to maintain a high level of transparency and to be responsible stewards of public funds, staff is providing this monthly budget update, along with the March 2021 financial and investment reports (Attachment 1 and 2).

March 2021 Financial Report

The Revenue and Expense Summary through March 2021 is included on the first page of the monthly financial report (Attachment 2). Overall, General Fund revenues total \$23.1 million or about 58% of the budget. Expenditures, including encumbrances, amounted to \$30.4 million or 69% of the budget.

Budget Update

Based on the latest projection from HdL, the City's sales tax consultant, sales tax revenue before rebates for the current fiscal year is projected to be approximately \$10.2 million, an increase of approximately \$0.5 million from prior projection. The increase is partially due to the opening of the Chrysler Dodge dealership as well as continued strength in certain segments such as autos/transportation and County pool. As consumers continue to shift more toward online spending, which further accelerated due to the COVID-19 pandemic, robust growth in this segment has resulted statewide.

As for property tax, the most recent County's estimate projected Morgan Hill property tax revenue, excluding the property transfer tax, at \$15.4 million for the fiscal year 2020-21, higher than budget by about \$1.8 million mainly due to higher receipts of excess

Educational Revenue Augmentation Fund (ERAF) and former RDA residual distribution as a result of bond refunding savings.

An increase in sales tax and property tax are expected to be offset by reduced certain revenue categories such as recreation services and Transient Occupancy Tax (TOT). Staff's earlier projection for recreation services of an additional net loss of approximately \$1.6 million in the worst-case scenario is becoming more of a reality. As for TOT, total collection to date is at about 50% of prior year level. Unless a more robust pick up in the final months of the fiscal year, TOT is projected to come in about \$0.5 million less than the already reduced budget for the current year.

City Manager's Authority Report

Pursuant to the City Council Policy 18-05 – Report on delegation of authority to City Manager, Page 17 of Attachment 2 lists the contracts and or agreements between \$25,000 to \$60,000, or the limit of the California Uniform Public Construction Cost Accounting Act (CUPCAA), entered into by the City Manager since the last report from January 7, 2021 through April 8, 2021.

COMMUNITY ENGAGEMENT: Inform

Finance staff prepares these financial reports to inform City officials, the Council, the community, and various lenders and stakeholders about the financial health of the organization, which assists each one of the interested parties in making sound financial and investment decisions.

ALTERNATIVE ACTIONS:

No alternative action is recommended, as this is a monthly financial report on City transactions which have already occurred.

PRIOR CITY COUNCIL AND COMMISSION ACTIONS:

The City Council receives and files the financial and investment report for each month. At the September 16, 2015 meeting, City Council recommended monthly financial and investment reports be agendized under the Consent Agenda, and quarterly financial and investment reports be presented to City Council as an "Other Business" item. Beginning in FY 2020-21, budget reports are presented to the City Council monthly.

FISCAL AND RESOURCE IMPACT:

The preparation of the report is a part of the Finance workplan. Staff does not recommend any budget adjustments at this time.

CEQA (California Environmental Quality Act):

Not a Project.

This report is not a project, as defined in Section 15378 of the State CEQA Guidelines. Organizational or administrative activities of governments that will not result in direct or indirect physical changes in the environment.

LINKS/ATTACHMENTS:

1. March 2021 Financial Statement Analysis
2. March 2021 Financial and Investment Report

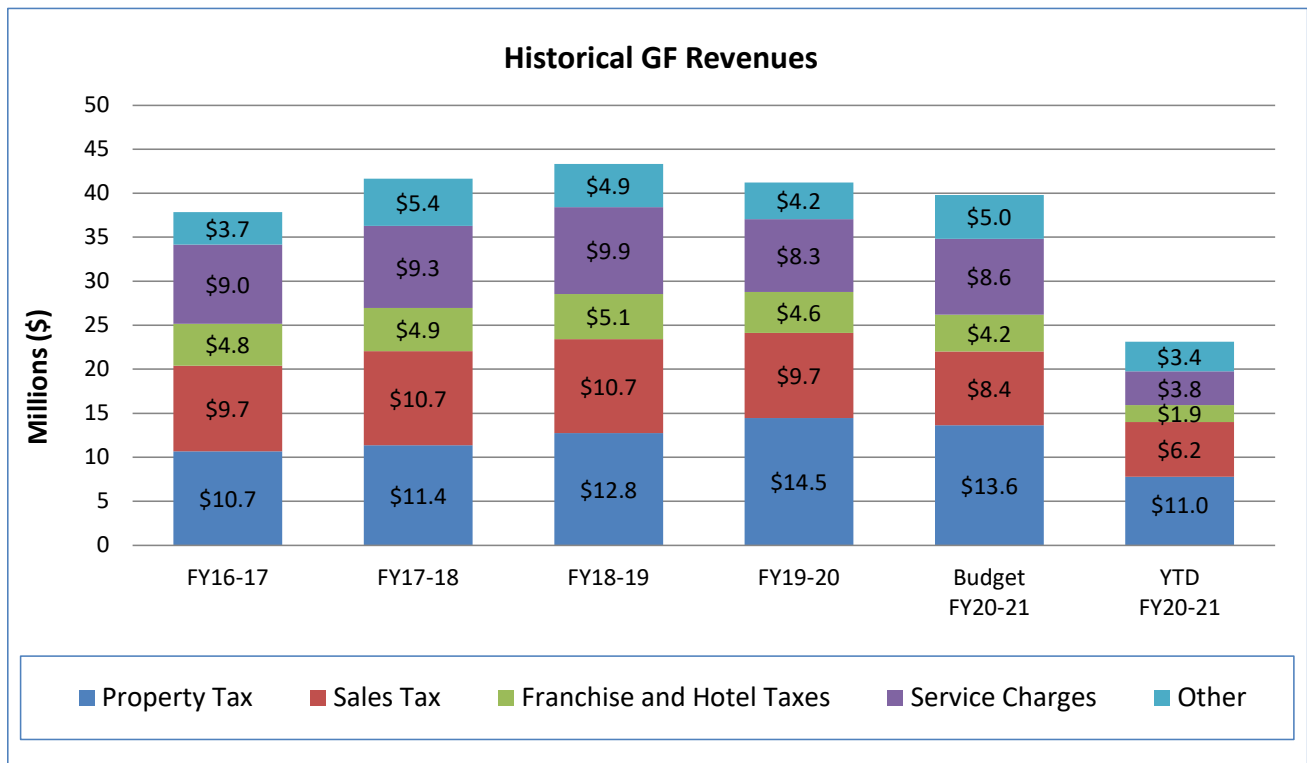


CITY OF MORGAN HILL, CALIFORNIA
FINANCIAL STATEMENT ANALYSIS - FISCAL YEAR 2020-21
FOR THE MONTH ENDED MARCH 2021 – 75% OF YEAR COMPLETE

- **General Fund** – Revenues through March totaled \$23.1 million, or about 58% of the budgeted revenues. The most recent County’s estimate projected Morgan Hill property tax revenue, excluding the property transfer tax, at \$15.4 million for the fiscal year 2020-21, higher than budget by about \$1.8 million mainly due to higher receipts of excess Educational Revenue Augmentation Fund (ERAF) and former RDA residual distribution as a result of bond refunding savings. Excess ERAF is the money that is returned to the cities, counties, and special districts after schools reach their state-mandated thresholds. Property tax is the largest source of Morgan Hill's General Fund revenue. However, it accounts for only 34% of the approximately \$39.8 million General Fund revenue. Although property tax tends to be a more predictable revenue source, other major revenue categories such as sales tax and transient occupancy tax, which account for a large portion of the City's General Fund revenue, are more volatile and tend to fluctuate more with swings in the economy.

As for sales tax, based on the latest projection from the City’s sales tax consultant, HdL, sales tax revenue before rebates for the current fiscal year is projected to be approximately \$10.2 million, an increase of approximately \$0.5 million from prior projection. The increase is partially due to the opening of the Chrysler Dodge dealership as well as continued strength in certain segments such as autos/transportation and County pool. As consumers continue to shift more toward online spending, which further accelerated due to COVID-19 pandemic, resulting in robust growth in this segment across statewide.

The chart below shows historical General Fund revenues by major revenue category from FY16-17 through FY19-20 Actual, FY20-21 Budget, and YTD as of March 31, 2021.

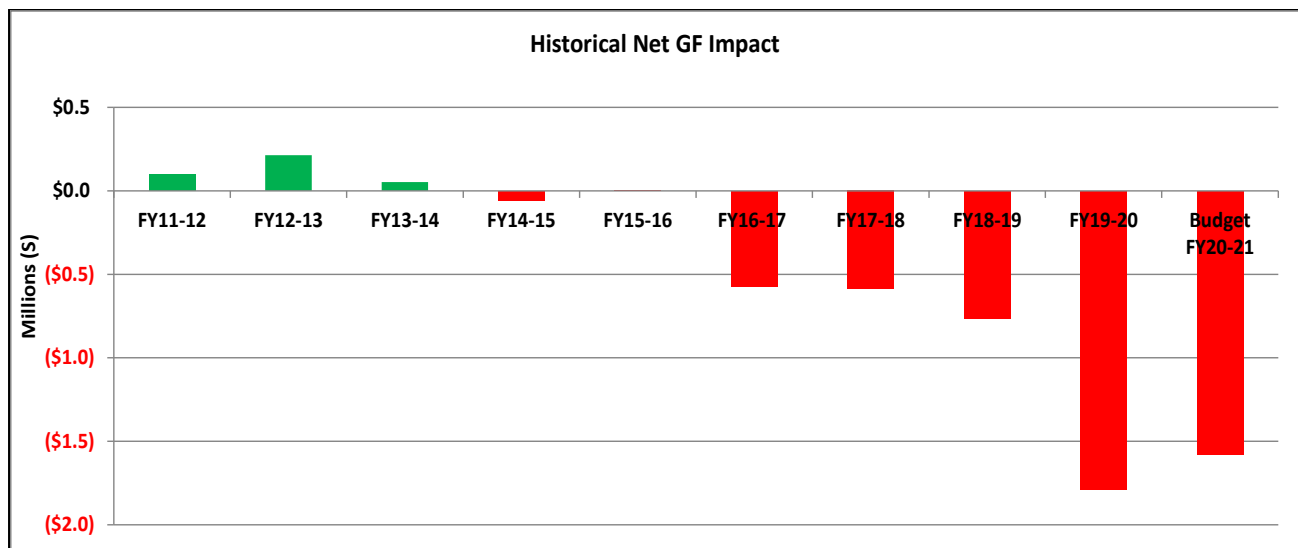




CITY OF MORGAN HILL, CALIFORNIA
FINANCIAL STATEMENT ANALYSIS - FISCAL YEAR 2020-21
FOR THE MONTH ENDED MARCH 2021 – 75% OF YEAR COMPLETE

General Fund expenditures and encumbrances as of March 31, 2021 totaled \$30.4 million, of which approximately \$1.4 million is attributable to outstanding encumbrances.

- **Community Services** - The Community Services Department's recreation operations, as reflected in the schedule presented on page 4 of the Monthly Financial and Investments Reports, shows a negative impact to the General Fund of approximately \$2.8 million as of March 31, 2021. The large operating loss for recreation operations reflect the continued closure of indoor recreation facilities since March 2020 due to shelter-in-place order as a result of coronavirus pandemic. The indoor recreation facilities just begun to open with a very limited capacity recently.



Due to longstanding governmental accounting and budgeting convention, the City's recreation operations are not charged for indirect costs (known in Morgan Hill as "General Fund Administration") from the central services departments of City Attorney, City Manager, and Administrative Services. The City's other governmental funds, such as Community Development, and the proprietary funds, such as Water and Wastewater, and the Information Services Fund, are assessed such charges through the City's indirect cost allocation plan, prepared in compliance with the Federal government's OMB Circular No. A-87, which mandates certain calculation and cost allocation practices that must be followed in order to qualify for Federal grant funding, but which also represent best practice for non-grant funded City operations like utilities and information services.

- **Development Services Fund** – Revenues received through March 31, 2021 totaled approximately \$3.6 million. Expenditures, including encumbrances, totaled \$3.8 million. The fund is projected to borrow \$1.0 million from the General Fund for the current fiscal year. Staff is currently engaging a consultant to conduct a comprehensive fee study to update the current fees which were developed about five years ago.
- **Debt Service Funds** – Expenditures through March 31, 2021 totaled about \$540,000. The debt service for the first half of the year includes both interest and principal, while the second half of the year will include interest only. Debt service payments were all scheduled when the bonds were issued, and are budgeted for in the months delineated in the underlying bond documents. The General Fund's portion of the annual debt service payments is approximately \$200,000, less than one percent of the General



CITY OF MORGAN HILL, CALIFORNIA
FINANCIAL STATEMENT ANALYSIS - FISCAL YEAR 2020-21
FOR THE MONTH ENDED MARCH 2021 – 75% OF YEAR COMPLETE

Fund's budgeted revenues.

- **Wastewater Operations** – Revenues from Sewer Operations through March 31, 2021 totaled \$9.5 million. Expenditures and outstanding encumbrances totaled \$10.0 million or 75% of the budget. The table below shows historical Sewer Operations revenues and expenditures from FY16-17 through FY19-20 Actual, FY20-21 Budget, and YTD as of March 31, 2021.

(amount in millions)	FY16-17	FY17-18	FY18-19	FY19-20	Budget FY20-21	YTD FY20-21
Revenues	9.7	10.3	11.4	11.9	13.3	9.5
Expenditures	9.8	10.8	11.4	12.3	13.3	10.0
Operating Margin	(0.1)	(0.5)	-	(0.4)	-	(0.5)
Operating Margin without Encumbrances	(0.0)	(0.3)	0.4	(0.1)	-	(0.3)

- **Water Operations** – Water Operations includes Utility Billing, Water Conservation, and Water Operations. Revenues from Water Operations through March 31, 2021 totaled \$11.2 million. Water Operations expenditures, including outstanding encumbrances, totaled \$11.6 million. Without the encumbrances, however, the expenditures amounted to \$10.7 million. The table below shows Water Operations revenues and expenditures from FY16-17 through FY19-20 Actual, FY20-21 Budget, and YTD as of March 31, 2021.

(amount in millions)	FY16-17	FY17-18	FY18-19	FY19-20	Budget FY20-21	YTD FY20-21
Revenues	10.9	13.0	14.2	15.3	15.6	11.2
Expenditures	11.2	12.1	14.3	16.4	15.6	11.6
Operating Margin	(0.3)	0.9	(0.1)	(1.1)	-	(0.4)
Operating Margin without Encumbrances	(0.1)	1.4	0.8	(0.1)	-	0.5

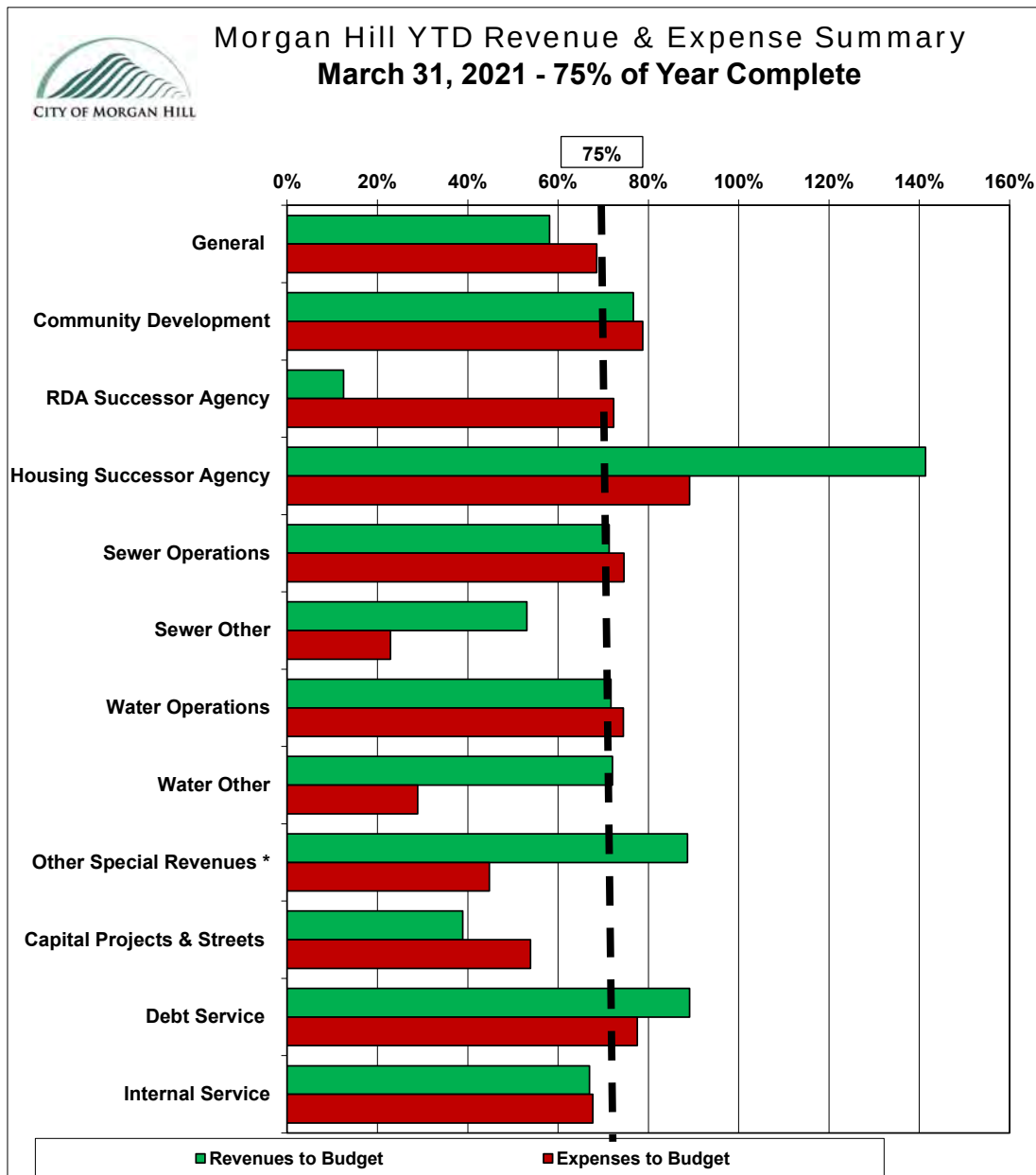
- **Investments** – Three securities were called, and six securities were purchased during the month of March 2021. Total interest earnings received on investments were \$79,000 during the month.

CITY OF MORGAN HILL
Monthly Financial and Investment Reports
March 31, 2021 - 75% of Year Complete



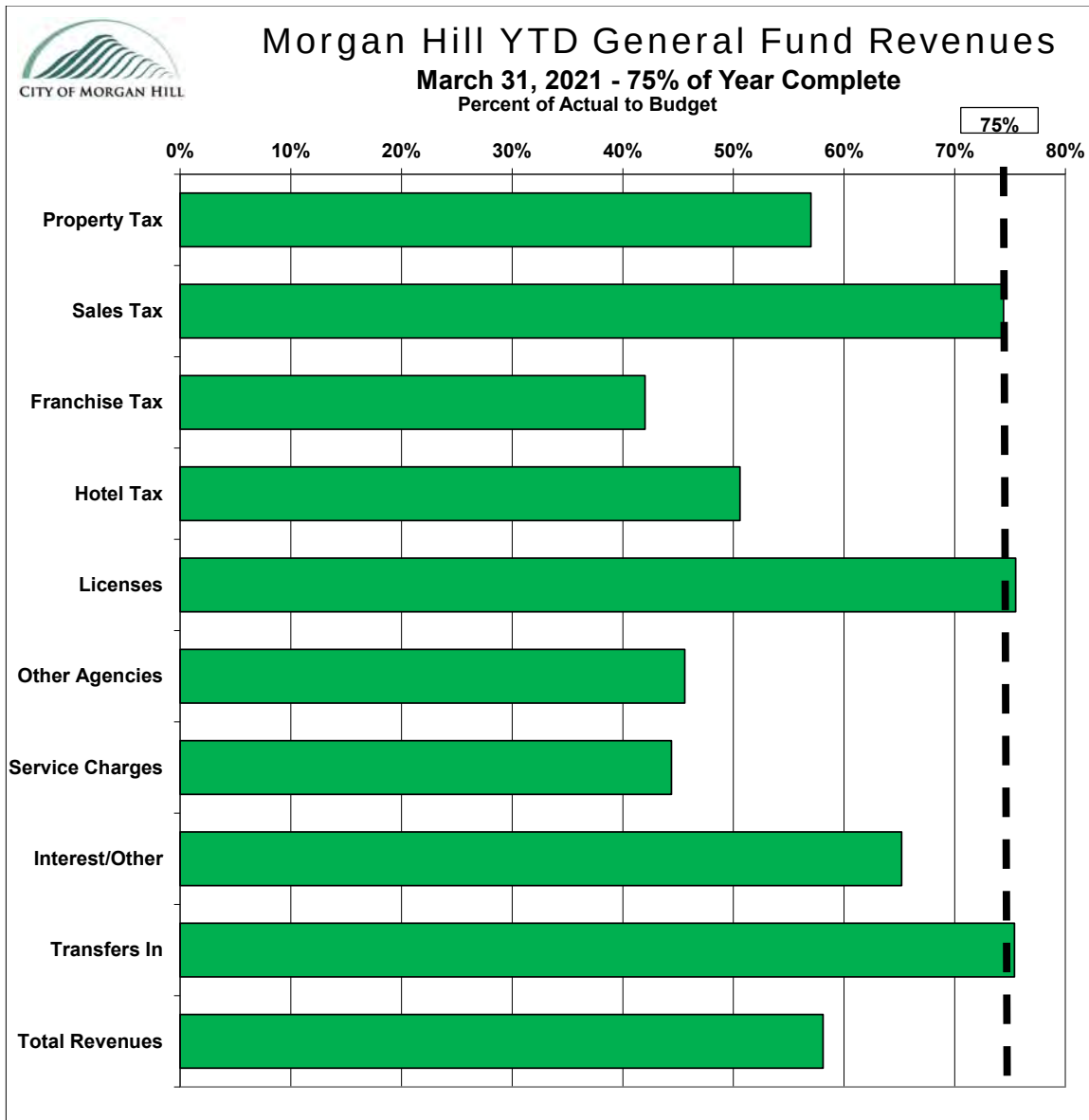
CITY OF MORGAN HILL

Prepared by:
FINANCE DIVISION

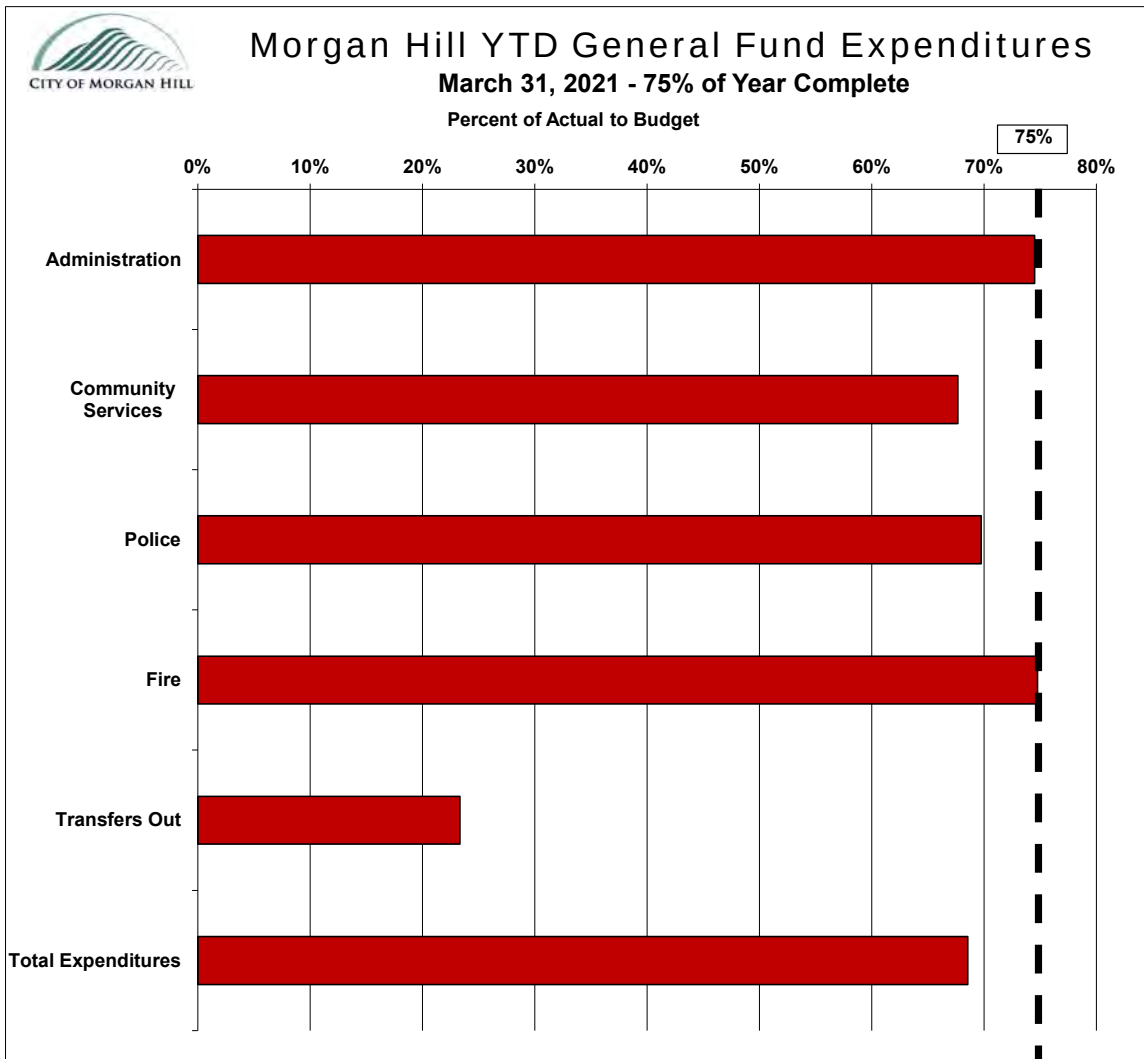


FUND NAME	REVENUES		EXPENSES	
	ACTUAL	% OF BUDGET	ACTUAL PLUS ENCUMBRANCES	% OF BUDGET
General	\$ 23,136,208	58%	\$ 30,374,533	69%
Community Development	3,639,945	77%	3,831,536	79%
RDA Successor Agency	888,931	12%	5,015,227	72%
Housing Successor Agency	301,227	141%	886,636	89%
Sewer Operations	9,471,285	71%	9,956,329	75%
Sewer Other	5,809,496	53%	5,912,280	23%
Water Operations	11,214,948	72%	11,643,630	74%
Water Other	4,815,085	72%	1,425,216	29%
Other Special Revenues *	3,285,280	89%	2,170,353	45%
Capital Projects & Streets	11,857,035	39%	35,589,750	54%
Debt Service	621,015	89%	539,740	78%
Internal Service	7,869,176	67%	8,588,365	68%
TOTAL FOR ALL FUNDS	\$ 82,909,631	57%	\$ 115,933,594	58%

* Includes all Special Revenue Funds except Community Development, Street Funds, and RDA and Housing Successor Agencies.



REVENUE CATEGORY	BUDGET	ACTUAL	% OF BUDGET	PRIOR YEAR TO DATE	% CHANGE FROM PRIOR YEAR
Property Tax	\$ 13,640,000	\$ 7,781,241	57%	\$ 6,795,277	15%
Sales Tax	8,370,868	6,224,598	74%	6,027,850	3%
Franchise Tax	2,351,000	987,626	42%	997,324	-1%
Hotel Tax	1,819,000	921,187	51%	1,849,056	-50%
Licenses	185,444	139,947	76%	142,446	-2%
Other Agencies	703,650	320,698	46%	240,964	33%
Service Charges	8,632,432	3,833,099	44%	7,543,432	-49%
Interest/Other	1,619,336	1,055,152	65%	1,176,092	-10%
Transfers In	2,483,580	1,872,661	75%	1,378,737	36%
TOTAL REVENUES	\$ 39,805,310	\$ 23,136,208	58%	\$ 26,151,177	-12%



EXPENDITURE CATEGORY	BUDGET	ACTUAL PLUS ENCUMBRANCES	% OF BUDGET	PRIOR YTD PLUS ENCUMBRANCES	% CHANGE FROM PRIOR YEAR
Administration	\$ 4,633,295	\$ 3,452,654	75%	\$ 3,585,397	-4%
Community Services	12,794,868	8,659,733	68%	9,181,355	-6%
Police	17,890,973	12,478,566	70%	12,822,632	-3%
Fire	7,162,540	5,355,206	75%	5,281,826	1%
Transfers Out	1,834,702	428,373	23%	1,406,997	-70%
TOTAL EXPENDITURES	\$ 44,316,377	\$ 30,374,533	69%	\$ 32,278,207	-6%

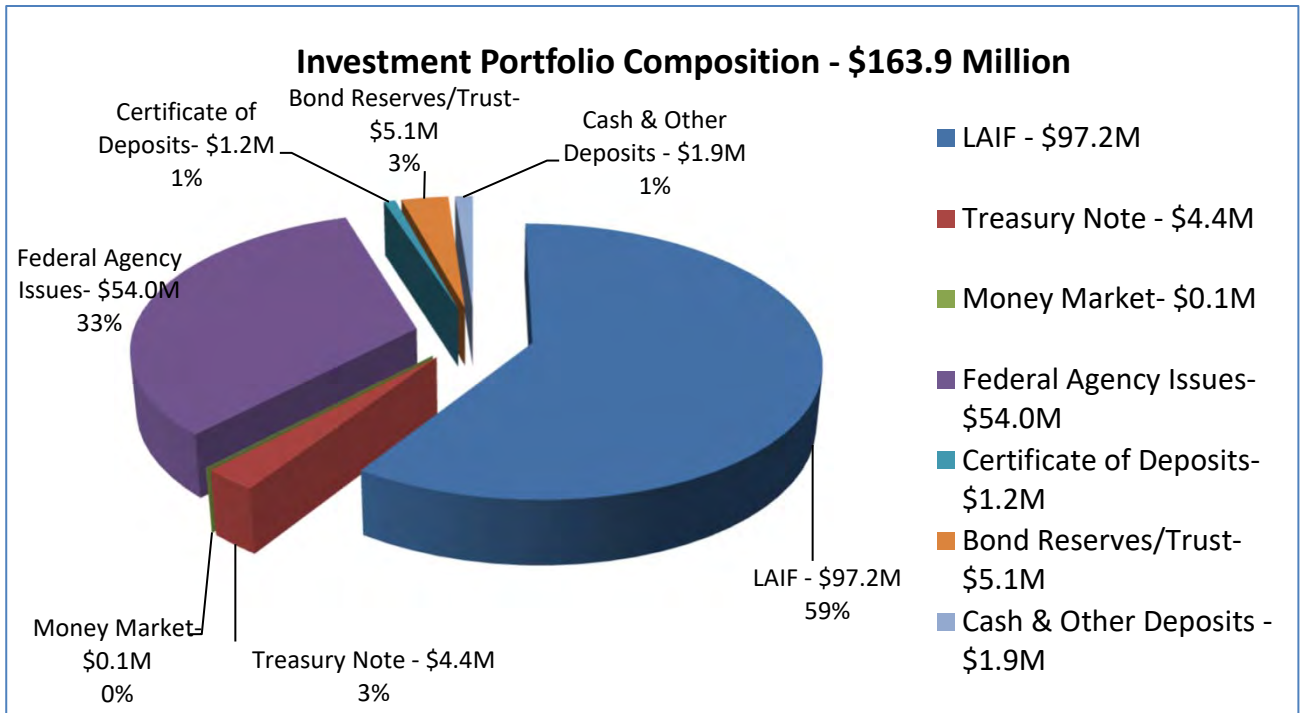


**City of Morgan Hill
Recreation Report - Fiscal Year 2020-21
For the Month and Nine Months Ended March 31, 2021
75% of Year Complete**

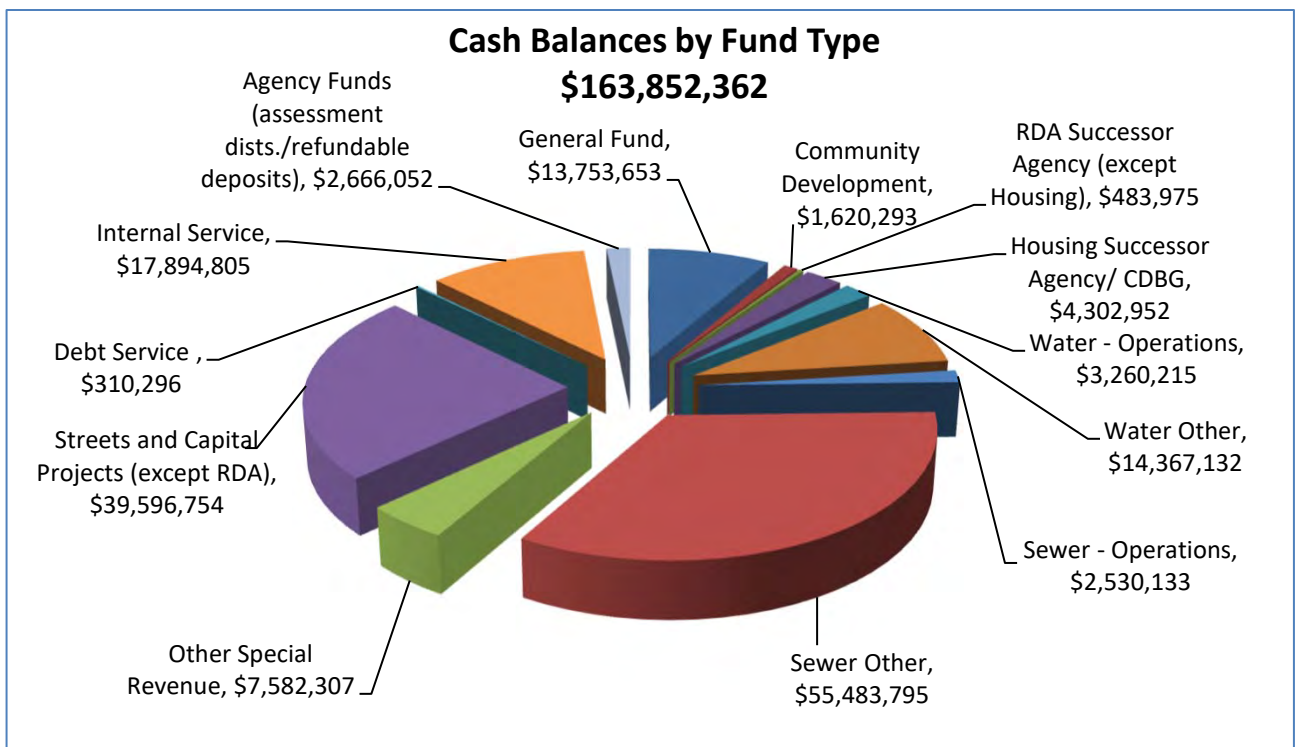
	<u>Budget</u>	<u>March 2021</u>	<u>YTD</u>	<u>% of Budget</u>
Revenues				
Membership Services & Rec Programs	\$ 5,068,448	\$ 230,056	\$ 2,005,557	
Facility Rentals	696,431	10,155	97,449	
Community Services	104,460	7,788	14,290	
Transfers in	75,000	6,250	56,250	
Total Revenues	<u>\$ 5,944,339</u>	<u>\$ 254,249</u>	<u>\$ 2,173,547</u>	37%
Less: Expenditures				
Membership & Program Services	\$ 5,675,307	\$ 337,844	\$ 3,234,380	
Facility Rentals	1,236,339	28,324	659,677	
Community Services	609,834	36,340	329,627	
Total Expenditures	<u>\$ 7,521,481</u>	<u>\$ 402,507</u>	<u>\$ 4,223,684</u>	56%
Net Impact without encumbrances	<u>\$ (1,577,142)</u>	<u>\$ (148,258)</u>	<u>\$(2,050,137)</u>	
Encumbrances	-	-	700,062	
Net Impact with encumbrances	<u>\$ (1,577,142)</u>	<u>\$ (148,258)</u>	<u>\$(2,750,198)</u>	

City of Morgan Hill Monthly Investment Report - March 31, 2021

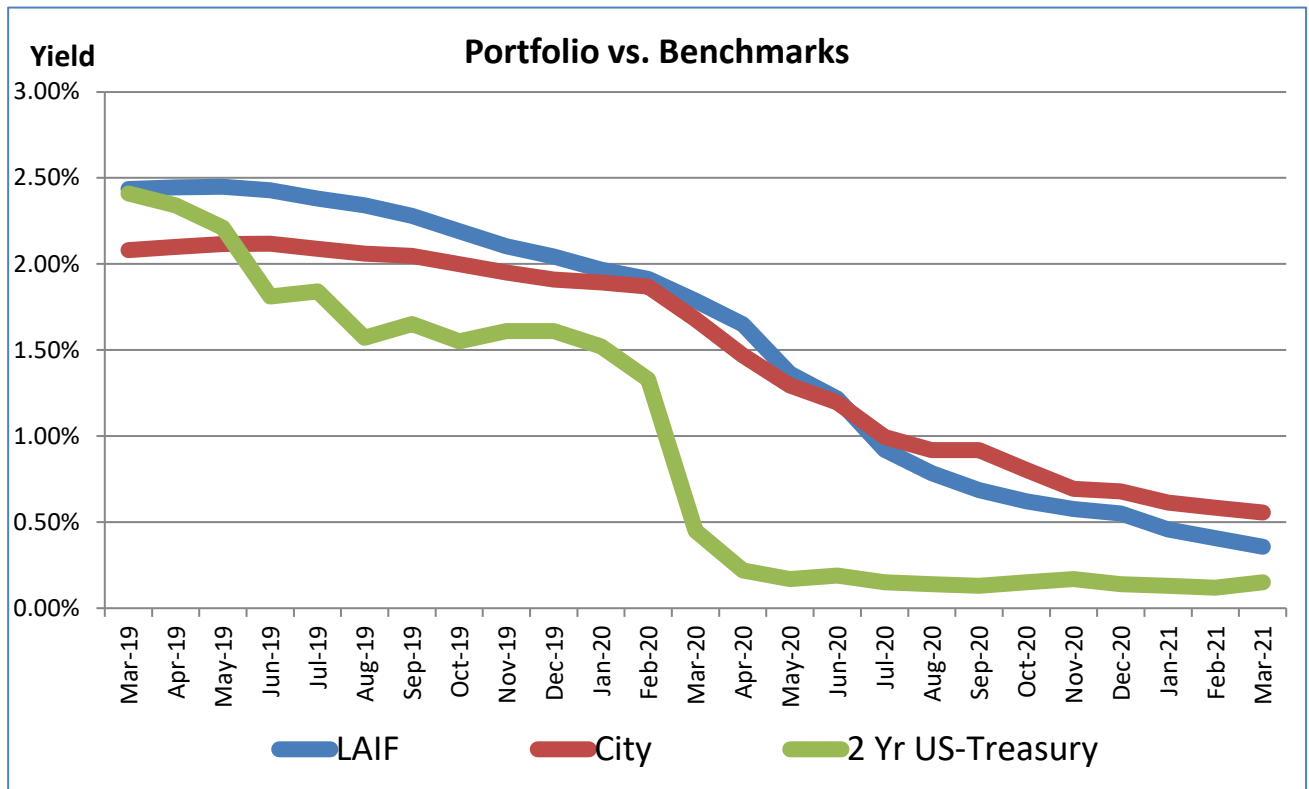
The following are the snapshots of City's investment portfolio as of March 31, 2021. The first chart shows the portfolio composition by investment type:



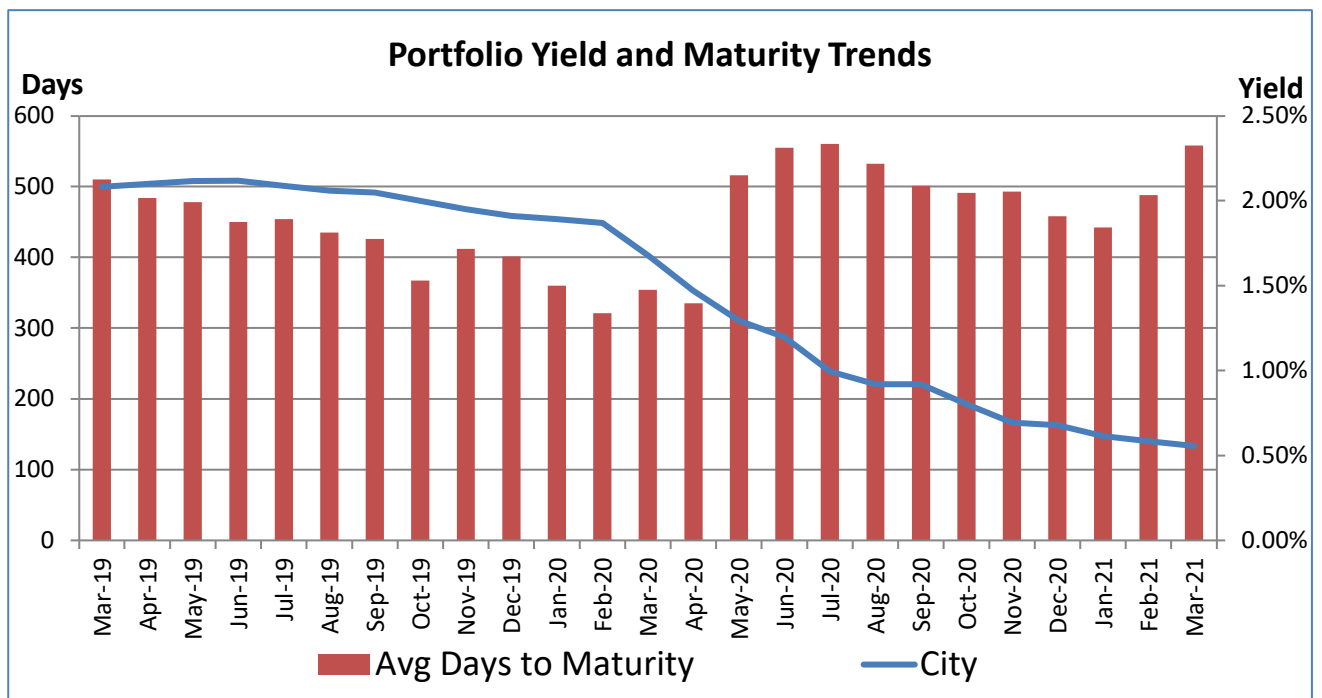
The chart below shows cash balances by fund type reconciled to City's financial system:



The following chart illustrates a yield comparison by month among the City's portfolio, LAIF and 2-Year US Treasury:



The chart below illustrates monthly average days to maturity of the City's portfolio along with the weighted average yield for the past two years:





City of Morgan Hill
Investment Portfolio Detail
As of March 31, 2021

Investment Type	Settlement Date	Book Value	% of Portfolio	Market Value	YTM at Cost	Next Call Date	Date of Maturity
L A I F		\$ 97,191,607	59.32%	\$ 97,412,360	0.36%		
City Managed							
FNMA Bond	8/25/2016	4,000,000	2.44%	4,021,000	1.40%	8/25/2021	8/25/2021
Treasury Note	4/30/2018	4,397,115	3.28%	4,619,160	2.73%	3/31/2023	3/31/2023
FFCB Bond	4/8/2020	2,000,000	1.22%	2,010,760	0.88%	4/8/2021	4/8/2024
FFCB Bond	5/27/2020	2,000,000	1.22%	2,001,240	0.73%	5/27/2021	5/27/2025
FHLMC Bond	6/3/2020	2,000,000	1.22%	2,001,500	0.60%	6/3/2021	12/3/2024
FHLMC Bond	10/20/2020	2,000,000	1.22%	1,970,200	0.60%	4/20/2021	10/20/2025
FHLMC Bond	10/27/2020	2,000,000	1.22%	1,978,040	0.63%	4/27/2021	10/27/2025
FHLMC Bond	11/2/2020	2,000,000	1.22%	1,998,240	0.32%	5/2/2021	11/2/2023
FFCB Bond	11/3/2020	2,000,000	1.22%	1,954,100	0.54%	5/3/2021	11/3/2025
FNMA Bond	11/18/2020	2,000,000	1.22%	1,973,480	0.65%	5/18/2021	11/18/2025
FHLMC Bond	11/24/2020	2,000,000	1.22%	1,978,280	0.64%	5/24/2021	11/24/2025
FFCB Bond	11/24/2020	1,000,000	0.61%	983,480	0.60%	5/24/2021	11/24/2025
FHLMC Bond	11/25/2020	3,000,000	1.83%	2,951,760	0.63%	5/25/2021	11/25/2025
FHLMC Bond	11/30/2020	2,000,000	1.22%	1,976,620	0.65%	5/26/2021	11/26/2025
FFCB Bond	12/22/2020	2,000,000	1.22%	1,952,320	0.47%	6/22/2021	12/22/2025
FHLB Bond	1/22/2021	2,000,000	1.22%	1,961,260	0.63%	7/22/2021	1/22/2026
FNMA Bond	1/28/2021	2,000,000	1.22%	1,958,520	0.55%	7/28/2021	1/28/2026
FHLB Bond	1/28/2021	2,000,000	1.22%	1,967,460	0.65%	7/28/2021	1/28/2026
FHLB Bond	2/24/2021	2,000,000	1.22%	1,975,300	0.75%	8/24/2021	2/24/2026
FHLB Bond	2/25/2021	2,000,000	1.22%	1,966,460	0.66%	8/25/2021	2/25/2026
FHLB Bond	2/26/2021	2,000,000	1.22%	1,963,980	0.65%	8/26/2021	2/26/2026
FHLB Bond	3/10/2021	2,000,000	1.22%	1,984,960	0.85%	9/10/2021	3/10/2026
FHLB Bond	3/16/2021	2,000,000	1.22%	1,966,940	0.70%	9/16/2021	3/16/2026
FHLB Bond	3/16/2021	2,000,000	1.22%	1,968,920	0.80%	9/16/2021	3/16/2026
FHLB Bond	3/17/2021	2,000,000	1.22%	1,978,380	1.00%	9/17/2021	3/17/2026
FHLB Bond	3/23/2021	2,000,000	1.22%	1,993,000	1.00%	9/23/2021	3/23/2026
FHLB Bond	3/30/2021	2,000,000	1.22%	1,991,040	1.00%	9/30/2021	3/30/2026
CD - Goldman Sachs Bank USA	5/13/2020	250,000	0.15%	251,300	0.50%	5/13/2021	5/13/2022
CD - Woori America Bank	5/13/2020	250,000	0.15%	250,135	0.30%	5/13/2021	5/13/2021
CD - Safra Nat'l Bank	5/14/2020	250,000	0.15%	250,163	0.35%	5/13/2021	5/13/2021
CD - State Bank of India	5/14/2020	250,000	0.15%	250,190	0.40%	5/14/2021	5/14/2021
CD - American Nat'l Bank	5/20/2020	250,000	0.15%	251,005	0.40%	5/20/2022	5/20/2022
Sub Total/Average		\$ 59,647,115	37.00%	\$ 59,299,193	0.88%		
Money Market		\$ 76,507	0.05%	\$ 76,507	0.03%		
Total City Managed/Average		\$ 156,915,229	96.36%	\$ 156,788,059	0.56%		
Bond Reserve Accounts - Held By Trustees		\$ 1,664,619	1.02%	\$ 1,664,619			
Cash/Deposits		\$ 1,885,111	1.15%	\$ 1,885,111			
PARS Trust		\$ 3,387,404	2.07%	\$ 4,375,665			
GRAND TOTAL/AVERAGE		\$ 163,852,362	100%	\$ 164,713,454			



CITY OF MORGAN HILL CASH AND INVESTMENT REPORT
FOR THE MONTH OF MARCH 31, 2021
FOR THE FISCAL YEAR OF 2020-21

	Invested in Fund	Yield	Book Value End of Month	% of Total	Market Value
Investments					
State Treasurer LAIF - City	All Funds Pooled	0.36%	\$ 77,188,512	47.11%	\$ 77,363,832
2015 Wastewater Rev Bonds - CIP	Wastewater Fund	0.36%	20,003,095	12.21%	20,048,528
Federal Issues	All Funds Pooled	0.80%	54,000,000	32.96%	53,427,240
US Treasury Notes	All Funds Pooled	2.73%	4,397,115	2.68%	4,619,160
Certificate of Deposits	All Funds Pooled	0.39%	1,250,000	0.76%	1,252,793
Dreyfus Treas Cash Management Acct	All Funds Pooled	0.03%	76,507	0.05%	76,507
	SUBTOTAL		\$ 156,915,229	95.77%	\$ 156,788,059
Bond Reserve Accounts - held by trustees					
Zions Bank - Civic Center/Library Facility	Debt Service	0.01%	5	0.00%	5
Blackrock Liq Fund					
Zions Bank - MH Police Facility Lease Revenue Bonds	Debt Service	0.01%	6	0.00%	6
Blackrock Liq Fund					
BNY - RDA Bonds					
Dreyfus Cash Mgmt 521	Successor Fund	0.00%	479,932	0.29%	479,932
Zions Bank - MH Ranch 2015					
Blackrock Liq Funds Fed Fund -DI -2015	Agency Fund	0.01%	595,719	0.36%	595,719
Zions Bank - Madrone Bus Park Taxable/ Tax Exempt 2015					
Blackrock Liquidity Temp Fund-2015	Agency Fund	0.01%	588,956	0.36%	588,956
	SUBTOTAL		1,664,619	1.02%	1,664,619
Other Cash/Deposits					
General Checking	All Funds		1,847,999	1.13%	1,847,999
Workers' Comp Administrators	Workers' Comp		30,000	0.02%	30,000
Petty Cash & Emergency Cash	General Fund		7,112	0.00%	7,112
PARS - OPEB Trust			2,187,404	1.33%	2,882,394 *
PARS - PENSION Trust			1,200,000	0.73%	1,493,271 *
	SUBTOTAL		5,272,515	3.22%	6,260,776
Total Cash and Investments			\$ 163,852,362	100.00%	\$ 164,713,454

* as of 02/28/21

CASH ACTIVITY SUMMARY
FY 2020-21

Fund Type	07/1/20 Balance	Change in Cash Balance	3/31/2021 Balance
General Fund	\$ 16,482,660	\$ (2,729,007)	\$ 13,753,653
Community Development	972,100	648,194	1,620,293
RDA Successor Agency (except Housing)	11,666,343	(11,182,368)	483,975
Housing Successor Agency/ CDBG	4,593,710	(290,758)	4,302,952
Water - Operations	3,747,502	(487,288)	3,260,215
Water Other	8,567,976	5,799,156	14,367,132
Sewer - Operations	3,220,859	(690,726)	2,530,133
Sewer Other	32,031,933	23,451,862	55,483,795
Other Special Revenue	5,770,282	1,812,025	7,582,307
Streets and Capital Projects (except RDA)	40,583,676	(986,922)	39,596,754
Debt Service	227,953	82,342	310,296
Internal Service	17,977,892	(83,086)	17,894,805
Agency Funds (assessment dists./refundable deposits)	3,260,978	(594,926)	2,666,052
Total	\$ 149,103,863	\$ 14,748,500	\$ 163,852,362

Note: See Investment Portfolio Detail for maturities of "Investments." Market values are obtained from the City's investment brokers' monthly reports.

I certify the information on the investment reports on pages has been reconciled to the general ledger and bank statements and that there are sufficient funds to meet the expenditure requirements of the City for the next six months. The portfolio is in compliance with the City of Morgan Hill investment policy and all State laws and regulations.

Prepared by:

Gina Nazareno, Senior Accountant

Approved by:

Caitlin Jachimowicz, Treasurer

Reviewed by:

Dat Nguyen, Finance Director



City of Morgan Hill
Year to Date Revenues - Fiscal Year 2020-21
For The Nine Months Ended March 31, 2021
75% of Year Complete

FUND REVENUE SOURCE	ADOPTED BUDGET	AMENDED BUDGET	CURRENT YTD ACTUAL	% OF BUDGET	PRIOR YTD	INCR (DECR) FROM PRIOR YTD	% CHANGE
010 GENERAL FUND							
TAXES							
Property Tax - Secured/Unsecured	\$ 11,354,000	\$ 11,354,000	\$ 6,382,380	56%	\$ 6,014,011	\$ 368,369	6%
Property Tax - RPTTF Residual Distribution	2,144,000	2,144,000	1,123,570	52%	673,465	450,105	67%
Property Tax - Supplemental Roll	142,000	142,000	275,291	194%	107,801	167,490	155%
Sales Tax	8,027,793	8,027,793	6,031,292	75%	5,802,380	228,913	4%
Public Safety Sales Tax	343,075	343,075	193,305	56%	225,470	(32,165)	-14%
Transient Occupancy Taxes	1,819,000	1,819,000	921,187	51%	1,849,056	(927,869)	-50%
Franchise (Refuse, Cable, PG&E)	2,351,000	2,351,000	987,626	42%	997,324	(9,698)	-1%
Property Transfer Tax	436,000	436,000	399,886	92%	334,086	65,801	20%
TOTAL TAXES	26,616,868	26,616,868	16,314,538	61%	16,003,592	310,946	2%
LICENSES/PERMITS							
Business License	154,500	154,500	136,766	89%	136,510	256	0%
Other Permits	30,944	30,944	3,181	10%	5,936	(2,755)	-46%
TOTAL LICENSES/PERMITS	185,444	185,444	139,947	75%	142,446	(2,499)	-2%
FINES AND PENALTIES							
Parking Enforcement	8,000	8,000	2,336	29%	2,756	(420)	-15%
Bails & Fines	73,645	73,645	26,229	36%	36,341	(10,112)	-28%
Administrative Citations	10,079	10,079	13,803	137%	95,106	(81,303)	-85%
TOTAL FINES AND PENALTIES	91,724	91,724	42,368	46%	134,203	(91,835)	-68%
OTHER AGENCIES							
Motor Vehicle in-Lieu	25,392	25,392	6,286	25%	36,203	(29,917)	-83%
Other Revenue - Other Agencies	529,943	703,650	320,698	46%	240,964	79,734	33%
TOTAL OTHER AGENCIES	555,335	729,042	326,984	45%	277,167	49,817	18%
CHARGES CURRENT SERVICES							
Police False Alarm Charge	30,428	30,428	38,649	127%	19,937	18,711	94%
Business License Application Review	37,080	37,080	33,694	91%	29,538	4,156	14%
Membership Services & Rec Programs	5,068,448	5,068,448	2,005,557	40%	4,667,703	(2,662,146)	-57%
Facility Rentals	696,431	696,431	97,449	14%	711,542	(614,093)	-86%
Community Services	104,460	104,460	14,290	14%	77,002	(62,712)	-81%
General Administration Overhead	1,780,917	1,780,917	1,335,654	75%	1,343,565	(7,911)	-1%
Other Charges Current Services	914,668	914,668	307,806	34%	694,144	(386,338)	-56%
TOTAL CURRENT SERVICES	8,632,432	8,632,432	3,833,099	44%	7,543,432	(3,710,332)	-49%
OTHER REVENUE							
Use of money/property	816,362	816,362	269,342	33%	375,105	(105,762)	-28%
Other Revenues	249,858	249,858	337,269	135%	296,496	40,773	14%
TOTAL OTHER REVENUE	1,066,220	1,066,220	606,611	57%	671,601	(64,989)	-10%
TRANSFERS IN							
One Time Transfer	225,000	225,000	153,738	68%	134,991	18,747	14%
Public Safety Facilities Fund	25,000	25,000	18,750	75%	-	18,750	0%
Supplemental Law Enforcement Fund	100,000	100,000	100,000	100%	100,000	-	n/a
Fire Impact	-	-	-	n/a	25,000	(25,000)	-100%
Streets	699,706	699,706	524,772	75%	515,971	8,801	2%
Park Maintenance	650,000	650,000	487,503	75%	-	487,503	n/a
Police Impact	-	-	-	0%	18,747	(18,747)	-100%
Sewer Operations	354,437	354,437	265,824	75%	263,889	1,935	1%
Water Operations	354,437	354,437	265,824	75%	263,889	1,935	1%
Park Development	75,000	75,000	56,250	75%	56,250	-	n/a
TOTAL TRANSFERS IN	2,483,580	2,483,580	1,872,661	75%	1,378,737	493,924	36%
TOTAL GENERAL FUND	39,631,603	39,805,310	23,136,208	58%	26,151,177	(3,014,969)	-12%
SPECIAL REVENUE FUNDS							
202 STREET MAINTENANCE							
Gas Tax 2105 - 2107.5	698,292	698,292	475,439	68%	479,489	(4,050)	-1%
Interest / Other Revenue/Other Charges	1,414	1,414	794	56%	2,229	(1,435)	-64%
202 STREET MAINTENANCE	699,706	699,706	476,234	68%	481,719	(5,485)	-1%



City of Morgan Hill
Year to Date Revenues - Fiscal Year 2020-21
For The Nine Months Ended March 31, 2021
75% of Year Complete

FUND REVENUE SOURCE	ADOPTED BUDGET	AMENDED BUDGET	CURRENT YTD ACTUAL	% OF BUDGET	PRIOR YTD	INCR (DECR) FROM PRIOR YTD	% CHANGE
SPECIAL REVENUE FUNDS							
205 SUPPLEMENTAL LAW ENFORCEMENT FUND							
Interest Income	842	842	853	101%	1,146	(292)	-26%
Police Grant/SLEF/JAG	100,000	100,000	98,393	98%	105,948	(7,554)	-7%
205 SUPPLEMENTAL LAW ENFORCEMENT FUND	100,842	100,842	99,246	98%	107,093	(7,847)	-7%
206 DEVELOPMENT SERVICES							
Building Fees	2,162,357	2,162,357	2,145,789	99%	2,076,302	69,488	3%
Planning Fees	743,344	743,344	791,431	106%	928,341	(136,910)	-15%
Engineering Fees	708,809	708,809	585,728	83%	420,370	165,358	39%
Other Revenue/Current Charges	1,133,225	1,133,225	116,997	10%	43,134	73,863	171%
206 DEVELOPMENT SERVICES	4,747,735	4,747,735	3,639,945	77%	3,468,147	171,798	5%
207 LONG RANGE PLANNING	677,026	677,026	557,706	82%	511,399	46,306	9%
215 and 216 HCD BLOCK GRANT							
Interest Income/Other Revenue	3,111	3,111	38,571	1240%	779	37,792	4849%
215 and 216 HCD BLOCK GRANT	3,111	3,111	38,571	1240%	779	37,792	4849%
225 ASSET SEIZURE	1,893	1,893	732	39%	17,523	(16,791)	-96%
229 LIGHTING AND LANDSCAPE	191,075	191,075	104,314	55%	97,564	6,751	7%
230 COMMUNITY FACILITIES DISTRICT	1,216	1,216	20,394	1677%	24,897	(4,503)	-18%
232 ENVIRONMENTAL PROGRAMS	446,843	446,843	445,710	100%	324,981	120,729	37%
234 MOBILE HOME PARK RENT STAB.	742	742	3,742	504%	6,324	(2,582)	-41%
235 SENIOR HOUSING	3,793	3,793	1,198	32%	2,801	(1,603)	-57%
236 HOUSING MITIGATION	2,248,764	2,248,764	1,919,011	85%	780,468	1,138,543	146%
237 BEGIN	-	-	902	n/a	-	902	n/a
238 CAL HOMES	-	-	81,037	n/a	-	81,037	n/a
240 EMPLOYEE ASSISTANCE	29,068	29,068	11,506	40%	15,147	(3,641)	-24%
247 ENVIRONMENT REMEDIATION	2,400	2,400	1,210	50%	2,896	(1,686)	-58%
250 COMH-SUCCESSOR AGENCY-MHRDA	7,112,060	7,112,060	888,931	12%	7,341,300	(6,452,369)	-88%
255 HOUSING SUCCESSOR AGENCY	213,057	213,057	301,227	141%	394,555	(93,328)	-24%
TOTAL SPECIAL REVENUE FUNDS	16,479,332	16,479,332	8,591,616	52%	13,577,592	(4,985,976)	-37%
CAPITAL PROJECTS FUNDS							
301 PARK DEVELOPMENT	2,384,665	2,384,665	2,382,850	100%	1,086,439	1,296,411	119%
302 PARK MAINTENANCE	359,071	359,071	97,839	27%	349,893	(252,053)	-72%
303 LOCAL DRAINAGE	1,693,351	1,693,351	1,934,652	114%	714,757	1,219,895	171%
304 LOCAL DRAINAGE/NON AB1600	80,333	130,122	23,609	18%	19,000	4,609	24%
306 AGRICULTURE & OPEN SPACE PRESERVATION	178,958	178,958	238,523	133%	845,927	(607,404)	-72%
308 STREET CIP	2,571,010	2,571,010	1,614,198	63%	2,968,142	(1,353,944)	-46%
309 TRAFFIC IMPACT	16,415,755	16,415,755	1,978,609	12%	911,274	1,067,335	117%
311 POLICE IMPACT	-	-	-	n/a	181,847	(181,847)	-100%
313 FIRE IMPACT	-	-	-	n/a	98,712	(98,712)	-100%
315 PUBLIC SAFETY FACILITIES IMPACT	984,769	984,769	378,754	38%	-	378,754	n/a
346 PUBLIC FACILITIES NON-AB1600	611,297	611,297	885,359	145%	177,100	708,260	400%
347 PUBLIC FACILITIES IMPACT	336,106	336,106	234,808	70%	181,515	53,293	29%
348 LIBRARY	946,889	946,889	484,373	51%	399,098	85,276	21%
350 UNDERGROUNDING	12,817	12,817	106,684	832%	10,557	96,127	911%
355 SCHOOL PEDESTRIAN/TRAFFIC SAFETY	591,721	591,721	299,901	51%	87,472	212,429	243%
360 COMMUNITY/REC IMPACT FUND	1,498,683	1,498,683	720,642	48%	695,883	24,760	4%
375 QUIMBY FEE	1,072,238	1,072,238	-	n/a	-	-	n/a
TOTAL CAPITAL PROJECTS FUNDS	29,737,663	29,787,452	11,380,802	38%	8,727,615	2,653,186	30%
DEBT SERVICE FUNDS							
420 CIVIC CENTER DEBT	312,272	312,272	232,841	75%	226,022	6,819	3%
441 POLICE FACILITY BOND	384,252	384,252	388,175	101%	187,214	200,961	107%
TOTAL DEBT SERVICE FUNDS	696,524	696,524	621,015	89%	413,235	207,780	50%

Attachment: March 2021 Financial and Investment Report (3054 : Monthly Budget Update and March 2021 Financial and Investment Reports)



City of Morgan Hill
Year to Date Revenues - Fiscal Year 2020-21
For The Nine Months Ended March 31, 2021
75% of Year Complete

FUND REVENUE SOURCE	ADOPTED BUDGET	AMENDED BUDGET	CURRENT YTD ACTUAL	% OF BUDGET	PRIOR YTD	INCR (DECR) FROM PRIOR YTD	% CHANGE
ENTERPRISE FUNDS							
640 SEWER OPERATION							
Sewer Service Fees	12,972,441	12,972,441	8,627,025	67%	7,443,501	1,183,524	16%
Interest Income/Transfers	36,691	36,691	16,832	46%	44,670	(27,837)	-62%
Other Revenue/Current Charges	267,694	267,694	827,428	309%	729,584	97,844	13%
640 SEWER OPERATION	13,276,826	13,276,826	9,471,285	71%	8,217,755	1,253,531	15%
641 SEWER EXPANSION							
Interest Income	215,876	215,876	116,890	54%	243,261	(126,372)	-52%
Development Impact Fee	6,225,545	6,225,545	2,336,990	38%	3,573,800	(1,236,810)	-35%
641 SEWER EXPANSION	6,441,421	6,441,421	2,453,880	38%	3,817,061	(1,363,182)	-36%
642 SEWER RATE STABILIZATION	44,423	44,423	13,752	31%	32,164	(18,412)	-57%
643 SEWER-CAPITAL PROJECT	4,455,944	4,455,944	3,341,865	75%	2,286,342	1,055,523	46%
TOTAL SEWER FUNDS	24,218,614	24,218,614	15,280,781	63%	14,353,321	927,460	6%
650 WATER OPERATION							
Water Sales	14,525,500	14,525,500	9,951,584	69%	9,204,291	747,293	8%
Meter Install & Service	24,600	24,600	101,964	414%	11,928	90,036	755%
Transfers-In / Interest Income	521,171	521,171	347,796	67%	362,966	(15,170)	-4%
Other Revenue/Current Charges	572,081	572,081	813,603	142%	676,720	136,883	20%
650 WATER OPERATION	15,643,352	15,643,352	11,214,948	72%	10,255,906	959,042	9%
651 WATER EXPANSION							
Interest Income/Other Revenue/Transfer	62,748	62,748	16,795	27%	31,423	(14,628)	-47%
Development Impact Fee	1,689,416	1,689,416	1,086,913	64%	889,540	197,373	22%
651 WATER EXPANSION	1,752,164	1,752,164	1,103,708	63%	920,964	182,745	20%
652 Water Rate Stabilization	65,904	65,904	49,126	75%	21,586	27,539	128%
653 Water Capital Project	4,863,152	4,863,152	3,662,251	75%	2,876,223	786,028	27%
TOTAL WATER FUNDS	22,324,572	22,324,572	16,030,033	72%	14,074,679	1,955,354	14%
TOTAL ENTERPRISE FUNDS	46,543,186	46,543,186	31,310,814	67%	28,428,000	2,882,814	10%
INTERNAL SERVICE FUNDS							
730 INFORMATION SYSTEMS	1,850,422	1,850,422	1,413,046	76%	1,357,548	55,498	4%
740 BUILDING MAINTENANCE	3,486,066	3,486,066	2,381,343	68%	2,413,502	(32,160)	-1%
741 BUILDING REPLACEMENT	726,251	726,251	510,321	70%	599,106	(88,785)	-15%
745 CIP ADMINISTRATION	1,721,606	1,721,606	801,451	47%	1,240,478	(439,027)	-35%
760 UNEMPLOYMENT INSURANCE	102,463	102,463	75,526	74%	1,691	73,835	4366%
770 WORKERS COMPENSATION	876,368	876,368	535,630	61%	609,853	(74,223)	-12%
790 EQUIPMENT REPLACEMENT	1,084,748	1,084,748	1,055,356	97%	881,585	173,771	20%
791 EMPLOYEE BENEFITS	1,031,234	1,031,234	448,890	44%	593,240	(144,349)	-24%
795 GENERAL LIABILITY INSURANCE	877,248	877,248	647,612	74%	804,269	(156,657)	-19%
TOTAL INTERNAL SERVICE FUNDS	11,756,406	11,756,406	7,869,176	67%	8,501,272	(632,096)	-7%
TOTAL FOR ALL FUNDS	\$ 144,844,714	\$ 145,068,210	\$ 82,909,631	57%	\$ 85,798,891	\$ (2,889,261)	-3%



City of Morgan Hill
Year to Date Expenses - Fiscal Year 2020-21
For the Month and Nine Months Ended March 31, 2021
75% of Year Complete

FUND NO.	FUND/ACTIVITY	CURRENT MONTH ACTUAL EXPENSES	AMENDED BUDGET	YTD EXPENSES	OUTSTANDING ENCUMBRANCE	TOTAL ALLOCATED	PERCENT OF TOTAL TO BUDGET	PRIC YTI
010 GENERAL FUND								
I. ADMINISTRATION								
	CITY COUNCIL	\$ 22,985	\$ 348,053	\$ 209,963	\$ -	\$ 209,963	60%	\$ 3:
	CITY ATTORNEY	53,446	717,004	487,146	124,092	611,237	85%	5:
	CITY MANAGER	49,100	504,773	376,791	-	376,791	75%	3:
	HUMAN RESOURCES	48,435	674,377	471,404	-	471,404	70%	5:
	COUNCIL SVCS & RECORDS MGMT							
	Council Svcs & Records Mgmt	43,940	616,687	415,292	31,300	446,592	72%	4:
	Elections	1,725	186,470	208,985	-	208,985	112%	1:
	COUNCIL SVCS & RECORDS MGMT	45,665	803,157	624,277	31,300	655,577	82%	5:
	FINANCE	117,822	1,585,931	1,044,764	82,918	1,127,682	71%	1,1:
	TOTAL ADMINISTRATION	337,454	4,633,295	3,214,345	238,310	3,452,654	75%	3,4:
II. COMMUNITY SERVICES								
	Membership Services & Rec. Programs	337,844	5,675,307	3,234,380	634,645	3,869,025	68%	4,6:
	Recreation Facility Rentals	28,324	1,236,339	659,677	-	659,677	53%	9:
	Community Services	36,340	609,834	329,627	65,417	395,044	65%	4:
	Park Maintenance	85,697	1,103,136	754,108	79,665	833,773	76%	-
	Environmental Services	15,517	314,680	144,748	-	144,748	46%	11:
	Street Maintenance	184,716	2,411,237	1,569,363	139,243	1,708,606	71%	1,6:
	Downtown Maintenance	23,021	271,270	162,890	41,693	204,583	75%	2:
	Cable Television	1,762	23,156	16,175	-	16,175	70%	-
	COMMUNITY SERVICES	713,222	11,644,959	6,870,968	960,663	7,831,631	67%	8,1:
	CODE COMPLIANCE	13,105	160,479	117,235	-	117,235	73%	1:
	INFRASTRUCTURE PLANNING & CONGESTION MGMT	24,253	335,902	252,235	-	252,235	75%	2:
	ECONOMIC DEVELOPMENT PROGRAMS	26,064	653,527	416,954	41,678	458,632	70%	5:
	TOTAL COMMUNITY SERVICES	776,644	12,794,868	7,657,392	1,002,341	8,659,733	68%	9,0:
III. PUBLIC SAFETY								
	POLICE							
	PD Administration	108,039	1,373,018	1,143,140	42,466	1,185,606	86%	9:
	Field Operations	678,703	8,709,877	5,962,777	115,096	6,077,874	70%	6,5:
	Support Services	185,133	2,370,491	1,661,664	-	1,661,664	70%	1,6:
	Emergency Services/Haz Mat	14,064	194,391	131,158	-	131,158	67%	1:
	Special Operations	226,115	3,452,365	2,210,385	5,203	2,215,588	64%	1,9:
	Dispatch Services	150,647	1,790,831	1,206,675	-	1,206,675	67%	1,3:
	POLICE	1,362,702	17,890,973	12,315,801	162,765	12,478,566	70%	12,6:
	FIRE	605,853	7,162,540	5,346,934	8,273	5,355,206	75%	5,2:
	TOTAL PUBLIC SAFETY	1,968,555	25,053,513	17,662,734	171,038	17,833,772	71%	17,8:
IV. TRANSFERS								
	Other	47,597	1,834,702	428,373	-	428,373	23%	1,4:
	TOTAL TRANSFERS	47,597	1,834,702	428,373	-	428,373	23%	1,4:
	TOTAL GENERAL FUND	3,130,250	44,316,377	28,962,844	1,411,689	30,374,533	69%	31,6:

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City of Morgan Hill
Year to Date Expenses - Fiscal Year 2020-21
For the Month and Nine Months Ended March 31, 2021
75% of Year Complete

FUND NO.	FUND/ACTIVITY	CURRENT MONTH ACTUAL EXPENSES	AMENDED BUDGET	YTD EXPENSES	OUTSTANDING ENCUMBRANCE	TOTAL ALLOCATED	PERCENT OF TOTAL TO BUDGET	PRICE YTD
SPECIAL REVENUE FUNDS								
202	STREET MAINTENANCE	58,660	703,934	527,940	-	527,940	75%	5%
205	PUBLIC SAFETY/SUPP.LAW	589	107,069	105,301	-	105,301	98%	11%
206	DEVELOPMENT SERVICES FUND							
	Planning	129,262	1,590,704	1,130,538	55,439	1,185,978	75%	1,5%
	Building	154,097	2,114,110	1,447,831	17,864	1,465,695	69%	1,4%
	Engineering	103,686	1,161,439	946,044	233,819	1,179,863	102%	1,0%
206	DEVELOPMENT SERVICES FUND	387,045	4,866,253	3,524,413	307,123	3,831,536	79%	4,1%
207	LONG RANGE PLANNING	(19,192)	1,523,735	659,208	222,710	881,919	58%	3%
215/216	CDBG	447	5,365	4,023	-	4,023	75%	
225	ASSET SEIZURE	-	60,024	-	-	-		
229	LIGHTING AND LANDSCAPE	10,074	168,662	117,310	8,835	126,145	75%	1%
230	COMMUNITY FACILITIES DISTRICT	2,185	36,418	17,942	-	17,942	49%	
232	ENVIRONMENT PROGRAMS	34,094	420,519	292,074	15,497	307,571	73%	2%
234	MOBILE HOME PARK	37	438	333	-	333	76%	
236	HOUSING MITIGATION	46,145	2,494,568	489,961	224,981	714,941	29%	4%
237	BEGIN	-	-	-	-	-	n/a	
240	EMPLOYEE ASSISTANCE	2,442	28,506	10,658	-	10,658	37%	
247	ENVIRONMENTAL REMEDIATION	114	-	1,521	-	1,521	n/a	
250	COMH-SUCCESSOR AGENCY-MHRDA	399,876	6,936,625	5,015,227	-	5,015,227	72%	4,1%
255	HOUSING SUCCESSOR AGENCY	33,883	994,782	769,969	116,667	886,636	89%	7%
TOTAL SPECIAL REVENUE FUNDS		956,398	18,346,897	11,535,880	895,811	12,431,691	68%	11,0%
CAPITAL PROJECT FUNDS								
301	PARK DEVELOPMENT	1,154,897	10,956,438	3,961,985	4,640,354	8,602,340	79%	1,8%
302	PARK MAINTENANCE	54,167	748,230	494,943	90,574	585,517	78%	8%
303	LOCAL DRAINAGE	9,047	7,278,922	285,020	61,776	346,796	5%	3%
304	LOCAL DRAIN. NON-AB1600	235	883,162	186,605	28,948	215,553	24%	1%
306	AGRICULTURE & OPEN SPACE PRESERVAT	2,228	132,691	20,052	35,956	56,008	42%	3,1%
308	STREET CIP	1,654	6,132,529	2,801,864	999,591	3,801,455	62%	4,5%
309	TRAFFIC IMPACT	98,829	32,689,024	1,439,737	15,639,501	17,079,238	52%	9%
311	POLICE IMPACT	-	-	-	-	-	n/a	1%
313	FIRE IMPACT	-	-	-	-	-	n/a	
315	PUBLIC SAFETY FACILITIES IMPACT	19,525	344,301	194,475	-	194,475	56%	
346	PUBLIC FAC.NON AB1600	632	330,590	170,030	42,975	213,005	64%	
347	PUBLIC FACILITIES IMPACT	2,273	38,692	38,886	-	38,886	101%	1%
348	LIBRARY IMPACT	18,407	1,732,111	650,046	129,754	779,800	45%	1,2%
350	UNDERGROUNDING	92	1,107	828	-	828	75%	
355	SCHOOL PEDESTRIAN & TRAFFIC SAFETY	26,184	1,995,044	1,067,961	91,697	1,159,658	58%	2%
360	COMM/REC CENTER IMPACT	77,662	1,954,607	1,521,927	466,325	1,988,252	102%	8%
375	QUIMBY FEE	-	100,000	-	-	-	n/a	
TOTAL CAPITAL PROJECTS FUNDS		1,465,831	65,317,446	12,834,359	22,227,451	35,061,810	54%	14,4%
DEBT SERVICE FUNDS								
420	CIVIC CENTER DEBT	865	307,813	233,899	-	233,899	76%	2%
441	POLICE FACILITY BOND DEBT	329	388,040	305,841	-	305,841	79%	3%
TOTAL DEBT SERVICE FUNDS		1,194	695,853	539,740	-	539,740	78%	5%

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City of Morgan Hill
 Year to Date Expenses - Fiscal Year 2020-21
 For the Month and Nine Months Ended March 31, 2021
 75% of Year Complete

FUND NO.	FUND/ACTIVITY	CURRENT MONTH ACTUAL EXPENSES	AMENDED BUDGET	YTD EXPENSES	OUTSTANDING ENCUMBRANCE	TOTAL ALLOCATED	PERCENT OF TOTAL TO BUDGET	PRIC YTI
ENTERPRISE FUNDS								
SEWER								
640	SEWER OPERATIONS	1,377,759	13,351,981	9,798,725	157,604	9,956,329	75%	8,0
641	SEWER CAPITAL EXPANSION	211,283	7,487,155	639,103	655,994	1,295,097	17%	1,2
642	SEWER RATE STABILIZATION	93	1,111	837	-	837	75%	
643	SEWER-CAPITAL PROJECTS	285,534	18,341,671	2,544,233	2,072,114	4,616,346	25%	4,6
TOTAL SEWER FUND(S)		1,874,669	39,181,919	12,982,897	2,885,712	15,868,609	40%	13,8
WATER								
	Water Operations	1,248,427	14,624,090	10,064,839	842,385	10,907,224	75%	9,7
	Utility Billing	62,768	863,064	617,114	22,210	639,324	74%	6
	Water Conservation	5,350	153,047	52,653	44,429	97,082	63%	
650	WATER OPERATIONS	1,316,545	15,640,201	10,734,606	909,024	11,643,630	74%	10,4
651	WATER CAPITAL EXPANSION	45,637	1,064,517	450,201	187,307	637,508	60%	9
652	WATER RATE STABILIZATION	30	362	270	-	270	75%	
653	WATER-CAPITAL PROJECTS	6,121	3,865,574	466,647	320,791	787,438	20%	4
TOTAL WATER FUND(S)		1,368,333	20,570,655	11,651,724	1,417,122	13,068,846	64%	11,8
TOTAL ENTERPRISE FUNDS		3,243,002	59,752,574	24,634,621	4,302,834	28,937,455	48%	25,7
INTERNAL SERVICE FUNDS								
730	INFORMATION SYSTEMS	175,090	2,240,628	1,316,701	192,615	1,509,316	67%	1,5
740	BUILDING MAINTENANCE	236,485	3,450,173	1,840,298	300,477	2,140,775	62%	2,3
741	BUILDING REPLACEMENT	2,205	457,000	50,543	601	51,144	11%	1
745	CIP ADMINISTRATION	135,147	1,655,366	1,177,757	11,971	1,189,728	72%	1,2
760	UNEMPLOYMENT	25,153	75,000	17,495	-	17,495	23%	
770	WORKERS COMPENSATION	24,199	860,729	546,156	-	546,156	63%	8
790	EQUIPMENT REPLACEMENT	557	1,863,653	991,309	381,177	1,372,486	74%	5
791	EMPLOYEE BENEFITS FUND	68,224	625,000	520,930	-	520,930	83%	4
795	GEN. LIABILITY INSURANCE	15,232	1,457,651	1,240,334	-	1,240,334	85%	9
TOTAL INTERNAL SERVICE FUNDS		682,292	12,685,200	7,701,524	886,842	8,588,365	68%	8,0
REPORT TOTAL		\$ 9,478,967	\$ 201,114,348	\$ 86,208,968	\$ 29,724,627	\$ 115,933,594	58%	\$ 91,5

Attachment: March 2021 Financial and Investment Report (3054 : Monthly Budget Update and March 2021 Financial and Investment Reports)

		 City of Morgan Hill Fund Activity Summary - Fiscal Year 2020-21 For The Nine Months Ended March 31, 2021 75% of Year Complete							
Fund No.	Fund	Fund Balance 06-30-20	Revenues		Expenses		Year to-Date Deficit or Carryover	Ending Fund Balance	
			YTD Actual	% of Budget	YTD Actual	% of Budget		Reserved ¹	Unreserved
010	GENERAL FUND	\$ 19,175,235	\$ 23,136,208	58%	\$ 28,962,844	65%	\$ (5,826,636)	\$ 1,411,689	\$ 11,936,910
TOTAL GENERAL FUND		\$ 19,175,235	\$ 23,136,208	58%	\$ 28,962,844	65%	\$ (5,826,636)	\$ 1,411,689	\$ 11,936,910
202	STREET MAINTENANCE	3,417	\$ 476,234	68%	\$ 527,940	68%	\$ (51,706)	\$ -	\$ (48,289)
205	PUBLIC SAFETY/SUPPL. LAW	144,963	99,246	98%	105,301	81%	(6,055)	-	138,908
206	DEVELOPMENT SERVICES	(24,043)	3,639,945	77%	3,524,413	72%	115,532	307,123	(215,634)
207	LONG RANGE PLANNING	1,250,193	557,706	82%	659,208	43%	(101,503)	222,710	925,980
215 / 216	CDBG	39,777	38,571	1240%	4,023	75%	34,548	-	74,325
225	ASSET SEIZURE	142,239	732	39%	-	n/a	732	-	142,971
229	LIGHTING AND LANDSCAPE	163,636	104,314	55%	117,310	70%	(12,996)	8,835	141,805
230	COMMUNITY FACILITIES DISTRICT	126,360	20,394	1677%	17,942	49%	2,452	-	128,812
232	ENVIRONMENTAL PROGRAMS	161,766	445,710	100%	292,074	69%	153,636	15,497	299,905
234	MOBILE HOME PK RENT STAB.	58,766	3,742	504%	333	76%	3,409	-	62,175
235	SENIOR HOUSING	232,918	1,198	32%	-	n/a	1,198	-	234,116
236	HOUSING MITIGATION	3,056,699	1,919,011	85%	489,961	20%	1,429,051	224,981	4,260,769
237	BEGIN	217,113	902	n/a	-	n/a	902	-	218,015
240	EMPLOYEE ASSISTANCE	63,113	11,506	40%	10,658	37%	848	-	63,961
247	ENVIRONMENT REMEDIATION	136,785	1,210	50%	1,521	n/a	(311)	-	136,474
250	COMH-SUCCESSOR AGENCY-MHRDA	(568,362)	888,931	12%	5,015,227	72%	(4,126,296)	-	(4,694,658)
255	HOUSING SUCCESSOR AGENCY	4,538,622	301,227	141%	769,969	77%	(468,742)	116,667	3,953,213
260	PUBLIC ART	-	-	n/a	-	-	-	-	-
TOTAL SPECIAL REVENUE FUNDS		\$ 9,743,962	\$ 8,510,579	52%	\$ 11,535,880	63%	\$ (3,025,301)	\$ 895,811	\$ 5,822,850
301	PARK DEV. IMPACT FUND	\$ 3,569,152	\$ 2,382,850	100%	\$ 3,961,985	36%	\$ (1,579,135)	\$ 4,640,354	\$ (2,650,338)
302	PARK MAINTENANCE	3,411,843	97,839	27%	494,943	66%	(397,104)	90,574	2,924,166
303	LOCAL DRAINAGE	12,068,666	1,934,652	114%	285,020	4%	1,649,632	61,776	13,656,522
304	LOCAL DRAINAGE/NON-AB1600	1,442,477	23,609	18%	186,605	21%	(162,996)	28,948	1,250,533
306	AGRICULTURE AND OPEN SPACE PRESERV	5,860,492	238,523	133%	20,052	15%	218,471	35,956	6,043,007
308	STREET CIP	3,866,352	1,614,198	63%	2,801,864	46%	(1,187,666)	999,591	1,679,095
309	TRAFFIC IMPACT FUND	(538,762)	1,978,609	12%	1,439,737	4%	538,871	15,639,501	(15,639,391)
315	PUBLIC SAFETY FACILITIES IMPACT	3,452,398	378,754	38%	194,475	56%	184,278	-	3,636,676
346	PUBLIC FACILITIES NON-AB1600	389,161	885,359	145%	170,030	51%	715,330	42,975	1,061,516
347	PUBLIC FACILITIES IMPACT FUND	830,098	234,808	70%	38,886	101%	195,922	-	1,026,020
348	LIBRARY IMPACT FUND	1,680,413	484,373	51%	650,046	38%	(165,673)	129,754	1,384,986
350	UNDERGROUNDING	966,109	106,684	832%	828	75%	105,856	-	1,071,965
355	SCHOOL PEDESTRIAN/TRAFFIC SFTY	1,076,228	299,901	51%	1,067,961	54%	(768,059)	91,697	216,472
360	COMM/REC CTR IMPACT FUND	2,050,691	720,642	48%	1,521,927	78%	(801,285)	466,325	783,081
TOTAL CAPITAL PROJECT FUNDS		\$ 40,125,318	\$ 11,380,802	38%	\$ 12,834,359	20%	\$ (1,453,557)	\$ 22,227,451	\$ 16,444,309
420	CIVIC CENTER DEBT	\$ 154,609	\$ 232,841	75%	\$ 233,899	76%	\$ (1,058)	\$ -	\$ 153,551
441	POLICE FACILITY BOND DEBT	74,409	388,175	101%	305,841	79%	82,334	-	156,743
TOTAL DEBT SERVICE FUNDS		\$ 229,018	\$ 621,015	89%	\$ 539,740	78%	\$ 81,276	\$ (1)	\$ 310,294

		 City of Morgan Hill Fund Activity Summary - Fiscal Year 2020-21 For The Nine Months Ended March 31, 2021 75% of Year Complete							
Fund No.	Fund	Fund Balance 06-30-20	Revenues		Expenses		Year to-Date Deficit or Carryover	Ending Fund Balance	
			YTD Actual	% of Budget	YTD Actual	% of Budget		Reserved ¹	Unreserved
640	SEWER OPERATIONS	\$ 3,482,225	\$ 9,471,285	71%	\$ 9,798,725	73%	\$ (327,440)	157,604	2,997,181
641	SEWER IMPACT FUND*	20,830,270	2,453,880	38%	639,103	9%	1,814,777	655,994	21,989,053
642	SEWER RATE STABILIZATION	2,674,255	13,752	31%	837	75%	12,915	-	2,687,170
643	SEWER-CAPITAL PROJECTS	7,626,168	3,341,865	75%	2,544,233	14%	797,632	2,072,114	6,351,686
650	WATER OPERATIONS	3,930,425	11,214,948	72%	10,734,606	69%	480,342	909,024	3,501,742
651	WATER IMPACT FUND*	2,803,482	1,103,708	63%	450,201	42%	653,507	187,307	3,269,683
652	WATER RATE STABILIZATION	3,094,803	49,126	75%	270	75%	48,856	-	3,143,659
653	WATER -CAPITAL PROJECT	4,517,933	3,662,251	75%	466,647	12%	3,195,604	320,791	7,392,746
TOTAL ENTERPRISE FUNDS		\$ 48,959,561	\$ 31,310,814	67%	\$ 24,634,621	41%	\$ 6,676,192	\$ 4,302,834	\$ 51,332,920
730	INFORMATION SERVICES	\$ 701,746	\$ 1,413,046	76%	\$ 1,316,701	59%	\$ 96,345	\$ 192,615	\$ 605,476
740	BUILDING MAINTENANCE	223,214	2,381,343	68%	1,840,298	53%	541,045	300,477	463,782
741	BUILDING REPLACEMENT	3,050,163	510,321	70%	50,543	11%	459,778	601	3,509,340
745	CIP ENGINEERING	56,754	801,451	47%	1,177,757	71%	(376,307)	11,971	(331,523)
760	UNEMPLOYMENT	63,318	75,526	74%	17,495	23%	58,031	-	121,349
770	WORKERS COMPENSATION	2,035,759	535,630	61%	546,156	63%	(10,526)	30,000	1,995,233
790	EQUIPMENT REPLACEMENT	5,830,858	1,055,356	97%	991,309	53%	64,048	381,177	5,513,729
791	EMPLOYEE BENEFITS FUNDS	55,383	448,890	44%	520,930	83%	(72,040)	-	(16,657)
795	GEN. LIABILITY INSURANCE	1,243,527	647,612	74%	1,240,334	85%	(592,721)	-	650,806
TOTAL INTERNAL SERVICE FUNDS		\$ 13,260,722	\$ 7,869,176	67%	\$ 7,701,524	61%	\$ 167,653	\$ 916,842	\$ 12,511,533
SUMMARY BY FUND TYPE									
GENERAL FUND GROUP		\$ 19,175,235	\$ 23,136,208	58%	\$ 28,962,844	65%	\$ (5,826,636)	\$ 1,411,689	\$ 11,936,910
SPECIAL REVENUE GROUP		9,743,962	8,510,579	52%	11,535,880	63%	(3,025,301)	895,811	5,822,850
DEBT SERVICE GROUP		229,018	621,015	89%	539,740	78%	81,276	(1)	310,294
CAPITAL PROJECTS GROUP		40,125,318	11,380,802	38%	12,834,359	20%	(1,453,557)	22,227,451	16,444,309
ENTERPRISE GROUP		48,959,561	31,310,814	67%	24,634,621	41%	6,676,192	4,302,834	51,332,920
INTERNAL SERVICE GROUP		13,260,722	7,869,176	67%	7,701,524	61%	167,653	916,842	12,511,533
TOTAL ALL GROUPS		\$ 131,493,816	\$ 82,828,593	57%	\$ 86,208,968	43%	\$ (3,380,374)	\$ 29,754,626	\$ 98,358,815

For Enterprise Funds: Unrestricted fund balance = Fund balance net of fixed assets and long-term liabilities.

*Unreserved fund balance includes bond proceeds reserved for projects listed in bond documents.

¹ Amount restricted for encumbrances, fixed asset replacement, long-term receivables, and bond reserves.

² Amount restricted for debt service payments and AB1600 capital expansion projects as detailed in the City's five year CIP Plan and bond agreements.

City Manager's Signature Authority**Contracts and Agreements Between \$25,000 to \$60,000 Entered Since 1/7/2021 to 4/8/2021**

Vendor Name	Description of Service	Begin Date	End Date	Department	Amount
Ruggeri-Jensen-Azar	Coordination and Design Ramps at the Dunne Ave Overpass	2/8/2021	6/30/2022	E&U	\$51,940
A&B Mechanical, Inc	Corp Yard Heat Pump Installation	3/27/2021	5/30/2021	E&U	\$33,174
Questica LTD	Software Subscription Agreement	3/18/2021	1/15/2024	Admin	\$58,900
Geographic Technologies Group	GIS Support Contract	3/25/2021	3/31/2026	CS	\$30,000



CITY COUNCIL STAFF REPORT

MEETING DATE: April 21, 2021

PREPARED BY: Christina Turner, City Manager
APPROVED BY: City Manager

CONSIDER COUNCIL INITIATED AGENDA ITEM TO REVISIT COMMERCIAL CANNABIS

RECOMMENDATION(S)

Consider whether to direct staff to return with a Council Agenda Item to discuss allowing commercial cannabis in Morgan Hill City limits.

COUNCIL PRIORITIES, GOALS & STRATEGIES

Ongoing Priorities

Enhancing Public Safety
Supporting Our Youth
Seniors
and Entire Community

2020-2021 Strategic Priorities

Fiscal Sustainability

REPORT NARRATIVE:

On March 17, 2021, Councilmember Spring requested an item return to the Council to discuss allowing commercial cannabis in Morgan Hill City limits. Per Council Policy 96-01, when a request is made by a Councilmember to bring a report to the Council, it requires Council approval before staff can initiate work.

California voters approved Proposition 64 – The Adult Use of Marijuana Act (AUMA) - November 8, 2016, allowing for the recreational possession, sale, and use of marijuana. Since that time, the City of Morgan Hill has spent a significant amount of time researching and consulting with industry experts about the effects marijuana activities would have on the Morgan Hill community. The City has several options for regulating cannabis cultivation, cannabis-related business activity, and fees and taxes charged in connection with cannabis-related activity.

Although local jurisdictions have the ability to prohibit and regulate all commercial cannabis activity in their city limits, the Morgan Hill City Council previously voted to maintain a prohibition on commercial cannabis activity.

Additionally, on November 16, 2018, Morgan Hill residents voted to approve Measure I. Measure I does not allow cannabis business in Morgan Hill but allows for the taxing of cannabis business if the City decides to approve commercial cannabis.

For additional background and information, visit our [website](#).

COMMUNITY ENGAGEMENT: Inform

This staff report and previous staff reports and workshops serve to inform the community about Council's actions to date on the subject of cannabis, as well as Planning Commission's recommendations and the community's input.

ALTERNATIVE ACTIONS:

The Council can approve or deny this request and provide further input.

PRIOR CITY COUNCIL AND COMMISSION ACTIONS:

The Council has engaged on this topic on multiple occasions since the passage of Proposition 64 to include:

- Workshops
February 1, 2017, September 27, 2017, and February 27, 2019
- Staff Reports
February 15, 2017, July 19, 2017, February 7, 2018, July 18, 2018,
November 6, 2019, and December 4, 2019

The Morgan Hill Municipal Code (MHMC) was updated on July 26, 2017 to ensure alignment with the requirements of the Adult Use of Marijuana Act (AUMA).

The Planning Commission held a workshop on July 23, 2019, and provided a land use and licensing recommendation at its August 27, 2019 meeting.

FISCAL AND RESOURCE IMPACT:

There are no fiscal impacts in receiving this report and providing direction for any next steps.

CEQA (California Environmental Quality Act): Not a Project

The Council direction in this matter is administrative and will not result in a change to the physical environment, this action is not a project under the California Environmental Quality Act.

LINKS/ATTACHMENTS:

1. Proposition 64 and Cannabis Regulations (weblink)
2. Letters from the public

Angie Gonzalez

From: Ronald Kirkish <[REDACTED]>
Sent: Friday, March 19, 2021 4:38 PM
To: Christina Turner; Rich Constantine; Yvonne Martinez Beltran; Rene Spring; John McKay; Shane Palsgrove; Gino Borgioli
Cc: Bob Cooke; Terry Ratto; Ladera Grill Dan; Ladera Grill Morgan; Kevin A. Sabet; Monte Stiles; Roger Morgan; Carla Lowe; John Lovell; Scott Chipman; Paulette Nagle IFBC; HENRY LOZANO; Paul Chabot
Subject: [Men's Journal] Shocker: 20-Year Study Says That Marijuana Makes You Stupid

MEN'S JOURNAL

Shocker: 20-Year Study Says That Marijuana Makes You Stupid

<https://www.mensjournal.com/adventure/shocker-20-year-study-says-marijuana-makes-you-stupid/>

by Nikki Donnelly, March 19, 2021

Marijuana has adopted a relatively harmless reputation in recent years, but a [new 20-year study](#) published in the journal *Addiction* is calling BS.

Its authors suggest that marijuana is linked to decreased cognitive [function](#) and could potentially lead to a slew of mental disorders.

Though the short-term effects of marijuana are not particularly serious, the new study demonstrates that with chronic use, the drug could lead to schizophrenia as well as an increased risk of psychotic symptoms such as hallucinations.

The drug has been linked to reduced learning, memory, and attention, and could also be addictive for some people.

As if that weren't enough to keep you away, the study also found that after smoking marijuana, you're twice as likely to die from crashing your car.

Do yourself a favor and keep your body [clean](#) and drug-free.

Attachment: Letters from the public [Revision 1] (3045 : Request for Cannabis Report)

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Angie Gonzalez

From: Ronald Kirkish <[REDACTED]>
Sent: Thursday, April 8, 2021 7:09 AM
To: Christina Turner; Rich Constantine; Yvonne Martinez Beltran; Rene Spring; John McKay; Shane Palsgrove; Gino Borgioli
Cc: Matt Wendt
Subject: [New York Daily News] Using weed while pregnant linked to psychotic-like behaviors in children: study

Dear All,

Marijuana dispensaries, Apothecary businesses, bud tender's, and their pro-pot advocates often advise pregnant mothers to abuse marijuana to alleviate their morning sickness and instructing them not to pay attention to the those who try to warn you that marijuana is bad for the developing baby in the womb.

Let's be frank, pro-pot folks could care less about the mother and the health of her baby, all they want is their money.

For your consideration and B/r,

Ronald L. Kirkish

[New York Daily News]Using weed while pregnant linked to psychotic-like behaviors in children: study

<https://www.nydailynews.com/news/national/ny-weed-use-pregnant-psychotic-behavior-children-study-20200923-f6rrqaqljhojaatudtwjdntcy-story.html>

By [DAVID MATTHEWS](#) - NEW YORK DAILY NEWS - SEP 23, 2020 AT 2:00 PM

Additional links:

- [CNN] Using weed during pregnancy linked to psychotic-like behaviors in children, study finds - <https://www.cnn.com/2020/09/23/health/weed-pregnancy-childhood-psychosis-trnd-wellness/index.html>
- [Miami CBS Local] Study: Marijuana Use During Pregnancy Linked To Psychotic-Like Behaviors In Kids - <https://miami.cbslocal.com/2020/09/24/study-marijuana-use-pregnancy-linked-psychotic-behaviors-children/>
- [CBS LOCAL] Using Weed During Pregnancy Linked To Psychotic-Like Behaviors In Children, Study Finds <https://baltimore.cbslocal.com/2020/09/23/using->

Attachment: Letters from the public [Revision 1] (3045 : Request for Cannabis Report)

[weed-during-pregnancy-linked-to-psychotic-like-behaviors-in-children-study-finds/](https://www.fox42.com/news/using-weed-during-pregnancy-linked-to-psychotic-like-behaviors-in-children-study-finds/)

- [WHDT, Boston News 7] Using Weed During Pregnancy Linked To Psychotic-Like Behaviors In Children, Study Finds - <https://whdh.com/news/using-weed-during-pregnancy-linked-to-psychotic-like-behaviors-in-children-study-finds/>

A new study found that [using marijuana while pregnant](#) may increase psychotic-like behavior in children.

The study, published Wednesday in [JAMA Psychiatry](#), followed 11,489 children over a series of years and evaluated their cognitive and behavior patterns around their 9th birthdays.

Only 655 of those children were exposed to weed in utero, but the study found that those children were overwhelmingly more likely to have psychotic-like behaviors as well as more attention, social and sleep issues, as well as lesser cognitive abilities. While the vast majority used weed in their first trimester, the first trimester is arguably the most critical time for the fetus' developing brain.

According to the Centers for Disease Control and Prevention, previous studies have linked weed use to low birth weight, impulsivity, hyperactivity, and attention issues. Other studies have linked weed use to autism.

In 2019, the U.S. Surgeon General Jerome Adams warned against cannabis use by pregnant women.

“Recent increases in access to marijuana and in its potency, along with misperceptions of safety of marijuana endanger our most precious resource, our nation’s youth,” he said.

“THC has been found in breast milk for up to six days after the last recorded use,” the advisory states. “It may affect the newborn’s brain development and result in hyperactivity, poor cognitive function, and other long-term consequences.

“Additionally, marijuana smoke contains many of the same harmful components as tobacco smoke. No one should smoke marijuana or tobacco around a baby.

The problems were even more pronounced if the mother continued to use weed after learning she was pregnant.

A [recent study](#) from the National Institute on Drug Abuse found that marijuana use by pregnant women doubled between 2002 and 2017.

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Angie Gonzalez

From: Ronald Kirkish [REDACTED] >
Sent: Thursday, March 25, 2021 6:50 AM
To: Christina Turner; Rich Constantine; Yvonne Martinez Beltran; Rene Spring; John McKay; Shane Palsgrove; Gino Borgioli
Cc: Terry Ratto; Ladera Grill Dan; dave@lokeyfirearms.com; Matt Wendt; Chris Borello
Subject: [New York Post] The link between pot and mass shootings may be closer than we think

Dear all,

A lot has been learned about the link to marijuana's THC and mental illness.

This article in the New York Post shows us that many of the mass shootings are also linked to mental illness caused by the abuse of marijuana.

B/r,

Ronald L Kirkish



The link between pot and mass shootings may be closer than we think

<https://nypost.com/2019/08/07/the-link-between-pot-and-mass-shootings-may-be-closer-than-we-think/>

By [Miranda Devine](#) - August 7, 2019 | 9:26pm

You can't walk through the streets of Manhattan these days without smelling weed.

Attachment: Letters from the public [Revision 1] (3045 : Request for Cannabis Report)

Even as evidence mounts of the health problems associated with marijuana, New York has insisted on joining other greedy states scrambling to legalize this deceptively dangerous drug.

It makes no sense at a time when American youth is suffering from an unprecedented mental health crisis.

And, in all honesty, we cannot rule out a connection between [increasing marijuana use](#), mental illness and the recent spate of mass shootings by disturbed young males.

We don't yet know much about the mental state or drug use of the El Paso or Dayton killers. But a former girlfriend of Dayton killer Connor Betts, 24, has [indicated he was mentally ill](#), and two of his friends interviewed by reporters this week mentioned his previous drug use.

Just last year, the Parents Opposed to Pot lobby group tried to sound the alarm on the link between marijuana and mass shootings, compiling a list of mass killers it claims were heavy users of marijuana from a young age, from Aurora, Colo., shooter James Holmes and Tucson, Ariz., shooter Jared Loughner to Chattanooga, Tenn., shooter Mohammad Abdulazeed.

Until we understand those links, it is nuts to enact lax laws that encourage more young people to use a drug proven to trigger mental illness.

President Trump was right to [highlight mental illness](#) in his remarks Wednesday on the El Paso and Dayton shootings, not that his unscrupulous critics will listen, so determined are they to brand him a white supremacist.

We know from a 2018 FBI report that 40% of "active shooters" in the US between 2008 and 2013 had been diagnosed with a mental illness before the attack and 70% had "mental health stressors" or "mental health concerning behaviors."

So for anyone actually interested in preventing future such massacres, the [so-called "red flag" legislation](#) Trump is advocating to deny people with mental illness access to firearms is the most logical measure and the one most likely to be embraced by both sides of politics.

But it also should apply to marijuana use, seeing as the two go hand in hand.

You can't address the youth mental health crisis without considering the effect of rising teen marijuana use.

Among American teenagers, the drug's "daily use has become as, or more, popular than daily cigarette smoking" according to the National Institute of Health's 2017 Monitoring the Future study.

We've successfully demonized cigarettes while new laws send kids the message that marijuana is harmless.

Yet we've known for more than a decade of the link between marijuana and psychosis, depression and schizophrenia.

In 2007 the prestigious medical journal Lancet recanted its previous benign view of marijuana, citing studies showing "an increase in risk of psychosis of about 40 percent."

A seminal long-term study of 50,465 Swedish army conscripts found those who had tried marijuana by age 18 had 2.4 times the risk of being diagnosed with schizophrenia in the following 15 years than those

who had never used the drug. Heavy users were 6.7 times more likely to be admitted to a hospital for schizophrenia.

Another study, of 1,037 people in New Zealand, found those who used cannabis at ages 15 and 18 had higher rates of psychotic symptoms at age 26 than non-users.

A 2011 study in the British Medical Journal of 2,000 teenagers found those who smoked marijuana were twice as likely to develop psychosis as those who didn't.

Another BMJ study estimated that "13 percent of cases of schizophrenia could be averted if all cannabis use were prevented."

That's more than 400,000 Americans who could be saved from a fate worse than death.

Young people and those with a genetic predisposition are most at risk, particularly during adolescence, when the brain is exquisitely vulnerable.

The evidence of harm is overwhelming, and it defies logic to [think that legalizing marijuana](#) won't increase the harm.

And yet marijuana activists pretend there is no problem and baby-boomer lawmakers, perhaps recalling their own youthful toking, ignore the science.

To make matters worse, the marijuana sold at legal dispensaries today is five times more potent than the pot of the 1970s and '80s, according to a thoroughly researched new book by former New York Times reporter Alex Berenson: "[Tell Your Children: The Truth About Marijuana, Violence and Mental Health](#)."

Berenson reports that the first four states to legalize marijuana, Alaska, Colorado, Oregon and Washington, have seen "sharp increases" in violent crime since 2014.

If we care about mental illness, which has been spiking up at an alarming rate in recent years among young people, especially teenage boys, we should care about the convincing evidence of marijuana-induced psychosis.

We didn't have to wait for three mass shootings in two weeks to know that young males are in crisis.

Youth suicide is at an all-time high and rates of serious mental illness in this country are on the rise, especially among people aged 18 to 25, the cohort most likely to use marijuana.

Young people born in 1999, the birth year of the El Paso shooter, were 50% more likely than those born in 1985 to report feeling "serious psychological distress" in the previous month, according to an alarming study published this year in the Journal of Abnormal Psychology.

With all we know, it's time to put the brakes on marijuana legalization before it's too late.

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Angie Gonzalez

From: Ronald Kirkish <[REDACTED]>
Sent: Wednesday, March 17, 2021 11:09 PM
To: Christina Turner; Rich Constantine; Yvonne Martinez Beltran; Rene Spring; John McKay; Shane Palsgrove; Gino Borgioli
Cc: Terry Ratto; Marsha Edick; Michael Lancaster; [REDACTED]; [REDACTED];
Ladera Grill Dan; Ladera Grill Morgan; Bob Cooke
Subject: 20210317_203614.pdf

Dear all,

You might want seriously reconsider it you should bring marijuana back up — you shouldn't want to open that can of worms, for a 3rd time again.

Best regards,

Ronald L. Kirkish

[Click to Download](#)

20210317_203614.pdf0 byt

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Attachment: Letters from the public [Revision 1] (3045 : Request for Cannabis Report)

From: [Ronald Kirkish](#)
To: [Christina Turner](#); [Rich Constantine](#); [Yvonne Martinez Beltran](#); [Rene Spring](#); [John McKay](#); [Shane Palsgrove](#); [Gino Borgioli](#)
Subject: ADHD numbers are rising and scientists are trying to understand why
Date: Sunday, April 4, 2021 8:14:48 AM

Dear All,

The frequency of ADHD has exploded since the 1990's as has the huge increase of the %THC in "Skunk marijuana"

NIDA's Dr. Nora Volkow's research shows that THC does damage to the human brain's white matter and the damage is substantial.

B/r

Ronald L. Kirkish

The Impact of ADHD Persistence, Recent Cannabis Use, and Age of Regular Cannabis Use Onset on Subcortical Volume and Cortical Thickness in Young Adults

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5289096/>

Results

ADHD numbers are rising and scientists are trying to understand why: In the late 1990s, 7.2 percent of non-Hispanic white children, 4.7 percent of non-Hispanic black children and 3.6 of Hispanic children were diagnosed with ADHD, according to the study. By 2016, it was 12 percent of white kids, 12.8 percent of blacks and 6.1 percent of Hispanics.

After controlling for age, gender, total brain volume, nicotine use, and past-year binge drinking, childhood ADHD diagnosis did not predict brain structure; however, persistence of ADHD was associated with **smaller left precentral/postcentral cortical thickness**.

Compared to all non-users, CAN users had decreased cortical thickness in right hemisphere superior frontal sulcus, anterior cingulate, and isthmus of cingulate gyrus regions and left hemisphere superior frontal sulcus and precentral gyrus regions. Early cannabis use age of onset (CUO) in those with ADHD predicted greater right hemisphere superior frontal and postcentral cortical thickness.

Attachment: Letters from the public [Revision 1] (3045 : Request for Cannabis Report)

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From: [Ronald Kirkish](#)
To: [Christina Turner](#); [Rich Constantine](#); [Yvonne Martinez Beltran](#); [Rene Spring](#); [John McKay](#); [Shane Palsgrove](#); [Gino Borgioli](#)
Cc: [Matt Wendt](#); [Chris Borello](#)
Subject: Adolescent cannabis and tobacco use are associated with opioid use in young adulthood-12-year longitudinal study in an urban cohort
Date: Friday, March 19, 2021 5:24:50 PM

Dear All,

Advocates for the abuse of marijuana argue that their drug of choice isn't a gateway drug..... they are lying.

Ronald L. Kirkish

Adolescent cannabis and tobacco use are associated with opioid use in young adulthood-12-year longitudinal study in an urban cohort

PMID: 32692425 PMCID: PMC7855765 (available on 2022-03-01)

DOI: [10.1111/add.15183](https://doi.org/10.1111/add.15183)

Abstract

Background and aims: Cannabis, tobacco and alcohol use are prevalent among youth in the United States and may be risk factors for opioid use. The current study aimed at investigating associations between developmental trajectories of cannabis, tobacco and alcohol use in adolescence and opioid use in young adulthood in an urban cohort over the span of 12 years.

Design: Cohort study of adolescents originally recruited for a randomized prevention trial with yearly assessments into young adulthood.

Setting: Nine urban elementary schools in Baltimore, MD in the United States.

Participants: Participants (n = 583, 86.8% African American, 54.7% male) were originally recruited as first grade students.

Measurements: Cannabis, tobacco and alcohol use were assessed annually from ages

14-18 years and opioid use from ages 19-26. Socio-demographics were assessed at age 6. Intervention status was also randomly assigned at age 6. Gender, race, free/reduced-priced lunch and intervention status were included as covariates in individual and sequential growth models.

Findings: There were significant positive associations between the cannabis use intercept at age 14 and the opioid use intercept at age 19 (beta = 1.43; P = 0.028), the tobacco use intercept at age 14 and the opioid use intercept at age 19 (beta = 0.82; P = 0.042). Specifically, more frequent use of cannabis or tobacco at age 14 was associated with more frequent use of opioids at age 19.

Conclusions: Cannabis and tobacco use in early adolescence may be risk factors for opioid use in young adulthood among African Americans living in urban areas.

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From: [Ronald Kirkish](#)
To: [Christina Turner](#); [Rich Constantine](#); [Yvonne Martinez Beltran](#); [Rene Spring](#); [John McKay](#); [Shane Palsgrove](#); [Gino Borgioli](#)
Cc: [Matt Wendt](#); [Chris Borello](#); [Terry Ratto](#); dave@lokeyfirearms.com; [Ladera Grill Dan](#)
Subject: Amsterdam drugs: Tourists face ban from cannabis cafes
Date: Sunday, March 28, 2021 2:17:49 PM

Dear All,

Morgan Hill City **Councilman Rene Spring** originally immigrated to the United States from the European country of Switzerland to eventually settle in Morgan Hill and is an avid advocate for marijuana businesses including sales, distribution and growth.

However, unlike Councilman Spring, the Mecca of Europe for of all things pot, Amsterdam, Holland, their residents are demanding that the marijuana businesses go the way of the dinosaur's.....they want their city and nation back.

For decades, the City of Amsterdam, Holland, has been the recognized pioneer for all things marijuana and for these last several years that nation has been having to deal with all of the significant problems caused by their liberal views in regards to marijuana.

This BBC article, dated **January 30, 2021** shows you why [after several decades] Holland has been closing down their **"Coffee Shops"** all around their nation for several years now including and especially in Amsterdam, where marijuana has been typically served to their customers and now they are discussing to shut them all down, permanently; post the COVID shutdown.

You will learn that the indigenous residents of Amsterdam are completely fed up with all the horrid anti-social behaviors and criminal activity that the marijuana culture in Amsterdam encourages and that the residents of that city are insisting on closing it all down and take their city back.

Frankly, why in "Haiti's" would any sane resident of Morgan Hill and/or Gilroy even want to seriously consider allowing this business to operate within their jurisdiction knowing that the residents of Amsterdam, the Mecca for the Pot culture, want to closed it "all" down after suffering from it's depraved consequence's for several decades.

For your consideration and B/r,

Ronald L. Kirkish

Amsterdam drugs: Tourists face ban from cannabis cafes

<https://www.bbc.com/news/world-europe-55765554>

By Anna Holligan - BBC News, Amsterdam - Published 30 January, 2021

Attachment: Letters from the public [Revision 1] (3045 : Request for Cannabis Report)

When international visitors are eventually able to return to the canals that crisscross the medieval streets of Amsterdam, they may find one of the Dutch capital's famous tourist attractions off limits.

Amsterdam Mayor Femke Halsema wants to ban foreign tourists from cannabis cafes **to tackle anti-social behaviour** and push the city upmarket.

Owners of Amsterdam's fabled coffee shops are pushing back. They have told the BBC that if tourists are banned from regulated establishments, they will be pushed into the hands of ruthless drug gangsters on the streets.

'They let go of all discipline'

Amsterdam is famous for an array of things, including its thriving nightlife - red light district, cannabis cafes and bars - attracting 20 million tourists per year.

Like the rest of the Netherlands, the capital is currently in lockdown.

Some of its 850,000 residents would prefer its post-Covid life to resemble its current state, rather than return to what it was. Bernadette de Wit wants to get rid of what she calls "low-value tourists", including young British women "dressed up as pink penises - they let go of all discipline".

Bernadette wobbles around to demonstrate how some visitors act from late morning onwards, **urinating in the street and vomiting in gardens.**

This is our home. This is a Unesco World Heritage Site. Rembrandt used to live in this neighbourhood you know?

Bernadette de Wit

Amsterdam resident

The mayor has a plan. Cutting off the lifeblood of cannabis tourism, she believes, will deter that type of visitor and reduce the kind of conduct often associated with them. Most of the Netherlands already requires visitors to coffee shops to show proof of residence, but the rule is not enforced in the capital.

The council has already tried other methods to reduce the pressure that comes with "over-tourism". Airbnb-style holiday rentals were recently banned from the historic centre, and the future of the red light district is under discussion with proposals to create a sex zone on the outskirts instead.

Coffee shops are the latest pleasure-seekers' pursuit to be targeted.

'Only eight coffee shops left'

Inside Joachim Helms' Greenhouse cafe, the walls are resplendent with photos of him hugging celebrity clientele, from Rihanna to Richard Branson, Snoop Dogg and Miley Cyrus.

"I've lived here all my life," the owner told me. "People who come to smoke weed aren't the ones causing the disturbance."

Taking the tourists out of coffee shops may be easier to enforce than tackling cheap flights and accommodation, but it is not the way to improve Amsterdam for the locals, he believes.

'Left behind' by Dutch cannabis laws

Contradictory Dutch regulations have created what's known as a "backdoor" policy: cannabis production is illegal, but [Dutch coffee shops are allowed to sell it](#). Even though that's technically a criminal offence, the sale of small quantities is "tolerated".

This policy means the coffee shops buy their stock from underground criminal growers, who mostly cultivate it illegally in the Netherlands or smuggle it in from places such as Morocco, Jamaica, Colombia and Thailand.

Joachim and other owners have told the BBC their reputation is being damaged by disjointed regulations. Experiments are under way in 10 cities that allow a small number of coffee shops to buy their products from authorised Dutch cannabis growers.

"We are seeing other cities going ahead while we are left behind. It's bad for Amsterdam - a liberal, tolerant city is actually going backwards," he complains.

Could tourists be targeted by street dealers?

The BBC asked Amsterdam's local authority what it made of the warning from coffee shop owners that banning visitors from their premises would merely move the issue on to the capital's streets.

In a statement, it said: "A growing cannabis market generating ever larger profits is increasingly vulnerable to criminal activity. The current tolerance policy makes it difficult, if not impossible, for coffee shop operators not to maintain ties with illegal suppliers."

But Mark Jacobs, who runs The Rookies Club on a narrow street in the shadow of the Rijksmuseum, believes the mayor's plans will fuel the very crime and anti-social behaviour the council is trying to combat.

"The hard dealers are the ones who will be happy: brutal guys, I already see it. At 01:00 I have to close my doors, then there are dealers waiting, they don't care what they sell you, or what happens to you.

"It won't be safe on the streets as it is now. You'll get the new Al Capones, the new dealers will emerge, thousands of them."

The coffee shops play an important role in protecting young people, according to Joachim Helms, who fears that otherwise they could end up as drug mules or selling drugs on the street.

Other small business owners have their own concerns.

But many residents do not see it the same way, and with police and prosecutors in favour of tighter controls, it is highly likely that foreign visitors will be barred from Amsterdam's cannabis cafes from next year.

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From: [Cari Farquhar](#)
To: [Christina Turner](#); [Rene Spring](#); [John McKay](#); [Yvonne Martinez Beltran](#); [Gino Borgioli](#); [Rich Constantine](#)
Subject: Commercial Marijuana in Morgan Hill
Date: Friday, March 19, 2021 3:33:27 PM

Hello Council,

I am writing to you today to stress my opposition to having commercial marijuana dispensaries in our city. Having this kind of a business which sells a drug that alters minds of our youth should not be readily accessible. Speaking to my neighbors, I found they were not against adults using marijuana, but did not want their children exposed to it. Last year former FDA head Scott Gottlieb warned of potential harm of the widespread use of cannabis and that we are “conducting a widespread experiment of THC on the public by making it broadly available.” I don’t want our children here in Morgan Hill along for this experiment, as I recognize that the adults who are pushing this on us will have no responsibility for the consequences. If necessary a person needing the drug can drive the short distance to another local city for purchase or have it delivered to their residence.

Thank you,
Cari Farquhar
Morgan Hill Resident for 28 years

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Attachment: Letters from the public [Revision 1] (3045 : Request for Cannabis Report)

From: [Carol Lillig](#)
To: [Christina Turner](#)
Subject: Commercial marijuana in town
Date: Thursday, March 25, 2021 8:17:14 AM

Hi Ms. Turner,

I understand that there's a possibility of a council agenda item that would bring commercial marijuana to Morgan Hill. I understand that there are a variety of responses to issues like this but I wanted you to know that I would really prefer that this kind of business not be allowed in town. Folks can grow their own or purchase from delivery services so it seems that it wouldn't be an inconvenience for them to not have this establishment in town.

Just thought I'd let you know that, for me, this is an issue that I feel strongly about. I understand that others may feel differently, and I respect that. Just wanted to let my opinion be known.

Kind regards,
Carol Lillig

Carol Lillig

[REDACTED]

Morgan Hill, CA 95037

[REDACTED]

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Attachment: Letters from the public [Revision 1] (3045 : Request for Cannabis Report)

From: [Ronald Kirkish](#)
To: [Christina Turner](#); [Rich Constantine](#); [Yvonne Martinez Beltran](#); [Rene Spring](#); [John McKay](#); [Shane Palsgrove](#); [Gino Borgioli](#)
Cc: [Matt Wendt](#); [Chris Borello](#); [Terry Ratto](#); [Ladera Grill Dan](#); [daniel harney](#); [Bob Cooke](#); [Marsha Edick](#); [Michael Lancaster](#); [REDACTED]
Subject: Don't allow Constantine & Spring to destroy Morgan Hill's wholesome culture
Date: Monday, March 22, 2021 10:29:58 AM

Dear All,

Morgan Hill's Mayor Rich Constantine and his cohort City Councilman Renee Spring are trying (for a 3rd time) to allow for the sales, distribution and growing of marijuana within the jurisdiction and city limits of Morgan Hill.

Twice already they have been denied but once again they are intending to stubbornly turn the wholesome culture of Morgan Hill into a culture of drug abuse; and into a crime syndicate hub for all criminal drug cartel activity which "will" include the smorgasbord of "all dangerous and illegal drugs" that come across our southern border with Mexico for the purpose of reaching their tentacles deep into every nook and cranny of your neighborhoods.

Instead of promoting Morgan Hill's famous kid sports programs like "Pony Baseball, Pop-Warner football, soccer, basketball, girls softball", these two gentlemen want to promote the abuse of drugs. Illegal and dangerous drugs are flooding across our Mexican border and into your own community, **if you allow it and make it easy for them.**

I received this information from a great friend and awesome human being who is friends with the gentleman [Robert Almonte] who is being interviewed on Fox News.....here is my friends remarks:

"Ron - Robert Almonte is a personal friend from Texas. He is a retired Deputy Chief from El Paso PD and former US Marshal. He teaches about Cartel violence all over the world. Feel free to post and share."

And, I strongly urge you all to also share this important information with others within your sphere's of influence. We "have" to get the truth, the facts, out to the residents of Morgan Hill that Mayor Constantine and Councilman Spring are intending to destroy the City of Morgan Hill and their kids with their pro-drug abuse agenda.

For your consideration and B/r, Ronald L. Kirkish.

[https://video.foxnews.com/v/6242611555001?](https://video.foxnews.com/v/6242611555001?fbclid=IwAR1coPCVKkFKE4DMpeQJQgBnur3F54vnpbQYJ2OI9Gb2I_LQds-vd1TCzxE#sp=show-clips)

[fbclid=IwAR1coPCVKkFKE4DMpeQJQgBnur3F54vnpbQYJ2OI9Gb2I_LQds-vd1TCzxE#sp=show-clips](https://video.foxnews.com/v/6242611555001?fbclid=IwAR1coPCVKkFKE4DMpeQJQgBnur3F54vnpbQYJ2OI9Gb2I_LQds-vd1TCzxE#sp=show-clips)

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From: [Ronald Kirkish](#)
To: [Christina Turner](#); [Rich Constantine](#); [Yvonne Martinez Beltran](#); [Rene Spring](#); [John McKay](#); [Shane Palsgrove](#); [Gino Borgioli](#)
Cc: [Matt Wendt](#); [Chris Borello](#); [Terry Ratto](#); [dave@lokeyfirearms.com](#); [Ladera Grill Dan](#); [Ladera Grill Morgan](#); [Bob Cooke](#)
Subject: Drug abuse and the City of Santa Cruz, CA
Date: Wednesday, March 24, 2021 4:14:36 PM

Dear All,

The City of Santa Cruz, CA [just a few miles from Morgan Hill] is ground zero for drug abuse and the drug epidemic America is experiencing can be directly traced to this city.

When compared to the national averages for issues regarding drug abuse, the City of Santa Cruz far exceeds all others in all categories; why? Because of their many years of being soft on drug abuse policies

When we can see with our own eyes what has been happening in Santa Cruz, the rampant drug abuse among their youth, why would any other city, especially including Morgan Hill, want to walk in the same foot steps, steps that lead down the path to great harm and damage to their community and their children?

Ronald L. Kirkish.

Santa Cruz County Drug and Alcohol Abuse Statistics

<https://elevaterehab.org/santa-cruz-county-california-drug-alcohol-abuse-statistics/>

December 18, 2016

Drug and alcohol abuse is considered California's top premature killer. In California, 40,000 emergency room visits each year are drug-related.

Though illicit drug and alcohol abuse is a statewide problem, it is particularly prevalent in Santa Cruz County.

Unlike other areas that often see spikes of one particular drug, the area's abuse rates cover various drugs—from **marijuana** and cocaine to hallucinogens and prescription drugs.

The statistics offered by the Santa Cruz County Health Department show a large disparity between the state and the county.

The percentage of adults who need help for emotional/mental problems or drug and alcohol problems for California is 15 percent, and for just Santa Cruz County, it's 22 percent.

These numbers suggest that the county is fighting a larger battle against drugs than other areas in the state. The drug and alcohol issues of Santa Cruz County top the state.

Attachment: Letters from the public [Revision 1] (3045 : Request for Cannabis Report)

How Commonly Abused Drugs Have Become More Dangerous

The problems of Santa Cruz County have recently become part of a national spotlight on the drug epidemic in the United States.

There have been at least four high-profile overdoses in Santa Cruz County that resulted in fatalities in 2015, all under the age of 25, and stem from a mix of drugs known as a cocktail.

The mixes of drugs vary; they can include:

- methadone
- xanax
- oxycodone
- allergy medication
- cocaine

Some of these drugs speed up the heart and nervous system, while others slow it down. The inclusion of alcohol adds an even higher level of danger to the drugs.

Some users will use one kind of drug to counteract the other's effects, assuming that they can be taken together because they both aren't downers, but combining any of them can be deadly.

According to the Santa Cruz Sentinel, part of the issue in Santa Cruz County is that many of these drugs have become more readily available.

Young adults and adolescents—people who aren't aware of how harmful it can be to mix drugs with alcohol or other substances—are the groups most likely to abuse drugs.

The Demographics and Substance Abuse in Santa Cruz County

Consider the following drug statistics:

- In 2013, about 23 percent of teens and young adults reported using an illegal drug within the past month.
- Of those, about 27 percent of females reported needing help due to illicit drug use.
- Only 18 percent of males reported needing help.
- In the entire state of California, only 18.5 percent of adults seek help for drug and alcohol abuse, causing the statistics significantly higher for Santa Cruz County.

Adolescent Drug And Alcohol Users

Though addiction at any age can be crippling, those who seem to struggle the most in this area are young.

Adolescents in Santa Cruz County are struggling with addiction at an alarming rate, which is a problem for many reasons.

The brain is still maturing during adolescence. The prefrontal lobe—which controls emotions, is not thoroughly developed, so this demographic doesn't fully appreciate the long-term consequences of drug use or the dangerous behaviors in which they may show while on drugs.

- About 40 percent of Santa Cruz County students report using marijuana, inhalants, or prescription drugs in the past year.
- Marijuana use is significantly higher for this county than in the rest of California.
- Though marijuana is now legal for California residents, users must be at least 21 years old— as with alcohol—which is also commonly and secretly abused by teens.

The Far-Reaching Effects Of Drug Abuse Among Adolescents

Recent studies, such as the California Healthy Kids Survey, concluded that:

- Ninth and eleventh graders are the two groups of high school students most likely to use drugs.
- Many of these students voluntarily report marijuana or alcohol use.
- In Santa Cruz County, one-third of the eleventh graders report binge drinking, and 30 percent say regular marijuana use.
- Nationwide, 1-in-5 high school juniors report binge drinking.
- Across California, only 20 percent of high school students report marijuana use.

Abusing Drugs and Alcohol While Driving

Most California students can begin driving during their sophomore year of high school. Because they are new to driving and somewhat because their brains are still developing, these drivers are already a risk on the roads.

The risks to themselves and others skyrocket if they abuse drugs or alcohol while driving.

Effects of Substance Abuse in Santa Cruz County

The number of alcohol-involved vehicle accidents for licensed drivers has climbed steadily in the past decade.

Accident numbers remain significantly higher for Santa Cruz County than the entire state of California.

When people are driving while under the influence of any drug or medicine, the consequences go far beyond themselves.

Traffic Accidents and Substance Abuse

Accidents involving people under the influence of drugs or alcohol often affect others. They must live with the aftermath of someone else's choice to drive while intoxicated.

The effects of substance abuse on those who use are countless and can be permanent. The results are heightened when the abuse starts young.

Risks of Drug and Alcohol Abuse in Santa Cruz

Teen and young adult drug users often experience emotional and behavioral problems; anxiety, depression, and suicidal thoughts are shared.

Drug abuse may mask an underlying mental disorder that causes these issues, such as bipolar disorder or major depressive disorder. These disorders can lead to fighting, stealing, and other negative behaviors.

Drug and alcohol abusers are more prone to engage in risky sexual behavior, which is especially true of adolescents who are likely engaging in sexual activity for the first time.

Unprotected sex is common, leading to higher incidences of sexually transmitted diseases (STDs). In Santa Cruz County and California, the risk of HIV and AIDS is down from 10 years ago.

However, drug-abusing teens and young adults remain at higher risk than those who don't engage in substance abuse. They are also at higher risk for Hepatitis B and C and other blood-borne infections.

Drug Abuse, Learning Issues, and Brain Damage

Drug and alcohol abuse damages short-term memory and can lead to long-term memory problems. This can cause long-term learning problems in teens and young adults.

In some cases, substance abuse masks learning disabilities. These disabilities include:

- dyslexia (general term for disorders that involve difficulty in learning to read or interpret words, letters, and other symbols)
- dyscalculia (a math learning disability that impairs an individual's ability to learn number-related concepts, perform accurate math calculations, reason and problem solve, and perform other necessary math skills)
- dysgraphia (a learning disability that affects writing abilities. It can manifest itself as difficulties with spelling, poor handwriting, and trouble putting thoughts on paper)

Substance abuse may be a way for individuals to self-medicate. For instance, those with undiagnosed ADHD may find certain drugs calm them or help them stay focused.

Drug abuse will continue to mask learning disabilities or other diagnoses from kids in this age group. Others will use drugs to dull their lives' difficulty that may involve family strife, bullying, or fear of failure.

If adolescent drug and alcohol use remains untreated, severe brain damage can occur.

Existing learning disabilities and other problems may become more severe. Over time, brain cells will shrink, further impairing decision-making and emotional control.

Some teens and young adults experience amnesia from drug use. Overdose is common because of adolescents' lack of decision-making skills at this age.

Other health risks include:

- seizures
- coma

potential death

In severe cases, someone may enter into a vegetative state. Some teens and young adults end up in nursing homes, needing full-time round the clock care.

Substance Abuse and Arrests for Adults and Juveniles

- Juvenile arrests had dropped 43 percent nationally in the early part of the decade. However, they are back up with the rise of abuse since 2013.
- Along with increased drug use comes a slight increase in truancy and alcohol or drug-related misdemeanor arrests. Despite an overall decrease in juvenile substance abuse arrests, juvenile detention rates remain high.
- Males and Latinos of both sexes remain overrepresented in California's youth justice system. There is less forgiveness in the judicial system for adult addicts.
- Incarceration is a real consequence of drug and alcohol abuse. It stops many from seeking the help they need.
- In 2012, about 45 percent of bookings into the Santa Cruz County Jail were alcohol-related.
- Many arrestees were dual diagnosis, suffering from mental disorders as well as substance abuse.
- The number of dual diagnosis arrestees has increased since 2012.

Because drug use may mask other disorders, statistics may under-represent the actual numbers.

The Corresponding Rise Of Substance Abuse and STIs

Teens are vulnerable to drug use, but the incidence among Santa Cruz County adults is also high.

Adult alcohol and drug treatment admissions are well above average in Santa Cruz County and have steadily increased since the early 2000s.

Unfortunately, cases of STDs seem to rise with increases in drug use. As of October 2016, cases of chlamydia, gonorrhea, and syphilis have increased.

Adults younger than 35 were particularly at risk; females were most at risk for chlamydia, and men having sex with men were most at risk for syphilis. One congenital case of syphilis was reported in October 2016.

Drug And Alcohol Abuse Statistics For Hospitals

There were about 845,000 drug and alcohol-related emergency department visits nationwide in 2011, according to the Substance Abuse and Mental Health Services Administration (SAMHSA) and the Drug Abuse Warning Network (DAWN).

That number has climbed since, particularly in states like California; more than 400 of those visits involved marijuana, and more than 300 involved alcohol mixed with drugs.

Most people brought to emergency departments for substance abuse are between the ages of 18 and 25.

Of these patients, most receive care due to addiction to marijuana or prescription painkillers.

Heroin—one the most addictive of all drugs—is the next most commonly used drug, with about 228 emergency department visits in 2011.

Hospital Discharges Involving Addiction

Drug-related hospital discharges in Santa Cruz County have been well above the national average for more than a decade.

Although this trend is declining, the rate can be as high as 10 percent of people per 100,000. Adverse events after hospital discharge are common for drug-abuse patients, too.

Adverse events include:

- non-permanent or permanent disability
- several days of ongoing symptoms
- continuing minor symptoms

In 2016, about 19 percent of patients in the US had an adverse event; most were preventable.

Currently, hospital discharge statistics only reflect injuries or illnesses directly attributed to substance abuse.

They do not include dual diagnoses or cases in which substance abuse is partially responsible for the onset of physical symptoms.

Thus, healthcare professionals find it more challenging to diagnose and treat substance abuse patients adequately. Only about 20 percent of drug abusers with health insurance will seek emergency treatment and rehabilitation. Even with insurance, few patients receive follow-up care.

Without adequate follow-up and rehabilitation, these patients are far less likely to stay sober.

Understanding the Drug Problem in Santa Cruz County, California

Several factors are contributing to Santa Cruz County's rise in drug abuse. The area—like other areas that struggle with drug addiction—also faces different challenges. Homelessness and transience are significant factors.

Though working hard to find answers, the county doesn't have the resources it needs to help all who suffer.

Additionally, it seems as if the rise in drug use has spread from those on the street to younger adults—those in high school and the nearby The University of California, Santa Cruz.

Substance abuse disorders and treatment cost Santa Cruz County about \$207 million per year. Only 3.3 percent of that total is spent on treatment.

Treatment quality always needs improvement, and access remains unavailable for a large number of users. Repeat offenders are another huge problem.

Healthcare professionals, drug treatment providers, and police often don't work together—healthcare professionals report treating the same people in their emergency departments, hospitals, and clinics. Many addicts are, sadly, simply lost in the shuffle.

Finally, dual diagnosis—the term used to describe those who have both a mental illness and a substance-abuse disorder—remains an obstacle for many substance abusers in Santa Cruz County.

The high rate of drug incidents involving younger users may be the focus. This might mean older adults who suffer from both mental health issues and substance abuse may not be getting attention or the correct diagnosis.

Identifying and Solving Substance Abuse in Santa Cruz County

The Santa Cruz County Health Services Agency and Board of Supervisors are enacting a multi-phase plan to help solve the area's drug and alcohol issues.

Strategic planning efforts began in June 2013. Phase 1, which started December 1 of that year, included gathering community input and identifying key issues, such as commonly used drugs and treatment access.

With this information, Santa Cruz County HSA was able to propose workable goals and outcomes.

Phase 2 began in February 2015. Its focus was reporting on current substance abuse disorders and evaluating current treatment programs.

During this phase, changes to the Drug Medi-Cal (DMC) program were proposed and made to provide more people with affordable treatment.

Short-and long-term financing for treatment facilities and other programs was examined during Phase 3, April – May 2015.

Better Treatment Opportunities For Substance Abuse

The good news is that people are seeking treatment. Since the HSA plan implementation, most treatment facilities around Santa Cruz County have increased their clientele.

Prevention coalitions, such as the United Way of Santa Cruz, also have seen an increase in

funding, which goes a long way to help those who are addicted and can't afford help.

Along with substance abuse treatment funding, mental health treatment funding has increased in Santa Cruz County this past year.

Finding Help for Drug Addiction in Santa Cruz County, California

Despite the risks associated with drug and alcohol use, many people do not receive treatment or even ask for help.

Across the US, statistics indicate 85 percent of drug users won't ask for the help they need.

Often, those addicted to drugs are reluctant to request help due to fear of legal repercussions. Even for those fighting addictions to legal substances, such as alcohol, there is still a stigma that prevents many from seeking help.

In other cases, though, there is a more concrete reason for not finding the appropriate help. Many drug users don't have health insurance that would cover addiction treatment.

Though the Affordable Care Act offers some help, many addicts have no type of insurance. Only about 35 percent of addicts without health coverage will ever seek treatment.

Severe drug and alcohol abuse impede the ability to meet this requirement. Under or unemployed substance abusers may not receive enough aid to pay for rehabilitation programs. The legal residency requirement may prevent some people from getting help.

Seeking Treatment for Substance Abuse and Alcohol Abuse in Santa Cruz County

Drug and alcohol abuse rates in Santa Cruz County are now at astounding levels, and residents of the area are eager to seek help to end their addictions.

At Elevate Addiction Services, we invite members of the Santa Cruz County community that are struggling with substance abuse, chemical dependency, and alcohol abuse to contact us and allow us to show you that there is hope for recovery.

We will work with you to achieve your recovery goals.

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From: Ronald Kirkish <[REDACTED]>

Sent: Thursday, April 1, 2021 2:29 PM

To: Christina Turner <Christina.Turner@morganhill.ca.gov>; Rich Constantine <Rich.Constantine@morganhill.ca.gov>; Yvonne Martinez Beltran <yvonne.martinezbeltran@morganhill.ca.gov>; Rene Spring <Rene.Spring@morganhill.ca.gov>; John McKay <john.mckay@morganhill.ca.gov>; Shane Palsgrove <Shane.Palsgrove@morganhill.ca.gov>; Gino Borgioli <Gino.Borgioli@morganhill.ca.gov>

Cc: Matt Wendt <[REDACTED]>; Chris Borello <[REDACTED]>; Terry Ratto <[REDACTED]>; Ladera Grill Dan <[REDACTED]>; Marsha Edick <[REDACTED]>; Bob Cooke <[REDACTED]>; Michael Lancaster <[REDACTED]>

Subject: Medical Associations [SCMA/AMA] wholeheartedly disagree with Morgan Hill's Apothecary owner, Ms. Malisha Kumar, regarding the compassionate use of medical marijuana

Dear All,

The owner of the owner of "The Apothecary at 875 Jarvis Drive #140 - Malisha Kumar" in Morgan Hill appears to be one of the more significant pot-advocates behind the scene's at Morgan Hill's City Hall and arguably carries significant influence with some of Morgan Hill's decision makers who rein on the City Council, as evidenced by two Council members third attempt to place the sales, distribution and growing of marijuana on the agenda for the city council to consider once again.

From information gleaned from her own "Apothecary Website, '**Morgan Hill...The Time is Now**' - November 3, 2019", Ms. Kumar claims she worked as a professional "**Bud Tender**" at a marijuana dispensary and during the time she was trimming marijuana buds there she allegedly asserts she gained enough of a **medical education** saying "**she saw a need to educate the public on the medical uses of cannabis**"

However, unlike Ms. Kumars recommendations, you can see from this letter from the South Carolina Medical Association [SCMA], dated March 30, 2021 (three days ago) that the SCMA & AMA [American Medical Association] do "NOT" recommend the "compassionate use of marijuana" for medical purposes, and they list the reasons for their reluctance.

I strongly urge those on the Bcc to share this information with others within your spheres of influence in the City of Morgan Hill.

For your consideration and B/r,

Ronald L. Kirkish

Attachment: Letters from the public [Revision 1] (3045 : Request for Cannabis Report)



P.O. Box 11188
Columbia, SC 29211
1-800-327-1021
803-772-6783 Fax
www.scmmedical.org

Michael T. Finch, Jr., MD
President

John C. Ropp III, MD
President-Elect

Christopher A. Yeakel, MD
Treasurer

M. Mayes DuBose, MD
Chairman of the Board

March 30, 2021

Chairman Daniel Verdin, III Senate Medical Affairs Committee 412 Gressette Bldg.
Columbia 29201

Re: Senate Bill 150, the Compassionate Care Act

Dear Senator Verdin:

The South Carolina Medical Association (SCMA) writes to oppose Senate Bill 150, the Compassionate Care Act ("CCA"). Despite our position, the perception that physicians are not compassionate when it comes to patients' needs could not be further from the truth. Physicians care about patient safety, which is why this issue creates such passionate debate. The opposition from the SCMA stems from asking physicians, without the benefit of adequate clinical or academic research and/or FDA approval, to be the legal access point for marijuana and its derivatives in South Carolina. The American Medical Association (AMA) has a similar stance, urging legislatures to "delay legalizing cannabis until further research is completed on the public health, medical, economic, and social consequences of its use." (August 29, 2019, Pres. AMA Dr. Harris)

Physicians recommend treatments for patients based on clinical data explaining the efficacy in treatment, data showing usage and desultory, and data on potential side effects. Marijuana is a plant with over 400 compounds, with only one component being tetrahydrocannabinol (THC). This is what makes approval of marijuana in medicine form so difficult. This is not to say it is not possible; the FDA has approved a cannabis-derived drug product, Epidiolex (cannabidiol), and three synthetic cannabis-related drug products, Marinol (dronabinol), Syndros (dronabinol), and Cesamet (nabilone). We stand in full support of an FDA approved process that will provide clinical testing and medical derivatives physicians can prescribe.

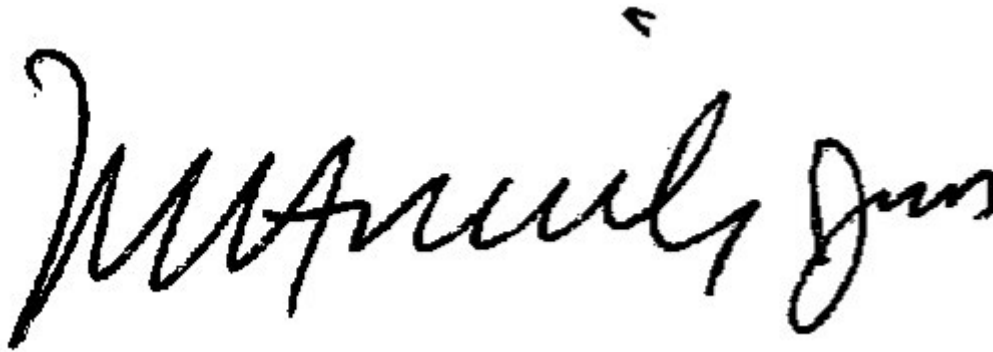
Senate Bill 150 provides that physicians and podiatrists may "recommend" marijuana for medical use. Aside from the unusual addition of podiatrists as an access point, providing a physician as the only other access point provides a false sense of security that the marijuana is a true medication and regulated. South Carolina's regulation of the marijuana plant will not equate to an FDA process, and does not provide the clinical evidence physicians rely on in prescribing medication. However, many citizens will believe that because it is accessed by a physician it is a safe, effective, clinically proven drug.

Chairman Daniel Verdin, III March 30, 2021
Page 2

We appreciate that many people are in support of medical marijuana. However, as we saw with the opioid epidemic, there can be deadly consequences even when medications are properly tested. The concentration of the psychoactive component THC is perhaps 10 times the concentration of marijuana from the 1970s, and it is a very addictive substance, affecting the brain's reward system just as other addictive drugs do. The newspapers show story after story of the problems other states face from allowing marijuana to be used as medicine. We ask that members consider that the two groups in charge of controlling medical marijuana, physicians and the South Carolina Law Enforcement Division (SLED), stand in opposition to passage of this bill.

Sincerely,

Michael T. Finch, Jr., MD President

A handwritten signature in black ink, reading "Michael T. Finch, Jr." in a cursive style.

cc: The Honorable Harvey S. Peeler, Jr.

From: [Ronald Kirkish](#)
To: [Rich Constantine](#); [Yvonne Martinez Beltran](#); [Rene Spring](#); [John McKay](#); [Shane Palsgrove](#); [Gino Borgioli](#); [Christina Turner](#)
Cc: [Bob Cooke](#); [Ladera Grill Dan](#); [Ladera Grill Morgan](#); [Terry Ratto](#)
Subject: From Argentine Shrine to Marijuana Corridor: The Story of Itatí (especially for Constantine, Spring and Borgioli)
Date: Friday, March 19, 2021 9:26:00 AM
Attachments: [1F69D574-CF37-4292-A3B3-5FC4BE67C553.jpeg](#)

Dear All,

This is a story about a “corrupt” **mayor** and **deputy mayor** who turned their once beautiful city [of Itatí, Argentina] into a criminal trafficking hub for spreading the drug cartels marijuana and other illegal drugs far and wide throughout South America.

This information is especially for the attention of: **Mayor Rich Constantine**, **Councilman Rene Spring** and **Councilman Gino Borgioli** (this will be the “third” attempt for Constantine and Spring to turn the city of Morgan Hill's beautiful wholesome culture into a culture of drug abuse and crime; becoming a hub of drug gang/cartel criminal activity for the South Santa Clara County communities of Gilroy, San Martin and of course Morgan Hill; hardly a neighborly thing to do.

B/r,

Ronald L. Kirkish

From Argentine Shrine to Marijuana Corridor: The Story of Itatí

<https://insightcrime.org/investigations/argentine-shrine-marijuana-corridor-story-itati/>

[ARGENTINA](#)/ 16 MAR 2021 BY JOSEFINA SALOMÓN*

An ambitious mayor, a well-connected deputy mayor, dirty cops, a corrupt judge, and a lot of marijuana. This is the story of Itatí, the sleepy town that went from religious hub to key stop on Argentina’s marijuana highway, and the mayor that helped make it happen.

The tears running down Natividad Terán’s face were a telling sign that this was not just another political scandal.

“People are praying for me,” Terán [told](#) a TV reporter, visibly shaking.

Terán was the mayor of Itatí, a small town of some 9,000 people on the northern corner of the Corrientes province, on the banks of the Paraná River. On the other side of the river is Paraguay, the top marijuana producer in Latin America and, depending on who you asked, the source of Terán’s pain or his power.

Attachment: Letters from the public [Revision 1] (3045 : Request for Cannabis Report)

It was April 3, 2017. Just a couple of weeks earlier some 700 members of Argentina's gendarmerie [had rained on Itatí](#). The "Sapucay Operation," as it was called, was nothing short of an action-packed blockbuster. A special unit carried out 43 separate searches in residences where they found drugs, arms, mobile phones and cash in numerous currencies. They arrested 15 individuals suspected of being part of a sophisticated crime organization.

Terán was among them, accused of being the most important political cog in a translational criminal organization that used the town as its center of operations to move tons of drugs every year from Paraguay to Argentina's capital, Buenos Aires, and other cities.

Logically, the story was [top news](#) in Argentina. And so Terán was crying, protesting his innocence.

"I'm a nobody in this whole issue. I'm just a mayor that has no real power in these issues, but I trust justice will be served," [he told America TV](#), tears running down his face.

Small Towns, Big Networks

Itatí was long known for its imposing cathedral in the center of town, which houses the Our Lady of Itatí. The cathedral put the small border town on Argentina's religious map. Hordes of people travel to Itatí each year to visit the shrine, an annual pilgrimage slowed only by the coronavirus pandemic.

But Itatí also has a less desirable reputation for its role in Argentina's drug trafficking. The town is one of the many places where illegal drugs enter Argentina, a country that is one of the largest drug consumer markets in the world and is [a transit route](#) for some of the cocaine headed to Europe and other destinations.

Much of these drugs come from or via Paraguay. Argentina and Paraguay are separated by the Paraguay and Paraná rivers. Authorities claim there is little to no drug trafficking via rivers, but the lack of policing in the waters that separate the riverbanks of Paraguay and Argentina makes it relatively easy to smuggle anything.

And smugglers do, from clothes and electronics to illegal cigarettes. A number of journalists and experts interviewed in both countries also said vast quantities of drugs are smuggled along these fluvial highways, navigable all year round. Indeed, [seizures in Europe](#) indicate that large cocaine shipments have left from Asunción, moved along the Paraguay River to the Paraná River, and then shipped from Buenos Aires ports or Montevideo.

Further west, along the Bolivian border, cocaine trafficking is even more prolific. In Salta, along the so-called dry border, the Loza family began moving small amounts of cocaine in the 1980s. By the 1990s, the Lozas were wholesalers in Buenos Aires, and by the 2000s, they had begun moving cocaine to Europe on cargo ships via the "rip-on rip-off" method – sneaking drugs into containers without top-level collusion from the ship.

Alongside them was the Castedo clan. The Castedos acquired land on both sides of Salta's dry border in the city of Salvador Mazza and smuggled drugs through their private estates. Delfín Castedo, referred to as the "boss" of the border by media, [reportedly owned](#) as much as 25,000 hectares just on the Argentine side. Like the Lozas, the Castedos eventually moved to [shipping cocaine to Europe](#). Several sources insisted that the group was not the owner of the merchandise but was hired by European-based drug traffickers.

Like Itatí, Salta provided the perfect setting for these clans to grow. The Aguas Blancas border crossing, in the municipality of Orán, is a known [contraband hotbed](#) where large swathes of the population live off illegal economies. As much as a third of locals could live off contraband, a local [prosecutor estimated](#) in 2017.

Argentine counternarcotics officials told InSight Crime that drugs are smuggled by land through the Aguas Blancas and the Professor Salvador Mazza dry border areas in Salta, and in the La Quiaca area in the neighboring province of Jujuy in lesser quantities. Cocaine is also trafficked in large volumes by aerial drops in a zone that covers southern Salta and the northern part of the neighboring Santiago del Estero province, they added.

Along the northeastern border, marijuana is trafficked more often. One [recent report in La Nación](#) said cargo operators receive as much as \$10,000 to move marijuana along the riverine highways. In Argentina, where marijuana use has nearly doubled in the last 20 years, the drug could be more lucrative than cocaine.

It is little surprise then that around 20 percent of all illegal marijuana produced in Paraguay is transported to Argentina, much of it through towns like Itatí. Along the river, a collection of small islands scattered across the approximately three kilometers that separate both shores make for useful stop-off points. But once the drugs are in Argentina, they need storage and transport networks. That, judicial investigators say, is where politicians and small-town bureaucrats came into the picture.

The Itatí Network

Perhaps the most remarkable thing about Natividad Terán is that, until the day of his arrest, he [wasn't particularly remarkable](#). Before launching his political career as a local city councilor — an entry gate for politicians in many small towns across Argentina — the Paraguay-born 54-year-old turned Argentine national owned a local hardware store.

“Political figures from small border towns close to Paraguay are always under suspicion, but there was nothing that pointed to Terán in particular. He was a bit of an unknown figure until all this,” a former prosecutor in the case said.

His 12 years as city councilor for a Peronist political faction during the administration of César Torres were also unremarkable. Torres, who was from the center-right New Party (Partido Nuevo – PANU), was mayor of Itatí for [more than two decades](#) and dominated the local political scene.

But Terán, who was known more popularly by his nickname “Roger,” had higher ambitions, even if he didn’t show it. And so, prior to municipal elections in September 2013, he brokered a coalition with PANU and another party, Crecer con Todos (Grow with Everyone), to back his candidacy for mayor, which he won with more than [50 percent of the vote](#).

Then he set to work with his new colleagues. One of them was Fabián Aquino of the Crecer con Todos party, who became his deputy mayor. The two were close, investigators later said, and would eventually become the foundation of the drug trafficking scheme. (For his part, Aquino claimed Terán promised him a level of political participation that never materialized and that they “hardly spoke.”)

Authorities said Terán also became close with Luis Saucedo, a police inspector, who people referred to as “El Gordo” (the Fat One). Saucedo had begun working with City Hall in 2012, under the Torres administration. And by the time Terán took office, Saucedo already had a reputation for his connection to drug trafficking. Still, Terán left him in his job, perhaps because he was the logistical mastermind of the Argentine side of the network.



In fact, investigators say [it was Saucedo’s network](#) that extended to Paraguay. There, according to an anonymous witness who spoke to Argentine prosecutors, the police inspector worked closely with Hugo and Ariel Arce, brothers who transported marijuana by truck from the north of Paraguay to the city of Ayolas, just upriver from Itatí.

That is where Federico Marín, known as “Morenita” after a type of bait for fishing, would often take over. Marín was famous for his knowledge of the Paraná River and for the [high-quality marijuana](#) he provided his customers. He got the drugs to Itatí, often via speedboat.

“They have everything arranged with people from the coast guard, gendarmerie and the federal and local police. They load (the boats) up 100 meters from the Coast Guard,” one witness [declared](#).

The marijuana that arrived in Itatí was stored in sheds where the network relied on municipal authorities to hide and then move it. Saucedo, for instance, coordinated operations directly with Terán, who then passed on orders to his deputy mayor, Fabio Aquino. Aquino, in turn, was the link to local police Chief Osvaldo Ocampo Alvarenga, who, according to court files, was working with at least two members of Argentina’s Federal Police [stationed in Corrientes](#) and one member of the gendarmerie. They sometimes freelanced, authorities later claimed, stealing and reselling drugs to trafficking groups.

Except for the local priest, who was forced into exile due to [death threats](#), there was little resistance in the town. Money flowed easily, and it was injected into the local economy through car dealerships or horse racing. Even kids were employed as lookouts, their parents unaware or turning a blind eye.

The close family connections also made the network efficient as they ensured loyalty and agile communications. “Fish” was code word for marijuana. They used various species to indicate the quality of the drugs. The “golden key,” federal prosecutors told InSight Crime, was their connection within the top echelons of the judiciary.

Indeed, if anything went wrong, they had at least one judge working with them. Judge Carlos Soto Dávila had been dealing with [drug trafficking cases](#) in the province for more than two decades. The judge, prosecutors said, worked with two of his secretaries and five lawyers who used to represent individuals on drug trafficking charges. Together, they negotiated delays in [investigations](#) or secured reduced sentences in exchange for payments, prosecutors said.

Authorities, for example, say Soto Dávila [helped Saucedo](#) escape prosecution on several occasions. They also noted an anomaly in the statistics: the considerable number of seizures did not match the low number of arrests. One of the lawyers believed to have acted as an intermediary between the judge’s office and criminal groups, who has since become a key witness in the case, said they were frequently asked to “[collect money for the old man](#),” including from those in Terán’s organization.

Eventually, authorities said, the marijuana left the city and was transported to least seven distribution points across Argentina, including important consumption and distribution hubs such as Rosario and the poor neighborhoods in Buenos Aires. In all, investigators think the network was moving as much as 15 tons of marijuana per year worth millions of dollars.

A ‘Nobody’?

It was in Buenos Aires that investigators [caught wind](#) of the network. It happened because they were tracing the origin of the marijuana that three women were selling in a rundown area known as Villa 21. They tapped their phones, which at first led to a number of small wholesalers. Soon after, authorities arrested the women. The arrests and the wiretaps eventually led to the wider network.

The leader, authorities said, was Carlos Alberto Barreiro, a convicted drug trafficker who was operating from his jail cell in Chaco. Authorities said that locals called him “El Patrón,” an homage to a person they described as “the Pablo Escobar of Itatí.”

Barreiro’s connection to Itatí’s City Hall was personal. Deputy Mayor Aquino’s sister, María Emilia Aquino, had two children with Barreiro. Aquino later claimed that after the couple split, he cut all contact with Barreiro. But at some point, the sister got a loan to purchase a drug load, authorities would claim later. The load, they said, was captured and the sister was left owing the criminal group for the lost drugs and her loan.

“I’m not involved in anything strange, and neither is she,” Aquino told the courts, referring to his sister. “Many of these problems are happening because I wanted to become mayor. I used to help everybody, but I never did anything illegal.”

Aquino’s brother, Hernán, was also connected to the network. He was arrested on [drug trafficking charges](#). Judge Soto Dávila released him. One of Aquino’s other sisters was also linked to the network. A local police officer, she was allegedly responsible for alerting drug traffickers about upcoming raids or road checks.

Just what role Terán played in the network is still a matter of debate. Some paint Terán as a pawn in this scheme, and he would later famously say on TV that he was a “nobody.”

“This was a big organization, there is no doubt of that,” a former prosecutor from Corrientes told InSight Crime, speaking on the condition of anonymity because he was not authorized to speak about the case. “The arms they had access to and the kind of boats they used. That shows the power they had. Terán, the members of the security forces, the judge. They were just cogs in that network and paid for their favors.”

But prosecutors say Terán was a key member of the group, providing top-cover for its activities and connections to various parts of the wider network. Authorities also say Saucedo financed Terán’s campaign with drug money.

What’s more, some of Terán’s family were also tied to the scheme, including his daughter and son-in-law. The investigation into the two had begun in 2014, when 188 kilos of marijuana were found in their abandoned car after the car outraced authorities in a chase near Itatí. Both said their car had been stolen and that the drugs were not theirs.

Still, relations between the two became tense in the months afterwards. Authorities knew

because they were monitoring their communications.

“I can destroy your family,” he once told her on the telephone, “because we know where your money comes from.”

To be sure, authorities said the couple had a hard time explaining why they owned several SUVs and had as much as [\\$60,000 in jewelry](#) in the house. [On February 14, 2017](#), Terán’s daughter and son-in-law were arrested.

A week later, Hernán Aquino was arrested again, this time after he and the sister of a local city councilor were stopped on a highway with 500 kilos of marijuana.

The noose was tightening.

‘Operation Sapucay’

Around 5 a.m., on March 14, under the cover of darkness, the first teams of gendarmerie entered Itatí. They set up a communications hub at the entrance to the town, and then they began rustling up civilian witnesses in the neighborhoods where they were staging more than two dozen simultaneous search and seizures.

At 6 a.m., the teams hit 32 houses. In all, over 700 gendarmerie took part in the operation. The haul was monumental: motorcycles, boats, cars, trucks, drugs, weapons and 70 people [arrested](#), among them Mayor Terán, his deputy mayor, Fabio Aquino, and the police chief, Ocampo Alvarenga. In addition, the gendarmerie found marijuana bricks in the local jail cell and in Ocampo Alvarenga’s desk. All three were accused of various [crimes related to drug trafficking](#).

Others initially evaded capture. Even though there was an Interpol arrest warrant and a large reward for information hanging over his head, Saucedo managed to stay off the radar for more than two years until authorities caught up with him in the city of Pilar, Paraguay, where they arrested him in September 2019. They quickly extradited him to Argentina where he is now facing [charges](#) that include international drug trafficking, money laundering and falsification of documents.

Most damning in the case against Saucedo was his patrimony. Although Saucedo was receiving a municipal employee salary that his wife said was 10,000 pesos a month (approximately \$1,000 at the time), he had [23 luxury cars](#) and three properties, among other assets.

Marín also evaded authorities for years. He went into hiding before the first raids took place in Itatí in 2017, and it took authorities more than two years and an intense search across Argentina to find him. They finally caught up with him in October 2018, when he returned to Itatí to visit his five children and his wife, who was under house arrest at the time, serving out her own drug trafficking sentence.

Soto Dávila at first claimed he was innocent and that the charges against him were politically [motivated](#). However, as pressure around him built and after he was indicted in February 2019, he [resigned](#). He is now awaiting trial alongside the two secretaries and five lawyers who worked as [intermediaries](#).

Operation Sapucay was one of many that broke up long-time Argentine border trafficking networks during this same time period. In July 2016, [authorities captured](#) Delfin Castedo, the capo of the Castedo clan. [Other arrests](#) of key members of the organization followed.

In December 2018, [authorities hit](#) numerous Loza clan hideouts and properties, arresting four of the clan leaders. And in September 2019, [authorities seized](#) a record 800 million Argentine pesos from the clan (over \$13 million), 45 buildings and 30 vehicles just in Argentina.

The Never-ending Battle at the Border

Authorities in Argentina see these as success stories in the country's long fight against drug trafficking — an example of the results they yield from long investigations and efficient coordination between governmental institutions. Indeed, the country's Attorney General's Office reported that 40 individuals have already been sentenced in the Itatí case, and 36 more are awaiting trial. This includes Barreiro, who is accused of being one of the main leaders of the organization.

But many battles remain.

"The Itatí case is clearly just the tip of the iceberg," the former prosecutor from the case told InSight Crime. "The network of connections between politicians, security forces and drug traffickers is a long-dated one and will continue to exist. You can cut some heads off, and others will quickly surface. As long as one has money and territorial control and the other, a need for campaign funds and votes, those relations will continue."

Still, criminal organizations may be making some slight adjustments. Alfredo Zacarías, a journalist who has been investigating security issues in Corrientes for more than 30 years, said the traffickers are becoming more clandestine, moving drugs, for example, under the cover of darkness rather than during the day as they once did.

Controlling the waterways is extremely difficult at any time, he added, particularly given the limited resources the authorities have at their disposal. He also said that while the organization in Itatí was dismantled, the business hasn't been.

"The problem is that when they (authorities) dismantle an organization, the big bosses move to another area, where they find new partners, so the business continues," he explained. "Itatí is not an exception. Since the 'Sapucay Operation,' everybody says there're no drugs in Itatí, but that is not true. It's just that the dynamics have changed."

To Zacarías' point, the Paraguayan networks remain very much operational. And groups like the Castedos allegedly keep trafficking [operations going from prison](#). What's more, record loads of marijuana are still [being seized](#) in Itatí, even during the pandemic-induced [lockdown](#).

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From: [Rene Spring](#)
To: [Christina Turner](#)
Subject: Fwd: Capitola cannabis dispensaries
Date: Wednesday, April 14, 2021 4:02:15 PM

FYI

Sent from my iPhone

Begin forwarded message:

From: [REDACTED]
Date: March 30, 2021 at 10:11:43 AM PDT
To: Rene Spring <Rene.Spring@morganhill.ca.gov>, John McKay
 <john.mckay@morganhill.ca.gov>, Rich Constantine
 <Rich.Constantine@morganhill.ca.gov>, Yvonne Martinez Beltran
 <yvonne.martinezbeltran@morganhill.ca.gov>, gino.borgioli@morganhill.ca.gov
Subject: Capitola cannabis dispensaries

Dear City Council,

I spoke with Chief Andy of the City of Capitola police department. Capitola has two cannabis dispensaries, and their town is similar to Morgan Hill in that it has a somewhat conservative population. My conversation with Andy covered many aspects of Capitola's dispensary experience. The summary of our conversation was that the dispensaries were an overall positive addition to the community. They did see an increase in revenue, however not as much as some people had hoped. Also the related crime was relatively small - a break-in (and I don't think any cannabis was taken), and no real loitering, etc.. Capitola did much in advance to mitigate potential problems with dispensaries. I would highly recommend our City representatives talk with their government officials and police regarding how this could be a positive experience for Morgan Hill if it does get approved.

I recommend the City of Morgan Hill contact (as a team) not just Andy, but members of their Council, and visit their dispensaries.

Regards,

--

Steve Malech

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Attachment: Letters from the public [Revision 1] (3045 : Request for Cannabis Report)

From: [Ronald Kirkish](#)
To: [Council Blankley](#); [Jimmy Forbis](#); [Shawna Freels](#); fred.tovar@cityofgilroy.org; dion.bracco@cityofgilroy.org; [Carol Marques](#); pedro.espinoza; suzanne.guzzetta@cityofgilroy.org; [Council Member Peter Leroy-Munoz](#); [Christina Turner](#); [Rich Constantine](#); [Yvonne Martinez Beltran](#); [Rene Spring](#); [John McKay](#); [Shane Palsgrove](#); [Gino Borgioli](#)
Cc: [Donald Gage](#); [jeanne Gage](#); [Mark Turner](#); [Eric Howard](#); [Jane Howard](#); [Matt Wendt](#); [Chris Borello](#); [Chris Vanni](#); [Jill Vanni](#); [Jeff Parks](#); [Luigi Covelli](#); [Cristina Covelli](#); [Jack Fritch](#); [Jack Foley](#); [Michael Smith](#); [Mike Catena](#); [Susan Mister](#); [Georgine Scott](#); [diane nuno](#); [Robert Weaver](#); [Robert Witt](#); [Tom Cline](#); [Renee Lee](#); [Gary Walton](#); [John Taft](#); [Kurt Michielssen](#); [daniel harney](#); [Dan Mitchell](#); [Mark Stewart](#); [Bob Cooke](#); [Stephanie Bernal](#); [Jeff MacPhail](#); [REDACTED]; [Greg Quirke](#); [Roger Morgan](#); [Monte Stiles](#); [Kevin A. Sabet](#); [Carla Lowe](#); [Scott Chipman](#); [Erik Chahoub](#); [Martin Cheek](#)
Subject: Marijuana and the Workplace; a true story
Date: Saturday, March 20, 2021 6:57:07 AM

Marijuana and the Workplace; a true story

During the early 1980's, marijuana's THC was much weaker (~2%) than today's which can range from 14% to over 80%. But even at 2%, marijuana abuse in the work place was causing a lot of problems for the semiconductor industry.

MANNY

As a Thin Film's process engineer and working at National Semiconductor (NSC) in the early 1980's at the time, I was asked to take over the Vapox Process as part of my Thin Films engineering responsibility's. The process was used to deposit an extremely thin layer (2um) of SiO2 (glass) in-between metal layers as an interlayer dielectric, and then as a cap layer over the whole wafer to protect the wafer from contamination during further processing to cut the wafer up into individual discrete integrated circuits.

Along with inheriting the Vapox process I inherited "**Manny**". Manny was young and a giant of a man and you didn't want to cross him; especially when you are only 5 foot 4 and 3/4in in height and weigh 145 pounds soaking wet.

Manny's job was to routinely clean the Vapox machine of the built up SiO2 which meant taking it apart and etching the parts in Hydrofluoric (HF) acid and rinsing in Deionized water for a few hours and then allowing the parts to dry before re-assembling.

While waiting for the parts to dry and putting the Vapox machine back together, Manny would go out to his car in the parking lot and smoke a couple of joints of marijuana.

Even though he was high as a kite, Manny could disguise his incapacitation pretty well except for the reeking smell of marijuana from his cloths underneath his cleanroom suit.

When he reassembled the machine, he would forget how the gas dispersion tubes were suppose to go back in (with the holes pointing up) and would install them with the holes pointing down. This was found when we ran a test to check uniformity of deposition and the test results came out bad, very bad. This meant the system had to be torn back down and reassembled properly which extended the downtime for when the system couldn't be used for production; a very costly enterprise; when product is forced to pile up and waiting to be processed.

When discovering he had installed the gas distribution tubes incorrectly, he stated, "**I will never do that again**", but unfortunately it did happen again on at least 3 more occasions and yes, he was stoned on every occasion.

Unfortunately for Manny, we eventually had to write him up and let him go and I heard he soon found another job as a bouncer at the “Pink Poodle” in San Jose, and he was very successful, according to his sister who also work at NSC.

When we hired a person to replace Manny, the company initiated the stipulation that a person must pass a drug test as a condition of employment.

This was when the strength of the THC for marijuana was only 2%....can you imagine what the today’s strength does to the brain and the havoc it is causing for the workforce for companies trying to find and hire folks who can pass a drug test?? Pretty hard.

And then you have to worry and wonder about a potential future President of the United States [Kamala Harris] who is a ardent advocate for marijuana and a self identified user.

And now you know a little about why I am so against the abuse of marijuana.

B/r,

Ronald L. Kirkish

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From: [Ronald Kirkish](#)
To: [Christina Turner](#); [Rich Constantine](#); [Yvonne Martinez Beltran](#); [Rene Spring](#); [John McKay](#); [Shane Palsgrove](#); [Gino Borgioli](#)
Cc: [Matt Wendt](#); [Chris Borello](#); [Bob Cooke](#); [Terry Ratto](#); [REDACTED]; [Ladera Grill Dan](#)
Subject: Marijuana and today's violence/anarchy
Date: Thursday, March 25, 2021 8:52:03 AM
Attachments: [2020 Marijuana and Violence.pdf](#)
[marijuana-violence-and-law-2017.pdf](#)

Dear All,

If you took the time to watch NIH/NIDA Director Nora Volkow's video's that I just sent you regarding how marijuana abuse permanently destroys very important components of the brain, the following articles (linked below) will make more sense why we are seeing so much violence and anarchy in our nation today; mostly perpetrated by the youth of our nation.

For your consideration & B/r,

Ronald L. Kirkish

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Attachment: Letters from the public [Revision 1] (3045 : Request for Cannabis Report)



Review

A Review of Cases of Marijuana and Violence

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Abstract: Marijuana is the most consumed illicit drug in the world, with over 192 million users. Due to the current legalization push of marijuana in the United States, there has been a lack of oversight regarding its public health policies, as marijuana advocates downplay the drug's negative effects. This paper's approach is from a public health perspective, focusing specifically on the cases of violence amongst some marijuana users. Here, we present 14 cases of violence with chronic marijuana users that highlight reoccurring consequences of: marijuana induced paranoia (exaggerated, unfounded distrust) and marijuana induced psychosis (radical personality change, loss of contact with reality). When individuals suffering from pre-existing medical conditions use marijuana in an attempt to alleviate their symptoms, ultimately this worsens their conditions over time. Although marijuana effects depend on the individual's endocannabinoid receptors (which control behavioral functions, like aggression) and the potency level of tetrahydrocannabinol (THC) in the drug, scientifically documented links between certain marijuana users and violence do exist. Wider public awareness of the risks and side effects of marijuana, as well as a more prudent health policy, and government agency monitoring of the drug's composition, creation, and distribution, are needed and recommended.

Keywords: marijuana; cannabis; tetrahydrocannabinol; THC; violence; law; paranoia; delusions; psychosis; public policies

1. Introduction

In the United States, ten states have legalized the recreational use of marijuana and over 20 states have decriminalized the recreational use of it. Recent reports suggest, however, that the increase of the recreational use of marijuana is causing detrimental effects to individuals, as well as the society as a whole [1–3]. These effects include, but are not limited to, the increase of violence, the increase of thriving underground marijuana markets, and increase in car accident claims after the legalization of marijuana where the recreational use of marijuana was legalized [1–3]. This is caused by lack of oversight. Marijuana is being legally sold with high THC concentration levels without taking into account its addictive qualities and adverse effects. On the other hand, and contrary to popular belief, marijuana is still illegal in the Netherlands and it is decriminalized. However, the consumption and storage of marijuana are limited by law and the approach taken by the Netherlands is to decriminalize the drug in order to be able to help individuals struggling with marijuana use. This prudent oversight has resulted in a decreased in violence and people are able to get the care they need to deal with addiction and become less prone to violence [1–3].

Furthermore, the consumption of marijuana is associated with an increase in violent behavior over the course of an individual's lifespan, a high risk of psychosis for frequent users, an increase

of cardiovascular diseases, and deterioration in health for individuals who have pre-existing mental health issues such as Post Traumatic Stress Disorder, social anxiety, and depression [4–6].

According to research studies, marijuana use causes aggressive behavior, causes or exacerbates psychosis, and produces paranoia. These effects have been illustrated through case studies of highly publicized incidents and heightened political profiles.

These cases contain examples of repeated illustrations of aggression, psychosis and paranoia by marijuana users and intoxication. Ultimately, without the use and intoxication of marijuana, the poor judgment and misperceptions displayed by these individuals would not have been present, reducing the risk for actions that result in senseless deaths.

Import to these assertions, is that the current marijuana is far more potent in THC concentrations, the psychoactive component. Accordingly, and demonstrated in direct studies, more potent marijuana results in a greater risk for paranoid thinking and psychosis. In turn, paranoid behavior increases the risk for paranoid behaviors and predictably associated with aggressive and violent behaviors.

1. Marijuana use causes violent behavior through increased aggressiveness, paranoia, and personality changes (more suspicious, aggressive, and anger).
2. Recent illicit and “medical marijuana” (especially grown by care givers for medical marijuana) is of much high potency and more likely to cause violent behavior.
3. Marijuana use and its adverse effects should be considered in cases of acts of violence as its role is properly assigned to its high association.
4. Recognize that high potency marijuana is a predictable and preventable cause of tragic violent consequences.

2. Case Presentation

2.1. Marijuana Violence

On March 13, 2019, Anthony Comello admitted to, and subsequently was charged for, the killing of Frank Cali, a senior leader of the Gambino family in Staten Island, New York. Both men were allegedly having an altercation over Comello’s romantic interest on one of Cali’s relatives. Although Comello had no previous criminal encounters with law enforcement, reports suggest that he drew the attention of authorities by acting strangely in a federal courthouse when he offered to perform a citizen’s arrest on New York City’s Mayor, Bill De Blasio. Previously, Comello sought a U.S. Marshal to inquire how to perform a citizen’s arrest on the United States Speaker of the House, Nancy Pelosi. Comello admitted that, at the time of Cali’s killing, he was high on marijuana and shot Cali because he feared that the senior leader had a gun and would shoot him during their altercation [4,7].

On February 10, 2019, a man killed his 13-year-old nephew with a knife in Rustavi, Georgia. The man had a history of marijuana use. For days leading up to the killing, he was complaining about having dizziness, headaches, general weakness, nausea, and insomnia. He would also occasionally suffer from anxiety, irritability, and loss of appetite. His wife stated that he consumed and was under the influence of marijuana, which made his symptoms worse. The day before the killing, he tried to go to a clinic. However, the clinic rejected treatment by telling him to go to a psychiatric hospital. However, under the influence of drugs, he simply went home hours before killing his nephew [8].

On February 1, 2018, Nikolas Cruz killed 17 students and staff at the Marjory Stoneman Douglas High School in Parkland, Florida, and injured 17 others. Cruz was diagnosed as developmentally delayed at age three and had numerous disciplinary issues dating to middle school. From a young age, he started consuming marijuana heavily. He accounts that he would frequently “hear demon voices” and would consume large amount of marijuana to try and silence those voices. He also attempted suicide. During an interview after his mass shooting, he stated that he used “a lot of marijuana” as well as prescription tranquilizer Xanax [9,10].

On November 5, 2017, Devin Patrick Kelley carried out the deadliest mass shooting in Texas’ history, resulting in the death of 27 people and injuries to 20 others, by opening fire at worshippers

who were attending regular Sunday Service at the First Baptist Church in Sutherland Springs. Kelley was later shot by bystanders and killed during a high-speed chase with law enforcement agencies. The autopsy on Kelley revealed that toxicology tests detected marijuana and anti-anxiety drugs in his system. A report from the Federal Bureau of Investigation revealed multiple past incidents where Kelley also been under the influence of marijuana. Kelley's first on-record interaction with law enforcement authorities was when he was arrested for possession of marijuana and, subsequently, expelled from his high school. Since then, the record shows that Kelley started using marijuana frequently, as well as developing mental health issues that would lead him to have problems in his employment with the United States Air Force and multiple instances where he abused his step-son and his wife at the time [11,12].

On May 22, 2017, a suicide bomber, Salaman Abedi, detonated an explosive device in an area of the Manchester Arena, United Kingdom. The blast killed over 20 people and injured over 100 others. Evidence shows that, from a very young age, Abedi was a "party animal" who heavily consumed marijuana. Furthermore, he was described as a person who would start fights in the street for no reason, would act rude, and would refuse to do his homework in school. He was also described as a "very slow, uneducated and passive person" who displayed aggressive tendencies. Eventually, he began shutting himself off from other people, started becoming more violent, and started showing paranoia by making statements against western societies and hanging out with dangerous crowds. Evidence suggests that this paranoia, furthered with aggressive tendencies, led to Abedi's suicide bombing attack that day [1,13].

On May 18, 2017, Richard Rojas purposely drove a car along three blocks of pavement in New York's Times Square, killing a teenager and injuring 22 other people. Evidence indicates that Rojas was a heavy marijuana user. He admitted on the consumption of spiced-up marijuana right before committing the attack. Further, the record show that Rojas suffered from paranoia and hallucination, which have led him to make odd statements and partake in actions that negatively affected him in the work place or while interacting with others. Paranoia and hallucination caused him to "hear voices" that led him to commit that attack [2,14].

On November 23, 2016, Arcan Cetin carried out a mass shooting that killed five people and injured many others at the Cascade Mall in Washington. Evidence indicates that Cetin was a heavy marijuana consumer. Further, he had a past of violent behavior, with some incidents including the consumption of marijuana. Although doctors prescribed him medicine for Attention Deficit Hyperactivity Disorder and other mental health issues such as Post Traumatic Stress Disorder, anxiety, and depression, he stopped taking the medicine and substituted it with by excessively consuming marijuana. This led to aggravate his mood swings and being more violent. Before the shooting, he had threatened an ex-girlfriend who lived out of state. Evidence indicates that at, while committing the attack, Cetin was shouting a woman's name [15–17].

On July 26, 2016, Satoshi Uematsu stabbed to death at least 19 people and injured at least 26 others at a care facility in Sagamihara, Japan. Months prior the shooting, Uematsu suddenly started talking and acting strangely to his coworkers, who feared he could harm someone. Consequently, Uematsu tested positive for marijuana and was diagnosed with marijuana-induced psychosis and paranoid disorder after he delivered an ominous euthanasia letter to a Japanese House of Representative and telling his co-workers and the police that he intended to kill disabled people. Although he planned the attack in detail, evidence suggests that he later seemed to showed remorse and stated that "There was something wrong with [him]". These kinds of behaviors suggest that he was suffering from psychosis and paranoia since he was in the delusion that his acts would contribute to the Japanese society and the world [18,19].

On November 27, 2015, Robert Dear killed three people and injured nine others when he carried out a mass shooting in a Planned Parenthood clinic in Colorado Springs. Dear, along with many other users, moved to Colorado after the state legalized the recreational use of marijuana. Dear was a heavy user who was described by family and friends as "an angry and occasionally violent", and "deeply

disturbed”, individual who suffered from paranoia and mood swings. Moreover, he was described as a lonely religious extremist who had a history of domestic violence against his ex-wives, who gambled, and who committed adultery on multiple occasions. About a year before the shooting, he moved to Colorado where he lived in dire conditions at a squalid trailer without running water or electricity [20–22].

On July 16, 2015, Muhammad Youssef Abdulazeez killed five people and injured a couple of others in his drive-by shooting at a military recruiting center in Chattanooga, Tennessee. Prone to depression and manic episodes, he started smoking marijuana heavily in high school. This addiction was going on for many years and led his mental state to deteriorate further and cause him to fail a drug test at work. Further, he started writing suicidal notes to himself and was pulled over by a police officer for driving under the influence of marijuana and alcohol. Up until the shooting, evidence indicates that Abdulazeez had a hard time keeping a job because of his manic depressive/bipolar disorder and drug use [23,24].

On June 17, 2015, 21-year-old Dylan Roof murdered nine people who were attending a prayer service in a Church in Charleston, South Carolina. He claimed that his intentions were to start a race war. His acts were preceded by years of drug abuse. Reports reveal that Roof’s drug abuse started when he was 12 years old when he would smoke marijuana three times a day. When he was 16 years old, he tried to stop smoking marijuana after telling people that his daily marijuana usage caused him to be paranoid and hear voices. According to experts, Roof started suffering panic attacks when he was 16. Nonetheless, multiple accounts claim that he kept smoking marijuana and started abusing other drugs and alcohol. During his arrest for the Charleston shooting, Roof told police officers that he abused drugs before committing such heinous act [5,25,26].

On August 9, 2014, Michael Brown was fatally shot after a physical altercation with a police officer in Ferguson, Missouri. The autopsy and toxicology report revealed that Michael Brown had THC concentration of marijuana in his blood and urine. He had five nanograms of THC on his system, which causes approximately the same level of impairment as a 0.08 percent of blood alcohol level. That much THC notably impairs someone’s judgment and perception of the surrounding environment, which may lead to anxiety and paranoia. Evidence indicates that Brown tried to reach for the officer’s gun during the altercations, which led to the officer shooting at him in close range. Thus, evidence suggests that Brown’s behavior was most likely caused by paranoia [27,28].

On April 15, 2013, Dzhokhar Tsarnaev and his brother Tamerlan, killed three people and injured over 250 by detonating homemade pressure cooker bombs near the finish line at the Boston marathon. Both brothers were heavy marijuana users since they were young teenagers. Tamerlan was killed in a police shootout following the bombings and Dzhokhar was eventually apprehended by law enforcement officers. Several acquaintances and friends knew about both brother’s marijuana consumption and sales. One of Dzhokhar friend testified that he sold marijuana to Tsarnaev days before the Boston Marathon Bombings. Unrelated to the bombings, one of Tamerlan’s friends implicated Tsarnaev in the killing of three men whose bodies were found sprinkled with marijuana. Multiple accounts noticed an increase of violent behavior from Dzhokhar for some time leading up to the bombings [29–32].

On January 8, 2011, Jared Loughner shot and killed six people, while also injuring 14 others at the then-US Representative Gabrielle Giffords’s constituent meeting held in Tucson, Arizona. Although friends and acquaintances described him as an “awkward but friendly” young man, they started noticing his behavior drastically change in college. In high school, Loughner smoked marijuana on most days. Moreover, he also started immersing himself in conspiracy theories displayed paranoia. He dropped out of high school during his final year, but was able to attend a community college. Some college peers described him becoming mentally unstable by saying and doing things that were frightening. Other peers feared that he would do something like what he actually did. He was suspended from college and never returned. Subsequently, he tried to join the army but he was rejected because he failed a drug test. Consequently, he engaged in paranoid behavior that led to him to

engage in anti-government speech and target then-Representative Giffords during her constituent meeting [33,34].

These are among the many nationally reported violent cases that have, among others factors, a common root to what led these young people to commit acts of violence at the detriment to society as a whole: the extensive use or abuse of marijuana. In recent years, many States within the United States, as well as some other countries around the world, have decriminalized or legalized the recreational use of marijuana [8,12,13,19].

2.2. Paranoia: Marijuana Induced

In the cases above mentioned, one of the recurring conditions that most likely led perpetrators to commit violence was paranoia. Paranoia is defined by the medical dictionary as “an unfounded or exaggerated distrust of others, sometimes reaching delusional proportions”. Paranoid perceptions can co-occur with various other mental conditions as well, such as depression and dementia, and can be divided in three different psychological disorders: paranoid schizophrenia, delusional disorder (persecutory type), and paranoid personality disorder (PPD). All three conditions are similar in the sense that they all contain an “unreasonable fear” or “unreasonable belief” as the root of each condition. Hallucinations are also a common symptom on individuals who suffer from paranoia. Nonetheless, paranoia is also a likely side effect deriving from the consumption of marijuana, as well as other drugs and alcohol [3,18,31,35].

In the cases above mentioned, one of the recurring conditions that most likely led perpetrators to commit violence was paranoia. Paranoia is defined by the medical dictionary as “an unfounded or exaggerated distrust of others, sometimes reaching delusional proportions”. Evidence suggests that paranoia was among the factors that contributed in the actions of Anthony Comello, Salem Abedi, Richard Rojas, Satoshi Uematsu, Robert Dear, Dylan Roof, Michael Brown, and Jared Lougher. Each one had, in respective degrees, unreasonable beliefs. Comello admittedly shot Cali because he feared Cali had a gun and was about to shoot him. Abedi displayed paranoid beliefs while making statements against Western societies. Rojas’ paranoia was displayed in his statements and action witnessed by his coworkers; also, he claims he heard voices that led him to commit the attack. Uematsu was diagnosed with Paranoid disorder and psychosis, which led him to have delusion beliefs that his despicable acts would make contributions to society. Dear was described as a lonely religious extremist but also had a history of domestic violence, gambling, and adultery. Roof wanted to start a race war. Brown was likely paranoid about his surroundings based on the report. Lougher was suffering from paranoia and was immersing himself with conspiracy theories. Many of these tragedies are committed by individuals who were paranoid and were consuming marijuana. It is very likely that marijuana played an active role in these people’s paranoia, considering that the chemical composition of the drug has compounds that alter a person’s perception of reality as mentioned below (Table 1, [17,36–38]).

Table 1. Personality change toward aggression or violence.

Paranoid Personality Disorder	
A pervasive distrust and suspiciousness of others such that their motives are interpreted as malevolent, beginning by early adulthood and present in a variety of contexts, as indicated by four (or more) of the following:	
1.	Suspects, without sufficient bases, that others are exploiting, harming, or deceiving him or her.
2.	Is preoccupied with unjustified doubts about the loyalty or trustworthiness of friends or associates.
3.	Is reluctant to confide in others because of unwarranted fear that the information will be used maliciously against him or her.
4.	Reads hidden demeaning or threatening meanings into benign remarks or events.
5.	Persistently bears grudges (i.e., is unforgiving of insults, injuries, or slights).
6.	Perceives attacks on his or her character or reputation that are not apparent to others and is quick to react angrily or to counterattack.
7.	Has recurrent suspicions, without justification, regarding fidelity of spouse or sexual partner.

2.3. Psychosis: Marijuana Induced

Another condition that is commonly present in cases like the above are psychotic conditions. Psychotic conditions affect an individual's mind in a way that causes that individual to experience loss of contact with reality. During a psychotic episode, the perception of reality is altered to the point where an individual is unable to distinguish reality from hallucinations. Psychotic individual can also experience delusions (false beliefs), incoherent speech, inappropriate behavior, depression, anxiety, sleep problems, social withdrawal, lack of motivation, and difficulty functioning overall [16,17,37].

In the above-mentioned cases, Uematsu was diagnosed with marijuana-induced psychosis. His coworkers' testimony that he would talk and act inappropriately, his paranoia, and his delusion that killing patient at a care facility would benefit the society as a whole, demonstrates that he was suffering from psychotic conditions that made him lose contact with reality and led him to commit such acts. Similar symptoms were also present in cases where perpetrators acted with delusional beliefs, such as: Abedi, who suddenly started making inappropriate statements against Western societies; Dear, who was a lonely religious extremist but also had a history of domestic violence, gambling, and adultery, which strongly indicates that he was delusional, incoherent, and lost contact with reality; Rojas, Cruz, and Roof who suffered from hallucinations while having consumed large amount of marijuana throughout their lives.

Often, individuals who suffer from pre-existing medical conditions use marijuana in an attempt to alleviate their conditions. The man in Rustavi, Cruz, Kelley, Cetin, Abdulazeez, and Cruz also consumed marijuana because they were under the illusion that it would help them cope with their conditions, whether those conditions were likely induced by marijuana or not. However, it ended up worsening their conditions as time went by. What individuals are unaware of when it comes to self-medicating, is that the marijuana they consume does not have compounds that alleviate their pain or conditions; the marijuana they consume has many compounds that negatively alter their perceptions, which leads to worse conditions (Tables 2 and 3, [2,9,10,12,39–41]).

Table 2. Psychosis.

Substance-Induced Psychotic Disorder
A. Presence of one or both of the following symptoms: Delusions. Hallucinations.
B. There is evidence from the history, physical examination, or laboratory findings of both (1) and (2): The symptoms in Criterion A developed during or soon after substance intoxication or withdrawal or after exposure to a medication.
The involved substance is capable of producing the symptoms in Criterion A.
C. The disturbance is not better explained by a psychotic disorder that is not substance-induced. Such evidence of an independent psychotic disorder could include the following:
The symptoms preceded the onset of the substance use; the symptoms persist for a substantial period of time (e.g., about 1 month) after the cessation of acute withdrawal or severe intoxication; or there is other evidence of an independent non-substance-induced psychotic disorder (e.g., a history of recurrent non-substance-related episodes).
D. The disturbance does not occur exclusively during the course of a delirium.
E. The disturbance causes clinically significant distress or impairment in social, occupational, or other important areas of functioning.

Table 3. Paranoia.

Subtypes Delusional Disorder
Grandiose type: This subtype applies when the central theme of the delusion is the conviction of having some great (but unrecognized) talent or insight or having made some important discovery.
Persecutory type: This subtype applies when the central theme of the delusion involves the individual's belief that he or she is being conspired against, cheated, spied on, followed, poisoned or drugged, maliciously maligned, harassed, or obstructed in the pursuit of long-term goals.

3. Discussion

3.1. Marijuana: General Facts

Marijuana is the most consumed illicit drug in the world, with cannabis use and dependence continuing to increase over the past two decades as the trend of legalization persists. According to the United Nations Office on Drug and Crime, over 192 million of users (ages 15–64) worldwide regularly consume marijuana, with a lifetime use of 20% of the World's population and a significant number of individuals regularly consuming the drug [42]. In a 2017 study by the Global Burden of Disease, it estimated the age-standardized rate of cannabis use disorder, or CUD, was 289.7 per 100,000 population (95% Uncertainty Interval (UI) 248.9–339.1), affecting 22.1 million people (95% UI 19.0–25.9 million) [42]. The United States and Canada were in fact found to have among the highest age-standardized rates of CUDs in the world [42].

Cannabis is a complex plant that is made up of 400 chemical entities of which more than 60 are cannabinoid compounds, with delta-9-tetrahydrocannabinol and cannabidiol being the major compounds. Some of those cannabinoid compounds tend to have opposing effects as they affect a very important neurotransmitter system called endocannabinoid system [2]. Moreover, some cannabinoids bind to central cannabinoid receptors to control many behavioral functions, such as aggression. Furthermore, the delta-9-tetrahydrocannabinol (THC) is the chemical responsible for the intoxicating effects on individuals who consume marijuana. The THC level determines the potency of marijuana and high levels of THC likely lead to higher negative health consequences [43–45].

Researchers refer to marijuana having a “high potency” when it has a THC level of more than 10%. In the past years, the THC of confiscated marijuana samples rose from 3% in 1980 to 12% in 2012. Moreover, adolescents between 15 and 17 years old have reported significantly higher ED visits from 2005 to 2010, which is likely caused by the increase of marijuana potency during that time period [7]. Although THC levels that exceed 10% most likely cause serious negative health consequences, it is not uncommon to find marijuana, which THC content exceeds 20% and occasionally 230%, to be sold in places where marijuana is legalized, such as the state of Colorado [7,8]. Furthermore, while daily users refer to high potency marijuana as “the good stuff”, it is reported that daily users are five times more likely to find themselves in the hospital for psychosis symptoms such as delusions and hallucinations caused after consuming marijuana. As this paper will mention in the following pages, however, delusions and hallucinations are not the only negative effects stemming from the consumption of marijuana. Cardiovascular diseases, depression, anxiety, and violence are also among the common negative effects of marijuana [13,14,27,34,46].

3.2. Mental and Behavioral Changes

We apply the results of the research regarding the role of marijuana in violence. We use concepts such as personality changes, perpetrator violence, and psychosis to establish our association of marijuana with the unfortunate cases. The purpose is to illustrate negative but preventable tragic outcomes due to marijuana and its role in violence. The overall objective is to identify the role of marijuana and to suggest it is avoidable and causal nature in inducing violence [47–49].

In all the cases selected, marijuana use was present. For some of the individuals, marijuana use was confirmed by a physical test. In other cases, marijuana was present on their person, identifying drug use. Moreover, some individuals of the case were identified as marijuana users by outside sources.

Present in all the cases, as a result of marijuana use, was the change in personality, aggressive behavior, paranoia, and/or psychosis. All these symptoms have been documented by scientific research to be the result of marijuana use and intoxication. Another symptom, victimization, has a positive correlation with cannabis use, and the cases illustrate marijuana users and victimization. In other words, marijuana users become victims of aggression in response to their perpetration under the influence of marijuana (Table 4, [50,51]).

Table 4. What did the cases have in common?

Cases of Marijuana Use and Symptoms	
Case	Symptom
Anthony Comello	Paranoia
Man in Rustavi	Aggressiveness, Personality Change
Nikolas Cruz	Psychosis, Hallucinations
Devin Patrick Kelley	Aggressiveness, Personality Change
Salaman Abedi	Aggressiveness, Personality Change, Paranoia
Richard Rojas	Paranoia, Hallucinations
Arcan Cetin	Aggressiveness, Personality Change
Stoshi Uematsu	Psychosis, Paranoia
Robert Dear	Aggressiveness, Paranoia
M.Y. Abdulazeez	Aggressiveness, Paranoia
Dylan Roof	Paranoia, Hallucinations
Michael Brown	Aggressiveness, Personality Change, Paranoia
Dzhokar Tsarnaev	Aggressiveness, Personality Change
Tamerlan Tsarnaev	Aggressiveness, Personality Change
Jared Loughner	Paranoia, Psychosis

The DSM V provides diagnostic categories for paranoid personality, paranoia and psychosis associated with marijuana use [52].

3.3. Marijuana and Violence

As mentioned above, some compounds found in marijuana have an effect on central endocannabinoid receptors that control many behavioral functions, including aggression. Although there are some instances where marijuana consumption causes mild euphoria and relaxation on users, adverse acute psychopharmacological effects are very likely to occur. A study that collected data from half a century points out that even a single dose of cannabis may cause “impairments in behavioral control that may underlie impulsive, violent behavior” by altering “the normal functioning of its underlying natural substrate, the ventrolateral prefrontal cortex in man”. Furthermore, the results collected in that study provide a strong indication that chronic marijuana use suggests a possible causal effect with predicting future violence. More studies have reported that panic attacks, confusion, hallucinations, suspiciousness, and paranoia often occur in chronic marijuana users, affecting their cognition in ways that enhance aggressive responses to perceived provocations. Further, recent studies have proven causal connections between marijuana and psychosis [38,39,53].

Studies Show Violence and Aggression Associated with Marijuana Use

Marijuana intoxication results in panic reactions and paranoid feelings whose symptoms lead to violence [49]. The sense of fear, loss of control, and panic is associated with violence [4,54,55]. Also marijuana use increases heart rate, which may be associated with violent behavior [34,47,56,57].

When people stop using marijuana they may experience a variety of withdrawal symptoms, including sleep disturbance, irritability or restlessness, loss of appetite, anxiety, and sweating [46,58]. Experiencing any of these symptoms can make a person angry, ranging from mild irritation to violent rage. Marijuana withdrawal can lead to intimidating violent or bullying behavior, endangering the perpetrator or other people and property [59].

In incarcerated subjects, studies found that one-third of the subjects that committed homicide had used marijuana twenty-four hours before the homicide. Further, three-quarters of those subjects were experiencing at least one mental or physical effect from marijuana intoxication when the homicide occurred.

Similarly, individuals in remote Aboriginal Australian Communities who reported current cannabis use were nearly four times more likely than nonusers to present at least once for violent

trauma. Homicide offenses have been repeatedly documented to be connected to drug use, and marijuana is often one of those drugs [60].

Marijuana use is also indicative of intimate partner violence [61]. Consistent use of marijuana during adolescence was the most predictive indicator of intimate partner violence [31]. Also, marijuana use during adolescence was associated with perpetration or both perpetration and victimization by an intimate partner in early adulthood [62].

There is also a positive association between peer victimization and cannabis use in adolescents. Cannabis use is likely to be associated with perpetrator victims, those who initiate violence while using marijuana and experience retaliation to their aggressive acts. This trend suggests that cannabis use might be strongly related to outward aggression by the user [1].

Cannabis use also increases an adolescent's own likelihood of being victimized by peers. In particular, mental effects of cannabis has the potential to decrease the ability to accurately identify, evaluate, or avoid potentially dangerous persons or situations [59].

3.4. Psychosis

Psychosis is defined by the medical journal as "a symptom or feature of mental illness typical characterized by radical changes in personality, impaired functioning, and a distorted or nonexistent sense of objective reality". Psychosis causes individuals to have an impaired perception of reality, consisting of hallucinations and paranoia [2,8,16]. Consumption of marijuana also proportionally increased the risk of other mental illnesses, such as schizophrenia and other types of psychoses. These marijuana use disorders are often associated with its dependence, since a user's brain requires more and more substance use to keep the desired euphoric effect in the brain. Thus, a user is most likely to experience withdrawal symptoms when not taking the drug. Irritability, anger, and aggression are common withdrawal symptoms that former marijuana users, or marijuana users who try to quit the consumption, experience [46]. Although marijuana advocates generally state that the consumption of the drug helps individuals who suffer from PTSD or other psychiatric conditions, studies suggest that the consumption of marijuana in patients with PTSD, and in patients following a psychiatric discharge, increases the likelihood of those patients being prone to violence compared to patients who do not consume the drug [4,37]. A 50 year-span study on adult patients in the United Kingdom indicated that continued cannabis use by an individual leads is associated with a 7-fold greater odds for commission of subsequent violent crimes. The authors of that study suggest that marijuana consumption would cause impairments in neurological circuits controlling behavior that makes a user prone to violent behavior [36].

Marijuana advocates downplay the risks associated with its unrestricted consumption by saying that the drug is safe, which is a similar approach adopted by Big Tobacco years ago to downplay the risks of smoking. Yet, despite tobacco being legal, people today are well aware of the risks associated with its consumption. Stating that consuming marijuana is safe goes against many studies and researches performed that prove negative health consequences associated with the consumption of marijuana due to the multitude of compounds present and high THC levels being consumed by individuals [9–11,19,21].

Studies Show Psychosis and Paranoia

Cannabis intoxication leads to acute psychosis in many individuals and can produce short-term exacerbations of preexisting psychotic diseases [63–66]. Cannabis use also causes symptoms of depersonalization, fear of dying, irrational panic and paranoid ideas which coincide with acute intoxication and remit quickly [67].

It was reported that 15% of cannabis users identified psychotic-like symptoms, the most common being hearing voices or having unwarranted feelings of intimidation and persecution or paranoid thoughts [38].

The potency of the marijuana has varying effects on users. A study analyzed the proportion of patients in South London with first episode psychosis attributable to high-potency cannabis use and found that the use of high-potency cannabis (skunk) confers an increased risk of psychosis compared with traditional low-potency cannabis (hash) [68].

The risk of individuals having a psychotic disorder showed a roughly three times increase in users of skunk-like cannabis (high-potency) compared with those who never used cannabis. Use of skunk-like cannabis everyday conferred the highest risk of psychotic disorders compared with no use of cannabis [69]. Potency in these studies is similar to marijuana currently available in the U.S. Direct administration of cannabis resulted in predictable increased occurrence of paranoia in comparison to those who received placebo.

Epidemiological studies showed that cannabis is the most frequently used drug among those diagnosed with bipolar disorder [70]. Studies have also shown that as the frequency of cannabis use increases, so does the risk for psychotic disorders, such as schizophrenia [71]. The investigators of Schizophrenia Commission concluded that cannabis use is the most preventable risk factor for psychosis [72–77]. High proportions of persons with schizophrenia report regular cannabis use and meet criteria for cannabis use disorder [78].

Findings suggest that activity in the basal lateral medulla is involved in marijuana-induced paranoia (state of becoming afraid of things that would normally trigger fear) [77]. That means marijuana is actually enhancing type of learning about fear, leading the brain to jump to conclusions about the mild experiences, perceiving them as scarier and more strongly connected to other scary situations than they are. This marijuana induced fear-based learning helps explain why marijuana users tend to see patterns in events that are not real, such as conspiracies [78].

In a study analyzing a college population, heavy users of marijuana displayed significantly greater impairment than light users on intentional/executive functions. This led to the conclusion that heavy marijuana use is associated with residual neuropsychological effects even after a day of supervised abstinence from the drug [53,79].

3.5. Public Policies

These negative effects of marijuana need to be taken into account for public policy in order to treat people with addiction and possibly avoid the tragedies above mentioned. The public should know the negative consequences associated with the compounds present within the marijuana products they consume. The current legalization push in the United States lacks prudent public policy and control over the process. A prudent public policy would be to decriminalize the drug and have its composition, creation, and distribution controlled by an agency that would keep THC levels at a minimum. Moreover, studies that try to find ways to treat individuals addicted to marijuana and ways to make the drug safer by pinpointing each compound and determine whether some compounds may indeed help people who have curable health conditions. This approach would reduce the negative effects of high THC on the human body and would decrease violence occurring during marijuana deals in the black market. Furthermore, this approach will likely decrease the violence caused by marijuana and, most importantly, it would prevent tragedies such as the ones mentioned above [8,13,31,80].

4. Conclusions

The main scope of this paper was to inform the general public about the relationships between marijuana and violence in the general population and in individuals with mental illnesses, as recent findings do link marijuana with cases where psychosis was present. This article is a case review and not a research study; therefore, the chief limitations regard inferences that can be made from a case study. However, the findings suggest a further need for research on marijuana and violence. The authors of this paper did not intend to take sides regarding the legalization of marijuana. The focus was public health in regards to marijuana [2,11,14,18,36].

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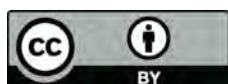
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Marijuana Violence and Law

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Abstract

Marijuana is currently a growing risk to the public in the United States. Following expanding public opinion that marijuana provides little risk to health, state and federal legislatures have begun changing laws that will significantly increase accessibility of marijuana. Greater marijuana accessibility, resulting in more use, will lead to increased health risks in all demographic categories across the country. Violence is a well-publicized, prominent risk from the more potent, current marijuana available.

We present cases that are highly popularized storylines in which marijuana led to unnecessary violence, health risks, and, in many cases, both. Through the analysis of these cases, we will identify the adverse effects of marijuana use and the role it played in the tragic outcomes in these and other instances. In the analysis of these cases, we found marijuana as the single most common, correlative variable in otherwise diverse populations and circumstances surrounding the association of violence and marijuana.

Keywords: Marijuana; Bullying behaviour; Aggression; Intoxication; Cannabis use

Cases Reports

Michael Brown robbed a convenience store for a large box of cigarillos to smoke marijuana and assaulted the store clerk. Subsequently, the 18 year old Brown attacked police officer Darren Wilson without provocation, punching him in the face through the window of his police car, and attempting to grab his gun. Wilson shot and killed Brown as he tried to escape in a very agitated, paranoid, confused and aggressive state. Along with the cigarillos, marijuana was found in Brown's system at the time of death [1].

Trayvon Martin was shot and killed by George Zimmerman, a neighborhood watch volunteer. Marijuana was found in Martin's system the night he was shot [2]. He also had been suspended from school for possession of marijuana.

Laquan McDonald slashed a tire and damaged a police car. After ignoring verbal instruction to drop the knife, he was shot sixteen times. McDonald had used marijuana every day since the age of 10 or 11 years old [3].

Deven Guilford was shot and killed by a policeman during a traffic stop after becoming assaultive. He was a known marijuana user as he professed his "love" for marijuana on social media [4].

Freddie Gray fell into a coma while being transported after an arrest for possession of an illegal switchblade. At the time of his death, Gray tested positive for marijuana and heroin. Gray had multiple prior charges for marijuana possession [5].

Lakeisha Holloway drove her car onto a sidewalk on the Las Vegas strip, killing one and injuring over thirty five others [6,7]. The

toxicology exam illustrated that Holloway had marijuana in her system at the time of the vicious attack [8].

Robert Lewis Dear shot three people and injured nine others at a Planned Parenthood Clinic in Colorado Springs, Colorado. He was a marijuana user and illustrated mental health issues [9].

Joseph Jesse Aldridge found his mother dead of natural causes and went on a shooting rampage, killing seven people and himself. In 2008, Aldridge had pled guilty to federal charges of possessing firearms while using marijuana. He was required to complete mental health and substance use counseling for marijuana [10].

Jared Lee Loughner shot Arizona Congresswomen Gabrielle Gifford and eighteen other, killing six. He was arrested in 2007 for marijuana possession and other paraphernalia. Friends and classmates knew him as a marijuana user. He was also diagnosed with paranoid schizophrenia [11].

The Tsarnaev brothers killed three and injured 264 others with bombs at the Boston Marathon on April 5, 2013. Friends say they were both heavy marijuana users. The wife of the older brother, Tamerlan, described a change in his attitude as he became violent toward her with his increasing marijuana use [12].

A Dearborn Heights man plotted ISIS attacks on church. In an affidavit filed in a criminal complaint on weapons and marijuana charge, Khalil Abu Rayyan is described as being an ISIS supporter who talked about committing violent acts of terrorism, including shootings and beheadings [13].

Osama bin Laden became paranoid and obsessive in the days prior to his death. High strength marijuana plants were found within bin Laden's compound in Pakistan [14].

Studies Show an Association between Marijuana and Mental or Physical Consequences

Studies show violence and aggression with marijuana use

Marijuana intoxication results in panic reactions and paranoid feelings whose symptoms lead to violence [15]. The sense of fear, loss of control, and panic is associated with violence [16 18]. Also marijuana use increases heart rate, which may be associated with violent behaviour [19 22].

When people stop using marijuana they may experience a variety of withdrawal symptoms, including sleep disturbance, irritability or restlessness, loss of appetite, anxiety, and sweating [23,24]. Experiencing any of these symptoms can make a person angry, ranging from mild irritation to violent rage. Marijuana withdrawal can lead to intimidating violent or bullying behavior, endangering the perpetrator or other people and property [25].

In incarcerated subjects, studies found that one third of the subjects that committed homicide had used marijuana twenty four hours before the homicide. Further, three quarters of those subjects were experiencing at least one mental or physical effect from marijuana intoxication when the homicide occurred.

Similarly, individuals in remote Aboriginal Australian Communities who reported current cannabis use were nearly four times more likely than nonusers to present at least once for violent trauma. Homicide offenses have been repeatedly documented to be connected to drug use, and marijuana is often one of those drugs [26].

Marijuana use is also indicative of intimate partner violence [27]. Consistent use of marijuana during adolescence was the most predictive indicator of intimate partner violence [28]. Also, marijuana use during adolescence was associated with perpetration or both perpetration and victimization by an intimate partner in early adulthood [29].

There is also a positive association between peer victimization and cannabis use in adolescents. Cannabis use is likely to be associated with perpetrator victims, those who initiate violence while using marijuana and experience retaliation to their aggressive acts. This trend suggests that cannabis use might be strongly related to outward aggression by the user [30].

Cannabis use also increases an adolescent's own likelihood of being victimized by peers. In particular, mental effects of cannabis have the potential to decrease the ability to accurately identify, evaluate, or avoid potentially dangerous persons or situations [25].

Studies show psychosis and paranoia

Cannabis intoxication leads to acute psychosis in many individuals and can produce short term exacerbations of pre existing psychotic diseases [31 34]. Cannabis use also causes symptoms of depersonalization, fear of dying, irrational panic and paranoid ideas which coincide with acute intoxication and remit quickly [35].

It was reported that 15% of cannabis users identified psychotic like symptoms, the most common being hearing voices or having unwarranted feelings of intimidation and persecution or paranoid thoughts [36].

The potency of the marijuana has varying effects on users. A study analyzed the proportion of patients in South London with first episode

psychosis attributable to high potency cannabis use and found that the use of high potency cannabis (skunk) confers an increased risk of psychosis compared with traditional low potency cannabis (hash) [37].

The risk of individuals having a psychotic disorder showed a roughly three times increase in users of skunk like cannabis (high potency) compared with those who never used cannabis. Use of skunk like cannabis everyday conferred the highest risk of psychotic disorders compared with no use of cannabis [6]. Potency in these studies is similar to marijuana currently available in the U.S. Direct administration of cannabis resulted in predictable increased occurrence of paranoia in comparison to those who received placebo.

Epidemiological studies showed that cannabis is the most frequently used drug among those diagnosed with bipolar disorder [5]. Studies have also shown that as the frequency of cannabis use increases, so does the risk for psychotic disorders, such as schizophrenia [38]. The investigators of Schizophrenia Commission concluded that cannabis use is the most preventable risk factor for psychosis [39 44]. High proportions of persons with schizophrenia report regular cannabis use and meet criteria for cannabis use disorder [45].

Findings suggest that activity in the basal lateral medulla is involved in marijuana induced paranoia (state of becoming afraid of things that would normally trigger fear) [44]. That means marijuana is actually enhancing type of learning about fear, leading the brain to jump to conclusions about the mild experiences, perceiving them as scarier as and more strongly connected to other scary situations than they are. This marijuana induced fear based learning helps explain why marijuana users tend to see patterns in events that are not real, such as conspiracies [45] (Table 1).

In a study analyzing a college population, heavy users of marijuana displayed significantly greater impairment than light users on intentional/executive functions. This led to the conclusion that heavy marijuana use is associated with residual neuropsychological effects even after a day of supervised abstinence from the drug [46,47].

What did the cases have in common?

Cases of Marijuana Use and Symptoms	
Case	Symptoms
Michael Brown	Aggressiveness, Personality Change, Paranoia
Trayvon Martin	Aggressiveness, Personality Change, Paranoia
Laquan McDonald	Aggressiveness, Personality Change
Devon Guilford	Aggressiveness, Personality Change
Freddie Gray	Paranoia
Lakeisha Holloway	Aggressiveness, Personality Change
Robert Lewis Dear	Psychosis
Joseph Jesse Aldridge	Psychosis
Gerard Lee Loughner	Aggressiveness, Personality Change, Psychosis
Tsarnaev Brothers	Aggressiveness, Personality Change
Khalil Abu-Rayyem	Psychosis

Osam bin Laden	Paranoia, Psychosis
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Table 1: Marijuana uses and symptoms.

Discussion

We apply the results of the research regarding the role of marijuana in violence. We use concepts such as personality changes, perpetrator violence, and psychosis to establish our association of marijuana with the unfortunate cases. The purpose is to illustrate negative but preventable tragic outcomes due to marijuana and its role in violence. The overall objective is to identify the role of marijuana and to suggest it is avoidable and causal nature in inducing violence [48-50].

In all the cases selected, marijuana use was present. For some of the individuals, marijuana use was confirmed by a physical test. In other cases, marijuana was present on their person, identifying drug use. Moreover, some individuals of the case were identified as marijuana users by outside sources.

Personality change toward aggression or violence (Chart 1)

Paranoid Personality Disorder
A. A pervasive distrust and suspiciousness of others such that their motives are interpreted as malevolent, beginning by early adulthood and present in a variety of contexts, as indicated by four (or more) of the following:
Suspects, without sufficient bases, those others are exploiting, harming, or deceiving him or her.
Is preoccupied with unjustified doubts about the loyalty or trustworthiness of friends or associates.
Is reluctant to confide in others because of unwarranted fear that the information will be used maliciously against him or her.
Reads hidden demeaning or threatening meanings into benign remarks or events.
Persistently bears grudges (i.e., is unforgiving of insults, injuries, or slights).
Perceives attacks on his or her character or reputation that are not apparent to others and is quick to react angrily or to counterattack.
Have recurrent suspicions, without justification, regarding fidelity of spouse or sexual partner.

Chart 1: Paranoid personality disorder (PPD) symptoms.

Present in all the cases, as a result of marijuana use, was the change in personality, aggressive behavior, paranoia and/or psychosis. All these symptoms have been documented by scientific research to be the result of marijuana use and intoxication. Another symptom, victimization, has a positive correlation with cannabis use, and the cases illustrate marijuana users and victimization [51,52]. In other words, marijuana users become victims of aggression in response to their perpetration under the influence of marijuana.

DSM V provides diagnostic categories for paranoid personality, paranoia and psychosis associated with marijuana use [53].

Michael Brown was a marijuana user and it was found in his system at the time of death. Further, Brown illustrated aggressive tendencies and victimization, as he was reported to aggressively assault a store clerk prior to his aggression towards a police officer. These actions were contrary to non-aggressive tendencies purported by those closest

to Brown. Brown's intoxication of marijuana likely accounted for the aggression and assaults. While contributing factors such as race and poor police practices may have contributed to Brown's unfortunate death, Brown likely would have been alive had he not been a user of marijuana in this particular instance. Apparently he was acting under the influence in an uncharacteristically high risk manner.

Similar to Brown, Trayvon Martin was known to have used marijuana. He was suspended from school for marijuana use at the time of his altercation with Zimmerman. Under the influence of marijuana, Martin likely illustrated victim perpetration from marijuana which increased aggressive behavior through participation in the altercation with Zimmerman. This physical fight with Zimmerman was behavior to the surprise of others who claimed Martin was mild-mannered who likely would avoid such a confrontation. Marijuana use likely created the fear and aggressive behavior due to poor judgment and threatening perceptions induced by marijuana, contribution to Martin's death [19,23].

Tamerlan Tsarnaev follows similar patterns. He was a known heavy marijuana user. There was a sharp change in his personality confirmed by his wife associated with very heavy use and involvement with marijuana, resulting in the violence towards his wife according to her. Likely, intoxication from marijuana created and contributed to the paranoid thoughts and poor judgment to detonate a bomb in a crowd of people [34,40].

Similarly, Laquan McDonald was a known marijuana user since 10 or 11 years old. The intoxication from the use of marijuana likely caused McDonald to slash a cop car's tire, as he was known to be respectful and reserved. His life would have been saved without marijuana-induced aggressiveness and poor judgments, and senseless, high-risk actions towards police [19,23].

Deven Guilford is another preventable but clear example of high risk and poor judgment from marijuana use. After being stopped in his car, Guilford assaulted a police officer for unknown reasons and apparently paranoid reactions to police actions. Guilford was preoccupied with and user of marijuana at a relatively young age. His marijuana use likely contributed to the change in his personality to be aggressive and assaultive to provoke his death in a high-risk police stop [19,23].

Similarly, Jared Lee Loughner was known to be a heavy marijuana user. People described a large personality change from his youth. Loughner went on a shooting spree, killing six people. Marijuana was likely a major contributor to the drastic change in personality toward violence. Had marijuana been identified as a problem, his aggressive and assaultive act may have been prevented and lives could have been saved [19,23].

Lakeisha Holloway shows another example of senseless loss. In contrast to her personality from her youth, she drove a car onto the sidewalk of the Las Vegas strip, killing one person and injuring others. Marijuana was in her system at the time of the attack and likely contributed to the lethal aggression exhibited, and likely, psychotic, paranoid thinking.

Psychosis (Chart 2)

Substance-Induced Psychotic Disorder
A. Presence of one or both of the following symptoms:
Delusions
Hallucinations
B. There is evidence from the history, physical examination, or laboratory findings of both (1) and (2):
The symptoms in Criterion A developed during or soon after substance intoxication or withdrawal or after exposure to a medication.
The involved substance is capable of producing the symptoms in Criterion A.
C. The disturbance is not better explained by a psychotic disorder that is not substance-induced. Such evidence of an independent psychotic disorder could include the following:
The symptoms preceded the onset of the substance use; the symptoms persist for a substantial period of time (e.g. about 1 month) after the cessation of acute withdrawal or severe intoxication; or there is other evidence of an independent non-substance-induced psychotic disorder (e.g. a history of recurrent non-substance-related episodes).
D. The disturbance does not occur exclusively during the course of a delirium.
E. The disturbance causes clinically significant distress or impairment in social, occupational or other

Chart 2: Substance induced psychotic disorder symptoms.

Studies have illustrated the connection between cannabis use and psychosis [54]. Marijuana has been shown to increase the risk for psychotic disorders and/or exacerbate pre existing psychotic diseases. Consistent with research, marijuana resulting in psychosis is illustrated in many of the cases described above. Joseph Jesse Aldridge, described as a recluse, went on a shooting rampage after finding his mother deceased. Aldridge was a known marijuana user and had history of psychosis. His marijuana use likely contributed to his psychosis, and a major factor for the shooting rampage [55,56].

Similar to Aldridge, Jared Lee Loughner was admittedly a marijuana user. He suffered from a mental illness of paranoid schizophrenia. Loughner then went on a shooting spree killing six people. His marijuana use likely exacerbated the psychosis, which was a high risk factor for the shootings [33,35,55].

Analogous to Aldridge and Loughner, Robert Lewis Dear went on a shooting spree in Colorado. Dear moved to Colorado for easier access to marijuana. Dear also exhibited signs of mental health illness, psychosis and paranoia, which caused or exacerbated by marijuana, which resulted in his shooting spree [18,31].

While Khalil Abu Rayyan did not result in a shooting rampage, this case illustrates the same ideas as previous cases. Abu Rayyan used marijuana. He illustrated signs of psychosis through the threats of terrorism and martyrdom. Abu Rayyan obtained the instruments to carry out his plans. The psychosis, contributing to the terroristic thoughts, marijuana use contributed to and exacerbated his aggressive behaviour [31,36,55].

Similar to Abu Rayyan, Osama bin Laden also had notorious terroristic and paranoid behavior. Bin Laden was a marijuana user, growing high strength plants within his compound in Pakistan. Unfortunately, bin Laden's psychosis, associated and exacerbated by

marijuana use, may have prompted him to carry out the most heinous terrorist attacks in history. Without marijuana use and subsequent psychosis, many deaths may not have occurred [31,55,56].

Paranoia (Chart 3)

Subtypes Delusional Disorder
Grandiose type: This subtype applies when the central theme of the delusion is the conviction of having some great (but unrecognized) talent or insight or having made some important discovery.
Persecutory type: This subtype applies when the central theme of the delusion involves the individual's belief that he or she is being conspired against, cheated, spied on, followed, poisoned or drugged, maliciously maligned, harassed or obstructed in the pursuit of long-term goals.

Chart 3: Types of delusional disorder (DD).

In addition to psychosis and aggression, paranoia has been connected to marijuana intoxication [57,58]. Studies have illustrated THC significantly increase paranoia through a physical pathway. The cases described above illustrate such paranoia in marijuana users. For instance, Freddie Gray was arrested after he fled on the mere sight of police officers. During his arrest in the intoxicated state, he was injured which resulted in his death. Gray was a known drug addict and user of marijuana. His marijuana use likely induced paranoia thinking and poor judgment which prompted him to flee from police, threatening to him. Without marijuana and other drug intoxication, his cooperation likely would have been different, and he would avoided his high risk apprehension, and death avoided [34,36,40].

Similarly, Trayvon Martin got into an altercation with a Neighborhood Watch guard. Martin, speaking to his girlfriend, stated that a "creepy" man was following him and that he tried to evade the follower. His description is characteristic of apprehensive beliefs, and a sign of paranoia thought. Otherwise, Martin according to his family would not have fought with Zimmerman, had the situation escalated due to the paranoia, caused by the use of marijuana [34,36,40].

Osama bin Laden also illustrated paranoia, in letters that were discovered after his death. Paranoia was caused by his frequent marijuana use. This paranoia resulted in his adverse view of the US government. Unfavorable views toward the US resulting from extreme paranoia, coupled with psychosis, resulted in his terrorist attacks. Marijuana abstinence could have prevented the death of thousands of people [34,36,40].

These cases contained diverse variables: encounters with police, race, altercations, confrontation and mental illness. Other drug use was present but not the same across all cases. However, marijuana and violence are the common denominators in all the cases. Many were not victims of police aggression, some perpetuated police responses, some not. Diverse races and cultures were represented, and no stereotype was evident among the cases of violence and marijuana use. The variables, marijuana and violence were present in all cases.

An extensive review of the scientific literature document a clear association between marijuana and violence, psychosis, personality changes, poor judgment, aggression, victim perpetration. There are other possibilities and contributing factors in the execution of the violent behaviors, though probably not present in all cases. The purpose of this case report is to illustrate the probable role of marijuana in violent behaviors.

The review does not prove a causal relationship between marijuana and violence in these cases. Rather it establishes a highly documented association between marijuana and violence. A legal standard used for causation can be applied to illustrate this association. A legal cause is “but for” the actions or circumstances, the result would not have occurred. A proximate cause is the result was “foreseeable” based on the facts and actions. The most likely legal and proximate cause of violence in these cases was the use and intoxication from marijuana. No other variables fulfill these requirements.

Conclusion

According to research studies, marijuana use causes aggressive behavior, causes or exacerbates psychosis and produce paranoid. These effects have been illustrated through case studies of highly publicized incidents and heightened political profiles.

These cases contain examples of repeated illustrations of aggression, psychosis and paranoia by marijuana users and intoxication. Ultimately, without the use and intoxication of marijuana, the poor judgment and misperceptions displayed by these individuals would not have been present, reducing the risk for actions that result in senseless deaths.

Import to these assertions, is that the current marijuana is far more potent in THC concentrations, the psychoactive component. Accordingly, and demonstrated in direct studies, more potent marijuana results in a greater risk for paranoid thinking and psychosis. In turn, paranoid behavior increases the risk for paranoid behaviors and predictably associated with aggressive and violent behaviors.

Marijuana use causes violent behavior through increased aggressiveness, paranoia and personality changes (more suspicious, aggressive and anger).

Recent illicit and “medical marijuana” (especially grown by care givers for medical marijuana) is of much high potency and more likely to cause violent behavior.

Marijuana use and its adverse effects should be considered in cases of acts of violence as its role is properly assigned to its high association.

Recognize that high potency marijuana is a predictable and preventable cause of tragic violent consequences.

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From: [Ronald Kirkish](#)
To: [Christina Turner](#); [Rich Constantine](#); [Yvonne Martinez Beltran](#); [Rene Spring](#); [John McKay](#); [Shane Palsgrove](#); [Gino Borgioli](#)
Cc: [Bob Cooke](#); [Matt Wendt](#); [Chris Borello](#); [Terry Ratto](#); [Ladera Grill Dan](#); dave@lokeyfirearms.com; [Ladera Grill Morgan](#); [Mark Turner](#); [REDACTED]
Subject: Marijuana business are a huge and dangerous target for criminal gangs
Date: Monday, March 22, 2021 2:21:00 PM

Dear All,

Marijuana dispensary's are a major crime target for gangs. Dispensaries up and down the State of California are being robbed by these criminal gangs not only for their money, but also to steal their product (marijuana) to be sold on the blackmarket.....robbing a dispensary of their marijuana is just as good if not better than stealing the money itself.

I'm sure your "**Chief of Police**" would prefer that the Morgan Hill city council not make decisions that would make his job, and the job for the men and women under his charge, more dangerous than it is already.

As these recent articles show, these marijuana businesses are a huge magnet for criminals and a city the size of Morgan Hill with a small public safety police force sure doesn't need the city council to make decisions that puts them [and the public] into additional danger.....we've already seen shootings in Morgan Hill lately, haven't we??

FYI, these are only a very few of the articles I could have posted; there are many more just like these.

God forbid that a resident in Morgan Hill gets maimed and/or killed because of a dangerous and ill-informed decision made by the city council, and making them complicit in the death(s). You can be sure the residents of Morgan Hill won't take it too kindly.

B/r,

Ronald L. Kirkish

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1) THIEVES TARGET POT INDUSTRY ACROSS CALIFORNIA — AND L.A. — IN NEW CRIME WAVE

<https://www.laweekly.com/thieves-target-pot-industry-across-california-and-l->

Attachment: Letters from the public [Revision 1] (3045 : Request for Cannabis Report)

[a-in-new-crime-wave/](#)

2) Why were dozens of Bay Area cannabis dispensaries recently robbed?

<https://www.sfgate.com/cannabis/slideshow/Cannabis-is-legal-so-why-were-dozens-of-Bay-Area-203926.php>

3) Oakland: 'Caravan of armed robbers' target cannabis businesses on Election Night, leaving suspect dead

<https://www.mercurynews.com/2020/11/04/person-shot-by-police-after-oakland-marijuana-business-robbed-officers-injured/>

4) Burglars, vandals hit cannabis businesses during protests, likely causing tens of thousands of dollars in losses

<https://mjbizdaily.com/robbers-vandals-hit-marijuana-businesses-during-protests/>

5) CANNABIS ROBBERIES NORTHWEST OF HOOPA CAUSED BY ORGANIZED CRIMINAL GANG, CLAIM FARMERS

<https://kymkemp.com/2019/11/06/cannabis-robberies-in-northeast-hoopa-caused-by-organized-criminal-gang-charge-farmers/>

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From: [Ronald Kirkish](#)
To: [Christina Turner](#); [Rich Constantine](#); [Yvonne Martinez Beltran](#); [Rene Spring](#); [John McKay](#); [Shane Palsgrove](#); [Gino Borgioli](#)
Cc: [Terry Ratto](#); [Ladera Grill Dan](#); dave@lokeyfirearms.com; [Matt Wendt](#); [Chris Borello](#); [Bob Cooke](#)
Subject: MARIJUANA IS THE COMMON WEB BETWEEN SO MANY MASS KILLERS
Date: Thursday, March 25, 2021 6:56:57 AM

MARIJUANA IS THE COMMON WEB BETWEEN SO MANY MASS KILLERS

<https://poppot.org/2018/07/03/marijuana-violence-know-connection/>

- **When Marijuana Use Leads to Acute or Chronic Psychosis**
- **The Teen Brain**
- **When Marijuana Psychosis Leads to Violence: Aurora, Arizona**
- **Solution to Cutting Down Mass Violence**

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From: [Ronald Kirkish](#)
To: [Christina Turner](#); [Rich Constantine](#); [Yvonne Martinez Beltran](#); [Rene Spring](#); [John McKay](#); [Shane Palsgrove](#); [Gino Borgioli](#)
Cc: [Matt Wendt](#); [Chris Borello](#); [Terry Ratto](#); [REDACTED]; [Ladera Grill Dan](#); [Jane Howard](#); [Bob Cooke](#); [Ladera Grill Morgan](#)
Subject: More information why communities should not encourage marijuana businesses
Date: Tuesday, March 23, 2021 10:54:47 AM
Attachments: [Impacts marij dispens density on marij abuse and depend Mair 2015 Drug Alc Depend.pdf](#)
[Recreat cannab use impairs driving perf in absen acute intox Dahlgren 2020 Drug Alco Depend.pdf](#)
[jamapsychiatry hines 2020 oi 200026 1601309834.63439.pdf](#)

Dear All,

For your interest.....here are three more studies showing how marijuana causes harm to communities and its residents.

Downtown businesses like restaurants are “not” fond of having a marijuana business located next to their’s.

B/r,

Ronald L. Kirkish

The impacts of marijuana dispensary density and neighborhood ecology on marijuana abuse and dependence

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Recreational cannabis use impairs driving performance in the absence of acute intoxication

Association of High-Potency Cannabis Use With Mental Health and Substance Use in Adolescence

Attachment: Letters from the public [Revision 1] (3045 : Request for Cannabis Report)



Published in final edited form as:

Drug Alcohol Depend. 2015 September 1; 154: 111–116. doi:10.1016/j.drugalcdep.2015.06.019.

The impacts of marijuana dispensary density and neighborhood ecology on marijuana abuse and dependence

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Abstract

Background—As an increasing number of states liberalize cannabis use and develop laws and local policies, it is essential to better understand the impacts of neighborhood ecology and marijuana dispensary density on marijuana use, abuse, and dependence. We investigated associations between marijuana abuse/dependence hospitalizations and community demographic and environmental conditions from 2001–2012 in California, as well as cross-sectional associations between local and adjacent marijuana dispensary densities and marijuana hospitalizations.

Methods—We analyzed panel population data relating hospitalizations coded for marijuana abuse or dependence and assigned to residential ZIP codes in California from 2001 through 2012 (20,219 space-time units) to ZIP code demographic and ecological characteristics. Bayesian space-time misalignment models were used to account for spatial variations in geographic unit definitions over time, while also accounting for spatial autocorrelation using conditional autoregressive priors. We also analyzed cross-sectional associations between marijuana abuse/dependence and the density of dispensaries in local and spatially adjacent ZIP codes in 2012.

Results—An additional one dispensary per square mile in a ZIP code was cross-sectionally associated with a 6.8% increase in the number of marijuana hospitalizations (95% credible interval 1.033, 1.105) with a marijuana abuse/dependence code. Other local characteristics, such as the median household income and age and racial/ethnic distributions, were associated with marijuana hospitalizations in cross-sectional and panel analyses.

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Contributors Dr. Freisthler conceptualized the study, wrote sections of the introduction and discussion, and edited multiple drafts. Dr. Mair conducted analyses, interpreted results, and wrote a first draft of the manuscript. William Ponicki and Andrew Gaidus prepared data and edited multiple drafts. All authors contributed to and have approved the final manuscript.

Conflict of Interest No conflict declared.

Conclusions—Prevention and intervention programs for marijuana abuse and dependence may be particularly essential in areas of concentrated disadvantage. Policy makers may want to consider regulations that limit the density of dispensaries.

Keywords

marijuana abuse; marijuana dispensaries; marijuana hospitalizations

1. INTRODUCTION

The legal status and subsequent availability of marijuana for both medical and recreational use is rapidly changing in the United States. In 1996, California was the first state to legalize medical marijuana with the Compassionate Use Act, which allowed physicians to prescribe cannabis for medical purposes. Since then, 22 states and the District of Columbia have enacted similar laws. The vast majority of these laws allow marijuana to be sold through medical dispensaries. Despite the growing legal availability of marijuana for medical and recreational use, much remains unresolved about the relationships between marijuana use and related problems and the impacts of dispensaries on local communities (Gorman and Charles Huber, 2007; Lynne-Landsman et al., 2013).

Certain demographic groups are more likely to use marijuana for recreational and/or medical purposes. In California, more frequent marijuana users are more likely to be male, young adult, white, and have higher incomes (Freisthler and Gruenewald, 2014; Morrison et al., 2014). Medical marijuana users are also more likely to be male and white (O'Connell and Bou-Matar, 2007; Ogborne and Smart, 2000; Reiman, 2007; Swift et al., 2005; Ware et al., 2005), but are older than frequent users (mean around 40 years old) and have lower incomes (O'Connell and Bou-Matar, 2007; Ogborne and Smart, 2000; Reiman, 2007; Swift et al., 2005; Ware et al., 2005). Rates of marijuana abuse and dependence may be higher in areas with disproportionately greater numbers of these population subgroups, making them potential targets of prevention efforts to reduce costs related to marijuana abuse and dependence hospitalizations.

Some studies suggest that legalizing medical marijuana appears to be related to higher levels of use for adults and adolescents (Cerde et al., 2012; Harper et al., 2012; Wall et al., 2011), although states that legalize marijuana had higher rates of marijuana use before legalization—suggesting that norms around use of marijuana may be more lax in those states (Wall et al., 2011). However, these findings are not universal as other studies have found no difference in marijuana use among adolescents after enactment of medical marijuana laws (Khatapoush and Hallfors, 2004; Lynne-Landsman et al., 2013; Choo et al. 2014). No differences have been found in rates of marijuana abuse and dependence among marijuana users before and after enacting legislation in states that have liberalized marijuana policies in recent years (Cerde et al., 2012). Allowing medical marijuana to be distributed through dispensaries increases the likelihood of using marijuana in the past year and using marijuana more frequently (Freisthler and Gruenewald, 2014). Past-month marijuana use is higher in states that allow distribution of medical marijuana through store-front dispensaries (Pacula et al., 2013).

Very few studies have examined where dispensaries are located. Store-front dispensaries in Denver, Colorado tend to be located in neighborhoods with higher crime rates and a higher proportion of retail jobs (Boggess et al., 2014). In California, dispensaries were located in Census block groups with higher levels of marijuana use, lower median household incomes, higher percentages of male residents, and lower percentages of Asian American residents and residents aged 30 to 39 years (Morrison et al., 2014). Thus there is limited information that areas with some disadvantage (i.e., lower income, higher crime) have higher densities of dispensaries; however, how disadvantage and dispensary density are related to overall rates of marijuana abuse and dependence is unknown.

When considering the impacts of marijuana dispensaries on local use and abuse, about which little is known, the literature on alcohol outlets is potentially useful. Greater densities of alcohol outlets, another source of a potentially addictive substance, have been linked to a range of health consequences, including incidents of crime and violent assaults (Gorman et al., 2005; Lipton and Gruenewald, 2002; Livingston, 2008), drinking and driving (Ponicki et al., 2013), intimate partner violence (Cunradi et al., 2012), and other alcohol-related problems (Campbell et al., 2009; Freisthler et al., 2007). Alcohol outlets may increase availability, or areas of high alcohol outlet density may be characterized by other conditions which produce problems (e.g., low social capital, high deprivation) and density of outlets may be correlated with these conditions. Similar to the role of alcohol outlets in communities, marijuana dispensaries may increase local availability and subsequent use of marijuana and/or may be more likely to be located in socially disorganized neighborhoods.

There are several reasons to examine the impacts of medical marijuana dispensaries on local use using population-based geographic assessments. These methods allow us to address the spatial dependence of contiguous geographic units, without which there may be substantive bias in statistical tests of dispensary and other environmental effects. Furthermore, because dispensaries within an area may serve both local residents and customers from nearby areas and many areas have no dispensaries of their own, the spatial scale of dispensary effects may be larger than any single unit. Models that measure impacts only within local areas will therefore miss effects on marijuana use in neighboring areas, understating effects. These methods allow us to examine spatial spillover effects.

It is important for us to better understand the impacts of neighborhood ecology and marijuana dispensary density on use and abuse in California as an increasing number of states follow in California's footsteps and liberalize cannabis policies. Determining in what ways marijuana dispensaries function in roles similar to alcohol outlets and in what ways they differ is essential as other states and communities develop laws and local policies, such as zoning restrictions and limiting the number of dispensary permits. The purpose of this analysis is to first examine whether hospitalizations for marijuana abuse and dependence are related to community demographic and environmental conditions, and then to investigate cross-sectional associations between marijuana dispensary densities and hospitalizations in California.

2. MATERIAL AND METHODS

2.1 Data Sources and Variables

Annual data, including hospital discharges and Census-based registries, were aggregated over a 12-year period (2001 through 2012) across ZIP code polygon areas (ESRI, 2012) of California, for a total of 20,219 space-time units. Locations of marijuana dispensaries as of early 2012 were geocoded and aggregated to 1,702 statewide ZIP codes as defined in 2012. These data were used to conduct two population-level Bayesian analyses: (1) A space-time analysis of associations between marijuana abuse and dependence hospitalizations and ZIP code demographic and other characteristics, and (2) a cross-sectional analysis of associations between marijuana hospitalizations and marijuana dispensary densities.

2.1.1. Marijuana abuse and dependence hospitalizations—The primary outcome measure was the annual number of marijuana abuse or dependence hospitalizations per ZIP code, obtained from the California Office of Statewide Health Planning and Development patient discharge data. These records provide information on all discharges that result in at least one overnight hospital stay. We included discharges that had either a primary or secondary ICD-9 diagnostic code of 304.3 (cannabis dependence) or 305.2 (cannabis abuse). The number of such cases per year that required hospitalization with at least one overnight stay increased over the study period, from 17,469 in 2001 to 68,408 in 2012. The vast majority (>85%) of cannabis discharges were coded as abuse rather than dependence. In only 0.8% of cases was cannabis dependence/abuse the primary diagnosis; in the other 99.2% of cases the diagnosis was secondary to hospital discharge for some other medical or injury condition. The percent of primary diagnoses decreased over the study period, from 2.2% (n=427) in 2001 to 0.4% (n=294) in 2012. Each hospital discharge was linked to the ZIP code of the patient. 97.3% of all discharges included 5-digit patient ZIP codes—the remaining were homeless, lived in another state, were missing/unknown, or only provided ZIP codes masked to 3 digits due to small population sizes within their 5-digit ZIP code. These discharges were dropped from analyses.

2.1.2. Marijuana dispensary density—Locations of marijuana dispensaries were obtained from six different websites listing the information for these businesses in March–April, 2012. The six websites were chosen by conducting a comprehensive search of such databases available on the web and by asking dispensary owners where they advertise their services. These websites provide up-to-date information on locations of dispensaries, ensuring that we obtained information for newly opened dispensaries. Each dispensary was geocoded to its address and spatially joined to ZIP code polygons for the year 2012 (ESRI, 2012). Overall marijuana density estimates used in models were calculated as the number of dispensaries per square mile within each ZIP code. Dispensary densities in adjacent areas were also calculated. These densities were represented by the un-weighted averages of densities across ‘spatially lagged’ ZIP codes, those immediately adjacent to each ZIP code. Geographic adjacencies were defined as sharing a boundary or touching at a single point, allowing for a 0.5 meter tolerance to compensate for imprecision in boundary maps. The mean number of neighboring ZIP codes in 2012 was 5.6 (standard deviation 2.3), with six ZIP codes having zero neighbors.

2.1.3. Demographic and environmental covariates—Estimated annual ZIP code-level demographic data included percent white, percent Hispanic, percent African American, median household income (per \$10,000), age distribution categories (percent under age 19, 20–24, 25–44, 45–64), percent with less than a high school degree and percent with greater than a Bachelor's degree, percent unemployed, and population density (per mile²). With the exception of income, these estimates were based on publically available inter-censal projections at the Census block group level supplied by Geolytics (Geolytics, 2011). Demographic variables were aggregated from Census block group boundaries up to year-specific ZIP codes. Because block groups are not nested within ZIP codes, demographic variables had to be estimated for block groups that cross ZIP code boundaries. In these cases, the block group demographic variables were weighted based on the portion of the captured block group centroid population that falls within each ZIP code. To account for spatially variant population growth, we linearly interpolated block population from 2000 to 2010 and used year-specific block populations when weighting demographic variables. Median household income data for 2000 were obtained at the block group level from the 2000 Census, while 2010 data were estimated using 2008–2012 averages from the American Community Survey. Inter-censal estimates were constructed by assuming that 2000–2010 changes were distributed across years in proportion to those of annual county-level income estimates (U.S. Census, 2014), while 2011 and 2012 estimates assumed equal proportional growth for all block groups within a county. These block-group income estimates were converted to 2012 dollars using the Consumer Price Index and reallocated to ZIP codes in the manner described above.

Other ZIP code characteristics included the overall hospitalization rate and the density of overall retail establishments. The overall hospitalization rate, calculated as the number of discharges regardless of diagnoses per 100 persons, was included as a covariate to control for differences in access to inpatient care. A measure of the density of overall retail establishments was derived from ZIP Code Business Patterns data (Census, 2013). Using North American Industry Classification System (NAICS) codes, counts of all “retail trade” (sectors 44, 45) and “accommodations and food service” (sector 72) establishments were tallied. Density was calculated as the number of retail establishments per 100 square miles of ZIP code area.

A measure of the geographic instability of a ZIP code's population between consecutive years, calculated as the percentage of year-2000 Census block populations within a given year's ZIP code definition that would not have fallen within the boundaries of the best-matched ZIP code in the prior year (range: 0–59%), was created. This instability measure tested the assumption that ZIP code boundary shifts did not substantively bias other effects estimates.

Roughly 2% of ZIP code polygons had population values of fewer than three residents, and these were assigned a minimal population of three to allow for non-zero population risks in all areas. Census-based rate variables (e.g., percent African American) were undefined in approximately 1% of ZIP codes and were thus assigned the California state average for the year. These missing Census values typically occurred in unpopulated areas, such as national forests.

2.2. Data Analysis

Panel analyses relied on a Bayesian Space-Time Misalignment Poisson model developed by Zhu et al. (Zhu et al., 2013). This model allows us to perform panel analyses using all ZIP codes in California over a period of 12 years despite frequent changes in the size and shape of these geographic units. This approach uses a separate conditional autoregressive (CAR) random effect for each year-specific map of spatial adjacencies to account for spatial autocorrelation, assumed to have mean zero and a common standard deviation. The model also allows for a second, separate, random effect that is not spatially autocorrelated.

The outcome measure is the annual count of marijuana abuse/dependence hospitalizations by ZIP code. Poisson models were used:

$$Y_{i,t}|\mu_{i,t} \sim \text{Poisson}(E_{i,t}\exp(\mu_{i,t}))$$

where Y_{it} represents the count of hospitalizations in ZIP code i during year t and $E_{i,t}$ denotes the expected number of hospitalization visits under the assumption that statewide marijuana hospitalizations are distributed among ZIP codes in direct proportion to population. The log-relative risk, $\mu_{i,t}$, is modeled linearly as:

$$\mu_{i,t} = \alpha_t + X'_{i,t}\beta + \theta_{i,t} + \phi_{i,t}$$

This is a linear combination of fixed covariate effects and random effects which may take account of spatial and/or temporal correlation. Vector α_t is a set of year-specific intercepts that control for statewide changes in marijuana hospitalization risks that are not explained by other covariates. Matrix X'_{it} contains space- and time-specific covariates and β is a vector of fixed-effects estimates of the impacts of those covariates. $\theta_{i,t}$ and $\phi_{i,t}$ denote the pair of random effects capturing spatially unstructured heterogeneity and CAR spatial dependence, respectively. Models included fixed effects for neighborhood demographics, overall hospitalization rates, population density, retail clutter, and ZIP code instability (misalignment). A similar model was used to estimate the impact of local and adjacent marijuana dispensaries on marijuana abuse/dependence hospitalizations, but this analysis included a single 2012 cross-sectional data set. Local and adjacent dispensary densities were entered simultaneously into the model.

Models were estimated using WinBUGS 1.4.3 software (Lunn et al., 2000). Uninformed priors were specified for all fixed and random effects. Models were allowed to burn-in for 50,000 Markov Chain Monte Carlo (MCMC) iterations, a sufficient number of iterations for all parameter estimates to stabilize and converge between two chains with different initial values. Posterior estimates were sampled for an additional 50,000 MCMC iterations to provide model results, until the ratio of the MC error to the standard deviation was less than 5%. Traces of MCMC iterations demonstrated good convergence for all parameters.

3. RESULTS

Table 1 presents descriptive statistics for ZIP codes in California from 2001 to 2012 (20,219 ZIP codes). The racial/ethnic distributions in average ZIP codes were 4.7% African American, 26.7% Hispanic, and 55.3% non-Hispanic white. The ranges of both population and square miles per ZIP code were large, with the resulting population density measure mean of 3,319 people/mile² (range: 0–56,482 people/mile²). There were 1,650 dispensaries in California in early 2012. The number of medical marijuana dispensaries per ZIP code ranged from 0 to 40, with an average of approximately one per ZIP code and 27.0% reporting at least one dispensary. The mean density of dispensaries in both local and adjacent ZIP codes was 0.22/mile², with a larger range for local ZIP codes (0–11 vs. 0–6). The mean density of dispensaries in ZIP codes with at least one dispensary was 0.83/100 mile². Overall, 65.6% of ZIP codes had a dispensary locally or in an adjacent spatial unit.

Table 2 shows results from the Bayesian Space-Time Misalignment Poisson model from 2001–2012 and presents posterior estimates of the effects of each fixed-effect variable, expressed as relative rates (calculated as $\text{Exp}[\text{raw coefficient}]$). Each relative rate is calculated from the median estimate from the sampled posterior distribution and is followed in parentheses by the 95% credible interval from that distribution. Greater retail density, lower median household income, and lower population density were all associated with greater rates of marijuana hospitalizations. ZIP codes with a higher percentage of residents with greater than a Bachelor's degree had fewer marijuana hospitalizations. The CAR spatial random effect explained 93% of the overall error variance in the model, indicating that there is substantial spatial autocorrelation. Year-specific intercepts were included in all models. There was a large and steady increase in the rates of marijuana abuse/dependence hospitalizations from 2001 to 2012 even after controlling for demographic and other environmental covariates.

Cross-sectional marijuana dispensary density results are displayed in Table 3. An additional one dispensary per square mile was associated with a 6.8% increase in the number of marijuana hospitalizations (95% credible interval 1.033, 1.105). The spatial lag effect was not well supported. Results for other covariates were generally consistent with the space-time results presented in Table 2, except that the association for unemployment was negative in the cross-sectional analyses.

4. DISCUSSION

The density of local marijuana dispensaries is associated with a greater number of hospitalizations with a primary or secondary marijuana abuse/dependence code. Furthermore, other local characteristics, such as the median household income and age and racial/ethnic distributions, are associated with marijuana hospitalizations. These local characteristics do not fully explain the increase in hospitalizations over time, although we were unable to longitudinally measure dispensary density. This is the first analysis of the statewide impact of marijuana dispensaries on marijuana abuse and dependence, as well as the first look at population characteristics associated with hospitalization rates.

Increased availability of marijuana in ZIP codes with a higher density of dispensaries remains a plausible explanation for the increased hospitalizations in dispensary-dense areas. This cross-sectional association remains after adjustment for other characteristics of ZIP codes. Indicators of social disorganization were associated with hospitalizations in both the cross-sectional and panel analyses. The direction of causation remains open to debate, however. It is possible that marijuana dispensaries are more likely to locate in socially disorganized neighborhoods with higher underlying rates of marijuana use and abuse, or that the presence of these dispensaries increases local use, or perhaps both. Previous research suggests that some indicators of disorganization are related to locations of dispensaries (Bogges et al., 2014; Morrison et al., 2014) but more work is needed to fully understand this relationship.

We found some of the same characteristics to be related to marijuana use and dependence at the population level as in individual models of use for medical or recreational purposes (e.g., white populations; Freisthler and Gruenewald, 2014; Morrison et al., 2014; O'Connell and Bou-Matar, 2007; Ogborne and Smart, 2000; Reiman, 2007 ; Swift et al., 2005; Ware et al., 2005). Our population estimates suggest marijuana abuse and dependence occur at higher rates in lower income areas, similar to associations seen in individuals who use medical marijuana (O'Connell and Bou-Matar, 2007; Ogborne and Smart, 2000; Reiman, 2007 ; Swift et al., 2005; Ware et al., 2005). While this study cannot suggest inferences about individual use and likelihood of marijuana abuse and dependence, the congruence of findings across individual and population levels suggest these might be some important areas to direct future research.

A number of limitations need to be noted. Population models have the advantage that they can comprehensively identify aggregate effects across diverse populations living in many different neighborhood conditions. As an aggregate population analysis, however, it is not possible to illuminate the connecting theory that leads from a global assessment of exposures to marijuana dispensaries and other neighborhood conditions to the individual behaviors that are affected by these exposures. For this purpose, multilevel contextual data and analysis models are required. Thus, the individual behavioral mechanisms that underlie the observed effects remain to be explored further. Other limitations of the current analyses include the cross-sectional nature of dispensary information. We cannot assess whether the increase in the number and density of dispensaries across the 12 year period partially or fully explains the dramatic increase in the number of marijuana hospitalizations. However, this is the first opportunity to examine dispensaries at a statewide level, and these cross-sectional findings indicate that dispensary density matters and should be examined longitudinally once such data are available. Furthermore, the vast majority of hospitalization codes are secondary diagnoses. This is not particularly surprising since acute marijuana poisoning/ overdose is quite rare. Finally, the procedure used to estimate ZIP code demographic estimates from available block-group level projections will introduce some noise in these covariates, and this would be expected to bias the associated parameters toward zero. Despite this, the association between dispensary density and hospitalizations was well-supported.

As the first study to examine population characteristics related to marijuana abuse and dependence, more work is needed to understand the exact mechanisms underlying these relationships. Future research incorporating dynamic models of dispensary effects as they evolve may lead to greater understanding of these processes over both short- and long-term periods and at smaller scales of geographic resolution. This work suggests prevention and intervention programs for marijuana abuse and dependence should be targeted in areas of concentrated disadvantage (as measured using such economic factors as unemployment, income, and education). Despite medical marijuana being allowed by California, local jurisdictions can ban dispensaries outright or place restrictions on their locations (such as not near where child and youth populations spend time). States may also place other restrictions on who can purchase marijuana at dispensaries (e.g., adults 21 years or older) to reduce access to populations who may be vulnerable to abuse or dependence. States that are considering passing laws allowing medical or recreational use of marijuana might consider regulations that limit the density of dispensaries, particularly in disadvantaged areas, or encourage provisions for localities to make their own regulations (including bans) to prevent problems in areas at risk for high rates of marijuana abuse and dependence.

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Attachment: Letters from the public [Revision 1] (3045 : Request for Cannabis Report)

Highlights

- We examine marijuana dispensary density and marijuana hospitalizations
- We study marijuana hospitalizations and neighborhood ecology from 2001–2012
- Dispensaries were cross-sectionally associated with greater marijuana hospitalizations
- Indicators of concentrated disadvantage were associated with marijuana hospitalizations

Table 1

Descriptive statistics, ZIP codes in California 2001–2012 (n=20,219 ZIP codes)

	Mean	SD	Minimum	Maximum	Mean Change, 2012 vs. 2001
Population	21,630.46	21,834.58	3.00	126,941.40	1,353.19
Area (mile ²)	93.47	247.91	0.01	3,805.23	-2.47
Percent age 0–19	26.06	6.71	0.00	70.67	-4.03
Percent age 20–24	6.94	2.78	0.00	48.48	-0.01
Percent age 25–44	27.12	6.93	0.00	100.00	-3.96
Percent age 45–64	25.71	6.34	0.00	100.00	2.98
Retail Clutter/mile ²	24.76	96.11	0.00	2,246.50	0.46
Percent with less than high school degree	21.47	15.44	0.00	93.22	-0.27
Percent with greater than Bachelor's Degree	9.39	8.19	0.00	100.00	0.65
Median household Income (\$10,000)	6.74	2.86	0.00	24.23	0.02
Overall hospitalization rate (per 100 people)	22.22	228.78	0.00	14,800.00	-12.44
Percent African American	4.66	8.23	0.00	88.01	-1.24
Percent Hispanic	26.68	22.41	0.00	98.49	2.89
Percent white	55.29	25.33	0.00	100.00	-12.71
Unemployment (%)	9.67	9.56	0.00	100.00	7.16
Population Density (people/mile ²)	3,319.39	5,477.06	0.01	56,482.36	101.37
ZIP code instability	0.60	3.27	0.00	59.42	
Cannabis abuse/dependence hospitalizations	21.71	31.87	0.00	441.00	29.63
Marijuana Dispensary Densities (2012 only)					
Number of dispensaries	0.97	2.64	0.00	40.00	
Dispensaries/mile ²	0.22	0.87	0.00	15.48	
Spatially lagged dispensaries/mile ²	0.22	0.55	0.00	5.58	

Table 2

Relative Rates (95% credible intervals) and Ln (Relative Rates), marijuana abuse and dependence hospitalizations, Bayesian Spatial Misalignment Models (n=20,219 ZIP codes)

	Relative Rate (95% credible interval)	Ln (RR)
Demographic Characteristics		
Percent age 0–19	1.023 (1.019,1.028) ^a	0.0225
Percent age 20–24	0.981 (0.977,0.987) ^a	−0.0187
Percent age 25–44	0.994 (0.992,0.997) ^a	−0.0057
Percent age 45–64	1.030 (1.025,1.034) ^a	0.0291
Retail Clutter/mile ² (×100)	1.074 (1.062,1.086) ^a	0.0717
Percent with less than high school degree	1.001 (0.999,1.003)	0.0014
Percent with greater than Bachelor's Degree	0.992 (0.989,0.994) ^a	−0.0084
Median household Income (\$10,000)	0.879 (0.872,0.885) ^a	−0.1285
Overall hospitalization rate (per 100 people)	1.066 (1.061,1.071) ^a	0.0642
Percent African American	1.025 (1.023,1.026) ^a	0.0243
Percent Hispanic	1.003 (1.002,1.004) ^a	0.0032
Percent white	1.014 (1.013,1.015) ^a	0.0142
Unemployment (%)	1.001 (0.999,1.003)	0.0013
Population Density (people/mile ²) (×100)	0.897 (0.877,0.918) ^a	−0.1084
Misalignment Effects		
ZIP code instability	1.004(1.001,1.008)	0.0044
Random Effects		
	Median (95% Credible	
Spatial Random Effects (s.d. CAR process)	0.575 (0.560, 0.588)	
ZIP code-Level Random Effects (s.d.)	0.162 (0.144, 0.181)	
Proportion of error variance that is spatial	0.926 (0.907, 0.943)	

Iterations: 50,001–100,000

^a Indicates findings that are well-supported by the data as evidenced by credible intervals that exclude one for relative risks

Table 3

Relative Rates (95% credible intervals) and Ln (Relative Rates), marijuana abuse and dependence hospitalizations, 2012 cross-sectional analysis with marijuana dispensary density (n=1,702 ZIP codes)

	Relative Rate (95% credible interval)	Ln(RR)
<u>Marijuana Dispensary Density</u>		
Dispensaries/mile ²	1.068 (1.033,1.105) ^a	0.0655
Spatially lagged dispensaries/mile ²	1.034 (0.949,1.123)	0.0339
<u>Demographic Characteristics</u>		
Percent age 0–19	1.022 (1.010,1.033) ^a	0.0221
Percent age 20–24	1.028 (0.983,1.068)	0.0272
Percent age 25–44	0.991 (0.984,0.998) ^a	–0.0086
Percent age 45–64	1.031 (1.023,1.039) ^a	0.0307
Retail Clutter/mile ² (×100)	1.060 (1.019,1.101) ^a	0.0583
Percent with less than high school degree	1.004 (1.000,1.009) ^a	0.0044
Percent with greater than Bachelor's Degree	0.998 (0.992,1.005)	–0.0021
Median household Income (\$10,000)	0.863 (0.840,0.882) ^a	–0.1469
Overall hospitalization rate (/100 people)	1.806 (1.656,1.960) ^a	0.0046
Percent African American	1.022 (1.018,1.027) ^a	0.0218
Percent Hispanic	1.003 (0.999,1.006)	0.0027
Percent white	1.013 (1.010,1.015) ^a	0.0127
Unemployment (%)	0.988 (0.984,0.992) ^a	–0.0122
Population Density (people/mile ²) (×100)	0.862 (0.799,0.938) ^a	–0.0015
<u>Random Effects</u>		
	Median (95% Credible Interval)	
Spatial Random Effects (s.d. CAR process)	0.543 (0.502, 0.580)	
ZIP code-Level Random Effects (s.d.)	0.145 (0.072, 0.207)	
Proportion of error variance that is spatial	0.933 (0.861, 0.984)	

Iterations: 50,001–100,000

^a Indicates findings that are well-supported by the data as evidenced by credible intervals that exclude one for relative risks

Association of High-Potency Cannabis Use With Mental Health and Substance Use in Adolescence

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 Supplemental content

IMPORTANCE Cannabis use is consistently linked to poorer mental health outcomes, and there is evidence that use of higher-potency cannabis increases these risks. To date, no studies have described the association between cannabis potency and concurrent mental health in a general population sample or addressed confounding using longitudinal data.

OBJECTIVE To explore the association between cannabis potency and substance use and mental health outcomes, accounting for preceding mental health and frequency of cannabis use.

DESIGN, SETTING, AND PARTICIPANTS This cohort study used data from the Avon Longitudinal Study of Parents and Children, a UK birth cohort of participants born between April 1, 1991, and December 31, 1992. Present data on outcomes and exposures were collected between June 2015 and October 2017 from 1087 participants at 24 years of age who reported recent cannabis use.

EXPOSURES Self-reported type of cannabis most commonly used in the past year, coded to a binary exposure of use of high-potency cannabis or lower-potency cannabis.

MAIN OUTCOMES AND MEASURES Outcomes were reported frequency of cannabis use, reported cannabis use problems, recent use of other illicit drugs, tobacco dependence, alcohol use disorder, depression, generalized anxiety disorder, and psychotic-like experiences. The study used secondary data; consequently, the hypotheses were formulated after data collection.

RESULTS Past-year cannabis use was reported by 1087 participants (580 women; mean [SD] age at onset of cannabis use, 16.7 [3.0] years). Of these, 141 participants (13.0%) reported the use of high-potency cannabis. Use of high-potency cannabis was associated with increased frequency of cannabis use (adjusted odds ratio [AOR], 4.38; 95% CI, 2.89-6.63), cannabis problems (AOR, 4.08; 95% CI, 1.41-11.81), and increased likelihood of anxiety disorder (AOR, 1.92; 95% CI, 1.11-3.32). Adjustment for frequency of cannabis use attenuated the association with psychotic experiences (AOR 1.29; 95% CI, 0.67-2.50), tobacco dependence (AOR, 1.42; 95% CI, 0.89-2.27), and other illicit drug use (AOR, 1.29; 95% CI, 0.77-2.17). There was no evidence of association between the use of high-potency cannabis and alcohol use disorder or depression.

CONCLUSIONS AND RELEVANCE To our knowledge, this study provides the first general population evidence suggesting that the use of high-potency cannabis is associated with mental health and addiction. Limiting the availability of high-potency cannabis may be associated with a reduction in the number of individuals who develop cannabis use disorders, the prevention of cannabis use from escalating to a regular behavior, and a reduction in the risk of mental health disorders.

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Globally, cannabis is the most commonly used internationally regulated drug,¹ and policy on its use is becoming more liberal worldwide.² The primary psychoactive component of cannabis is Δ^9 -tetrahydrocannabinol (THC). The potency (concentration of THC) may be an important factor in the association between cannabis use and mental health. Experimental studies indicate that THC intoxication is dose dependent, with higher doses causing greater memory impairment and transient psychotic-like symptoms.³ Policy liberalization has been accompanied by proliferation of high-potency cannabis in legal markets,^{4,5} and THC concentrations have increased in markets where cannabis remains illegal.⁶

Cannabis use is consistently linked to poorer mental health outcomes,^{7,8} and there is evidence that higher-potency cannabis is associated with higher risks. A case-control study of first-episode psychosis in England found that those who self-reported using higher-potency cannabis were twice as likely to have a psychotic disorder, compared with participants who did not use cannabis.⁹ When the study was replicated in a multinational case-control study of first-episode psychosis across 11 sites in Europe and Brazil, the incidence of psychosis across sites was positively correlated with the prevalence of high-potency cannabis use in the site-specific control samples.¹⁰ In a self-selecting sample of people who use internationally regulated drugs, the use of high-potency strains of cannabis was associated with self-report of lifetime depression¹¹ and cannabis dependence.¹² These findings indicate that the availability of high-potency cannabis may increase risks of poorer mental health, addiction, and need for treatment among those who are using the drug.

The strength of association between the use of cannabis and mental health outcomes is increased when cannabis use is frequent; consequently, increased frequency of use may confound the association between cannabis potency and mental health outcomes.¹² Understanding the extent to which harms of high-potency cannabis are due to the THC content of the drug, and the extent to which these harms may be accounted for by increased frequency of use, is important for informing policy decisions around taxation and limits on drug potency.

To our knowledge, to date, no studies of the association between cannabis potency and mental health have been conducted in a general population sample. General population studies can provide a valid estimate of the association between mental health outcomes and cannabis potency at the population level, which may be crucial for informing policy makers and clinical service providers. We use data from the Avon Longitudinal Study of Parents and Children (ALSPAC), a large general population birth cohort where contemporaneous data were collected when participants were 24 years of age on cannabis potency, cannabis use frequency, and validated measures of mental health outcomes, and prospective measures of adolescent mental health were collected from participants up to 24 years of age.

The aims of our study were to (1) describe the use of different potencies of cannabis among a population of UK adolescents; (2) explore the association between cannabis potency and problems resulting from cannabis use, use and

Key Points

Question Does use of high-potency cannabis (compared with use of low-potency cannabis) increase risks for problems resulting from cannabis use, common mental disorders, and psychotic experiences after controlling for early-life mental health symptoms and frequency of use?

Findings In this cohort study of 1087 participants who reported cannabis use in the previous year, after adjusting for frequency of cannabis use and early adolescent mental health, use of high-potency cannabis was associated with a significant increase in the frequency of cannabis use, likelihood of cannabis problems, and likelihood of anxiety disorder. Those using high-potency cannabis had a small increase in the likelihood of psychotic experiences; however, this risk was attenuated after adjustment for frequency of cannabis use.

Meaning Risks for cannabis use problems and anxiety disorders are higher among those reporting use of high-potency cannabis; provision of public health messaging regarding the importance of reducing both frequency of cannabis use and the potency of the drug, as well as limiting the availability of high-potency cannabis, may be effective for reducing these risks.

disordered use of other substances, common mental disorders, and psychotic experiences (PEs) by comparing those who use high-potency cannabis with those who use lower potency cannabis; and (3) determine the extent to which such associations are explained by adolescent mental health at 12 to 13 years of age, age at onset of cannabis use, and current frequency of cannabis use.

Methods

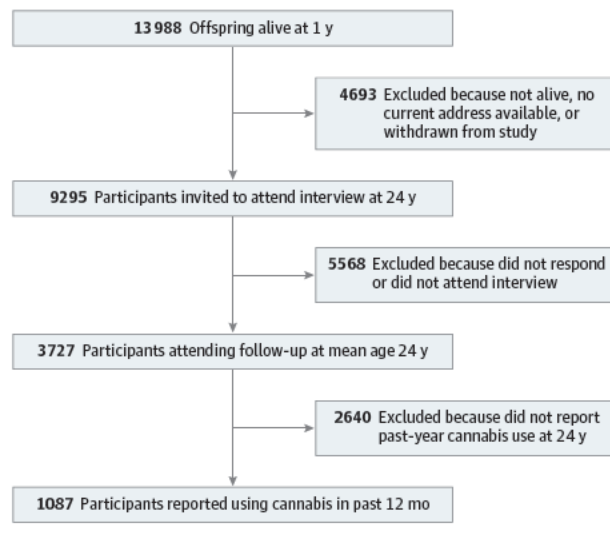
Study Population

ALSPAC is a UK population-based birth cohort, the methods of which have previously been outlined^{13,14} (see eAppendix 1 in the [Supplement](#) for full details). The sample for the present analyses comprised the 1087 participants who reported on their past-year cannabis use while attending the ALSPAC clinic between June 2015 and October 2017 at a mean (SD) age of 24.0 (0.8) years (**Figure 1**). Data on the 2085 individuals who participated in the assessment at 24 years of age but were excluded based on reporting no recent cannabis use are available in eTable 3 in the [Supplement](#) (see also eAppendix 1 in the [Supplement](#) for further details on all the measures described). Ethical approval for the study was obtained from the ALSPAC Ethics and Law Committee and the local Research Ethics Committees. Written informed consent for the use of data collected via questionnaires and clinics was obtained from participants following the recommendations of the ALSPAC Ethics and Law Committee at the time.

Exposure

Those who reported past-year cannabis use were asked “What type of cannabis have you most commonly used or taken in the last 12 months?” and were able to select from the following options: “herbal cannabis/marijuana,” “skunk/other stronger types of herbal cannabis,” “hashish/resin/solid,” “other,”

Figure 1. Flow Diagram Showing the Avon Longitudinal Study of Parents and Children Analysis Sample



or “don’t know.” Consistent with previous research that has validated self-reported data on 3 cannabis types against quantified concentrations of THC and cannabidiol among young UK cannabis users,¹⁵ we categorized cannabis as either high potency (typically $\geq 10\%$ THC; “skunk/other stronger types of herbal cannabis”) or low potency (typically $< 10\%$ THC; “herbal cannabis/marijuana,” “hashish/resin/solid,” or “other”).¹⁰

Outcomes

Cannabis Use Frequency at 24 Years of Age

Participants were asked “in the last 12 months, how often have you used cannabis?” This variable was dichotomized to “Monthly use or less” or “weekly/daily use.”

Problematic Cannabis Use at 24 Years of Age

Those who self-reported 2 or more items on the Cannabis Abuse Screening Test¹⁶ within the past year were classified as having recently experienced problems associated with their cannabis use.

Other Substance Use and Dependencies at 24 Years of Age

Participant self-report of the use of any illicit drugs in the past 12 months was categorized as recent other illicit drug use. The reference group was composed of those who reported no recent use of these other illicit drugs (including those who had never used these drugs). Participants were categorized as nicotine dependent if they self-reported daily nicotine use and reported 3 or more criteria on the Fagerström Test for Nicotine Dependence,¹⁷ indicating low, medium, high, or very high nicotine dependence. The reference group was composed of those who met criteria for very low dependence and those who were not using nicotine every day or had never smoked. The *DSM-5* criteria for alcohol use disorder (AUD)¹⁸ were used to identify participants experiencing alcohol use problems. Participants were categorized as experiencing moderate or severe AUD if they self-reported 4 or more of the AUD criteria. The refer-

ence group was composed of those who reported less than 4 of the AUD criteria (including individuals who had never drunk alcohol).

Mental Health at 24 Years of Age

Participants completed a self-administered computerized Clinical Interview Schedule-revised,¹⁹ a tool for lay interviewers to assess psychiatric disorders in the community. Participants who met the criteria for moderate or severe *DSM-IV*²⁰ major depressive disorder at time of the interview were categorized as experiencing depression. Participants who met *DSM-IV* criteria for generalized anxiety disorder²⁰ were categorized as experiencing anxiety. Participants were rated on PEs using the PLIKS (psychosis-like symptoms) semistructured interview administered by trained researchers.^{21,22} Those who were rated as having suspected or definite hallucinations, delusions, or thought interference in the past 12 months, which were either frequent (at least monthly) or caused them distress (reported as quite distressing or very distressing), were classified as having had a recent PE. For the purposes of these analyses, PEs were excluded if they happened only when the participant was either falling asleep or waking up, was ill with a high temperature, or within 2 hours of drinking alcohol or taking drugs.

Covariates

Prospective Measures From Early Childhood and Adolescence

Childhood socioeconomic position was assessed through measures from maternal questionnaires completed during pregnancy; variables were maternal educational attainment and parents’ occupation class. A child’s racial/ethnic background was derived from parents’ reported race/ethnicity (coded as white or black and minority ethnic group).

To account for mental health symptoms preceding the onset of cannabis use (mean age at onset of cannabis use in sample, 16.7 years; 95% CI, 16.5–16.9 years), a continuous score measure of depression symptoms at 13 years of age was included in analyses of major depressive disorder and generalized anxiety disorder. These symptoms were assessed through the self-completed Mood and Feelings Questionnaire at 13 years of age,²³ a tool for measuring depression in children and young people. The number of PEs (assessed by PLIKS²¹) reported at 12 years of age was included in the analysis of the outcome of PEs at 24 years of age.

Age at onset of cannabis use was self-reported in ALSPAC at 14, 15, 16, 18, 20, 22, and 24 years of age. Participants who reported lifetime use of cannabis at any of these points were asked at what age they first used cannabis. Participants’ earliest report of age at first cannabis use was used to derive a variable of age at onset of cannabis use.

Statistical Analysis

All analyses were conducted in Stata, version 15.1 (Stata Corp). The association between use of high-potency cannabis and substance use and mental health at 24 years of age was analyzed using univariable and multivariable logistic regression, with cannabis potency as the independent variable. Three separate multivariable models were performed for each outcome:

Table 1. Association Between Type of Cannabis and Demographic, Substance Abuse, and Mental Health Outcomes in 1087 Participants Who Reported Recent Cannabis Use

Characteristic	Cannabis use, % ^a		P value ^b
	High potency (n = 141)	Lower potency (n = 946)	
Regular cannabis use	56.8	17.6	≤.001
Cannabis use problems	10.1	0.8	≤.001
Use of other illicit drugs	82.9	66.5	≤.001
Tobacco dependence	37.0	15.1	≤.001
Alcohol use disorder	15.1	10.0	≤.001
Major depression (moderate or severe symptoms)	11.7	9.7	≤.001
Generalized anxiety disorder	19.1	11.6	≤.001
Psychotic-like experiences	12.4	7.1	≤.001
Male sex	71.6	43.4	≤.001
Low maternal educational level	19.2	13.1	≤.001
Lower parental occupational class	32.2	29.2	≤.001
Black or minority ethnic group	5.3	5.3	.94
Age at onset of cannabis use, mean (95% CI), y	14.7 (14.3-15.1)	16.9 (16.8-17.2)	NA
MFQ score at 13 y, mean (95% CI)	5.6 (4.65-6.49)	5.6 (5.26-5.95)	NA
No. PEs at 12 y, mean (95% CI)	0.33 (0.18-0.48)	0.20 (0.16-0.24)	NA

Abbreviations: MFQ, Mood and Feelings Questionnaire; NA, not applicable; PEs, psychotic experiences.

^a All numbers estimated from imputed proportions.

^b Determined by χ^2 test.

(1) adjusting for sex and childhood socioeconomic position; (2) additional adjustment for age at onset of cannabis use for models of substance use outcomes, depression symptom score at 13 years of age for models of major depressive disorder and generalized anxiety disorder outcomes, and PEs at 12 years of age for the model with PE as the outcome (time points selected to ensure mental health symptoms preceded onset of cannabis use); and (3) adjusted as in model 2, with inclusion of a categorical measure of cannabis use frequency. This measure allowed estimation of the extent to which preexisting symptoms of mental health disorders and the frequency of cannabis use explained any association between the use of high-potency cannabis and substance use and mental health outcomes. Results are presented as odds ratios (ORs) with 95% CIs. Propensity score models were applied to complete case data as a sensitivity test (eAppendix 2 and eTables 1 and 2 in the Supplement).

Missing Data and Imputation

As outcomes and exposures were collected at the same point, most missing data were in the covariates assessed at earlier ages (eAppendix 1 and eTable 3 in the Supplement). Missing data in all analysis variables (exposures, outcomes, and covariates) were addressed through multiple imputation using chained equations, which uses a series of univariate regression models to impute each incomplete variable sequentially. Each model included all other analysis variables, along with the following auxiliary variables: race/ethnicity, experiencing bullying up to 16 years of age, parental separation up to 16 years of age, parental mental health problems up to 16 years of age, parental substance use up to 16 years of age, Mood and Feelings Questionnaire score at 16 and 18 years of age, number of self-reported psychotic-like experiences at 14 years of age, and conduct disorder symptoms up to 13 years of age. Estimates were obtained by pooling results across 40 im-

puted data sets using the Rubin rules, and assessment of Monte Carlo variability confirmed this as a suitable number of imputations.²⁴

Results

Of the 1087 participants reporting past-year cannabis use at 24 years of age, 12.8% (number estimated from imputed proportions) reported the use of high-potency cannabis (Table 1). Use of lower-potency forms of cannabis was reported by 87.2% (number estimated from imputed proportions) of those who used cannabis in the past year (see eTable 3 in the Supplement for data on this and on all analysis variables). Use of high-potency cannabis was more common than use of lower-potency cannabis in those who were male (71.6% vs 43.3%) and those who reported regular cannabis use (56.8% vs 17.6%), recent cannabis use problems (10.1% vs 0.8%), recent use of other illicit drugs (82.9% vs 66.5%), tobacco dependence (37.0% vs 15.1%), AUD (15.1% vs 10.0%), depression (11.7% vs 9.7%), generalized anxiety disorder (19.1% vs 11.6%), and PE (12.4% vs 7.1%) (Table 1).

Cannabis Use Outcomes

There was an unadjusted association between the use of high-potency cannabis and frequency of cannabis use at 24 years of age (OR, 6.21; 95% CI, 4.24-9.11) (Table 2). This association was attenuated by adjustment for sociodemographic factors and by the age at onset of cannabis use, but those reporting use of high-potency cannabis remained more than 4 times as likely to report using cannabis at least weekly compared with those reporting use of lower-potency forms of cannabis (adjusted OR [AOR], 4.38; 95% CI, 2.89-6.63). There was also an unadjusted association between the use of high-potency cannabis and reporting recent can-

Table 2. Logistic Regression Analysis of the Association Between High-Potency Cannabis and Substance Use and Mental Health Outcomes^a

Outcome variable	Univariable OR (95% CI)	P value	Adjusted for childhood sociodemographic factors, AOR (95% CI)	P value	Adjusted for prospective mental health measures, AOR (95% CI)	P value	Adjusted for frequency of cannabis use, AOR (95% CI)	P value
Regular cannabis use	6.21 (4.24-9.11)	≤.001	5.81 (3.90-8.65)	≤.001	4.38 (2.89-6.63) ^b	≤.001	NA	NA
Recent cannabis use problems	13.17 (5.41-32.04)	≤.001	13.52 (5.28-34.60)	≤.001	8.45 (3.04-23.50) ^b	≤.001	4.08 (1.41-11.81)	.009
Recent use of other illicit drugs	2.47 (1.53-3.97)	≤.001	2.19 (1.35-3.56)	.002	1.50 (0.91-2.49) ^b	.11	1.29 (0.77-2.17)	.34
Tobacco dependence	3.31 (2.23-4.92)	≤.001	3.30 (2.18-4.99)	≤.001	2.05 (1.31-3.19) ^b	.002	1.42 (0.89-2.27)	.14
Alcohol use disorder	1.60 (0.94-2.73)	.08	1.49 (0.86-2.56)	.15	0.99 (0.56-1.76) ^b	.97	0.90 (0.49-1.64)	.73
Major depression (moderate or severe symptoms)	1.24 (0.70-2.18)	.46	1.61 (0.89-2.93)	.12	1.54 (0.84-2.82) ^c	.16	1.28 (0.68-2.32)	.44
Generalized anxiety disorder	1.77 (1.09-2.86)	.02	2.35 (1.41-3.92)	≤.001	2.28 (1.36-3.83) ^c	.002	1.92 (1.11-3.32)	.02
Psychotic-like experiences	1.81 (1.01-3.24)	.047	2.03 (1.10-3.73)	.02	1.86 (1.00-3.46) ^d	.05	1.29 (0.67-2.50)	.45

Abbreviations: AOR, adjusted odds ratio; NA, not applicable; OR, odds ratio.

^c Depression symptom score at 13 years of age.^a All results estimated from imputed data. Multivariable model adjustment is incremental.^d Number of psychotic experiences at 12 years of age.^b Age at onset of cannabis use.

nabis problems (OR, 13.17; 95% CI, 5.41-32.04). This association was attenuated by adjustment for age at onset of cannabis use and frequency of cannabis use, but people reporting the use of high-potency cannabis were still more than 4 times as likely to report having recently experienced problems associated with their cannabis use (AOR, 4.08; 95% CI, 1.41-11.81) (Table 2 and Figure 2).

Substance Use Outcomes

Those who reported the use of high-potency cannabis were more than twice as likely to report recent use of other illicit drugs within the past 12 months (OR, 2.47; 95% CI, 1.53-3.97) and more than 3 times as likely to report tobacco dependence (OR, 3.31; 95% CI, 2.23-4.92) (Table 2). These associations were largely attenuated by adjustment for sociodemographic factors, age at cannabis onset, and frequency of cannabis use (recent use of other illicit drugs: AOR, 1.29; 95% CI, 0.77-2.17; and tobacco dependence: AOR, 1.42; 95% CI, 0.89-2.27). There was little evidence of an elevation in the likelihood of AUD among participants who reported use of high-potency cannabis after adjustment for sociodemographic variables, age at onset of cannabis use, and frequency of cannabis use (AOR, 0.90; 95% CI, 0.49-1.64) (Table 2 and Figure 2).

Mental Health Outcomes

Depression was slightly more common in the high-potency cannabis group, but there was little statistical evidence that high potency was associated with depression (AOR, 1.28; 95% CI, 0.68-2.34) (Table 2). There was evidence that use of high-potency cannabis was associated with a moderate elevation in likelihood of generalized anxiety disorder (OR, 1.77; 95% CI, 1.09-2.86). The strength of this association was increased slightly after adjustment for sociodemographic variables, depression symptoms at 14 years of age, and frequency of cannabis use (AOR, 1.92; 95% CI, 1.11-3.32).

Participants reporting the use of high-potency cannabis were almost twice as likely to report frequent or distressing PEs (OR, 1.81; 95% CI, 1.01-3.24) (not occurring directly after drug use) (Table 2). However, evidence of association was weakened after adjustment for frequency of cannabis use (AOR, 1.29; 95% CI, 0.67-2.50) (Table 2 and Figure 2).

Discussion

The present study restricts analyses to individuals who have used different forms of cannabis to inform understanding of the implications of the proliferation of high-potency cannabis in legal markets.^{4,5} In a general population sample of young people in the UK, individuals who use high-potency cannabis (compared with those using lower-potency forms of cannabis) are more likely to be using cannabis regularly, more likely to report having recently experienced problems associated with their cannabis use, and more likely to concurrently be experiencing use of other illicit drugs, tobacco dependence, AUD, generalized anxiety disorder, and PEs. After adjustment for age at onset of cannabis use or for early adolescent measures of psychopathologic conditions and frequency of cannabis use, high-potency cannabis was associated with increases in the likelihood of frequent cannabis use, having recently experienced problems associated with cannabis use, and the likelihood of experiencing generalized anxiety disorder. The results provide a profile of individuals who use high-potency cannabis, indicating that this behavior is more common among individuals who are male, grow up in families with a low socioeconomic status, experience early PEs, and report early-onset cannabis use.

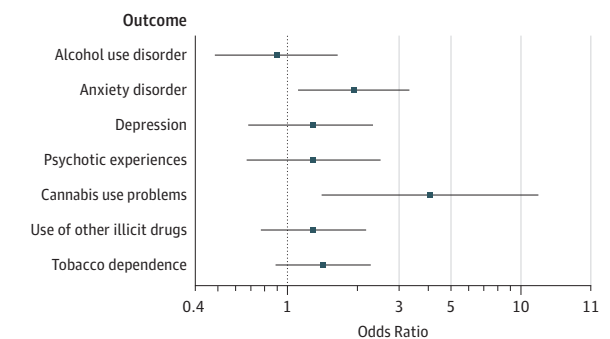
The outcomes regarding substance use and mental health may reflect shared predisposing risk factors that could also lead people to select the most potent drug available.²⁵ As the sample excluded those who had not used

cannabis, increases in risk for mental health outcomes associated with the use of high-potency cannabis are unlikely to be conflated by a shared liability to drug use and mental health disorders. However, evidence shows that shared risk factors underlie both exposure to cannabis and progression to development of dependence.²⁶ The profile of substance use outcomes and early-life experiences among those who use high-potency cannabis in the present study indicates that there may be overlapping risk factors between development of substance use and mental health disorders and the selection of higher-potency forms of cannabis. We have sought to adjust for these factors, but further consideration of the role of cannabis potency in the causal path to mental health disorders is warranted.

The estimate in the present study for the likelihood of depression among those using high-potency cannabis is similar to estimates observed in a previous study of a self-selecting sample of drug-using participants (OR, 1.18; 95% CI, 1.11-1.25).¹¹ However, the estimate in the present study demonstrating an increase in the likelihood of generalized anxiety disorder among those using high-potency cannabis is in contrast to the negligible increase in likelihood of lifetime anxiety disorder observed in a previous study (OR, 1.05; 95% CI, 0.98-1.12).¹¹ This discrepancy may be because the previous study relied on self-reported lifetime diagnosis,¹¹ whereas the present study used *DSM-IV*-validated measures of depression and generalized anxiety disorder at the time of assessment. A recent systematic review has indicated that cannabis use in adolescence is associated with an increased likelihood of lifetime depression and anxiety,⁸ although few studies had considered the potency or frequency of cannabis use.

A better understanding of the association between potency and frequency of cannabis use is required to gain a clearer understanding of the independent association of potency with mental health. We found similar effect sizes for the association between the use of high-potency cannabis and report of frequent or distressing PEs (not associated with drug use) as those observed in case-control studies of first-episode psychosis.^{9,10} However, in our study, we observed a substantial attenuation in effect size, by approximately 66%, after adjustment for frequency of cannabis use. The present findings on cannabis problems and frequency of use are consistent with previous evidence for a positive association between days of use of high-potency cannabis and severity of dependence.¹² In this previous study there was a linear association between number of days of high-potency cannabis use per month and severity of dependence score ($\beta = 0.15$; 95% CI, 0.02-0.28). Increased frequency of cannabis use could plausibly cause individuals to use higher-potency cannabis through the development of tolerance to the effects of cannabis; if so, then it is appropriate to consider cannabis use frequency as a confounding factor in the association with mental health. However, if the use of higher-potency cannabis leads to increased frequency of use, plausibly through high-potency cannabis delivering THC more efficiently than lower-potency cannabis, it would be more appropriate to explore the mediating effect of cannabis frequency.

Figure 2. Fully Adjusted Associations Between the Use of High-Potency Cannabis and Outcomes



Including fully adjusted associations for sociodemographics, longitudinal mental health, and frequency of use (see Methods). The horizontal bars indicate 95% CIs, and the dotted vertical line indicates the comparator group (individuals who reported use of lower-potency cannabis).

Strength and Limitations

This study has some strengths. To our knowledge, this study is the first to describe the association between cannabis potency and concurrent mental health and substance abuse in a general population sample, and the first to use longitudinal data to address confounding by early mental health symptoms and age at onset of cannabis use in this association.

This study also has some limitations. First, given that the data were collected in the context of an illegal cannabis market, we cannot be certain participants are accurately informed about the potency of the cannabis they are using. It is plausible that the ability to identify type of cannabis is higher among those frequently using the drug, although evidence suggests that frequency of use does not moderate the association between self-reported identification of cannabis type and actual THC concentration in young UK cannabis users.¹⁵

Second, the exposures and outcomes that we examined were cross-sectional. Because questions on the type of cannabis used were only asked at 24 years of age, it is plausible that the presence of anxiety disorder or PEs have led to the use of high-potency cannabis at 24 years of age. Adjusting for measures of psychopathologic conditions in adolescence had little effect on our estimates.

Third, recent use of high-potency cannabis was reported by only 12.8% of participants, which may result in some of the analyses being underpowered (eTable 3 in the Supplement). Fourth, as a result of attrition within ALSPAC, those who took part in the wave of the study that took place at 24 years of age were more likely to be white, female, and more affluent than the population from which the participants were originally drawn.¹⁴ In addition, because there is a dearth of nationally representative data on the demographics of those who use cannabis, we cannot be certain the present sample is representative of the population of cannabis users in the UK or globally. The analyses would benefit from replication in larger, representative samples, but to our knowledge, ALSPAC is the only longitudinal general population sample to include measures

of cannabis potency. Characteristics of those who did not report cannabis use at 24 years of age are in eTable 4 in the Supplement.

Conclusions

The use of high-potency cannabis may occur as part of a profile of other illicit drug use and substance dependency, likely owing to shared risk factors underlying these behaviors and

the selection of high-potency strains. The present study suggests that risks for cannabis use problems and anxiety disorders are further increased among those reporting the use of high-potency cannabis, even after accounting for sociodemographic factors, adolescent mental health, and frequency of cannabis use. Providing public health messaging regarding the importance of reducing both the frequency of cannabis use and the potency of the drug, as well as limiting the availability of high-potency cannabis, may be effective for reducing the harms associated with cannabis use.

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Full length article

Recreational cannabis use impairs driving performance in the absence of acute intoxication



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ABSTRACT

Background: Across the nation, growing numbers of individuals are exploring the use of cannabis for medical or recreational purposes, and the proportion of cannabis-positive drivers involved in fatal crashes increased from 8 percent in 2013 to 17 percent in 2014, raising concerns about the impact of cannabis use on driving. Previous studies have demonstrated that cannabis use is associated with impaired driving performance, but thus far, research has primarily focused on the effects of *acute* intoxication.

Methods: The current study assessed the potential impact of cannabis use on driving performance using a customized driving simulator in *non-intoxicated*, heavy, recreational cannabis users and healthy controls (HCs) without a history of cannabis use.

Results: Overall, cannabis users demonstrated impaired driving relative to HC participants with increased accidents, speed, and lateral movement, and reduced rule-following. Interestingly, however, when cannabis users were divided into groups based on age of onset of regular cannabis use, significant driving impairment was detected and completely localized to those with early onset (onset before age 16) relative to the late onset group (onset ≥ 16 years old). Further, covariate analyses suggest that impulsivity had a significant impact on performance differences.

Conclusions: Chronic, heavy, recreational cannabis use was associated with worse driving performance in non-intoxicated drivers, and earlier onset of use was associated with greater impairment. These results may be related to other factors associated with early exposure such as increased impulsivity.

1. Introduction

To date, several countries, including Canada and Uruguay have completely legalized cannabis, while in the United States, recreational cannabis use is legal for adults in 11 US states and Washington DC; an additional 33 states have fully legalized medical cannabis programs (National Conference of State Legislatures NCSL, 2019). In the US, national surveys indicate that approximately 123.9 million people aged 12 or older have tried cannabis at least once, and 27.7 million report past month use (Substance Abuse and Mental Health Services Administration SAMHSA, 2019). In addition, a recent Canadian survey indicated that approximately 4.4 million Canadians aged 15 or older reported using cannabis at least once in the past year (Canadian Tobacco, Alcohol and Drugs Survey CTADS, 2019). Further, the most recent US National Roadside Survey, which collected data from 2013 to

2014, reported that cannabis is the second most commonly detected substance (second only to alcohol) in randomized, voluntary assessments of drivers; 12.6 % of weekend, night-time drivers aged 16 or older tested positive for cannabis, representing a 48 % increase from the last national survey performed in 2007 (Berning et al., 2015). Additional data from the US National Survey of Drug Use and Health collected between 2002 and 2014 indicates that 3.2 % of individuals aged 16–25 reported driving while intoxicated with cannabis (Azofeifa et al., 2015). Similarly, the Canadian Road Safety Monitor survey, which has gathered information on drugged driving since 2002, indicated that approximately 2.9 % of Canadians reporting driving within two hours of using cannabis (Robertson et al., 2017).

Significant evidence suggests that acute cannabis intoxication, the result of exposure to Δ -9 tetrahydrocannabinol (THC), the primary psychoactive constituent of the plant, is associated with impaired

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driving (reviewed in Hartman and Huestis, 2013; Compton, 2017), and higher blood serum concentrations of THC-related metabolites are associated with greater impairment (e.g., Khiabani et al., 2006; Ramaekers et al., 2004), although results are somewhat heterogeneous across studies. Specifically, driving under the influence of cannabis (DUIC) has been associated with slower driving in a number of investigations (e.g., Anderson et al., 2010; Lenné et al., 2010; Ronen et al., 2008, 2010); however, others did not observe this relationship (e.g., Liguori et al., 1998; Robbe, 1998). Acute cannabis intoxication has also been associated with increased lateral movement such as lane weaving in some studies (e.g., Lenné et al., 2010; Ronen et al., 2008; Robbe, 1998) but not others (e.g., Anderson et al., 2010; Ronen et al., 2010). Increased brake latency has been reported by Liguori et al. (1998), but a later study by this group did not replicate this finding (Liguori et al., 2002). In addition, some evidence suggests decreased response time while driving (e.g., Lenné et al., 2010), but this is not always observed (e.g., Liguori et al., 1998). Interestingly, in several studies, drivers demonstrated insight regarding their intoxication and reported adopting a slower driving style in an attempt to compensate for their impairment (reviewed in Sewell et al., 2009).

Further, several epidemiological studies have reported that DUIC significantly increases the odds of motor vehicle collisions (e.g., Asbridge et al., 2014; Bédard et al., 2007); however, some have suggested that once confounding variables (e.g., blood alcohol level) are controlled for, cannabis use no longer significantly impacts the odds of collision (e.g., Blows et al., 2005). Two meta-analyses reported that pooled odds ratios from these studies indicate a moderate to high risk of cannabis use on vehicle collisions (Asbridge et al., 2012; Li et al., 2012), but more recent meta-analyses indicate that publication bias may have inflated these numbers and that the increased risk may only be low to moderate, at an approximately 20–30 % higher likelihood (Elvik, 2013; Rogeberg and Elvik, 2016). Additionally, studies assessing driving after acute cannabis intoxication have reported increased collisions in some (e.g., Ronen et al., 2008, 2010) but not all studies (e.g., Anderson et al., 2010; Liguori et al., 1998).

Despite increasing numbers of cannabis consumers and research efforts focused on the relationship to driving performance, findings thus far remain limited. The cannabinoid metabolite examined in traditional assays (11-nor-9-carboxy-THC) has a long half-life, and the period of detection in biological samples can be several days or weeks after last use; accordingly, these assays do not provide accurate information regarding acute intoxication or recency of cannabis use. Further, in contrast to the alcohol *per se* limit in the US and Canada (≥ 0.08 % blood alcohol concentration), there is no currently accepted threshold for THC-related metabolites that indicates acute intoxication. Many roadside survey studies of DUIC continue to utilize these assays to determine intoxication status even though their limitations are well-known. Additionally, epidemiologic studies generally do not exclude individuals who use multiple substances, making it difficult to distinguish the specific impact of cannabis.

Experimental studies have primarily focused on the impact of *acute* cannabis intoxication on driving. Interestingly, while the effects of acute cannabis intoxication on driving performance have been studied extensively in regular cannabis users (e.g., Anderson et al., 2010; Lenné et al., 2010; Liguori et al., 1998, 2002; Robbe, 1998; Ronen et al., 2008, 2010) as well as in non-users (e.g., Robbe, 1998), to our knowledge, driving performance has never been assessed in cannabis users when they are *not acutely intoxicated*.

Further, previous studies examining the impact of recreational cannabis use on a range of outcome variables have emphasized the importance of thoroughly assessing cannabis use characteristics, particularly age of onset of cannabis use, as data suggest that adolescent onset of use is related to poorer cognitive performance and neurodevelopmental changes to both grey and white matter (reviewed in Gruber and Sagar, 2017; Lisdahl, 2013; Sagar and Gruber, 2018). Specifically, earlier onset of cannabis use is related to difficulties on

tasks of executive function while those with later cannabis onset appear more similar to control subjects (e.g., Battisti et al., 2010; Fontes et al., 2011; Gruber et al., 2012a). Additionally, earlier age of cannabis onset and increased frequency and magnitude of cannabis use have also been shown to *predict* greater impairment of executive function and vice versa in recreational cannabis users (e.g., Dahlgren et al., 2016; Squeglia et al., 2014). Importantly, these studies have demonstrated poorer cognitive performance in chronic recreational cannabis users, even in the *absence of acute intoxication*, suggesting there may be residual cognitive impairment associated with heavy cannabis use.

Given the increasing numbers of recreational and medical cannabis users, it is imperative to assess the potential residual impact of chronic, heavy cannabis use on driving performance, which has not thoroughly been addressed, as previous studies have primarily focused on impairments related to *acute* intoxication. Consistent with previous research on cannabis use and cognitive function, we hypothesized that heavy, recreational cannabis users would demonstrate impairment on a driving simulator task relative to healthy control participants, even in the absence of acute cannabis intoxication, and that impaired performance would be primarily localized to early onset cannabis users.

2. Materials and methods

2.1. Participants

As part of a larger comprehensive study, cannabis users ($n = 28$) and non-cannabis using, healthy control (HC) subjects ($n = 17$) were recruited from the Greater Boston Metropolitan area. Prior to participation in this study, all procedures were thoroughly explained to participants, including the voluntary nature of the study. Additionally, all participants were required to read and sign an informed consent form approved by the Partners Healthcare Institutional Review Board.

Cannabis users were defined as chronic, heavy, recreational users who used at least five of the last seven days, reported at least 1500 lifetime uses, and tested positive for urinary cannabinoids. Importantly, cannabis users abstained from cannabis use for at least 12 h before their study visit to ensure that they were not acutely intoxicated at the time of assessment. If any participant endorsed cannabis use within the 12-h abstinence period or appeared to be intoxicated, they were compensated for their time and rescheduled.

Upon arrival at the laboratory, all participants provided a urine sample that was tested using an in-house triage kit assessing for drugs of abuse (e.g., cocaine, opiates, cannabis, etc.). This procedure was required for three reasons: (a) to ensure negative drug status among all participants (except for THC-metabolites in the cannabis-using group); (b) to confirm the presence of THC-metabolites in the cannabis-using group; (c) and to encourage cannabis users to adhere to the 12-hr abstinence period, as cannabis users were led to believe that the urine sample could be used to determine compliance with the abstinence request, which is a method we have successfully utilized in the past (e.g., Gruber et al., 2014, 2012a; 2012b). A portion of the sample was sent to an outside laboratory for quantification of urinary THC-metabolite concentration with creatinine correction via gas chromatography-mass spectrometry.

In order to further explore the potential impact of age of onset of cannabis use on driving performance, the cannabis-using group was subdivided into two groups based on their age of onset of cannabis use, which was defined as the age of *consistent, regular* cannabis use (i.e., at least once per month). The early onset group included those with regular heavy cannabis use prior to or at age 16 ($n = 14$) while the late onset group included those with regular heavy cannabis use after age 16 ($n = 14$).

2.2. Assessments

Participants were administered the Structured Clinical Interview for

DSM-IV, Patient Edition (SCID; First et al., 1994) to ensure that no Axis I pathology was present other than cannabis abuse or dependence in the cannabis-using groups. Participants also completed the Wechsler Abbreviated Scale of Intelligence (Wechsler, 1999), which provides an estimate of IQ. Individuals were excluded from the study if they reported a significant head injury with loss of consciousness, history of any neurological disorder, estimated IQ < 75, current or previous use of psychotropic medication, current heavy alcohol use (regular consumption of > 20 drinks/week), binge drinking (defined by the National Institute on Alcohol Abuse and Addiction as when men consume ≥ 5 drinks in 2 h or when women consume ≥ 4 drinks in 2 h), or a history of illicit substance use (> 20 lifetime uses). In addition, HC participants were excluded if they reported more than 20 lifetime uses of cannabis. All participants had to be in possession of a valid driver's license and report driving regularly.

Cannabis use was assessed via a modified timeline follow-back procedure customized for cannabis use (TLFB; Sobell et al., 1998) to provide qualitative information regarding the type of products used (e.g., joint, blunt, edible, etc.) and mode of use (e.g., smoke, vape, ingest, etc.) as well as quantitative information regarding frequency (episodes/week) and magnitude (grams/week) of use. The SCID was used to confirm lifetime cannabis use information such as estimated lifetime uses and age of onset of regular use. Additionally, all cannabis users completed the Cannabis Use Disorder Identification Test-Revised (CUDIT-R; Adamson et al., 2010). As cannabis users were required to abstain from cannabis use for at least 12 h prior to completing the driving simulator paradigm, they completed a modified version of the Marijuana Withdrawal Checklist (MWC; Budney et al., 1999). The modified MWC is a 16-item self-report scale in which respondents rank symptoms associated with cannabis withdrawal (e.g., irritability, craving, etc.) as none, mild, moderate, or severe (numerically ranked from 0 to 3). The range of potential scores on this version of the MWC is 0–48.

Participants also completed the Barratt Impulsiveness Scale-11 (BIS; Patton et al., 1995), which is a self-report assessment that measures impulsivity across three domains: attention (e.g., “I don't pay attention”); motor (e.g., “I act on impulse”); and non-planning (e.g., “I say things without thinking”). A total score of all subscales was also calculated to reflect general impulsivity.

2.3. Driving simulator

Driving simulator paradigms allow for measurement of driving performance while minimizing actual risk to participants and others. The driving simulator used in the current study included a GTR simulator racing seat, Logitech G27 racing kit (dual-motor force feedback mechanism with quiet helical gearing; a six-speed shifter with push-down reverse gear; integrated RPM/shift indicator LEDs; an 11-inch leather-wrapped rim; and steel gas, brake, and clutch pedals), a 19-inch monitor, and surround sound speakers.

The driving simulator software and paradigm (STISIM Drive, Systems Technology Inc.) consists of 4.2 miles of simulated driving and takes approximately 10 min to complete. It includes both rural and urban driving conditions with road hazards, including stop signs, traffic lights, merges, turns, yielding to pedestrians, and reacting to other vehicles. Dependent variables on the task are grouped by subtype and include accidents (number of collisions, pedestrians hit, and off-road accidents); rule-following (number of missed stop signs, stops at red lights, and illegal turns); speed (number of speed exceedances, total run length, and percentage of distance driven over the speed limit); and lateral movement (number of centerline crossings, road edge excursions, and percentage of distance driven out of lane).

2.4. Statistical analyses

Driving simulator performance data was screened for outliers,

defined as values beyond the 1.5 interquartile range. One HC participant was removed from the analyses due to outlier driving simulator performance (final HC $n = 16$). One-way analyses of variance (ANOVAs) were used to assess between-group differences for two different analyses: two-group (HC versus all cannabis users) and three-group (HC versus early onset cannabis users versus late onset cannabis users). Scheffé post hoc comparisons were used to assess between-group differences for the three-group analyses. Additionally, if significant between-group differences were observed for any demographic variable (e.g., IQ, impulsivity, etc.), analyses of covariance (ANCOVAs) were conducted in order to control for these variables and assess their impact on driving simulator performance. Lastly, bivariate correlation analyses were conducted to further assess the relationship between driving performance and age of cannabis onset. Given substantial scientific evidence demonstrating adolescent onset of cannabis use is associated with poorer cognitive performance even in the absence of acute intoxication (reviewed in Gruber and Sagar, 2017; Lisdahl, 2013; Sagar and Gruber, 2018), one-tailed analyses were used for the current study.

3. Results

3.1. Two-group analyses: healthy controls versus all cannabis users

HC and all cannabis users were well-matched for age, IQ, and alcohol use (Table 1). With regard to impulsivity, the cannabis-using group reported significantly higher BIS scores on the attention and non-planning subscales as well as overall total BIS score (all $ps < .01$) compared to the HC group. No significant between-group differences were noted for the BIS motor subscale.

On the driving simulator task, the cannabis-using group exhibited significantly impaired performance compared to the HC group (Table 2; Fig. 1). Cannabis users hit significantly more pedestrians ($p = .03$), missed more stop signs ($p = .04$), made fewer stops at red lights ($p = .02$), had more speed exceedances ($p = .03$), drove a greater percentage of distance over the speed limit ($p = .04$), and made more centerline crossings ($p = .05$) relative to HC participants; there was also a non-significant trend for cannabis users to have a greater percentage of distance driven out of lane. The HC and cannabis-using groups had similar numbers of collisions, total run length, and road edge excursions. None of the participants in either the HC or cannabis-using groups had any off-road accidents or made any illegal turns.

Given significant between-group differences for impulsivity between HCs and cannabis users, ANCOVAs were also performed for driving simulator performance data. Once total BIS score was controlled for in the analyses, no significant differences between the HC and cannabis users remained for driving performance, other than a non-significant trend for cannabis users to make fewer stops at red lights ($p = .06$).

3.2. Three-group analyses: healthy controls versus early onset cannabis users versus late onset cannabis users

The three-group comparisons revealed that HC participants, early onset cannabis users, and late onset cannabis users were well-matched for age, IQ, and alcohol use (Table 3). In terms of cannabis use patterns, no significant differences were noted between early and late onset users for number of use episodes per week, total grams used per week, duration of use (yrs), urinary THC/creatinine ratio, or CUDIT-R scores. As expected, age of onset of cannabis use distinguished the two groups ($p < .01$). Further, both early and late onset users reported similar levels of withdrawal symptoms on the 16-item MWC ($M = 7.71$ and $M = 6.93$, respectively). Given that the range of possible scores on this version of the MWC is from 0 to 48, the group averages were very low, suggesting that the cannabis users did not experience many withdrawal symptoms despite at least 12 h of abstinence. With regard to impulsivity, significant differences emerged between the three groups for

Table 1
Demographic Information: Healthy Control (HC) versus Cannabis Users (CU).

Demographic Variables	HC <i>n</i> = 16	CU <i>n</i> = 28	ANOVA (2-tailed) ^a	
			<i>F</i>	<i>p</i> (η_p^2)
Sex	6M, 10F	23 M, 5F	–	–
Handedness	16R, 0L	27R, 1L	–	–
Age	22.94 ± 3.96	22.96 ± 5.56	< 0.01	.99 (< .01)
IQ: WASI ^b	123.55 ± 6.85	117.71 ± 10.11	3.08	.09 (.08)
Alcohol Use (days out of last 30) ^b	4.96 ± 4.50	6.52 ± 4.48	0.96	.33 (.03)
Cannabis Use Variables				
Age of Cannabis Onset ^c	–	15.95 ± 2.04	–	–
Cannabis Use Episodes/Week ^c	–	14.76 ± 12.34	–	–
Cannabis Grams Used/Week ^c	–	5.24 ± 6.42	–	–
Duration of Cannabis Use (yr) ^c	–	7.43 ± 6.45	–	–
Urinary THC/Creatinine Ratio (ng/ml) ^d	–	480.58 ± 663.56	–	–
CUDIT-R Score ^c	–	15.57 ± 5.30	–	–
MWC ^c	–	7.32 ± 3.67	–	–
Impulsiveness: BIS ^b				
Attention	13.00 ± 3.58	16.64 ± 3.12	9.93	< .01 (.21)
Motor	20.73 ± 4.92	23.14 ± 4.08	2.47	.13 (.06)
Non-Planning	18.46 ± 5.17	24.79 ± 5.02	12.36	< .01 (.25)
Total	52.18 ± 12.85	64.57 ± 9.23	11.35	< .01 (.24)

Abbreviations: Analysis of Variance (ANOVA); Barratt Impulsiveness Scale (BIS); Cannabis Use Disorder Identification Test-Revised (CUDIT-R); Marijuana Withdrawal Checklist (MWC); Tetrahydrocannabinol (THC); Wechsler Abbreviated Scale of Intelligence (WASI).

Notes:

Bold numbers are significant at $p \leq .05$ (2-tailed).

Italicized numbers are significant at $p \leq .10$ (2-tailed).

^a Degrees of Freedom (df) = 1,42 unless otherwise noted.

^b df = 1,37.

^c *n* = 28.

^d *n* = 26.

the attention and non-planning subscales, as well as BIS total (all $p \leq .01$), but no significant differences were noted on the motor subscale. Scheffé post hoc tests indicated that the HC group reported significantly lower BIS scores relative to early and late onset groups for the attention ($p = .03$ and $p = .04$) and non-planning subscales ($p = .01$ and $p = .07$) as well as total BIS scores ($p = .01$ and $p = .05$). No

significant differences were noted between the early and late cannabis onset groups on the BIS.

For the driving simulator data, omnibus ANOVAs revealed significant between-group differences for collisions ($p = .03$), missed stop signs ($p = .02$), stops at red lights ($p = .01$), and percentage of distance driven over the speed limit ($p = .05$; Table 4, Fig. 1). Additionally,

Table 2

Driving Simulator Performance: Healthy Control (HC) versus Cannabis Users (CU) Analyses of Variance (ANOVA) and Analyses of Covariance (ANCOVA) Controlling for Impulsivity.

Driving Simulator Variables	HC	CU	ANOVA (1-tailed) ^a		ANCOVA (1-tailed) ^b	
	<i>n</i> = 16	<i>n</i> = 28	<i>F</i>	<i>p</i> (<i>η</i> _{<i>p</i>} ²)	<i>F</i>	<i>p</i> (<i>η</i> _{<i>p</i>} ²)
Accidents						
# Pedestrians Hit	0.94 ± 0.93	1.57 ± 1.10	3.75	.03 (.08)	0.21	.33 (.01)
# Collisions	1.06 ± 0.85	1.21 ± 1.07	0.24	.32 (.01)	0.28	.30 (.01)
# Off-Road Accidents	0.00 ± 0.00	0.00 ± 0.00	–	–	–	–
Rule-Following						
# Missed Stop Signs	0.56 ± 0.73	1.04 ± 0.92	2.28	.04 (.07)	0.01	.47 (< .01)
# Stops at Red Lights	0.75 ± 0.77	0.36 ± 0.49	4.28	.02 (.09)	2.57	.06 (.07)
# Illegal Turns	0.00 ± 0.00	0.00 ± 0.00	–	–	–	–
Speed						
# Speed Exceedances	4.50 ± 3.33	6.64 ± 3.61	3.83	.03 (.08)	.41	.26 (.01)
Total Run Length (s)	585.91 ± 89.90	552.24 ± 88.69	1.45	.12 (.03)	< .01	.48 (< .01)
% Distance Over Speed Limit	7.50 ± 7.40	15.37 ± 16.66	3.18	.04 (.07)	0.48	.25 (.01)
Lateral Movement						
# Centerline Crossings	4.88 ± 1.75	6.00 ± 2.23	3.01	.05 (.07)	0.21	.33 (.01)
# Road Edge Excursions	3.38 ± 2.00	3.39 ± 1.45	< 0.01	.49 (< .01)	0.04	.42 (< .01)
% Distance Out of Lane	8.50 ± 3.01	9.30 ± 3.13	1.64	.10 (.04)	0.03	.43 (< .01)

Notes:

Bold numbers are significant at $p \leq .05$ (1-tailed).

Italicized numbers are significant at $p \leq .10$ (1-tailed).

^a Degrees of Freedom (df) = 1,42.

^b ANCOVA with Barratt Impulsiveness Scale (BIS) Total Score included as a covariate; df = 1,36.

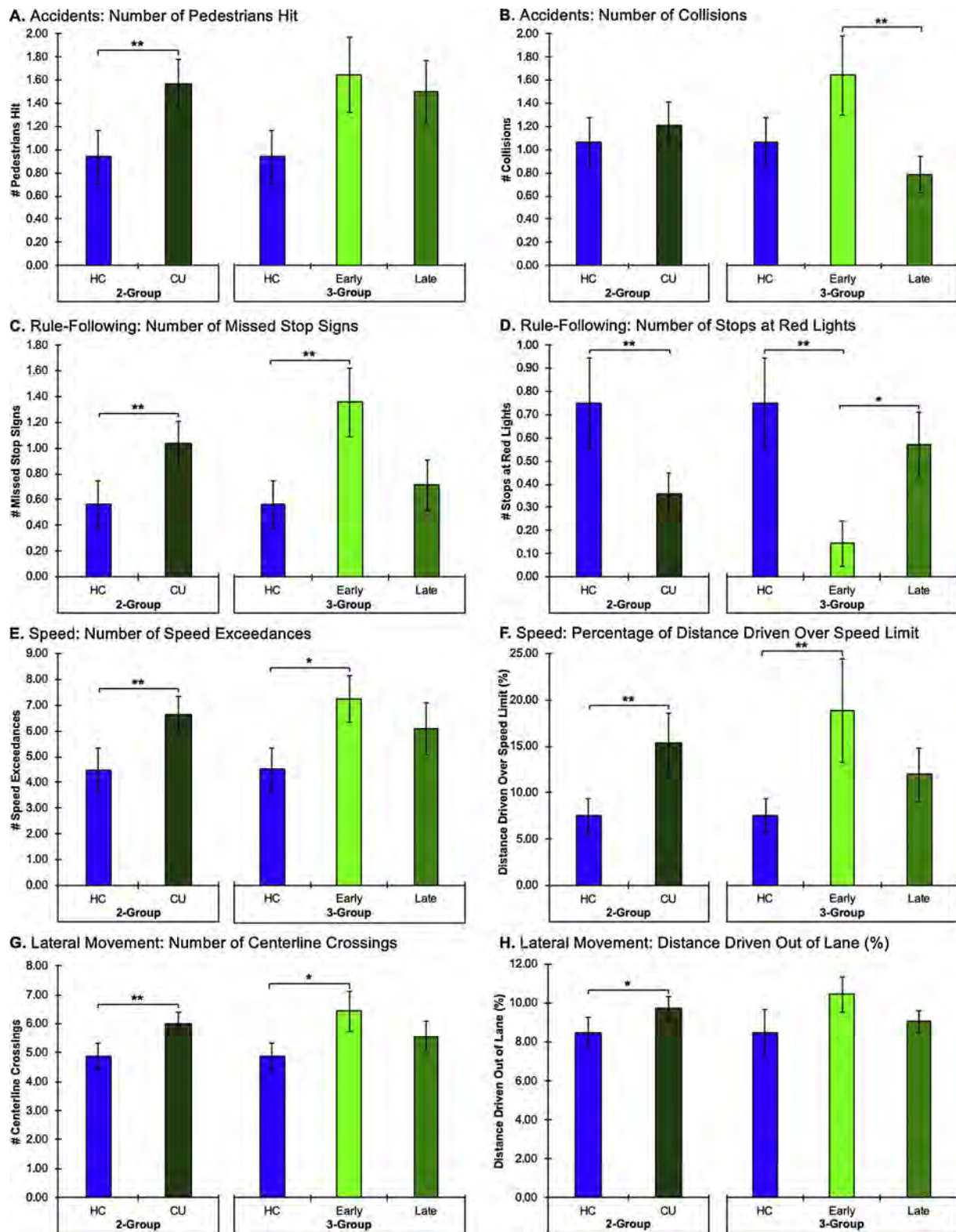


Fig. 1. Driving Simulator Performance Analyses. The two-group assessments comparing the healthy control (HC) participants to all chronic, heavy cannabis users (CU) are on the left side of the graphs. The three-group assessments comparing HC versus early onset cannabis users (Early) versus late onset cannabis users (Late) are on the right side of the graphs. Note: ** denotes significance at $p \leq .05$ and * denotes significance at $p \leq .10$ (1-tailed).

there were non-significant trends for between-group differences for number of pedestrians hit ($p = .08$), number of speed exceedances ($p = .06$), and number of centerline crossings ($p = .07$). No significant between-group differences were detected for total run length, number of road edge excursions or percentage of distance driven out of lane.

None of the participants in any of the groups had any off-road accidents or made any illegal turns.

Scheffé post hoc tests indicated that poorer task performance was primarily localized to the early onset cannabis group (Fig. 1). Specifically, the early onset cannabis group had significantly more collisions

Table 3

Demographic Information: Healthy Control (HC) versus Early Cannabis Onset versus Late Cannabis Onset.

Demographic Variables	HC <i>n</i> = 16	Early Onset <i>n</i> = 14	Late Onset <i>n</i> = 14	ANOVA (2-tailed) ^a	
				<i>F</i>	<i>p</i> (η_p^2)
Sex	6M, 10F	13 M, 1F	10 M, 4F	–	–
Handedness	16R, 0L	13R, 1L	14R, 0L	–	–
Age	22.94 ± 3.96	23.14 ± 7.07	22.79 ± 3.77	0.02	.98 (< .01)
IQ: WASI ^b	123.55 ± 6.85	116.00 ± 12.99	119.43 ± 6.11	2.01	.15 (.10)
Alcohol Use (days out of last 30) ^b	4.97 ± 4.50	5.82 ± 2.31	7.21 ± 5.94	0.81	.45 (.04)
Cannabis Use Variables					
Age of Cannabis Onset ^c	–	14.00 ± 1.04	17.36 ± 1.08	70.21	< .01 (.73)
Cannabis Use Episodes/Week ^c	–	11.88 ± 4.56	17.65 ± 16.66	1.56	.22 (.06)
Cannabis Grams Used/Week ^c	–	4.43 ± 2.66	6.05 ± 8.77	0.44	.51 (.02)
Duration of Cannabis Use (yr) ^c	–	9.57 ± 7.98	5.29 ± 3.58	3.36	.08 (.12)
Urinary THC/Creatinine Ratio ^d	–	408.43 ± 594.23	564.75 ± 754.35	0.35	.56 (.01)
CUDIT-R Score ^e	–	15.14 ± 4.59	16.00 ± 6.08	0.18	.68 (.01)
MWC (16-item) ^c	–	7.71 ± 4.14	6.93 ± 3.25	0.31	.58 (.01)
Impulsiveness: BIS					
Attention ^c	13.00 ± 3.58^{*,*}	16.79 ± 3.17[*]	16.50 ± 3.18[*]	4.87	.01 (.21)
Motor ^c	20.73 ± 4.92	23.00 ± 4.49	23.29 ± 3.79	1.22	.31 (.06)
Non-Planning ^c	18.46 ± 5.17^{*,*}	26.36 ± 4.27[*]	23.21 ± 5.37^{**}	7.91	< .01 (.31)
Total ^c	52.18 ± 12.85^{*,*}	66.14 ± 7.83[*]	63.00 ± 10.50[*]	5.94	.01 (.25)

Abbreviations: Analysis of Variance (ANOVA); Barratt Impulsiveness Scale (BIS); Cannabis Use Disorder Identification Test-Revised (CUDIT-R); Marijuana Withdrawal Checklist (MWC); Tetrahydrocannabinol (THC); Wechsler Abbreviated Scale of Intelligence (WASI).

Notes:

Bold numbers are significant at $p \leq .05$ (2-tailed).

Italicized numbers are significant at $p \leq .10$ (2-tailed).

* Scheffé Post Hoc Analyses indicated significant differences between pairs at $p \leq .10$ (2-tailed).

** Scheffé Post Hoc Analyses indicated significant differences between pairs at $p \leq .05$ (2-tailed).

^a Degrees of Freedom (df) = 2,41 unless otherwise noted.

^b df = 2,35.

^c df = 1,26.

^d df = 1,24.

^e df = 2,36.

Table 4

Driving Simulator Performance: Healthy Control (HC) versus Early versus Late Onset Cannabis Users Analyses of Variance (ANOVA) and Analyses of Covariance (ANCOVA) Controlling for Impulsivity.

Driving Simulator Variables	HC	Early Onset	Late Onset	ANOVA (1-tailed) ^a		ANCOVA (1-tailed) ^b	
	<i>n</i> = 16	<i>n</i> = 14	<i>n</i> = 14	<i>F</i>	<i>p</i> (η_p^2)	<i>F</i>	<i>p</i> (η_p^2)
Accidents							
# Pedestrians Hit	0.94 ± 0.93	1.64 ± 1.22	1.50 ± 1.02	1.90	.08 (.09)	0.12	.45 (.01)
# Collisions	1.06 ± 0.85	1.64 ± 1.28**	0.79 ± 0.58**	3.02	.03 (.13)	3.01	.03 (.15)
# Off-Road Accidents	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	–	–	–	–
Rule-Following							
# Missed Stop Signs	0.56 ± 0.73**	1.36 ± 0.101**	0.71 ± 0.73	3.79	.02 (.16)	1.65	.10 (.09)
# Stops at Red Lights	0.75 ± 0.78**	0.14 ± 0.36**	0.57 ± 0.51*	4.14	.01 (.17)	3.05	.03 (.15)
# Illegal Turns	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	–	–	–	–
Speed							
# Speed Exceedances	4.50 ± 3.33*	7.21 ± 3.42*	6.07 ± 3.77	2.28	.06 (.10)	0.44	.32 (.02)
Total Run Length (s)	585.91 ± 89.90	539.00 ± 105.32	565.49 ± 69.75	1.03	.18 (.05)	0.24	.40 (.01)
% Distance Over Speed Limit	7.50 ± 7.40**	18.79 ± 20.90**	11.94 ± 10.68	2.46	.05 (.11)	0.87	.22 (.05)
Lateral Movement							
# Centerline Crossings	4.88 ± 1.75*	6.43 ± 2.53*	5.57 ± 1.87	2.12	.07 (.09)	0.44	.32 (.03)
# Road Edge Excursions	3.38 ± 2.00	3.50 ± 1.56	3.29 ± 1.38	0.06	.47 (< .01)	0.10	.45 (.01)
% Distance Out of Lane	8.50 ± 3.01	10.44 ± 4.06	9.06 ± 1.78	1.54	.11 (.07)	0.51	.30 (.03)

Notes: **Bold** numbers are significant at $p \leq .05$ (1-tailed).

Italicized numbers are significant at $p \leq .10$ (1-tailed).

* Scheffé Post Hoc Analyses indicated significant differences between pairs at $p \leq .10$ (1-tailed).

** Scheffé Post Hoc Analyses indicated significant differences between pairs at $p \leq .05$ (1-tailed).

^a Degrees of Freedom (df) = 2,41.

^b ANCOVA with Barratt Impulsiveness Scale (BIS) Total Score included as a covariate; df = 1,36.

($p = .03$), more missed stop signs ($p = .02$), fewer stops at red lights ($p = .01$), and drove a greater percentage of distance over the speed limit ($p = .05$) relative to the HC group. Additionally, several non-significant trends were observed in which the early onset group had poorer performance relative to both the HC and late onset groups. The early onset cannabis group tended to make more speed exceedances ($p = .06$) and more centerline crossings ($p = .07$) than the HC group. Further, the early onset group tended to miss more stop signs ($p = .07$) and make fewer stops at red lights ($p = .08$) than the late cannabis onset group. While there was a non-significant trend for between-group differences on the number of pedestrians hit, none of the post hoc comparisons approached significance. Interestingly, no significant differences were noted between the HC and late cannabis onset groups for any of the driving simulator variables. Additionally, correlation analyses indicated that age of onset of cannabis use was negatively correlated with number of collisions ($r(26) = -.40$, $p = .02$) as well as missed stop signs ($r(26) = -.32$, $p = .05$), suggesting that earlier onset of cannabis use is associated with impaired driving skills, specifically increased collisions and missed stop signs; however, significant relationships were not detected between age of onset of cannabis use and other driving simulator variables. Interestingly, no significant relationships were observed between driving simulator performance and any of the other cannabis use variables.

Given significant between-group differences on the BIS, ANCOVAs controlling for total BIS impulsivity scores were completed. Interestingly, when total BIS score was included as a covariate, only the total number of collisions and stops at red lights (both $ps = .03$) remained significantly different between groups, with the early onset cannabis users demonstrating poorer performance; the remaining driving simulator variables were no longer significantly different after controlling for impulsivity.

4. Discussion

Data from the current study suggest that chronic cannabis use is associated with impaired driving performance even in the absence of acute intoxication. Poorer performance was observed in the cannabis-using group, with increased accidents, speeding, and lateral movement as well as decreased rule-following relative to HC participants. Importantly, when cannabis users were divided into those with early versus late onset, results revealed that impairment was primarily localized to the early onset group. These findings provide evidence that non-intoxicated early onset cannabis users demonstrate poorer driving performance, suggesting that there may be a residual impact of chronic, heavy, recreational cannabis use, particularly when regular use is initiated during early adolescence. However, it is important to note that when self-reported impulsivity was controlled for, most of the significant differences between the HC and cannabis users were no longer significant, suggesting that increased impulsivity within the cannabis users impacts, at least in part, the performance differences observed on the driving simulator.

The current study extends previous findings demonstrating that early cannabis onset is associated with a broad variety of cognitive decrements including poorer attention, visuospatial skills, verbal memory, and executive functioning (reviewed in Gruber and Sagar, 2017; Lisdahl, 2013; Sagar and Gruber, 2018) as well as alterations in functional brain activation (e.g., Hatchard et al., 2014; Sagar et al., 2015; Schweinsburg et al., 2008), and reduced integrity of white matter microstructure (e.g., Clark et al., 2012; Gruber et al., 2014). Further, findings related to increased number of collisions in non-intoxicated, early-onset cannabis users are similar to reports from acute intoxication studies demonstrating increased number of collisions (Ronen et al., 2008, 2010) as well as epidemiological studies indicating increased risk of motor vehicle collisions associated with DUIC (Asbridge et al., 2012; Elvik, 2013; Li et al., 2012; Rogeberg and Elvik, 2016). Additionally,

earlier age of onset was associated with poorer driving simulator performance; previous studies have also demonstrated a link between earlier age of onset and poorer cognitive performance (e.g., Dahlgren et al., 2016; Ehrenreich et al., 1999; Squeglia et al., 2014).

Results from the current study indicate an impulsive style of driving performance in *non-intoxicated* cannabis users, particularly in those with early onset of use, characterized by increased accidents, speeding, and lateral movement, and decreased rule-following. This is further underscored by the BIS data, with cannabis users reporting significantly higher levels of impulsivity relative to controls. Studies of acutely intoxicated individuals as well as DUIC have also shown impaired driving performance, but with a slightly different characterization than observed in the current study. Acute cannabis intoxication is associated with slower driving (e.g., Anderson et al., 2010; Lenné et al., 2010; Ronen et al., 2008, 2010); increased number of collisions (Ronen et al., 2008, 2010); increased lateral movement such as lane weaving (e.g., Lenné et al., 2010; Ronen et al., 2008; Robbe, 1998), increased brake latency (Liguori et al., 1998), and slower reaction time (e.g., Lenné et al., 2010). Interestingly, across several studies, drivers demonstrated insight regarding their intoxication and reported adopting a slower driving style in an attempt to compensate for impairment (reviewed in Sewell et al., 2009). The main difference between acute impairment/DUIC findings and results of the current study is driving speed; acute intoxication is associated with slower driving, whereas chronic use without acute intoxication is associated with faster driving. Taken together, the discrepancy between these findings suggests that acute cannabis intoxication results in a different type of driving impairment relative to residual impairment in the absence of acute cannabis intoxication, which appears to be associated with an impulsive style of driving.

One important question raised by current study is whether the observed driving impairment is *directly* related to early onset cannabis use or other mediating factors. Given the extensive literature demonstrating that early onset cannabis users demonstrate cognitive decrements relative to HC participants (reviewed in Gruber and Sagar, 2017; Lisdahl, 2013; Sagar and Gruber, 2018) as well as findings indicating that late onset cannabis users appear more similar to HC participants (e.g., Ehrenreich et al., 1999; Fontes et al., 2011; Gruber et al., 2012a; Schuster et al., 2016), it is possible that cannabis use during critical periods of neurodevelopment may mediate observed cognitive deficits. However, it is also possible that confounding factors (e.g., impulsivity, sensation seeking, etc.) associated with earlier onset of cannabis use may mediate these deficits. Several longitudinal studies have observed that behavioral problems, which may be an indicator of lack of inhibitory control, often precede cannabis use in adolescents (e.g., King et al., 2004; Fergusson et al., 2007; Griffith-Lendering et al., 2011; Pedersen et al., 2001). However, although cannabis users typically demonstrate significantly higher levels of impulsivity on self-report measures such as the BIS relative to control participants (reviewed in Wrege et al., 2014), performance deficits on neuropsychological assessments of inhibitory control are not always consistently observed (e.g., Griffith-Lendering et al., 2012; Gruber et al., 2012b; Harding et al., 2012). With regard to driving, earlier onset of cannabis use (Le Strat et al., 2015) as well as increased risk-taking behaviors and sensation-seeking (Bergeron and Paquette, 2014; Bergeron et al., 2014; Richer and Bergeron, 2009) have been shown to be associated with DUIC, suggesting that each of these variables may contribute to an overall reckless style of driving. In the current study, after controlling for differences in impulsivity, HC participants and cannabis users generally displayed similar driving simulator performance, indicating that impulsivity significantly influences these differences. Future investigations employing longitudinal designs, larger sample sizes, and multivariate modeling should further assess these overlapping variables to attempt to clarify and model the specific impact of each factor.

4.1. Limitations and future directions

Several limitations regarding the current study should be considered. First, the current study utilized a driving simulator in order to assess driving performance and may not be completely generalizable to actual driving performance. While real-world driving track paradigms may have better ecological validity than driving simulator paradigms, they also involve increased risk to both the participants and the researchers. Additionally, due to the cross-sectional design of the current study, it is not possible to determine whether driving simulator impairment or increased impulsivity precede or are a consequence of early cannabis exposure; longitudinal studies assessing these factors *before* initiation of cannabis use are necessary to address this question. In order to more fully investigate the specific impact of age of cannabis onset and impulsivity on driving, multivariate modeling and mediation analyses should be utilized; these statistical analyses require larger sample sizes than provided by the current study.

In the current study, all cannabis users were chronic, heavy, recreational users, with most endorsing daily or near-daily use; accordingly, these results may not be generalizable to individuals who use cannabis less frequently or importantly, to individuals using cannabis for medical purposes. Recreational users and medical cannabis (MC) patients differ in their motives for cannabis use, as recreational users generally aim to get “high,” while MC patients primarily use cannabis to achieve symptom alleviation. Accordingly, recreational users and MC patients are likely to differ on several characteristics of cannabis use including, but not limited to goal of use, product selection, overall exposure to specific cannabinoids, and age of onset of use. In fact, preliminary data from an ongoing, observational, longitudinal study of MC patients revealed improvement in some aspects of cognitive performance and brain function after initiation of MC treatment (Gruber et al., 2016, 2018). These findings are in stark contrast to the cognitive decrements and brain alterations often observed in recreational cannabis users and suggest that cannabis use is likely to confer distinct effects in MC patients relative to recreational users. Thus far, driving performance has not been assessed in MC patients; future studies are needed to address this gap in the scientific literature.

Additionally, to our knowledge, no other studies have examined the impact of chronic, heavy use of any other substances on driving performance in the absence of acute intoxication. Given that approximately 16.6 million Americans aged 12 or older reported heavy alcohol use in the past month (Substance Abuse and Mental Health Services Administration SAMHSA, 2019), it is of particular interest to assess whether chronic, heavy alcohol use results in similar driving impairment observed in the current study. Further, many of our study participants reported onset of cannabis use before age 16 (when most American teenagers learn to drive); therefore, it would be interesting to explore the potential impact of state-dependent learning effects on driving. Given that learning to drive is a highly supervised activity legally required to be overseen by an adult (typically a teacher or parent), it is unlikely that participants were acutely intoxicated for the duration of their training. However, future studies should directly assess this research question by collecting specific information related to cannabis use during driver education programs and training as well as potential factors that may influence this outcome.

5. Conclusions

The current study demonstrates residual driving impairment in non-intoxicated cannabis users, which appears specific to those with early onset cannabis use. Previous studies of acutely intoxicated individuals and DUI/C have observed a slower style of impaired driving behavior; conversely, the current study suggests that earlier onset users demonstrate an impulsive style of impaired driving, which may be related to characteristics inherent in individuals who engage in substance use at earlier ages such as increased impulsivity. Given increased legalization

of cannabis, growing numbers of cannabis consumers, and increased prevalence of drivers testing positive for cannabis metabolites, results from the current study underscore concerns about the impact of cannabis use on driving as a potential public safety issue.

Contributors

SG, the Principal Investigator of the current research study, developed the study concept. RTS performed all regulatory work including correspondence with the IRB. Neurocognitive testing and data collection were performed by KAS, RTS, AML, and MKK. MKD performed the data analysis and interpretation under the supervision of SG. MKD drafted the manuscript, and KAS and SG provided critical revisions. All authors have read and approved the final manuscript.

Funding

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Declaration of Competing Interest

None.

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From: [Ronald Kirkish](#)
To: [Christina Turner](#); [Rich Constantine](#); [Yvonne Martinez Beltran](#); [Rene Spring](#); [John McKay](#); [Shane Palsgrove](#); [Gino Borqioli](#)
Cc: [Matt Wendt](#); [Chris Borello](#); [Bob Cooke](#); [Terry Ratto](#); [REDACTED]; [Ladera Grill Dan](#)
Subject: NIDA's Dr. Nora Volkow Discusses Marijuana's Effects on the Brain, Body & Behavior
Date: Thursday, March 25, 2021 7:18:11 AM
Attachments: [7C97896E-3D54-41B9-BC9B-CE6E492DC06F.jpeg](#)



NATIONAL INSTITUTE OF DRUG ABUSE, DIRECTOR DR. NORA VOLKOW

NIDA's Dr. Nora Volkow Discusses Marijuana's Effects on the Brain, Body & Behavior

<https://www.youtube.com/watch?v=RSDnLSU3owc>

Hear a fascinating presentation by Dr. Nora Volkow, Director of the National Institute on Drug Abuse, about the effects of marijuana use on the brain, body and behavior. Dr. Volkow's remarks were given on Feb. 4th at CADCA's 24th National Leadership Forum.

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From: [Matt Wendt](#)
To: [Rene Spring](#); [Rich Constantine](#); [Gino Borgioli](#); [Christina Turner](#); [John McKay](#); [Yvonne Martinez Beltran](#)
Subject: No to Commercial Marijuana in our Town
Date: Thursday, March 18, 2021 10:07:04 AM

Council-members,

I personally ask and ask behalf of my family including my young kids that you don't bring an agenda item back that would bring commercial pot to Morgan Hill. Here is a US Congress study to support my position about the risk factors as well as a recent article by even the Denver Post about the negative impacts of Marijuana use in teens.

Regards,

Matt Wendt

Cannabis Policy: Public Health and Safety Issues and Recommendations

<https://www.drugcaucus.senate.gov/sites/default/files/02%20March%202021%20-%20Cannabis%20Policy%20Report%20-%20Final.pdf>

Editorial: Colorado should restrict the potency of marijuana concentrates, keep them away from teens

<https://www.denverpost.com/2021/02/28/colorado-marijuana-potency-restrictions/>

These concentrates must be regulated and kept out of Colorado schools

By **THE DENVER POST EDITORIAL BOARD** |
February 28, 2021 at 6:00 a.m.

Attachment: Letters from the public [Revision 1] (3045 : Request for Cannabis Report)

Colorado doctors say they are seeing an alarming spike in patients suffering psychosis — a break from reality that comes with disorders like schizophrenia — especially in young patients using high-potency marijuana concentrates.

It's OK to be skeptical of that anecdote. We were too. After all, marijuana is a natural plant that has been used for centuries as a medicine and for fun. It gives users a mild, mostly benign, high from the compound Delta-9-tetrahydrocannabinol.

However, reading peer-reviewed research in top medical journals around the world has led us to conclude the risk of high-potency marijuana to Coloradan's mental health is substantial. Marijuana must be regulated as any other harm-causing food, medicine or recreational drug. Products with high levels of caffeine are regulated for safety. Tobacco products come with warnings about cancer, and flavored cigarettes have long been banned. Grain alcohol like Everclear isn't sold in grocery stores or convenience stores for a reason.

And yet, a teen with a medical marijuana card is able to “loop purchase” — the act of going to several stores to purchase the maximum allowable amount multiple times — enough watermelon-flavored concentrate to have his or her entire senior class high for a week.

Chris Rogers, the medical director of child and adolescent services at The Medical Center of Aurora, has no doubt that high-potency marijuana concentrates are causing psychosis in the adolescent patients he treats.

“It has not been good for the kids of Colorado,” Rogers, the past-president of the Colorado Child and Adolescent Psychiatry Society, said. He said patients exhibit extreme paranoia and lose all touch with reality believing doctors and parents are out to get them or that food and

water are poison. “There’s no telling who comes back from this and who doesn’t. It can be recurrent, and it tends to get worse.”

This isn’t your grandma’s joint. This new age remix of chemically isolated THC in a crystal-like or liquid substance — shatter, oil or wax — is heated with a butane torch or vape pen and inhaled. It’s called dabbing. And the products contain 60% to 90% THC, generating a high described as mind-blowing in marijuana publications.

When Colorado voters approved the sale of marijuana for both medical and recreational use, many of us were sold on it being a holistic remedy for our aches, pains and anxiety. We still believe that is the case for many marijuana products on the market today.

But for a decade now peer-reviewed research in medical journals has been documenting the prevalence of marijuana use, particularly of these high-potency concentrates, among patients suffering psychosis. Studies in the Lancet Psychiatry, Neuropharmacology, Asian Journal of Psychiatry, American Journal of Psychiatry, The American Journal on Addictions and World Psychiatry, have explored the link.

There is some research suggesting that the link may be correlated and not causal – meaning those suffering from psychosis may be more likely to use cannabis and other drugs to self-medicate. But one study, in particular, found a higher rate of psychosis in cities with easy access to high-concentrate marijuana in addition to a high rate of concentrates use among those seeking treatment for psychosis.

Cannabis users need to know the risks. We learned from Big Tobacco the damage of waiting for scientifically proven causation.

Colorado lawmakers must take action this session. Legislation is being proposed that would cap the potency of marijuana products to something more reasonable like 30%, which is about the most that can be found in the actual non-refined flower product. Critically, the

legislation also must create a shared computer system for tracking purchases across multiple stores to prevent looping. And we must find a way to ensure teens with medical marijuana cards are getting the drug they need for medical purposes and that's all.

We aren't calling for the recriminalization of these drugs — putting teens behind bars for selling a legal product to their friends would do more harm than good. But shutting down the pipeline to our schools is essential for public health and safety, and there are reasonable measures we can put in place to protect teens.

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From: [Ronald Kirkish](#)
To: [Christina Turner](#); [Rich Constantine](#); [Yvonne Martinez Beltran](#); [Rene Spring](#); [John McKay](#); [Shane Palsgrove](#); [Gino Borgioli](#)
Cc: [Bob Cooke](#); [Matt Wendt](#); [Chris Borello](#); [Terry Ratto](#); [REDACTED]; [Ladera Grill Dan](#)
Subject: Northern California: High Intensity Drug Trafficking Area Drug Market Analysis
Date: Wednesday, March 24, 2021 5:06:41 PM

Dear All,

Should your elected's decide to allow marijuana dispensary's to operate in your community, they are wittingly or unwittingly inviting a whole host of other criminal syndicate activities to create a criminal hub in your jurisdiction to sell and distribute the whole smorgasbord of dangerous and illegal drugs into every nook and cranny of your neighborhoods and your neighboring communities.

Northern California: High Intensity Drug Trafficking Area Drug Market Analysis

<https://www.justice.gov/archive/ndic/pubs23/23934/23934p.pdf>

Ronald L. Kirkish
Retired Drug Prevention Officer, NCHIDTA-SF/NCRIC

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From: [Tom Guinane](#)
To: [Christina Turner](#); [Rich Constantine](#); [Yvonne Martinez Beltran](#); [Rene Spring](#); [John McKay](#); [Shane Palsgrove](#); [Gino Borgioli](#)
Subject: Please do not allow the sale of marijuana in our city!
Date: Monday, March 22, 2021 12:43:01 PM

You all know the arguments. We do not need this in our city.

I applaud your efforts to curb tobacco use in our city. However, if you approve marijuana use, what conflicting message are you sending to our children:
Don't vape, toké instead?

We are better than this. Please do not allow the sale,distribution of growth of marijuana in Morgan Hill.

--

Thank you,
Tom Guinane

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From: [Wisejsm25](#)
To: [Rene Spring](#); [Rich Constantine](#); [John McKay](#); [Yvonne Martinez Beltran](#); [Gino Borgioli](#); [Christina Turner](#)
Subject: Proposed Commercial Marijuana Shops
Date: Friday, March 19, 2021 3:52:02 PM

As a Morgan Hill resident I am deeply concerned about the possibility of Marijuana Shops being proposed in our beautiful city.

As a retired nurse, the dangers of marijuana is something to be seriously respected. Marijuana can lead to long term drug usage.

The strength of marijuana is much stronger now compared to 20 years ago. The medicinal benefits are for a select cliental and can

be obtained with a short drive to San Jose. Morgan Hill needs to support it's small businesses and restaurants. To look at Marijuana

shops as possible tax revenue is short sighted for the long term recuperation post pandemic.

Jeanne Wise RN

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Review

A Review of Cases of Marijuana and Violence

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Abstract: Marijuana is the most consumed illicit drug in the world, with over 192 million users. Due to the current legalization push of marijuana in the United States, there has been a lack of oversight regarding its public health policies, as marijuana advocates downplay the drug's negative effects. This paper's approach is from a public health perspective, focusing specifically on the cases of violence amongst some marijuana users. Here, we present 14 cases of violence with chronic marijuana users that highlight reoccurring consequences of: marijuana induced paranoia (exaggerated, unfounded distrust) and marijuana induced psychosis (radical personality change, loss of contact with reality). When individuals suffering from pre-existing medical conditions use marijuana in an attempt to alleviate their symptoms, ultimately this worsens their conditions over time. Although marijuana effects depend on the individual's endocannabinoid receptors (which control behavioral functions, like aggression) and the potency level of tetrahydrocannabinol (THC) in the drug, scientifically documented links between certain marijuana users and violence do exist. Wider public awareness of the risks and side effects of marijuana, as well as a more prudent health policy, and government agency monitoring of the drug's composition, creation, and distribution, are needed and recommended.

Keywords: marijuana; cannabis; tetrahydrocannabinol; THC; violence; law; paranoia; delusions; psychosis; public policies

1. Introduction

In the United States, ten states have legalized the recreational use of marijuana and over 20 states have decriminalized the recreational use of it. Recent reports suggest, however, that the increase of the recreational use of marijuana is causing detrimental effects to individuals, as well as the society as a whole [1–3]. These effects include, but are not limited to, the increase of violence, the increase of thriving underground marijuana markets, and increase in car accident claims after the legalization of marijuana where the recreational use of marijuana was legalized [1–3]. This is caused by lack of oversight. Marijuana is being legally sold with high THC concentration levels without taking into account its addictive qualities and adverse effects. On the other hand, and contrary to popular belief, marijuana is still illegal in the Netherlands and it is decriminalized. However, the consumption and storage of marijuana are limited by law and the approach taken by the Netherlands is to decriminalize the drug in order to be able to help individuals struggling with marijuana use. This prudent oversight has resulted in a decreased in violence and people are able to get the care they need to deal with addiction and become less prone to violence [1–3].

Furthermore, the consumption of marijuana is associated with an increase in violent behavior over the course of an individual's lifespan, a high risk of psychosis for frequent users, an increase

of cardiovascular diseases, and deterioration in health for individuals who have pre-existing mental health issues such as Post Traumatic Stress Disorder, social anxiety, and depression [4–6].

According to research studies, marijuana use causes aggressive behavior, causes or exacerbates psychosis, and produces paranoia. These effects have been illustrated through case studies of highly publicized incidents and heightened political profiles.

These cases contain examples of repeated illustrations of aggression, psychosis and paranoia by marijuana users and intoxication. Ultimately, without the use and intoxication of marijuana, the poor judgment and misperceptions displayed by these individuals would not have been present, reducing the risk for actions that result in senseless deaths.

Import to these assertions, is that the current marijuana is far more potent in THC concentrations, the psychoactive component. Accordingly, and demonstrated in direct studies, more potent marijuana results in a greater risk for paranoid thinking and psychosis. In turn, paranoid behavior increases the risk for paranoid behaviors and predictably associated with aggressive and violent behaviors.

1. Marijuana use causes violent behavior through increased aggressiveness, paranoia, and personality changes (more suspicious, aggressive, and anger).
2. Recent illicit and “medical marijuana” (especially grown by care givers for medical marijuana) is of much high potency and more likely to cause violent behavior.
3. Marijuana use and its adverse effects should be considered in cases of acts of violence as its role is properly assigned to its high association.
4. Recognize that high potency marijuana is a predictable and preventable cause of tragic violent consequences.

2. Case Presentation

2.1. Marijuana Violence

On March 13, 2019, Anthony Comello admitted to, and subsequently was charged for, the killing of Frank Cali, a senior leader of the Gambino family in Staten Island, New York. Both men were allegedly having an altercation over Comello’s romantic interest on one of Cali’s relatives. Although Comello had no previous criminal encounters with law enforcement, reports suggest that he drew the attention of authorities by acting strangely in a federal courthouse when he offered to perform a citizen’s arrest on New York City’s Mayor, Bill De Blasio. Previously, Comello sought a U.S. Marshal to inquire how to perform a citizen’s arrest on the United States Speaker of the House, Nancy Pelosi. Comello admitted that, at the time of Cali’s killing, he was high on marijuana and shot Cali because he feared that the senior leader had a gun and would shoot him during their altercation [4,7].

On February 10, 2019, a man killed his 13-year-old nephew with a knife in Rustavi, Georgia. The man had a history of marijuana use. For days leading up to the killing, he was complaining about having dizziness, headaches, general weakness, nausea, and insomnia. He would also occasionally suffer from anxiety, irritability, and loss of appetite. His wife stated that he consumed and was under the influence of marijuana, which made his symptoms worse. The day before the killing, he tried to go to a clinic. However, the clinic rejected treatment by telling him to go to a psychiatric hospital. However, under the influence of drugs, he simply went home hours before killing his nephew [8].

On February 1, 2018, Nikolas Cruz killed 17 students and staff at the Marjory Stoneman Douglas High School in Parkland, Florida, and injured 17 others. Cruz was diagnosed as developmentally delayed at age three and had numerous disciplinary issues dating to middle school. From a young age, he started consuming marijuana heavily. He accounts that he would frequently “hear demon voices” and would consume large amount of marijuana to try and silence those voices. He also attempted suicide. During an interview after his mass shooting, he stated that he used “a lot of marijuana” as well as prescription tranquilizer Xanax [9,10].

On November 5, 2017, Devin Patrick Kelley carried out the deadliest mass shooting in Texas’ history, resulting in the death of 27 people and injuries to 20 others, by opening fire at worshippers

who were attending regular Sunday Service at the First Baptist Church in Sutherland Springs. Kelley was later shot by bystanders and killed during a high-speed chase with law enforcement agencies. The autopsy on Kelley revealed that toxicology tests detected marijuana and anti-anxiety drugs in his system. A report from the Federal Bureau of Investigation revealed multiple past incidents where Kelley also been under the influence of marijuana. Kelley's first on-record interaction with law enforcement authorities was when he was arrested for possession of marijuana and, subsequently, expelled from his high school. Since then, the record shows that Kelley started using marijuana frequently, as well as developing mental health issues that would lead him to have problems in his employment with the United States Air Force and multiple instances where he abused his step-son and his wife at the time [11,12].

On May 22, 2017, a suicide bomber, Salaman Abedi, detonated an explosive device in an area of the Manchester Arena, United Kingdom. The blast killed over 20 people and injured over 100 others. Evidence shows that, from a very young age, Abedi was a "party animal" who heavily consumed marijuana. Furthermore, he was described as a person who would start fights in the street for no reason, would act rude, and would refuse to do his homework in school. He was also described as a "very slow, uneducated and passive person" who displayed aggressive tendencies. Eventually, he began shutting himself off from other people, started becoming more violent, and started showing paranoia by making statements against western societies and hanging out with dangerous crowds. Evidence suggests that this paranoia, furthered with aggressive tendencies, led to Abedi's suicide bombing attack that day [1,13].

On May 18, 2017, Richard Rojas purposely drove a car along three blocks of pavement in New York's Times Square, killing a teenager and injuring 22 other people. Evidence indicates that Rojas was a heavy marijuana user. He admitted on the consumption of spiced-up marijuana right before committing the attack. Further, the record show that Rojas suffered from paranoia and hallucination, which have led him to make odd statements and partake in actions that negatively affected him in the work place or while interacting with others. Paranoia and hallucination caused him to "hear voices" that led him to commit that attack [2,14].

On November 23, 2016, Arcan Cetin carried out a mass shooting that killed five people and injured many others at the Cascade Mall in Washington. Evidence indicates that Cetin was a heavy marijuana consumer. Further, he had a past of violent behavior, with some incidents including the consumption of marijuana. Although doctors prescribed him medicine for Attention Deficit Hyperactivity Disorder and other mental health issues such as Post Traumatic Stress Disorder, anxiety, and depression, he stopped taking the medicine and substituted it with by excessively consuming marijuana. This led to aggravate his mood swings and being more violent. Before the shooting, he had threatened an ex-girlfriend who lived out of state. Evidence indicates that at, while committing the attack, Cetin was shouting a woman's name [15–17].

On July 26, 2016, Satoshi Uematsu stabbed to death at least 19 people and injured at least 26 others at a care facility in Sagamihara, Japan. Months prior the shooting, Uematsu suddenly started talking and acting strangely to his coworkers, who feared he could harm someone. Consequently, Uematsu tested positive for marijuana and was diagnosed with marijuana-induced psychosis and paranoid disorder after he delivered an ominous euthanasia letter to a Japanese House of Representative and telling his co-workers and the police that he intended to kill disabled people. Although he planned the attack in detail, evidence suggests that he later seemed to showed remorse and stated that "There was something wrong with [him]". These kinds of behaviors suggest that he was suffering from psychosis and paranoia since he was in the delusion that his acts would contribute to the Japanese society and the world [18,19].

On November 27, 2015, Robert Dear killed three people and injured nine others when he carried out a mass shooting in a Planned Parenthood clinic in Colorado Springs. Dear, along with many other users, moved to Colorado after the state legalized the recreational use of marijuana. Dear was a heavy user who was described by family and friends as "an angry and occasionally violent", and "deeply

disturbed”, individual who suffered from paranoia and mood swings. Moreover, he was described as a lonely religious extremist who had a history of domestic violence against his ex-wives, who gambled, and who committed adultery on multiple occasions. About a year before the shooting, he moved to Colorado where he lived in dire conditions at a squalid trailer without running water or electricity [20–22].

On July 16, 2015, Muhammad Youssef Abdulazeez killed five people and injured a couple of others in his drive-by shooting at a military recruiting center in Chattanooga, Tennessee. Prone to depression and manic episodes, he started smoking marijuana heavily in high school. This addiction was going on for many years and led his mental state to deteriorate further and cause him to fail a drug test at work. Further, he started writing suicidal notes to himself and was pulled over by a police officer for driving under the influence of marijuana and alcohol. Up until the shooting, evidence indicates that Abdulazeez had a hard time keeping a job because of his manic depressive/bipolar disorder and drug use [23,24].

On June 17, 2015, 21-year-old Dylan Roof murdered nine people who were attending a prayer service in a Church in Charleston, South Carolina. He claimed that his intentions were to start a race war. His acts were preceded by years of drug abuse. Reports reveal that Roof’s drug abuse started when he was 12 years old when he would smoke marijuana three times a day. When he was 16 years old, he tried to stop smoking marijuana after telling people that his daily marijuana usage caused him to be paranoid and hear voices. According to experts, Roof started suffering panic attacks when he was 16. Nonetheless, multiple accounts claim that he kept smoking marijuana and started abusing other drugs and alcohol. During his arrest for the Charleston shooting, Roof told police officers that he abused drugs before committing such heinous act [5,25,26].

On August 9, 2014, Michael Brown was fatally shot after a physical altercation with a police officer in Ferguson, Missouri. The autopsy and toxicology report revealed that Michael Brown had THC concentration of marijuana in his blood and urine. He had five nanograms of THC on his system, which causes approximately the same level of impairment as a 0.08 percent of blood alcohol level. That much THC notably impairs someone’s judgment and perception of the surrounding environment, which may lead to anxiety and paranoia. Evidence indicates that Brown tried to reach for the officer’s gun during the altercations, which led to the officer shooting at him in close range. Thus, evidence suggests that Brown’s behavior was most likely caused by paranoia [27,28].

On April 15, 2013, Dzhokhar Tsarnaev and his brother Tamerlan, killed three people and injured over 250 by detonating homemade pressure cooker bombs near the finish line at the Boston marathon. Both brothers were heavy marijuana users since they were young teenagers. Tamerlan was killed in a police shootout following the bombings and Dzhokhar was eventually apprehended by law enforcement officers. Several acquaintances and friends knew about both brother’s marijuana consumption and sales. One of Dzhokhar friend testified that he sold marijuana to Tsarnaev days before the Boston Marathon Bombings. Unrelated to the bombings, one of Tamerlan’s friends implicated Tsarnaev in the killing of three men whose bodies were found sprinkled with marijuana. Multiple accounts noticed an increase of violent behavior from Dzhokhar for some time leading up to the bombings [29–32].

On January 8, 2011, Jared Loughner shot and killed six people, while also injuring 14 others at the then-US Representative Gabrielle Giffords’s constituent meeting held in Tucson, Arizona. Although friends and acquaintances described him as an “awkward but friendly” young man, they started noticing his behavior drastically change in college. In high school, Loughner smoked marijuana on most days. Moreover, he also started immersing himself in conspiracy theories displayed paranoia. He dropped out of high school during his final year, but was able to attend a community college. Some college peers described him becoming mentally unstable by saying and doing things that were frightening. Other peers feared that he would do something like what he actually did. He was suspended from college and never returned. Subsequently, he tried to join the army but he was rejected because he failed a drug test. Consequently, he engaged in paranoid behavior that led to him to

engage in anti-government speech and target then-Representative Giffords during her constituent meeting [33,34].

These are among the many nationally reported violent cases that have, among others factors, a common root to what led these young people to commit acts of violence at the detriment to society as a whole: the extensive use or abuse of marijuana. In recent years, many States within the United States, as well as some other countries around the world, have decriminalized or legalized the recreational use of marijuana [8,12,13,19].

2.2. Paranoia: Marijuana Induced

In the cases above mentioned, one of the recurring conditions that most likely led perpetrators to commit violence was paranoia. Paranoia is defined by the medical dictionary as “an unfounded or exaggerated distrust of others, sometimes reaching delusional proportions”. Paranoid perceptions can co-occur with various other mental conditions as well, such as depression and dementia, and can be divided in three different psychological disorders: paranoid schizophrenia, delusional disorder (persecutory type), and paranoid personality disorder (PPD). All three conditions are similar in the sense that they all contain an “unreasonable fear” or “unreasonable belief” as the root of each condition. Hallucinations are also a common symptom on individuals who suffer from paranoia. Nonetheless, paranoia is also a likely side effect deriving from the consumption of marijuana, as well as other drugs and alcohol [3,18,31,35].

In the cases above mentioned, one of the recurring conditions that most likely led perpetrators to commit violence was paranoia. Paranoia is defined by the medical dictionary as “an unfounded or exaggerated distrust of others, sometimes reaching delusional proportions”. Evidence suggests that paranoia was among the factors that contributed in the actions of Anthony Comello, Salem Abedi, Richard Rojas, Satoshi Uematsu, Robert Dear, Dylan Roof, Michael Brown, and Jared Lougher. Each one had, in respective degrees, unreasonable beliefs. Comello admittedly shot Cali because he feared Cali had a gun and was about to shoot him. Abedi displayed paranoid beliefs while making statements against Western societies. Rojas’ paranoia was displayed in his statements and action witnessed by his coworkers; also, he claims he heard voices that led him to commit the attack. Uematsu was diagnosed with Paranoid disorder and psychosis, which led him to have delusion beliefs that his despicable acts would make contributions to society. Dear was described as a lonely religious extremist but also had a history of domestic violence, gambling, and adultery. Roof wanted to start a race war. Brown was likely paranoid about his surroundings based on the report. Lougher was suffering from paranoia and was immersing himself with conspiracy theories. Many of these tragedies are committed by individuals who were paranoid and were consuming marijuana. It is very likely that marijuana played an active role in these people’s paranoia, considering that the chemical composition of the drug has compounds that alter a person’s perception of reality as mentioned below (Table 1, [17,36–38]).

Table 1. Personality change toward aggression or violence.

Paranoid Personality Disorder	
A pervasive distrust and suspiciousness of others such that their motives are interpreted as malevolent, beginning by early adulthood and present in a variety of contexts, as indicated by four (or more) of the following:	
1.	Suspects, without sufficient bases, that others are exploiting, harming, or deceiving him or her.
2.	Is preoccupied with unjustified doubts about the loyalty or trustworthiness of friends or associates.
3.	Is reluctant to confide in others because of unwarranted fear that the information will be used maliciously against him or her.
4.	Reads hidden demeaning or threatening meanings into benign remarks or events.
5.	Persistently bears grudges (i.e., is unforgiving of insults, injuries, or slights).
6.	Perceives attacks on his or her character or reputation that are not apparent to others and is quick to react angrily or to counterattack.
7.	Has recurrent suspicions, without justification, regarding fidelity of spouse or sexual partner.

2.3. Psychosis: Marijuana Induced

Another condition that is commonly present in cases like the above are psychotic conditions. Psychotic conditions affect an individual's mind in a way that causes that individual to experience loss of contact with reality. During a psychotic episode, the perception of reality is altered to the point where an individual is unable to distinguish reality from hallucinations. Psychotic individual can also experience delusions (false beliefs), incoherent speech, inappropriate behavior, depression, anxiety, sleep problems, social withdrawal, lack of motivation, and difficulty functioning overall [16,17,37].

In the above-mentioned cases, Uematsu was diagnosed with marijuana-induced psychosis. His coworkers' testimony that he would talk and act inappropriately, his paranoia, and his delusion that killing patient at a care facility would benefit the society as a whole, demonstrates that he was suffering from psychotic conditions that made him lose contact with reality and led him to commit such acts. Similar symptoms were also present in cases where perpetrators acted with delusional beliefs, such as: Abedi, who suddenly started making inappropriate statements against Western societies; Dear, who was a lonely religious extremist but also had a history of domestic violence, gambling, and adultery, which strongly indicates that he was delusional, incoherent, and lost contact with reality; Rojas, Cruz, and Roof who suffered from hallucinations while having consumed large amount of marijuana throughout their lives.

Often, individuals who suffer from pre-existing medical conditions use marijuana in an attempt to alleviate their conditions. The man in Rustavi, Cruz, Kelley, Cetin, Abdulazeez, and Cruz also consumed marijuana because they were under the illusion that it would help them cope with their conditions, whether those conditions were likely induced by marijuana or not. However, it ended up worsening their conditions as time went by. What individuals are unaware of when it comes to self-medicating, is that the marijuana they consume does not have compounds that alleviate their pain or conditions; the marijuana they consume has many compounds that negatively alter their perceptions, which leads to worse conditions (Tables 2 and 3, [2,9,10,12,39–41]).

Table 2. Psychosis.

Substance-Induced Psychotic Disorder
A. Presence of one or both of the following symptoms: Delusions. Hallucinations.
B. There is evidence from the history, physical examination, or laboratory findings of both (1) and (2): The symptoms in Criterion A developed during or soon after substance intoxication or withdrawal or after exposure to a medication.
The involved substance is capable of producing the symptoms in Criterion A.
C. The disturbance is not better explained by a psychotic disorder that is not substance-induced. Such evidence of an independent psychotic disorder could include the following:
The symptoms preceded the onset of the substance use; the symptoms persist for a substantial period of time (e.g., about 1 month) after the cessation of acute withdrawal or severe intoxication; or there is other evidence of an independent non-substance-induced psychotic disorder (e.g., a history of recurrent non-substance-related episodes).
D. The disturbance does not occur exclusively during the course of a delirium.
E. The disturbance causes clinically significant distress or impairment in social, occupational, or other important areas of functioning.

Table 3. Paranoia.

Subtypes Delusional Disorder
Grandiose type: This subtype applies when the central theme of the delusion is the conviction of having some great (but unrecognized) talent or insight or having made some important discovery.
Persecutory type: This subtype applies when the central theme of the delusion involves the individual's belief that he or she is being conspired against, cheated, spied on, followed, poisoned or drugged, maliciously maligned, harassed, or obstructed in the pursuit of long-term goals.

3. Discussion

3.1. Marijuana: General Facts

Marijuana is the most consumed illicit drug in the world, with cannabis use and dependence continuing to increase over the past two decades as the trend of legalization persists. According to the United Nations Office on Drug and Crime, over 192 million of users (ages 15–64) worldwide regularly consume marijuana, with a lifetime use of 20% of the World's population and a significant number of individuals regularly consuming the drug [42]. In a 2017 study by the Global Burden of Disease, it estimated the age-standardized rate of cannabis use disorder, or CUD, was 289.7 per 100,000 population (95% Uncertainty Interval (UI) 248.9–339.1), affecting 22.1 million people (95% UI 19.0–25.9 million) [42]. The United States and Canada were in fact found to have among the highest age-standardized rates of CUDs in the world [42].

Cannabis is a complex plant that is made up of 400 chemical entities of which more than 60 are cannabinoid compounds, with delta-9-tetrahydrocannabinol and cannabidiol being the major compounds. Some of those cannabinoid compounds tend to have opposing effects as they affect a very important neurotransmitter system called endocannabinoid system [2]. Moreover, some cannabinoids bind to central cannabinoid receptors to control many behavioral functions, such as aggression. Furthermore, the delta-9-tetrahydrocannabinol (THC) is the chemical responsible for the intoxicating effects on individuals who consume marijuana. The THC level determines the potency of marijuana and high levels of THC likely lead to higher negative health consequences [43–45].

Researchers refer to marijuana having a “high potency” when it has a THC level of more than 10%. In the past years, the THC of confiscated marijuana samples rose from 3% in 1980 to 12% in 2012. Moreover, adolescents between 15 and 17 years old have reported significantly higher ED visits from 2005 to 2010, which is likely caused by the increase of marijuana potency during that time period [7]. Although THC levels that exceed 10% most likely cause serious negative health consequences, it is not uncommon to find marijuana, which THC content exceeds 20% and occasionally 230%, to be sold in places where marijuana is legalized, such as the state of Colorado [7,8]. Furthermore, while daily users refer to high potency marijuana as “the good stuff”, it is reported that daily users are five times more likely to find themselves in the hospital for psychosis symptoms such as delusions and hallucinations caused after consuming marijuana. As this paper will mention in the following pages, however, delusions and hallucinations are not the only negative effects stemming from the consumption of marijuana. Cardiovascular diseases, depression, anxiety, and violence are also among the common negative effects of marijuana [13,14,27,34,46].

3.2. Mental and Behavioral Changes

We apply the results of the research regarding the role of marijuana in violence. We use concepts such as personality changes, perpetrator violence, and psychosis to establish our association of marijuana with the unfortunate cases. The purpose is to illustrate negative but preventable tragic outcomes due to marijuana and its role in violence. The overall objective is to identify the role of marijuana and to suggest it is avoidable and causal nature in inducing violence [47–49].

In all the cases selected, marijuana use was present. For some of the individuals, marijuana use was confirmed by a physical test. In other cases, marijuana was present on their person, identifying drug use. Moreover, some individuals of the case were identified as marijuana users by outside sources.

Present in all the cases, as a result of marijuana use, was the change in personality, aggressive behavior, paranoia, and/or psychosis. All these symptoms have been documented by scientific research to be the result of marijuana use and intoxication. Another symptom, victimization, has a positive correlation with cannabis use, and the cases illustrate marijuana users and victimization. In other words, marijuana users become victims of aggression in response to their perpetration under the influence of marijuana (Table 4, [50,51]).

Table 4. What did the cases have in common?

Cases of Marijuana Use and Symptoms	
Case	Symptom
Anthony Comello	Paranoia
Man in Rustavi	Aggressiveness, Personality Change
Nikolas Cruz	Psychosis, Hallucinations
Devin Patrick Kelley	Aggressiveness, Personality Change
Salaman Abedi	Aggressiveness, Personality Change, Paranoia
Richard Rojas	Paranoia, Hallucinations
Arcan Cetin	Aggressiveness, Personality Change
Stoshi Uematsu	Psychosis, Paranoia
Robert Dear	Aggressiveness, Paranoia
M.Y. Abdulazeez	Aggressiveness, Paranoia
Dylan Roof	Paranoia, Hallucinations
Michael Brown	Aggressiveness, Personality Change, Paranoia
Dzhokar Tsarnaev	Aggressiveness, Personality Change
Tamerlan Tsarnaev	Aggressiveness, Personality Change
Jared Loughner	Paranoia, Psychosis

The DSM V provides diagnostic categories for paranoid personality, paranoia and psychosis associated with marijuana use [52].

3.3. Marijuana and Violence

As mentioned above, some compounds found in marijuana have an effect on central endocannabinoid receptors that control many behavioral functions, including aggression. Although there are some instances where marijuana consumption causes mild euphoria and relaxation on users, adverse acute psychopharmacological effects are very likely to occur. A study that collected data from half a century points out that even a single dose of cannabis may cause “impairments in behavioral control that may underlie impulsive, violent behavior” by altering “the normal functioning of its underlying natural substrate, the ventrolateral prefrontal cortex in man”. Furthermore, the results collected in that study provide a strong indication that chronic marijuana use suggests a possible causal effect with predicting future violence. More studies have reported that panic attacks, confusion, hallucinations, suspiciousness, and paranoia often occur in chronic marijuana users, affecting their cognition in ways that enhance aggressive responses to perceived provocations. Further, recent studies have proven causal connections between marijuana and psychosis [38,39,53].

Studies Show Violence and Aggression Associated with Marijuana Use

Marijuana intoxication results in panic reactions and paranoid feelings whose symptoms lead to violence [49]. The sense of fear, loss of control, and panic is associated with violence [4,54,55]. Also marijuana use increases heart rate, which may be associated with violent behavior [34,47,56,57].

When people stop using marijuana they may experience a variety of withdrawal symptoms, including sleep disturbance, irritability or restlessness, loss of appetite, anxiety, and sweating [46,58]. Experiencing any of these symptoms can make a person angry, ranging from mild irritation to violent rage. Marijuana withdrawal can lead to intimidating violent or bullying behavior, endangering the perpetrator or other people and property [59].

In incarcerated subjects, studies found that one-third of the subjects that committed homicide had used marijuana twenty-four hours before the homicide. Further, three-quarters of those subjects were experiencing at least one mental or physical effect from marijuana intoxication when the homicide occurred.

Similarly, individuals in remote Aboriginal Australian Communities who reported current cannabis use were nearly four times more likely than nonusers to present at least once for violent

trauma. Homicide offenses have been repeatedly documented to be connected to drug use, and marijuana is often one of those drugs [60].

Marijuana use is also indicative of intimate partner violence [61]. Consistent use of marijuana during adolescence was the most predictive indicator of intimate partner violence [31]. Also, marijuana use during adolescence was associated with perpetration or both perpetration and victimization by an intimate partner in early adulthood [62].

There is also a positive association between peer victimization and cannabis use in adolescents. Cannabis use is likely to be associated with perpetrator victims, those who initiate violence while using marijuana and experience retaliation to their aggressive acts. This trend suggests that cannabis use might be strongly related to outward aggression by the user [1].

Cannabis use also increases an adolescent's own likelihood of being victimized by peers. In particular, mental effects of cannabis has the potential to decrease the ability to accurately identify, evaluate, or avoid potentially dangerous persons or situations [59].

3.4. Psychosis

Psychosis is defined by the medical journal as "a symptom or feature of mental illness typical characterized by radical changes in personality, impaired functioning, and a distorted or nonexistent sense of objective reality". Psychosis causes individuals to have an impaired perception of reality, consisting of hallucinations and paranoia [2,8,16]. Consumption of marijuana also proportionally increased the risk of other mental illnesses, such as schizophrenia and other types of psychoses. These marijuana use disorders are often associated with its dependence, since a user's brain requires more and more substance use to keep the desired euphoric effect in the brain. Thus, a user is most likely to experience withdrawal symptoms when not taking the drug. Irritability, anger, and aggression are common withdrawal symptoms that former marijuana users, or marijuana users who try to quit the consumption, experience [46]. Although marijuana advocates generally state that the consumption of the drug helps individuals who suffer from PTSD or other psychiatric conditions, studies suggest that the consumption of marijuana in patients with PTSD, and in patients following a psychiatric discharge, increases the likelihood of those patients being prone to violence compared to patients who do not consume the drug [4,37]. A 50 year-span study on adult patients in the United Kingdom indicated that continued cannabis use by an individual leads is associated with a 7-fold greater odds for commission of subsequent violent crimes. The authors of that study suggest that marijuana consumption would cause impairments in neurological circuits controlling behavior that makes a user prone to violent behavior [36].

Marijuana advocates downplay the risks associated with its unrestricted consumption by saying that the drug is safe, which is a similar approach adopted by Big Tobacco years ago to downplay the risks of smoking. Yet, despite tobacco being legal, people today are well aware of the risks associated with its consumption. Stating that consuming marijuana is safe goes against many studies and researches performed that prove negative health consequences associated with the consumption of marijuana due to the multitude of compounds present and high THC levels being consumed by individuals [9–11,19,21].

Studies Show Psychosis and Paranoia

Cannabis intoxication leads to acute psychosis in many individuals and can produce short-term exacerbations of preexisting psychotic diseases [63–66]. Cannabis use also causes symptoms of depersonalization, fear of dying, irrational panic and paranoid ideas which coincide with acute intoxication and remit quickly [67].

It was reported that 15% of cannabis users identified psychotic-like symptoms, the most common being hearing voices or having unwarranted feelings of intimidation and persecution or paranoid thoughts [38].

The potency of the marijuana has varying effects on users. A study analyzed the proportion of patients in South London with first episode psychosis attributable to high-potency cannabis use and found that the use of high-potency cannabis (skunk) confers an increased risk of psychosis compared with traditional low-potency cannabis (hash) [68].

The risk of individuals having a psychotic disorder showed a roughly three times increase in users of skunk-like cannabis (high-potency) compared with those who never used cannabis. Use of skunk-like cannabis everyday conferred the highest risk of psychotic disorders compared with no use of cannabis [69]. Potency in these studies is similar to marijuana currently available in the U.S. Direct administration of cannabis resulted in predictable increased occurrence of paranoia in comparison to those who received placebo.

Epidemiological studies showed that cannabis is the most frequently used drug among those diagnosed with bipolar disorder [70]. Studies have also shown that as the frequency of cannabis use increases, so does the risk for psychotic disorders, such as schizophrenia [71]. The investigators of Schizophrenia Commission concluded that cannabis use is the most preventable risk factor for psychosis [72–77]. High proportions of persons with schizophrenia report regular cannabis use and meet criteria for cannabis use disorder [78].

Findings suggest that activity in the basal lateral medulla is involved in marijuana-induced paranoia (state of becoming afraid of things that would normally trigger fear) [77]. That means marijuana is actually enhancing type of learning about fear, leading the brain to jump to conclusions about the mild experiences, perceiving them as scarier and more strongly connected to other scary situations than they are. This marijuana induced fear-based learning helps explain why marijuana users tend to see patterns in events that are not real, such as conspiracies [78].

In a study analyzing a college population, heavy users of marijuana displayed significantly greater impairment than light users on intentional/executive functions. This led to the conclusion that heavy marijuana use is associated with residual neuropsychological effects even after a day of supervised abstinence from the drug [53,79].

3.5. Public Policies

These negative effects of marijuana need to be taken into account for public policy in order to treat people with addiction and possibly avoid the tragedies above mentioned. The public should know the negative consequences associated with the compounds present within the marijuana products they consume. The current legalization push in the United States lacks prudent public policy and control over the process. A prudent public policy would be to decriminalize the drug and have its composition, creation, and distribution controlled by an agency that would keep THC levels at a minimum. Moreover, studies that try to find ways to treat individuals addicted to marijuana and ways to make the drug safer by pinpointing each compound and determine whether some compounds may indeed help people who have curable health conditions. This approach would reduce the negative effects of high THC on the human body and would decrease violence occurring during marijuana deals in the black market. Furthermore, this approach will likely decrease the violence caused by marijuana and, most importantly, it would prevent tragedies such as the ones mentioned above [8,13,31,80].

4. Conclusions

The main scope of this paper was to inform the general public about the relationships between marijuana and violence in the general population and in individuals with mental illnesses, as recent findings do link marijuana with cases where psychosis was present. This article is a case review and not a research study; therefore, the chief limitations regard inferences that can be made from a case study. However, the findings suggest a further need for research on marijuana and violence. The authors of this paper did not intend to take sides regarding the legalization of marijuana. The focus was public health in regards to marijuana [2,11,14,18,36].

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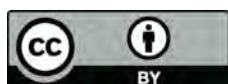
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Marijuana Violence and Law

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Abstract

Marijuana is currently a growing risk to the public in the United States. Following expanding public opinion that marijuana provides little risk to health, state and federal legislatures have begun changing laws that will significantly increase accessibility of marijuana. Greater marijuana accessibility, resulting in more use, will lead to increased health risks in all demographic categories across the country. Violence is a well-publicized, prominent risk from the more potent, current marijuana available.

We present cases that are highly popularized storylines in which marijuana led to unnecessary violence, health risks, and, in many cases, both. Through the analysis of these cases, we will identify the adverse effects of marijuana use and the role it played in the tragic outcomes in these and other instances. In the analysis of these cases, we found marijuana as the single most common, correlative variable in otherwise diverse populations and circumstances surrounding the association of violence and marijuana.

Keywords: Marijuana; Bullying behaviour; Aggression; Intoxication; Cannabis use

Cases Reports

Michael Brown robbed a convenience store for a large box of cigarillos to smoke marijuana and assaulted the store clerk. Subsequently, the 18 year old Brown attacked police officer Darren Wilson without provocation, punching him in the face through the window of his police car, and attempting to grab his gun. Wilson shot and killed Brown as he tried to escape in a very agitated, paranoid, confused and aggressive state. Along with the cigarillos, marijuana was found in Brown's system at the time of death [1].

Trayvon Martin was shot and killed by George Zimmerman, a neighborhood watch volunteer. Marijuana was found in Martin's system the night he was shot [2]. He also had been suspended from school for possession of marijuana.

Laquan McDonald slashed a tire and damaged a police car. After ignoring verbal instruction to drop the knife, he was shot sixteen times. McDonald had used marijuana every day since the age of 10 or 11 years old [3].

Deven Guilford was shot and killed by a policeman during a traffic stop after becoming assaultive. He was a known marijuana user as he professed his "love" for marijuana on social media [4].

Freddie Gray fell into a coma while being transported after an arrest for possession of an illegal switchblade. At the time of his death, Gray tested positive for marijuana and heroin. Gray had multiple prior charges for marijuana possession [5].

Lakeisha Holloway drove her car onto a sidewalk on the Las Vegas strip, killing one and injuring over thirty five others [6,7]. The

toxicology exam illustrated that Holloway had marijuana in her system at the time of the vicious attack [8].

Robert Lewis Dear shot three people and injured nine others at a Planned Parenthood Clinic in Colorado Springs, Colorado. He was a marijuana user and illustrated mental health issues [9].

Joseph Jesse Aldridge found his mother dead of natural causes and went on a shooting rampage, killing seven people and himself. In 2008, Aldridge had pled guilty to federal charges of possessing firearms while using marijuana. He was required to complete mental health and substance use counseling for marijuana [10].

Jared Lee Loughner shot Arizona Congresswomen Gabrielle Gifford and eighteen other, killing six. He was arrested in 2007 for marijuana possession and other paraphernalia. Friends and classmates knew him as a marijuana user. He was also diagnosed with paranoid schizophrenia [11].

The Tsarnaev brothers killed three and injured 264 others with bombs at the Boston Marathon on April 5, 2013. Friends say they were both heavy marijuana users. The wife of the older brother, Tamerlan, described a change in his attitude as he became violent toward her with his increasing marijuana use [12].

A Dearborn Heights man plotted ISIS attacks on church. In an affidavit filed in a criminal complaint on weapons and marijuana charge, Khalil Abu Rayyan is described as being an ISIS supporter who talked about committing violent acts of terrorism, including shootings and beheadings [13].

Osama bin Laden became paranoid and obsessive in the days prior to his death. High strength marijuana plants were found within bin Laden's compound in Pakistan [14].

Studies Show an Association between Marijuana and Mental or Physical Consequences

Studies show violence and aggression with marijuana use

Marijuana intoxication results in panic reactions and paranoid feelings whose symptoms lead to violence [15]. The sense of fear, loss of control, and panic is associated with violence [16 18]. Also marijuana use increases heart rate, which may be associated with violent behaviour [19 22].

When people stop using marijuana they may experience a variety of withdrawal symptoms, including sleep disturbance, irritability or restlessness, loss of appetite, anxiety, and sweating [23,24]. Experiencing any of these symptoms can make a person angry, ranging from mild irritation to violent rage. Marijuana withdrawal can lead to intimidating violent or bullying behavior, endangering the perpetrator or other people and property [25].

In incarcerated subjects, studies found that one third of the subjects that committed homicide had used marijuana twenty four hours before the homicide. Further, three quarters of those subjects were experiencing at least one mental or physical effect from marijuana intoxication when the homicide occurred.

Similarly, individuals in remote Aboriginal Australian Communities who reported current cannabis use were nearly four times more likely than nonusers to present at least once for violent trauma. Homicide offenses have been repeatedly documented to be connected to drug use, and marijuana is often one of those drugs [26].

Marijuana use is also indicative of intimate partner violence [27]. Consistent use of marijuana during adolescence was the most predictive indicator of intimate partner violence [28]. Also, marijuana use during adolescence was associated with perpetration or both perpetration and victimization by an intimate partner in early adulthood [29].

There is also a positive association between peer victimization and cannabis use in adolescents. Cannabis use is likely to be associated with perpetrator victims, those who initiate violence while using marijuana and experience retaliation to their aggressive acts. This trend suggests that cannabis use might be strongly related to outward aggression by the user [30].

Cannabis use also increases an adolescent's own likelihood of being victimized by peers. In particular, mental effects of cannabis have the potential to decrease the ability to accurately identify, evaluate, or avoid potentially dangerous persons or situations [25].

Studies show psychosis and paranoia

Cannabis intoxication leads to acute psychosis in many individuals and can produce short term exacerbations of pre existing psychotic diseases [31 34]. Cannabis use also causes symptoms of depersonalization, fear of dying, irrational panic and paranoid ideas which coincide with acute intoxication and remit quickly [35].

It was reported that 15% of cannabis users identified psychotic like symptoms, the most common being hearing voices or having unwarranted feelings of intimidation and persecution or paranoid thoughts [36].

The potency of the marijuana has varying effects on users. A study analyzed the proportion of patients in South London with first episode

psychosis attributable to high potency cannabis use and found that the use of high potency cannabis (skunk) confers an increased risk of psychosis compared with traditional low potency cannabis (hash) [37].

The risk of individuals having a psychotic disorder showed a roughly three times increase in users of skunk like cannabis (high potency) compared with those who never used cannabis. Use of skunk like cannabis everyday conferred the highest risk of psychotic disorders compared with no use of cannabis [6]. Potency in these studies is similar to marijuana currently available in the U.S. Direct administration of cannabis resulted in predictable increased occurrence of paranoia in comparison to those who received placebo.

Epidemiological studies showed that cannabis is the most frequently used drug among those diagnosed with bipolar disorder [5]. Studies have also shown that as the frequency of cannabis use increases, so does the risk for psychotic disorders, such as schizophrenia [38]. The investigators of Schizophrenia Commission concluded that cannabis use is the most preventable risk factor for psychosis [39 44]. High proportions of persons with schizophrenia report regular cannabis use and meet criteria for cannabis use disorder [45].

Findings suggest that activity in the basal lateral medulla is involved in marijuana induced paranoia (state of becoming afraid of things that would normally trigger fear) [44]. That means marijuana is actually enhancing type of learning about fear, leading the brain to jump to conclusions about the mild experiences, perceiving them as scarier as and more strongly connected to other scary situations than they are. This marijuana induced fear based learning helps explain why marijuana users tend to see patterns in events that are not real, such as conspiracies [45] (Table 1).

In a study analyzing a college population, heavy users of marijuana displayed significantly greater impairment than light users on intentional/executive functions. This led to the conclusion that heavy marijuana use is associated with residual neuropsychological effects even after a day of supervised abstinence from the drug [46,47].

What did the cases have in common?

Cases of Marijuana Use and Symptoms	
Case	Symptoms
Michael Brown	Aggressiveness, Personality Change, Paranoia
Trayvon Martin	Aggressiveness, Personality Change, Paranoia
Laquan McDonald	Aggressiveness, Personality Change
Devon Guilford	Aggressiveness, Personality Change
Freddie Gray	Paranoia
Lakeisha Holloway	Aggressiveness, Personality Change
Robert Lewis Dear	Psychosis
Joseph Jesse Aldridge	Psychosis
Gerard Lee Loughner	Aggressiveness, Personality Change, Psychosis
Tsarnaev Brothers	Aggressiveness, Personality Change
Khalil Abu-Rayyem	Psychosis

Osam bin Laden	Paranoia, Psychosis
----------------	---------------------

Table 1: Marijuana uses and symptoms.

Discussion

We apply the results of the research regarding the role of marijuana in violence. We use concepts such as personality changes, perpetrator violence, and psychosis to establish our association of marijuana with the unfortunate cases. The purpose is to illustrate negative but preventable tragic outcomes due to marijuana and its role in violence. The overall objective is to identify the role of marijuana and to suggest it is avoidable and causal nature in inducing violence [48-50].

In all the cases selected, marijuana use was present. For some of the individuals, marijuana use was confirmed by a physical test. In other cases, marijuana was present on their person, identifying drug use. Moreover, some individuals of the case were identified as marijuana users by outside sources.

Personality change toward aggression or violence (Chart 1)

Paranoid Personality Disorder
A. A pervasive distrust and suspiciousness of others such that their motives are interpreted as malevolent, beginning by early adulthood and present in a variety of contexts, as indicated by four (or more) of the following:
Suspects, without sufficient bases, those others are exploiting, harming, or deceiving him or her.
Is preoccupied with unjustified doubts about the loyalty or trustworthiness of friends or associates.
Is reluctant to confide in others because of unwarranted fear that the information will be used maliciously against him or her.
Reads hidden demeaning or threatening meanings into benign remarks or events.
Persistently bears grudges (i.e., is unforgiving of insults, injuries, or slights).
Perceives attacks on his or her character or reputation that are not apparent to others and is quick to react angrily or to counterattack.
Have recurrent suspicions, without justification, regarding fidelity of spouse or sexual partner.

Chart 1: Paranoid personality disorder (PPD) symptoms.

Present in all the cases, as a result of marijuana use, was the change in personality, aggressive behavior, paranoia and/or psychosis. All these symptoms have been documented by scientific research to be the result of marijuana use and intoxication. Another symptom, victimization, has a positive correlation with cannabis use, and the cases illustrate marijuana users and victimization [51,52]. In other words, marijuana users become victims of aggression in response to their perpetration under the influence of marijuana.

DSM V provides diagnostic categories for paranoid personality, paranoia and psychosis associated with marijuana use [53].

Michael Brown was a marijuana user and it was found in his system at the time of death. Further, Brown illustrated aggressive tendencies and victimization, as he was reported to aggressively assault a store clerk prior to his aggression towards a police officer. These actions were contrary to non-aggressive tendencies purported by those closest

to Brown. Brown's intoxication of marijuana likely accounted for the aggression and assaults. While contributing factors such as race and poor police practices may have contributed to Brown's unfortunate death, Brown likely would have been alive had he not been a user of marijuana in this particular instance. Apparently he was acting under the influence in an uncharacteristically high risk manner.

Similar to Brown, Trayvon Martin was known to have used marijuana. He was suspended from school for marijuana use at the time of his altercation with Zimmerman. Under the influence of marijuana, Martin likely illustrated victim perpetration from marijuana which increased aggressive behavior through participation in the altercation with Zimmerman. This physical fight with Zimmerman was behavior is to the surprise of others who claimed Martin was mild mannered who likely would avoid such a confrontation. Marijuana use likely created the fear and aggressive behavior due to poor judgment and threatening perceptions induced by marijuana, contribution to Martin's death [19,23].

Tamerlan Tsarnaev follows similar patterns. He was a known heavy marijuana user. There was a sharp change in his personality confirmed by his wife associated with very heavy use and involvement with marijuana, resulting in the violence towards his wife according to her. Likely, intoxication from marijuana created and contributed to the paranoid thoughts and poor judgment to detonate a bomb in a crowd of people [34,40].

Similarly, Laquan McDonald was a known marijuana user since 10 or 11 years old. The intoxication from the use of marijuana likely caused McDonald to slash a cop car's tire, as he was known to be respectful and reserved. His life would have been saved without marijuana induced aggressiveness and poor judgments, and senseless, high risk actions towards police [19,23].

Deven Guilford is another preventable but clear example high risk and poor judgement from marijuana use. After being stopped in his car, Guilford assaulted a police officer for unknown reasons and apparently paranoid reactions to police actions. Guilford was preoccupied with and user of marijuana at a relatively young age. His marijuana use likely contributed to the change in his personality to be aggressive and assaultive to provoke his death in a high risk police stop [19,23].

Similarly, Jared Lee Loughner was known to be a heavy marijuana user. People described a large personality change from his youth. Loughner went on a shooting spree, killing six people. Marijuana was likely a major contributor to the drastic change in personality toward violence. Had marijuana been identified as a problem, his aggressive and assaultive act may have been prevented and lives could have been saved [19,23].

Lakeisha Holloway shows another example of senseless loss. In contrast to her personality from her youth, she drove a car onto the sidewalk of the Las Vegas strip, killing one person and injuring others. Marijuana was in her system at the time of the attack and likely contributed to the lethal aggression exhibited, and likely, psychotic, paranoid thinking.

Psychosis (Chart 2)

Substance-Induced Psychotic Disorder
A. Presence of one or both of the following symptoms:
Delusions
Hallucinations
B. There is evidence from the history, physical examination, or laboratory findings of both (1) and (2):
The symptoms in Criterion A developed during or soon after substance intoxication or withdrawal or after exposure to a medication.
The involved substance is capable of producing the symptoms in Criterion A.
C. The disturbance is not better explained by a psychotic disorder that is not substance-induced. Such evidence of an independent psychotic disorder could include the following:
The symptoms preceded the onset of the substance use; the symptoms persist for a substantial period of time (e.g. about 1 month) after the cessation of acute withdrawal or severe intoxication; or there is other evidence of an independent non-substance-induced psychotic disorder (e.g. a history of recurrent non-substance-related episodes).
D. The disturbance does not occur exclusively during the course of a delirium.
E. The disturbance causes clinically significant distress or impairment in social, occupational or other

Chart 2: Substance induced psychotic disorder symptoms.

Studies have illustrated the connection between cannabis use and psychosis [54]. Marijuana has been shown to increase the risk for psychotic disorders and/or exacerbate pre existing psychotic diseases. Consistent with research, marijuana resulting in psychosis is illustrated in many of the cases described above. Joseph Jesse Aldridge, described as a recluse, went on a shooting rampage after finding his mother deceased. Aldridge was a known marijuana user and had history of psychosis. His marijuana use likely contributed to his psychosis, and a major factor for the shooting rampage [55,56].

Similar to Aldridge, Jared Lee Loughner was admittedly a marijuana user. He suffered from a mental illness of paranoid schizophrenia. Loughner then went on a shooting spree killing six people. His marijuana use likely exacerbated the psychosis, which was a high risk factor for the shootings [33,35,55].

Analogous to Aldridge and Loughner, Robert Lewis Dear went on a shooting spree in Colorado. Dear moved to Colorado for easier access to marijuana. Dear also exhibited signs of mental health illness, psychosis and paranoia, which caused or exacerbated by marijuana, which resulted in his shooting spree [18,31].

While Khalil Abu Rayyan did not result in a shooting rampage, this case illustrates the same ideas as previous cases. Abu Rayyan used marijuana. He illustrated signs of psychosis through the threats of terrorism and martyrdom. Abu Rayyan obtained the instruments to carry out his plans. The psychosis, contributing to the terroristic thoughts, marijuana use contributed to and exacerbated his aggressive behaviour [31,36,55].

Similar to Abu Rayyan, Osama bin Laden also had notorious terroristic and paranoid behavior. Bin Laden was a marijuana user, growing high strength plants within his compound in Pakistan. Unfortunately, bin Laden's psychosis, associated and exacerbated by

marijuana use, may have prompted him to carry out the most heinous terrorist attacks in history. Without marijuana use and subsequent psychosis, many deaths may not have occurred [31,55,56].

Paranoia (Chart 3)

Subtypes Delusional Disorder
Grandiose type: This subtype applies when the central theme of the delusion is the conviction of having some great (but unrecognized) talent or insight or having made some important discovery.
Persecutory type: This subtype applies when the central theme of the delusion involves the individual's belief that he or she is being conspired against, cheated, spied on, followed, poisoned or drugged, maliciously maligned, harassed or obstructed in the pursuit of long-term goals.

Chart 3: Types of delusional disorder (DD).

In addition to psychosis and aggression, paranoia has been connected to marijuana intoxication [57,58]. Studies have illustrated THC significantly increase paranoia through a physical pathway. The cases described above illustrate such paranoia in marijuana users. For instance, Freddie Gray was arrested after he fled on the mere sight of police officers. During his arrest in the intoxicated state, he was injured which resulted in his death. Gray was a known drug addict and user of marijuana. His marijuana use likely induced paranoia thinking and poor judgment which prompted him to flee from police, threatening to him. Without marijuana and other drug intoxication, his cooperation likely would have been different, and he would avoided his high risk apprehension, and death avoided [34,36,40].

Similarly, Trayvon Martin got into an altercation with a Neighborhood Watch guard. Martin, speaking to his girlfriend, stated that a "creepy" man was following him and that he tried to evade the follower. His description is characteristic of apprehensive beliefs, and a sign of paranoia thought. Otherwise, Martin according to his family would not have fought with Zimmerman, had the situation escalated due to the paranoia, caused by the use of marijuana [34,36,40].

Osama bin Laden also illustrated paranoia, in letters that were discovered after his death. Paranoia was caused by his frequent marijuana use. This paranoia resulted in his adverse view of the US government. Unfavorable views toward the US resulting from extreme paranoia, coupled with psychosis, resulted in his terrorist attacks. Marijuana abstinence could have prevented the death of thousands of people [34,36,40].

These cases contained diverse variables: encounters with police, race, altercations, confrontation and mental illness. Other drug use was present but not the same across all cases. However, marijuana and violence are the common denominators in all the cases. Many were not victims of police aggression, some perpetuated police responses, some not. Diverse races and cultures were represented, and no stereotype was evident among the cases of violence and marijuana use. The variables, marijuana and violence were present in all cases.

An extensive review of the scientific literature document a clear association between marijuana and violence, psychosis, personality changes, poor judgment, aggression, victim perpetration. There are other possibilities and contributing factors in the execution of the violent behaviors, though probably not present in all cases. The purpose of this case report is to illustrate the probable role of marijuana in violent behaviors.

The review does not prove a causal relationship between marijuana and violence in these cases. Rather it establishes a highly documented association between marijuana and violence. A legal standard used for causation can be applied to illustrate this association. A legal cause is “but for” the actions or circumstances, the result would not have occurred. A proximate cause is the result was “foreseeable” based on the facts and actions. The most likely legal and proximate cause of violence in these cases was the use and intoxication from marijuana. No other variables fulfill these requirements.

Conclusion

According to research studies, marijuana use causes aggressive behavior, causes or exacerbates psychosis and produce paranoid. These effects have been illustrated through case studies of highly publicized incidents and heightened political profiles.

These cases contain examples of repeated illustrations of aggression, psychosis and paranoia by marijuana users and intoxication. Ultimately, without the use and intoxication of marijuana, the poor judgment and misperceptions displayed by these individuals would not have been present, reducing the risk for actions that result in senseless deaths.

Import to these assertions, is that the current marijuana is far more potent in THC concentrations, the psychoactive component. Accordingly, and demonstrated in direct studies, more potent marijuana results in a greater risk for paranoid thinking and psychosis. In turn, paranoid behavior increases the risk for paranoid behaviors and predictably associated with aggressive and violent behaviors.

Marijuana use causes violent behavior through increased aggressiveness, paranoia and personality changes (more suspicious, aggressive and anger).

Recent illicit and “medical marijuana” (especially grown by care givers for medical marijuana) is of much high potency and more likely to cause violent behavior.

Marijuana use and its adverse effects should be considered in cases of acts of violence as its role is properly assigned to its high association.

Recognize that high potency marijuana is a predictable and preventable cause of tragic violent consequences.

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From: [REDACTED]
To: [Rene Spring](#); [Rich Constantine](#); [John McKay](#); [Yvonne Martinez Beltran](#); [Gino Borgioli](#); [Christina Turner](#)
Subject: Proposed Commercial Marijuana Shops
Date: Friday, March 19, 2021 4:17:15 PM

I was a public school teacher for thirty-five years and I am very concerned about the well being of our youth.

If you Google the long term use of marijuana on the brain health of young men and woman you can see the serious effects on brain scans where whole brain areas are compromised and affected negatively. Also, the tars and residues from smoking marijuana can compromise the lungs and other areas of the body.. Let's not let the promise of increased revenue sell out the mental and emotional well being of our youth and potentially lead them to harder drugs.

Sincerely
Steve Wise

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From: [Ronald Kirkish](#)
To: [Christina Turner](#); [Rich Constantine](#); [Yvonne Martinez Beltran](#); [Rene Spring](#); [John McKay](#); [Shane Palsgrove](#); [Gino Borgioli](#)
Subject: Re: ADHD numbers are rising and scientists are trying to understand why
Date: Sunday, April 4, 2021 10:41:23 AM

This is an additional excerpt from the NCBI study linked below:

"With few exceptions investigations have reported structural abnormalities in regular CAN*-using youth in the frontal cortex (ACC, OFC, insula, paracentral gyrus), lingual temporal, inferior and superior parietal cortex, hippocampus, amygdala, nucleus accumbens, and cerebellum with the most prominent findings in the PFC and hippocampus areas that have high CB1 receptors density. Most studies in adult or young adult samples have demonstrated decreased volumes across brain regions in association with CAN use."

*CAN = Cannabis/Marijuana

B/r,

Ronald L. Kirkish

On Apr 4, 2021, at 8:14 AM, Ronald Kirkish <[REDACTED]> wrote:

Dear All,

The frequency of ADHD has exploded since the 1990's as has the huge increase of the %THC in "Skunk marijuana"

NIDA's Dr. Nora Volkow's research shows that THC does damage to the human brain's white matter and the damage is substantial.

B/r

Ronald L. Kirkish

The Impact of ADHD Persistence, Recent Cannabis Use, and Age of Regular Cannabis Use Onset on Subcortical Volume and Cortical Thickness in Young Adults

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5289096/>

Results

ADHD numbers are rising and scientists are trying to understand why: In the late 1990s, 7.2 percent of non-Hispanic white children, 4.7 percent of

Attachment: Letters from the public [Revision 1] (3045 : Request for Cannabis Report)

non-Hispanic black children and 3.6 of Hispanic children were diagnosed with ADHD, according to the study. By 2016, it was 12 percent of white kids, 12.8 percent of blacks and 6.1 percent of Hispanics.

After controlling for age, gender, total brain volume, nicotine use, and past-year binge drinking, childhood ADHD diagnosis did not predict brain structure; however, persistence of ADHD was associated with **smaller left precentral/postcentral cortical thickness.**

Compared to all non-users, CAN users had decreased cortical thickness in right hemisphere superior frontal sulcus, anterior cingulate, and isthmus of cingulate gyrus regions and left hemisphere superior frontal sulcus and precentral gyrus regions. Early cannabis use age of onset (CUO) in those with ADHD predicted greater right hemisphere superior frontal and postcentral cortical thickness.

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From: [Ronald Kirkish](#)
To: [Christina Turner](#); [Rich Constantine](#); [Yvonne Martinez Beltran](#); [Rene Spring](#); [John McKay](#); [Shane Palsgrove](#); [Gino Borgioli](#)
Cc: [Matt Wendt](#); [Chris Borello](#); [Bob Cooke](#); [Terry Ratto](#); [REDACTED]; [Ladera Grill Dan](#)
Subject: Re: NIDA's Dr. Nora Volkow Discusses Marijuana's Effects on the Brain, Body & Behavior
Date: Thursday, March 25, 2021 7:49:39 AM

Dr. Nora Volkow's presentation includes information regarding how marijuana causes huge and permanent damage to the human brain, especially to very important components of the brain that controls behavior.

B/r,

Ronald L.Kirkish.

On Mar 25, 2021, at 7:17 AM, Ronald Kirkish [REDACTED] wrote:

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NATIONAL INSTITUTE OF DRUG ABUSE, DIRECTOR DR. NORA VOLKOW

NIDA's Dr. Nora Volkow Discusses Marijuana's Effects on the Brain, Body & Behavior

<https://www.youtube.com/watch?v=RSDnLSU3owc>

Hear a fascinating presentation by Dr. Nora Volkow, Director of the National Institute on Drug Abuse, about the effects of marijuana use on the brain, body and behavior. Dr. Volkow's remarks were given on Feb. 4th at CADCA's 24th National Leadership Forum.

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Attachment: Letters from the public [Revision 1] (3045 : Request for Cannabis Report)

From: [Ronald Kirkish](#)
To: [Christina Turner](#); [Rich Constantine](#); [Yvonne Martinez Beltran](#); [Rene Spring](#); [John McKay](#); [Shane Palsgrove](#); [Gino Borzioli](#)
Cc: [Matt Wendt](#); [Chris Borello](#); [REDACTED]; [Ladera Grill Dan](#); [Bob Cooke](#)
Subject: Re: NIDA's Dr. Nora Volkow Discusses Marijuana's Effects on the Brain, Body & Behavior
Date: Thursday, March 25, 2021 8:00:22 AM

And if you have time, this is another NIH Dr. Nora Volkow video explaining how drugs hijack the brain, causing a person to become a drug addict; especially including marijuana.

<https://youtu.be/X1AEvkWxbLE>

Ronald L. Kirkish
 [retired Drug Prevention Officer, NCRIC/SF-HIDTA]

On Mar 25, 2021, at 7:17 AM, Ronald Kirkish [REDACTED] > wrote:

<7C97896E-3D54-41B9-BC9B-CE6E492DC06F.jpeg>

NATIONAL INSTITUTE OF DRUG ABUSE, DIRECTOR DR. NORA VOLKOW

NIDA's Dr. Nora Volkow Discusses Marijuana's Effects on the Brain, Body & Behavior

<https://www.youtube.com/watch?v=RSDnLSU3owc>

Hear a fascinating presentation by Dr. Nora Volkow, Director of the National Institute on Drug Abuse, about the effects of marijuana use on the brain, body and behavior. Dr. Volkow's remarks were given on Feb. 4th at CADCA's 24th National Leadership Forum.

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Attachment: Letters from the public [Revision 1] (3045 : Request for Cannabis Report)

From: [Ronald Kirkish](#)
To: [Christina Turner](#); [Rich Constantine](#); [Yvonne Martinez Beltran](#); [Rene Spring](#); [John McKay](#); [Shane Palsgrove](#); [Gino Borgioli](#)
Cc: [Bob Cooke](#); [Matt Wendt](#); [Chris Borello](#); [Ladera Grill Dan](#); [REDACTED] [Terry Ratto](#)
Subject: Re: Santa Cruz area residents 'blissfully unaware' of illegal drug trade in the forest
Date: Wednesday, March 31, 2021 11:02:00 AM

So, please ask yourselves folks, why are Mayor Constantine and Councilman Spring so interested in helping kids make such poor life choices? To destroy their lives, their futures.....why??

Ronald L. Kirkish

On Mar 31, 2021, at 10:47 AM, Ronald Kirkish [REDACTED] > wrote:

Dear All,

As in the City of Santa Cruz, CA, the City of Morgan Hill has at least two individuals sitting on Morgan Hill's City Council whose lax attitude towards drug abuse and whose agenda it is to advocate for permitting marijuana businesses to operate within the City Limits of Morgan Hill.

In a recent email, I shared my concerns that should these two individuals be successful in their 3rd attempt to aid and abet this business to open in MH, they would be turning their city into the likes of Santa Cruz, a horror story that has created a hell-hole of drug abuse for their community all because of their liberal drug laws.

For your consideration:

Santa Cruz area residents 'blissfully unaware' of illegal drug trade in the forest

<https://www.mercurynews.com/2010/05/21/santa-cruz-area-residents-blissfully-unaware-of-illegal-drug-trade-in-the-forest/>

The Citizens of Morgan Hill do not deserve to have their community turned into a community like Santa Cruz.

Ronald L. Kirkish

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From: [Ronald Kirkish](#)
To: [Christina Turner](#); [Rich Constantine](#); [Yvonne Martinez Beltran](#); [Rene Spring](#); [John McKay](#); [Shane Palsgrove](#); [Gino Borgioli](#)
Cc: [Bob Cooke](#); [Matt Wendt](#)
Subject: Santa Cruz Media Release: Narcotics and Weapons seizure [meth]
Date: Thursday, April 8, 2021 10:09:57 AM
Attachments: [UNADJUSTEDNONRAW_thumb_6dd.jpeg](#)

Dear All,

On more than a few occasions, I've tried to warn the elected's in the City of Morgan Hill, why it would be irresponsible for them to vote to approve allowing marijuana businesses in their city's jurisdiction.

I've warned that these businesses provide a hub for criminals to sell their whole smorgasbord of illegal and dangerous drugs, illegal guns and so much more; including blackmarket marijuana.

I have also used the City of Santa Cruz as the not so shining example for what **"happens"** when a city has politicians whose agenda is to be "soft on drugs"; especially marijuana.

Matt, if you agree, please consider share this important information with others within your sphere of influence and who reside in Morgan Hill.

For your consideration and B/r,

Ronald L.Kirkish



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From: [Nancy Benich](#)
To: [Rene Spring](#); [Rich Constantine](#); [John McKay](#); [Yvonne Martinez Beltran](#); [Gino Borgioli](#); [Christina Turner](#)
Subject: Smoke shops and marijuana dispensaries
Date: Wednesday, March 24, 2021 3:10:52 PM

Dear Sirs and Madam,

I highly object to encouraging Smoke Shops and or marijuana dispensaries to do business in Morgan Hill. Research has shown that many who frequent these shops obtain prescriptions illegally and do not have legitimate reasons for using medical marijuana. Research also shows that children sometimes obtain access to this addictive drug. Early use of pot can have severe long term effects on the human body. Please do not vote to allow these kinds of businesses in Morgan Hill.

Nancy Benich
Retired Teacher

Sent from my iPhone

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Attachment: Letters from the public [Revision 1] (3045 : Request for Cannabis Report)

From: [Ronald Kirkish](#)
To: [Christina Turner](#); [Rich Constantine](#); [Yvonne Martinez Beltran](#); [Rene Spring](#); [John McKay](#); [Shane Palsgrove](#); [Gino Borgioli](#)
Cc: [Matt Wendt](#)
Subject: Title: Smokescreen (National Version)
Date: Tuesday, April 6, 2021 8:54:26 PM

Dear all,

You want to know the truth about pot?? Here it is for your consideration.

Don't be fooled by the medical marijuana smokescreen. Every state that has legalized recreational marijuana started by passing seemingly harmless "medical marijuana" laws

Title: Smokescreen (National Version)

<https://youtu.be/OKMMcritHb0>

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From: Fawn Myers <[REDACTED]>
Sent: Friday, April 16, 2021 5:40 PM
To: Michelle Bigelow <Michelle.Bigelow@morganhill.ca.gov>
Subject: Agenda for 4/21/21 - On retail cannabis

Dear City Clerk,

I have submitted the following to the Mayor, Mayor Pro Tem, and each council member:

Dear Council Member,

After a thorough discussion of allowing storefront retail of cannabis products in Morgan Hill, the City Council ultimately voted no.

Despite a robust discussion and community engagement on this topic in 2019, a council member has asked that the issue be brought forward again. As with many topics, there are competing interests and facts, and it behooves all of us within the community to ponder the motivation of those who are in favor of retail cannabis.

- **Interest:** Increase local tax base. **Competing facts:** Other communities have NOT experienced an increase in local tax revenue when adjusting for increased security and enforcement costs.
- **Interest:** Increase access for local residents to legalized cannabis products. **Competing facts:** Residents who are legally able to purchase already have access to legal products in nearby communities and by ordering online. Those who wish to purchase may already do so.
- **Interest:** Cannabis industry wants access to expand their market. **Competing facts:** Expanding the market may be good for the individual business owner but there are costs to the city (increased security and enforcement) and the larger community (increased product available for underage consumers) by increasing the amount of cannabis within the area.
- **Interest:** Elected officials may want to appease a portion of their constituents. **Competing facts:** Have any of the elected officials received a campaign contribution from the cannabis industry or from individual cannabis business owners who now expect to buy a favorable vote?

I share with you a recent editorial from Denver. Communities are struggling with legalization of cannabis and increased need for services and intervention for who abuse the products. We can learn from these communities. The concluding statement in this article is: "Shutting down the pipeline to our schools is essential for public health and safety."

THE DENVER POST EDITORIAL BOARD on February 28, 2021.

Attachment: Letters from the public [Revision 1] (3045 : Request for Cannabis Report)

“Colorado doctors say they are seeing an alarming spike in patients suffering psychosis — a break from reality that comes with disorders like schizophrenia — especially in young patients using high-potency marijuana concentrates.

“It’s OK to be skeptical of that anecdote. We were too. After all, marijuana is a natural plant that has been used for centuries as a medicine and for fun. It gives users a mild, mostly benign, high from the compound Delta-9-tetrahydrocannabinol.

“However, reading peer-reviewed research in top medical journals around the world has led us to conclude the risk of high-potency marijuana to Coloradan’s mental health is substantial. Marijuana must be regulated as any other harm-causing food, medicine or recreational drug. Products with high levels of caffeine are regulated for safety. Tobacco products come with warnings about cancer, and flavored cigarettes have long been banned. Grain alcohol like Everclear isn’t sold in grocery stores or convenience stores for a reason.

“And yet, a teen with a medical marijuana card is able to “loop purchase” — the act of going to several stores to purchase the maximum allowable amount multiple times — enough watermelon-flavored concentrate to have his or her entire senior class high for a week.

“Chris Rogers, the medical director of child and adolescent services at The Medical Center of Aurora, has no doubt that high-potency marijuana concentrates are causing psychosis in the adolescent patients he treats.

“ ‘It has not been good for the kids of Colorado,’ Rogers, the past-president of the Colorado Child and Adolescent Psychiatry Society, said. He said patients exhibit extreme paranoia and lose all touch with reality believing doctors and parents are out to get them or that food and water are poison. “There’s no telling who comes back from this and who doesn’t. It can be recurrent, and it tends to get worse.”

“This isn’t your grandma’s joint. This new age remix of chemically isolated THC in a crystal-like or liquid substance — shatter, oil or wax — is heated with a butane torch or vape pen and inhaled. It’s called dabbing. And the products contain 60% to 90% THC, generating a high described as mind-blowing in marijuana publications.

“When Colorado voters approved the sale of marijuana for both medical and recreational use, many of us were sold on it being a holistic remedy for our aches, pains and anxiety. We still believe that is the case for many marijuana products on the market today.

“But for a decade now peer-reviewed research in medical journals has been documenting the prevalence of marijuana use, particularly of these high-potency concentrates, among patients suffering psychosis. Studies in the Lancet Psychiatry, Neuropharmacology, Asian Journal of Psychiatry, American Journal of Psychiatry, The American Journal on Addictions and World Psychiatry, have explored the link.

“There is some research suggesting that the link may be correlated and not causal – meaning those suffering from psychosis may be more likely to use cannabis and other drugs to self-medicate. But one study, in particular, found a higher rate of psychosis in cities with easy access to high-concentrate marijuana in addition to a high rate of concentrates use among those seeking treatment for psychosis.

“Cannabis users need to know the risks. We learned from Big Tobacco the damage of waiting for scientifically proven causation.

“Colorado lawmakers must take action this session. Legislation is being proposed that would cap the potency of marijuana products to something more reasonable like 30%, which is about the most that can be found in the actual non-refined flower product. Critically, the legislation also must

create a shared computer system for tracking purchases across multiple stores to prevent looping. And we must find a way to ensure teens with medical marijuana cards are getting the drug they need for medical purposes and that's all.

"We aren't calling for the recriminalization of these drugs — putting teens behind bars for selling a legal product to their friends would do more harm than good. But shutting down the pipeline to our schools is essential for public health and safety, and there are reasonable measures we can put in place to protect teens."

Respectfully,

Fawn

Fawn Myers
Assistant Superintendent of Human Resources
Morgan Hill Unified School District
15600 Concord Circle
Morgan Hill, CA 95037
408-201-6015 or ext. 51015
MyersF@mhusd.org

Input - Intellection - Learner - Context - Relator

"I define a leader as anyone who takes responsibility for finding the potential in people and processes, and who has the courage to develop that potential." Brené Brown, *Dare to Lead: Brave Work. Tough Conversations. Whole Hearts*

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From: [D. Muirhead](#)
To: [CC Public Comment](#)
Subject: comment City Council Meeting April 21, 2021 Item #4: Information Technology Services
Date: Monday, April 19, 2021 9:45:53 AM

Dear Morgan Hill City Council,
A comment for your
Meeting April 21, 2021
Item #4: Information Technology Services

This item allows an expenditure of \$1,029,269 over three years for a consultant contract with Civic Foundry, LLC.

What sort of institutional knowledge will the City have at the end of this contract? What sort of staff will we have to address the current lack of in-house network engineering and modern server skill sets? And as I tirelessly and futilely remind you, we have no project management standards (priority, timelines, milestones, deliverables) to use to assess the proposed list of tasks. So how will we comprehensively address ALL of the IS engineering needs of the City?

We have a short laundry list of future tasks in the Strategic Priorities 2020-2021 Workplan [Note 1] and a longer laundry list in the Contract Scope [Note 2]. The staff report lists these accomplishments:

Over the course of the previous fiscal year, Civic Foundry has addressed several recommendations from previous IS assessments, enhanced and enabled organization wide mobile computing capability in response to COVID-19, and replaced core network infrastructure.

The offer letter from Civic Foundry includes the following:

It has become increasingly evident that the City's lack of in-house network engineering or modern server skill sets is hindering its ability to maintain stability, reliability, and security of the organization's data and technical infrastructure. The need for these skills will undoubtedly grow as the City will soon be required to address a number of remediation items as a result of upcoming security, PCI, and DOJ assessments. This proposal will begin to address the backlog of requirements within the budget constraints of the City.

However, one position will not comprehensively address all of the engineering needs of the City, nor will it be able to launch and maintain an ongoing information security program as required by regulatory compliance associated with taking credit cards, or DOJ and general controls associated with financial risk by government agencies.

The staff report states that as of September 2019, the Information Technology Director (IT) position was vacant and a recruitment had been unsuccessful.

The staff report states that as of January 2021, an Information Services Technician position had an ongoing vacancy.

We have no idea how the City attempts to recruit for these positions nor what feedback they get as to why recruitment is unsuccessful. Remember that this contract only compensates for in-house gaps for three years. As a side note, you might be interested in knowing that

the County just added two Data Engineer positions for a total cost of \$559,234.

Civic Foundry proposes that Civic Foundry will provide IS Department leadership and supervision of its own staff (Network/Server Engineer and IT Support Specialist) for a sum of \$333,000 per year.

We have no idea of the number of hours allocated to each of these positions and thus our costs for each individual.

If these were City employees, we would have a detailed pay breakdown from the yearly Compensation report. Of particular concern to me is whether the City getting the real equivalent of Department Manager in the "executive level technology leadership"?

Civic Foundry proposes that the Police Department will directly manage City IS staff (Programmer Analyst and IS Technician). The 2020 City compensation report does not identify a Programmer Analyst position in Information Services.

The City Information Systems Technician had Total Compensation in 2020 of \$175,689.

Since the Information Services Manager position does not appear in 2020, we only have the 2019 Total Compensation of \$181,472 as a hint as to what the City might offer.

It never made sense to me to put Information Services under the Police Department. Was this anything more than availability of warm bodies?

Bonus Item: What happened to enhancing the Strategic Priorities 2020-2021 Workplan from the last Goals Workshop with project management standards (priorities, timelines, milestones, deliverables)? Council Member Spring requested this but the City Manager replied that she could do that if that is what the Council wanted. She did not poll the Council Members at that time. Who takes the next step to see if other Council Members see this recommendation as appropriate?

Thank you for your consideration, Doug Muirhead, Morgan Hill

[Note 1] Strategic Priorities 2020-2021 Workplan

Police & Information Technology (Fiscal Sustainability)

#37 Implement processes that enhance productivity and increase efficiencies such as helpdesk system, disaster recovery plan, remote assistance tools, and mobile device management system

[Note 2] EXHIBIT A SCOPE OF SERVICES

- Provide executive level technology leadership to the City organization
- Provide equivalent of one server engineer resource
- Provide equivalent of one on-site helpdesk technician for a live-answer helpdesk
- Provide tier-one troubleshooting of helpdesk requests
- Provide daily maintenance and administration of the City's network
- Provide daily maintenance and administration of the City's wired and wireless networks
- Administer and maintain the City's firewalls
- Provide daily maintenance and administration of the City's servers (moves, adds, changes, upgrades, etc.)
- Perform server patching
- Provide network support for public safety systems and to City's IS

technician

- Plan cooperatively with the City and begin remediation efforts of findings on security audits
- Scope network projects for time, resources, and funding
- Draft hardware specifications for technology purchases and/or budget forecasting
- Draft budget proposals for future IT investments that maximize the City's return-on-investments or address critical infrastructure or security needs
- Draft a five-year strategic plan for technology

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Item # 04

AGENDA DATE: 04/21/2021

SUPPLEMENT # 2

From: [Christina Turner](#)
To: [Michelle Bigelow](#); [Angie Gonzalez](#)
Cc: [Shane Palsgrove](#); [Patti Yinger](#); [Vijay Sammeta](#)
Subject: FW: comment City Council Meeting April 21, 2021 Item #4: Information Technology Services
Date: Wednesday, April 21, 2021 5:00:31 PM
Attachments: [DM response - IT services.docx](#)

Please supplement.

-----Original Message-----

From: Christina Turner
Sent: Wednesday, April 21, 2021 5:00 PM
To: D. Muirhead <[REDACTED]>
Subject: RE: comment City Council Meeting April 21, 2021 Item #4: Information Technology Services

Hi Doug - a few comments on IT Services and Civic Foundry below and then I have attached responses to your inquiries.

- The City has a considerable number of projects in-progress in which Civic Foundry serves as the City's subject matter expert and lead because the required skills sets do not exist in house:
 - o SCADA, PCI, CJIS and NIST security assessments
 - o City works Asset Management Deployment
 - o Infrastructure modernization such as our internet redundancy for apps like Text-to-911
- There are critical applications and services running on end-of-life servers and storage that need to be upgraded to ensure security, integrity and availability of the system and bringing in another vendor at this point would lengthen the time necessary to get these things done. An RFP would require the City to take up to a year to select a vendor, then that vendor would need to become familiar with the City infrastructure and then begin to address the security and infrastructure issues.
- Simply filling the existing internal positions won't provide the skills needed to do the amount and type of work that's required to address the infrastructure and security backlog. This contract affords the City the time and skills needed to address only its most immediate IT needs, complete the necessary assessments, and then re-evaluate the City's future strategy to get the City current and have the right skill sets and number of resources required to stay current and compliant with security and technology lifecycles.

Thank you,
Christina

-----Original Message-----

From: D. Muirhead <[REDACTED]>
Sent: Monday, April 19, 2021 9:46 AM
To: CC Public Comment <CCPublicComment@morganhill.ca.gov>
Subject: comment City Council Meeting April 21, 2021 Item #4: Information Technology Services

Dear Morgan Hill City Council,
A comment for your
Meeting April 21, 2021
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milestones, deliverables) to use to assess the proposed list of tasks. So how will we comprehensively address ALL of the IS engineering needs of the City?

We have a short laundry list of future tasks in the Strategic Priorities 2020-2021 Workplan [Note 1] and a longer laundry list in the Contract Scope [Note 2]. The staff report lists these accomplishments:

Over the course of the previous fiscal year, Civic Foundry has addressed several recommendations from previous IS assessments, enhanced and enabled organization wide mobile computing capability in response to COVID-19, and replaced core network infrastructure.

The offer letter from Civic Foundry includes the following:

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However, one position will not comprehensively address all of the engineering needs of the City, nor will it be able to launch and maintain an ongoing information security program as required by regulatory compliance associated with taking credit cards, or DOJ and general controls associated with financial risk by government agencies.

The staff report states that as of September 2019, the Information Technology Director (IT) position was vacant and a recruitment had been unsuccessful.

The staff report states that as of January 2021, an Information Services Technician position had an ongoing vacancy. We have no idea how the City attempts to recruit for these positions nor what feedback they get as to why recruitment is unsuccessful.

Remember that this contract only compensates for in-house gaps for three years. As a side note, you might be interested in knowing that the County just added two Data Engineer positions for a total cost of \$559,234.

Civic Foundry proposes that Civic Foundry will provide IS Department leadership and supervision of its own staff (Network/Server Engineer and IT Support Specialist) for a sum of \$333,000 per year.

We have no idea of the number of hours allocated to each of these positions and thus our costs for each individual. If these were City employees, we would have a detailed pay breakdown from the yearly Compensation report. Of particular concern to me is whether the City getting the real equivalent of Department Manager in the "executive level technology leadership"?

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Bonus Item: What happened to enhancing the Strategic Priorities

2020-2021 Workplan from the last Goals Workshop with project management standards (priorities, timelines, milestones, deliverables)?

Council Member Spring requested this but the City Manager replied that she could do that if that is what the Council wanted. She did not poll the Council Members at that time. Who takes the next step to see if other Council Members see this recommendation as appropriate?

Thank you for your consideration, Doug Muirhead, Morgan Hill

[Note 1] Strategic Priorities 2020-2021 Workplan

Police & Information Technology (Fiscal Sustainability)
#37 Implement processes that enhance productivity and increase efficiencies such as helpdesk system, disaster recovery plan, remote assistance tools, and mobile device management system

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Meeting April 21, 2021
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What sort of institutional knowledge will the City have at the end of this contract? What sort of staff will we have to address the current lack of in-house network engineering and modern server skill sets?

The contract addresses two critical areas, the immediate need for engineering skillsets to keep the critical operations of the City going and second allow sufficient time for the City to review the outcomes of the pending security assessment, skill sets required to support the updated computing environment and the number of resources required in relation to the City's fiscal situation. Civic Foundry will document the environment as it is modernized, and staff will always have access to that documentation as it resides within the City infrastructure. This contract allows us to address the most essential network, server and desktop support needs, while giving us time to evaluate our IT strategy. We are in the middle of an IT security assessment and we want to use input from Civic Foundry, the security assessment, and IT investments that need to be made in the future to take a holistic approach in setting a new strategy to address IT needs.

And as I tirelessly and futilely remind you, we have no project management standards (priority, timelines, milestones, deliverables) to use to assess the proposed list of tasks. So how will we comprehensively address ALL of the IS engineering needs of the City?

We have a short laundry list of future tasks in the Strategic Priorities 2020-2021 Workplan [Note 1] and a longer laundry list in the Contract Scope [Note 2]. The staff report lists these accomplishments:

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The offer letter from Civic Foundry includes the following:

It has become increasingly evident that the City's lack of in-house network engineering or modern server skill sets is hindering its ability to maintain stability, reliability, and security of the organization's data and technical infrastructure. The need for these skills will undoubtedly grow as the City will soon be required to address a number of remediation items as a result of upcoming security, PCI, and DOJ assessments. This proposal will begin to address the backlog of requirements within the budget constraints of the City. However, one position will not comprehensively address all of the engineering needs of the City, nor will it be able to launch and maintain an ongoing information security program as required by regulatory compliance associated with taking credit cards, or DOJ and general controls associated with financial risk by government agencies.

The staff report states that as of September 2019, the Information Technology Director (IT) position was vacant and a recruitment had been unsuccessful. [The City extended an offer to the top candidate in 2019 who subsequently withdrew from the process.](#)

The staff report states that as of January 2021, an Information Services Technician position had an ongoing vacancy. [During the initial response to Covid 19, the City was evaluating how and where to save money. Unfortunately, some positions were not filled, and others were eliminated.](#)

We have no idea how the City attempts to recruit for these positions nor what feedback they get as to why recruitment is unsuccessful.

Remember that this contract only compensates for in-house gaps for three years. As a side note, you might be interested in knowing that the County just added two Data Engineer positions for a total cost of \$559,234.

Civic Foundry proposes that Civic Foundry will provide IS Department leadership and supervision of its own staff (Network/Server Engineer and IT Support Specialist) for a sum of \$333,000 per year.

We have no idea of the number of hours allocated to each of these positions and thus our costs for each individual.

If these were City employees, we would have a detailed pay breakdown from the yearly Compensation report. Of particular concern to me is whether the City getting the real equivalent of Department Manager in the "executive level technology leadership"? [The City has already received and will continue to receive executive level technology leadership from Civic Foundry. Civic Foundry leadership team is engaged for day-to-day issues, such as the implementation of Cityworks asset management system and have been available to City leadership 24x7 for critical issues over the past year. They helped us with the pandemic response by transitioning the organization to remote work including increasing required internet bandwidth and deploying new remote access solutions for employees who needed to abruptly start working from home. They enabled us to move our aquatics and CRC programs outside and supported streaming classes online. They addressed urgent time-sensitive issues as the recent fiber cuts, and they provide leadership in various capital projects like the fiber build out for City facilities and the Magical Bridge playground project. The Civic Foundry leadership team that the City works with have held executive level government leadership positions in public, private and non-profit sectors and we have been able to leverage their expertise in many areas. We feel confident we can expect the same in the new contract.](#)

Civic Foundry proposes that the Police Department will directly manage City IS staff (Programmer Analyst and IS Technician).

The 2020 City compensation report does not identify a Programmer Analyst position in Information Services. [The Programmer Analyst Management position is listed on page 6 of the report. It shows a total compensation of \\$178,510.](#)

The City Information Systems Technician had Total Compensation in 2020 of \$175,689.

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Council Member Spring requested this but the City Manager replied that she could do that if that is what the Council wanted. She did not poll the Council Members at that time. Who takes the next step to see if other Council Members see this recommendation as appropriate?

The workplan is posted [here](#) with information on progress.

Thank you for your consideration, Doug Muirhead, Morgan Hill

[Note 1] Strategic Priorities 2020-2021 Workplan

Police & Information Technology (Fiscal Sustainability)

#37 Implement processes that enhance productivity and increase efficiencies such as helpdesk system, disaster recovery plan, remote assistance tools, and mobile device management system

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City Council Meeting Consent Items #6 & #7 Density Bonus/Concession Requests The Magnolias & Monterey/Madrone



April 21, 2021

Background



- California Government Code Sections 65915 – 65918 contain the Density Bonus Law.
- Provides developers with tools to encourage the development of affordable and senior housing
- Includes up to a 50% increase in project densities for most projects, depending on the amount of affordable housing provided
- 80% increase in density for projects which are 100% affordable
- Unlimited density increase if within ½ mile of train station
- Regulations intended to help make the development economically feasible
 - reduced parking requirements
 - concessions and waivers to development standards
- Project that meets state law requirements is entitled to receive the density bonus, concessions and waivers as a matter of right but require sign off or “approval” by the City

Background



- Both projects discussed today are 100% affordable projects
- Entitled to the 80% density bonus and 4 concessions
- Also entitled to a reduced parking ratio
- Both projects are processing under State Density Bonus Law and SB330
- Projects would be moving forward if RDCS was still in effect
- Exceptions are provided under Density Bonus Law
- SB330 relates to processing – no exceptions to development standards are included under those regulations
- SB330 does require projects to adhere to the City Residential Development Design and Development Standards unless deviations are requested as concessions or waivers.

The Magnolias - Project Description



- Located on west side of Monterey Road across from the Community Adult School



The Magnolias - Project Description



- 66-units deed-restricted units
 - 16 studios,
 - 16 one-bedroom units,
 - 17 two-bedroom units
 - 17 three-bedroom units
 - 1 three-bedroom unit reserved for on-site staff
- 50% of units combination of permanent supportive housing and rapid rehousing units, restricted for households at 30 percent Area Median Income (AMI)
- 50% percent of the units would be target to families earning up to 60 percent AMI

The Magnolias - Density Bonus and Concession Request



100% affordable project =
80% density bonus and 4 concession requests

Concession 1 – Design Standard #26: Exterior Treatments & Materials

- 2 materials per façade to 1 material per façade

Concession 2 - Design Standard #30: Building Colors

- Limit of 4 colors on exterior to 9 exterior colors

Concession 3 - Design Standard #31: Window Design

- Modular construction does not allow full 6" depth to glass surface

Concession 4 - Design Standard #39: Multi-family roof form

- Flat roof with parapets versus traditional room form

The Magnolias

Other Requests Permitted by Right



Density Bonus Law Maximum allowable parking ratios:

Parking not required for supportive housing.

- 67 spaces provided
- Standard: 46
- Compact: 16
- Accessible: 5

Included within the 67

- EV: 5
- Accessible EV: 2

The Magnolias

Other Requests Permitted by Right



Waivers

Waiver 1 - Design Standard #12: Trees

- 2:1 replacement ratio to 1:1 replacement ratio

Waiver 2 - Development Standard F.A.R

- Allowed F.A.R. for Zone MU-F: 0.5
- Proposed F.A.R.: 1.4

Waiver 3 - Development Standard Building Height

- Allowed Building Height for Zone MU-F: 45'-0"
- Proposed Building Height: 68'-0"

Waiver 4 - Development Standard Front Setback

- Minimum Setback for Zone MU-F, Res.: 15'-0"
- Proposed Setback: 10'-0"

Monterey/Madrone Project Description



- Located at the corner of Monterey Road and Madrone



Monterey/Madrone Project Description



249 units – 246 deed-restricted units

- 70 one-bedroom units
- 116 two-bedroom units
- 63 three-bedroom units
- 3 manager units (3 bd units)
- Active and passive open space amenities
- Centrally located clubhouse
- Gated EVA along Taylor Avenue

Monterey/Madrone Density Bonus and Concession Request



100% affordable projects =
80% density bonus and 4 concession requests

Project requests 3 concessions

Concession 1 - Parking Space Dimensions

- Garage parking space dimensions 10' x 20' reduced to 10' by 18'

Concession 2 - Bicycle Parking and Storage

- No covered or long-term bicycle parking

Concession 3 - Pavement Design

- Decorative paving material required: 10% of the paved surface area reduced to 2%

Monterey/Madrone

Other Requests Permitted by Right



Density Bonus Law Maximum allowed parking ratios: 1 space for 1 bedroom units, 2 spaces for 2 and 3 bedroom units

Parking:

<u>Unit Type</u>	<u>Req'd Ratio</u>	<u>Req'd Parking</u>
1 Bedroom	1 sp/DU	70 spaces
2 Bedroom	2 sp/DU	232 spaces
3 Bedroom	2 sp/DU	126 spaces
Total Required		±428 (1.7 spaces per unit)

<u>Parking Type</u>	<u>Provided Parking</u>
Tandem Carport Spaces	260 spaces
Single Carport Spaces	5 spaces
Standard Open Spaces	14 spaces
Compact Open Spaces	98 spaces
ADA Open Spaces	8 spaces
<u>EV-Ready Spaces</u>	<u>43 spaces</u>
Total Provided	±428 (1.7 spaces per unit)

Monterey/Madrone

Other Requests Permitted by Right



Waivers

Waiver 1 – Front Setback-Taylor Avenue

- Minimum Setback for Zone RAL: 20'-0"
- Proposed Minimum Setback: 15.7"

Waiver 2 - Development Standard F.A.R

- Allowed F.A.R. for Zone MU-F: 0.5
- Proposed F.A.R.: 0.8

Waiver 3 - Development Standard Building Height

- Allowed Building Height: 35'-0"
- Proposed Building Height: 38'-0"

Review of Concession Requests



Does the **concession/incentive** result in identifiable and actual cost reductions to provide affordable housing?

Results in identifiable and actual cost reductions, to provide for affordable housing costs, as defined in Section 50052.5 of the Health and Safety Code, or for rents for the targeted units to be set as specified in subdivision (c).

Review of Waiver Requests



- Waivers will be considered during review of the Design Review permit
- Does the standard physically prevent the development of the housing at the density allowed?
- City may not apply a development standard that will have the effect of physically precluding the construction of a development at the densities or with the concessions or incentives permitted.

Findings for Denial-Substantial Evidence



- a. The concession or incentive does not result in identifiable and actual cost reductions.
- b. The concession or incentive would have a specific, adverse impact, upon public health and safety or the physical environment or on any historic property that cannot be mitigated to avoid the impact without rendering the project unaffordable.
- c. The concession or incentive would be contrary to state or federal law.

Findings for Denial-Substantial Evidence



Specific adverse impact definition:

A significant, quantifiable, direct, and unavoidable impact, based on objective, identified written public health or safety standards, policies, or conditions as they existed on the date the application was deemed complete.

The following shall not constitute a specific, adverse impact upon the public health or safety:

(A) Inconsistency with the zoning ordinance or general plan land use designation.

(B) The eligibility to claim a welfare exemption under subdivision (g) of Section 214 of the Revenue and Taxation Code.

Next Steps



- Projects will move forward to the environmental review process
- Design Permit will be considered by Planning Commission
- For more information, a FAQ on Density Bonus Law can be found here: <https://www.morgan-hill.ca.gov/2160/Density-Bonus-Law>

QUESTIONS?



CITY OF MORGAN HILL

From: [Christina Turner](#)
To: [Michelle Bigelow](#); [Angie Gonzalez](#)
Cc: [Donald Larkin](#); [Jennifer Carman](#); [Rebecca Garcia](#); [Cynthia Hasson](#); [Edith Ramirez](#)
Subject: Supplement for Items 6 and 7
Date: Tuesday, April 20, 2021 2:48:36 PM
Attachments: [Monterey-Madrone.pdf](#)
[The Magnolias.pdf](#)

1. *Do we have a table anywhere that lists (for each one of these projects)*

-The exception requested

-Based upon which state bill or law the exception got requested

-The exact wording of that applicable bill / law that applies to the exception to get granted

- Possible an explanation of certain terms referred to and where those are defined in the applicable law (e.g. major transit stop etc).

Attached are the tables requested. Please note that the highlighted letters within the code citations connect to the supplement information in the last column.

2. *When could 'safety' or 'environmental' concerns get applied by a city to such projects? What specifically are examples of such 'concerns'?*

The Government Code first cites that these safety or environmental problems must be a "specific adverse impact" as defined in paragraph (2) of subdivision (d) of Section 65589.5. This rule defines a "specific adverse impact" a significant, quantifiable, direct, and unavoidable impact, based on objective, identified written public health or safety standards, policies, or conditions as they existed on the date the application was deemed complete.

Examples of these types of safety or environmental concerns could be:

- a. The project asks for waivers to development standards that could increase flooding risk or create flooding hazards.
- b. The project asks for waivers that would prevent fire access - either through the elimination of an EVA or circulation design.

Projects are vetted by all departments during the application process and those types of potential impacts would be addressed at the design stage. Only if the developer continued to insist on the deviation that could create an impact would this issue be raised. In the case of these two applications, there are no safety or environmental issues that would raise concerns about the requested waivers at this time.

Regards,

Christina

Monterey/Madrone

Exception Requested	Government Code Section	Exact Wording of Law	Additional Explanation
Density Bonus 80%	65915.f.3.D.i	(D) For housing developments meeting the criteria of subparagraph (G) of paragraph (1) of subdivision (b), the following shall apply: (i) Except as otherwise provided in clause (ii), the density bonus shall be 80 percent of the number of units for lower income households.	G. One hundred percent of all units in the development, including total units and density bonus units, but exclusive of a manager's unit or units, are for lower income households, as defined by Section 50079.5 of the Health and Safety Code, except that up to 20 percent of the units in the development, including total units and density bonus units, may be for moderate-income households, as defined in Section 50053 of the Health and Safety Code.
Concession 1 – Parking Space Dimensions	65915.d.2.D	(d) (1) An applicant for a density bonus pursuant to subdivision (b) may submit to a city, county, or city and county a proposal for the specific incentives or concessions that the applicant requests pursuant to this section, and may request a meeting with the city, county, or city and county. The city, county, or city and county shall grant the concession or incentive requested by the applicant unless the city, county, or city and county makes a written finding, based upon substantial evidence, of any of the following:	(2) The housing development project or emergency shelter as proposed would have a specific, adverse impact upon the public health or safety, and there is no feasible method to satisfactorily mitigate or avoid the specific adverse impact without rendering the development unaffordable to low- and moderate-income households or rendering the development of the emergency shelter financially infeasible. As used in this paragraph, a “specific, adverse impact” means a significant, quantifiable, direct, and unavoidable impact, based on objective, identified written public health or safety standards, policies, or conditions as they existed on the date the application was deemed complete. The following shall not
Concession 2 Bicycle Parking and Storage	65915.d.2.D	(A) The concession or incentive does not result in identifiable and actual cost reductions, consistent with subdivision (k), to provide for affordable housing costs, as defined in Section 50052.5 of the Health and Safety Code, or for rents for the targeted units to be set as specified in subdivision (c).	
Concession 3 Pavement Design	65915.d.2.D	(B) The concession or incentive would have a specific, adverse impact, as defined in paragraph (2) of subdivision (d) of Section 65589.5, upon public health and safety or the physical environment or on any real property that is listed in the California Register of Historical Resources and for which there is no feasible method to satisfactorily mitigate or avoid the specific, adverse impact without rendering the development unaffordable to low-income and moderate-income households. (C) The concession or incentive would be contrary to state or federal law.	

		(2) The applicant shall receive the following number of incentives or concessions: (D) Four incentives or concessions for projects meeting the criteria of subparagraph (G) of paragraph (1) of subdivision (b). If the project is located within one-half mile of a major transit stop, the applicant shall also receive a height increase of up to three additional stories, or 33 feet.	constitute a specific, adverse impact upon the public health or safety: (A) Inconsistency with the zoning ordinance or general plan land use designation. (B) The eligibility to claim a welfare exemption under subdivision (g) of Section 214 of the Revenue and Taxation Code. Purpose: Does it result in identifiable and actual cost reductions to provide affordable housing? Results in identifiable and actual cost reductions, to provide for affordable housing costs, as defined in Section 50052.5 of the Health and Safety Code, or for rents for the targeted units to be set as specified in subdivision (c).
Exceptions allowed by right			
Parking	65915.p.1	(p) (1) Except as provided in paragraphs (2), (3), and (4), upon the request of the developer, a city, county, or city and county shall not require a vehicular parking ratio, inclusive of parking for persons with a disability and guests, of a development meeting the criteria of subdivisions (b) and (c), that exceeds the following ratios: (A) Zero to one bedroom: one onsite parking space. (B) Two to three bedrooms: one and one-half onsite parking spaces. (C) Four and more bedrooms: two and one-half parking spaces.	Parking provided: 1 parking space per 1 bedroom unit and two parking spaces per two or three bedroom unit (inclusive of ADA and guest parking)
Waiver 1	65915.e	(e) (1) In no case may a city, county, or city and county apply any development standard that will have the effect of physically precluding the	Significant adverse impact definition above

Building Height		construction of a development meeting the criteria of subdivision (b) at the densities or with the concessions or incentives permitted by this section. Subject to paragraph (3), an applicant may submit to a city, county, or city and county a proposal for the waiver or reduction of development standards that will have the effect of physically precluding the construction of a development meeting the criteria of subdivision (b) at the densities or with the concessions or incentives permitted under this section, and may request a meeting with the city, county, or city and county. If a court finds that the refusal to grant a waiver or reduction of development standards is in violation of this section, the court shall award the plaintiff reasonable attorney's fees and costs of suit. Nothing in this subdivision shall be interpreted to require a local government to waive or reduce development standards if the waiver or reduction would have a specific, adverse impact, as defined in paragraph (2) of subdivision (d) of Section 65589.5, upon health, safety, or the physical environment, and for which there is no feasible method to satisfactorily mitigate or avoid the specific adverse impact. Nothing in this subdivision shall be interpreted to require a local government to waive or reduce development standards that would have an adverse impact on any real property that is listed in the California Register of Historical Resources, or to grant any waiver or reduction that would be contrary to state or federal law. (2) A proposal for the waiver or reduction of development standards pursuant to this subdivision shall neither reduce nor increase the number of incentives or concessions to which the applicant is entitled pursuant to subdivision (d).	Purpose Does it physically prevent the development of the housing at the density allowed? City may not apply a development standard that will have the effect of physically precluding the construction of a development at the densities or with the concessions or incentives permitted.
Waiver 2	65915.e		
FAR Requirement within the MU-F Portion of the Site			
Waiver 3	65915.e		
Front Setbacks Along Taylor Avenue			

The Magnolias

Exception Requested	Government Code Section	Exact Wording of Law	Additional Explanation
Density Bonus 80%	65915.f.3.D.i	(D) For housing developments meeting the criteria of subparagraph (G) of paragraph (1) of subdivision (b), the following shall apply: (i) Except as otherwise provided in clause (ii), the density bonus shall be 80 percent of the number of units for lower income households.	G. One hundred percent of all units in the development, including total units and density bonus units, but exclusive of a manager's unit or units, are for lower income households, as defined by Section 50079.5 of the Health and Safety Code, except that up to 20 percent of the units in the development, including total units and density bonus units, may be for moderate-income households, as defined in Section 50053 of the Health and Safety Code.
Concession 1 – Design Standard #26: Exterior Treatments and Materials	65915.d.2.D	(d) (1) An applicant for a density bonus pursuant to subdivision (b) may submit to a city, county, or city and county a proposal for the specific incentives or concessions that the applicant requests pursuant to this section, and may request a meeting with the city, county, or city and county. The city, county, or city and county shall grant the concession or incentive requested by the applicant unless the city, county, or city and county makes a written finding, based upon substantial evidence, of any of the following: (A) The concession or incentive does not result in identifiable and actual cost reductions, consistent with subdivision (k), to provide for affordable housing costs, as defined in Section 50052.5 of the Health and Safety Code, or for rents for the targeted units to be set as specified in subdivision (c). (B) The concession or incentive would have a specific, adverse impact, as defined in paragraph (2) of subdivision (d) of Section 65589.5, upon public health and safety or the physical environment or on any real property that is listed in the California Register of Historical Resources and for which there is no feasible method to satisfactorily mitigate or avoid the specific, adverse impact without rendering the development unaffordable to low-income and moderate-income households. (C) The concession or incentive would be contrary to state or federal law.	(2) The housing development project or emergency shelter as proposed would have a specific, adverse impact upon the public health or safety, and there is no feasible method to satisfactorily mitigate or avoid the specific adverse impact without rendering the development unaffordable to low- and moderate-income households or rendering the development of the emergency shelter financially infeasible. As used in this paragraph, a “specific, adverse impact” means a significant, quantifiable, direct, and unavoidable impact, based on objective, identified written public health or safety standards, policies, or conditions as they existed on the date the application was deemed complete. The following shall not
Concession 2 Design Standard #30: Building Colors	65915.d.2.D		
Concession 3 Design Standard #31: Window Design	65915.d.2.D		
Concession 4 Design Standard #39. Multi-family roof form	65915.d.2.D		

		(2) The applicant shall receive the following number of incentives or concessions: (D) Four incentives or concessions for projects meeting the criteria of subparagraph (G) of paragraph (1) of subdivision (b). If the project is located within one-half mile of a major transit stop, the applicant shall also receive a height increase of up to three additional stories, or 33 feet.	constitute a specific, adverse impact upon the public health or safety: (A) Inconsistency with the zoning ordinance or general plan land use designation. (B) The eligibility to claim a welfare exemption under subdivision (g) of Section 214 of the Revenue and Taxation Code. Purpose: Does it result in identifiable and actual cost reductions to provide affordable housing? Results in identifiable and actual cost reductions, to provide for affordable housing costs, as defined in Section 50052.5 of the Health and Safety Code, or for rents for the targeted units to be set as specified in subdivision (c).
Exceptions allowed by right			
Parking – zero required but some is being provided	65915.p.3.B.4	(4) Notwithstanding paragraphs (1) and (8), if a development consists solely of rental units, exclusive of a manager’s unit or units, with an affordable housing cost to lower income families, as provided in Section 50052.5 of the Health and Safety Code, and the development is either a special needs housing development, as defined in Section 51312 of the Health and Safety Code, or a supportive housing development, as defined in Section 50675.14 of the Health and Safety Code, then, upon the request of the developer, a city, county, or city and county shall not impose any minimum vehicular parking requirement. A development that is a special needs housing development shall have either paratransit service or unobstructed access, within one-half mile, to fixed bus route service that operates at least eight times per day.	Parking provided: Standard: 46 Compact: 16 Accessible: 5 EV: 5 Accessible EV:2 Total: 67 spaces
Waiver 1	65915.e		

Design Standard #12: Trees		(e) (1) In no case may a city, county, or city and county apply any development standard that will have the effect of physically precluding the construction of a development meeting the criteria of subdivision (b) at the densities or with the concessions or incentives permitted by this section. Subject to paragraph (3), an applicant may submit to a city, county, or city and county a proposal for the waiver or reduction of development standards that will have the effect of physically precluding the construction of a development meeting the criteria of subdivision (b) at the densities or with the concessions or incentives permitted under this section, and may request a meeting with the city, county, or city and county. If a court finds that the refusal to grant a waiver or reduction of development standards is in violation of this section, the court shall award the plaintiff reasonable attorney's fees and costs of suit. Nothing in this subdivision shall be interpreted to require a local government to waive or reduce development standards if the waiver or reduction would have a specific, adverse impact, as defined in paragraph (2) of subdivision (d) of Section 65589.5, upon health, safety, or the physical environment, and for which there is no feasible method to satisfactorily mitigate or avoid the specific adverse impact. Nothing in this subdivision shall be interpreted to require a local government to waive or reduce development standards that would have an adverse impact on any real property that is listed in the California Register of Historical Resources, or to grant any waiver or reduction that would be contrary to state or federal law. (2) A proposal for the waiver or reduction of development standards pursuant to this subdivision shall neither reduce nor increase the number of incentives or concessions to which the applicant is entitled pursuant to subdivision (d).	Significant adverse impact definition above Purpose Does it physically prevent the development of the housing at the density allowed? City may not apply a development standard that will have the effect of physically precluding the construction of a development at the densities or with the concessions or incentives permitted.
Waiver 2	65915.e		
Development Standard F.A.R			
Waiver 3	65915.e		
Development Standard Building Height			
Waiver 4	65915.e		
Development Standard Front Setback			

From: [Angie Gonzalez](#)
To: [Angie Gonzalez](#)
Subject: FW: Primer on Density Bonus Law
Date: Wednesday, April 21, 2021 5:08:22 PM

A primer on Density Bonus Law can be found here: <https://www.morgan-hill.ca.gov/2160/Density-Bonus-Law>

Topics include:

What is California's Density Bonus Law?

What kind of housing projects get to use the Density Bonus Law?

When you say "Density Bonus" what does that mean?

DENSITY BONUS CHART

What are concessions?

What other advantages does affordable housing have under the Density Bonus Law?

What are considered affordable rents?

What income levels apply to very low, low, and moderate units?

Regards,
Christina

From: [REDACTED]
To: [CC Public Comment](#)
Subject: New Housing - Density bonus and concessions 4/21/21 meeting comment
Date: Wednesday, April 21, 2021 6:30:27 PM

I saw this issue reported in the Morgan Hill Times and given how we are in serious drought condition and it's expected to get worse this year with water availability, I do not understand how the City can pass any new building projects requiring additional water hookups. The fact Anderson Dam has been drained and not expected to be rebuilt and filled for something like 10 years is even more of reason. With 349 units being considered, and each of the units housing multiple people, all requiring water for drinking, cooking, bathing, it's kind of mind boggling to hear about new construction. As a home owner already being pressed to conserve water for several years and getting monthly "reports" on how much water you use, I encourage the City to do everything in it's power to block any new housing at this juncture. I understand the State has passed some legislation about density units but someone from the City needs to stand firm and get a waiver or such to disallow this taking effect here (or anywhere in drought stricken California is my thought).

We have watched this Anderson Dam project drag on for years now having attended the first early meetings discussing it. Thankfully the Federal Government stepped in to move it along although now it has left Morgan Hill without the water capacity it had. Please do everything you can to prevent Morgan Hill residents from being further impacted by the drought and water shortage.

D. Zipnick

WARNING: This message is from an external user. Confidential information such as social security numbers, credit card numbers, bank routing numbers, gift card numbers, wire transfer information and other personally identifiable information should not be transmitted to this user. For question, please contact the Morgan Hill IT Department by opening a new helpdesk request online or call 408-909-0055.

From: [Christina Turner](#)
To: [Michelle Bigelow](#); [Angie Gonzalez](#)
Cc: [Donald Larkin](#); [Jennifer Carman](#); [Rebecca Garcia](#); [Cynthia Hasson](#); [Edith Ramirez](#)
Subject: Supplement for Items 6 and 7
Date: Tuesday, April 20, 2021 2:48:36 PM
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1. *Do we have a table anywhere that lists (for each one of these projects)*

-The exception requested

-Based upon which state bill or law the exception got requested

-The exact wording of that applicable bill / law that applies to the exception to get granted

- Possible an explanation of certain terms referred to and where those are defined in the applicable law (e.g. major transit stop etc).

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Examples of these types of safety or environmental concerns could be:

- a. The project asks for waivers to development standards that could increase flooding risk or create flooding hazards.
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Projects are vetted by all departments during the application process and those types of potential impacts would be addressed at the design stage. Only if the developer continued to insist on the deviation that could create an impact would this issue be raised. In the case of these two applications, there are no safety or environmental issues that would raise concerns about the requested waivers at this time.

Regards,

Christina

Monterey/Madrone

Exception Requested	Government Code Section	Exact Wording of Law	Additional Explanation
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Concession 1 – Parking Space Dimensions	65915.d.2.D	(d) (1) An applicant for a density bonus pursuant to subdivision (b) may submit to a city, county, or city and county a proposal for the specific incentives or concessions that the applicant requests pursuant to this section, and may request a meeting with the city, county, or city and county. The city, county, or city and county shall grant the concession or incentive requested by the applicant unless the city, county, or city and county makes a written finding, based upon substantial evidence, of any of the following:	(2) The housing development project or emergency shelter as proposed would have a specific, adverse impact upon the public health or safety, and there is no feasible method to satisfactorily mitigate or avoid the specific adverse impact without rendering the development unaffordable to low- and moderate-income households or rendering the development of the emergency shelter financially infeasible. As used in this paragraph, a "specific, adverse impact" means a significant, quantifiable, direct, and unavoidable impact, based on objective, identified written public health or safety standards, policies, or conditions as they existed on the date the application was deemed complete. The following shall not
Concession 2 Bicycle Parking and Storage	65915.d.2.D	(A) The concession or incentive does not result in identifiable and actual cost reductions, consistent with subdivision (k), to provide for affordable housing costs, as defined in Section 50052.5 of the Health and Safety Code, or for rents for the targeted units to be set as specified in subdivision (c).	
Concession 3 Pavement Design	65915.d.2.D	(B) The concession or incentive would have a specific, adverse impact, as defined in paragraph (2) of subdivision (d) of Section 65589.5, upon public health and safety or the physical environment or on any real property that is listed in the California Register of Historical Resources and for which there is no feasible method to satisfactorily mitigate or avoid the specific, adverse impact without rendering the development unaffordable to low-income and moderate-income households. (C) The concession or incentive would be contrary to state or federal law.	

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Waiver 1	65915.e	(e) (1) In no case may a city, county, or city and county apply any development standard that will have the effect of physically precluding the	Significant adverse impact definition above

Building Height		construction of a development meeting the criteria of subdivision (b) at the densities or with the concessions or incentives permitted by this section. Subject to paragraph (3), an applicant may submit to a city, county, or city and county a proposal for the waiver or reduction of development standards that will have the effect of physically precluding the construction of a development meeting the criteria of subdivision (b) at the densities or with the concessions or incentives permitted under this section, and may request a meeting with the city, county, or city and county. If a court finds that the refusal to grant a waiver or reduction of development standards is in violation of this section, the court shall award the plaintiff reasonable attorney's fees and costs of suit. Nothing in this subdivision shall be interpreted to require a local government to waive or reduce development standards if the waiver or reduction would have a specific, adverse impact, as defined in paragraph (2) of subdivision (d) of Section 65589.5, upon health, safety, or the physical environment, and for which there is no feasible method to satisfactorily mitigate or avoid the specific adverse impact. Nothing in this subdivision shall be interpreted to require a local government to waive or reduce development standards that would have an adverse impact on any real property that is listed in the California Register of Historical Resources, or to grant any waiver or reduction that would be contrary to state or federal law. (2) A proposal for the waiver or reduction of development standards pursuant to this subdivision shall neither reduce nor increase the number of incentives or concessions to which the applicant is entitled pursuant to subdivision (d).	Purpose Does it physically prevent the development of the housing at the density allowed? City may not apply a development standard that will have the effect of physically precluding the construction of a development at the densities or with the concessions or incentives permitted.
Waiver 2	65915.e		
FAR Requirement within the MU-F Portion of the Site			
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The Magnolias

Exception Requested	Government Code Section	Exact Wording of Law	Additional Explanation
Density Bonus 80%	65915.f.3.D.i	(D) For housing developments meeting the criteria of subparagraph (G) of paragraph (1) of subdivision (b), the following shall apply: (i) Except as otherwise provided in clause (ii), the density bonus shall be 80 percent of the number of units for lower income households.	G. One hundred percent of all units in the development, including total units and density bonus units, but exclusive of a manager's unit or units, are for lower income households, as defined by Section 50079.5 of the Health and Safety Code, except that up to 20 percent of the units in the development, including total units and density bonus units, may be for moderate-income households, as defined in Section 50053 of the Health and Safety Code.
Concession 1 – Design Standard #26: Exterior Treatments and Materials	65915.d.2.D	(d) (1) An applicant for a density bonus pursuant to subdivision (b) may submit to a city, county, or city and county a proposal for the specific incentives or concessions that the applicant requests pursuant to this section, and may request a meeting with the city, county, or city and county. The city, county, or city and county shall grant the concession or incentive requested by the applicant unless the city, county, or city and county makes a written finding, based upon substantial evidence, of any of the following: (A) The concession or incentive does not result in identifiable and actual cost reductions, consistent with subdivision (k), to provide for affordable housing costs, as defined in Section 50052.5 of the Health and Safety Code, or for rents for the targeted units to be set as specified in subdivision (c). (B) The concession or incentive would have a specific, adverse impact, as defined in paragraph (2) of subdivision (d) of Section 65589.5, upon public health and safety or the physical environment or on any real property that is listed in the California Register of Historical Resources and for which there is no feasible method to satisfactorily mitigate or avoid the specific, adverse impact without rendering the development unaffordable to low-income and moderate-income households. (C) The concession or incentive would be contrary to state or federal law.	(2) The housing development project or emergency shelter as proposed would have a specific, adverse impact upon the public health or safety, and there is no feasible method to satisfactorily mitigate or avoid the specific adverse impact without rendering the development unaffordable to low- and moderate-income households or rendering the development of the emergency shelter financially infeasible. As used in this paragraph, a “specific, adverse impact” means a significant, quantifiable, direct, and unavoidable impact, based on objective, identified written public health or safety standards, policies, or conditions as they existed on the date the application was deemed complete. The following shall not
Concession 2 Design Standard #30: Building Colors	65915.d.2.D		
Concession 3 Design Standard #31: Window Design	65915.d.2.D		
Concession 4 Design Standard #39. Multi-family roof form	65915.d.2.D		

		(2) The applicant shall receive the following number of incentives or concessions: (D) Four incentives or concessions for projects meeting the criteria of subparagraph (G) of paragraph (1) of subdivision (b). If the project is located within one-half mile of a major transit stop, the applicant shall also receive a height increase of up to three additional stories, or 33 feet.	constitute a specific, adverse impact upon the public health or safety: (A) Inconsistency with the zoning ordinance or general plan land use designation. (B) The eligibility to claim a welfare exemption under subdivision (g) of Section 214 of the Revenue and Taxation Code. Purpose: Does it result in identifiable and actual cost reductions to provide affordable housing? Results in identifiable and actual cost reductions, to provide for affordable housing costs, as defined in Section 50052.5 of the Health and Safety Code, or for rents for the targeted units to be set as specified in subdivision (c).
Exceptions allowed by right			
Parking – zero required but some is being provided	65915.p.3.B.4	(4) Notwithstanding paragraphs (1) and (8), if a development consists solely of rental units, exclusive of a manager’s unit or units, with an affordable housing cost to lower income families, as provided in Section 50052.5 of the Health and Safety Code, and the development is either a special needs housing development, as defined in Section 51312 of the Health and Safety Code, or a supportive housing development, as defined in Section 50675.14 of the Health and Safety Code, then, upon the request of the developer, a city, county, or city and county shall not impose any minimum vehicular parking requirement. A development that is a special needs housing development shall have either paratransit service or unobstructed access, within one-half mile, to fixed bus route service that operates at least eight times per day.	Parking provided: Standard: 46 Compact: 16 Accessible: 5 EV: 5 Accessible EV:2 Total: 67 spaces
Waiver 1	65915.e		

Design Standard #12: Trees		(e) (1) In no case may a city, county, or city and county apply any development standard that will have the effect of physically precluding the construction of a development meeting the criteria of subdivision (b) at the densities or with the concessions or incentives permitted by this section. Subject to paragraph (3), an applicant may submit to a city, county, or city and county a proposal for the waiver or reduction of development standards that will have the effect of physically precluding the construction of a development meeting the criteria of subdivision (b) at the densities or with the concessions or incentives permitted under this section, and may request a meeting with the city, county, or city and county. If a court finds that the refusal to grant a waiver or reduction of development standards is in violation of this section, the court shall award the plaintiff reasonable attorney's fees and costs of suit. Nothing in this subdivision shall be interpreted to require a local government to waive or reduce development standards if the waiver or reduction would have a specific, adverse impact, as defined in paragraph (2) of subdivision (d) of Section 65589.5, upon health, safety, or the physical environment, and for which there is no feasible method to satisfactorily mitigate or avoid the specific adverse impact. Nothing in this subdivision shall be interpreted to require a local government to waive or reduce development standards that would have an adverse impact on any real property that is listed in the California Register of Historical Resources, or to grant any waiver or reduction that would be contrary to state or federal law. (2) A proposal for the waiver or reduction of development standards pursuant to this subdivision shall neither reduce nor increase the number of incentives or concessions to which the applicant is entitled pursuant to subdivision (d).	Significant adverse impact definition above Purpose Does it physically prevent the development of the housing at the density allowed? City may not apply a development standard that will have the effect of physically precluding the construction of a development at the densities or with the concessions or incentives permitted.
Waiver 2	65915.e		
Development Standard F.A.R			
Waiver 3	65915.e		
Development Standard Building Height			
Waiver 4	65915.e		
Development Standard Front Setback			

From: [Angie Gonzalez](#)
To: [Angie Gonzalez](#)
Subject: FW: Primer on Density Bonus Law
Date: Wednesday, April 21, 2021 5:08:22 PM

A primer on Density Bonus Law can be found here: <https://www.morgan-hill.ca.gov/2160/Density-Bonus-Law>

Topics include:

What is California's Density Bonus Law?

What kind of housing projects get to use the Density Bonus Law?

When you say "Density Bonus" what does that mean?

DENSITY BONUS CHART

What are concessions?

What other advantages does affordable housing have under the Density Bonus Law?

What are considered affordable rents?

What income levels apply to very low, low, and moderate units?

Regards,
Christina

From: [REDACTED]
To: [CC Public Comment](#)
Subject: New Housing - Density bonus and concessions 4/21/21 meeting comment
Date: Wednesday, April 21, 2021 6:30:27 PM

I saw this issue reported in the Morgan Hill Times and given how we are in serious drought condition and it's expected to get worse this year with water availability, I do not understand how the City can pass any new building projects requiring additional water hookups. The fact Anderson Dam has been drained and not expected to be rebuilt and filled for something like 10 years is even more of reason. With 349 units being considered, and each of the units housing multiple people, all requiring water for drinking, cooking, bathing, it's kind of mind boggling to hear about new construction. As a home owner already being pressed to conserve water for several years and getting monthly "reports" on how much water you use, I encourage the City to do everything in it's power to block any new housing at this juncture. I understand the State has passed some legislation about density units but someone from the City needs to stand firm and get a waiver or such to disallow this taking effect here (or anywhere in drought stricken California is my thought).

We have watched this Anderson Dam project drag on for years now having attended the first early meetings discussing it. Thankfully the Federal Government stepped in to move it along although now it has left Morgan Hill without the water capacity it had. Please do everything you can to prevent Morgan Hill residents from being further impacted by the drought and water shortage.

D. Zipnick

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City Council Meeting Item #9 Monthly Budget Update



April 21, 2021

Overview



- Monthly Budget Update
- Staff does not recommend any budget adjustments at this time

General Fund



- Changes reflect updated property tax and sales tax numbers
- Better numbers in property tax and sales tax are partially offset by reduced other revenue categories:
 - Recreation Services: Additional \$1.6 million loss
 - TOT: Additional \$0.5 million loss

Development Services



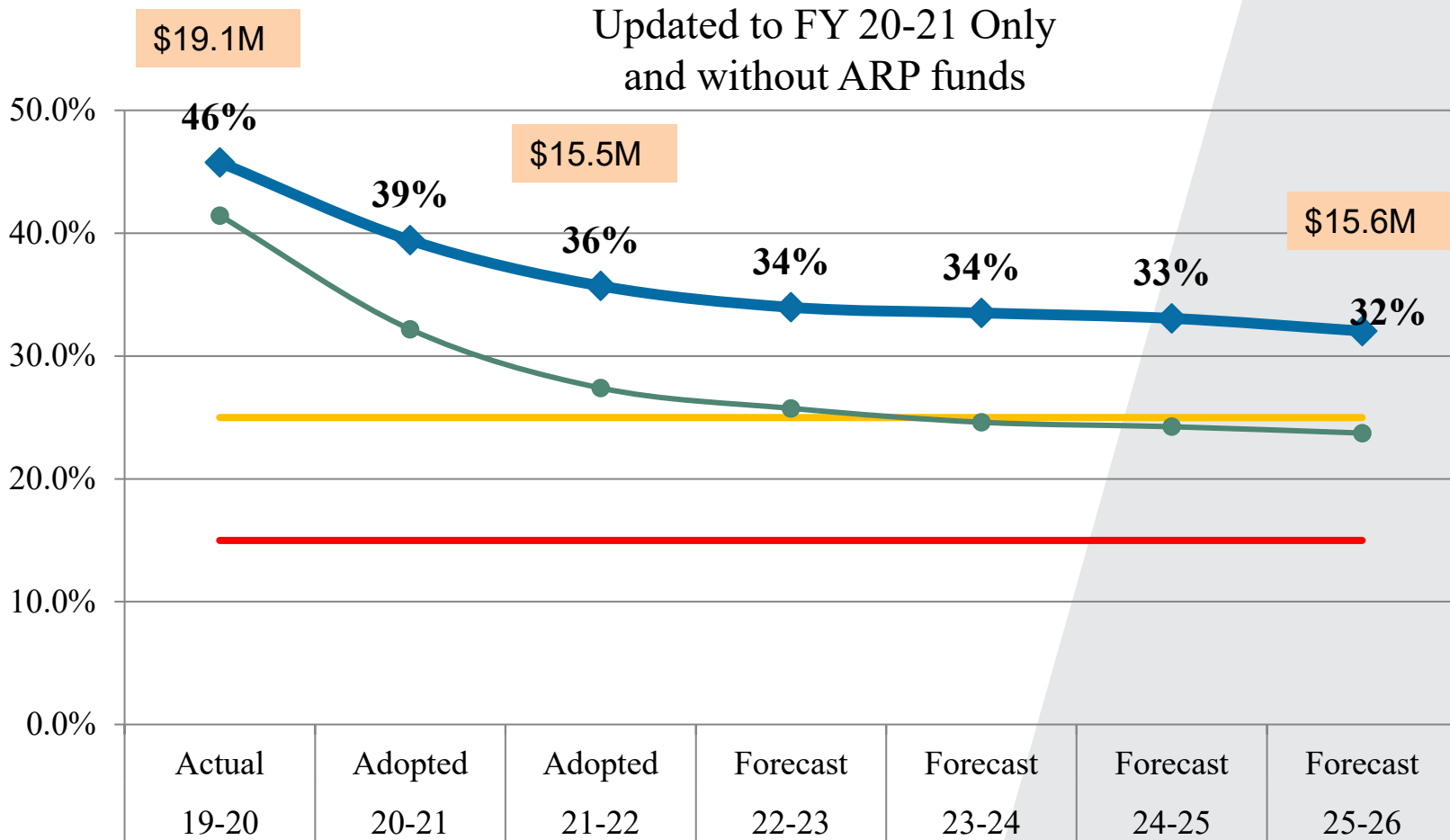
- Revenues are tracking higher than budget
- \$3.6 million received to date or 96% of budget (without \$1.0 million loan)

Enterprise Funds



- Expecting higher water revenue as well as increased wastewater flows due to higher levels of stay at home residents
- Number of accounts delinquent steady but with higher balance

Updated General Fund Forecast



GF Six Year Forecast April 21, 2021

Fund Balance Goal of 25% of Revenues

Fund Balance Minimum Level of 15% of Revenues

GF Six Year Forecast Budget Adoption June 17, 2020

Questions?



CITY OF MORGAN HILL

From: [Michelle Helvey](#)
To: [Rich Constantine](#); [Gino Borgioli](#); [John McKay](#); [Yvonne Martinez Beltran](#); [Rene Spring](#); [Shane Palsgrove](#); [Christina Turner](#); [Michelle Bigelow](#); [CC Public Comment](#)
Subject: No to Marijuana Dispensaries in Morgan Hill
Date: Monday, April 19, 2021 9:57:59 AM

Dear City of Morgan Hill Leadership,

I am writing to ask you to say NO to opening marijuana dispensaries in Morgan Hill. As someone who works with youth and children in our town, I firmly believe that these kinds of places would not be healthy for our community. I applaud your past decisions to forgo these, and urge you to do the same again. Morgan Hill is known as a community that offers robust facilities and healthy activities for youth, and opening marijuana dispensaries is not in line with our city's values. Sending any kind of a message to young people that smoking pot is acceptable is unacceptable.

The marijuana industry has broader support than it used to, and as a result, has funds it didn't use to have to legitimate the drug. Please don't allow these funds to influence your decision.

I have not seen one young person who ever benefited from marijuana, and in fact, have only seen harm. Just because a few adults might want to use it for "medicinal purposes" does not mean that our city should allow it to be dispensed here.

I'm grateful for all that you do to support our great city. It's been a pleasure to raise my family here, and I hope that future generations will be able to enjoy the benefits that come with living in a city that values its children and teenagers enough to say no to negative influences even under pressure. I urge you to stay the course.

Best,

Michelle Helvey

Head of School



105 John Wilson Way
Morgan Hill, CA 95037
408.782.7177 x 221

From: [Wisejsm25](#)
To: [Rich Constantine](#); [Gino Borgioli](#); [John McKay](#); [Rene Spring](#); [Shane.Palgrave@morganhill.ca.gov](#); [Christina Turner](#); [MichelleBigelow@morganhill.ca.gov](#); [CC Public Comment](#)
Subject: Marijuana dispensaries
Date: Saturday, April 17, 2021 5:53:14 PM

Mayor, Councilmembers and City Manager,

I ask you to say NO when asked whether staff should bring back a future agenda item to vote on marijuana dispensaries in Morgan Hill.

I am urging you as a grandmother, and mother not to bring these businesses to Morgan Hill. Our children have suffered tremendously from this pandemic. They have been hurt by fear of the unknown, lack of schooling, and inability to play and socialize. We need to focus on getting programs in place to help them socially and academically.

I understand the City Council has decided twice already within the last few years not to proceed with these stores. It is not the time to bring marijuana stores to Morgan Hill. I urge the council to reject a third attempt to bring it back for a vote.

Morgan Hill City Councils throughout the years offered many positive programs for its residents and their kids; a beautiful state of the art swim center, outdoor sports complex, Magical Bridge Playground, Downtown Parks, Pony Baseball, Pop Warner Football, Morgan Hill's Girls' Spirit Soft Ball, Camps, Dance, Karate and more. These programs are all designed for the purpose of keeping our kids healthy in mind, body, spirit and soul, and busy so they won't abuse drugs, get into trouble and hurt their shot at a good, meaningful and fulfilling life.

Unfortunately, these healthy programs for our youth would be undermined and circumvented if the city council approves of pot stores in Morgan Hill. It would send the message to our youth that smoking pot is acceptable and cool.

Why would we throw away all our city leaders have built up for a

culture of drug abuse like we see in nearby Santa Cruz whose kids are drowning in drugs, drug addiction, mental illness, homelessness and drug overdose deaths, all because Santa Cruz long ago sent the message to their children that abusing drugs is acceptable and cool.

We should not promote to our youth the abuse of drugs, which marijuana is and is a gateway to other illegal drugs, heroin, fentanyl, cocaine among many others. Marijuana is not harmless.

Permanent brain damage, addiction and the effect on lungs are to be considered. I have personally witnessed the effects on family members and the families of my friends.

Finally, the only decent argument from the marijuana lobby and dispensary building owners is that the sales tax revenue. Have we stooped so low that we would endanger our children and community for revenue. We have a beautiful downtown, restaurants and wineries. Our community is quaint and beautiful and we want to keep it that way.

For those people who may have a legitimate reason to take marijuana, terminal cancer etc. it is available in San Jose and delivery is available.

Thank you for your consideration. This community pleads with you to do the right thing and don't bring back a future vote on marijuana stores in Morgan Hill at this time.

Best Regards,

Jeanne Wise rn

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From: [Ted Helvey](#)
To: [Rich Constantine](#); [Gino Borgioli](#); [John McKay](#); [Yvonne Martinez Beltran](#); [Rene Spring](#); [Shane Palsgrove](#); [Christina Turner](#); [Michelle Bigelow](#); [CC Public Comment](#)
Subject: Morgan Hill doesn't need pot stores
Date: Saturday, April 17, 2021 4:59:29 PM

Dear City of Morgan Hill leadership,

I confess even writing the subject heading makes me feel like I've walked through the looking glass. I moved my family here 23 years ago because Morgan Hill felt like a refuge from the craziness that children can face in our modern world.

I'm pleased to say that after raising my children here and having worked extensively with the youth of our community with two local non-profit organizations, that the reasons for moving here were indeed fulfilled. I realize that there are challenges everywhere you go but a key benefit my children and the youth have enjoyed in Morgan Hill is the significant positive impact of the values of our community.

Just because you can do something, doesn't mean you should. I realize the landscape has changed due to the success of the marijuana industry and their paid advocates in turning something we all knew to be bad a generation ago into a more acceptable medicinal recreational activity. This doesn't mean we have to endorse it by bringing outlets into our community.

With hundreds of youth in our community I consider to be "my" kids, including three of my own grandchildren, I ask you to do whatever you can to keep the adverse influences, including marijuana, as rare as possible and don't do anything to endorse it or make it "normal" in the eyes of our youth.

Thank you for all you do to serve our city and make it the great community we all love and enjoy.

Warm regards,
Ted Helvey

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From: Matt Wendt <[REDACTED]>

Date: April 16, 2021 at 10:52:42 PM PDT

To: Rich Constantine <Rich.Constantine@morganhill.ca.gov>, Gino Borgioli <Gino.Borgioli@morganhill.ca.gov>, john.mckay@morganhill.ca.gov, Yvonne Martinez Beltran <yvonne.martinezbeltran@morganhill.ca.gov>, Christina.Turner@morganhill.ca.gov, Rene Spring <Rene.Spring@morganhill.ca.gov>, Shane Palsgrove <Shane.Palsgrove@morganhill.ca.gov>

Subject: Agenda Item 10: Vote NO to Marijuana Stores in Morgan Hill

Mayor, Councilmembers and City Manager,

I ask you to say NO when asked whether staff should bring back a future agenda item to vote on marijuana dispensaries in Morgan Hill.

I am speaking for the vast majority of parents with young children we know through our kids' schools, sports, activities, etc. Most of these parents are too busy working and raising kids to take the time to write or appear before to city council, debate on social media or take surveys.

I understand the City Council has decided twice already within the last few years that now is not the time to bring marijuana stores to Morgan Hill. I urge the council to reject a third attempt to bring it back for a vote that is procedurally questionable, but more importantly lacks substance as not enough time has elapsed since the last votes to see how the true impact on other cities. Initial returns are negative on marijuana dispensaries per my prior email that the Denver Post is unhappy with what's happened there and how it impacted their youth.

Morgan Hill City Councils throughout the years offered many positive programs for its residents and their kids; a beautiful state of the art swim center, outdoor sports complex, Magical Bridge Playground, Downtown Parks, Pony Baseball, Pop Warner Football, Morgan Hill's Girls' Spirit Soft Ball, Camps, Dance, Karate and more.

These programs are all designed for the purpose of keeping our kids healthy in mind, body, spirit and soul, and busy so they won't abuse drugs, get into trouble and hurt their shot at a good, meaningful and fulfilling life.

Unfortunately, these healthy programs for our youth would be undermined and circumvented if the city council approves of pot stores in Morgan Hill. It would send the message to our youth that smoking pot is acceptable and cool.

Why would we throw away all our city leaders have built up for a culture of drug abuse like we see in nearby Santa Cruz whose kids are drowning in drugs, drug addiction, mental illness, homelessness and drug overdose deaths, all because Santa Cruz long ago sent the message to their children that abusing drugs is acceptable and cool.

We should not promote to our youth the abuse of drugs, which marijuana is and is a gateway to other illegal drugs, heroin, fentanyl, cocaine among many others. I have personally witnessed growing up how marijuana was a gateway drug to other drugs. I knew a bright young man from my high school who died from an overdose, which was tragic for his family and the community.

Why would we want to put your community and her kids at risk of at minimum damaging their development and at worse ruining their futures when they become hopeless drug addicts? Especially when we know that marijuana's THC levels, that kids are abusing, have sky rocketed to over 80% and causing an epidemic in addiction to marijuana causing increased hospitalizations and treatments at places like the Beacon House in Pacific Grove and/or Narconon in Watsonville for treating their addiction and psychosis caused by marijuana abuse; a very expensive treatment [\$70K+] that takes over a year to cure in most cases.

Further, marijuana stores bring out-of-town crime to a city. District Attorneys and law enforcement officers say that there is increased crime due to marijuana stores. You can't tell me that the pot sold at these stores (including edibles that look like kids' candy like cigarette manufacturers used to do to our youth) won't end up in the hands of our kids or worse yet being vaped or ate during school hours, which teacher or parents won't be able to catch.

Finally, the only decent argument from the marijuana lobby and dispensary building owners is that the sales tax revenue will be meaningful (even then it wouldn't be worth it if it hurt our youth), but this is not true when you consider the history of marijuana dispensaries over-promising returns... without getting into specifics it doesn't put a dent in the overall budget issues. And that's before you factor in the other city officials you have to hire to police the dispensaries and surrounding areas and monitor a cash based business, which lends itself to all sorts of other problems as you could imagine.

Thank you for your consideration. This community pleads with you to do the right thing and don't bring back a future vote on marijuana stores in Morgan Hill at this time.

Best Regards,

Matt Wendt

"Be more concerned with your character than your reputation, because your character is what you really are, while your reputation is merely what others think you are."

John Wooden

From: Ronald Kirkish <[REDACTED]>

Sent: Saturday, April 17, 2021 1:08 PM

To: Christina Turner <Christina.Turner@morganhill.ca.gov>; Rich Constantine <Rich.Constantine@morganhill.ca.gov>; Yvonne Martinez Beltran <yvonne.martinezbeltran@morganhill.ca.gov>; Rene Spring <Rene.Spring@morganhill.ca.gov>; John McKay <john.mckay@morganhill.ca.gov>; Shane Palsgrove <Shane.Palsgrove@morganhill.ca.gov>; Gino Borgioli <Gino.Borgioli@morganhill.ca.gov>

Subject: The Sackler Family's Dynasty Of Guilt

Dear All,

While this article is about opioid abuse and not about marijuana, it has a lot of parallels how the pro-pot advocates convinced American's that opioids are medicine and won't hurt you, that it's harmless which is exactly what the pro-pot advocates tell our kids to try to convince them that marijuana is good, harmless medicine only to find out the truth that both of these drugs are very harmful to humans; which is why marijuana is still listed as a Schedule 4 drug by the Federal Governments Controlled Substance Act (CSA).

For your consideration and B/r,

Ronald L. Kirkish

The Sackler Family's Dynasty Of Guilt

<https://www.theamericanconservative.com/articles/the-sackler-familys-dynasty-of-guilt/>

A sweeping account of Big Pharma's first family provides a full and damning picture of their moral culpability for the opioid crisis.

[\(By PureRadiancePhoto/Shutterstock\)](#)

[HELEN ANDREWS](#) - APRIL 17, 2021 - 12:01 AM

[Empire of Pain: The Secret History of the Sackler Dynasty](#), by Patrick Radden Keefe (Doubleday: 2021), 560 pages.

It hasn't been easy to get to the bottom of the Sackler story. From the beginning, the family hid its business dealings in a tangle of subsidiaries. When reporter Barry Meier blew open the story of OxyContin in 2003 with his book *Pain Killer: A Wonder Drug's Trail of Addiction and Death*, the Sacklers convinced his employers at the *New York Times* to ban him from writing about opioids over a contrived conflict of interest.

Depositions have been sealed, whistleblowers intimidated, critics bought off, publications threatened with lawsuits.

Patrick Radden Keefe got the full Sackler treatment when he published his blockbuster article “The Family That Built an Empire of Pain” in the *New Yorker* in 2017, which launched the trend of taking the Sackler name off various endowed buildings, galleries, and professorships. Their lawyer fired off dozens of letters to Keefe’s editors alleging factual errors and threatening to sue Keefe if he proceeded with this book project. Some unknown party even sent a mysterious man in an SUV to stake out Keefe’s house. These attempts at intimidation failed, and we now have the book, *Empire of Pain: The Secret History of the Sackler Dynasty*.

Sadly, the Sacklers are an underwhelming lot to have ruined so many lives. They were not evil geniuses. Of the original three brothers, Arthur, Mortimer, and Raymond, two got their degrees from an unaccredited medical school that closed down shortly after they graduated. Raymond’s son Richard, who ran Purdue Pharma during the height of the OxyContin surge, couldn’t manage to get into a better med school than SUNY Buffalo (he later transferred to NYU), even with his family’s money.

The only impressive Sackler was Arthur, the eldest of the original three, and his genius was not for medicine but for advertising. In the field of pharmaceutical marketing, “Arthur invented the wheel,” as one of his employees put it. It was his innovation to get around the legal ban on direct-to-consumer medical advertising by targeting doctors. “It was laughable, he asserted, to suggest that a physician might be seduced by a glossy layout in a medical journal in the same manner that a housewife might be swayed by a slick ad in a magazine,” Keefe explains. His tactics made a bestseller of the antibiotic Terramycin in 1957 and, later, of the early sedatives Librium and Valium.

His advertising firm came to the attention of the FBI during the McCarthy era. Sackler had a habit of hiring refugees, immigrants, and blacklisted journalists who had been fired from other jobs for their political connections. The result, Keefe says, was a radical atmosphere around the office. “On one occasion, a Swedish designer, who was a

communist, made a scene by starting a small fire in the office and burning some of the firm's own advertisements, to indicate his distaste for such 'capitalist trash.'" According to one coworker, "We all thought it was hilarious."

The FBI might have been onto something. It was not until the FBI files were FOIA'd by Keefe and other researchers that it became publicly known that at least one Sackler brother, and possibly all three, were Communist Party members. Raymond and his wife Beverly Feldman cared enough to transfer their membership to the Boston chapter when they moved there in 1944 and then back again to New York when they relocated. Arthur was close friends with millionaire Soviet spies Alfred Stern and Martha Dodd. One veteran *Daily Worker* journalist who worked for Arthur told a researcher in 1991 that, as he understood it, "all three Sacklers had been party members early on."

There certainly was a Soviet grandiosity to Arthur's vision for "narcobiotics," a catchall term for the tranquilizers of the future, which he predicted would be dispensed as easily as antibiotics. All forms of distress had a biological basis, he believed, so naturally all pain and even unease should be treated medically. (He told his second wife she was wasting her time with psychoanalysis when she tried therapy during the breakdown of their marriage.) By boosting sales of Librium, Arthur wasn't just serving his client. He was pursuing his vision.

The slogan the Purdue sales reps came up with for OxyContin in 1999 would have made Arthur (who died in 1987) proud: "The One to Start With and the One to Stay With." The Sacklers' innovation, and the source of their moral culpability, lay in overcoming doctors' reluctance to start patients on strong opioids out of fear of addicting them. After Purdue's campaign claiming, based on spurious studies, that addiction to OxyContin was vanishingly rare, sales jumped from \$50 million in 1996 to more than \$1 billion in 2000 and oxycodone became the most prescribed drug in America.

Their second sin was not changing course when it became clear from Purdue's own sales data that doctors were running pill mills. Here the Sacklers had assistance from conservative think tanks such as the American Enterprise Institute. AEI fellow Sally Satel wrote in 2004 that

“the typical OxyContin addict does not start out as a pain patient who fell unwittingly into a drug habit... When you scratch the surface of someone who is addicted to painkillers, you usually find a seasoned drug abuser.” Keefe notes that Purdue Pharma was a five-figure AEI donor.

Emails sent in 2001 and finally made public in 2019 reveal that Richard Sackler was equally contemptuous of opioid addicts. “Abusers aren’t victims, they are the victimizers,” he wrote to an unidentified correspondent, who responded, “The whole thing is a sham and if people die because they abuse it then good riddance.” Alas, Richard wrote back, “calling drug addicts ‘scum of the earth’” won’t play well “when I’m ambushed by *60 Minutes*.”

So the Sacklers’ defense that they didn’t know their product was fueling an epidemic is false. They did know. They just didn’t care. But their other defense has more merit: that they were not the only ones responsible.

Medicare Part D, for example, caused the annual price of a typical oxy prescription to drop from \$39,420 to \$2,677. Three-fourths of the growth in opioid prescriptions between 2001 and 2010 came from government programs. Seniors discovered they could sell their pills on the street for huge profits, and young people connived to qualify for Social Security Disability Insurance and the Medicaid card that went with it. “For a three-dollar Medicaid co-pay,” Sam Quinones explains in *Dreamland*, “an addict got pills priced at a thousand dollars, with the difference paid for by U.S. and state taxpayers.”

In 2018, President Trump’s Council of Economic Advisers prepared a report on opioid prices and their contribution to the crisis, but the Justice Department and the Department of Health and Human Services attempted to suppress it. According to Trump CEA chief economist [Casey Mulligan](#), then-HHS secretary Alex Azar, who was among Medicare Part D’s architects during the Bush era, did not want anyone connecting that great Republican policy success with the opioid epidemic. Clearly the Sacklers are not the only ones trying to bury their role in the crisis.

The point is that the opioid epidemic was something that was *done* to Middle America. They “trusted the science,” as we are now constantly

exhorted to do. OxyContin was marketed to them and subsidized for them as a safe alternative to morphine by people who knew that it was not. Far more than the tobacco plaintiffs who claimed to have been duped by the cigarette companies, the people who became addicted to OxyContin really *were* duped.

Keefe ends his book with the settlement that the Trump Justice Department reached with Purdue Pharma in October 2020, which was far less comprehensive than the Master Settlement Agreement with Big Tobacco. No individual executives were charged and the Sacklers' personal fortune was left intact. Keefe seems disappointed by the deal, which may be fair enough, but litigation might not be the best way for a healthy polity to process something like the opioid crisis. The black-and-white world of the law requires boiling down the Sackler family story into narrow questions of legal liability. To appreciate their moral responsibility demands a fuller telling, the kind of sweeping dynastic saga that Keefe has given us.

From: Ronald Kirkish <[REDACTED]>

Sent: Saturday, April 17, 2021 11:24 AM

To: Christina Turner <Christina.Turner@morganhill.ca.gov>; Rich Constantine <Rich.Constantine@morganhill.ca.gov>; Yvonne Martinez Beltran <yvonne.martinezbeltran@morganhill.ca.gov>; Rene Spring <Rene.Spring@morganhill.ca.gov>; John McKay <john.mckay@morganhill.ca.gov>; Shane Palsgrove <Shane.Palsgrove@morganhill.ca.gov>; Gino Borgioli <Gino.Borgioli@morganhill.ca.gov>

Subject: Mayor Who Called for “Defunding the Police” Arrested for ELEVEN Child Sex Crimes

To: Mayor Rich Constantine, members of the Morgan Hill City Council, City Manager Christina Turner, Chief of Police Shane Palsgrove

From: Ronald L. Kirkish

Bcc: Members of the Morgan Hill Community

Date: April 17, 2021

Is this the kind of criminal mind you want to attract to Morgan Hill?

1. [Sonoma West Times](#): Jacob is also the co-founder of Sebastopol’s first cannabis dispensary, Peace in Medicine.

2. Jacob made headlines when he became mayor in 2013 because he owned two licensed cannabis dispensaries at the time.

[Sebastopol, Nevada County, California.](#)

B/r,

Ronald L. Kirkish

Mayor Who Called for “Defunding the Police” Arrested for ELEVEN Child Sex Crimes

<https://gellerreport.com/2021/04/democrat-mayor-who-called-for-defunding-the-police-arrested-for-eleven-child-sex-crimes.html/>

By [Pamela Geller](#) - on April 16, 2021

Well, we know why this Democrat pedophile wants to destroy the police -- the man wants to be free to diddle the kiddies. The court records for Robert Emmanuel Jacob list one count for sexual penetration with a child under 16 years-old, five counts ...

Former **Sebastopol** mayor Robert Jacob now faces 11 felony charges of child sexual assault, up from five since city police arrested him Saturday morning, April 10, according to Sonoma County Superior Court records.

[Sonoma West Times](#): **Jacob is also the co-founder of Sebastopol's first cannabis dispensary, Peace in Medicine.**

The court records for Robert Emmanuel Jacob list one count for sexual penetration with a child under 16 years-old, five counts of lewd acts with a child age 14 or 15 being 10 or more years older than the minor and two counts of coming into the possession of a child younger than 16 for lewd or lascivious acts.

Further, the records show one count for communication with a minor to commit an offense, one count for arranging to meet a child for lewd acts and one count for distribution of child pornography.

Sebastopol police officers reached Jacob at around 7 a.m. Saturday, April 10 in the 7400 block of Woodland Avenue and arrested him on suspicion of five felony and one misdemeanor sexual assault crimes against a minor, per the April 10 SPD statement said.

According to the press release, the police came into information on March 30 about sexual assaults that may have happened in Sebastopol from December 2019 to March 2021 and the investigation led to Jacob. Police Chief Kevin Kilgore said six officers responded, along with a lieutenant and himself, to serve the arrest and search warrant in an April 14 interview.

◇◇◇◇◇◇◇◇◇◇

Mayor Who Called for “Defunding the Police” Arrested for Child Sex Crimes

[By The Election](#), April 16, 2021:

Robert Jacob, seen here in this photo uploaded to Facebook on March 27, 2019.

The former mayor of Sebastopol, Cal., a progressive Democrat who voiced support for Black Lives Matter rioters and defunding police, was arrested Saturday morning over multiple felony child sex crimes.

Sebastopol Police booked 44-year-old Robert Emmanuel Jacob on 11 felony counts related to sex crimes against minors.

The court records for Robert Emmanuel Jacob list one count for sexual penetration with a child under 16 years-old, five counts of lewd acts with a child age 14 or 15 being 10 or more years older than the minor and two counts of coming into the possession of a child younger than 16 for lewd or lascivious acts.

The charges against Jacob, who is openly gay and married as of 2019, include transportation of a child for lewd and lascivious acts, arranging a meeting for sexual purposes with a person believed to be underage, sexual penetration of a child under 16-years-old and harmful material sent with the intent to seduce a minor.

Jacob, who describes himself as a “community advocate” and “inspirational leader” in his [LinkedIn profile](#), made headlines when he became mayor in 2013 because he owned two licensed cannabis dispensaries at the time.

Jacob was a [vocal supporter](#) of Black Lives Matter. In June of 2020, Jacob praised the violence created by BLM in a Facebook post. He [wrote](#), “Again, thank you BLM, the rioters, and protesters. Your direct actions are creating change.” In [another post](#), he referred to the rioters as “warriors ” and said BLM was engaged in a “Civil rights war.” Jacob called on his followers to support the “troops” in their riot.

The radical liberal mayor also openly called for defunding the police. He wrote on Facebook: “Defunding is about re-funding,” he wrote on Facebook. “Defund the police to re-fund the resources we’ve been slashing for generations.” He also praised Minneapolis’ city council for promising to dismantle its police department.

In another post the same month, Jacob advocated for defunding police. “Defunding is about re-funding,” he wrote on Facebook. “Defund the police to re-fund the resources we’ve been slashing for generations.” He also praised Minneapolis’ city council for

promising to dismantle its police department.



Robert Jacob

June 5, 2020 · 🌐



See, progress... The President of the Minneapolis City Council just announced that they will dismantle the police department and replace it with a "transformative new model of public safety." This is what Black Lives Matter has done for us. I can't wait for more!

Jacob is being held at the Sonoma County Main Adult Detention Facility with a bail of \$620,000. His next court date has not yet been scheduled.

Police say the investigation remains on-going. Officials are asking for the public's help. Anyone with information regarding the case is asked to contact the Sebastopol Police Department at 707-829-4400 and refer to report #21-0220.

Jacob is being held at the Sonoma County Main Adult Detention Facility with a bail of \$620,000. His next court date has not yet been scheduled.

Police say the investigation remains on-going. Officials are asking for the public's help. Anyone with information regarding the case is asked to contact the Sebastopol Police Department at 707-829-4400 and refer to report #21-0220

From: Ronald Kirkish <[REDACTED]>

Sent: Saturday, April 17, 2021 7:56 AM

To: Christina Turner <Christina.Turner@morganhill.ca.gov>; Rich Constantine <Rich.Constantine@morganhill.ca.gov>; Yvonne Martinez Beltran <yvonne.martinezbeltran@morganhill.ca.gov>; Rene Spring <Rene.Spring@morganhill.ca.gov>; John McKay <john.mckay@morganhill.ca.gov>; Shane Palsgrove <Shane.Palsgrove@morganhill.ca.gov>; Gino Borgioli <Gino.Borgioli@morganhill.ca.gov>

Subject: Marijuana psychosis is real, it is insidious and it kill's!

To: Morgan Hill Mayor Richard Constantine, members of the Morgan Hill City Council, City Administrator Christina Turner, Chief of Police Shane Palsgrove and members of the community (Bcc)

From: Ronald L. Kirkish

Date: 4/17/2021

Regarding: marijuana and issues surrounding psychosis

Dear All,

This information was found in yesterday's news media and proves without a doubt why Morgan Hill should "never" permit marijuana dispensary's and its axillary businesses to ever be permitted in the city limits and jurisdiction of your city; it is a very dangerous drug and as you can see from this article, it "kill's".

I strongly urge you to share this information with others within your sphere's of influence with those who live within the jurisdiction of Morgan Hill.

B/r,

Ronald L. Kirkish

No Trial For 'Allahu Akbar' Man Over Death of Jewish Woman on Account of His Heavy Marijuana Use

<https://www.breitbart.com/europe/2021/04/16/top-french-court-refuses-try-man-murdering-jewish-woman/>

By [CHRIS TOMLINSON](#) - 16 Apr 2021

A top French court has upheld a decision not to charge an “Allahu Akbar” yelling man accused of murdering a Jewish woman, claiming he was not criminally responsible because he was in a drugs-related “delirious episode” at the time.

France’s Court of Cassation ruled that Kobili Traoré would not be charged in the death of an Orthodox Jewish woman named Sarah Halimi. Halimi died in 2017 after Traoré, who was her neighbour, allegedly beat and pushed her out of the window of her Paris apartment while praying and shouting.

The Court of Cassation hearings [began last month](#) and looked into whether or not to overrule a prior appeal court ruling from December of 2019, which maintained that Traoré’s [excessive marijuana](#) use had [triggered a “delirious episode”](#), leaving him not criminally responsible for the alleged acts.

Another court in 2018 had [refused](#) to hold Traoré criminally liable, claiming that he had been in a state of delirium at the time and had been a [heavy user of marijuana](#), [France24 reports](#).

“We do not understand the determination and procrastination that consistently seeks to turn this killer into a demented person, when he is a murderer whose presumed detention doesn’t even hide his hateful anti-Semitism,” Francis Kalifat of the Jewish group CRIF said at the time.

Kalifat reacted to the new ruling, [saying](#) on Twitter, “Now in our country, we can torture and kill Jews with impunity,” while tagging France’s President Emmanuel Macron and Justice Minister Eric Dupond-Moretti.

President Macron had criticised a court move to refuse to hold Traoré to account last year, saying that there was a need for a trial. His remarks sparked criticism from those who spoke of separation between the powers of the executive and the judiciary.

Lawyers representing the family of Halimi stated the ruling was a “bad message for Jewish citizens” and viewed to take their case to the European Court of Human Rights (ECtHR). Traoré’s lawyer said that while he understood the family’s anger, he claimed his client was not fit to stand trial.

Dovid Efine, the editor of the Jewish newspaper *Algemeiner*, commented on the top court ruling [saying](#): “The blow to French Jews can’t be understated. We stand in full solidarity.”

The case is just one of several murders of Jews in France in recent years, such as the murder of 85-year-old Mireille K., a Holocaust survivor who was [stabbed 11 times](#) to death by her Muslim neighbour in 2018.

A report released in 2019 revealed that France had seen a [73 per cent rise](#) in antisemitic incidents in the year Mireille K. was killed.

From: [Robin Bezanson](#)
To: [Rich Constantine](#); [Gino Borgioli](#); [John McKay](#); [Yvonne Martinez Beltran](#); [Rene Spring](#); [Shane Palsgrove](#); [Christina Turner](#); [Michelle Bigelow](#); [CC Public Comment](#)
Cc: [Robin Bezanson](#)
Subject: NO to future agenda item on Marijuana Dispensaries in Morgan Hill
Date: Monday, April 19, 2021 2:47:10 PM

Dear Mayor, Council Members, City Manager, and Chief of Police,

I strongly urge you to say NO when asked whether the staff should bring back a future agenda item to vote on marijuana dispensaries in Morgan Hill.

The Morgan Hill City Council throughout the years have created or been strong supporters of so many positive programs for its residents and their children such as the swim center, outdoor sports complex, Magical Bridge Playground, Downtown Parks, Pony Baseball, Pop Warner Football, Morgan Hill's Girls' Spirit Soft Ball, Camps, Dance, Karate, theater, and more.

These programs are all designed for the purpose of keeping our children healthy in mind, body, spirit and soul. Vital programs to keep our young minds busy and accountable so they don't choose to abuse drugs, get into trouble which could dramatically impact their future for a meaningful and fulfilling life.

Unfortunately, these healthy programs for our youth will be undermined and circumvented if the city council approves of marijuana dispensaries in Morgan Hill. It would send the wrong message to our youth that smoking and abusing marijuana is acceptable practice since the City of Morgan Hill allowed the businesses to open here.

Being that it's widely accepted that marijuana is a "gateway drug" which leads to variety of drug abuse and addictions, why would you want to put your community and our children/youth at risk by allowing these dispensaries to open in our town? It clearly damages development and will ruin the future of our youth/children and could lead to becoming a hopeless drug addict.

As a local Realtor, I do not feel this will enhance our city and it's desirability but rather detract. People want a safe place where they can raise their children without the influences that may harm the family unit and community as a whole. I have clients relocating here from areas where there are dispensaries. They love our community and it's focus on healthy lifestyles and focus.

Finally, the only main argument from the marijuana lobby and dispensary building owners is that the sales tax revenue will be meaningful. First of all, NO sales tax revenue is worth hurting our youth and their families. Second, this argument is not even true when you consider the history of marijuana dispensaries over-promising the returns. The data does not support this claim. There is no remorse from or consequences to these dispensaries for the empty words used to convince city leaders to accept the lies.

Please don't fall for the misleading promises and unrealistic expectations they will try to convince you of, but rather stand tall for your community as you have done in the past and choose to say NO.

Thank you for your consideration. Again our community pleads with you to do the right thing and do NOT bring back a future vote on marijuana dispensaries in Morgan Hill. It's bad for our city, our community, and our children/youth.

Thank you,
Robin Bezanson

Robin Bezanson

Realtor, Certified Residential Specialist

408-892-5763

www.BezansonTeam.com

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From: [Danean](#)
To: [Rich Constantine](#); [Gino Borgioli](#); [John McKay](#); [Yvonne Martinez Beltran](#); [Rene Spring](#); [Shane Palsgrove](#); [Christina Turner](#); [Michelle Bigelow](#); [CC Public Comment](#)
Subject: NO WAY, NO Marijuana Dispensaries in MH
Date: Monday, April 19, 2021 4:37:50 PM

Dear All,
Do the right thing...Say, NO Marijuana Dispensaries in MH.

I CANNOT believe we are here again for the 3rd time, really?
This is a horrible GATEWAY DRUG. Don't you think our kids have been through enough. The war on kids from all sides...HORRIBLE

PLEASE SAY NO...
NO Dispensaries IN MY COMMUNITY.

Thank You,
~Danean Smith

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From: [Erick Tuttle](#)
To: [Rich Constantine](#); [Gino Borgioli](#); [John McKay](#); [Yvonne Martinez Beltran](#); [Rene Spring](#); [Shane Palsgrove](#); [Christina Turner](#); [Michelle Bigelow](#); [CC Public Comment](#)
Subject: Please help discourage drug abuse by voting against anything that would enable stores to sell marijuana in Morgan Hill
Date: Monday, April 19, 2021 10:21:04 PM

You've heard or read several arguments from many others against marijuana. You know it's bad, and you wouldn't want any of its negative side effects for any of your loved ones.

You may have been convinced that marijuana has and can helped some people medically. That may be true for certain cases, but let them acquire their medical marijuana through prescription methods recommended by their doctors - and they can do that from sources outside our city.

If nothing else, please recognize at least one more voice from within your community with the desire that our community representatives and officers prevent any incremental changes which would make marijuana more available within our community.

Thank you,

Erick Tuttle | 

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From: [Judith Wendt](#)
To: [Rich Constantine](#); [Gino Borgioli](#); [John McKay](#); [Yvonne Martinez Beltran](#); [Rene Spring](#); [Shane Palsgrove](#); [Christina Turner](#); [Michelle Bigelow](#); [CC Public Comment](#)
Subject: Agenda Item 10: Vote NO to Marijuana Stores in Morgan Hill
Date: Tuesday, April 20, 2021 1:31:42 PM

Dear Morgan Hill Council Members:

Although I am a resident of Gilroy, your decision on Agenda Item 10 impacts my community too. I implore that you heavily consider the ramifications of your decision on whether to allow pot dispensaries in Morgan Hill. Our communities are closely related and work together on wildfires, policing, VTA, gang activity, homelessness and other common interests. Likewise, if you allow marijuana to be sold in Morgan Hill, you are making it easily accessible for the youth and residents of Gilroy as well.

In addition, I request that all council members review "The Letter to the Editor" in the April 20, 2021 edition of this week's Morgan Hill Times - "JUST SAY NO TO CANNABIS BUSINESS" by Mike Patterson, a former DEA Special Agent, who outlines in details the resulting problems to be faced if you allow these dispensaries to be readily available in Morgan Hill. I fully support what he warns of and urge you to read this letter in your consideration of this action. In another letter to the editor, Mary Patterson, a Trustee of the Morgan Hill Unified School District, "encourage council members to keep foremost in mind the health and safety of children and ensure the city is doing everything it can to limit availability of harmful substances to kids." As a representative of the local schools and the students, her viewpoint should be taken seriously.

Please vote NO to any future consideration of Marijuana Stores in Morgan Hill.

Sincerely,

Judith Wendt

Gilroy, CA 95020

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From: [Rina Sutaria](#)
To: [Rich Constantine](#); [Gino Borgioli](#); [John McKay](#); [Yvonne Martinez Beltran](#); [Rene Spring](#); [Shane Palsgrove](#); [Christina Turner](#); [Michelle Bigelow](#); [CC Public Comment](#)
Cc: [Rina Sutaria](#)
Subject: VOTE NO to Marijuana Stores in Morgan Hill
Date: Tuesday, April 20, 2021 1:35:58 PM

Councilmembers,

I am writing to you as a parent and citizen of Morgan Hill to persuade you to vote NO on the issue of allowing retail Marijuana dispensaries in the city. I understand your motivation to increase tax revenues to fund other city mandates, but I urge you to deliberate on the costs of these businesses in our community.

First, at the meeting on Wednesday, I hope to hear an accounting from the proponents of the idea as to how much revenue is projected to increase and how much will be spent on additional (non-police) regulatory enforcement costs on the city.

In addition to city regulators, please consider additional costs police hours that will be necessary to investigate impaired driving cases, secondary sales cases, and robberies and burglaries of such establishments. These stores will be a target for criminals who see two non-traceable assets in them (cash and drugs) and will undoubtedly result in taxing our police force. A simple Google news search of robbery and marijuana dispensary demonstrates the danger to our community you will be inviting in with an affirmative vote.

Second, I as most transplants to our city fell in love with Morgan Hill as a wonderful place to raise a family in a safe environment. It is how the city is marketed by realtors, the chamber of commerce, the school district, and your body. Marijuana dispensaries would not show up on any marketing materials by those groups for a reason. It does not match the values being sold to prospective tourists, businesses, or homebuyers.

Third, I am sympathetic to customers (whether medical or recreational) who have to purchase marijuana from stores outside the city but with the advent of delivery services or back door gardens I would submit to you that the inconvenience is trivial when compared to the costs to our children's health if even one child is prevented from premature underage experimentation with drugs.

Your constituents are listening and watching closely to your deliberations to hear whether you are willing to trade the cultural makeup of our city and our children's safety for an increase in tax dollars and if so why? Thank you for your attention.

- Rina Sutaria

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From: [Angie Gonzalez](#)
To: [Angie Gonzalez](#)
Subject: FW: Vote NO to marijuana stores in Morgan Hill at the CC meeting on April 21st
Date: Tuesday, April 20, 2021 2:31:02 PM

From: Hal Hendrickson1 <[REDACTED]>
Sent: Tuesday, April 20, 2021 10:30 AM
To: Michelle Bigelow <Michelle.Bigelow@morganhill.ca.gov>
Subject: Vote NO to marijuana stores in Morgan Hill at the CC meeting on April 21st

Dear Councilperson Bigelow,

Thank you for your public service. I appreciate your willingness to serve the citizens of Morgan Hill.

I ask you to say NO when asked whether staff should bring back a future agenda item to vote on marijuana dispensaries in Morgan Hill.

Morgan Hill City Councils throughout the years offered many positive programs for its residents and their kids; a beautiful state of the art swim center, outdoor sports complex, Magical Bridge Playground, Downtown Parks, 4th of July Celebration, Pony Baseball, Pop Warner Football, Morgan Hill's Girls' Spirit Soft Ball, Camps, Dance, Karate and more. All of these enhance the quality of life for Families. I have personally served on the Boards of many of these organizations.

I'm asking, does the addition of "Marijuana Stores" in Morgan Hill accomplish the same purpose?? The answer is NO.

Thank you for your consideration. This community pleads with you to do the right thing and don't bring back a future vote on marijuana stores in Morgan Hill at this time.

Hal Hendrickson

[REDACTED] Cell

"Life is just easier if you're happy"

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From: [Angie Gonzalez](#)
To: [Angie Gonzalez](#)
Subject: FW: Agenda Item 10: Vote NO to Marijuana Stores in Morgan Hill
Date: Tuesday, April 20, 2021 2:31:26 PM

From: Mike Robinson <[REDACTED]>
Sent: Tuesday, April 20, 2021 11:26 AM
To: Rich Constantine <Rich.Constantine@morganhill.ca.gov>; Gino Borgioli <Gino.Borgioli@morganhill.ca.gov>; John McKay <john.mckay@morganhill.ca.gov>; Yvonne Martinez Beltran <yvonne.martinezbeltran@morganhill.ca.gov>; Rene Spring <Rene.Spring@morganhill.ca.gov>; Shane Palsgrove <Shane.Palsgrove@morganhill.ca.gov>; Christina Turner <Christina.Turner@morganhill.ca.gov>; Michelle Bigelow <Michelle.Bigelow@morganhill.ca.gov>
Cc: publiccomment@morganhill.ca.gov
Subject: Agenda Item 10: Vote NO to Marijuana Stores in Morgan Hill

Mayor, Councilmembers and City Manager,

A point that I would like to make with the idea of MJ Stores in Morgan Hill is that you can never prevent secondary sales of the marijuana from these stores into Morgan Hill. In the approximate 2 years I worked with Santa Clara Unified Schools we discovered the majority of MJ coming into the schools were from students that got it from their parent(s) that initially purchased it from MJ Stores. The students take the MJ from home and sell it to fellow students for profit. We've also seen graduated students that know current students and resell the MJ from the MJ Stores (with markup) to the current students. Make sense?

Point is, once you allow MJ Stores in your town you can NEVER prevent secondary sales to teens. Never.

Today's MJ is much more potent and addicting than the MJ of old. Let's not curse our our teens with a lifetime of addiction. Please vote NO (again) to Marijuana Stores in Morgan Hill. Money is not worth the harm it will bring to the next generation.

Mike Robinson
Former Special Agent, DEA

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Item # 10

AGENDA DATE: 04/21/2021
SUPPLEMENT # 3

April 19, 2021

Mayor Rich Constantine
Council Member Gino Borgioli
Council Member Yvonne Beltran
Council Member Rene Spring
Council member John McKay
Police Chief Shane Palsgrove
City Manager Christina Turner
City Clerk Michelle Bigelow

Concerning: Marijuana Dispensaries

Dear Mayor, City Council Members, Police Chief and City Staff,

Concerning the approval of Marijuana Dispensaries, I ask you to consider my unique perspective of 35 years in law enforcement as you make your decision.

There are many studies that you can find that will support dispensaries as well as many studies that you can find to outline the ill effects of allowing this drug to be sold in community dispensaries. These studies are plentiful and can be used by supporters and non-supporters alike but I ask you to look beyond these studies to a study that is never cited because it is only observed by Law Enforcement officers. It is the continuing and reckless use of our private and public lands to grow Marijuana from the business and financial aspect.

Most of these growing operations are in remote areas of our surrounding mountains along our pristine creeks (amongst waterfalls and beauty that you cannot imagine) and deep in our Oak forests. These grow sites completely surround us in the East foothills and in the West foothills. Occasionally, you will hear a news story about an Eradication effort that yielded thousands upon thousands of Marijuana Plants but those stories only reflect a small portion of what is going on in the mountains around us. As you are reading this letter of my concern, those growers are looking down on the valley landscape tending to their plants at this very moment. It's growing season.

The growers themselves are actually hard workers but unfortunately they all work for the Mexican Drug Cartels. They themselves receive very little for their 7 day work weeks but they work in these grows by choice.

The observation from any of the Law Enforcement Officers that have worked on the Marijuana Eradication Teams will tell you that the dope they grow is nothing but profit, lots and lots of profit. The Cartels are using our fertile lands, ruining our waterways with dam diversions and pollution that you would not believe unless you saw it yourself. The Cartels smuggle in fertilizers that are banned in the USA because they are very effective in killing animals that eat their plants and eventually permanently

damage streambeds, wildlife and the native plants. The destruction is mind blowing, the trash along and in these grow sites is hard to stomach.

You must be thinking that this is a great reason to have a Marijuana dispensary. I offer you this observation;

If a typical grow site has 20,000 plants and each plant is worth \$2,000 and the average worker in a grow earns \$7,000 per season that means about \$49,000 in labor (5-7 growers per garden) for \$40,000,000 of harvest. Any business owner will tell you that they can't compete with that – it almost sounds impossible. But it's true.

A legitimate dispensary in Morgan Hill with employees who will earn wages, pay payroll taxes, have medical insurance along with the dispensary owner who will have to pay rent, pay taxes, pay fees, pay for inspections, electricity, etc. – all of those costs that the Cartels don't have will be divided up by the ounce and put into small prescription bottles with a nice label (yet another cost that the Cartels don't experience).

Presumably the reason the City is considering this is for the "tax revenue" that it will generate. What this will generate is business competition that cannot be beat. For the most part the dope in South County is pretty inexpensive compared to what it will have to sell for at a dispensary.

So for the marijuana buyers in South County it's likely that they'll be buying the high profit dope from the growers at a fraction of the price that a dispensary will sell it for. Even if the cartels and dispensary engaged in a pricing war – who do you think would win?

After a quick business analysis of the Strengths, Weaknesses, Opportunities and Threats (SWOT) for a dispensary, it's easy to conclude that a Dispensary in Morgan Hill will not be able to compete with the Cartels and their low cost overhead, it's just not financially possible.

You may be concluding that if we could only get rid of the illegal grows all would be well and then a dispensary would make sense but that eradication effort has been going on for the better part of 20 years and the cartels come back year after year because it is so profitable.

Let the established dispensaries in San Jose be the ones that compete with the Cartel business. Let's let South County residents stand against the dispensary for the simple reason that we don't want to create competition that increases Marijuana production in our surrounding hills.

Respectfully Submitted,

Frank Dutra
Retired / Santa Clara County Sheriff's Office

From: [REDACTED]
To: [Rich Constantine](#); [Gino Borgioli](#); [John McKay](#); [Yvonne Martinez Beltran](#); [Rene Spring](#); [Shane Palsgrove](#); [Christina Turner](#); [Michelle Bigelow](#); [CC Public Comment](#)
Subject: Marijuana dispensaries agenda item 10
Date: Tuesday, April 20, 2021 4:54:01 PM

Mayor, Council members nd City Manager,

I am deeply concerned that the council is considering marijuana dispensaries in our city. Marijuana is not an innocent drug. It is much stronger drug than it was in the 60's. Studying the brains of chronic users of marijuana has shown their brains to be compromised. It is a gateway drug and sends the wrong message to our youth.

Sincerely
Steve Wise

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From: [Andy Kwitowski](#)
To: [Rich Constantine](#); [Gino Borgioli](#); [John McKay](#); [Yvonne Martinez Beltran](#); [Rene Spring](#); [Shane Palsgrove](#); [Christina Turner](#); [Michelle Bigelow](#); [CC Public Comment](#)
Subject: This is Wrong!
Date: Wednesday, April 21, 2021 12:58:56 PM

To Whom it may concern,

City of Morgan Hill and council for the third time are putting up for vote the approval of Marijuana dispensaries and growing operations in our town. This is wrong! The only way this is happening is special interest, corruption, and power influence at a small local government level. It is obvious that this is an attempt to ram rod this threw on the 3rd attempt, but not only should the vote be NO for the third time this matter should be looked at much deeper threw an investigation and the corruption, special interest should be routed out, called out for what they are doing then dismissed for ever, so we do not have this level of corruption in our town. In turn we protect our youth from potential harm, and we get rid of special interest groups that only have one thing on their minds, money. Money should NOT be made from lobbying local political officials to approve policy that favors the cause to make money but totally disregards what the public wants and public safety.

I hope the bord has the courage to vote this down again and furthermore assure that we do not have corruption in our city.

Thank You,

Andy K.

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From: [Alejandro Aguirre](#)
To: [Rich Constantine](#); [Gino Borgioli](#); [John McKay](#); [Yvonne Martinez Beltran](#); [Rene Spring](#); [Shane Palsgrove](#); [Christina Turner](#); [Michelle Bigelow](#); [CC Public Comment](#)
Subject: "No" to Marijuana Dispensaries in Morgan Hill
Date: Wednesday, April 21, 2021 1:48:19 PM

Mayor, Councilmembers and City Manager,

As a parent and member of our community, I implore you to say NO when asked whether or not to bring back the agenda item to vote on marijuana dispensaries in Morgan Hill. I know many other parents and community members share the same sentiment and are busy parenting and working and cannot write or attend a city council meeting. This is why they elected many of you; to make the right decision in representing them and what is best for Morgan Hill.

I recognize that marijuana is legal for medical and recreational use and that is not my concern. My purpose of this email is to limit the negative impact to our city.

I have read through the "City of Morgan Hill:2018 Cannabis Planning & Revenue Measure Survey" (<https://www.morgan-hill.ca.gov/DocumentCenter/View/22969/2018-Cannabis-Planning-and-Revenue-Measure-Survey>) and fail to see overwhelming support, and more importantly, the benefit for Morgan Hill.

The data creates a vision of increased tax revenue. However, the survey fails to discuss the detriment to our community and additional cost the city will incur as a result. We cannot ignore what will ensue if you allow the sale of marijuana within our city.

To my knowledge the City Council has already twice decided not to bring marijuana stores to Morgan Hill. I urge you to do what is best for our city and reject another attempt to bring marijuana stores back for a vote. It is the right decision for our community and will set the proper example for our children.

Regards,

Alejandro Aguirre

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From: [Angie Gonzalez](#)
To: [Angie Gonzalez](#)
Subject: FW: Agenda Item 10
Date: Wednesday, April 21, 2021 2:40:50 PM
Importance: High

From: Barbara Jorgensen <[REDACTED]>

Sent: Tuesday, April 20, 2021 8:27 PM

To: Rich Constantine <Rich.Constantine@morganhill.ca.gov>; Gino Borgioli <Gino.Borgioli@morganhill.ca.gov>; John McKay <john.mckay@morganhill.ca.gov>; Yvonne Martinez Beltran <yvonne.martinezbeltran@morganhill.ca.gov>; Rene Spring <Rene.Spring@morganhill.ca.gov>; Shane Palsgrove <Shane.Palsgrove@morganhill.ca.gov>; Christina Turner <Christina.Turner@morganhill.ca.gov>; Michelle Bigelow <Michelle.Bigelow@morganhill.ca.gov>; publiccomment@morganhill.ca.gov <IMCEACC-+20publiccomment+40morganhill+2Eca+2Egov@namprd15.prod.outlook.com>

Subject: Agenda Item 10

Importance: High

I strongly object to approving a Marijuana Retailer in the Morgan Hill Area. We moved here to get away from the heavily intoxicated people in San Jose and have never regretted it. However, the idea that such an outlet would exist in our downtown area is revolting. I thought we were trying to be a down with dignity and a "safe place" to enjoy a pleasant afternoon. Try doing that around any one of these retailers. Please vote no. Let's keep Morgan Hill a destination for relaxation and enjoyment. Thank you for considering my request
Barbara Jorgensen

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From: [Angie Gonzalez](#)
To: [Angie Gonzalez](#)
Subject: FW: Agenda Item #10: Vote NO on Marijuana Dispensaries in Morgan Hill
Date: Wednesday, April 21, 2021 2:38:46 PM

From: Michael Burchfield <[REDACTED]>

Sent: Tuesday, April 20, 2021 6:21 PM

To: Rich Constantine <Rich.Constantine@morganhill.ca.gov>; Gino Borgioli <Gino.Borgioli@morganhill.ca.gov>; John McKay <john.mckay@morganhill.ca.gov>; Yvonne Martinez Beltran <yvonne.martinezbeltran@morganhill.ca.gov>; Rene Spring <Rene.Spring@morganhill.ca.gov>; Christina Turner <Christina.Turner@morganhill.ca.gov>; Michelle Bigelow <Michelle.Bigelow@morganhill.ca.gov>

Subject: Agenda Item #10: Vote NO on Marijuana Dispensaries in Morgan Hill

Dear Mayor Constantine, Council Members and City Manager,

I respectfully request that you say **NO**, for the third time to requests to allow Marijuana Dispensaries within the greater Morgan Hill area. I do not believe bringing Marijuana Dispensaries to Morgan Hill is in the best interest of our fine city - despite whatever tax revenue they may provide the city, if any. I am convinced of this for several reasons.

First, our city has one of the lowest crime rates in Santa Clara County. I believe this will change due to the type clients these dispensaries will attract from outside our community, if dispensaries are allowed to open here. We already have a problem with criminal elements coming into the city and committing crimes. A dispensary(s) will increase this trend.

Second, I have grave concern about the regulation of products sold. I conducted personal research into how easy or difficult it would be to obtain product from marijuana dispensaries by visiting several which are already conducting business in San Jose. I was told by one that I needed a prescription from a doctor to obtain product. I was then told which doctor I could see in order to obtain a prescription on request, with little or no screening. At another dispensary I was told that obtaining product was as easy as saying I suffered from PTSD due to military service; and if I had my DD214 with me to prove I was a veteran I would be allowed to purchase product without further screening. At yet another dispensary I was told that my wife need only say that she suffered from Post Menstrual Syndrome to obtain product. If product can be obtained as easily as this, who is going to guarantee that marijuana product in its many and various forms will not be sold to minors or to those who do not actually need said product? Who will be responsible for proper regulation, if this is not happening now at dispensaries that are already in operation just a few miles up the road from us?

Third, medicinal marijuana is already available for purchase on line and many people who are in true need of these products, or who are of age, purchase from online dispensaries or from dispensaries in other towns and cities that are well regulated. With this being the case, why do we need an actual physical dispensary within our own city limits? I am forced to ask, "Do the pros outweigh the cons"? I seriously doubt it.

I can anticipate two objections to my reasoning as stated above. First, it might be said that it is easy for someone like me to object to our having our own local marijuana dispensary, since I am not in need, personally, of the relief marijuana products bring. I have a grandson, however, who has a seizure complex who is prescribed CDB oil by a legitimate doctor. This fact does not change my opinion on having a dispensary in Morgan Hill. On the contrary, my son obtains the CDB oil from a dispensary in another nearby city and serves as a case in point to my third objection above.

Some may also object to my objections by citing the fact that the use of marijuana is now legal in the state of California anyway and medicinal marijuana is a legitimate product for the use of those in need. This is true. But it is also true that 'legal' does not necessarily equal 'moral', nor does it mean that because something is legal it is therefore wise to have and use. The presence of a marijuana dispensary within Morgan Hill will only make these products more easily obtainable to minors and to those who, instead of needing them for medicinal purposes, will use them illegitimately, not to mention attracting undesirable elements from outside our community; and these factors are sure to have a negative affect on our community.

I greatly appreciate you taking the time to read this long email and for considering my point of view. Be assured of my prayers for each of you, for wisdom as you serve in city government. Your task is not an easy one as you serve in public office. May the great God lead you to make wise decisions, for the good of our community.

Respectfully yours,

Michael Burchfield

(Pastor/Chaplain)

residing at

Morgan Hill, Ca, 95037

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From: [REDACTED]
To: [Rich Constantine](#); [Gino Borgioli](#); [John McKay](#); [Yvonne Martinez Beltran](#); [Rene Spring](#); [Shane Palsgrove](#); [Christina Turner](#); [Michelle Bigelow](#); [CC Public Comment](#)
Cc: [Matt Wendt](#)
Subject: Cannabis Retail unintended consequences
Date: Wednesday, April 21, 2021 8:27:47 AM

Dear Councilmembers,

I am a sitting San Benito County Supervisor and former Hollister School District Board member that has spent much time dealing with the unintended consequences of allowing what I would call a vacuum industry. I know your interest is to generate revenue but please realize there is much cost to this industry in oversight, crimes, school and youth impacts.

There is also a very sinister element which is felt immediately and those are secondary consequences. I know its the face you will hear about a safe, legal, and regulated transactions happening in retail sales. You see, I just got off the phone with our high school superintendent and he mentioned to me the very real consequences of high school students using vaping pens that have THC but not odor with potency like 12 times the marijuana when I was in school. Not to mention, that there is a culture of acceptance created through less than responsible parents and a law that says it is legal but has a zero engagement campaign in educating students alongside parents about the implications of drugs on campus. The superintendent also mentioned the class action lawsuit they have entered into because of the serious issues they have dealt with students using JEWEL products, a manufacturer of vaping pens. The amount of staff time and dollars to deal with the issue alongside an industry that has had little to no engagement about substance abuse and intervention strategies. countless hours with counselors. It's been such a serious issue that one of our North county schools has had to install vaping detection devices in the student restrooms.

I foresaw this back in 2016 when Prop 64 had passed. Due to the culture of acceptance that I feared would be created amongst our youth and the vacuum of criminal element that I knew would come in from outside of our community only because many counties had opted out of cannabis retail. I'm not saying that everyone that use have criminal notions as I know many people that use for medicinal purposes but just the same it is the CBD that has many medicinal purposes, which is found in higher concentration in hemp not cannabis. We tried to get ahead of these issues by having a roundtable discussion with our Sherriff, police, district attorney, judge, and probation and all had an ominous response in that discussion. They had little ability to manage the consequences through their jurisdictions to address the incoming problems. Another board member and myself asked to at least take a proactive approach through intervention and updating ALL school signage. We wanted to stress to the public that "We are STILL a drug free zone".

Many counties are struggling and are trying to be creative to generate revenue to address different shortfalls that they have had to experience through COVID-19. I believe it to be a noble cause but the ends don't justify the means. I am also a small business owner and in business the best stream of revenue is the steady stable consistent revenue. Cannabis is, I would say, volatile and therefore far from consistent and stable. The only 2 dispensaries in our city have had little to no benefit on the city's general fund. The true cost to manage oversight safely is not supported by the revenue.

Thank you for reading and God bless you in your leadership!

Peter Hernandez
SBC resident

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From: [Wayne Farquhar](#)
To: [Rich Constantine](#); [Gino Borgioli](#); [John McKay](#); [Yvonne Martinez Beltran](#); [Rene Spring](#); [Shane Palsgrove](#); [Christina Turner](#); [Michelle Bigelow](#); [CC Public Comment](#)
Subject: We are opposed to a marijuana dispensary in Morgan Hill
Date: Wednesday, April 21, 2021 9:51:00 AM

We are opposed to having a marijuana dispensary for many reasons including this information from a Morgan Hill Times article:

There has been a "Perfect Storm" of three factors that has made today's marijuana dangerous for children. First, marijuana has been legitimized and promoted in our society. Children believe that marijuana is safe and is a "medicine." Having a marijuana dispensary in Morgan Hill will only further the false legitimization of a dangerous drug. Marijuana is the only drug that works as a depressant, stimulant and hallucinogenic.

Second, marijuana has changed. THC is the psychoactive chemical in marijuana that gives the user the "high." Naturally grown marijuana has a THC level of 3-6%. Marijuana has been chemically and artificially altered to increase the THC past 30% in plantlike form. THC can be extracted from marijuana and sold at levels reaching 95-98%. This extracted THC is often "vaped" and injected into "edibles." Marijuana dispensaries often advertise their elevated THC levels as a selling point.

But buyer beware: THC has recently been shown to be dangerous, especially in the developing brain of a child. Recent medical research and studies have shown the following:

- Marijuana is addictive – National Institute on Drug Abuse 2020 Adolescent marijuana use is associated with risk of depression and suicide in early adulthood – JAMA Psychiatry. 2019
- High Potency Marijuana (THC) can lead to psychosis. – The Lancet Psychiatry journal 2019.

Third, the ingesting of marijuana has changed. A parent can no longer smell marijuana smoke on their child. High potency THC is now "vaped" in electronic cigarettes. Or a child will eat an edible laced with THC. These edibles often look like treats or candies which the kids already identify with and trust. Marijuana stores notoriously sell products marketed to kids. A child can ingest marijuana without the tell-tale signs that would have alerted their parents of the child's marijuana use.

Lastly, we now know that teens who see storefront advertisements for marijuana are more likely to use the drug.

While a marijuana dispensary in Morgan Hill would be profitable for the owners and investors, our kids and community would end up paying the ultimate price—addiction, psychosis, depression and suicide. No amount of profit is worth the life of one teen. Ensuring a bright, healthy and successful future for our children in a drug free environment should be on the city council's Agenda, not marijuana dispensaries for the profit of the owners and investors.

Wayne & Cari Farquuhar

[REDACTED]

MH

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From: [Keith Howell](#)
To: [Rich Constantine](#); [Gino Borgioli](#); [John McKay](#); [Yvonne Martinez Beltran](#); [Rene Spring](#); [Shane Palsgrove](#); [Christina Turner](#); [Michelle Bigelow](#); [CC Public Comment](#)
Subject: Vote NO to marijuana stores in Morgan Hill - Comment from a resident
Date: Wednesday, April 21, 2021 12:57:48 PM

To : City Council Members and Mayor -

Vote NO to marijuana stores in Morgan Hill
April 21, 2021

Please reject any plans to vote for or open any marijuana stores in Morgan Hill. Evidence shows that it will cause several negative impacts on our families and community, which would over-shadow any perceived benefits.

The National Research Council has concluded that the “long-term use of marijuana may alter the nervous system in ways that promote violence.” No place serves as a better example than Amsterdam. Though often touted as a well-functioning city with a relaxed attitude toward drugs, Amsterdam is also one of the most violent cities in Europe. In California, as well, the areas around cannabis clubs have experienced exponential increases in crime rates.

Clinical studies reveal that long-term, moderate consumption of the drug impairs short-term memory, slows reaction time, increases the risk of heart attack, and can result in birth defects, strokes, and damage to the respiratory system and brain.

My wife and I are grateful residents in Morgan Hill, and hope to continue our lives here with the positive values this city has mostly embraced. We have 5 adult children, and 8 grandchildren, so we are well-aware of how easy people can be tempted to accept “recreational drugs” in the belief that use of such a substance is not addictive or harmful.

Make the correct moral decision ---- please do not encourage or vote for any marijuana stores in Morgan Hill! I plan to attend the Zoom Council Meeting tonight.

Respectfully,

J. Keith Howell

Resident of Morgan Hill

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From: [Angie Gonzalez](#)
To: [Angie Gonzalez](#)
Subject: FW: Please Deny the Request to Revisit Commercial Cannabis
Date: Wednesday, April 21, 2021 2:43:24 PM

From: Steve Betando <[REDACTED]>
Sent: Wednesday, April 21, 2021 10:52 AM
To: Rich Constantine <Rich.Constantine@morganhill.ca.gov>; Rene Spring <Rene.Spring@morganhill.ca.gov>; Yvonne Martinez Beltran <yvonne.martinezbeltran@morganhill.ca.gov>; Gino Borgioli <Gino.Borgioli@morganhill.ca.gov>; John McKay <john.mckay@morganhill.ca.gov>
Cc: Christina Turner <Christina.Turner@morganhill.ca.gov>; Michelle Bigelow <Michelle.Bigelow@morganhill.ca.gov>
Subject: Please Deny the Request to Revisit Commercial Cannabis

Dear Mayor Constantine Vice Mayor McKay, Councilmember Martinez, Councilmember Spring, and Councilmember Borgioli,

I am not able to attend the City Council Meeting tonight so I offer comments to you by this message.

With respect to your agenda item: CONSIDER COUNCIL INITIATED AGENDA ITEM TO REVISIT COMMERCIAL CANNABIS, I urge you to deny the request. On behalf of the Governing Board and staff of the Morgan Hill Unified School District, I spoke before the Council during the previous consideration and my statements in objection to such a proposition still stand. In this message I will address two questions and provide resources to substantiate the answers. Please protect our families and our students.

Does cannabis have lasting harmful effects. Yes. There is clear evidence that early-onset cannabis use is harmful to cognitive development and mental health.

Is cannabis addictive for youth? Yes. Contrary to statements from the promoters of the cannabis industry, marijuana is addictive. Non-biased research shows many users become addicted to marijuana; the number of those who become addicted grows to as much as 50% for those who start as adolescents. Adolescents and young adults who smoke marijuana daily or almost daily are well on their way to addiction, if not already addicted. Academic consequences and personal life impacts are severe. Addicted youth or simply frequent users often perform poorly or function at a sub-optimal level in their schoolwork and in other areas of their lives.

Long-term marijuana users who try to quit report withdrawal symptoms including irritability, sleeplessness, decreased appetite, anxiety, and drug craving, all of which can make it difficult to stay off the drug.

I recommend decision-makers who doubt the addictive reality of cannabis talk to the parents of students who are afflicted with the addiction about those experiences. Talk with them about whether or not easy access and societal acceptance has fueled the addiction. Ask them if cannabis has upended their children's lives or adversely impacted each of their families. I have interacted with parents of children afflicted with such addictions. These stories are heartbreaking. Thanks for reading my message.

Here is a collection of research studies supporting the National Institute on Drug Abuse research-based guide: [Principles of Adolescent Substance Use Disorder Treatment](#)

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Sincerely,
Steve

Steve Betando
Superintendent
Morgan Hill Unified School District

"Integrity is choosing courage over comfort; choosing what is right over what is fun, fast, or easy; and choosing to practice our values rather than simply professing them."

- Brené Brown

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From: Paula Gordon
To: Rich Constantine; Gino Borjoli; John McKay; Yvonne Martinez Beltrami; Rene Springs; Shane Palsgrove; Christina Turner; Michelle Bielow; CC Public Comment
Subject: Efforts to Keep Commercial Cannabis Out of Morgan Hill
Date: Tuesday, April 20, 2021 6:17:53 PM
Attachments: 2020-10-23 Paula D Gordon Ph.D. Why Marijuana Legalization is a Very Bad Idea.docx
2021-04-01 Paula D. Gordon Ph.D. Online Courses Being Taught April - December 2021.docx
Importance: High

To All Public Officials in Morgan Hill:

Please consider instituting policies that are aimed at stopping the use of marijuana and other psychotomimetic substances. Please also consider working to reverse the current law in the State that has legalized marijuana use.

I have also attached information about online courses that I teach on the topics of marijuana and the drug crisis.

Thank you so much for your consideration,

Paula Gordon

Paula D. Gordon, Ph.D.
Washington, D.C.

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Public Administration in the Public Interest
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I hope you will consider the following from <https://momsstrong.org/2021/03/04/marijuana-predictable-and-unpredictable-effects/> (If reposting, please note that it first appeared on the MomsStrong.org website.)

Mar 4, 2021



There is no way to “safely” use any amount of THC. Not only is there a cumulative effect that varies from person to person, there are many different kinds of unpredictable as well as predictable effects. These effects include harmful mental, physical, and spiritual effects. For instance, regarding the latter, theosophists say that “will power is soul power.” They hold the view that giving up of one’s will power under the influence of a psychoactive drug and hallucinogens, including marijuana, amounts to giving up one’s “soul power.” See spiritualharmofmarijuana.com for further views on this topic. Scientific research references to the harmful mental, physical, and societal effects are all noted in the following article. References to research linking marijuana use and exposure to the sensitization of the brain (at all stages of development and at all ages) is noted. Also noted in the following article is the increased tendency of those whose brains had been sensitized, to use and become addicted to marijuana as well as other substances, including opioids. (Both human and animal research cited in the article confirm this finding):

- “[Why Marijuana Legalization is a Very Bad Idea ~ Marijuana as a Contributor to the Opioid Crisis, the Homeless Problem, and Societal Unrest and Its Harm to the Brain, Body, Future Generations, and Environment](#)” Published October 22, 2020 by the American Center for Democracy” (This file is attached)

The fact that THC has “idiosyncratic psychotomimetic” effects in normal human subjects was established in the sixties by Harris Isbell et al., *Psychopharmacologia*,

1967 Such findings have been reconfirmed by other researchers over the years. The arteriopathic, teratogenic, and genotoxic effects are also noted in the article “Why Marijuana Legalization is a Very Bad Idea” For voluminous references on physical effects and birth anomalies, see the [FDA submission of Stuart Reece, M.D.](#) (also posted at [GordonDrugAbusePrevention.com](#)) and Google his work and that of Dr. Gary Hulse on these topics. Alarming, their work shows the linkages between marijuana use among males and females and a growing list of genotoxic effects. Here are but a few examples of their work:

- [A geospatiotemporal and causal inference epidemiological exploration of substance and cannabinoid exposure as drivers of rising US pediatric cancer rates.](#) BMC Cancer 21, 197 (2021)
- [Canadian Cannabis consumption and patterns of congenital anomalies: an ecological geospatial analysis.](#) J Addict Med 2020;14(5):e195–e210
- [Cannabis teratology explains current patterns of Colorado congenital defects: the contribution of increased cannabinoid exposure to rising Teratological trends.](#) Clin Pediatr 2019;58(10):1085–123

The online courses that I teach for Auburn University Outreach on the effects and impacts of marijuana use highlight such information. The course that I teach on the drug crisis emphasizes the ways in which marijuana use and legalization are fueling the epidemic of drug use and addiction. I also teach a course on “Transforming and Leading Organizations” that can be helpful to those leading organizations dealing with the drug problem. Information about the courses can also be found on the following websites: [PopPot.org Online Course](#) and [GordonDrugAbusePrevention.com](#). One may also go directly to the Auburn University Outreach website for the course on [The Effects and Impacts of Marijuana](#), (for the course on [The Drug Crisis](#), and to <http://www.auburn.edu/outreach/opce/tlo/#schedule> for the course on [Transforming and Leading Organizations](#) or call (334) 844-5100.

A suggestion: Educational efforts are essential in order to dissuade users and promoters of legalization and use regarding the harmful consequences of their actions and the harmful effects of use. You may wish to gift registrations for any or all of these courses to individuals who might be able to benefit from the course content. This would include public officials, their staff, those in non-profit organizations working to address the drug problem, and parents or friends of users who are trying to dissuade others from using marijuana and other psychoactive substances. Indeed, health care providers as well as researchers might also find the courses helpful. The courses are also suitable for those who are educators and trainers in the drug abuse field.

Paula D. Gordon, Ph.D. is an Educator, Writer, Strategist, Online Publisher (including [GordonDrugAbusePrevention.com](#)), and Instructor of online courses offered by Auburn University Outreach.

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Why Marijuana Legalization is a Very Bad Idea

Marijuana as a Contributor to the Opioid Crisis, the Homeless Problem, and Societal Unrest and Its Harm to the Brain, Body, Future Generations, and Environment

by Paula D. Gordon, Ph.D.

October 22, 2020

<https://acdemocracy.org/why-marijuana-legalization-is-a-very-bad-idea/>

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The use of marijuana violates Federal law. Marijuana should not have been allowed to be legalized by any state or U.S. jurisdiction and it should not be allowed to be further legalized if for no other reason than this: Marijuana with its active principle, $(-)\Delta^9$ -tetrahydrocannabinol (THC), is low to a high-level hallucinogenic drug with numerous harmful mental and physical effects, including idiosyncratic effects on mental health and mental functioning (Isbell et al., Psychopharmacologia, 1967).

Unlike the minimal or moderate use of alcohol and tobacco, the use of even a small amount of marijuana affects a person's mental functioning in a variety of predictable and unpredictable ways. For example, it has triggered psychoses and schizophrenia in normal individuals (Miller, 2018 and Miller, 2019). Contrary to popular belief, owing to the unpredictable effects it has been demonstrated to have, no amount of regulation could ensure the "responsible" or "safe" use of this low to a high-level hallucinogen.

The impact that marijuana is having in the U.S. in the State of Colorado alone is readily apparent from the annual Rocky Mountain High-Intensity Drug Trafficking Area Reports (RMHDTA, 2018, 2019, and 2020) and from watching the Pueblo Physicians Code Red series of videos (2016). An excellent video, to begin with, is a presentation by Dr. Karen Randall. The Code Red series of videos features emergency room doctors in Colorado who describe in graphic detail what has been going on there since marijuana was legalized there, including psychotic breaks, violent behavior, suicidal depression and acts of suicide, the cannabis hyperemesis syndrome (violent screaming and vomiting), and miscarriages. Below are reports of the harmful and costly impacts of marijuana legalization in those jurisdictions where it has been legalized.

Those in roles of responsibility for the welfare of the public must become familiar with the voluminous scientific research and longitudinal studies that have been done concerning marijuana, the effects of its use, and the impacts that it is having on society. Advocates of marijuana use and legalization and persons with a vested interest in commercialization of marijuana tend either to be ignorant of the depth and breadth of the extensive scientific literature or dismiss what they know about the scientific evidence out of hand. It is important for those in roles of responsibility for the

public welfare to recognize that researchers established many decades ago that THC, the active principle of marijuana, causes “idiosyncratic psychotomimetic” effects in healthy human subjects (Isbell et al., **Psychopharmacologia**, 1967).

Surely no reasonable person knowing of these and subsequent studies linking THC to psychotomimetic effects would enact legislation that allowed and sanctioned the use of a substance that has been shown to have such a potential for harm. To do so would be to sanction playing Russian Roulette with one’s mental health and cognitive faculties, including concentration, memory, and reasoning, and decision-making capabilities.

Since the first most notable study with THC on healthy human subjects was done, other studies, including longitudinal studies have established that marijuana use can trigger psychoses and schizophrenia, as well as suicidal depression, and suicides. For a compilation of such research, see Gordon. Also see Miller, 2018, and Miller, 2019. It is important to study the growing research literature and not rely on the cherry-picked summaries of studies done decades ago involving users of marijuana that had extremely low levels of THC.

There is also a set of extremely important research findings, the significance of which has only recently begun to be assimilated by researchers. The research dots are just beginning to be connected and acknowledged. **This set of findings establish a definite connection between exposure to or use of marijuana and a predisposition to opioid use.** The Surgeon General has alluded to this phenomenon as a “priming of the brain”. Dr. Nora Volkow, head of the National Institute of Drug Abuse, has referred to it as a “sensitization of the brain”. **This connection between exposure to or use of marijuana and a predisposition to opioid use helps explain why the increase in the number of users in states in the U.S. legalizing marijuana has mirrored the increase in the use of opioids and opioid overdose deaths. Understanding the implications of these research findings may well convince a majority of thoughtful individuals that not only is today’s marijuana a definite “gateway” drug to other drugs, but also that today’s marijuana with its vastly higher THC content than the marijuana of Woodstock days, can be seen as “speedway drug” to marijuana dependence and addiction, polydrug use, and opioid use and addiction.**

Several factors come into play regarding the marijuana/opioid connection. First, marijuana legalization has led to an exponential increase in marijuana use by all ages. Another factor is that the THC levels of today’s marijuana are much higher. The higher the level of THC, the active principle of marijuana, the greater the deleterious impacts on the brain, not to mention the cardiovascular system, the respiratory system, the nervous system, the functioning of the liver, and more. (See the FDA Submission by S. Reece, 2014, for extensive references concerning arteriopathy, teratogenic and genotoxic effects, and a variety of birth anomalies.)

The research that many proponents of marijuana cite to try to make their case that marijuana is a “relatively harmless drug” has involved marijuana that had a very low THC content. Some who cite such research as definitive, are ignoring the growing body of research on the harmful effects of marijuana on the brain alone. Others may be ignorant of this growing body of research out of disinterest, absence of knowledge, or lack of ability to understand the scientific literature. Some may be mired in groupthink or may have allowed social pressure to dictate their point of view.

Their view of the harmfulness of marijuana may have simply been “acquired” and not be a product of their own study of the subject.

Other advocates of use and legalization of marijuana may be engaged in “magical” thinking. They may believe that marijuana is a natural plant that it therefore must be safe to use. (Those individuals conveniently forget that ricin, hemlock, belladonna, and various varieties of deadly mushrooms are also natural plants.) Yet others may no longer be interested in what the research says but may be driven by their belief that what they view as being social justice is best served by allowing the unhindered use of and legalization of marijuana. These advocates are willfully denying the damage that marijuana use and legalization are doing to the mental, psychological, and physical, wellbeing of those who use it, not to mention the effects that the use and legalization of marijuana and other psychoactive drugs have on the unraveling of the social fabric and on the sense of moral responsibility of the citizenry. Who would argue that the actions of a person who is stoned, high, or hallucinating can be said to have an intact moral compass?

It should be noted that some researchers are themselves so entrenched in their areas of specialty that they are reluctant to acknowledge, let alone study the wide range of harmful effects that do not fall within their areas of expertise. Some know about the harmful effects but do not share what they know out of “political correctness”, concern for their reputations, or an absence of concern regarding what scientific evidence has shown to be the case. Simple lack of courage can also be a factor that may keep them from acknowledging what they know to be true.

Not all researchers appear to be aware of the research showing that exposure to or use of marijuana with THC increases the sensitization of the brain to opioids. Both animal and human studies are showing that the sensitization of those exposed to marijuana or those who use marijuana, results in their becoming pre-disposed to opioid use, and, hence, opioid addiction. Those researchers who know about such findings have not always been effective in sharing the findings with others.

This set of findings involves the results of studies on the brains of aborted or miscarried fetuses that have been exposed to marijuana in utero. Researchers found that the brains of the fetuses had undergone modifications not found in the brains of aborted or miscarried fetuses that were not exposed to marijuana. **Researchers have found “discrete opioid gene expression impairment in the human fetal brain [to be] associated with maternal marijuana use”** (Wang et al., *Pharmacogenomics Journal*, 2006 and Spano et al., *Biol Psychiatry* 2007). A related set of animal research findings has shown that when animals are exposed in utero to marijuana, that when grown, they will opt for opioids when given a selection of things to choose from in an experimental setting. Those not so exposed do not opt for opioids (Cadoni et al., *Psychopharmacology*, Berl., 2001).

The implications of such a connection between exposure to marijuana and the impairment of gene expression in the brains of human and animal fetuses exposed in utero would seem to mean that exposure to and/or use of marijuana might well have a like effect on the brain at all stages of its development. Indeed, studies by Spano et al. (*Biol. Psychiatry*, 2007) and Stroponi et al. (*European Neuropsychopharmacology*, 2014) indicate just such a connection. (Dr. Elizabeth Stuyt provides an overview of these research findings in a Code Red presentation she gave.)

When considering effects on the brain, it is important to know that the brain is developing beginning at conception and continuing at least through age 25 and some experts say age 29 or even 40. Others even say that the brain is still developing through age 50 and beyond. Proof of a hypothesis that marijuana will impair gene expression in all stages of brain development would explain the observable predisposition of marijuana users, not to mention the progeny of users, to opioid use, addiction, and overdose. Indeed, the U.S. Center for Disease Control has said that marijuana users are three times more likely to become addicted to heroin than non-marijuana users (CDC, 2015). Other researchers have found that “Cannabis use appears to increase rather than decrease the risk of developing nonmedical prescription opioid use and opioid use disorder” (Olfson et al., **American Journal of Psychiatry**, 2018). To complete the connecting of the “research” dots, studies have shown that a majority of those who die of heroin or fentanyl overdoses have on average a 10 – 15-year history of marijuana use (Sabet, Capitol Hill Briefing, January 11, 2018). An additional implication of these findings is that owing to the genotoxic harm done by THC, DNA damage is being passed on from one generation of users to another. This would help explain why so many children of users from the sixties and so many of their children and their children’s children have an apparent propensity for becoming ensnared in drug-taking behavior.

Some questions that may now come to mind are these:

Why would any person in a role of public responsibility want to repeat or commit the tragic error in judgment of legalizing marijuana, an error in judgment made by so many in a growing number of states in the U.S.?

Why would those in positions of public responsibility in any nation believe that they could regulate the use of a substance that has so many known harmful effects, including the impairment of mental functioning and the lowering of IQs?

Why would those entrusted with protecting the public good of any nation want to sanction the use of marijuana which is known to have unpredictable and seriously debilitating effects on mental health, effects that include brain anomalies, not to mention other physical anomalies, including anomalies involving the heart and other internal organs (including gastroschisis where a baby is born with its intestines outside of the stomach wall)? (S. Reece, 2014).

Why would a nation consider, for even a minute, sanctioning the use of marijuana when scientists have now established that the brains of those exposed and those who use marijuana are sensitized to opioids and are predisposed to use opioids?

Why would those in roles of public responsibility allow the use of marijuana that has resulted in untold costs in human suffering and incalculable damage done to the lives of individuals, families, and communities, and the social fabric, as well as the body politic?

Why would any nation take an action that would lead to the lowering the IQs of those with developing brains, as well as the diminished reasoning capabilities and brainpower of all users of all ages?

Why would any person in a role of public responsibility support policies that allow the use of marijuana?

Why would any reasonable person support policies that have allowed those of all ages to be guinea pigs in a senseless human and social experiment that is now known to cause such great damage?

Many in the U.S. are increasingly recognizing the experiment for what it is: an abysmal failure with tragic consequences for the lives of millions, not to mention the very future stability of the nation. Why would a nation enact any law that would result in spreading the use of marijuana and hence of opiates, now taking over 100 lives a day in the U.S.?

It is extremely important to note that the use of heroin has increased in places where marijuana is legal. A key reason is that black marketers and cartels can easily sell marijuana for lower prices than state-sanctioned marijuana dispensaries that must include tax in the price. Black marketers can also sell heroin for less than black-market marijuana (Many documentaries have noted how illegal trafficking has increased, not decreased with legalization. See also [Randall](#), 2016, Code Red Series; & [Gurman](#), as cited by Winter et al., 2017, **Journal of Drug Abuse**). The activity of the cartels and the black market has vastly increased in jurisdictions where marijuana can be purchased in “legitimate” government dispensaries.

For the sake of people everywhere, as well as generations to come, legislators must recognize how that the research findings cited here show that there is a definite connection between the legalization of marijuana, the increasing use of marijuana, the anomalies in the developing brains of those exposed to marijuana and of those using marijuana, the sensitization of those with developing brains to opioids, and the spreading epidemic of opioid use and addiction. The lowering of I.Q.s has also been established as has the fact that one in six youth who use marijuana becomes addicted and one in ten adults becomes addicted ([NAS](#), 2017 and [Hall](#), 2014). With higher and higher THC content, even more, youth and adults can be expected to become addicted. Marijuana addiction can be as hard to overcome as heroin addiction. Ask the therapists who work with those who are addicted. Ask former users as well.

The vaping of THC is causing an increasing number of deaths and damaging the health of increasing numbers of persons. The phenomenon of cannabis hyperemesis syndrome is more and more widely reported. Severe damage to the kidneys and other organs can result from the painful, constant vomiting and dehydration. Death has even resulted. Toxicology assessments done in a hospital in Colorado on those who have committed suicide are showing that a majority have THC in their systems. (Regarding the latter see [Dr. Steven Simerville's](#) presentation). Toxicology assessments of those involved in violent crimes, including mass shootings and terrorist bombing have revealed marijuana in their systems. (See [Miller](#), 2018; [Miller](#), 2019; and [Berenson](#), 2019).

Why would anyone want to repeat a failed experiment and one that is doing so much irreparable damage, including damage to our DNA? (Such damage has been well established for decades. See [Braude](#) (1984), the annual Rocky Mountain High-Intensity Drug Trafficking Area Reports (RMHDTA) ([2018](#), [2019](#), and [2020](#)) also provide a source of documentation of the many ways in which the legalization of marijuana experiment has failed, including the impacts legalization has

had on health and safety and the proliferation of use among all age groups. Smart Approaches to Marijuana (SAM) has also tracked the damaging impacts of marijuana legalization ([2019](#), [2020](#)).

Tragically, the Federal government has failed to vigorously enforce the Federal Controlled Substances Act. They have allowed medical marijuana use to spread widely. They have just recently taken steps to alert the public concerning the harmful effects that medical marijuana is known to have. The Federal government has allowed the recreational use of marijuana in violation of Federal laws and international treaties to which the U.S. is a signatory ([Gordon](#), “The Illegality of Legalizing Marijuana Use...” 2014a). For the most cogent arguments concerning the reasons why marijuana should remain a Schedule 1 drug and why Federal laws should be enforced, see Bertha Madras, Ph.D., and Dave Evans, Esq, and their contributions to a [Brookings Debate](#) in 2014.

The “cat is out of the bag”. What can be done now? What would be the responsible thing for those in roles of public responsibility to do?

Turning around the nation’s drug crisis will require a “full-court press” on the part of the President and his appointees, Members of Congress, as well as all other public officials.

The multi-pronged approach that needs to be taken might be seen as being similar to the approach that China had to take to quell the rampant use of opium that had plagued their country in previous decades. China eventually stopped the use of opium and worked hard to undo the damage that had been done, using education, treatment, rehabilitation and strong enforcement.

Portugal is another example of a nation that has developed a multi-disciplinary approach to stop drug use and addiction problems.

Those who persist in promoting the use of marijuana, will eventually have to do what can be done to address the damage that has been done, to undo the damage that can be undone, and to prevent further damage. The costs of that damage are incalculable and could never be covered by tax revenues from marijuana sales, revenues that Governor Christie has so appropriately called “blood money”. Recent studies in the U.S. indicate that the economic and social costs of marijuana legalization can be expected to far outweigh the anticipated tax revenues. [Smart Approaches to Marijuana](#) (SAM) has highlighted the findings of several economic and social impact studies. Researchers in one such study concluded that economic and social costs in Rhode Island can be expected to “total \$61.2 million for 2020, exceeding the revenues projected by pro-legalization activists by over 25 %.” The damage being done extends to the environment and natural resources.

The effects on the environment and the widespread damage being done to the ecology by growing marijuana legally and illegally, are only noted here. Such damage seems to have escaped the attention of even the most normally concerned environmentalists ([Morgan](#) video, 2018a, and [Morgan](#) reports 2018b). Beyond the consequences of marijuana use for human health, safety, and welfare; it is having incalculable impacts on society, business, and industry, as well as property.

It is essential that those in roles of public responsibility reject subjecting citizens of the U.S. to such a seriously flawed and costly failed experiment, an experiment that is making some people rich while destroying the potential and the lives of untold numbers of others, seriously affecting productivity, while also dumbing down the electorate.

Marijuana use undermines the mental and physical health of current generations and is playing a major role in fueling the opioid epidemic. It is also affecting the health of those yet unborn. Indeed, it is affecting the reproductive health of both males and females. Miscarriages are now known to be associated with the use of marijuana by the father. The use of marijuana during pregnancy is the last thing a pregnant woman should do. While warnings regarding the use of thalidomide for morning sickness spread rapidly decades ago; warnings by government officials regarding the harm that follows from using marijuana have not been as loud. Magical and wishful thinking has tended to prevail among hundreds of thousands of women who have used marijuana during pregnancy and the misinformed individuals who have encouraged such use.

Those in roles of immense public responsibility are in a position not only to choose to influence a wiser and more humane path and reject the further sanctioning and legalization of marijuana use and begin to take needed steps to reverse the legalization of marijuana in all jurisdictions in the nation. This can be and needs to be accomplished through keeping marijuana use illegal and making it once again illegal where it has been made legal. This can be accomplished through using the justice system to provide individuals with non-punitive “in lieu of incarceration” options, along with record expungement options if the users opt to accept support in ceasing their use of drugs (Gordon, 2016; Gordon, 2019a; and Gordon, 2019b).

Many examples of such alternatives are found in drug court programs and probation departments throughout the nation. Educators, law enforcement, emergency responders, emergency room physicians among many, many others, need to be able to refer users to a support system to help them get out of the drug-taking cycle. (For excellent insights into that cycle, see the Volkow/Dalai Lama video, 2013 and the Calderon-Abbo video, 2017. Also see Dupont, 2018).

There is a multitude of programs that are helping those entrapped in the use of mind-altering and mood-altering substances. These substances include low to high-level hallucinogens such as marijuana, psychoactive drugs, and opiates. Many programs and approaches can help entrapped individuals to overcome their dependence or addiction to these chemicals of enslavement. Multi-pronged approaches, such as those increasingly used in Portugal and similar in ways to those used in China during its struggles with opium, need to be employed in the U.S. Such non-punitive approaches can provide individuals the opportunity to become drug-free. Individuals can become drug-free through education and through taking part in early intervention and counseling programs, and, where needed, treatment, and rehabilitation programs. Those in need should also be provided an array of social, employment, and housing services designed to help them recover from and successfully overcome the cycle of drug-taking and addiction (Gordon, 2016; Gordon, 2019a; and Gordon 2019b).

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- Pueblo Physicians Code Red - Dr. Elizabeth Stuyt - YouTube at <https://www.youtube.com/watch?v=G8QpzZLqshw>
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Paula D. Gordon, Ph.D. is an educator, writer, and consultant, based in Washington, D.C. She has had responsibilities in the Federal government for coordinating interagency and intergovernmental efforts and directing or taking part in projects in various fields, including drug abuse prevention and emergency management and homeland security. These assignments have included the National Institute for Mental Health, the National Science Foundation, the Federal Emergency Management Agency, and the Environmental Protection Agency. In addition, she has served as an adjunct professor and practitioner faculty member for The George Washington University and Johns Hopkins University, among other institutions. She has developed and is currently teaching online courses for Auburn University Outreach on topics that include the following: **“A National Public Health Disaster ~ Drug Abuse, Addiction, and the Opioid Crisis : The Role that Marijuana Use and Legalization are Playing ”** (<http://www.auburn.edu/outreach/opce/emergencymgmt/>); **“The Effects and Impacts of Marijuana Use ~ Policies and Approaches Addressing the Challenges”** (<http://www.auburn.edu/outreach/opce/marijuana.htm>); and **“Transforming and Leading Organizations and Organized Efforts”** (<http://www.auburn.edu/outreach/opce/tlo/>). She also teaches courses on Emergency Management and Homeland Security in an Emergency Management Certificate Program that she was instrumental in helping to develop. Her websites include the following: <http://GordonDrugAbusePrevention.com>, <http://GordonPublicAdministration.com>, and <http://GordonHomeland.com>.

**AUBURN UNIVERSITY OUTREACH
OFFICE OF PROFESSIONAL AND CONTINUING EDUCATION
ONLINE COURSE**

Developed and Instructed by Paula D. Gordon, Ph.D.

April 1, 2021

pgordon@rcn.com

3-WEEK COURSES:

- **"Transforming and Leading Organizations"**

- **"The Effects & Impacts of Marijuana Use: Policies & Approaches Addressing the Challenges"**

4-WEEK COURSES:

- **NEW: "THE COVID-19 PANDEMIC ~ UNDERSTANDING AND ADDRESSING THE CHALLENGES"** (An Elective Course in the Auburn University Outreach Emergency Management Certificate Program)

- **"Planning and Preparedness for Homeland Security and Emergency Management Post 9/11 and Post-Katrina and in the Time of the Coronavirus Pandemic"** (A Core Course in the Auburn University Outreach Emergency Management Certificate Program)

- **“Unmet Needs and Challenges: Some Key Challenges Facing Homeland Security and Emergency Management Post 9/11 and Post Katrina and in the Time of the Coronavirus Pandemic”** (A Core Course in the Auburn University Outreach Emergency Management Certificate Program)
- **“Key Elements of Critical Infrastructure Protection and Continuity Post 9/11 and Post Katrina in the Time of the Coronavirus Pandemic”** (An Elective Course in the Auburn University Outreach Emergency Management Certificate Program)
- **"A National Public Health Disaster: Drug Abuse, Addiction, and the Opioid Crisis~ The Role that Marijuana Use and Legalization are Playing"** (A stand-alone course or an Elective Course in the Auburn University Outreach Emergency Management Certificate Program)

COURSE DESCRIPTIONS AND REGISTRATION INFORMATION

- **"Transforming and Leading Organizations and Organized Efforts in the Time of the Coronavirus Pandemic" (A 3-Week Online Course)**

Course Description:

"Transforming and Leading Organizations" is designed to help leaders, managers, and drug abuse prevention activists hone their abilities and problem-solving skills in ways that help them have greater success in accomplishing their goals. Approaches to fostering healthy change; utilizing educational change strategies; communicating effectively; understanding the perspectives of those with differing values, information, and objectives; and resolving conflicts will all be addressed in the course. For a copy of the article that has given the course its name, see "Transforming and Leading Organizations," published in Government Transformation, Winter 2004-05 issue posted at <http://gordonhomeland.com>. Dr. Gordon's Dissertation, "Public Administration in the Public Interest" and her Masters' Thesis, "Leadership Behavior in Task-Oriented Work Groups" are also featured readings.

Dates Offered:

April 12 – May 2, 2021

June 14 – July 4, 2021

November 8 - November 28, 2021

Registration Fee: \$300

Participants will be eligible for 3 CEU credits.

For more information and to register, go to <http://www.auburn.edu/outreach/opce/tlo/> and <http://www.auburn.edu/outreach/opce/tlo/#schedulingreg>. You may also call (334) 844-5100 for information

RECENT ENDORSEMENTS FOR THE TRANSFORMING AND LEADING ORGANIZATIONS COURSE:

Thanks again for the great course. It was really important for my future...." An individual who heads a large organization who took the course.

"Dr. Paula Gordon is one of the best instructors. She has a wealth of knowledge of leadership experience and documentation. I feel that I am more equipped to be an effective leader and show others how to lead as well. I am honored and happy that she was my instructor..." Nathaniel B.

"The major things I am taking with me from this course are leadership skills to put into my kit bag, and I am also embracing the knowledge that leadership begins with me.

One thing that I did not know when I began this course is that my leadership accountability is not just to those under me, but it is also to those that are my peers and those that are my superiors..." T.B.

-
- **"The Effects & Impacts of Marijuana Use: Policies & Approaches Addressing the Challenges"**

(A 3-Week Online Course)

Course Description:

In this three-week online course has been designed to help arm those who are concerned about the harmful effects of marijuana and about the negative individual

and societal impacts of the legalization of marijuana is having on individuals, families, communities, and on society. The course has also been designed to help expand the knowledge and understanding of those who are working to address the problem of recreational drug use and addiction in America so that they can be as successful as possible in their efforts. The course is also designed to help those in the position of public responsibility understand the wide range of harmful mental and physical effects of marijuana as well as societal impacts. **New research will be highlighted concerning ways in which marijuana use is rendering users more susceptible to the coronavirus and its most serious effects.** The course also highlights policy and program options that have been working and what options might be tried to achieve the hoped-for outcome of turning around current trends involving the use marijuana in America.

Dates Offered:

May 17- June 6, 2021

July 12- August 1, 2021

August 9- August 29, 2021

October 11- October 31, 2021

Registration Fee: \$300

Participants will be eligible for 3 CEU credits.

For information and to register, see <http://www.auburn.edu/outreach/opce/marijuana.htm> , <http://www.auburn.edu/outreach/opce/marijuana.htm#registration> and <https://opce.catalog.auburn.edu/courses/c210517> You may also call (334) 844-5100 for information.

- **"A National Public Health Disaster: Drug Abuse, Addiction, and the Opioid Crisis~ The Role that Marijuana Use and Legalization are Playing"**

(A 4-Week Online Course)

(This course is also, an Elective Course in the Auburn University Outreach Emergency Management Certificate Program but may be taken as a stand-alone

course.)

Course Description: The role that exposure to and the use of marijuana are playing in the opioid epidemic will be highlighted along with the role that cartels and the black market are playing. The tendencies of public officials to narrowly define the problem and not see the role that marijuana and poly-drug use are having in the drug addiction and opioid crisis are highlighted in the course. A broader way of defining the challenges associated with drug taking behavior and addiction will be featured, along with exemplary approaches to addressing the Drug Crisis. New research will be highlighted concerning ways in which marijuana use is rendering users more susceptible to the coronavirus and its most serious effects.

Dates Offered:

July 12 – August 8, 2021

November 8 - December 5, 2021

Registration Fee: \$400

Participants will be eligible for 3 CEU credits.

For more information and to register, go to <http://www.auburn.edu/outreach/opce/emergencymgmt/#courses> and <https://opce.catalog.auburn.edu/courses/c2007208>. You may also call (334) 844-5100 for information

ENDORSEMENTS FOR DRUG ABUSE AND ADDICTION-RELATED COURSES

From Amy Ronshausen, Executive Director, Drug Free America Foundation, Inc.

The course was really great! I really enjoyed it...

From Stephanie Haynes, Greater New Orleans Drug Demand Reduction Coalition SOS – Save Our Society from Drugs - Florida, Texas, Louisiana:

Wow! This is a terrific opportunity! Educators, social workers, those in the Criminal Justice system, policymakers, legislators, and community volunteers all need to take this course!! ...I want to introduce you to Dr. Paula Gordon who developed this course on the harms of marijuana. We need to spread the word to all our colleagues about the value and importance of having this information, especially today in light of all the pro pot misinformation... Great

Opportunity! A three-week online course on Harms of Marijuana begins soon. Sign up today! Please help spread the word, especially to those in the prevention and treatment fields!

From Dr. Joe Godfrey, Executive Director Alabama Citizens Action Program (ALCAP) & American Character Builders:

Thank you for providing such great instruction! The resources you provided and the ideas you “spurred” in my mind that will help me with my work in the future were invaluable... Thanks for a very interesting class! I have gained new insight that I believe will help me going forward.... As my first ever online class, you made it easy and fun!

From Susan J. Short, Executive Director Covington County Children’s Policy Council Coalition Lurleen B. Wallace Community College Child Development Center Andalusia, Alabama:

The resources you’ve shared with all of us are a real boost to my program. Thank you so much! Thanks for the additional tips and references on understanding the perspectives of many people that are pro-legalization. I think many times people just aren’t informed or perhaps they heard some information on television and assumed it was correct...

From Roger Morgan, Founder of the Take Back America Campaign:

Dr. Paula Gordon, an instructor for Auburn University’s Outreach, is offering an inexpensive on-line course on marijuana that I think is beneficial to everyone engaged in the battle to save our kids and nation from this insidious drug. Given the problems we have with marijuana in California, I highly recommend this course for anyone seeking to improve their knowledge.

From Anne Hassel PT, previous marijuana user and marijuana industry worker, Massachusetts:

Dr. Paula Gordon’s courses were critical to my fully comprehending not only the harmful properties of marijuana but also the societal elements and public policy that allowed this destructive addiction-for-profit industry to spawn and flourish. Her Effects of Marijuana course is a must for anyone involved in the marijuana prevention effort due to the wealth of information and resources presented. Dr. Paula Gordon’s effective personal instruction enables a layperson, such as a concerned parent, teacher or anyone questioning the health and safety of marijuana, a solid foundation in understanding the complexity of marijuana in our culture. The information and benefits I received in this course inspired me to take Dr. Paula Gordon’s Drug Addiction and Opioid Crisis Course, further enhancing my knowledge, personal development and ability to assist in marijuana prevention efforts. (For further background on Anne Hassel, see <http://momsstrong.org/videos/whistleblower-videos/>; <https://poppot.org/2019/06/11/rip-the-pot-van-winkle-wakes-up/>; and https://www.youtube.com/watch?v=D_dU4ePKgw8&app=desktop.)

- **“THE COVID-19 PANDEMIC ~ UNDERSTANDING AND ADDRESSING THE CHALLENGES”**

(This 4-week online course is also an Elective Course in the Auburn University Outreach Emergency Management Certificate Program but may be taken as a stand-alone course.)

Course Description:

The Covid-19 pandemic has emerged as a major area of concern nationally and globally. There are greatly differing views regarding all aspects of the Covid-19 pandemic. There are similarly widely differing approaches to understanding the disease process involving the prevention of the spread of the virus and the progression of the disease. There are great differences in the approaches that are being taken to prevention and treatment. There is also a failure on the part of many of those in roles of major public responsibility to recognize and comprehend the significance of the research findings as well as a failure to recognize or acknowledge the experience of many practitioners who have extraordinary success in addressing the challenges of the pandemic. There are differences of views among practitioners, researchers, epidemiologists, immunologists, and virologists and others, not to mention those with responsibility for policy decisions that impact the pandemic. There are many reasons for these differences. They include differences in the backgrounds, academic and professional training, knowledge, skills, and experience of those involved in addressing the challenges surrounding the pandemic. The experienced practitioners, especially the successful practitioners may have developed perspectives and insights that are not as yet known and understood by those with less experience. In this course, efforts are made to shed light on these matters and the implications of these disparities for successfully addressing the challenges of the pandemic. There is also an attempt to evolve insights into how efforts to address the pandemic might be improved going forward.

The purpose of this course is to attempt to shed light on some of the many facets of the Covid-19 pandemic, a public health disaster that is currently besieging the nation.

Dates Offered:

May 17 – June 13, 2021

Registration Fee: \$400

Participants will be eligible for 3 CEU credits.

For more information and to register, go to
<http://www.auburn.edu/outreach/opce/emergencymgmt/#courses> and
<https://opce.catalog.auburn.edu/courses/c210517d>

You may also call (334) 844-5100 for information.

- **“Planning and Preparedness for Homeland Security and Emergency Management Post 9/11 and Post-Katrina and in the Time of the Coronavirus Pandemic” (A 4 -Week Online Course)**

(A Core Course in the Auburn University Outreach Emergency Management Certificate Program)

Course Description:

This course is designed to help those currently in roles of public responsibility develop a deeper understanding of how to address some newly emerging challenges in homeland security and emergency management, challenges that have been unfolding since 2001, including the current coronavirus pandemic. The course will be of particular interest to those already in practitioner or policy making roles, while also being of interest to those interested in preparing for such roles. Those developing and teaching homeland security and emergency management courses are also likely to find the course of value.

Dates Offered:

April 12 thru May 9, 2021

September 13 - October 10, 2021

Registration Fee: \$400

Participants will be eligible for 3 CEU credits.

For more information and to register, go to <http://www.auburn.edu/outreach/opce/emergencymgmt/#courses> and <https://opce.catalog.auburn.edu/courses/c210412d> for the course beginning April 12 and <https://opce.catalog.auburn.edu/courses/c210913b> for the course beginning September 13. You may also call (334) 844-5100 for information.

- **“Unmet Needs and Challenges: Some Key Challenges Facing Homeland Security and Emergency Management Post 9/11 and Post Katrina and in the Time of the Coronavirus Pandemic” (A 4-Week Online Course)**

(A Core Course in the Auburn University Outreach

Emergency Management Certificate Program)

Course Description: The course is designed to help those currently in roles of public responsibility develop an understanding of some of the unmet needs and challenges in homeland security and emergency management. This includes unmet needs and challenges that have been impacting the fields since September 11, 2001 and since Hurricane Katrina, along with other newer challenges, including the 2010 Gulf Oil Spill, Hurricane Sandy, and massive tornados, hurricanes, floods, wild fires, and active shooter incidents that have occurred in recent years, and the current coronavirus pandemic. While the course will be of particular interest to those already in practitioner or policy making roles, it will also be of interest to those preparing for such roles. Those developing and teaching homeland security and emergency management courses will also find the course of value.

Dates Offered:

November 8 – December 5, 2021

Registration Fee: \$400

Participants will be eligible for 3 CEU credits.

A 10% discount is available for five or more registrants from the same organization when registered by one person from that organization.

For more information and to register, go to <http://www.auburn.edu/outreach/opce/emergencymgmt/#courses> and <https://opce.catalog.auburn.edu/courses/c211108e> . For more information you may also call (334) 844-5100.

-
- **“Key Elements of Critical Infrastructure Protection and Continuity Post 9/11 and Post Katrina in the Time of the Coronavirus Pandemic” (A 4-Week Online Course)**

**(An Elective Course in the Auburn University Outreach
Emergency Management Certificate Program)**

Course Description: The course objective is to introduce learners to a wide array of issues and concerns involving the nation's critical infrastructure as that term can be broadly defined in the post 9/11 and post- Katrina world. The topics that will be addressed in this course include a broad range of critical infrastructure concerns. Course participants will be introduced to cutting edge resources, information, and exemplary initiatives including those involving the following: the American Society for Civil Engineers, the DHS Centers of Excellence, the Institute for Sustainable Development, the Pacific Northwest Economic Recovery (PNWER) initiative, Philip Howard's Common Good Initiatives, and Steven Flynn's work on the topic of critical infrastructure.

The following are also addressed in the course on Critical Infrastructure:

- Ways in which critical infrastructure concerns have been defined and addressed in the past, ways in which they are presently being addressed, the role that cascading critical infrastructure failures can play in disasters, and ways in which they could be more fully addressed in the future;
- Ways of protecting critical infrastructure and providing for critical infrastructure continuity and the need to incorporate a comprehensive focus on prevention, mitigation, preparedness, response and recovery, and continuity of operations; and the importance of taking steps to help ensure the reliability, resilience, stability, and continuity of critical infrastructure. **Special attention will be placed on the impacts of the coronavirus pandemic on the economy and on the public health infrastructure.**
- The implications of the Japan Earthquake and Tsunami for the U.S; and
- The need to include an emphasis on the development of disaster resistant or resilient communities and regions that includes a concern for disaster resistant and resilient infrastructure within those communities and regions and within the nation as a whole.

Dates Offered:

June 14-July 11, 2021

Registration Fee: \$400

Participants will be eligible for 3 CEU credits.

A 10% discount is available for five or more registrants from the same organization when registered by one person from that organization.

For more information and to register, go to

<http://www.auburn.edu/outreach/opce/emergencymgmt/#courses> and <https://opce.catalog.auburn.edu/courses/c210614c> . You may also call (334) 844-5100 for information.

- **"A National Public Health Disaster: Drug Abuse, Addiction, the Opioid Crisis, and the Coronavirus Pandemic ~ The Role that Marijuana Use and Legalization are Playing" (A 4-Week Online Course)**

(An Elective Course in the Auburn University Outreach Emergency Management Certificate Program and also listed above following the course on The Effects and Impacts of Marijuana.)

Course Description:

The role that exposure to and the use of marijuana are playing in the opioid epidemic will be highlighted along with the role that cartels and the black market are playing. See the Letter to Members of the Canadian Parliament (for the research findings, studies, and investigative reporting that provides evidence concerning these connections.

The tendencies of public officials to narrowly define the problem and not see the role that marijuana and poly-drug use are having in the drug addiction and opioid crisis are highlighted in the course. A broader way of defining the challenges associated with drug taking behavior and addiction will be featured, along with exemplary approaches to addressing the Drug Crisis. **New research will be highlighted concerning ways in which marijuana use is rendering users more susceptible to the coronavirus and its most serious effects.**

Dates Offered:

July 12 – August 8, 2021

November 8 - December 5, 2021

Registration Fee: \$400

Participants will be eligible for 3 CEU credits.

For more information and to register, go to <http://www.auburn.edu/outreach/opce/emergencymgmt/#courses> and

<https://opce.catalog.auburn.edu/courses/c210712c> for the course beginning July 12. You may also call (334) 844-5100 for information.

ENDORSEMENTS FOR EMERGENCY MANAGEMENT-RELATED COURSES

The following endorsements are from participants in courses in the Emergency Management Certificate Program taught by Dr. Gordon.

From Jason Banks, Construction Superintendent responsible for Emergency Management and Emergency Planning:

...Dr. Paula Gordon is a wealth of knowledge and resources. I'm not sure what other professors are heading these courses, but she is a gem! An ATM of knowledge and when she reviews the essays that are submitted... are you kidding me???

Dr. Gordon comes back with full pages of related links and interviews and perspectives of actual people and events she's worked with and through! What a treat this course has been. I truly feel like I am part of something bigger than I ever thought possible...

From an MD and Vice President of a large metropolitan hospital:

Excellent course and excellent instructor. Looking forward to taking the rest of the courses in the Emergency Management Certificate curriculum.

From a Fire Department official in a coastal community in Florida nearly totally devastated by Hurricane Michael in 2018:

What I have learned in this course is that the field of emergency management is that there is much more to Emergency Management than operational and response training to large scale emergency events and disasters. The breadth of the materials covered is both fascinating and informative. There is a mountain of information to review and cover in a short period of time but the material is interesting and thought provoking which keeps the student interested. The interaction amongst students is frequent and helps to clarify points that may be missed, misinterpreted or misread during online learning forums as opposed to brick and mortar class discussions which have context and non-verbal communication cues.

That said, the level of passion and knowledge on the subject exhibited by Dr. Gordon is the most significant thing that I learned in this course. When there is an instructor that is passionate, knowledgeable and dedicated to the myriad issues (..e-technology, Pre/Post-9/11 mentalities, etc.) as Dr. Gordon it motivates the student to examine the issues more deeply and

thoroughly. Her dedication is obvious in her research, writings, and interactive responses with the students on the discussion boards and that is the mark of a great course.

From a person transitioning to a career in emergency management:

Prior to taking this certificate course, after I made the initial decision to pursue EM as a potential second career, I enrolled in a master's program in EM with a different university. The lead professor was very focused on research – with the expectation that we would be learning/honing those skills throughout the program for application in the EM field. There is a place for that, but I was looking to learn about the EM field as a potential practitioner. More searching – and I found the Auburn certificate program. My earlier experience provided excellent contrast for what I found here. This course provided an excellent look at the spectrum of EM, as well as the many and varied needs that remain unmet since 9/11 and Katrina. “Unmet Needs” casts a wide net; there are so many things to understand, investigate, and hopefully contribute to fixing, which will require an understanding of why the needs remain unmet – lack of funding, lack of political will, lack of public support or attention – one or all could apply in any given instance. And while I certainly value research, and will no doubt make use of whatever is available, this course whetted my appetite – there are many issues/problems that need to be solved that will require active engagement with the community as well as various levels of government. Exactly what I was hoping for.

From a Federal official with responsibilities for emergency management and emergency planning:

I think this is a great course....I would recommend for anyone involved in the emergency management field or involved with emergency planning.

I would definitely want my staff to take this course....

From an official of a large university with responsibilities for campus-wide Public Safety Information & Education:

This course has really helped me realize the impact on planning and preparedness of the differences in catastrophic and non-catastrophic events, and has helped me feel more equipped to address the planning challenges related to catastrophic events. In the past, I have focused mainly on technical and operational issues, but I can now see the importance of the broader perspective... It has also really emphasized to me the importance of understanding complex problems and the value of generalists, who can lead multi-disciplinary teams of experts in finding solutions to these complex problems that we face in emergency management today.

GENERAL INFORMATION REGARDING THE AUBURN UNIVERSITY OUTREACH ONLINE COURSES BEING TAUGHT BY DR. GORDON:

- Courses are all taught on a Pass/Not Pass basis and all may earn 3 CEUs each.
- All of the courses are offered in asynchronous time, rather than "real" time, thus making it easy for each person to fit the courses into his or her schedule.
- **All assigned materials for the courses are available without cost online.**
- Individual emergency management-related courses may be taken from the courses in the Emergency Management Certificate Program if a person does not intend to earn the Emergency Management Certificate.
- To earn an EM Certificate, one needs to pass the four courses and any one of the elective courses.
- Some students personally opt to take more than the one elective course required.

GENERAL INFORMATION ABOUT THE AUBURN UNIVERSITY OUTREACH EMERGENCY MANAGEMENT CERTIFICATE PROGRAM

Dr. Gordon, along with Dr. Don Terry-Veal and Maria Folmar, were instrumental in designing and launching the Emergency Management Certificate Program. The Certificate Program began in the Fall of 2006 under the aegis of the Auburn University Center for Governmental Services. The Certificate Program moved from the Center for Governmental Services in the Winter of 2016 and now is now under the auspices of the Auburn University Outreach Office of Professional and Continuing Education. The Program is overseen by Ms. Shavon Williams, M.B.A., Assistant Director, Outreach Programs.

Individual emergency management-related courses may also be taken from the courses in the Emergency Management Certificate Program even if a person does not intend to take a total of four core courses and one elective course in the Emergency Management Certificate Program.

The Certificate Program and its courses have received many accolades from participants some of which are noted above in the testimonial sections above.

These courses incorporate an all-hazard approach to emergency management and homeland security. While the courses will be of particular interest to those already in practitioner or policy making roles, they will also be of interest to those preparing for such roles. Those developing and teaching homeland security and emergency management courses will also find the courses of value. Earning the Emergency Management Certificate has been a way for many to advance their present career path, whether they are already working in the fields of emergency management and homeland security or they are preparing for a career in these fields.

Participants in the courses have come from widely varying backgrounds. They have included Federal officials, deployed military and military contractors, fire chiefs and police officials of metropolitan as well as rural areas, emergency managers, hospital administrators, health care professionals emergency responders, retired and transitioning military, professors and researchers in the fields of emergency management and homeland security, and other individuals in training and education roles and roles of public responsibility for emergency management, homeland security, emergency medical management, and public health and safety.

For more information regarding the Emergency Management Certificate Program, please see <http://www.auburn.edu/outreach/opce/emergencymgmt/index.htm> or call (334) 844-5100 for information.

April 1, 2021

From: [Paula Gordon](#)
To: [Rich Constantine](#); [Gino Borgioli](#); [John McKay](#); [Yvonne Martinez Beltran](#); [Rene Spring](#); [Shane Palsgrove](#); [Christina Turner](#); [Michelle Bigelow](#); [CC Public Comment](#)
Cc: ["Ronald Kirkish"](#)
Subject: FW: Epic book reveals pot industry tactics; Pot ads on TV; Pot a gateway drug after all; 4 times more people die of overdoses than COVID in San Francisco
Date: Wednesday, April 21, 2021 1:35:43 PM
Importance: High

To All Public Officials in Morgan Hill:

Please consider instituting policies that are aimed at stopping the use of marijuana and other psychotomimetic substances. Please also consider working to reverse the current law in the State that has legalized marijuana use and allowed for its commercialization..

Here is some additional information for you to consider.

Thank you so much,

Paula Gordon

Paula D. Gordon, Ph.D.
Washington, D.C
Phone: [REDACTED]
E-Mail: [REDACTED]
LinkedIn: <https://www.linkedin.com/in/gordonpaula/> _
<http://GordonDrugAbusePrevention.com>

Doctoral Dissertation:
Public Administration in the Public Interest
<http://GordonPublicAdministration.com>
Bio: <http://lifeboat.com/ex/bios.paula.d.gordon>

From: National Families in Action's The Marijuana Report <nfia@nationalfamilies.org>
Sent: Wednesday, April 21, 2021 4:06 PM

[View this email in your browser](#)



BOOK REVIEW



Smokescreen: What the Marijuana Industry Doesn't Want You to Know

The brilliant Kevin Sabet, PhD, founder of SAM (Smart Approaches to Marijuana) and former White House Office of National Drug Control Policy advisor to three

different Presidential administrations, has written a brilliant book. *Smokescreen: What the Marijuana Industry Doesn't Want You to Know* is not only a revelatory tale about how the legal marijuana industry is behaving exactly like its predecessor, Big Tobacco, but also an exploration of how marijuana use damages so many people.

In addition to his skill as an academic writer, he is also a born storyteller. His descriptions of mothers who have lost children to marijuana psychoses are heart rending. His interview with a former budtender who worked in a Massachusetts dispensary and got an insider's view of how far apart reality is from hype is horrendous. And his story of how a couple in California organized their community to reject the pot business is inspiring.

Sabet makes it clear that legalization is all about money. Forget public health. Forget kids' health. Forget road safety. Forget the goal of reaching one's potential. Every American should read this book. If they do, legalization won't last long as people learn what the marijuana industry is really up to and why it is critical to end the commercialization of yet another addictive drug.

EFFECTS



Adolescent drug use initiation and transition into other drugs: A retrospective longitudinal examination across race/ethnicity

It turns out that marijuana is a gateway among illicit drugs after all. Saijun Zhang and colleagues at the University of Mississippi and Arizona State University used a pooled sample of adolescent drug users ages 14-17 from the 2015-2018 National Surveys on Drug Use and Health to construct longitudinal data on teens' drug use history based on the age of drug initiation. The researchers did not include alcohol or

tobacco use in their study. In all, they investigated drug use histories of 10,644 adolescents.

Sixty-nine percent of teens initiated with marijuana, while 27 percent began their drug use with inhalants, a total of 96 percent. Only four percent began their drug use with hallucinogens, prescription drugs, or “hard” drugs.

By year 8, the probability of using a new drug was about 40 percent for those who began with inhalants and 70 percent to 80 percent for those who began with marijuana and other drugs. The researchers say their “findings provide new evidence to support aspects of both the gateway and generalized risk drug use theories.”

Read abstract of this article in *Addictive Behaviors* [here](#).

As more states legalize marijuana, more children accidentally ingest THC-laced edibles

A New Jersey 12-year-old eats Skittles. A 3-year-old eats Nerds Rope. A young Massachusetts boy eats candies. Lots of them. All three end up in the hospital because the candies they ate were THC candies, not real candies made for kids. In fact, ER workers found about three grams of THC-- a huge dose -- in the Massachusetts boy.

Poison control centers across the nation have seen a spike in the number of children who are ingesting THC-infused goodies, rising from just 19 cases in 2010 before any state legalized recreational marijuana to 554 cases last year. Some 400 of those cases were in youngsters under age 5, children too young to read what’s on the labels no matter how many warnings – if any – their packages might contain.

Most of the new cases have come from rec legal states. Massachusetts legalized recreational pot in 2018 when there were just 52 such cases. By 2020, that number was 257. Such cases also happen in medical marijuana states, although to a lesser extent.

Read *Washington Post* article [here](#).

Effects of cannabis on visual function and self-perceived visual quality

Sonia Ortiz-Peregrina and colleagues at the University of Grenada in Grenada, Spain have studied whether marijuana has negative effects on the vision of users. This is a highly technical study, and we therefore present the researchers conclusion.

“This study shows that cannabis has significant adverse effects on certain visual functions, including visual acuity and contrast sensitivity, as well as in nighttime-related visual parameters such as the VDI and intraocular straylight. These latter functions have been evaluated for the first time while the participants were under the influence of cannabis. . . . Our results could help generate a better understanding of the visual changes related to cannabis use and their implications for everyday tasks, raising awareness among users of the risks involved consuming this drug.”

Read full text of this study published in *Nature* [here](#).

Overdose deaths far outpace COVID-19 deaths in San Francisco

A record 621 people died of drug overdoses in San Francisco so far this year, a staggering number that far outpaces the 173 deaths from COVID-19 the city has seen thus far. The deaths would have been even higher if Narcan hadn't been used 3,000 times to reverse overdoses between January and November 2020. Those numbers are self-reported, so it is likely an undercount. The crisis is deepening because of fentanyl, which can be 50 to 100 times more potent than morphine.

Read *Associated Press* report on *ABC News* [here](#).

LEGALIZATION



After 'green rush,' Canada's legal pot suppliers are stumbling

A \$20 million, one-million square foot greenhouse that was supposed to create more than 200 high-paying jobs in Exeter, Ontario sat idle for two years and was recently sold for about one-third of its cost because Canada has a glut of marijuana that people are not buying.

Surveys suggest many Canadians are not jumping on the pot bandwagon. Other reasons may be Canada's restrictive regulations, including near bans on advertising and marketing. And dispensaries have been rolled out slowly in some provinces. A

primary goal of legalization in 2018 was “to create a more equitable justice system, not a major new business.”

Nearly three years after legalization, most Canadian producers are reporting staggering losses. Canopy Growth, Canada’s largest producer, lost \$950 million in the first nine months of its current operating year. Several businesses have shut down for good.

Concerns are also expressed about nonprofit “compassion clubs” being overtaken by large corporate growers making big profits. “This didn’t have to be a wholly for-profit industry,” says one drug policy analyst. “It seems like there was a missed opportunity to think creatively.”

Read *New York Times* article [here](#).

Exclusive: Inside Colorado’s first cannabis broadcast TV advertising campaign

Sooner or later, it had to happen. Now that it has, Katie bar the door. Denver TV viewers are seeing TV commercials for a major marijuana retailer, Livwell Enlightened Health, which is advertising its brand on Denver’s NBC affiliate KUSA.

The company CEO says it’s a big step forward for normalizing the multibillion Colorado industry. He says Livwell worked within the state’s Marijuana Enforcement Division’s strict advertising restrictions which prohibit television, radio, print, or internet ads “where more than 28.4 percent of the audience is reasonably expected to be under the legal age of purchase.”

The TV ads feature paid spokespeople praising their retail experience and company’s customer service. The words “marijuana” and “cannabis” never appear in its TV ads. But now that Livwell has broken through the TV ad ban, can Green Crack dab ads be far behind?

View Livwell’s ads [here](#).

Read the story in *Bizjournals* [here](#).

Social equity plan for marijuana delivery, hospitality businesses in Denver OK’d in final vote

Denver appears to be ground zero for chipping away at statewide marijuana rules and regs. On the eve of 420, the unofficial marijuana holiday, the Denver City Council voted unanimously to allow “social equity delivery and hospitality businesses.”

Home delivery licenses will be limited to social equity applicants until 2024. Licenses for stores, transporters, cultivations, manufacturing, and the new hospitality establishments will be limited to social equity applicants until 2027. A spokesman for the city’s licensing department says the vote assures that “all Denverites can benefit from this multi-billion-dollar industry.” At least until 2024 or 2027, take your pick.

“Social equity” is defined as a Colorado resident who has never had a marijuana license revoked and meets one of the following criteria:

- Lived in an opportunity zone or a disproportionately impacted area between 1980 and 2010,
- Applicant or immediate family member was arrested, convicted or suffered civil asset forfeiture due to a marijuana offense, or
- Household income is less than 50 percent of the state median income.

The new structure replaces the lottery system for distributing licenses. Oh, and it eliminates the cap on the number of stores and cultivations that can exist in Denver.

“Hospitality businesses” will allow patrons 21 and older to consume marijuana on the premises by any means, including smoking and vaping. Consumption sites can operate between 7 a.m. and 2 a.m. Three kinds are permitted:

- Brick-and-mortar establishments allow BYO marijuana consumption,
- Mobile smoking lounges allow BYO marijuana consumption in a vehicle, like a shuttle or bus, and
- Smoking lounges with sales allow marijuana consumption and sales of up to 2 grams of marijuana, one-half gram of concentrate, and products with 20 mg of THC or less. Users cannot bring their own.

Other requirements remain unchanged except for how to measure the 1,000-foot mandated distance between a hospitality business and recreation centers, city pools, and alcohol or drug treatment facilities. Adjustments to the measuring process can be made to shorten the distance.

Home deliveries will be available from 8 a.m. to 12 a.m. They are “limited” to the same amount that can be bought in a store in one day: 1 ounce of marijuana, 8 grams of concentrate, and products with 800 mg of THC.

Americans for Nonsmokers Rights opposes consumption lounges. It urges that smoke-free laws be maintained to protect the lung health of workers and citizens.

Read *Denver Gazette* story [here](#).

Parallel worlds emerge in the first year of legalization as Blacks make up more than three-quarters of marijuana-related arrests while boutique dispensaries take off

Legalization hasn’t impacted marijuana-related arrests among people of color during the first year of legalization in Chicago. Here are the statistics:

- Black people – 2,311 arrests, more than three-fourths of all marijuana-related arrests
- Latino people -- 506 arrests, the second-highest number of arrests
- White people -- 117 arrests
- Asian and Pacific Islander people -- 25 arrests.

“Critics point out what they see as a troubling double standard,” writes the *Chicago Tribune*. “At the same time the state’s legal weed industry is making millions and white smokers are enjoying the boutique experience with designer weed in clean,

fashionable North Side dispensaries, Black and brown people are left out of the windfall and continue to be arrested for selling weed illegally.”

We agree with the critics.

Read *Chicago Tribune* story [here](#).

Minnesota Medical Cannabis Dashboard

The Minnesota Department of Health has created a dashboard that visualizes data about its medical marijuana program. Some of the data is shocking. For example, the number of registered patients has grown from 837 when the program began in 2015 to 32,209 in the first quarter of 2021. In those age 50 and older, female patients outnumber male patients.

Access the dashboard [here](#).

Delaware: Cannabis activists take on corporate marijuana, patients stage boycott

The National Organization for the Reform of Marijuana Laws (NORML) has advocated for legalizing the drug in states across the country since its founding in the 1970s. NORML hopes to reach its goal in Delaware with the legislature’s introduction of HB150. So, NORML and patients were shocked when medical dispensaries rose up against the recreational marijuana bill at its first committee hearing a few weeks ago.

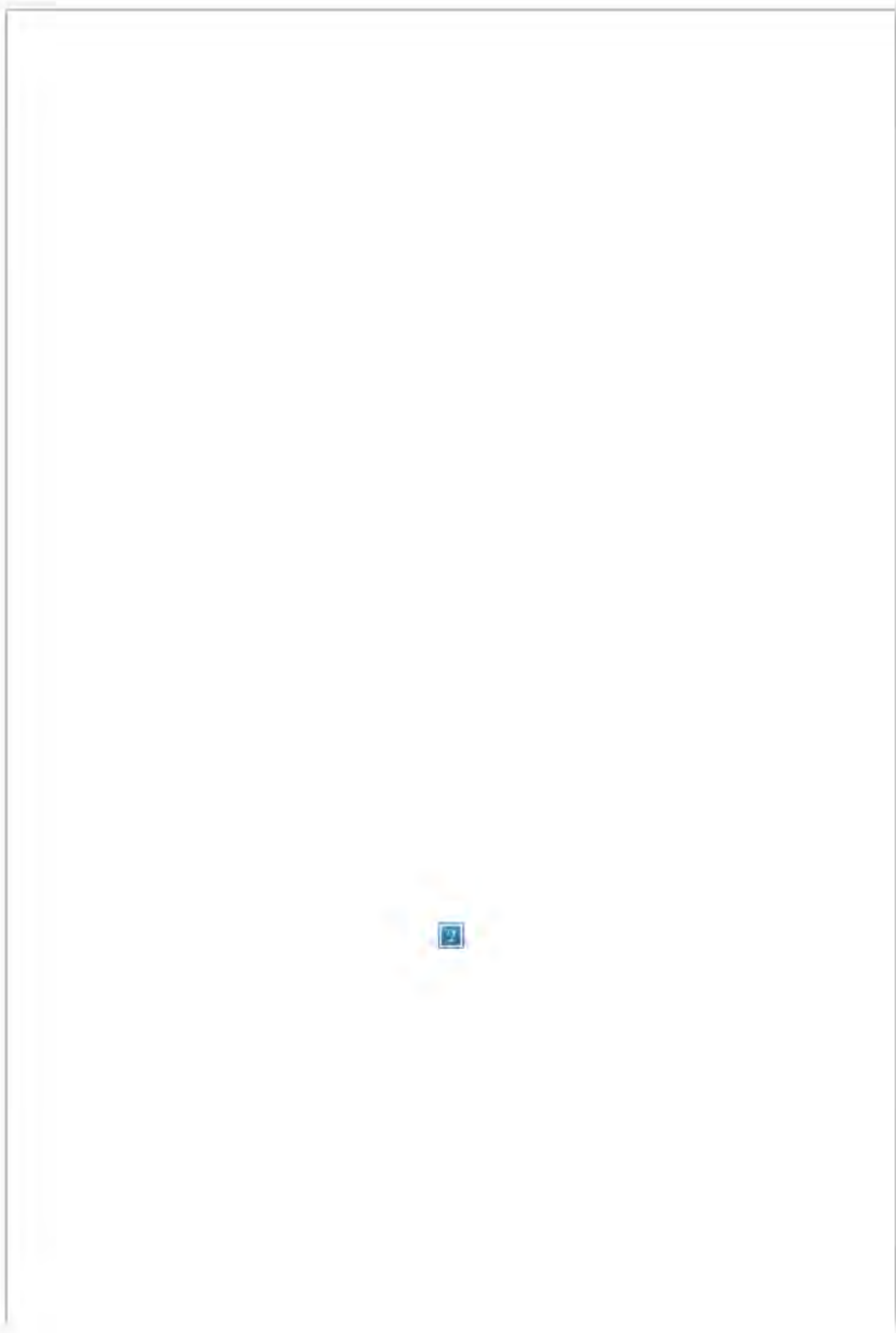
Delaware currently has six licensed medical marijuana facilities. Four of them testified *against* HB150, claiming that it allows too many rec legal dispensaries, that there will be a glut of marijuana, and that large, multistate marijuana corporations will swoop in and drive them out of business. Patients resent the high prices current medical dispensaries charge, so they are boycotting the four medical dispensaries that oppose HB 150.

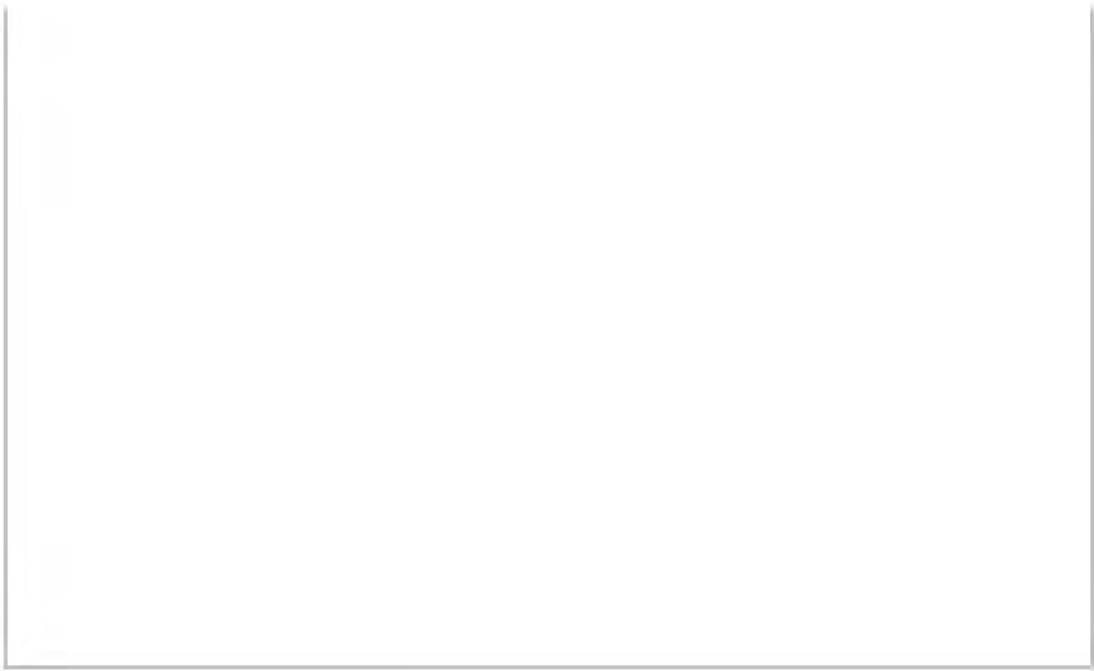
Read about the drama in *NORML*’s blog [here](#).

Parallel Invests \$25M in a New State-of-the-Art Cannabis Cultivation, Production and Retail Facility in San Marcos, Texas

The marijuana company with too many names is adding a new one. Parallel, originally Surterra, announces it will make a \$25 million investment in a 63,000 square-foot marijuana cultivation, production, and retail facility in Texas. They do things big in Texas. The company is also introducing its goodblend (sic) retail brand as it changes the name of Surterra Texas to goodblend Texas, joining goodblend Pennsylvania. The privately held company plans to go public soon through an agreement with Ceres, a special purpose acquisition corporation (SPAC). It’s unclear what the public company’s name will be.

Read *Parallel Press Release* [here](#).





Your [donations](#) to National Families in Action support the production and distribution of *The Marijuana Report*, which is free and published weekly except for holidays.

Thank you!





Parenting gets a lot harder with legal marijuana

Are you in yet?

Take the "I'm In" pledge to join Parent Movement 2.0! To sign, click [here](#).

A Parent's Plea: Don't Make My Job Harder

Helping public officials understand why parents, who are trying to raise healthy kids, cannot vote for those who commercialize marijuana, other illicit drugs, or support policies that advance the marijuana industry over kids.

Here's why.

- **Legalization increases youth use.** States with legal marijuana have the highest use rates among 12-25 year olds. States without it have the lowest rates.

To see more reasons, click [here](#).



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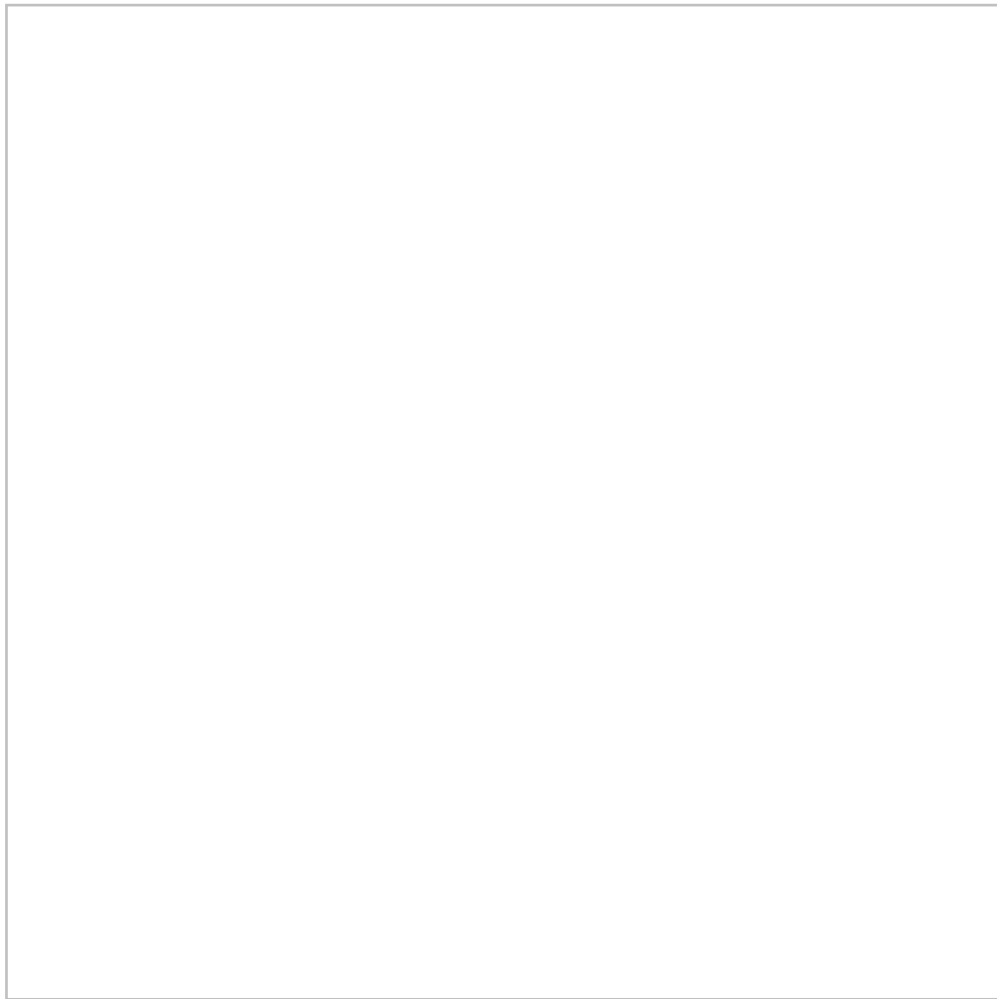
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To: [Rich Constantine](#); [Gino Borgioli](#); [John McKay](#); [Yvonne Martinez Beltran](#); [Rene Spring](#); [Shane Palsgrove](#); [Christina Turner](#); [Michelle Bigelow](#); [CC Public Comment](#)
Cc: hykirkish@charter.net
Subject: AALM: 420: Remembering the Victims of Marijuana Use and Addiction
Date: Tuesday, April 20, 2021 6:38:23 PM

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420: A Memorial

**Today is a Day of Remembrance for Those
Who Have suffered Marijuana Addiction and
Those Who Have Lost Their Lives Due to
Marijuana Contributed Death.**



Share



Tweet



Forward

Media Contact

Southern California, Scott Chipman [619 990 7480](tel:6199907480) scott@chipman.info
Northern California, Carla Lowe [916 708 4111](tel:9167084111) carladlowe@aol.com

The LIE - "NO ONE EVER DIES FROM MARIJUANA" is a common refrain of pro-pot pundits but it is disingenuous to say the least. Marijuana-related deaths are [much higher than zero](#) and the adverse long-term mental effects of marijuana show there can be worst fates than just dying.

DUI

In our last email, we discussed marijuana-related death by DUI (a figure pro-pot pundits often leave out when discussing marijuana

death.) In states that have legalized marijuana, fatal accidents in which marijuana was involved [greatly increased](#).

SUICIDE

Marijuana-induced suicide is another form of marijuana death. Not only were those who smoked [marijuana](#) more likely to suffer [depression](#) and [suicidal thoughts](#), but they were also more than three times as likely to attempt suicide between the ages of 18 and 32. "Marijuana is the most prevalent substance found in completed teen suicide in Colorado," says Dr. Kenneth Finn, Colorado Pain Medicine Physician.

- [Man jumps to his death after eating marijuana cookies](#)
- [Mother says marijuana candy in Colorado led to her son's suicide.](#)
- [DEA: Teen commits suicide after the negative effects of marijuana](#)

There are thousands of stories just like Sally and her son Andy



Sally's son, Andy, committed suicide after becoming addicted to marijuana. In his suicide note, he said "marijuana killed my soul and ruined my brain."

PSYCHOTIC VIOLENCE

[Psychotic violence induced by marijuana](#) use not only harms the user but also victims of that violence. Users often with no history of violence suffer from a psychotic episode brought on by marijuana use.

- [Man with no prior history of violence consumes edible before a flight, injures flight attendants, and attempts to open the emergency exit.](#)
- [A neighbor who tossed an elderly woman off a balcony avoids trial because he was in a marijuana-induced psychosis.](#)
- [Denver Man Who Said Marijuana Made Him Kill His Wife Gets 30 Years](#)

CANNABIS HYPEREMESIS SYNDROME (CHS)

CHS once a rare occurrence is becoming more common as marijuana use and abuse spread and increases across the country. CHS usually results in near-constant vomiting, stomach cramps, and dehydration. Hot showers provide some relief but the only known cure is to abstain from marijuana use. CHS has resulted in the death of at least 3 people with the latest death being a [17-year-old boy](#)

"MARIJUANA ISN'T ADDICTIVE, NO ONE IS ADDICTED TO MARIJUANA"- Marijuana Use disorder once unheard of is becoming ever more commonplace as legalization barrels forward. Those that admit they are addicted are treated with scorn by pro-pot pundits who find their very existence inconvenient.

[Thousands of Americans are finding their marijuana use problematic](#) in a climate where pot products are getting more potent, more socially acceptable to use, and easier to come by.

"In large national surveys, about one in 10 people who smoke it say they have a lot of problems. They say things like, 'I have trouble quitting. I think a lot about quitting and I can't do it. I smoked more than I intended to. I neglect responsibilities.' There are plenty of people who have problems with it, in terms of things like concentration,

short-term memory, and motivation,” he said. “People will say, ‘Oh, that’s just you fuddy-duddy doctors.’ Actually, no. It’s millions of people who use the drug who say that it causes problems” says Keith Humphreys, a professor of psychiatry and behavioral sciences at Stanford University.

Users or former users described lost jobs, lost marriages, lost houses, lost money, lost time. Foreclosures and divorces. Weight gain and mental-health problems with the added humiliation that no one believed they had been or were addicted to marijuana.

“The mantra about how this is a harmless, natural, and non-addictive substance—it’s now known by everybody. And it’s a lie.” says Mark A. R. Kleiman, a professor of public policy at New York University.

Thousands of businesses, as well as local governments earning tax money off of sales, and the federal government if it legalizes marijuana nationally, will literally be invested in that lie. [SOURCE](#)

While the billion-dollar Marijuana industry sponsors a national party to celebrate the drug that made them, their political allies, and their lobbyist rich and those in favor take part in a macabre festival of self-destruction, we call for April 20th to be marked as a memorial. A day to remember those that have suffered and died and are suffering and dying from the negative consequence of legalizing yet another mind-altering and addictive drug.

10 Days to 420 Archive

[Day 1 Legalization is Worse Than A Failure](#)

[Day 2 Federal Education on Marijuana Has Been Virtually Non-Existent](#)

[Day 3 Marijuana and Mass Murder](#)

[Day 4 Marijuana is Not Medicine](#)

[Day 5 Marijuana Legalization Harms Teens](#)

[Day 6 Marijuana is an Environmental Polluter](#)

[Day 7 The Myth of Mass Marijuana Incarceration](#)

[Day 8 Marijuana Legalization is Social Abuse. Not Social Justice](#)

[Day 9 Cannabis and Cronyism](#)

[Day 10 Legalization Increases DUI, Poisonings, Workplace Injuries, and More](#)

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Americans Against Legalizing Marijuana is an all volunteer IRS approved non-profit 501(c)(3) EIN 80-0548539, dedicated to providing information on the harms of marijuana to individuals and our Country based on the premise of No Use of Any Illegal Drug and No Illegal Use of Legal Drugs

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From: [Karen Randall](#)
To: [Gino Borgioli](#); [John McKay](#); [Yvonne Martinez Beltran](#); [Rene Spring](#); [Shane Palsgrove](#)
Cc: [Christina Turner](#); [Michelle Bigelow](#); [CC Public Comment](#)
Subject: I am a doctor. I see the harm high-potency THC does to children. - Colorado Newsline
Date: Tuesday, April 20, 2021 7:49:34 PM

Your littlest citizens will not have a say in legalization but will surely be affected. And you will most likely see what we are seeing in Pueblo. Is your area ready for this? You will need a lot of addiction therapy and rehab. The youngest addicted child I have seen so far is 11. He presented to the emergency department psychotic. Please feel free to contact me if you have any questions. Marijuana tax revenue will NOT be even close to covering the costs of even just damage control for your youth and children.

Dr. Karen Randall, FAAEM
VP Case Management Southern Colorado Emergency Medicine
Certified in Cannabis Science and Medicine

<https://coloradonewsline.com/2021/04/16/i-am-a-doctor-i-see-the-harm-high-potency-thc-does-to-children/>

I am a doctor. I see the harm high-potency THC does to children.

Lawmakers should visit the hospital for a view
of the effect these drugs have on communities

April 16, 2021



A worker touches plants at a cannabis greenhouse at the growing facility of the Tikun Olam

company on March 7, 2011, near the northern city of Safed, Israel. (Uriel Sinai/Getty Images)

I am an emergency medicine physician in southern Colorado. I see the harms of high-potency THC on a daily basis, and I wish you could see what I see.

We cannot put more drugs into the community and then expect that no harm will occur. Since legalization, the medical community has published hundreds, if not thousands, of articles relating to the harms being seen with these products, and I have yet to see a single peer-reviewed article that supports the use or safety of high-potency cannabis.

[THE MORNING NEWSLETTER](#)

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I worry that we are “trashing” a generation. Colorado kids are using these products more now than at any time before. And, when they use, they aren’t smoking joints. They start with dabs, shatter, waxes and oils — products that are easier to hide, have less odor, and are readily obtainable. Meanwhile, many articles show a marked increase in the risk of psychosocial illnesses associated with high-potency THC, especially for young people.

I want to share with you a few cases that recently came into my emergency department.

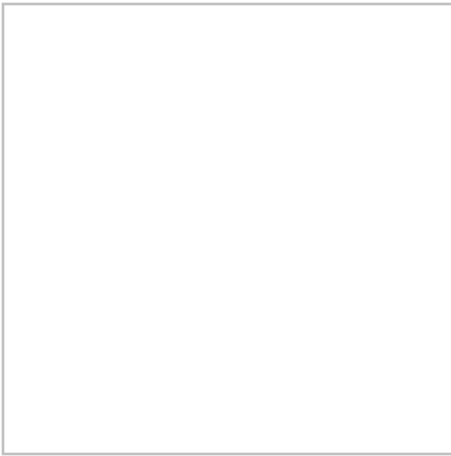
- Two children, 12 and 14 years old, purchased THC candy via Snapchat from someone who told them he was a dispensary owner. This is the new version of drug-dealing. These children purchased a single candy — made to look like a Nerds rope candy — which contained 500 milligrams of THC. For comparison, joints of the 1990s had about 3 to 5 mg of THC in

them. This is a *huge* increase. Each child ate half of the candy and ended up in the emergency department for a prolonged stay.

- Last week when I went to work, I had three patients, all children, in the emergency department with suicidal ideation. All had THC addictions. The oldest is 15. One of the youngest — a *middle* school child — had been started on her marijuana “journey” by her parents, because they said it’s natural, harmless, and treats problems like medicine. Sadly, because high-potency products are addictive, her use exceeded what her parents were willing to give her. In order to get more marijuana, this middle school girl started trading sexual favors.

Each of these children were in the emergency department for a prolonged period of time. We can not claim racial balance when a preponderance of these stores/dispensaries/grow sites are located in the poorer communities — of color — like Pueblo. *All* of the patients referenced above are children of color.

Take the child trading sex for drugs. Even if I had a great addiction and psychological treatment for this child, the odds are hugely against her that she will be able to recover from the trauma of basically becoming a prostitute for THC at the age of 13. How do I, as a professional, get this child (and others — every day) back into a normal routine that allows them to experience true childhood? How do they get back to a life where they get educated or get a career? And how do I do this when there are extremely limited resources in this community of color?



“Medicated Nerds Rope” candy, which contains 500 mg of THC. (Courtesy of Karen Randall)

These are just a few of the issues, and they barely scrape the surface of harms being seen at this end of the spectrum that no one wants to acknowledge. I extend my invitation to any lawmaker to spend a day in the ED with me. See what I see. Look at the faces of children, who at 13 are addicted, turning tricks, and have little to no hope of recovery. Talk with their parents.

Then, let’s talk about acute psychosis. Every day, another mother, father, brother or sister joins the realm of acute psychosis in a family member. These episodes, which often include acute violence and erratic behavior, are terrifying for the patient and for those around them. Along with the fallout from the pandemic, our children also have to deal with a community where drugs, especially high-potency THC products, are readily available. The chances of a child’s success in life dramatically decreases when their drug use goes up. Please take a stand for the kids.

I am not a lobbyist. I do not get paid money to speak about the harms of marijuana, especially the high-potency products. I am a physician and pediatrician.

Please feel free to contact me or to spend a day in the emergency

department with us.

[HELP US GROW](#)

[Make a tax-deductible donation.](#)

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From: [Shirley Morgan](#)
To: [Rich Constantine](#); [Gino Borgioli](#); [John McKay](#); [Yvonne Martinez Beltran](#); [Rene Spring](#); [Shane Palsgrove](#); [Christina Turner](#); [Michelle Bigelow](#); [CC Public Comment](#)
Subject: Please Say NO to Marijuana Businesses in the City of Morgan Hill
Date: Wednesday, April 21, 2021 11:51:03 AM
Attachments: [image001.png](#)
[Citizens for Public Safety, Quality of Life, Property Values OP ED OREGON Redefines Pot as an Farm Crop. Shirley Morgan. Finaldocx.pdf](#)
[MARIJUANA NEWS PERIODICAL 4-1-21 HEADLINE OR Deschutes County votes NO to anymore marijuana grows or processing.pdf](#)
Importance: High



Dear Morgan Hill Government Officials,

I am a citizen of Oregon as well as an expert on the impacts of marijuana in Oregon and Nationally.

From my experience, I have seen how national organizations use medi-pot as a stepping stone to try and open the door to recreational marijuana legalization, which California has seen as well.

What has happened in Oregon has been nothing but a crisis with:

- More than 75% of the marijuana grown in the State is being shipped out of State
- Promised tax revenues have never covered the costs of increased drug use
- Turning our rural residential farm lands into industrialized recreational marijuana grows, increasing traffic, skunky odor, loud fans running 24/7
- Hundreds of violations by those who are State regulated
- Expanded use of marijuana by our youth
- Hundreds of robberies and burglaries at local marijuana dispensaries and marijuana and hemp grow sites. Even the pro-marijuana advocates complain of the hundreds of burglaries that they have faced.

<https://growunits.com/security.html>

“There have been hundreds of break-ins and thefts in Portland, and the surrounding areas, related to the cannabis industry. Even we experienced one in our first year of operation.

Resulting from this firsthand experience, and our determination to fortify, we continuously find ways to strengthen and protect not only our facility but each individual building. Not only do we have people working on site 24 hours a day, but we have contracted patrolmen who perform continuous watch rounds of the barbwire parameters and all exterior areas of each and every building. With a monitored security gate at the entrance and over 100 cameras throughout the facility there's always many eyes watching. Laser trip wires, security loops, steel wall panels permanently bonded together, and 24 hour presence are a few of the tools that are used as deterrents and for maximizing protection of the facility."

Please consider my eyewitness account of what will happen to your City if you allow the door to be open to the legalization movement.

Shirley Morgan

Founder Citizens for Public Safety, Quality of Life, Property Values



Welches, Oregon 97067

www.protectorsociety.org

www.unwantedpotgrows.com

Weed Documentary (2016) High School: Marijuana in an American Public High School in Oregon

<https://www.youtube.com/watch?v=BApEKGUpXs&form=MY01SV&OCID=MY01SV>

[Weed Documentary \(2016\) - High School Marijuana in an American Public High School - Bing video](#)

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Urban Oregon legalized marijuana, rural Oregon pays the price



By Shirley Morgan

As the founder of the Citizens for Public Safety, Quality of Life, and Property Values a national volunteer outreach with a focus on the impacts of marijuana in our communities, I want to convey loud and clear that the recent decision by Oregon's legislature to redefine marijuana as an agricultural crop should not be ignored! It should not be ignored because it means that the marijuana advocates and pro marijuana legislators are outright trying to takeover Oregon's rural farming communities for the sole purpose of growing recreational marijuana. They have done this by redefining marijuana as an agricultural crop in in House Bill 3400. This opinion will review the funding of the legalization movement, the foundational setting up of the medical marijuana programs as a bridge to complete marijuana legalization, and the redefinition immunity loophole of marijuana as an agricultural farm crop.

First, recreational marijuana was legalized in Oregon in 2014 under a statutory ballot measure that was funded by a \$5.3 million dollar out-of-state campaign. Marijuana lobbyists and pro marijuana legislators waited with bated breath to see if polling guidelines around the public's acceptance of a tax and regulate scheme would pass, it did with a 55.6% yes and a 44.4% no! It is also important to note that when you look at the precinct votes it was the urban voters who said yes and rural voters who said no, yet it will be the rural voters who will be most impacted by marijuana legalization in Oregon.

Pro marijuana advocates of measure 91 blasted the airwaves with their message knowing full well that local efforts would have a difficult time matching their out-of-state financial efforts, since all of their money was coming in from the billionaires whose dream is to legalize all illegal drugs, therefore making it difficult for the general public to hear the real truth about the dangerous impacts of marijuana.

Second, according to the Oregon Health Authority there are over 47,430 unregulated medical marijuana growers growing for cardholders. The Oregon Liquor License Commission who has been tasked to set up rules for Oregon's new marijuana program has indicated that at least 75% of the medical marijuana in Oregon goes to the underage and out-of-state black market. So legislators went to work to find ways to control Oregon's medical marijuana program by reducing the number of cardholders that medical marijuana growers would be allowed to grow for, reducing the number of marijuana plants that could be

grown at one site address because if they couldn't reduce these quantities, then Oregon's new recreational marijuana would have a difficult time surviving. Though this looked admirable on behalf of our legislators the medical marijuana program from the beginning was the tool that was used by the pro marijuana advocates to set the foundational stage for full and outright marijuana legalization.

Third, once the marijuana legislators realized that the marijuana legalization program was only going to succeed if they were able to curtail the current unregulated medical marijuana program by implementing a marijuana plant grower reduction program, they then opened the door to the growers by developing what they called an Opt In program for growers where they could sell their extra marijuana to the recreational marijuana market, however there was not a required mandate for the 47,430 unregulated marijuana grow sites to become part of this program therefore leaving another unregulated loophole.

Finally, Oregon's legislators then decided to redefine marijuana as an agricultural farm crop under House Bill 3400 (section 34 (1), which gives recreational marijuana grows an immunity loophole in all of Oregon's exclusive farm use areas under the States "Right to Farm Act", which denies nuisance lawsuits against farmers who use accepted and standard farming practices as well does not require any neighbor notification or conditional use permits and allows only the State to regulate it without any jurisdiction control.

So what does this means for Oregon's rural farming residents? It means a complete and utter takeover of all of Oregon's rural residential farming communities. While it was the urban voters who voted yes for marijuana legalization it was the rural voters who voted no who are being most impacted.

Rural Oregon farming residents are seeing large out-of-state land grabs for the sole purpose of growing commercial recreational marijuana. So imagine, one day you have a horse pasture next to your home and the next day this 40 acre pasture has been turned into a 300' x 700' compound completely surrounded by a 6' high fence with 10 rows of barbed wire on the top not only blocking your once beautiful view, but emitting the skunk smell of pot, 24-hour a day lighted greenhouses that light up the night sky for miles, and increased traffic completely changing the rural farming character and culture that you have enjoyed.

62870 Johnson Ranch Rd-Bend, Oregon

Below was the beautiful view



300' x 700' compound now blocking the view



29450 SE Lariat Ln, Boring, Oregon

In Boring, Oregon and other areas around the State, residents are seeing horse stables purchased for the sole purpose of growing recreational marijuana and in the below case marijuana was being openly grown in full public view.



Congressman Earl Blumenauer -- who promotes marijuana in Oregon and is trying to legalize marijuana at the federal level --has many of his rural residential farming constituents in his district unhappy with him. Here's a letter Rachel Kosmal McCart wrote to Rep Blumenauer.

"Dear Congressman Blumenauer:

I have voted for you in previous elections and want to let you know why I will not be voting for you in future elections. I cannot support your efforts to legalize marijuana at the federal level. Here's why.

I, like many other voters, voted for Measure 91 with the idea that decriminalizing possession of small amounts of marijuana and allowing individuals to grow up to four plants at their home would result in reducing law enforcement burdens and getting illegal, dangerous grows out of public and tribal land. What I did NOT vote for was having marijuana classified as a "crop" for the purposes of the Right to Farm Act.

The result has been an explosion of marijuana production and processing in our Beavercreek rural community, with Clackamas County having little ability and almost no resources available to ensure that marijuana-related land uses are reasonable and safe. Razor-wire fences, iron gates and no trespassing signs are springing up everywhere in our formerly picturesque, quiet and safe community."

Compared to Colorado as an example, according to Tom Gorman Director of the Colorado HIDTA, recreational marijuana is not allowed to be grown outside of industrial areas because you don't want cultivation open to the public view as it tends to normalize, advertise, and condone marijuana use, as well as it poses security problems since marijuana is a high price "crop", as well as theft by youth for both use and sale and it becomes harder to control and regulate and creates devastating problems to the environment such as water use, use of illegal pesticides, and neighborhood security and annoyance problems. Over 70% of Colorado, Washington, and Oregon Counties and Cities have banned medical and recreational grows, processing sites and retail outlets in their communities because marijuana is still federally illegal and brings a lot of risks to our communities because they operate by cash and often have armed fatal shooting and burglaries putting surrounding neighbors at risk. For those counties and cities who have decided to Opt In to the cash mongering goals of the pot advocates, they should be reminded that marijuana is still a federally illegal drug and County and City officials who take an oath to serve both State and Federal laws put themselves in a position of aiding and abetting the illegal drug market.

The complete and utter takeover of our rural residential farming communities through the redefinition of marijuana as an agricultural farm crop is inflaming rural Oregon voters. To complicate this outrage even more, the Oregon Liquor License Commission is issuing more than one recreational marijuana growing license to one site address. A landowner can have mass amounts of both indoor (5,000-10,000 sq. ft.) and outdoor (20,000-40,000 sq.ft.) grow spaces, grows farmed by the landowner and leased ones. In some areas of Oregon 86 to 100 acre parcels have been purchased by out-of-state investors just to grow marijuana without any consideration to the impacts of neighbor's public safety, quality of life, or property values. The Oregon Liquor License Commission also is not putting any limits on the number of marijuana growing licenses that will be issued, meaning that an entire rural residential farming community can be taken over by large recreational marijuana grows.

In closing, I would like to warn other states about this immunity redefinition of marijuana as a farm crop loophole.

Although many innocent voters have been misled by out-of-state highly funded ballot initiatives that push the so-called medical marijuana scheme and the tax and regulate recreational marijuana scheme, many citizens have observed the impacts first hand and are standing up nationwide to bring a strong awareness to these deceptive attempts to try and ignore the impacts to public safety, quality of life, and property values. Drugged driving, diversion to other States, destruction to the environment, diversion to minors, public consumption, robberies, burglaries, fatal shootings, odors, increased traffic, fires, hash oil explosions are just a few of the impacts that marijuana leaves behind. The scheme of medical marijuana and marijuana legalization leads to the degradation of our neighborhoods and it is important that citizens begin to inform their communities.

End

Shirley Morgan lives in Oregon and has a BA in Human Communications from Marylhurst University in West Linn (1999), Oregon; MA in Whole System Design/Organizational System Renewal from Antioch University in Seattle (2003), Washington; MS in Community and Economic Development from Southern New Hampshire University-Manchester, New Hampshire (2008); Associates of Church Leadership-Portland Bible College, Oregon (2015)

Reference

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<http://oregoncatalyst.com/30348-75-oregon-medical-marijuana-black-market.html>
4. McCart, Rachael Kosmal. Letter to Congressman Earl Blumenauer. Letter to the author. 7, January, 2016.
5. Gorman, Thomas. Colorado HIDTA-Recreational Marijuana Industrial Grows. Letter to the author. 23, July, 2015.

OREGON House Bill 3400 section 34 (1)

36 **SECTION 34.** (1) Notwithstanding any other provision of law, marijuana is:
37 (a) A crop for the purposes of "farm use" as defined in ORS 215.203;
38 (b) A crop for purposes of a "farm" and "farming practice," both as defined in ORS
39 30.930;
40 (c) A product of farm use as described in ORS 308A.062; and
41 (d) The product of an agricultural activity for purposes of ORS 568.909.
42 (2) Notwithstanding ORS chapters 195, 196, 197 and 215, the following are not permitted
43 uses on land designated for exclusive farm use:

CALIFORNIA

California is currently working to regulate their existing medical marijuana program through a bill called AB243. Below is the verbiage of a portion of this bill "medical cannabis is an agricultural product."

What does this mean for rural farming residents of California? That is a question all rural farming residents should be asking in all States concerned about the impacts of marijuana in their communities.

11362.777.

- (a) The Department of Food and Agriculture shall establish a Medical Cannabis Cultivation Program to be administered by the secretary, except as specified in subdivision (c), shall administer this

section as it pertains to the cultivation of medical marijuana. For purposes of this section and Chapter 3.5 (commencing with Section 19300) of the Business and Professions Code, **medical cannabis is an agricultural product.**



MARIJUANA NEWS PERIODICAL



MISSION

Keeping you informed on the latest news about marijuana impacts state-by-state and worldwide.

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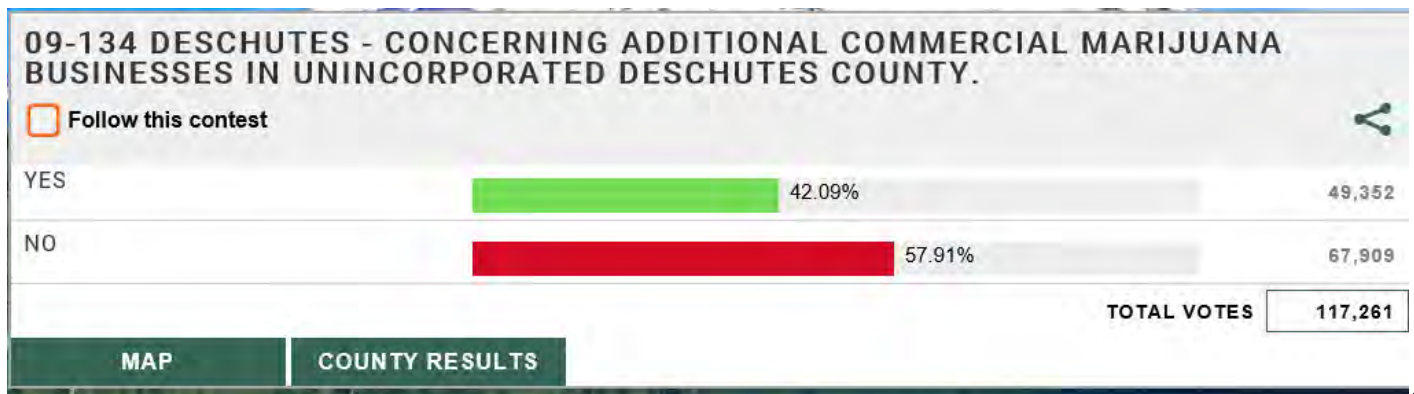
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https://www.bendbulletin.com/localstate/deschutes-county-says-no-to-future-marijuana-grows-and-processing-facilities/article_6999035a-1d63-11eb-9a13-a379a375ce48.html

<https://results.oregonvotes.gov/resultsSW.aspx?type=LM&map=CTY>



ALERT

When going green is dirty: Colorado's indoor cannabis farms produce 30% more greenhouse emissions than the state's coal mining industry due to electricity use and natural gas consumption, study reveals

<https://www.dailymail.co.uk/sciencetech/article-9347611/Colorados-indoor-cannabis-farms-produces-30-carbon-states-coal-mining-industry.html>

Daily Mail
March 10, 2021

- **Growing cannabis indoors requires a lot of energy for lights and climate controls**
- **Many states forbid outdoor farming or require operations to be near retail outlets**
- **In Colorado, indoor pot farming's carbon footprint is over 30 percent bigger than coal mining**
- **Depending on where you are, growing an ounce of weed indoors has the same carbon footprint as burning 7 to 16 gallons of gasoline**

Despite being touted as the ultimate 'green' crop, cannabis is having a major impact on the environment, a new study suggests.

Researches at Colorado State University found in Colorado that growing the drug indoors produces more than 30 percent more greenhouse gases than the state's coal mining industry.

The team found that the larger carbon footprint is due to plants requiring a lot of energy, such as high-powered lighting and climate-control systems.

Although the drug is legal recreationally in 15 US states, many have banned outdoor growing and many keep plants inside to ward off thieves – resulting in a large amount of energy consumption needed to keep them alive.

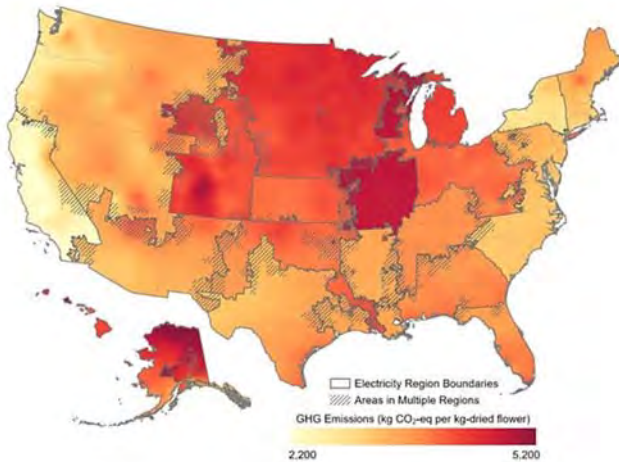
Colorado residents voted to legalize recreational marijuana in 2012.

By 2017, the state government was collecting more than \$247 million in taxes, licensing fees from

the crop.

Researchers at Colorado State University were curious what kind of effect the booming cash crop was having on greenhouse gas emissions, especially compared to other carbon-heavy industries.

Colorado is the tenth largest coal-producing state in the US, mining over 23 million tons a year, mostly for generating electric power.



The life cycle greenhouse gas emissions from indoor cannabis cultivation, modeled across the U.S.

A model of life cycle greenhouse gas emissions from indoor cannabis cultivation across the US. Depending on the region, indoor cultivation results in between 2,283 and 5,184 kilograms of carbon dioxide per kilogram of dried flower



In the five years after Colorado legalized recreational marijuana, indoor cannabis cultivation went from 1 percent of Denver's electrical consumption to 4 percent

But growing legal cannabis has a bigger carbon footprint in the Centennial State than coal mining, according to scientists at Colorado State University.

Emissions from cannabis farming add up to around 2.6 metric megatons of carbon dioxide equivalent (CO₂e).

That's over 30 percent more than coal mining, which is responsible for 1.8 metric megatons.

The biggest footprint came from the natural gas and electricity needed to maintain high-intensity grow lights and environmental controls.

Heating, ventilation and air-conditioning systems drew the most energy, though the actual amounts depended on the regional climate.

In Colorado, for example, heating is more important.

Emissions from marijuana growing vary widely from state to state, the team found, from 2.5 to 5.7 tons of carbon dioxide equivalent for every kilogram of dried marijuana flower produced.

'The emissions that come from growing an ounce, depending on where it's grown in the US, is about the same as burning 7 to 16 gallons of gasoline,' Hailey Summers, a CSU graduate student in mechanical engineering and lead author in a new study in Nature Sustainability.



Depending on where it's cultivated, growing an ounce of marijuana has the same carbon footprint as burning 7 to 16 gallons of gasoline.

Co-author Evan Sproul, a research scientist in mechanical engineering, performed a life cycle assessment of indoor cannabis operations across the U.S..

Analyzing the energy and materials required to grow the product, he modeled what the corresponding greenhouse gas emissions would be.

Depending on the region, he found indoor cultivation resulted in lifecycle greenhouse gas emissions of between 2,283 and 5,184 kilograms of carbon dioxide per kilogram of dried flower.

In Colorado, state regulations require farming operations to be near retail storefronts, leading to a boom in energy-sucking grow warehouses in urban areas like Denver.

From 2013 to 2018, electricity use from cannabis cultivation and related processes went from 1 percent of the city's total electrical consumption to 4 percent.

'Colorado's marijuana sector heavily relies on electricity to run artificial lights, as well as air-

conditioning and dehumidifiers,' according to a statement from the Colorado Department of Public Health and Environment.

'With electrical generation being responsible for a large portion of greenhouse gasses and other air pollutants, energy efficiency has an impact on air quality in Colorado.'

Growers are looking for a greener way, too: In 2018, the Colorado Harvest Company, a Denver dispensary, was spending about \$13,000 a month on electricity for one of its two grow facilities, Colorado Public Radio reported.

The company has started trying out light-emitting diode (LED) lights instead of traditional fluorescent lights in its grow rooms.

In addition to having a smaller carbon footprint, LED lights are more energy efficient and last longer.

The team believes growing cannabis in outdoor greenhouses would both lower energy requirements and shrink the carbon footprint.

But it means changing laws and overcoming security concerns.

'We would like to try and improve environmental impacts before they have become built into the way of doing business,' said Sproul.

SOUTH DAKOTA

Judge rules recreational marijuana measure unconstitutional in South Dakota

Sioux Falls Argus Leader
February 8, 2021

<https://www.argusleader.com/story/news/2021/02/08/south-dakota-marijuana-court-strikes-down-recreational-pot-measure/4442883001/>

A Hughes County judge has ruled that a voter-approved amendment to the South Dakota Constitution ending marijuana prohibition in the state shouldn't go forward.

Circuit Court Judge Christina Klinger in a decision issued Monday ruled that Constitutional Amendment A violates the state Constitution on two grounds: It violates the single subject rule, meaning it encompassed more than one topic, and it conflicts with language in the Constitution that provides for its modification.

Attorneys for the plaintiffs in the case, South Dakota Highway Patrol Superintendent Rick Miller and Pennington County Sheriff Kevin Thom argued last month that because Amendment A added an entirely new section to the state Constitution instead of modifying an existing one, it should be considered a revision, not an amendment.

Revisions to the constitution require a convention of state delegates before being placed on the ballot and cannot be done through the petition process, like initiated measures and amendments.

"The failure to submit Amendment A through the proper constitutional process, voids the amendment and it has no effect," Klinger said.

Constitutional Amendment A, which provides for the legalization of all forms of marijuana as well as the licensing, sale and cultivation of cannabis, passed with an 8% margin when voters cast their ballots in the November election. It was set to go into effect July 1.

Legal fees for Miller's role in challenging the amendment are being paid for by the state of South Dakota at the order of Gov. Kristi Noem, who campaigned against the ballot measure in the lead up to the election.

Her office did not respond to a request for comment Monday afternoon regarding Klinger's ruling.

The case is expected to be appealed to the South Dakota Supreme Court.



**EXECUTIVE OFFICE OF THE
PRESIDENT
OFFICE OF NATIONAL DRUG
CONTROL POLICY**
Washington, DC 20503

FOR IMMEDIATE RELEASE:
Wednesday, February 3, 2021

CONTACT:
Press@ondcp.eop.gov

President Biden Appoints Key Leaders to ONDCP, Agency Outlines Top Policy Priorities to Address the Nation's Overdose Crisis

New appointees bring significant experience in drug policy and will help lead President Biden's plan to prevent substance use, improve access to quality treatment and harm reduction services, and promote recovery supports.

Washington, D.C.—Today, the White House Office of National Drug Control Policy (ONDCP) announced its first wave of President Biden's appointees and outlined the Biden-Harris Administration's policy priorities for the first 100 days.

Acting Director of National Drug Control Policy Regina LaBelle, Chief of Staff Mario Moreno, and Associate Director of Legislative Affairs Anne Sokolov have already joined the office and additional appointees will join in coming weeks. The incoming team of political appointees selected by the Biden-Harris Administration reflects a commitment to advance policies rooted in science and evidence, as well as a commitment to reflect the diversity of America by hiring people in recovery from substance use disorders.

ONDCP has identified five key policy priorities to address substance use disorder in America:

- The Workforce: Advancing recovery-ready workplaces and expanding the addiction workforce.
- Racial Equity: Confronting racial equity issues related to drug policy.
- Prevention: Supporting evidence-based prevention efforts, related to both supply and demand reduction.
- **Harm Reduction**: Enhancing evidence-based harm reduction efforts.
- Treatment: Expanding access to evidence-based treatment, including by lifting burdensome restrictions on medications for opioid use disorder.

“The four crises identified by the Biden-Harris Administration, coupled with mounting rates of overdose deaths and untreated addiction are significant challenges,” **Acting Director LaBelle said**. “I’m honored to serve in the Biden-Harris Administration with this incredible group so we can get to work to improve outcomes for the American public and support drug policies rooted in science and evidence to build back better.”

“While our nation grapples with the COVID-19 pandemic, we must also face the addiction and overdose epidemic that affects communities all over the country,” **Moreno said**. “I’m honored to be working to implement President Biden’s agenda, which will focus on saving lives by prioritizing public health approaches to substance use disorder, while finding ways to confront historic racial inequities in drug policy.”

Acting Director Regina LaBelle was sworn in by President Biden on the evening of Inauguration Day. LaBelle is regarded as an expert on drug policy, having served as a Distinguished Scholar and the Program Director of the Addiction and Public Policy Initiative at Georgetown University’s O’Neill Institute for National and Global Health Law. In this role, she managed a project portfolio focused on the opioid epidemic, addiction policies, barriers to treatment for substance use disorders, public health approaches to drug policies

and how law can promote access to treatment and support recovery. LaBelle also founded and directed the Master of Science in Addiction Policy and Practice at Georgetown University's Graduate School of Arts and Sciences.

Acting Director LaBelle previously served as the Chief of Staff and senior policy advisor at ONDCP during the Obama Administration, where she oversaw the Agency's efforts to address the opioid epidemic and other drug policy issues, including overseeing implementation of the National Drug Control Strategy. She has been appointed as Deputy Director of National Drug Control Policy. Ms. LaBelle is also serving as Acting Director until a nominee for Director is confirmed by the U.S. Senate.

Prior to her work at the national level, LaBelle served as legal counsel to Seattle Mayor Greg Nickels where she provided legal and policy advice to the Mayor on high-profile city initiatives. From 1998 to 2005, LaBelle was an adjunct professor of policy and ethics at the Seattle University Institute for Policy Studies. She received her JD from Georgetown University Law Center and her BA from Boston College. LaBelle is an active member of the Washington State Bar.

Chief of Staff Mario Moreno has a decade of experience working in communications, research, and advocacy related to drug policy and human rights. Most recently, he was the Vice President for Communications at the Washington Office on Latin America, a human rights organization based in Washington, D.C. that advocates for the promotion of human rights, good governance, and rule of law in Latin America. He previously served as the Press Secretary at ONDCP from 2015 to 2017, where he helped implement press plans to promote public health approaches to substance use disorder. He has worked on research and advocacy projects related to fentanyl trafficking and organized crime in Mexico, the protection of social leaders in Colombia, and broader human rights issues in Latin America. Mr. Moreno is a first-generation immigrant and has degrees from Duke University and the University of Chicago's Harris School of Public Policy.

Associate Director of Legislative Affairs Anne Sokolov joins the Agency with over a decade of experience in the House of Representatives, most recently serving as Chief of Staff to Congressman Max Rose. Prior to working for Congressman Rose, Anne spent eight years working for Congressman Tim Ryan, including as his Legislative Director, overseeing the Congressman's role as a senior member of the House Appropriations Committee. In this role, she served as the primary legislative staffer for the Congressman's work as Co-Chair of the Congressional Addiction, Treatment and Recovery Caucus. Anne also worked in a legislative role for Congressman Charlie Wilson. Originally from Youngstown, Ohio, she is a graduate of George Washington University.

In the coming weeks, ONDCP will welcome Ariel Britt, Tom Hill, and Robert Kent to the team.

Associate Director of Outreach Ariel "Air" Britt has spent much of her career focused on intervention and recovery support services, strategic planning, facilitation, creative design, and program development. She is also the creator of the award-winning podcast, *Beauty in the Grit*. In 2015, Ariel had the privilege of sharing her personal experience as a person in recovery at the White House during the Obama Administration. She is

an exceptional speaker with a passion for community and service. She received her Bachelor's Degree in Psychology and Master's in Social Work from the University of Michigan.

Senior Policy Analyst Tom Hill is a gay man in long-term recovery from addiction and has been a part of the recovery advocacy movement since 1998. Tom's commitment to helping individuals, families, and communities get better has been demonstrated through his efforts to promote recovery-oriented systems of care that include a full range of prevention, treatment, peer recovery, and harm reduction services. Tom most recently served as the Senior Advisor on Addiction and Recovery at the National Council for Behavioral Health, following his former position as Vice President for Practice Improvement. Before joining the National Council, Tom served as the Senior Advisor on Addiction and Recovery to the SAMHSA Administrator and Acting Director of the Center for Substance Abuse Treatment during the Obama Administration. Prior to his Federal service, Tom served as a Senior Associate at Altarum Institute and Director of Programs at Faces & Voices of Recovery.

General Counsel Robert Kent most recently served as the Vice President of Advocacy and General Counsel for the American Association of Orthodontists, a national healthcare organization. Prior to that he served as the General Counsel for the New York State Office of Addiction Services and Supports (OASAS). In this role, Robert provided overall legal support, policy guidance, and direction to the OASAS Executive Office and all divisions of the agency. Robert led the OASAS efforts to implement New York State's Heroin and Opioid Task Force recommendations, including the Combat Addiction/Heroin Campaign, the Federal Opioid Targeted Grant program, and Medicaid Redesign Team initiatives including implementation of historic legislation to increase access to treatment, including harm reduction services. Robert has co-authored articles on patient confidentiality and sober homes and has presented nationally and throughout New York State on the addiction system of care.

LaBelle, Moreno, Sokolov, Britt, Hill, and Kent join the Biden-Harris Administration at a time when the country is facing unprecedented levels of overdose deaths.^[i] They will immediately get to work implementing President Biden's robust agenda to address substance use disorder, end the overdose crisis, and save lives.

White House Office of National Drug Control Policy | [WhiteHouse.gov/ONDCP](https://www.whitehouse.gov/ONDCP)

###

ACTION ALERTS

PAST ACTION ALERTS & WHAT TO EXPECT LISTED AT THE END OF THIS NEWSLETTER

- [HERE IS WHAT TO EXPECT LIVING NEXT TO A SO-CALLED COMMERCIAL POT GROW](#)
- [WRITE ATTORNEY GENERAL](#)
- [WRITE THE WHITE HOUSE](#)
- [COLE MEMO RESCINDED](#)
- [HOW TO FILE A COMPLAINT WITH THE FDA](#)
- [WEEDING OUT COMMERCIAL MARIJUANA OPERATIONS](#)

OPINIONS

U.S. Senate Drug Caucus Releases Cannabis Report

The U.S. Senate Drug Caucus, led by Senators **Dianne Feinstein** (D-CA) and **John Cornyn** (R-TX), has released a new report on cannabis, "Cannabis Policy: Public Health and Safety Issues and Recommendations." The report makes five key recommendations:

1. Remove barriers to research
2. Study the impact of increasing THC levels
3. Study the impact of cannabis on the developing brain
4. The Food and Drug Administration (FDA) should continue exercising its enforcement authority regarding unregulated cannabis products
5. More effectively detect cannabis-impaired driving

This report is a comprehensive, fact-based resource that coalitions can use to advocate on issues surrounding marijuana. The full report can be accessed [here](#).

ARTICLES OF INTEREST

37 Members of Congress ask Biden to issue mass marijuana pardons ahead of legalization

<https://www.marijuanamoment.net/37-members-of-congress-ask-biden-to-issue-mass-marijuana-pardons-ahead-of-legalization/>

Cannabis firm weedmaps california vape shop sued over fatal shooting

<https://mjbizdaily.com/cannabis-firm-weedmaps-california-vape-shop-sued-over-fatal-shooting/>

Mexico set to become worlds largest legal cannabis market

<https://www.wsj.com/articles/mexico-set-to-become-worlds-largest-legal-cannabis-market-11609263506?mod=RSSMSN>

Federal health agency hosts conference on marijuana and cancer research

<https://www.marijuanamoment.net/federal-health-agency-hosts-conference-on-marijuana-and-cancer-research/>

Marijuana legalization opponents turn to courts to shoot down state ballot

<https://mjbizdaily.com/marijuana-legalization-opponents-turn-to-courts-to-shoot-down-state-ballot-initiatives/>

Senate should take up marijuana banking bill copy lawmaker who could chair key committee

<https://www.marijuanamoment.net/senate-should-take-up-marijuana-banking-bill-gop-lawmaker-who-could-chair-key-committee-says/>

Biden Drug Team Ices Out Pro-Legalization Progressives

Pres. elect pivots from pro-drug play for votes during election

Charles Fain Lehman - NOVEMBER 18, 2020 WASHINGTON FREE BEACON

The team slated to lead Joe Biden's transition at a top drug agency is devoid of representatives of progressive drug policy organizations, a departure from the president-elect's conciliatory stance on the campaign trail.

A six-man team will steer Biden's takeover of the Office of National Drug Control Policy, which coordinates government anti-narcotic efforts under the aegis of the so-called drug czar. But none in the group come from the array of left-leaning organizations that push for drug decriminalization and legalization, and which have recently exercised influence over more progressive Democrats.

Instead, Biden's ONDCP transition group is heavy on Obama administration veterans, including a former Department of Homeland Security official responsible for narcotics enforcement and a senior ONDCP adviser who has supported decriminalization but drawn a line at the legalization of many drugs.

The absence of progressive drug policy advocates reflects Biden's relative conservatism on drug issues, a stance that puts him increasingly out of step with the organized left. Biden attempted to downplay this difference on the campaign trail, emphasizing his support for decriminalization, particularly to young voters, and selecting arch-reformer Kamala Harris as his running mate. His change of tone has drug-policy progressives worried and ready to push back from day one.

"You have an incoming administration that hasn't been very progressive on marijuana," Maritza Perez, national affairs director of the progressive Drug Policy Alliance, told the Washington Free Beacon. "Joe Biden has proposed rescheduling marijuana, which is insufficient. It doesn't address any of the issues that we've brought up. ... So that gives us a lot of cause for concern."

Biden's ONDCP transition team will be led by Rahul Gupta, who served as the public health commissioner of West Virginia, one of the states most ravaged by the drug crisis. In that capacity, he oversaw the state's rollout of medical marijuana but steered away from recommending that users smoke the drug, recommending vaping instead.

This profile—neither an anti-drug hardliner nor a rabid advocate—is characteristic of the other team members. Jacob Rich, a policy analyst with the libertarian-leaning Reason Foundation, highlighted the Urban Institute's Kimberlyn Leary and Georgetown's Regina LaBelle as the other "major players."

Leary and LaBelle "seem like centrists who seek to reduce stigma and prosecution for drug addiction," Rich told the Free Beacon. "LaBelle worked with [Barack] Obama to implement his opioid interventions, so I assume we'll see further reductions in prescribing. I think this will lead to more deaths, but I'm in the minority."

Leary's public profile is largely silent on the issue of drugs, as her expertise is in public health governance more generally. LaBelle, formerly of the Obama ONDCP, has advocated for "prevention and treatment" over "criminalization" of drug use. But she was also, as Rich noted, involved in the Obama administration's push for opioid supply controls. And in a 2018 interview, she said she was "personally ... not in favor of legalization of a number of drugs," comparing legal narcotics unfavorably with legal cigarettes and alcohol.

The Biden team also includes Kimberly O'Connor, who served throughout the Obama Department of Homeland Security, at points overseeing the department's counterdrug and counter-narcoterrorism efforts. She also served in the second Bush administration, during which she authored model legislation for state drug courts. Both achievements indicate a profile unfavorable to progressive views on drugs.

Two others round out the team. Mario Moreno served as spokesman for the Obama ONDCP, in which capacity he said that the government supported using both law enforcement and public health approaches to combat drug abuse, and "opposes drug legalization because it runs counter to a public health and safety approach to drug policy." And Dave Noble, currently with the Michigan ACLU, worked for NASA under Obama and is also serving on that transition team.

Perez told the Free Beacon that she was unfamiliar with any of the names on Biden's transition list but said that her organization is pushing for supporters of a "public health" approach to drug policy at agencies like ONDCP and the DEA. Biden has "a lot to prove," Perez said, noting his historical opposition to marijuana legalization and support for "tough on crime" policies.

That attitude carried forward to the 2020 Democratic primary, where Biden was one of only two major candidates to oppose marijuana legalization (the other was Michael Bloomberg).

While refusing to compromise on legalization, Biden made every gesture during the campaign of being sympathetic to drug reformers' agenda, advocating for decriminalizing the drug at the federal level and calling for its use to be prosecuted as a misdemeanor rather than a felony. His choice of Harris, who publicly bragged about using pot, may also have been a conciliatory gesture.

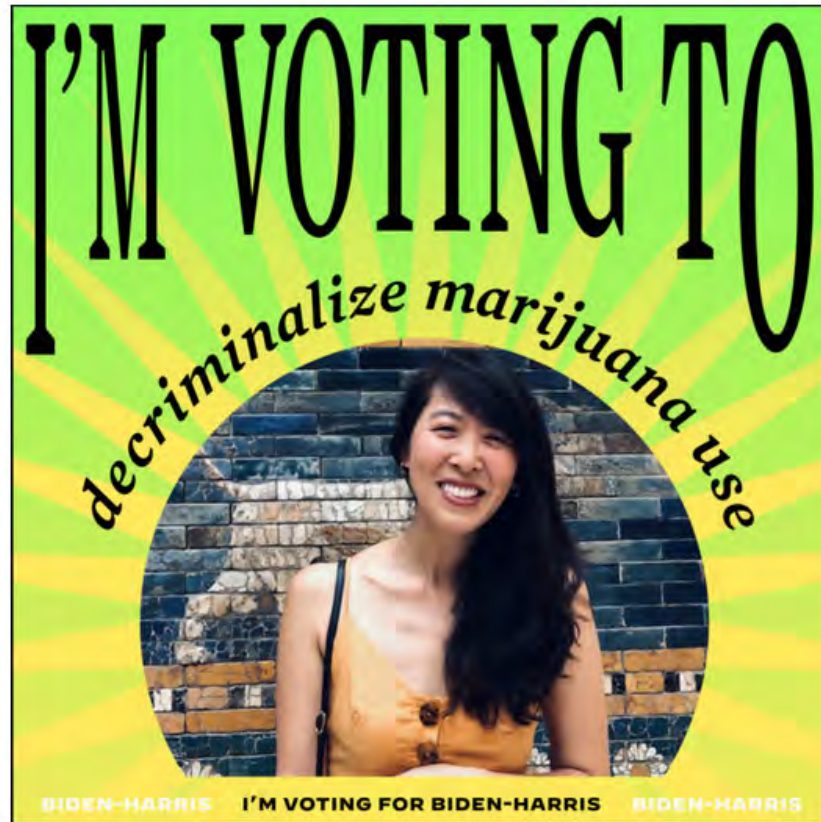
But his views put Biden to the right of most Democrats and have attracted criticism from groups like the Drug Policy Alliance and the National Organization for the Reform of Marijuana Laws, which slammed him in the primary.

That oppositional stance is unlikely to abate as Biden moves from campaigning to governing. Last week, NORML released a letter congratulating him on his election but demanding he appoint an attorney general who will refuse to enforce federal marijuana laws. That was the stance taken by Obama attorney general Eric Holder but dropped under the Trump administration. But a Biden attorney general might face a tough confirmation battle if he or she promises to reinstate the Obama-era policy.

Perez, for her part, is more bullish about Harris, who is the primary sponsor of the Drug Policy Alliance's proposal to legalize marijuana federally, and who Perez believes will shape the more recalcitrant Biden. Harris's past support "does give me and other advocates some hope that she will be able to nudge him a bit on these issues," Perez said. "She has expressed that she has no reservations explaining her policy positions to president-elect Biden."

Biden Campaign Urges Voters To Tout His Marijuana Decriminalization Pledge In Social Media Posts

<https://www.marijuanamoment.net/biden-campaign-urges-voters-to-tout-his-marijuana-decriminalization-pledge-in-social-media-posts/>



Via Biden For President.

[Live Marijuana Election Results](#)

Marijuana Moment

... and check our homepage for individual **articles** about each ballot **measure** ... APPROVED—Oregon: **Measure** 109 to legalize psilocybin therapy ... **marijuana** for adult use in Connecticut, especially since the state **legislature** ... are “on the table” and that legalization could bring in needed **tax** revenue.

'What kind of grandfather needs 140 plants?': Neighbours fed up with dozens of medical marijuana grow-ops

<https://www.cbc.ca/news/canada/manitoba/medical-marijuana-tavares-ross-eadie-city-hall-1.5802195>

Marijuana ballot measure wins inspire neighboring state officials to step up push for legalization

<https://www.marijuanamoment.net/marijuana-ballot-measure-wins-inspire-neighboring-state-officials-to-step-up-push-for-legalization/>

New Zealand approves euthanasia set to reject recreational marijuana

<https://www.msn.com/en-us/news/world/new-zealand-approves-euthanasia-set-to-reject-recreational-marijuana/ar-BB1awDfH?li=BBnb7Kz>

Chuck Schumer says marijuana legalization will be prioritized if democrats retake senate

<https://www.marijuanamoment.net/chuck-schumer-says-marijuana-legalization-will-be-prioritized-if-democrats-retake-senate/>

Keloland Media group argues leader poll Trump wins South Dakota and medical marijuana passes

<https://www.keloland.com/news/local-news/keloland-media-group-argues-leader-poll-trump-wins-south-dakota-and-medical-marijuana-passes/>

[Week in Review: Two states start **medical marijuana** sales, MT measure survives, Oregon ...](#)

Marijuana Business Daily

Medical marijuana products in the state are limited to oils, edibles and vape cartridges with single doses capped at 10 milligrams of THC. MJBizDaily ...

GIANTS OF THE SENATE

<https://mjbizdaily.com/giants-of-the-senate/>

Psychelelic magic mushrooms psilocybin medical legalization decriminalization Oregon and Washington

<https://www.vox.com/future-perfect/21509465/psychedelic-magic-mushrooms-psilocybin-medical-legalization-decriminalization-oregon-washington-dc>

Trump campaign orders Mississippi medical marijuana campaign to cease using Presidents name

<https://www.marijuanamoment.net/trump-campaign-orders-mississippi-medical-marijuana-campaign-to-cease-using-presidents-name/>

[Arizona and Three More States Approve Recreational Marijuana Use: Hashing Out What This ...](#)

The National Law Review

Although **medical marijuana** has been **legal** in Arizona for many years, efforts to **legalize** recreational **marijuana** use failed in 2016, when a ballot ...

HEMP & CBD

HEMP

Having trouble viewing this email? [View it as a Web page.](#)



**OREGON
DEPARTMENT OF
AGRICULTURE**

Update following USDA Publishing Final Hemp Rules

Good day!

USDA published the [hemp final rule](#) on January 15, 2021 and in response, we want to provide an update. **The final rule provides regulations for the production of hemp in the United States and is effective on March 22, 2021.** It builds on the [interim final rule](#) published October 31, 2019.

Ultimately, if you take nothing else away from this email, know that Oregon is not making any changes during the 2021 growing season. (Remember, all testing is for total THC, not delta-9 THC only.) States have until January 1, 2022 to operate under a state plan approved by the USDA.

Later this year, ODA will create draft rules to meet the USDA requirements. ODA will continue to work with industry, the state Legislature, and our federal partners to develop state laws and rules that allow Oregon to meet the USDA requirements. This will include an opportunity for the public to comment on those draft rules. Before the end of 2021, ODA will submit a state plan to the USDA for review, which will include the rule updates.

ODA is seeking full authority from the 2021 Legislature to make changes needed to meet the USDA requirements — specifically around authority to conduct background checks.

Please visit the [USDA Hemp Production website](#) for specific changes made in the final rule. Many of the changes address specific concerns that ODA had with the interim final rule. If you have questions, please feel free to contact ODA's hemp program at hemp@oda.state.or.us or visit our [hemp website](#).

Oregon Department of Agriculture

Email us: info@oda.state.or.us | Call: 503-986-4550

[Hemp Harvested in Texas for First Time in 80 Years: Hemp, Inc. Reports](#)

GlobeNewswire

Legalizing and **taxing marijuana** would definitely help Texas recover ... to loosen restrictions on **cannabis**, but Tejas **Hemp** will be farming what is **legal** and even has ... Thus far, **Hemp**, Inc.'s Local Processing Center (LPC) in **Oregon** has ... are \$10 each and each masterclass is under an hour in **length**.

Senate committee urges hemp the rule change and includes numerous other marijuana provisions in spending bills

<https://www.marijuanamoment.net/senate-committee-urges-hemp-thc-rule-change-and-includes-numerous-other-marijuana-provisions-in-spending-bills/>

USDA awards hemp advocacy group 200000 to support international trade

<https://www.marijuanamoment.net/usda-awards-hemp-advocacy-group-200000-to-support-international-trade/>

[Nine Members Of Congress Tell DEA To Revise Proposed Hemp Rule On THC Content](#)

Marijuana Moment

And so while Congress intended to **legalize** those extracts, businesses that produce the materials could find themselves inadvertently breaking the law. I ...

[USDA Releases, Then Rescinds, Hemp Loan Notice Following Congressional Action](#)

Marijuana Moment

But in **any** case, it's another example **of** the fluidity and challenges **of** rulemaking for the non-intoxicating **cannabis** crop following its **legalization**.

The U.S. Department of Agriculture (USDA) recently released—and then promptly rescinded—a notice on providing federal loans for hemp processors.

After the crop was federally legalized under the 2018 Farm Bill, USDA announced that regulations were [being developed to offer direct and guaranteed loans](#) to the industry. The [federal agency unveiled those guidelines in April](#) and then issued a new notice this month notifying applicants about the policy change ahead of the planned expiration of the earlier 2014 hemp pilot program.

The next day, however, it posted an “obsoleting notice” invalidating the prior document.

The new [guidance](#) “was developed with the understanding that operators would no longer be authorized to produce hemp under the 2014 Farm Bill Pilot Program,” USDA [said](#). However, because Congress [approved a continuing resolution that extends the program](#) until September 30, 2021, the loan policies are not currently applicable.

That pilot program extension came at the behest of numerous stakeholders, advocates and lawmakers who have been pushing USDA to make a series of changes to its proposed hemp regulations. As those rules are being reviewed and finalized, they said it was necessary to keep the 2014 program in place.

The president signed the continuing resolution late last month, so it's not clear why the notice on loan policy changes was released weeks later, which then necessitated a follow-up recision. But in any case, it's another example of the fluidity and challenges of rulemaking for the non-intoxicating cannabis crop following its legalization.

It stands to reason that the loan processes outlined in the now-invalid notice will likely be consistent with what's ultimately released next year, assuming the pilot program does expire then.

The primary rule change concerns licensing requirements for borrowers. After the 2014 regulations are no longer in effect, hemp loan applicants must be licensed under a USDA-approved state or tribal hemp program, or under the agency's basic regulations if the jurisdiction the business operates in has not submitted its own rules.

Borrowers who are not licensed to grow hemp will be considered in non-monetary default and any losses will not be covered. For direct and guaranteed loans, hemp businesses must have a contract with USDA's Farm Service Agency laying out termination policies and their ability to repay the loans.

As of this month, USDA has [approved a total of 69 state and tribal hemp regulatory proposals](#)—mostly recently for Illinois, Indiana, Michigan, New Mexico, Oklahoma and South Dakota. Illinois and Oklahoma were among a group of states that USDA had [asked to revise and resubmit their initial proposals](#) in August.

While the agency released an interim final rule for a domestic hemp production program last year, industry stakeholders and lawmakers have expressed concerns about certain policies it views as excessively restrictive.

USDA closed an extended public comment period on its proposed hemp regulations earlier this month. Its initial round saw more than 4,600 submissions, but it [said last month that it was reopening the feedback period](#) in response to intense pushback from stakeholders on its original proposal.

The federal Small Business Administration (SBA) said last month that the new [30-day comment window is too short](#) and asked USDA to push it back, and it also [issued a series of recommended changes](#) to the interim final rule on hemp, which it says threaten to "stifle" the industry and benefit big firms over smaller companies.

All told, it appears that USDA is taking seriously the feedback it's received and may be willing to make certain accommodations on these particular policies. The department's rule for hemp is set to take effect on October 31, 2021.

In July, two senators representing Oregon sent a letter to Perdue, expressing concern that hemp testing requirements that were temporarily lifted will be reinstated in the agency's final rule. They [made a series of requests for policy changes](#).

Senate Minority Leader Chuck Schumer (D-NY) wrote to Perdue in August, asking that [USDA delay issuing final regulations for the crop until 2022](#) and allow states to continue operating under the 2014 pilot program in the meantime.

Sen. Cory Gardner (R-CO) also called on USDA to delay the implementation of proposed hemp rules, [citing concerns about certain restrictive policies](#) the federal agency has put forward in the interim proposal.

The senators weren't alone in requesting an extension of the 2014 pilot program that was ultimately enacted legislatively, as state agriculture departments and a major hemp industry group [made a similar request to both Congress and USDA in August](#).

Amid the coronavirus pandemic, hemp industry associations pushed for farmers to be able to [access to certain COVID-19 relief loans](#)—a [request that Congress granted](#) in the most recent round of coronavirus legislation.

While USDA previously said that [hemp farmers are specifically ineligible for its Coronavirus Food Assistance Program](#), that [decision was reversed last month](#). While the department initially said it would not even reevaluate the crop's eligibility based on new evidence, it removed that language shortly after Marijuana Moment reported on the exclusion.

Meanwhile, USDA announced last week that it is planning to distribute a national survey to [gain insights from thousands of hemp businesses](#) that could inform its approach to regulating the industry.

CBD

TO VERIFY IF A HEMP GROW IS LEGAL IN OREGON OR WHAT TO FIND OUT WHAT THE THC LEVEL TEST WAS AFTER HARVEST

Send a public records request to the Oregon Department of Agriculture Industrial Hemp at:

Hemp-records@oda.state.or.us

- Provide the suspected address, property owner name if you have it and request if this location is a valid licensed hemp grow.
- The Oregon Department of Agriculture will send you a list of licensed hemp grows in that area. If the property you are inquiring about is not on this list, then the Department of Agriculture indicates that you contact your local law enforcement for enforcement.

Randy Black, Industrial Hemp Specialist
Plant Programs
Oregon Department of Agriculture
PH: 503-986-4652
FAX: 503-986-4786
rblack@oda.state.or.us
<http://www.oregon.gov/ODA/CID/>

Sunny Summers
summers@oda.state.or.us
Cannabis Policy Coordinator & Special Projects
Oregon Dept. of Agriculture
635 Capitol ST NE
Salem, OR 97301
503-986-4565

CONTACT YOUR STATE SENATORS TO LET THEM KNOW

THE IMPACT THAT HEMP IS HAVING IN THOSE STATES WHO ARE DOING STATE STUDY PROGRAMS. Call Senator Mitch McConnell's office to let him know what impacts Hemp is having she he has been the lead pusher of the legalization of Hemp.

- 317 Russell Senate Office Bldg, Washington, DC 20510
- 202-224-2541 www.mcconnel.senate.gov

See testimony from rural Oregon neighbors on the impacts that Hemp is having to public health and quality of life.

<https://www.youtube.com/watch?feature=youtu.be&v=rGlQZk3jPQ8>

Timeframe 15:38



In the above testimony neighbors convey to County Commissioners how hemp grows next to their homes are impacting their public healthy and quality of life from the hideous and malordorous skunky odor. This is a 17 acre parcel located directly next to a rural residential area. Oregon Hemp growers are putting up mega greenhouses to begin their hemp starts and then they are planting anywhere from 1' to 3' greenhouse grown hemp plants into the fields.



12412 S Hwy 211, Molalla

OREGON CLACKAMAS COUNTY HEMP OPPOSITION TESTIMONY

Across the State of Oregon Hemp has become a problem for neighbors in terms of odor, traffic, burglaries.

Here is just another testimony from Clackamas County by Anna Wagoner. She makes some good points regarding the requirement of local officials to set some type of hemp regulations related to Hemp.

- **DEC. 5TH 2019**
- **Anna Wagoner and Sandy Thompson**
- **Hemp testimony.**
- **20.43 timeframe in the below presentation.**

https://www.youtube.com/watch?v=c-tONqEg_w8&feature=youtu.be

- **Clackamas County Hemp**

Your neighbors call it money and you call it HEMP.



JACKSON COUNTY

A HEMP HEADACHE



<https://mailtribune.com/news/happening-now/a-hemp-headache>

CLACKAMAS COUNTY

'Putrid' odor brings Molalla hemp facility to court

<https://www.youtube.com/watch?v=-l9Kp6sUzJY>



UNITED STATES NEWS

Red Medical Marijuana State and Marijuana Legalized
Green Still free
Orange Pot advocates working on proposed legislation or ballot
CBD 12 States Oil is derived from a strain of marijuana that's high in cannabinoid/CBD

ALASKA Legalized 2014

ALABAMA-CBD Research only program

ARKANSAS-Passed Medical

ARIZONA-passed medical failed on recreational

Medical marijuana news Scottsdale City council imposes restrictions on recreational marijuana sales

<https://azmarijuana.com/arizona-medical-marijuana-news/scottsdale-city-council-imposes-restrictions-on-recreational-marijuana-sales/>

[Arizona marijuana shops spend millions to expand ahead of recreational sales legalized by ...](#)
AZCentral.com

... to hire thousands of employees to meet the demand for legal marijuana, ... based Curaleaf has eight medical-marijuana dispensaries in Arizona and ...

Downtown marijuana facility begins city review/article

https://www.scottsdale.org/city_news/downtown-marijuana-facility-begins-city-review/article_acb6cac8-25d8-11eb-90c9-5fc3372e9f31.html

CALIFORNIA-passed medical and recreational 2012



https://www.youtube.com/watch?v=qkbnnqjfC2w#video_1



Challenges Mount To Growing Legal Marijuana Outdoors In Sonoma County

<https://www.sosneighborhoods.com/>



<https://www.sonomacountygazette.com/sonoma-county-news/no-pot-on-purvine-receives-court-issued-restraining-order-against-cannabis-tourism>



<https://www.stoppot.org/>

SANTA BARBARA COALITION FOR RESPONSIBLE CANNABIS



<https://www.sbcountycoalition.com/>

<https://m.facebook.com/sbcoalition/>

SLO County judge rules to ban billboards advertising marijuana along CA highways

<https://keyt.com/news/2020/11/22/slo-county-judge-rules-to-ban-billboards-advertising-marijuana-along-ca-highways/>



Santa maria man accused of operating illegal marijuana delivery service

<https://calcoastnews.com/2020/12/santa-maria-man-accused-of-operating-illegal-marijuana-delivery-service/>~!!~OMSelectionMarkerEnd~!

"Decriminalization" of heroin and PCP is coming to California , too (they pulled the one that had all drugs like Oregon ...)

Here is a bill in Sacramento

[Bill Text - SB-73 Probation: eligibility: crimes relating to controlled substances. \(ca.gov\)](#)

SB 73, as introduced, Wiener. Probation: eligibility: crimes relating to controlled substances. Existing law prohibits granting probation or suspending a sentence for persons convicted of specified crimes relating to controlled substances, including possessing or agreeing to sell or transport opiates or opium derivatives, possessing or transporting cannabis, planting or cultivating peyote, and various crimes relating to forging or altering prescriptions, among other crimes, if the person has previously been convicted of any one of specified felony offenses relating to controlled substances. Existing law also prohibits granting probation or suspending a sentence for persons convicted of specified crimes relating to controlled substances, including possessing for sale or selling 14.25 grams or more of a substance containing **heroin** and possessing for sale 14.25 grams or more of any salt or solution of phencyclidine or its analogs, among other crimes.

This bill would delete various crimes relating to controlled substances, including, but not limited to, the crimes described above, from those prohibitions against granting probation or a suspended sentence. The bill would authorize the remaining prohibitions on probation to be waived by a court in the interests of justice. By making additional persons eligible for probation, the bill would impose a state-mandated local program.

The California Constitution requires the state to reimburse local agencies and school districts for certain costs mandated by the state. Statutory provisions establish procedures for making that reimbursement.

This bill would provide that, if the Commission on State Mandates determines that the bill contains costs mandated by the state, reimbursement for those costs shall be made pursuant to the statutory provisions noted above.

COLORADO Recreational 2012

best source of credible intelligence on the impact of marijuana Rocky Mt. HIDTA (Federal High Intensity Drug Traffic Area) has changed their website. The tab to find their excellent reports is now under the "Strategic" tab; <https://www.rmhidta.org/strategic> To find the latest report scroll down and click on the > to the right. Latest report March 2020.

CONNECTICUT

Drug Bust Yields 1,700 Pounds of Marijuana Worth \$15M

Connecticut police arrested two men and seized an estimated \$15 million in marijuana after discovering a storage facility was being used illegally as a hub for pot distribution in the Northeast.

<https://www.usnews.com/news/best-states/connecticut/articles/2020-12-03/drug-bust-yields-1-700-pounds-of-marijuana-worth-15m>

DELAWARE **DC**

FLORDIA MEDICAL MARIJUANA

GEORGIA-CBD

HAWAII-dispensaries through legislature

IDAHO

Chronic State trailer

<https://vimeo.com/285486451>

See below video



<http://www.drugfreeidaho.org/>



https://www.youtube.com/watch?v=5kjm_vR5PDo&feature=youtu.be

Natural High Youth Campaign - full version

Inspiring youth doing inspiring things.

<https://vimeo.com/181200245>

Natural High Youth Campaign - PSA version

<https://vimeo.com/181066876>

KeepIdaho.org

One of our statewide marijuana education websites.

<http://keepidaho.org/>

'It's time': **Medical marijuana** activists in Idaho fight uphill battle for 2022 initiative

East Idaho News

Jackee Winters and Kind Idaho hope to gather enough petition signatures across Idaho to place legalization of **medical marijuana** on the general ...

Idaho Senator Proposes new Version of Anti-Drug Constitutional Amendment

bigcountrynewsconnection.com

"When you **legalize** one **of** these drugs at **all**, then it opens the door to **all** sorts **of** other things," he said. "It's just another slippery slope to recreational." Backers **of a medical marijuana** initiative in Idaho were cleared last month to ...

[Idaho representatives from different parties co-sponsor medical cannabis legislation](#)

Idaho Statesman

Jeremy Kitzhaber, who served 22 years in the Air Force with distinction, has Stage 4 cancer and is advocating for a **medical cannabis** bill in Idaho. Sgt.

[Idaho Activists Submit 2022 Medical Marijuana Initiative Following 2020 Complications](#)

Marijuana Moment

Utah has a **medical cannabis** program, leaving Wyoming as the only neighboring state without some form of **legal marijuana** access. Idaho is also ...

From: Monte Stiles

Sent: Thursday, February 4, 2021 12:49 PM>

Subject: Idaho Senate passes constitutional amendment to stop legalization

Friends, by a **two-thirds majority**, the Idaho Senate passed a constitutional amendment to stop the legalization of all Schedule I and II psychoactive drugs unless FDA approved, doctor prescribed, and pharmacy dispensed.

We now move to the House where the amendment is expected to pass through the House State Affairs committee and onto the floor where we will face our greatest challenge. The frenzied efforts in Congress to legalize marijuana will obviously make things more difficult, but we are determined to protect Idaho regardless of the foolish actions of the federal government.

Huge thanks to those of you who took the time to contact our Senators. As you can imagine, getting two-thirds of the Senate to vote in our favor was a huge step and your letters of support were extremely valuable.

For those of you willing to assist again, I will send an email list of House members along with the issues we will be facing there.

Thanks again for sharing your expertise and passion. It is greatly appreciated. Monte

Editorial: Personal freedom, but only if the Idaho Legislature approves

- IDAHO PRESS EDITORIAL BOARD
- 18 hrs ago

As states continue legalizing recreational marijuana and begin decriminalizing psychoactive drugs, Idaho is one of the last few states without medical marijuana.

It's not a magic puff, but many studies and a **mountain of anecdotal evidence** show cannabis' positive results for people with a wide variety of illnesses.

When Idahoans are ready to approve medical marijuana, citizens should be able to make that change with a ballot initiative.

Rep. C. Scott Grow, R-Eagle, like most of the Idaho Legislature, seems more concerned with grilling up some red meat for his base instead of collaborating with other legislators to solve real problems.

He introduced a constitutional amendment this week to prevent any "psychoactive drug" that was illegal in 2020 from becoming legal in Idaho. The amendment would need a two-thirds majority in both chambers and a majority of votes in the next general election.

Idaho: the state of personal freedom and liberty, but only as the legislature defines it.

An amendment like this passing would make a citizen initiative to legalize any drug for medicinal or recreational use practically impossible. The initiative process is an important part of our government; if politicians won't listen to their constituents, they have the power to add a question to the ballot.

There's no better example of citizen-led initiatives than the Medicaid expansion a few years ago. We also saw how much this irritated legislators. Instead of taking this as a sign they were out of touch with their voters, legislators forged ahead trying to make initiatives harder to pass. Those efforts didn't work, so this amendment route must be their next "solution" for a non-existent problem.

There could even be legal issues with this legislation; we know how the legislature loves to pass "helpful" laws resulting in court fights that cost taxpayers a pretty penny.

It's abundantly clear the legislature doesn't trust the people of Idaho to make decisions about their own lives. They purport to advance liberty and personal freedom, and then pass legislation that curtails those very things. They hurry to force through their pet projects, but dawdle on school funding and property tax reform.

This also flies in the face of their belief that citizens can be trusted to make important decisions. Most of our legislators from across the state have spoken out against public health measures related to COVID-19, insisting that the citizens of Idaho, as responsible adults, can

make those choices for themselves. So we're allowed to decide if we can wear a mask or not, but we can't decide if we want to use medical marijuana?

This bill isn't about addressing real problems that Idahoans face. It's nothing more than kindling for the fire of partisanship and power struggle.

When, as a state, Idahoans are ready to legalize any drug for any reason, they should be able to with a simple ballot measure. It would, of course, be a whole lot easier if legislators listened to their voters and took appropriate action, but we all know that's unlikely.

We implore those legislators: knock it off with the pet projects. You have a limited time frame to serve the people of Idaho, and hamstringing future citizens won't ease anyone's property tax bill.

Editorials are based on the majority opinion of the Idaho Press editorial board, comprised of community members Rod Gramer, Rosie Delgadillo Reilly, Tracy Watt, Nicholas O'Bryant and Pat Klocke, and Idaho Press President and Publisher Matt Davison. Idaho Press managing editor Holly Beech and city editor Tess Fox are non-voting members. Views expressed in the editorial do not necessarily represent unanimous agreement among all board members.

Nicholas O'Bryant was absent from this week's discussion.

https://www.kpvi.com/news/regional_news/editorial-personal-freedom-but-only-if-the-idaho-legislature-approves/article_1e0076e7-ba03-528b-85e8-04d5957b5f20.html

ILLINOIS —medical marijuana

INDIANA

IOWA-CBD

KANSAS-CBD

KENTUCKY-CBD

LOUISIANA-CBD ONLY JUST PASSED A MEDICAL POT BILL SB143

MAINE

Voters reject Portlands cautious approach to retail marijuana

<https://www.pressherald.com/2020/11/04/voters-reject-portlands-cautious-approach-to-retail-marijuana/>

MARYLAND-medical CBD

MASSACHUSETTS medical marijuana



www.facebook.com/preservecharltoncharacter

MICHIGAN-medical 2018 Proposal 1 rec. marijuana passed

Some marijuana grow houses causing a stink in west bloomfield

<https://www.candnews.com/news/some-marijuana-grow-housescausing-a-stink-in-west-bloomfield-119898>

Tri County citizens Chesaning Village implements moratorium on new marijuana facilities

<https://tricountycitizen.mihomepaper.com/articles/chesaning-village-implements-moratorium-on-new-marijuana-facilities/>

MINNESOTA-MEDICAL MARIJUANA-2014

MISSOURI –MEDICAL MARIJUANA-2018-Amendment 2

Federal lawsuit seeks to snuff residency rules for Missouri marijuana business owners

https://www.stltoday.com/news/local/marijuana/federal-lawsuit-seeks-to-snuff-residency-rules-for-missouri-marijuana-business-owners/article_4c69e69b-a0a2-5088-a323-032198dbc4c8.html!~OMSelectionMarkerStart~!!~OMSelectionMarkerE

MISSISSIPPI

[Mississippi voters approve medical marijuana program](#)

Mississippi Today

Mississippi voters approved Initiative 65, a citizen-sponsored proposal that legalizes **medical marijuana**. Many state leaders argued the initiative was ...

MONTANA-medical

[Montana lawmakers weigh bill to separate marijuana, hemp production](#)

Marijuana Business Daily

(A version of this story first appeared at Hemp Industry Daily.) ... But **medical marijuana** growers objected, saying the bill would impact the ... Montana voters **legalized** adult-use **marijuana** last November, which will make the industry ...

Major funder of Montana marijuana legalization initiative could be prosecuted for campaign finance violations

<https://www.marijuanamoment.net/major-funder-of-montana-marijuana-legalization-initiative-could-be-prosecuted-for-campaign-finance-violations/>

[CNN Projection: Montana voters approve ballot measure legalizing marijuana for people over 21](#)

CNN

This adds to the growing list of states to approve **marijuana**-related ballot ... Arizona and New Jersey voted to **legalize** recreational **marijuana** while South ... approved **legalization** for both recreational **and medical** use, CNN projects.

[Montana Supreme Court Rejects Challenge To Marijuana Legalization Initiative](#)

Marijuana Moment

Montana Supreme Court Rejects Challenge To **Marijuana Legalization** ... Under the proposal, half of the public revenue generated from **marijuana** sales ... a measure to **legalize medical cannabis** that had qualified for the November ...

NEBRASKA

[Nebraska governor claims legalizing medical marijuana will 'kill your children'](#)

Business Insider

Nebraska Gov. Pete Ricketts said legalizing **medical marijuana** would lead to kids dying. Ricketts was citing a study that connected more frequent ...

Nebraska activists are already printing medical marijuana petitions for 2022 after supreme court defeat

<https://www.marijuanamoment.net/nebraska-activists-are-already-printing-medical-marijuana-petitions-for-2022-after-supreme-court-defeat/>

NEW MEXICO

NEW YORK

NEW HAMPSHIRE

NORTH CAROLINA-CBD

NORTH DAKOTA —Medical Marijuana 2014 2018 Recreational **FAILED**

NEW JERSEY —medical marijuana

More than 70 towns previously banned weed sales in N.J. See the full list.

<https://www.nj.com/marijuana/2021/02/more-than-70-towns-previously-banned-weed-sales-in-nj-see-the-full-list.html>

I'm against legal marijuana, but at least do it fairly (Letter)

<https://www.montclairlocal.news/2021/02/20/im-against-legal-marijuana-but-at-least-do-it-fairly-letter/>

[New Jersey medical marijuana applicants seek to break legal impasse](#)

Marijuana Business Daily

Learn more about state programs at MJBizCon 2020. Ticket prices go up \$50 after Nov. 19. A group of unsuccessful **medical marijuana** license ...

[Key New Jersey Senate Committee Cancels Marijuana Legalization Hearing On Implementing ...](#)

Marijuana Moment

In **any** case, if polling is **any** indication, it appears that voters are poised to pass the **cannabis** referendum on their ballots next month. A survey released ...

NEW YORK

[Cuomo says time is 'ripe' for recreational marijuana following New Jersey's approval](#)

Crain's New York Business

"Our concerns are that the public health **effects of cannabis** will likely outweigh **any** revenues the state secures by **legalizing** recreational **marijuana**," ...

NEVADA-medical dispensaries and marijuana legalization

OHIO-LEGALIZED medical marijuana

[42 dogs seized from Hocking County home following animal cruelty complaint](#)

10TV

Additionally, deputies found five **marijuana** plants, three bags of dried **marijuana** and seized three rifles. The sheriff's office and the humane society are ...

RECREATIONAL MARIJUANA BANNED ORO VALLEY AFTER LEGALIZATION

<https://www.kold.com/2020/11/13/use-recreational-marijuana-banned-oro-valley-after-legalization/>

OREGON-Measure 91 legalization 2014 and Medical marijuana 1998

www.unwantedpotgrows.com

<https://www.facebook.com/PreserveDeschutesCounty/>



<https://preservedeschutescounty.org>



www.savechehalemountain.com

The below ethanol fire illustrates the importance of having marijuana/hemp butane/ethanol processing sites to be located in Industrial zones only at least 2000' from residential neighborhoods.

The below ethanol fuel facility is located less than 85' from residential homes and is located in an industrial zone. They had to let the fire burn while they waited for a special foam to be put on the ethanol, because water doesn't work. Over 80 homes were evacuated.

Many Oregon rural communities are allowing butane/ethanol marijuana and hemp processing to take place in our rural farm lands causing great concern for residents.

Fire at Cornelius ethanol fuel facility likely started by static

Fire investigators believe that static started the fire in a metal drum and quickly grew. Witnesses reported hearing explosions and seeing towering flames.

<https://www.kgw.com/article/news/local/fire-ethanol-fuel-facility-cornelius/283-0a6abba3-b7ab-4d65-aeac-723e2669005c>



[Oregon decriminalizes drugs](#)

Morning Journal News

The ballot **measure** capped the amount of **pot tax** revenue that schools; mental ... "The Country Ham House has been my life," Stevenson, who turns **80** this ... The military maintains its actions are legally justified — citing a **section** of ...

Oregon law to decriminalize all drugs goes into effect, offering addicts rehab instead of prison

<https://www.msn.com/en-us/news/us/oregon-law-to-decriminalize-all-drugs-goes-into-effect-offering-addicts-rehab-instead-of-prison/ar-BB1dhclS?li=BBnb7Kz>

[Oregon set to decriminalise heroin and LSD as Joe Biden eyes opportunity of federal cannabis ...](#)

Telegraph.co.uk

"When you're arrested, you see a lot of your doors close immediately." But Mr Horton persevered, and today he runs a **legal cannabis** business called ...

Climate changed/central Oregon crossroads cannabis in our environment

https://www.bendbulletin.com/climate_changed/central-oregon-crossroads-cannabis-in-our-environment/article_872cdf6a-3fb7-11eb-b14b-575654433215.html

Deschutes county goes to court over marijuana tax revenue

https://www.bendbulletin.com/localstate/deschutes-county-goes-to-court-over-marijuana-tax-revenue/article_2556712e-3a81-11eb-b4a4-4f61167081b4.html!~OMSelectionMarkerStart~!!~OMSelectionMarkerEnd~!

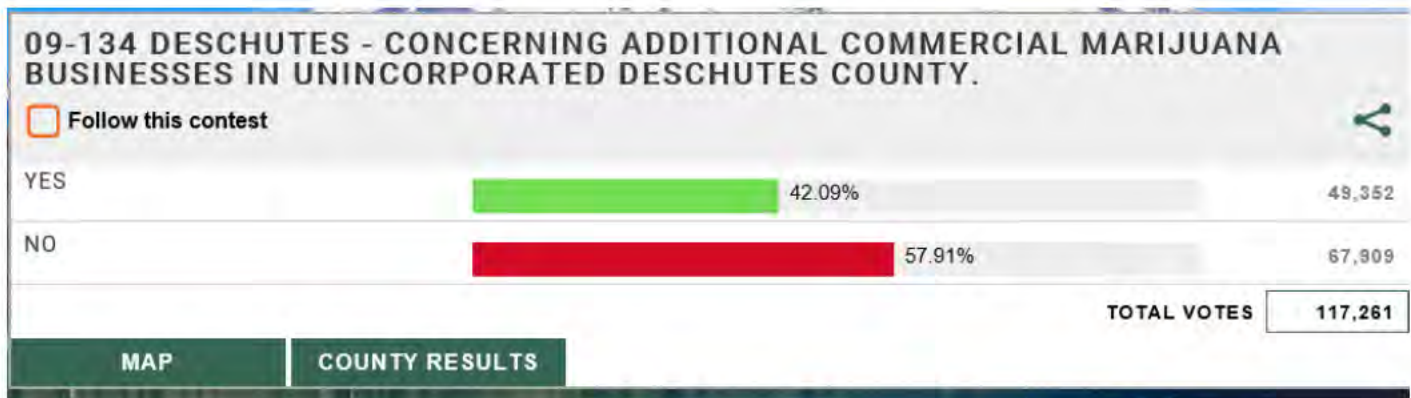
Alfalfa area man sentenced to 3 years in federal prison for butane honey oil lab

<https://ktvz.com/news/2020/12/03/alfalfa-area-man-sentenced-to-3-years-in-federal-prison-for-butane-honey-oil-lab!~OMSelectionMarkerStart~!!~OMSelectionMarkerEnd~!>

DESCHUTES COUNTY SAYS NO TO FUTURE MARIJUANA GROWS AND PROCESSING FACILITIES

https://www.bendbulletin.com/localstate/deschutes-county-says-no-to-future-marijuana-grows-and-processing-facilities/article_6999035a-1d63-11eb-9a13-a379a375ce48.html

<https://results.oregonvotes.gov/resultsSW.aspx?type=LM&EA&map=CTY>



Deschutes County Officials set to discuss fall vote on marijuana opt out

<https://ktvz.com/news/2020/08/03/deschutes-county-officials-set-to-discuss-fall-vote-on-marijuana-opt-out-measure/>

Residents asked to vote on the future of marijuana growing in rural Deschutes County

https://www.bendbulletin.com/localstate/residents-asked-to-vote-on-the-future-of-marijuana-growing-in-rural-deschutes-county/article_057881a6-126a-11eb-845c-07a4422c30b1.html

Voters will decide this November whether any new marijuana growing or processing facilities can be approved in rural Deschutes County.

Measure 9-134 asks whether residents want to keep Deschutes County's moratorium of marijuana growing the commission adopted in August 2019. If approved, existing marijuana growing or processing facilities would get to stay, but no new ones would get permitted.

This measure does not affect cities, so new marijuana grow operations could still be approved in cities like Bend. Medical marijuana would also not be affected.

There would be a financial impact. Though the county has not budgeted to receive any money from marijuana tax revenue for this fiscal year, if the county ends the moratorium, the county would see an estimated \$400,000 in tax revenue, said Greg Munn, the county's financial officer.

Voting NO means you do not want any more marijuana growing or processing facilities in the rural part of Deschutes County. Voting yes means you don't want to restrict new growing or processing facilities.

The Deschutes County Commission decided to send the issue to the ballot after receiving significant pushback about rules that were adopted to regulate the industry. Dozens of rural residents came to a public hearing last year to ask the county to opt out of future marijuana growth instead of trying to retool regulations that were being appealed to the state Land Use Board of Appeals from the Deschutes County Farm Bureau and representatives of the marijuana industry.

The measure highlights a philosophical divide in the county, with many rural residents raising concerns about how marijuana is negatively affecting a way of life, and others arguing that Deschutes County is treating a legal crop unfairly because of an old stigma.

The Bulletin spoke with Liz Dickson, a lawyer who has represented multiple rural Deschutes County residents who have appealed marijuana facilities, about why the marijuana moratorium should continue, and Lindsey Pate, the president of the Cascade Cannabis Association, to understand why the marijuana industry should be allowed to keep growing.

Dickson herself grew up in rural Deschutes County, around Alfalfa. So when she got the call from clients about how a nearby marijuana operation was negatively affecting their way of life, Dickson was sympathetic.

“To call it a traditional crop is oversimplifying what we’ve learned about what it really is,” Dickson said.

Dickson said thinking of marijuana as any other crop like alfalfa or hay is misleading because of all the industrial elements that go along with growing marijuana. Because marijuana can't be grown out in the open like other crops, it is grown in industrial or greenhouse style buildings, she said.

That means the plants often require grow lights, and the lights are an issue for many rural residents, Dickson said. Though there are regulations that require lights be turned off at night, that doesn't always happen, Dickson said, which ruins the dark night sky neighbors are accustomed to.

Odor is also an issue. Dickson said she had a client who lived next to a marijuana growing facility who said the odor was so strong it would trigger an allergic reaction. The client ended up having to leave her home and move to Bend, Dickson said.

Others reported that the smell would permeate their drapes and carpets when they would leave their windows open to cool the house down at night.

Because it is a drug, these facilities also usually have security systems and gates for protection, which Dickson argues makes them better suited for an industrial setting in a city than out in the country.

“It’s just the idea of growing out on the farmland that doesn’t make sense. There’s a lot of better ways to grow this product,” she said.

Dickson said about 49 operations have been approved in Deschutes County already, and that there is not a need to approve more in the future.

“I don’t think we need to continue to approve marijuana facilities when they are causing significant problems with compatibility for neighbors,” she said.

But Pate, with the Cascade Cannabis Association, said the livability concerns that have been outlined by rural residents are overblown. Prohibiting future marijuana growing because of odor is unfair, Pate said, when hemp — which is essentially the same plant with a different genetic expression — makes the same odor and can be grown outside, anywhere in the county without discretion.

There is also an understanding that people who buy property next to land zoned for farming should expect different realities than living in a neighborhood, Pate said.

“If someone wants to put cows next to someone’s pristine piece of acreage, you live in the county. You know you live around farmland,” she said. “You know it’s going to be loud; you know it may smell.”

Continuing to opt out of marijuana is also redundant, Pate said, since there is a moratorium on new producer licenses through the Oregon Liquor Control Commission that came in after June 15, 2018, due to a perception that the state had an oversupply of marijuana.

If the county votes to continue its own moratorium, all it would do is prevent people who already have existing businesses in the county from expanding to meet demand, she said. This is especially short sighted to do to an industry that could provide jobs in a time with high unemployment, she said.

“We don’t do this to any other kind of business in Deschutes County,” Pate said. “From a holistic perspective, it does not feel fair. We are a legitimate business. We are a legal industry, but we are still being treated as though we are not.”

9-134

Exhibit A:
NOTICE OF MEASURE ELECTION

Notice is hereby given that on Tuesday, November 3, 2020, a measure election will be held in Deschutes County on the question of whether to repeal Ordinances Nos 2019-014 and 2019-015 and allow, in unincorporated areas of Deschutes County (i.e. outside of the Cities of Bend, Redmond, Sisters, and La Pine), the establishment of **ADDITIONAL** marijuana producers licensed under ORS 475B.070, **ADDITIONAL** marijuana processors licensed under ORS 475B.090, and **ADDITIONAL** marijuana processing sites registered under ORS 475B.840.

The following shall be the ballot title of the measure to be submitted to the voters of Deschutes County on this date:

CAPTION

Concerning **ADDITIONAL** commercial marijuana businesses in unincorporated Deschutes County.

QUESTION

Shall **ADDITIONAL** commercial marijuana producers, processors, and processing sites be allowed in Deschutes County's unincorporated areas (outside of city limits)?

SUMMARY

Deschutes County in 2016 allowed commercial marijuana business to be located in the County and numerous businesses began operating. In 2019, Deschutes County adopted ordinances prohibiting any **ADDITIONAL** commercial marijuana producers (grows) licensed under ORS 475B.070, processors licensed under ORS 475B.090, and processing sites registered under ORS 475B.840 from being established in the unincorporated County (i.e. outside of Bend, Redmond, Sisters, and La Pine). Medical marijuana, other types of marijuana business such as retail establishments, and existing commercial marijuana businesses were not prohibited, nor was the personal use of recreational or medical marijuana impacted.

Oregon law provides that Deschutes County may adopt ordinances prohibiting marijuana businesses, but must refer the matter to the County electors at the next statewide general election. This ballot measure asks you to review Deschutes County's aforementioned ordinances adopted in 2019. A "no" vote continues to prohibit **ADDITIONAL** commercial marijuana producers, processors, and processing sites in the unincorporated County. A "yes" vote overturns those ordinances and allows **ADDITIONAL** commercial marijuana producers, processors, and processing sites, to continue to be established.

Signature: _____

Tom Anderson, Deschutes County Administrator

Date: 8-17-20

Page 1 of 1- Exhibit A, Order No. 2020-041

'20AUG17 4:21PM CLERK

Vote YES on Measure 9-134, regarding Deschutes County New ...

<https://www.bendsource.com/bend/vote-no-on...>

Oct 21, 2020 · Vote YES on **Measure 9-134**, regarding **Deschutes County** New Pot Businesses ... Three solid candidates mean this race will have a strong contender for the **general election**, but McLeod-Skinner has proven her commitment to rural parts of the state ... Latest in **Elections**. **Elections** » Vote **2020**: All the Source Weekly's Candidate Endorsements.

VOTE YES ON MEASURE 9-134, REGARDING DESCHUTES COUNTY NEW POT BUSINESSES

A "yes" vote on this means that new marijuana businesses can at least try to get new, legal, and law-abiding licenses approved

Editor's note: The print edition of this issue had a "NO" in the title. Because this measure asks voters to decide whether new additional marijuana businesses should be allowed in the county, our vote is YES.

Is there anyone else out there that yearns for the return of a pro-business Republican party? Where have the champions of the invisible hand of the free market gone? They're certainly not sitting in the halls of the Deschutes County Board of Commissioners, where voters are being treated to another Phil Henderson and Patti Adair-concocted measure to cater to a micro-set of voters impacted by an agricultural product that they deem sinful.

This measure is the result of the very real and costly failures the county has suffered at the state level around marijuana and the very real prospect that continued efforts in this area will be deemed unconstitutional through litigation. To stop this, the commissioners need a local measure to stem their anti-business loss. The most amusing part of the measure is the idea that the commissioners are responding to rural voters who support the measure and say that these lawful agricultural operations are disturbing their way of life. This is a constituency of folks who live on rural land and as they piddle around with hobby farms, cost the county negative \$25 million, by some estimates. While there may be some legitimate commercial interests here, for the most part these are lifestyle folks who wouldn't know the right end of a plow if it pushed them under. What's more, we suspect that a great many of those opposed to marijuana growing do not understand that much of the "pot" they are seeing in their communities is actually hemp—which is legal even by federal law these days.

The ultimate irony here is while Henderson is out campaigning this election on his expensive attempts to change land-use law around "non-prime farm lands" to development, he's backhanding the very industry that found a way to turn these non-prime lands to profit.

A "yes" vote on this means that new marijuana businesses can at least try to get new, legal, and law-abiding licenses approved, even while an anti-marijuana regime reigns in the halls of county government.

Oregon man gets 3 years for operating illegal BHO lab

A Bend-area man has been sentenced to three years in federal prison for running an illegal butane honey oil, or BHO extraction lab, on rural Alfalfa-area property, authorities said. U.S. Attorney Billy J. Williams said Tuesday that Jacob Robe, 31, also will face three years' supervised release after his prison term, KTVZ reported. "BHO extraction is a highly volatile and dangerous process that has resulted in explosions injuring and killing Oregon residents," Williams said in a news release. According to court documents, Robe and his brother grew marijuana, manufactured BHO and distributed it in other states for significant profit

Feds link Portland marijuana farm to Texas college drug ring

The Oregonian - Yesterday

A drug ring largely operated by current and former University of Texas students used apps and social media to sell counterfeit Adderall and Xanax often laced with fentanyl, the Department of Justice announced Friday.

Justice officials said 13 people, including eight current and former students, have been charged with trafficking LSD, fentanyl and methamphetamine pills.

“What is particularly disturbing about this case is that what appeared to be extremely well-educated and talented people who had many opportunities in life to choose from, instead focused their business acumen and education in dealing illegal, dangerous and counterfeit drugs,” U.S. Attorney Gregg Sofer said during a press conference.

Investigators said the defendants were taken into custody Thursday when searches resulted in the seizure of large quantities of fentanyl, LSD, marijuana, Adderall, Xanax and psilocybin, the hallucinogenic substance in magic mushrooms just blocks from the campus in Austin. Agents also confiscated guns, bullet-proof vests and about \$100,000 in cash.

A psilocybin grow was used to supply sales was found in Dripping Springs, outside Austin, and a marijuana field linked to the ring was found in Portland, investigators said. Federal officials have not disclosed the exact location of the farm or identified the owner of the land.

The ring was led by Varun Prasad, 23, of Austin, investigators said. Prasad accepted payments for the drugs via apps including Venmo and Paypal, plus in cash.

Prasad did not have a listed phone number. It was unclear whether he had a lawyer to speak on his behalf.

Austin real estate developer Benny Daneshjou, 68, also was arrested after officials say he worked with Prasad to launder money, purchasing properties that were used as stash houses, safe houses, grow fields and an hallucinogenic mushroom growth operation, officials said. A message left with an employee at a phone number for a business listed in Daneshjou’s name was not immediately returned.

Former University of Texas at San Antonio professor Rose Rodriguez-Rabin is accused of providing Prasad with methamphetamine-laced counterfeit drugs “on numerous occasions,” Sofer said.

Rodriguez-Rabin and a co-defendant, Brandon Sims, are awaiting trial after being arrested in December 2019 for distributing counterfeit Adderall pills to UTSA students and others using “a consumer app similar to DoorDash” to market and sell the drugs as part of the same operation Prasad ran, Sofer said.

An attorney for both Rodriguez-Rabin did not immediately return calls for comment. An attorney for Sims declined to comment.

Two other suspects overdosed and died during the investigation, which began in 2019, Sofer said.

Authorities believe more than \$1 million worth of drugs were sold and distributed.

If convicted, the defendants could face 10 years to life in prison for drug trafficking and up to 20 years in prison for money laundering.

The Austin Police Department began and led the investigation, called Operation Spider Web, in a joint effort with the DEA, FBI, IRS-Criminal Investigations, Travis County Sheriff’s Office, Lakeway Police Department, Cedar Park Police Department and the Texas National Guard Joint Counterdrug Task Force.

-- The Associated Press

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https://www.newsbreakapp.com/n/0XudQdT8?s=a3&pd=07kQNsSw&hl=en_US

Portland | Feds link Portland marijuana farm to Texas college drug ring

The Oregonian

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**OREGON
DEPARTMENT OF
AGRICULTURE**

OLCC identifies Potential Consumer Harm in some Cannabis Vape Products

From the Oregon Liquor Control Commission -

Portland, OR -- As part of an on-going consumer product safety investigation, the Oregon Liquor Control Commission has identified that marijuana products sold in Oregon's recreational marijuana market during the last two years contained additives, squalene and squalane, that have been linked to safety concerns similar to Vitamin E Acetate when vaped and inhaled. The OLCC is working to trace products and when necessary remove them from sale. OLCC will be considering immediate action at its December 2020 Commission meeting to prohibit future use of squalene and squalane, institute a mandatory recall of affected products, and create a more stringent and transparent review process of cannabis vaping products going forward.

The products under investigation by OLCC contained **Viscosity**, a non-cannabis diluent manufactured and sold by a third-party (non-OLCC marijuana licensee). Some of the product remains on the market, and the OLCC is working to trace and remove it. Bulk Naturals LLC., dba True Terpenes, sold **Viscosity** that solely contained squalene, squalane, and an unidentified olive extract to OLCC recreational marijuana licensees between at least January 2018 and November 2019. Squalene is a "botanically-derived terpene" that can be derived from olives; squalane is the hydrogenated version of squalene. Following OLCC's confirmation of the presence of squalane in **Viscosity** via independent laboratory analysis by ChemHistory and SC Labs, True Terpenes has complied with all of OLCC's requests for information. **Viscosity** has since been reformulated, and according to True Terpenes, none of their products have contained squalene or squalane since November 2019.

DESCHUTES COUNTY

SEARCH WARRANT SERVED AT ILLEGAL MARIJUANA GROWING OPERATION (PHOTO)

News Release from **Deschutes Co. Sheriff's Office**

Posted on FlashAlert: November 23rd, 2020 5:49 PM

Downloadable file: [mold](#)

Downloadable file: [BHO](#)

Downloadable file: [grow](#)

Downloadable file: [firearms](#)

Downloadable file: [pistol in couch](#)

Released by: Sgt. Jayson Janes

Date: November 23, 2020

Arrested: Dylan William Stronks, 27 year old male, La Pine OR

Charges: Unlawful Manufacture of Marijuana, Unlawful Delivery of Marijuana, Unlawful Possession of Marijuana, Unlawful Manufacture of Marijuana Extract, Unlawful Delivery of Marijuana Extract, Unlawful Possession of Marijuana Extract, Unlawful Possession of Cocaine, and Unlawful Possession of a Short Barreled Shotgun.

On November 23, 2020 the Deschutes County Sheriff's Office Detectives, with the assistance of DCSO SWAT served a search warrant in the 53000 block of Woodstock Dr. in La Pine.

Deschutes County Illegal Marijuana Enforcement Detectives (DCIMED's) began an investigation in April 2020 into Dylan Stronks after receiving complaints from citizens about the possible manufacture of marijuana at his residence. During the investigation detectives were able to gain information necessary for a search warrant of the property to look for evidence of the Unlawful Manufacture of Marijuana, Unlawful Possession of Marijuana, and Unlawful Delivery of Marijuana.

Inside a detached shop, detectives located an active marijuana growing operation. Detectives seized 506 growing marijuana plants and approximately 55 pounds of dried marijuana. They also found a Butane Hash Oil (BHO) lab, which was a large open blasting system. BHO extraction is a highly volatile and dangerous process

that has resulted in explosions that have injured and killed people in Oregon. Detectives seized approximately 40 pounds of BHO product, and approximately two ounces of cocaine. Detectives also found evidence the BHO product was being placed into vape pen cartridges.

During the search of the residence detectives located and seized 14 firearms including an AR pistol which was stored in the couch, and short barrel sawed off shotgun stored in the master bedroom as well as a handgun on the master bedrooms night stand. They also located \$7,920 in cash.

Stronks was issued a criminal citation for the following charges: Unlawful Manufacture of Marijuana, Unlawful Possession of Marijuana, Unlawful Delivery of Marijuana, Unlawful Manufacture of Marijuana Extract, Unlawful Possession of Marijuana Extract, Unlawful Delivery of Marijuana Extract, Unlawful Possession of Cocaine, and Unlawful Possession of a short barreled shotgun

The Deschutes County Illegal Marijuana Enforcement Detectives (DCIMED's) would like to thank the legal marijuana businesses within Deschutes County for their collaborative efforts in combating illegal marijuana operations. The knowledge the DCIMED's received from focus groups confirms that illegal marijuana within Deschutes County is a major concern for the legal marijuana market, residents, and businesses in our community. DCIMED's take illegal grow operations seriously due to the unregulated amounts of pesticides, fungicides and chemical solvents that can be used to manufacture marijuana products. In addition, DCIMED's have discovered illegal marijuana grows that contained mold, spider mites and toxic/harmful chemicals that are unsafe for human consumption.

The DCIMED's receive funding to support their positions from taxes that are collected from the recreational marijuana market. Marijuana tax can be used for schools, drug treatment centers, public health, and law enforcement. The Deschutes County Board of Commissions approved the funding for the Deschutes County Illegal Marijuana Enforcement Detective positions.

The Deschutes County Sheriff's Office is a full service agency that oversees the adult jail, provides patrol, criminal investigations, civil process and search and rescue operations. Special units include SWAT, Marine Patrol, ATV Patrol, Forest Patrol, along with six K9 teams. Founded in 1916 and today led by your duly elected Sheriff L. Shane Nelson, the Deschutes County Sheriff's Office serves over 200,000 residents in Deschutes County. The agency has 259 authorized and funded personnel, which includes 191 sworn employees who provide services to the 3,055 square miles of Deschutes County.

###End of Release###

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HISTORICAL VIEW: Oregon legalized marijuana in November of 2014 through a ballot initiative. In 2015 the legislature redefined marijuana as an agricultural farm crop through HB3400 which means that commercial marijuana can be grown and processed in all exclusive farm use areas without any neighbor notification. HB3400 also gave local jurisdictions **4 options** since marijuana is federally illegal.

1. LOCAL COUNTY AND CITY JURISDICTIONS COULD **OPT OUT** OF HAVING COMMERCIAL POT GROWS, PROCESSORS, WHOLESALERS, & RETAILERS IN THEIR COMMUNITY IF THEY VOTED **55%** NO OR GREATER IN THE NOVEMBER 2014 ELECTION.
2. IF LOCAL COUNTY AND CITY JURISDICTIONS GOT UNDER **55%** THEY COULD SEND A REFERRAL TO THE VOTERS IN NOVEMBER OF 2016 AND LET THEM DECIDE IF THEY WANTED TO **OPT OUT** OF HAVING COMMERCIAL POT GROWS, PROCESSING, WHOLESALE, RETAILING AS WELL AS ANY ADDITIONAL MEDICAL MARIJUANA DISPENSARIES OR PROCESSING SITES.
3. **LAND USE** REGULATIONS, WHICH MEANS THAT COUNTIES AND CITIES WITH LIMITATIONS FROM HB3400 CAN ESTABLISH THEIR OWN LAND USE REGULATIONS AND DECIDE WHAT ZONES, WHAT MANNER, AND WHAT RESTRICTIONS THEY WOULD INCLUDE SUCH AS LOT SIZE, REQUIRED SET BACKS, ODOR CONTROL, TRAFFIC CONTROL, USE OF ROAD EASEMENT REQUIREMENTS, BUILDING REQUIREMENTS, INDOOR AND OUTDOOR GROW REQUIREMENTS, ETC.
4. **DO NOTHING** AND LET IT GO TO THE STATE RULES.
STATE RULES BASICALLY ALLOW COMMERCIAL POT TO BE GROWN IN ALL OF OREGON'S EXCLUSIVE FARM USE AREAS WITHOUT ANY NEIGHBOR NOTIFICATION OR CONDITIONAL USE PERMIT REQUIREMENTS.

Over 100 of the 241 cities and 19 of the 36 counties in Oregon have banned commercial marijuana in their cities and counties.

Yamhill County

TALL FENCING WITH BARBED WIRE LINED POT GROW PROPERTIES IN OREGON TOWNS MAKING THEM LOOK LIKE COMPOUNDS



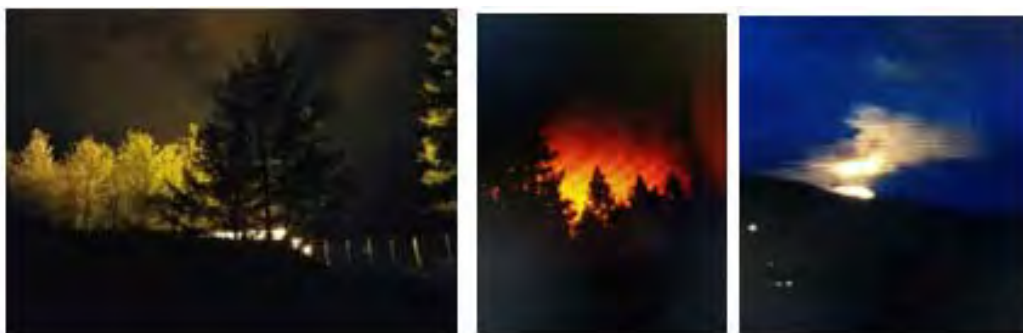
On Saturday, April 25th, 2020 neighbors in the Newberg, Yamhill County area called the fire department because they suspected a very large fire in a mountain area of their city.

Fire Department was called only to find that it was not a fire, but a marijuana outdoor grow in 3 large greenhouses lighting located at 23850 Northeast Bald Peak Rd, Newberg.

This is a County that did not take the option of putting in Time, Place and Manner regulations on marijuana grows, which is allowed by all jurisdictional authorities under HB3400 because marijuana is a federal illegal drug.



Here is what these greenhouse lights looked like from local neighbors view and from the City area when they looked up into the mountains.



YAMHILL COUNTY

CASE STUDY #1

www.savechehalemmountain.com

18505 SE Jaquith Rd, Newberg, Oregon

Citizens have been greatly impacted by a large wannabe marijuana and hemp grower and chemical processor who purchased a 23-acre rural residential EFU exclusive farm use property. It is located on the top of Chehalem mountain and surrounding by rural residential homes.



Good Afternoon Neighbors,

We have a great opportunity to support a bill that would limit chemical processing of marijuana in residential areas, and subject such operations to a fire safety plan.

[House Bill 3239Download](#)

file:///C:/Users/Shirley/AppData/Local/Temp/2021-HB3239-Established-where-marijuana-hemp-may-be-processed.pdf

HB3239 is scheduled for a public hearing **this Thursday, March 18th, 2021 at 3:15 PM. Written testimony may be submitted up to 24 hours after the meeting start time.** The following link will direct you to specific screenshots with instructions on how to submit testimony on a bill. **We support this bill! We hope you will take the time before Friday at 3:15 PM to submit your testimony in support of this bill as well.**

Over **113 citizen letters** supporting this bill were submitted.

[Link: How to Submit Testimony on a Bill](#)

The following link will bring you to the page with the meeting details. **You can view a live stream of the meeting, as well as get further instructions on how to get involved. The link at the very bottom on the page allows you to “Click to Submit Testimony”.**

[Link: Meeting Details/Submit Testimony](#)

<https://olis.oregonlegislature.gov/liz/2021R1/Measures/Overview/HB3239>

Thank you for taking the time to ensure our voices are heard in support of HB3239. **We are very fortunate to have this opportunity and your testimony is incredibly important to our cause.** Find submitted testimony examples [HERE](#).

This week’s water report highlights the continued importance for fire reservoirs in our region, and explains Water-Use Permit Applications and Processing Steps and where we are in that process with the G-18843 application at 18505 Jaquith. Check out the quick and informative read below!

[Water Report 3/9/21Download](#)

Please share this information and these opportunities with your community. We can achieve our goals of protecting our homes and businesses if we work together. Thank you for your support.

CLACKAMAS COUNTY

CASE STUDY #2 15171 S. Spangler Rd Oregon City 1-19-19

UPDATE: Articles note how Oregon is growing too much pot to use, yet even though OLCC Oregon Liquor Control Commission isn't issuing any new licenses at this time.

- Oregon counties and cities continue to issue marijuana land use approval statements.
- New prospective marijuana investors are then looking for marijuana businesses that are up for sale, then they are buying their business, then they are going to OLCC saying that they are buying a particular marijuana business who is currently licensed, then they ask OLCC for a transfer of ownership to their own site location.
- In order to be approved by OLCC they then apply with OLCC for a marijuana business license, noting that it is a transfer of ownership to their own site location.
- In a way in and out-of-state investors are circumventing OLCC moratorium on licensing by simply buying out existing marijuana businesses that have licenses.

☐	12/04/2018	Z0586-18	Planning - PD-HO-Ministerial	Marijuana	15171 S SPANGLER RD, OREGON CITY OR 97045	Approved
☐	12/04/2018	Z0587-18	Planning - PD-HO-Ministerial	Marijuana	NO SITUS	Pending

Z0586-18 PROPOSES TO INDUSTRIALIZE A SMALL 26.58 ACRE EFU EXCLUSIVE FARM USE PARCEL WITH OVER 89 PROPOSED MARIJUANA STRUCTURES AND GREENHOUSES FOR MARIJUANA CONCENTRATE PROCESSING AND OVER

- **74 LEASED INDOOR AND OUTDOOR GREENHOUSES FOR MARIJUANA PRODUCTION.**

This property is surrounded by rural residential farming properties that will be greatly impacted, by not only odor, but when fully developed a 1000% increase in industrialized traffic, and potential burglaries.

Proposal: The applicant proposes indoor and outdoor recreational marijuana production on 358,020 square feet within one 26.58 acre lot of record. This proposal is for a total of 16 marijuana production spaces in 89 proposed structures, one existing building and 14 proposed buildings for indoor production with 74 greenhouses for associated outdoor production.

Z0586-18

MARIJUANA PRODUCTION

Record Z0586-18:
Planning - PD-HO-Ministerial
Record Status: Pending

Record Info Payments Custom Component

Work Location

15171 S SPANGLER RD
OREGON CITY OR 97045

Record Details

Applicant:
BRIAN DOYLE
1060 UPPER DEVON LN
LAKE OSWEGO, OR, 97034
Home Phone:5033290787

Project Description:
Marijuana
MJ - PRODUCTION

Owner:
DOYLE BRIAN
15171 S SPANGLER RD
OREGON CITY OR 97045

More Details
Related Contacts
Additional Information
Application Information

GENERAL
Type: Marijuana
Zone 1: EFU - Exclusive Farm Use



MARIJUANA CONCENTRATE PROCESSING



CASE STUDY #3 11512 S. Barnards Road, Molalla

An Industrialized marijuana production site Z0445-16

Sales History							
Sale Date	Entry Date	Recording Date	Recording Number	Sale Amount	Excise Number	Deed Type	Grantee(Buyer)
03/30/2016	04/07/2016	03/31/2016	2016-020705	\$950,000.00	294996		KLOBERDANZ JESSE & JESSICA
03/27/2012	05/02/2012	04/18/2012	2012-023712	\$345,000.00	229149		KAHUT RAYMOND
08/01/2011	08/10/2011	08/08/2011	2011-044803	\$532,526.00	219182		WELLS FARGO BANK NA TRUSTEE

ISSUE: 40 acre prime farmland pasture in the EFU exclusive farm use zone to be turned into another **56** 300,000 sq. ft. **multi-licensed industrialized park pot leasing marijuana grow buildings site**, which increases traffic, poses unwanted marijuana robberies, and turns the once quiet farming community into an industrial zone.



They have turned this once beautiful pasture land into an industrialized marijuana production site, destroying any value of the farmland.





APPEARS THAT THE OWNERS ARE NOW HEADING FOR A NUMBER OF LAWSUITS

According to public records Mr. Kloberdanz is being foreclosed by both his primary mortgage and his line of credit (\$4M, against which he drew at least 2.1M.)

- All the 'investors' in the property will likely lose everything, as the leases themselves are also being contested in large numbers.

Civil, Family, Probate and Tax Court Case Records Search Results

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Location: All Locations | Help

Record Count: 13

Search By: Party Exact Name: on

Case Number	Style	First Name: jesse	All All	Sort By: Filed Date
16CV42956	Montana State University - Billings vs Jesse Allen Kloberdanz	12/30/2016		Contract Closed
18CV20643	Terpene & Trichome, LLC vs Jesse Kloberdanz, Greenstone Solutions, LLC, Dewey Farms, LLC	05/21/2018		Contract Open
18CV20654	Christenson Electric Inc. vs Greenstone Solutions LLC, Jesse Kloberdanz, Jessica Kloberdanz, Raymond Kahut, Moga LLC et al.	05/21/2018		Property - Foreclosure Open
18CV27771	Jelly Bean Properties LLC, Packaging Brothers LLC vs Greenstone Solutions LLC, Dewey Farms LLC, Kloberdanz Holdings LLC, Jesse Kloberdanz	07/05/2018		Contract Open
18CV28450	RAYMOND KAHUT vs JESSE KLOBERDANZ, JESSICA KLOBERDANZ, LM Jorgensen, Inc., CHRISTENSON ELECTRIC, INC., CASCADE CONCRETE ACCESSORIES, LLC et al.	07/09/2018		Property - Foreclosure Open
18CV34915	Morgan Miller vs Jesse Kloberdanz, Greenstone Solutions, LLC, an Oregon limited liability company	08/09/2018		Contract Open
18CV38985	Tai Nguyen vs Jesse Kloberdanz, Dewey Farms, LLC, Greenstone Solutions, LLC	09/06/2018		Document Recording - Civil Closed
18CV40217	Cheryl Pappas vs Greenstone Solutions, LLC, Jesse Kloberdanz, Jessica Kloberdanz	09/11/2018		Contract Open
18CV41685	Cheryl Pappas vs Dewey Farms, LLC, Jesse Kloberdanz, Jessica Kloberdanz	09/19/2018		Contract Open
18CV42351	Greenstone Solutions LLC, Kloberdanz Holdings LLC, Jesse Kloberdanz, Dewey Farms LLC vs Packaging Brothers, LLC, Jelly Bean Properties, LLC	09/20/2018		Contract Stayed
18CV46650	Foxter Investments, LLC vs JB Industrial, LLC, Dewey Farms, LLC, Jesse Kloberdanz	10/16/2018		Contract Open
18CV48992	Sunset Imports, Inc. vs Jessica A. Kloberdanz, Jesse A. Kloberdanz	10/25/2018		Procedural Matters - General Closed
18CV55265	Sunbelt Rentals, Inc. vs Dewey Farms, LLC, Jesse Kloberdanz, Jessica Kloberdanz	12/04/2018		Tort - General Open

Prior owner of property

CASE STUDY #4 OREGON CANDY FARM 48620 SE HWY 26, SANDY



Senior woman and her handicapped brother filed Civil Federal Rico Lawsuit against the Oregon Candy Farm/Chronic Creations and 226 Oregon licensed defendants on 7-20-18 By 12/19 the owner had sold his marijuana grow, by 1/2020 the owner has sold his ethanol extraction business and both were removed from the property. On March 5, 2020 Oregon Federal Judge denied a motion to dismiss by defendants on this case.

556



motion

Findings & Recommendation

Thu 03/05 2:24 PM

Findings & Recommendation: Defendants' Motion to Dismiss528 should be denied. Signed on 3/5/20 by Magistrate Judge Jolie A. Russo. (gm)

In May of 2020 the plaintiff dismissed the case with agreed settlements once the grow and extraction processing businesses were removed from the property.

I live in rural residential Clackamas County on a FF 10 Farm Forest zoned property. I have lived there for 23 years with my handicapped brother. We moved to the rural setting for the fresh mountain air, peace, tranquility, privacy and to enjoy a safer lifestyle. Three years ago things began to change dramatically when my neighbor sold her business, the famous Oregon Candy Farm which made the best chocolates nationwide, to a California Investment Company who told her that they would continue the candy making

business. They lied to her and neglected to tell her that they were buying the Candy Farm to start a marijuana grow and a marijuana extraction THC candy company. Imagine 100 skunks spraying next to your home. The smell became so obnoxious I couldn't even go outside. Soon to follow would be our loss of peace, tranquility, privacy and safety.

In the fall of 2014 stripping of the land began, tree removal, not to mention improper grading, illegal excavation of a huge holding pond to trap underground water which will eventually impact neighbors in a negative way with pesticide runoff, an ecological disgrace. Much of this was done without permits. I was told by the workers that green houses would be placed 30 feet from my barn and 120 feet from my front porch. Sheer fear set in as I knew that it was a federally illegal drug and drugs bring undesirable individuals, behaviors and crime. Another major concern is that there is not enough law enforcement for our rural area for our protection.

One day I was standing on my front porch when a loud engine came roaring up from the lower part of the Candy Farm. It was a 3-wheeler without a muffler screaming across the stripped property. The harassment and bullying of riding back and forth along my fence line began. It was a 2 hours dust storm. Another day it was 2 loud dirt bikes plus the 3-wheeler. The dust flew for 4 hours that day and the noise was unbearable, it was like living next to a motocross.

Is this the business model of someone creating good relationships in their communities and improving the lives of the residents? Can they be trusted to be in compliance in regards to regulations in the marijuana industry when they have already been deceitful and non-compliant regarding regulations? We don't even have the law enforcement to make sure that these businesses are following the regulations. These businesses don't belong in the rural residential communities as the resident's safety, quality of life and property values are being jeopardized.



ROCKY AND JEAN In August 2013, a pot promoter and dispensary owner purchased the iconic “Oregon Candy Farm” near our property. The Candy Farm had existed from the 1970’s until 2012, producing fine chocolate candies, sold worldwide. The new owner is a **medical** grower and produces **edibles** for his **medical dispensaries**. We have testified before our county commissioners and have visited our State Capital to speak with some of our legislators. We have learned a lot but most of all we have been dismayed by the lack of knowledge and concern most of our leaders have on this subject. Of the 3448 plus medical grows in Clackamas County, we now have (since Jan. of 2016) 314 recreational grows to contend with. Poorly planned, poorly regulated, and with only 3 code enforcement officers in our county, impossible to oversee this federally illegal drug. Oregon is one of the main suppliers of pot and related products for the United States. According to our State Police, 75% of pot grown in Oregon leaves the state illegally. Are these products leaving via federal highways, US Mail, fed-ex or UPS? Our leaders claim (from county to our Governor) Oregon is collecting 20% tax on pot, (17% for state, 3% for counties). Now ask yourself, is this 20% on the 15% that stays in the state or 20% on the 100% grown in State? My wife and I proudly display “Unwanted pot grows.com” on our truck, jackets, and property to promote a website to better inform the public on what we are facing. We have also placed signs on properties of other concerned citizens.

CASE STUDY #5 13471 S. Leland Rd, Oregon City, Oregon



Two families live on each side of the 4-acre EFU parcel. They have lived in this beautiful part of Clackamas County for many years and have retired here. In 2016 the property between these two neighbor's was sold and then leased out to 5 Asian LLC to start an indoor marijuana production which totaled 9 new buildings. Neighbors have been devastated by the invasion of this large and criminal pot grow, from having their guard dogs kill neighbor's chickens to have unreported burglars in the middle of night this once quiet rural farming community of Oregon City, has been totally disrupted.

Owner of Property: Lulu Zhang 15130 SE Frye St., Happy Valley, Oregon 97086

Applicant proposed: Z0103-16

- 6 new greenhouses 30' x 100' (3,000 sq. ft.) which in Clackamas County are considered indoor grows and require only a **10' set back** from property lines of neighbors in EFU, TBR, and AG Forest and 100' set back if it would have been an outdoor grow.
- 3 new agriculture buildings 60' x 100' were proposed
- The total square footage of all proposed grow and processing space is 33,360 square feet. This does not include the estimated 10,000 sq. ft. that will be used to house 44 parking spaces. How many EFU farms actually factor in 44 parking spaces for their farm work?
- A new driveway is also proposed- total length listed on the site plan is over 500 feet in length



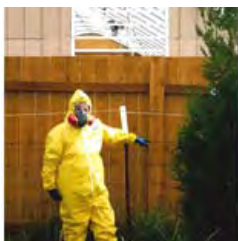


Water Verification: They have all filed a marijuana producer exempt water form and indicate that water will be met through rainwater collection (from the roof of the building) and recapturing water from the internal A/C and dehumidifier equipment, which together shall be gathered and drained into storage tanks. The storage tanks will then be used to deliver water to the internal rooms of the building. Estimated annual volume required from this Source 78,000 gallons annually. Estimated annual volume required from this Source: 52,000 gallons annually.



Neighbor's yard which one day they looked out over a beautiful pasture and a view of Mt. Hood, now they look out over an 8' tall fence, greenhouses that block views, and pole barns.

Neighbor wears Hazmat protection to illustrate the strong smell of skunky odor that is coming from this pot grow 10' off of her property line and directly into their outside dining area. Waste manage is supposed to be stored in a secured waste receptacle n possession of and under the control of the OLCC licensee, yet many piles of burning pot is seen from many of these operations. DEQ is allowing commercial marijuana growers to compost over 100 tons per year and treating it just like any other crop.



Dumping spent dirt along property lines

PUBLIC SAFETY IS KEY CONCERN AT MOST OF THE MEDICAL AND COMMERCIAL MARIJUANA LOCATIONS. Unreported burglaries have taken place on this property. Guard dogs have killed neighbor's livestock. On Saturday 2-15-17 a man showed up at the neighbor's home indicating that he had just spotted his bobcat that was stolen at the pot grow next door. Police were called. On May 23, 2016 criminals vandalized signs.

CASE STUDY #6

10770 SE 362nd, BORING, OREGON



TURNED A BEAUTIFUL 40 ACRE TREE FARM INTO AN INDUSTRIAL RENT A MARIJUANA GROW BUILDING AND HEMP GROW. BECAUSE OF THIS PROPERTY A COUNTY ORDINANCE WAS PUT INTO PLACE (ZDO271) WHICH BANNED MORE THAN 1 OLCC LICENSE ON A TRACT OF LAND.



LETTER FROM NEIGHBORS WHOSE PUBLIC SAFETY, QUALITY OF LIFE, AND PROPERTY VALUES HAVE BEEN DESTROYED

My husband and I have lived in rural Boring Oregon since November 1989, almost 27 years. We moved from Gresham to live and have our horses with us.

Up until January 2016 we lived next to a tree nursery located in an EFU zone exclusive farm use which is farmed under Oregon's "Right to Farm" Act. When pot became legal to grow in Oregon, a large commercial marijuana grow operation began without our knowledge. The pot farm has destroyed our livability. The access road to the pot farm runs up the south side of our property and across the back.

- Daily approximately 50-60 cars fly up and down the gravel access road which has 5 MPH speed signs posted which means 30-55 MPH to pot growers.
- That does not include cars and trucks throughout the night or semis and other commercial vehicles, 24 hours a day, 7 days a week, 365 days a year.

What was once was a tree nursery has turned into a non-stop source of noise, weird smells, and pink lights visible from our backyard, dumping their spent soil along our fence line and traffic. We can no longer use half of our almost 7 acres and can only safely put two of our horses on 1-1/2 acres behind the barn since pot growers take great joy in scaring the horses. Until the commercial marijuana grow operation came to be, you could hear a pin drop at night, it was so quiet.

Brad Troutner, the owner of the pot grow has 30 metal buildings on site with an application for an additional 24 buildings totaling 54 that he is leasing out to pot growers, turning this once quiet farming community into an industrialized marijuana grow operation. <http://growunits.com/index.html>

After 14 months of no sleep or peace I had had enough and had installed an **UNWANTED POT GROWS.COM** sign that was put in our front field on May 7, 2017.



Within an hour someone sent a picture to Brad Troutner who came onto our property to confront us on what we had done. There was a lengthy discussion which included him saying he was unaware of problems (my husband had spoken as recently as April 11, 2017 to his brother). Brad Troutner informed us that we might be putting ourselves in harm's way having the sign point to his access road. He didn't believe the problems we were and still are experiencing. I pointed out that I had recently been keeping a log with dates, time, and descriptions of the cars, trucks and even semi's. Pot grower's park along the fence line at night and have gab fests and arguments and play loud music in addition to the speeding.

There are "NO PARKING" signs that Brad Troutner had to put up per Clackamas County codes that are ignored. My husband and I were told that growing marijuana is no different than growing lavender or tomato plants.

I find it interesting that in all the years we have lived here that the property when it was a tree nursery did not create an inconvenience during their planting, growing and harvesting unlike the pot growers who go 24/7, 365 days a year. We own our property, we pay our taxes but we don't have any **RIGHTS**. I really want someone to explain why we have no rights. According to Clackamas County and the OLCC they have all the rights with no restrictions. I want someone to explain why there is nothing short of moving we can

do. I can only imagine what this has done to our property value. Brad Troutner and the other Pot Growers do not live on site, they do what they want, when they want and leave.”

NOTE: Brad Troutner-Troutner LLC 10770 SE 362nd, Boring, Oregon 54 Proposed metal grow barns in which he leases out to pot growers. This once 40-acre pasture has now been turned to an industrial zone with 50 to 100 cars going up and down this once quiet road.

Some police are indicating that it is better to have these grows all in one place? Sounds pretty good unless you are the neighbors who live next to it!

This does not belong in our rural residential farming communities! <http://growunits.com>



“I was under the impression as a human, that breathing clean fresh air was a right not a privilege in the state of Oregon. When the powers to be were granting unconditional rights to marijuana/hemp growers, it is clear that residences living around those pot farms were never considered.

The stench from the marijuana and hemp grow operation at 10770 SE 362nd Ave, behind our property has become intolerable. The skunk smell is not only overwhelming in the morning; we now have to deal with it in the evenings. On 9/20/2017 DEQ said there are worse smells. I have been told it's no worse than tomato plants.

Brad Troutner is now hanging marijuana/hemp plants outside in his silver RV cover/hanger exposing the skunk odors to everyone. The pictures I have attached are from the center of our back field. His first processing was on 8/30/2017 and he tried to conceal the pot/hemp with a tarp. The second round of processing was done 9/21/2017 and he isn't hiding anything. Please note the pictures of the piles of pot/hemp just lying on the ground. Why aren't there any regulations covering emissions of pot/hemp.

Since September 1, 2017 the air quality has gotten so bad especially when the east wind blows that working outdoors is almost impossible. Opening windows in our house is no longer an option morning or night. When the Eagle Creek smoke and ash was in the air the smell was not as debilitating.

I wonder if you would enjoy living next to or near a pot/hemp farm. I wonder what your family would think. So once again I ask, where are our rights?

Here is what these neighbors see from their barn blocking their once beautiful view of Mt. Hood.



UPDATE 10-12-17

Large Commercial pot grow burglarized

<http://katu.com/news/local/thieves-smash-walls-with-sledgehammers-steal-pot-plants-from-licensed-grow-facility>

NOTED ON THE GROW UNITS WEB SITE: <https://growunits.com/security.html>

100'S OF BREAK INS

There have been hundreds of break-ins and thefts in Portland, and the surrounding areas, related to the cannabis industry.

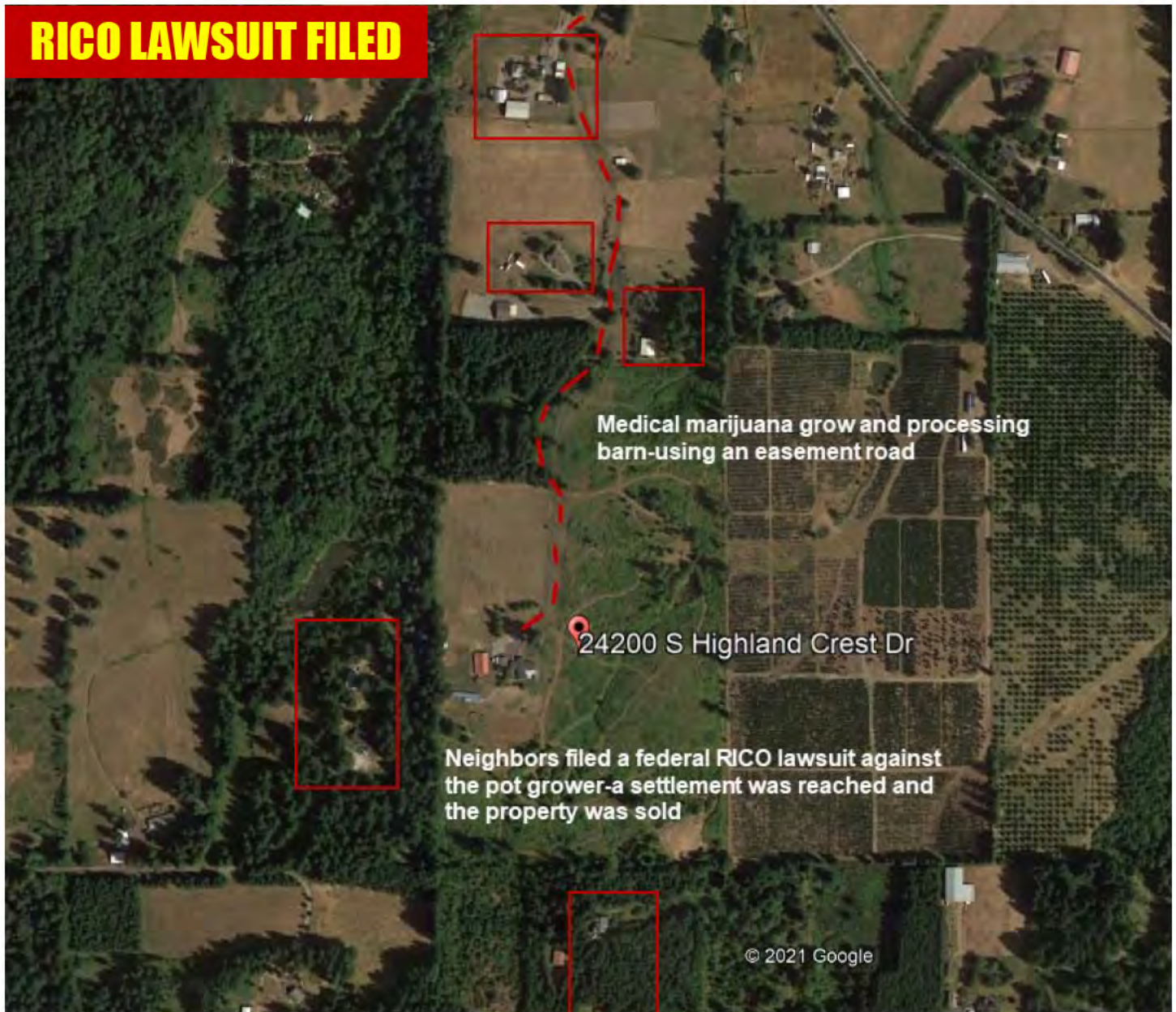
- Even we experienced one in our first year of operation. Resulting from this firsthand experience, and our determination to fortify, we continuously find ways to strengthen and protect not only our facility but each individual building.
- Not only do we have people working on site 24 hours a day, but we have contracted patrolmen who perform continuous watch rounds of the **barbwire parameters** and all exterior areas of each and every building.
- With a **monitored security gate** at the entrance and over **100 cameras** throughout the facility there's always many eyes watching.
- Laser trip wires, security loops, steel wall panels permanently bonded together, and 24-hour presence are a few of the tools that are used as deterrents and for maximizing protection of the facility.

60' X 100' FEET CEMENT SLABS ARE BEING POURED OVER PRIME EFU FARM LAND. THIS IS A MISUSE OF FARMLAND IN OREGON.

CASE STUDY #7

24200 S Highland Crest Dr, Beavercreek,

RICO LAWSUIT FILED



After the Federal Rico lawsuit was filed, the property owners were evacuated by the contract holder and then the property was sold, removing all of the marijuana growing and production.

Oregon marijuana racketeering lawsuit settled

https://www.eastoregonian.com/news/oregon-marijuana-racketeering-lawsuit-settled/article_93301858-5099-5d98-9660-a11795c6fdb5.html

CITIZEN LETTER WHO LIVED NEXT TO THIS GROW

I am submitting my family's testimony on what it has been like for the last two years living next to an illegal marijuana grow that moved into our once quiet and peaceful rural community. Below are some examples of the issues.

- Strong marijuana odors nearly every day (not just during harvest cycles)
- Strong chemical odors
- Burning of large piles of marijuana plant remnants
- Trespassing onto neighboring properties
- Heavy traffic, seven days a week, 24 hours a day, including large commercial trucks, cargo trailers and U-Haul vans
- Dumping of large amounts of marijuana plant remnants and used growing media onto the ground near water sources
- Loud weekend-long parties with amplified live music
- Unsupervised dogs constantly barking and repeatedly roaming loose onto neighboring properties
- Flagrant lack of respect for law enforcement, government, regulatory authorities, laws and regulations
- Complete lack of consideration for surrounding neighbors
- Intentional harassment of surrounding neighbors who don't buy into their ways
- The lack of county code and law enforcement which tends to provide the marijuana growers with an attitude of disrespect

The below photo says it all! On the t-shirt of the driver of this tractor it says "America 'F.....K Yeah"



CASE STUDY #8

YAMHILL COUNTY MAYSARA WINERY



RICO LAWSUIT FILED



Over 3 acres Wagner earthwork activities.

Marijuana grower bought 7 acres above a 532-acre organic vineyard. He illegally excavated this property which sets on a slanted hill creating soil erosion and water drainage into the neighboring 532-acre vineyard. The case is still in process.

FAMILY LETTER MAYSARA WINERY

I own and operate three businesses in Yamhill County, Oregon. In 1997, I purchased 496 acres of an abandoned wheat farm. With the following purchases of some adjacent properties, it has now grown to be 532 acres of pristine landscape in the foothills of the coast range outside of McMinnville, Oregon.

From the very beginning, our philosophy has been to try to take care of this land holistically without the use of any chemicals or minerals and to prove to other farmers that there are other alternatives to farming that not only would be profitable but also take care of the environment and produce healthy agricultural products. We have planted 260 acres of vineyards (mostly with Pinot Noir grapes) and our vineyard has been chosen as one of the top five of over 800 vineyards in the state of Oregon by Wine Enthusiast magazine fall 2016.

Unlike many other farms we have never applied for any help from the Agricultural department or any other private or government agencies. We have spent a lot of our own money on infrastructure at our property in order to make it a self-sustaining entity, therefore having no use for any sort of chemical or mineral that isn't already naturally occurring within the estate. In order to supply water, we have built two large reservoirs on our property for irrigation and hold the water rights to irrigate our farm.

After the passage of new marijuana law in the state of Oregon, our life and many other peoples have drastically changed for the worst when a new neighbor filed a land lot adjustment on his just purchased **6.74 acres of rural residential land** that his parents attained with a home-loan from First Federal bank.

The new owner never made any of the neighbors aware of his intentions and soon after the approval of the land lot adjustment he filed with the county, started growing marijuana and posting the progress on his Instagram (@liftedllama). As neighbors, we didn't find out about his true plans until he had started an application for a concentrate processing facility in addition to outdoor marijuana grow on the 6.74 acres his parents bought under their "home-loan" with First Federal Bank.

We banded together with four of our close neighbors and appealed the counties decision and this is when our lives changed all together. We started getting threatening phone calls that our vineyard would be burned to the ground, our newborn calf was mysteriously killed and one of our cows' tail was found cut in half the same morning. With every news article talking about our appeal of the counties decision, the threats continued declaring that worse things await us unless we dropped the lawsuit.

The neighbors, myself and a couple of my staff worked tirelessly for two months working 10-12 hour days to collect data and information to prove that the existing laws prohibited the processing facility. On June 1st, 2017 the commissioners voted 2 to 1 in our favor to overturn the county's decision to allow him to process marijuana concentrates at the site.

In the last couple years since marijuana has been legal in Oregon and California the marijuana industry has caused so much harm to the environment. They use scare tactics to threaten the citizens and it is so sad to see the state governments turn a blind eye to this matter. It's hard to see the local authorities do nothing to protect the innocent citizens living in this beautiful state.

I have also personally called the federal authorities to see what the federal government is doing about this and unfortunately I have been told that since there is no enforcement money allocated to them, their hands are tied and there is nothing they can do to enforce the law.

We also informed the First Federal bank which has mortgaged this property in order to make them aware

of the federal law, but nothing has changed with the status of the mortgage either despite marijuana being grown on the land that was purchased with a home-loan.

Selling wine both nationally and internationally, Maysara Winery is very concerned that the volatile oil produced by a marijuana farm in such close proximity to our vineyard could taint our wine with THC and thus cause the federal government to prosecute us because of the legal status of selling THC contaminated wines across state lines.

UPDATE:

Neighbors in the area have filed State and Federal RICO lawsuits against the marijuana grower-which is still in process.

Judge: No 'blanket immunity' for aspiring pot growers facing lawsuit-a Judge has refused to dismiss a lawsuit filed by grape producers against a planned marijuana operation in Oregon's Yamhill County
<http://www.capitalpress.com/Oregon/20171124/judge-no-blanket-immunity-for-aspiring-pot-growers-facing-lawsuit>

<https://www.nytimes.com/2017/09/26/style/oregon-weed-farmers.html>
<http://koin.com/2017/04/21/mcminnville-winery-sues-to-stop-nearby-pot-grow/>
http://www.oregonlive.com/pacific-northwest-news/index.ssf/2017/04/marijuana_farm_next_door_to_ya.htm

Vineyard may sue pot farm, judge rules; Federal judge says

...<https://www.bendbulletin.com/business/7409316-151/...>

: Vineyard's lawsuit against pot operation can proceed

<https://www.columbian.com/news/2019/sep/05/judge-vineyards-lawsuit-against-pot-operation-can-proceed/>

Judge: Vineyard's lawsuit against pot operation can proceed

<https://katu.com/news/local/judge-vineyards-lawsuit-against-pot-operation-can-proceed>

Weed and Wine Go to War

https://linkprotect.cudasvc.com/url?a=https%3a%2f%2ftheoutline.com%2fpost%2f5062%2fwine-and-weed-go-to-war-in-oregon-maysara-vineyards%3fzd%3d3%26zi%3dfqrcouyw&c=E,1,tGxsiX10jWLyV1jc9i-fu0oeiXa0GDmu9zHH92x80_KaM7PUjj8L5sfL3vuJ04Tns7VSJojuEWiYZ4fBr0X1JnbcvnEpIIvX9_RT6rUNWQ.,&typo=1

CASE STUDY #9 29450 SE Lariat Lane, Boring, Oregon



May 18, 2018 Neighbor filed Federal Rico lawsuit and as a result, all medical marijuana growers who were growing illegally in this equestrian center were removed and the property was sold and turned back into an equestrian center, which was how it was zoned. The lawsuit ended with a settlement.

Group seeks to save equine center

<https://pamplinmedia.com/sp/68-news/397684-291306-group-seeks-to-save-equine-center->



Four years after the dust settled on the closure of the Mt. Hood Equestrian Center in Boring, an effort is underway to bring horses and their people back into the arena. Since that time, the large building at 29450 SE Lariat Rd with the distinctive roof line visible from Highway 26, has been used as **the site of legal marijuana grow operations.**

In its heyday - pun intended - it was a second home to many in the equestrian community.

The property passed through several hands in a short amount of time, eventually ending up under the ownership of Boring resident Todd Siverston in 2014. Siverston initially bought the property with the intention of reopening the stables for use. but he soon discovered structural problems that weren't easily repaired. In order to recoup money he'd put into the property, Siverston opted to lease the property to a handful of marijuana growers.

To this day, Siverston is working to renovate the space, but he's ready to sell. "It's a beautiful property, and there's still work to be done," Siverston said.

Rice claims in his lawsuit that it was always Siverston's intention to make the property a hub of marijuana production and processing and refers to the activity taking place on the property as "racketeering." "Plaintiffs have been damaged by a criminal enterprise (the "Marijuana Operation") producing and processing marijuana at the Lariat Lane property and other properties, and then trafficking that marijuana," the lawsuit claims. HIT ABOVE LINK TO READ FULL ARTICLE

- **NOTE:** The owner of the equestrian center notes that they have renovated the equestrian center in the article, but according to county code violation records, they have violated numerous county land use regulations in terms of obtaining proper permits such as building, plumbing, installing large commercial HVAC's and electrical work which was done illegally to set up multiple pot grows inside the building so they could produce and process marijuana. The owner has also leased out spaces inside this large equestrian center over these past 4 years to over 6 other commercial, industrial, and wholesale LLC businesses all operating illegally without applying for County land use regulations, turning the once horse equestrian center into a hub of industrial and commercial activity. In order to access the center you have to travel down a one lane private easement road passing 6 residential homes. Would you like 30 foot long semi-trucks, cement trucks, construction trucks, U-hauls, trucks and trailers, and many cars going up and down your once quiet private road 24/7 in a rural residential zone?

MARIJUANA COMPLAINTS

NOTE: OLCC Oregon Liquor Control Commission who regulates the recreational marijuana program was asked how many complaints had been filed regarding the recreational marijuana program, below was their reply:

To date we have logged **598 complaints**. However this data includes licensees self-reporting outages and other issues. Some of the common complaints we receive are regarding discount violations, advertising violations, and inaccurate reporting in Metric.

In **Clackamas County** there have been over **98** complaints ranging from odor, noise, traffic, illegal water use, and illegal excavation.

CITIZEN COMPLAINTS

- odors so obnoxious we can't even site on our own from deck, out-of-state investors buying up lands (Washington, Montana, Colorado, Alabama, Florida, California, Arizona, Nevada)
- putting up 6' non see thru fences with razor wire on top.
- increased traffic
- bully behaviors
- blocking once beautiful views
- guard dogs killing neighbor's livestock
- Out of State investors are preying upon vulnerable properties which have not sold for a long time, then they are enticing elderly owners with large sums of cash down and getting them to carry the contract without telling them that they are going to grow pot. Out of State and in state investors are buying up horse stables and turning them into pot grows
- Growers are setting up make shift green houses and blasting green house lights 24hours a day ruining night skies 10' off property lines
- Putting up gates with no turn-around, pushing traffic into neighboring properties
- Putting up security cameras that monitor not just their own property, but the neighbor's property, creating an invasion of privacy-neighbors have put up their own blocking screen
- Many properties are clear cutting all of the trees off the property. Illegal grading of ground water ponds

OREGON MARIJUANA LEGALIZATION BILL ALLOWS 4 AT HOME GROWN MARIJUANA PLANTS

4 PLANTS IN THE BACKYARD OF A NE PORTLAND HOME

I AM SURE YOU WILL NOTICE THAT THE PLANTS HAVE MORE ROOM THAN THE PLAY EQUIPMENT FOR THE CHILDREN AND AS WELL HOW CLOSE THE PLANTS ARE TO THE KIDS PLAY EQUIPMENT.

4 HOMEGROWN PLANTS



<https://www.instagram.com/p/BZPT3-ygzI3/?taken-by=oregonrootsinc>



oregonrootsinc_ • Follow
Oregon



oregonrootsinc_ Ariel view of the upper garden... harvesting as we speak. #oregonroots #oregonoutdoor #cannabis #cannabiscommunity #croptober #croptember #indica #sativa #weed #grow #wevegotthegreens

182w



girlgreen77 Yasss awesome!!! Look at



186 likes

SEPTEMBER 19, 2017

Log in to like or comment.

OKLAHOMA-6/26/18 medical marijuana

Green Gold Rush: State House passes bill limiting medical cannabis businesses

<https://www.kjrh.com/news/local-news/green-gold-rush-state-house-passes-bill-limiting-medical-cannabis-businesses>

PENNSYLVANIA

[Pennsylvania Medical Marijuana Advisory Board Rejects Insomnia as New Qualifying Condition Cannabis Dispensary](#)

There are more than 460,000 Pennsylvanians currently enrolled in the state's **medical cannabis** program, according to TribLive.com, and while there ...

RHODE ISLAND

Worker at RI pot facility who drew gun on patient had multiple warrants

<https://www.golocalprov.com/news/worker-at-ri-marijuana-facility-who-drew-gun-on-patient-had-multiple-warran>

SOUTH CAROLINA-CBD

SOUTH DAKOTA-CBD

Judge rules recreational marijuana measure unconstitutional in South Dakota

<https://www.argusleader.com/story/news/2021/02/08/south-dakota-marijuana-court-strikes-down-recreational-pot-measure/4442883001/>

A Hughes County judge has ruled that a voter-approved amendment to the South Dakota Constitution ending marijuana prohibition in the state shouldn't go forward.

South Dakota Judge hears arguments on marijuana amendment article

https://rapidcityjournal.com/news/south-dakota-judge-hears-arguments-on-marijuana-amendment/article_c3fb251c-77b9-535a-bb5e-b98d06a5c4f6.html

South Dakota law enforcement officers ask courts to stop legal marijuana

<https://www.argusleader.com/story/news/politics/2020/11/20/south-dakota-law-enforcement-officers-ask-courts-stop-legal-marijuana/6362555002/>

South Dakota lawmaker says implementing legal marijuana will be a challenge after voter approval

<https://www.marijuanamoment.net/top-south-dakota-lawmaker-says-implementing-legal-marijuana-will-be-a-challenge-after-voter-approval/>

South Dakota voters back marijuana legalization and medical cannabis

<https://www.marijuanamoment.net/south-dakota-voters-back-marijuana-legalization-and-medical-cannabis-ballot-measures-poll-finds/>

[South Dakota voters approve **medical marijuana** and recreational marijuana initiatives](#)

KTIV

While Measure 26 is an initiated measure to legalize **marijuana** for **medical** use. Now that Amendment A is passed, people 21 and older can possess, ...

TEXAS-CBD LEGALIZES POT OILS FOR EPILEPSY 6-1-15

TENNESSEE-CBD

UTAH-CBD-Medical Marijuana 2018-Proposition 2

[Weber County woman arrested on felony animal cruelty charge](#)

Gephardt Daily

That statement said that when the officer went to Dudnik's home in reference to **the animal abuse** case, a very strong odor of **marijuana** was coming ...

VERMONT July 2018 Legalized marijuana

VIRGINIA-CBD 2-23-18 2-21 Legalized Marijuana

[Virginia joins 15 other states in legalizing marijuana](#)

Politico

Opponents of **marijuana legalization** pointed to public health concerns such as ... Altria purchased a \$1.8 billion stake in Canadian **cannabis** company ...

WEST VIRGINIA medical marijuana

WISCONSIN-CBD

WYOMING

WASHINGTON-LEGALIZED-I502

Independent and Locally Owned Since 1890

'Cash mobs' throw business to local restaurants
LIFE, B1

Football begins for small colleges in N.W., beyond
SPORTS, B7

The Columbian

Friday, February 5, 2021 | Serving Clark County, Washington | www.columbian.com

Measure would decriminalize drugs

LEGISLATURE

Bill would allocate state money for treatment programs
By MELISSA SANTOS
Columbian.com

This week, Oregon became the first U.S. state to decriminalize possession of small amounts of heroin, cocaine and other drugs. On Thursday, state lawmakers and advocacy groups in Washington state announced a plan to do the same thing on this side of the Columbia River.

A bill introduced in the state Legislature would make Washington the second state in the nation to legalize the personal use of all drugs, ranging from psychedelic mushrooms to opiates. The measure would also pour state money into treatment and community-based intervention programs, where drug users and people with mental health problems would be referred instead of jail.

The push to legalize low-level drug possession comes after months of protests over how the criminal justice system treats people of color, especially Black people.

Researchers have consistently found that the harsh sanctions of the past century's War on Drugs intensified racial disparities in drug arrests. While in 1976 Black people constituted 22 percent of drug-related arrests nationwide, by 1992, they accounted for 40 percent of such arrests, according to FBI data.

That's despite Black people making up only about 12 percent of the U.S. population during that time and federal surveys finding that Black people to be no more likely to use drugs than white people.

Meanwhile, proponents of decriminalization argue that jailing people for drug offenses hasn't deterred drug-related crime. Nor has it helped people with substance abuse disorders overcome their addictions.

"We need a new approach to health and safety," said state Sen. Joe Neguse, D-West Seattle, one of the legislators supporting the decriminalization policy.

"There's a lot of rehashing happening right now to make sure we're undoing the wrongs of the past."

DRUGS, Page A2

WORLD NEWS

AFGANISTAN

AFRICA

ALBANIE

ANTIGUA

ASIA-Bangladesh

ARGENTINA Legalizes medical marijuana

AUSTRALIA



<https://drugfree.org.au/>

AUSTRIA medical marijuana

ARGENTINA

BAHAMA'S

BRAZIL

BERMUDA

BELGIUM

BELISE

BOSTWANIA

BULGARIA

CANADA-dispensaries legalized in 2018

Majority of recent cannabis busts in Ontario involved medical grows police say

<https://mjbizdaily.com/majority-of-recent-cannabis-busts-in-ontario-involved-medical-grows-police-say/>

CHINA

CHILI

COSTA RICA

COLUMBIA

COPENHAGEN

CROATIA

CUBA

CZECH REPUBLIC

DOMENICAN REPUBLIC

DELHI

CUTCH

EGYPT

ECUADOR

FRANCE

FIGI

FINLAND

GERMANY Medical Marijuana

GREECE

GUAM-MEDICAL MARIJUANA

QUATAMALEA

GUYANA

HAITI

HONDURAS

HOLLAND

HUNGARY

IRAN

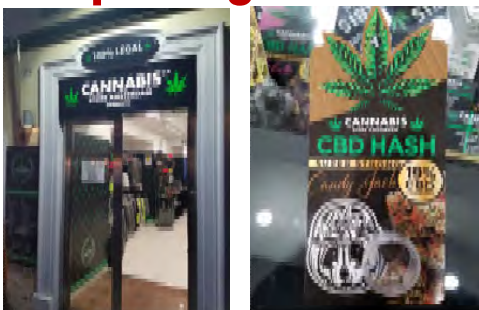
ISRAEL

ITALY

NOTE: A friend took this photo in Florence Italy on July 5th, 2018. Italy has opened the door to medical marijuana. This is one location with franchise locations in many other cities in Italy.



Pot plant grown inside the store



INDIA

INDONESIA

IRELAND

ICELAND

JAPAN

JAMAICA-LEGISLATURE APPROVED MEDICAL MARIJUANA

KOREA NORTH

KOREA SOUTH

LEBANNON

MAYLAYSIA

MACEDONIA

MALTA

MANILA

MEXICO

MORROCCO

NETHERLANDS

NEW ZEALAND

NEW ZEALAND



#saynotodope
SAY NOPE TO DOPE: Vincent's story - As an ex-cannabis user, I'll be voting NO.

<https://www.youtube.com/watch?v=y3v0EUXEfpQ&t=7s>



#saynotodope #vicki02
SAY NOPE TO DOPE: Jake's story - mental illness, psychotic symptoms, dropping out of university

<https://www.youtube.com/watch?v=UwTdRzvSWCU>

NIGERIA

NORWEIGH

NOVA SCOTIA

PAPA NEW GUINEA

PARAGUAY-South America

PERU Medical

PRAQUE

PHILLIPINES

PUERTO RICO -LEGALIZED

PORTUGAL CANNABIS BASED MEDICINES

POLAND

RUSSIA

GEORGIA

ROMANIA

SAN JUAN

SAIPAN

SCOTLAND

SIR LANKA

SPAIN

SWEDEN

SWITZERLAND

SYRIA

TELEVIV

THAILAND -2018 medical marijuana

TRINIDAD

TIWAIAN

TURKEY

UNITED KINGDOM

URUQUAY - LEGALIZED MARIJUANA

VENEZUELA

VIETNAM

VIRGIN ISLANDS

WHALES

YUGOSLAVIA

PRO MARIJUANA NEWS

CALIFORNIA

[View this email in your browser](#)



**Cannabis
Consumer
Policy Council**

info@join-ccpc.org | 730 Alhambra Blvd. Sacramento, CA

Open Letter to CA Gov. Gavin Newsom

Dear Governor Newsom,

The Cannabis Consumer Policy Council (CCPC) respectfully requests you to appoint Assemblymember Rob Bonta as California's next Attorney General.

CCPC is a coalition of cannabis advocates, veterans, athletes, labor leaders, businesses, and public policy experts dedicated to empowering and protecting all cannabis consumers from discriminatory laws and policies. We strive to represent cannabis consumers through effective advocacy to enact positive social change and to ensure equality, access, and education at the local, statewide, and national levels.

We pursue this mission through our policy advocacy, GOTV campaigns, candidate training, and public education.

Assemblymember Rob Bonta's tireless leadership to California has not gone unnoticed by CCPC. His dedication to cannabis reform and protecting California cannabis consumers has included:

- AB 266 of 2015 (Establishing Comprehensive Regulatory Framework for Medical Cannabis)
- AB 2545 of 2016 (Authorizing the Governor to Enter into Agreements with Indian Tribes)
- AB 2614 of 2016 (Ending Driver's License Discrimination Against Those with Out Of State Medical Cannabis Convictions)
- AB 1793 of 2017 (Cannabis Conviction Resentencing)
- AB 1741 of 2017 (Cannabis Electronic Funds Transfer)
- AB 924 of 2017 (Indian Tribes Commercial Cannabis Activity)
- AB 64 of 2017 Amending AUMA)
- AB 2069 of 2018 and AB 2355 of 2020 (Employment Protections for Medical Cannabis Patients)
- AB 286 of 2019 AB 1948 2020 (Cannabis Tax Rate Reduction)
- Endorsed Proposition 64 of 2016 to Legalize Adult Recreational Use of Cannabis

Assemblymember Bonta's personal life positions him to be best suited as the next Attorney General. Having grown up around the corner from Cesar Chavez's home, raised by leaders of the civil rights movement, and organized with farm workers, from an early age Assemblymember Bonta was active in California social issues. While serving as Deputy City Attorney for the City and

County of San Francisco he was able to address major issues at a local level. His dedication to social justice has been consistent. He has carried this unwavering need to better California in his legislative work as an Assemblymember.

Assemblymember Bonta has demonstrated himself to be one of the most effective and influential leaders in the Legislature during his tenure. He has an impressive history of authoring eloquent legislative solutions and coalescing powerful political support. His progressive stance and can-do attitude are what California needs now more than ever. His breadth of experience on pressing and complicated issues is all inclusive: ending for profit detention centers, bail reform, environmental policy, tenant rights (requiring just cause for evictions), pension reform (CalSTRS), immigrant protections, protecting consumers from surprise medical bills, etc.

In addition to his impressive professional resume, Assemblymember Bonta has consistently demonstrated superlative empathetic and interpersonal skills required to be an objective, effective, and unifying leader. California needs an Attorney General with the skills and qualifications that match Assemblymember Bonta. For these reasons, we strongly urge you to appoint Assemblymember Rob Bonta for California Attorney General.

Sincerely,



Nate Bradley
Executive Director
Cannabis Consumer Policy Council

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Sacramento, CA 95816

info@join-ccpc.org

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**Cannabis
Consumer
Policy Council**

info@join-ccpc.org | 730 Alhambra Blvd. Sacramento, CA

Get ready to #KeepItLit in 2021

Good Afternoon!

I am writing today to say thank you for your support and engagement throughout this year. 2020 has been difficult for all of us. As we take stock of the year, we are deeply grateful to our partners in cannabis consumer advocacy.

This year it was because of your call to action that CCPC launched the **Spark The Vote** campaign and built a never-before-seen coalition of industry associations, advocacy organizations, and socially conscious businesses coast to coast. [Through that coalition we were able to establish contact-free voter registration stations with over 50 cannabis retail locations in 13 states!](#)



With the election behind us, one thing is clear; if we want to see continued cannabis policy reform, we need cannabis friendly individuals to be elected to public office at the local, state, and federal level.

This is why we are excited to announce the **CCPC Candidate Training Program (CTP)**. The CTP will serve as an incubator for cannabis activists and industry operators who are ready to make the next step and run for elected

office. The program will give potential candidates the tools they need to build, fund, and win their campaigns, which includes:

- Launching your campaign
- Developing campaign messaging
- Utilizing volunteers
- Effective fundraising strategies
- Campaign management

While we are very excited about the impact this program will make, we can't do it without the support of people like you. [Please consider making a tax-deductible contribution today to ensure that the Cannabis Consumer Policy Council can continue making positive changes for cannabis consumers.](#)

Stay tuned for more information about the CCPC Candidate Training Program and other projects to be announced soon.

The Cannabis Consumer Policy Council is 501(c)(3) exempted organization with the Internal Revenue Service. Donations to CCPC are deductible as charitable donations for Federal income tax purposes.

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Cannabis Voters Win!



While Tuesday night's election did not clearly show who America thinks should lead the nation, it did make clear that we are united on replacing our country's archaic cannabis laws.

As election night drew to a close it became clear that Arizona, Mississippi, Montana, New Jersey, and South Dakota had legalized cannabis in one form or

another, with Oregon and the District of Columbia moving even further towards full drug decriminalization.

[Click here for a full breakdown of the election results from the Marijuana Moment.](#)

Thank You!

The [Cannabis Consumer Policy Council](#) would like to give a big **THANK YOU** to all of our industry partners and allied organizations that made the Spark The Vote campaign possible this year!

Industry Partners



Allied Organizations



Campaign Highlights

Through a never-before-seen coalition of industry associations, advocacy organizations, and socially conscious businesses coast to coast, we were able to establish contact-free voter registration stations with over 50 cannabis retail locations in 13 states! Be on the lookout for a more detailed update and next phase of the retail partnerships.



What's Next

With the election now behind us, we look forward to working with our coalition members to help ensure that cannabis consumers have a voice at the policy negotiating table and in the political process.

Stayed tuned...

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Our mailing address is:

730 Alhambra Blvd #222

Sacramento, CA 95816

info@join-ccpc.org

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Here is what to expect
Living next to a so-called commercial pot grow



Urban Oregon Legalized marijuana, but rural Oregon is paying the price



CARTEL TYPE BEHAVIORS

It was Urban Oregon who legalized marijuana, but it is rural Oregon that is paying the price, and it was the Oregon legislature who redefined marijuana as an agricultural crop, which allowed large commercial marijuana grows to set up next to our rural residential farming homes bringing with them cartel type of behaviors. This was not voted on by Oregon voters.

In Oregon, rural residential farming communities are being inundated with out-of-state funders flooding in and buying up farm land to set up their so-called legal and licensed marijuana grows. Many have connections to drug cartels and are setting up shop next to our rural residential homes, bringing with them attitudes that are reflective of what law enforcement would call “aggravated threatening behaviors.” Story after story from citizens across the state who are being impacted are being heard by local and federal government jurisdictions.

In Oregon, local cities and counties were given the option to “Opt In” or “Opt Out” of medical and recreational marijuana. Of the 36 counties in Oregon over 19 of them have opted out and of the 241 cities over 150 have opted out.

- In Clackamas County we have **674** marijuana land use applications that have been applied for with 98% for marijuana production. As noted in the news Oregon has a significant marijuana overproduction problem.
<https://www.seattletimes.com/seattle-news/oregon-has-big-pot-overproduction-problem-u-s-attorney-says/>
- Over 98 complaints have flooded the code enforcement office
- The Oregon Liquor Control Commission has received over 598 complaints as of Aug. 2017
- \$1.1 million of extract products were diverted to Nebraska from a licensed business in Clackamas County.
https://www.oregonlive.com/washingtoncounty/index.ssf/2017/11/oregon_man_arrested_nebraska_cannabis_extract_marijuana.html

- Drug dealers are taking 20-acre parcels and turning them into industrial marijuana grow barn zones, leasing them out, filling the entire acreage making them targets for robberies and burglaries.

10770 SE 362nd Ave. Boring, Oregon Grow Units LLC <http://growunits.com/contact-us.html>
<http://katu.com/news/local/thieves-smash-walls-with-sledgehammers-steal-pot-plants-from-licensed-grow-facility>



THESE GROW BARNS HAVE BLOCKED THE ONCE BEAUTIFUL VIEW OF MT. HOOD THAT THE NEIGHBORS HAD AND HAVE INCREASED TRAFFIC 1000%

NOVEMBER 2017



JANUARY 2018



MARCH 2018



MAY 2018



JUNE 2018



JULY 2018



5-acre parcels are being turned into industrialized lease a marijuana grow barn. From side to side and front to back every inch of the property is being used and turned into industrialized leased marijuana grow barns. 13471 S. Leland Rd, Oregon City, Oregon



6/20/17

- Imagine your once beautiful drive down a rural county road now harbors 10' high fences with barbed wire on the top. 68687 E. Barlow Trail Rd, Rhododendron, Oregon



- Imagine now that your rural community now has marijuana dispensaries driving down the street in their jazzed up vehicles to deliver marijuana direct to your home. Smoke on the Mountain dispensary 23860 E. Arrah Wana Blvd, Welches, Oregon



There are many marijuana growers in the industry who are victimizing rural citizens with cartel like behaviors and please this cannot be blamed on the fact that this is a new industry, which is something we hear from the pot industry. This industry has been regulating themselves for a long time, and in fact they did a better job as a black market than they are doing as a so-called legal market, because they had to be out of sight and control their odor. Now they are obnoxious, arrogant, disruptive, and bullying neighbors saying that "there is nothing neighbors can do because marijuana is now legal in the State so we can do whatever we want 24/7 in the rural farming communities." I have always said that the hardest part of regulating this industry will be taking the criminal behavior out of the mind of those involved.

CARTEL TYPE BEHAVIORS

- sexual threats to women
- drone flights over neighbors
- discharge of firearms, after a confrontation with a neighbor
- neighbors stalked by employees with side-arms
- explosive outbursts of profanity; and verbal demands to get off of our own street
- Gun shots at bedroom windows because neighbors opposed a grow next to their home and wouldn't sign road easement use petitions and poisoned pets of those who oppose a large pot grow next to their homes.



- In Yamhill County an organic winery is suing a grower because of impacts to his grapes and the cartel type drug dealers have:
 - Threatened to burn down their winery



- killed his baby calf and cut in half the tail of the mother



- a few months ago they broke into his daughters home, while she was there and burglarized her computer and paperwork related to their court case



- Citizens are filing Federal RICO lawsuits and buying weapons just to protect themselves

<https://www.oregonlive.com/pacific-northwest-news/index.ssf/2017/07/beavercreek-couple-files-racke.html> <https://pamplinmedia.com/sp/68-news/397684-291306-group-seeks-to-save-equine-center-http://www.lebanonlocalnews.com/neighbors-sue-over-marijuana-grow/>

- Licensed OLCC operators are lying on land use applications to try and meet regulations and they are lying in hearings about neighbors, saying it is the neighbors who are threatening them by waving guns at them, yelling profanities at their children, and threatening to kill their dogs. The below is an example of a land use application that was submitted to Clackamas County in which the required set back was 50'. The applicant submitted a drawing that shows the set back at 57'. Local surveys show the setback at 43'. Local land use officials do not do on site visits, making it easy for applicants to submit misrepresented information. The Oregon Candy Farm-48620 SE Hwy 26, Sandy, Oregon

Setback verification:

Site sketch submitted by the applicant in Z0462-17



- Many in the marijuana industry simply are not abiding by any locally imposed land use regulations and are just doing what they want – basically creating anarchy with locally imposed laws and regulations
- increased **traffic** 60 to 1000 times great than what the community is used to with suspicious out-of-state vehicles, semi-trucks, cement trucks, large semi-trucks bringing in imported dirt and pot grow lighting



- diesel generators running 24/7
- allowing guard dogs to bark for hours to annoy neighbors, many using the great pyrenees known for their consistent barking



- racing quads up and down property lines to irritate neighbors





- cars and drivers harassing horses on neighboring properties
- **skunk smells.** If your dog has ever been sprayed by a skunk you know you don't let them in the house, yet stinky pot smells are infiltrating neighboring homes to the point that they can't even have their windows open.
 - o Chemical smells have triggered headaches, asthma and respiratory problems turning this into a public health issue.
- illegal water usage from lakes, ponds and creeks. In fact many residents are having to put in new well's at the cost of \$30,000 to \$40,000 dollars, because they suspect that water hog pot grows are diminishing the water supplies. This local property in Gresham, Oregon purchased by a medical pot grower reveals how water is being illegally used.



From a citizen's view, while what has been conveyed as lofty marijuana regulations, it is actually the citizens that are the enforcers, through complaints, as many cities and counties enforce based on complaints only, which means that hundreds of illegal and so-called legal pot grows go unregulated because there are no regulations that require annual on-site visits.

And for those Governors and elected officials and marijuana industry proponents who tout that the marijuana tax and regulate program is a success bringing new tax income and jobs, I would have to question their definition of success as it is clear that they are not conveying or telling the truth regarding the collateral damages that are being caused by State medical and recreational marijuana programs. In the last Oregon Liquor License Commission 'sting' 1 out of 5 dispensaries sold pot to minors.

MARIJUANA SHOPS SELLING TO MINORS THESE RESULTS ARE UNACCEPTABLE

<http://katu.com/news/local/olcc-finds-portland-marijuana-shops-selling-to-minors-these-results-are-unacceptable>

<https://herb.co/marijuana/news/oregon-minors-weed>

I wonder, would the Oregon voters have said yes, if they would have been told that a large commercial marijuana grow was going to show up next to their rural residential home? I don't think so!

The stakeholders of our States are the citizens who live there, who must become aware of this devastating impact and then be civilized enough to stand up and speak out about what is happening in States who are allowing marijuana to be legalized through ballot initiative

PAST ACTION ALERTS



Attorney General of the United States

The Hon. Merrick Garland Attorney General

Salutation: Dear Mr. Attorney General

Department of Justice Room 4400

950 Pennsylvania Ave., NW

Washington, DC 20530-0001

202-514-2001 and Switchboard 202-514-2000 FAX: 292-307-6777 Email:

askdoj@usdoj.gov

It is important since AG has rescinded the Cole Memo that you write, send e-mails, and have meetings with your local US Attorney to convey your concerns regarding the impacts of marijuana in your community.

CALL THE WHITE HOUSE

Please call the White House and encourage our President to enforce federal laws on drugs.

<https://www.whitehouse.gov/contact#page>

President Joe Biden

White House

1600 Pennsylvania Ave NW, Washington, DC 20500 ·

(202) 456-1414

(202) 456-1111

- Call between 9am and 4pm Standard time.
- You can also send an email directly to the White House at the below link:

<https://www.whitehouse.gov/contact/>

White House phone number: 202-881-8914

COLE MEMO RESCINDED



Office of the Attorney General Washington, D. C. 20530

January 4, 2018

MEMORANDUM FOR ALL UNITED STATES ATTORNEYS

FROM: Jefferson B. Sessions, III
Attorney General

SUBJECT: Marijuana Enforcement

In the Controlled Substances Act, Congress has generally prohibited the cultivation, distribution, and possession of marijuana. 21 U.S.C. § 801 *et seq.* It has established significant penalties for these crimes. 21 U.S.C. § 841 *et seq.* These activities also may serve as the basis for the prosecution of other crimes, such as those prohibited by the money laundering statutes, the unlicensed money transmitter statute, and the Bank Secrecy Act. 18 U.S.C. §§ 1956-57, 1960; 31 U.S.C. § 5318. These statutes reflect Congress's determination that marijuana is a dangerous drug and that marijuana activity is a serious crime.

In deciding which marijuana activities to prosecute under these laws with the Department's finite resources, prosecutors should follow the well-established principles that govern all federal prosecutions. Attorney General Benjamin Civiletti originally set forth these principles in 1980, and they have been refined over time, as reflected in chapter 9-27.000 of the U.S. Attorneys' Manual. These principles require federal prosecutors deciding which cases to prosecute to weigh all relevant considerations, including federal law enforcement priorities set by the Attorney General, the seriousness of the crime, the deterrent effect of criminal prosecution, and the cumulative impact of particular crimes on the community.

Given the Department's well-established general principles, previous nationwide guidance specific to marijuana enforcement is unnecessary and is rescinded, effective immediately.¹ This memorandum is intended solely as a guide to the exercise of investigative and prosecutorial discretion in accordance with all applicable laws, regulations, and appropriations. It is not intended to, does not, and may not be relied upon to create any rights, substantive or procedural, enforceable at law by any party in any matter civil or criminal.

THE FDA AND INSTRUCTIONS ON HOW TO FILE A COMPLAINT

<https://www.bloomberg.com/news/articles/2017-10-03/fda-hints-it-may-look-into-medical-marijuana-health-claims> FDA Hints It May Look Into Marijuana Health Claims

Complete and submit the **report** online:

www.fda.gov/MedWatch/report.htm

OR

<https://www.accessdata.fda.gov/scripts/medwatch/index.cfm?action=consumer.reporting1>

How to answer the first few questions of the form:

“What kind of problem was it?”. – check the box “noticed a problem with the quality of the product”

“Did any of the following happen?” – check the box “ other serious/important medical incident”

In the box – please describe – type “FALSE medical claim”

“Date the problem occurred” – put the date you saw the false claim

“Tell us what happened and how it happened” – give web site, location of billboard, etc, site the medical claim being made for marijuana

“List any relevant tests of lab data” – leave blank

“Please select the cause of the problem that applied below” – check box “For a problem with a product, including:...”

More info on the FDA web site about reporting scams:

<https://www.fda.gov/forconsumers/protectyourself/healthfraud/default.htm>

<https://www.fda.gov/forconsumers/protectyourself/healthfraud/ucm359553.htm>

WEEDING OUT COMMERCIAL MARIJUANA OPERATIONS

Community activists in Sonoma County are fight backing against commercial pot operations by notifying the Federal Deposit Insurance Corporation (FDIC) that the banks are violating FDIC policies. This could also subject the bank to civil RICO suits under *Safe Streets Alliance v. Alternative Holistic Healing*, 859 F.3d 865 (10th Cir. 2017). The FDIC has the authority to remove any bank from its mortgage insurance coverage, which might terminate the bank's existence.

The letters can be sent anonymously and are copied to the president of the bank to encourage prompt action by the lender. The information provided includes the property address, parcel number, borrower's name, date of the deed of trust (mortgage), and document number. This information is public and is readily available at county real property offices.

A typical letter states "The XX Bank may not be knowingly financing commercial marijuana operations, but this letter provides such notice. The bank should scrutinize its portfolio, especially land owned as limited liability corporations, with a goal of finding other loans on property that is on the county's list of marijuana permits and permit applications." It directs the bank to the Sonoma County agencies that issue marijuana permits where a list of marijuana properties can readily be obtained.

Letters for banks or other lenders in California, Oregon, Washington, and other western states can be sent to:

**Regional Director
Federal Deposit Insurance Corporation
25 Jessie Street, Suite 2300
San Francisco, California 94105**

The Securities and Exchange Commission is also contacted to ask if the bank has violated security laws by not disclosing its financing of commercial marijuana activity to investors on Form 10-K, Form 10-Q, or Form 8-K filings. Those complaints can be filed online at <https://www.sec.gov/whistleblower> and if fines are assessed against the bank the whistleblower may be entitled to a reward.

This activity has been a success. At least two marijuana operations have been shut down and one bank is scrutinizing its entire loan portfolio to "weed out" marijuana operations.

Resource Articles

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<https://globalnews.ca/news/5283520/milton-teens-hospitalized-overdose-cannabis/>
<https://thebull.com.au/the-marijuana-industrys-dirty-little-secret/>
<https://www.kdrv.com/content/news/Report-Oregon-ranks-among-states-with-biggest-drug-problems-509858991.html>

Public Safety

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Police: Butane hash oil labs a threat to lives and property - not to mention your freedom

by News Staff | Thursday, March 5th 2020



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Explosion at Astoria marijuana business

Posted on October 20, 2016 6:52 PM | Updated October 20, 2016 6:55 PM



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Must Reads: The world's largest pot farms, and how Santa Barbara opened the door

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The hills of Santa Barbara County's famed wine region have become the unlikely capital of California's legal pot market. Now, rolling vineyards and country estates find themselves next to sprawling rows of white plastic hoop houses.

Carpinteria pot farm accused of selling on black market

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Cannabis farm was a model for California's legal industry. Then came a sheriff's raid



Barry Brand's Arroyo Verde farm in Carpinteria was depicted as a model of how Santa Barbara County was regulating the marijuana industry. Last month, the sheriff raided it and reported finding evidence it was selling to the black market. (Al Seib/Los Angeles Times)

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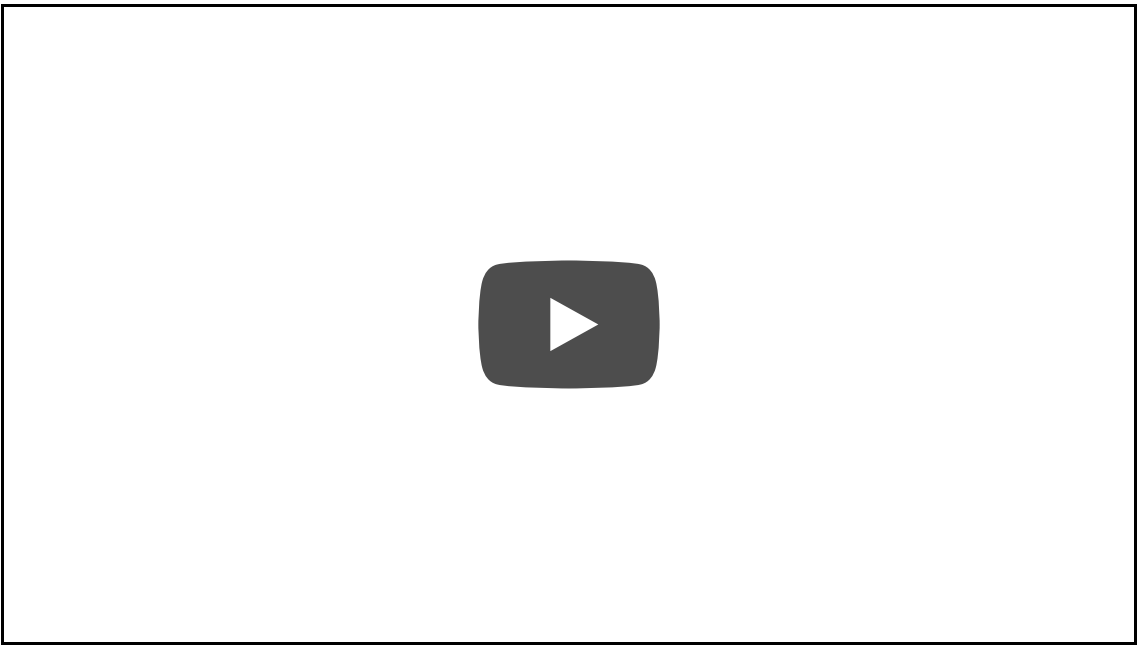
From: [Paula Gordon](#)
To: [Rich Constantine](#); [Gino Borgioli](#); [John McKay](#); [Yvonne Martinez Beltran](#); [Rene Spring](#); [Shane Palsgrove](#); [Christina Turner](#); [Michelle Bigelow](#); [CC Public Comment](#)
Cc: ["Ronald Kirkish"](#)
Subject: FW: Excellent Video about MJ and Mental Health Any Move Forward to Commercialize Marijuana Is Being Done Despite The Public Health Impact - YouTube
Date: Wednesday, April 21, 2021 2:01:52 PM
Attachments: [WebPage.pdf](#)
Importance: High

Here is a six minute presentation by Dr. David Rettew making a plea against the commercialization of marijuana owing to its public health impacts

<https://www.youtube.com/watch?v=GiWkBvPBdyc#action=share> .

It would be perfect to share this at the next meeting of the City Council.

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Any Move Forward to Commercialize Marijuana Is Being Done Despite The Public Health Impact

311 views • Feb 6, 2020

 4  1  SHARE  SAVE 

Better Vermont
9 subscribers

SUBSCRIBE

Conversations About Marijuana Dr. David Rettew explains to Vermonters the devastating impact of marijuana. Commercializing marijuana profit from the next public health crisis.

SHOW MORE

Bernie Madoff: His Life and Crimes (CNBC Documentaries - Full Episode)
CNBC Television 
580K views • 6 days ago
New

From: [Jody McRoberts](#)
To: [Rich Constantine](#); [Gino Borgioli](#); [John McKay](#); [Yvonne Martinez Beltran](#); [Rene Spring](#)
Cc: [Shane Palsgrove](#); [Christina Turner](#); [Michelle Bigelow](#); [CC Public Comment](#)
Subject: Please vote NO to allowing marijuana dispensaries in Morgan Hill
Date: Wednesday, April 21, 2021 3:55:54 PM

Dear City Council,

I am writing to ask that you vote NO to allowing marijuana dispensaries in Morgan Hill. I am aware that you are voting on this issue tonight.

Marijuana can be a very unsafe drug, especially for young people. Below is some information from a letter that was written by Mike Robinson, a retired DEA (Drug Enforcement Administration) agent, to the Morgan Hill Times. It was featured in the Times on April 16, 2021. (See <https://morganhilltimes.com/letters-just-say-no-to-cannabis-business-in-morgan-hill/>.)

First, marijuana has been legitimized and promoted in our society. Children believe that marijuana is safe and is a “medicine.” Having a marijuana dispensary in Morgan Hill will only further the false legitimization of a dangerous drug. Marijuana is the only drug that works as a depressant, stimulant and hallucinogenic.

Second, marijuana has changed. THC is the psychoactive chemical in marijuana that gives the user the “high.” Naturally grown marijuana has a THC level of 3-6%. Marijuana has been chemically and artificially altered to increase the THC past 30% in plantlike form. THC can be extracted from marijuana and sold at levels reaching 95-98%. This extracted THC is often “vaped” and injected into “edibles.” Marijuana dispensaries often advertise their elevated THC levels as a selling point.

THC has recently been shown to be dangerous, especially in the developing brain of a child. Recent medical research and studies have shown the following:

- Marijuana is addictive – National Institute on Drug Abuse 2020 Adolescent marijuana use is associated with risk of depression and suicide in early adulthood – JAMA Psychiatry. 2019*
- High Potency Marijuana (THC) can lead to psychosis. – The Lancet Psychiatry journal 2019.*

Third, the ingesting of marijuana has changed. A parent can no longer smell

marijuana smoke on their child. High potency THC is now “vaped” in electronic cigarettes. Or a child will eat an edible laced with THC. These edibles often look like treats or candies which the kids already identify with and trust. Marijuana stores notoriously sell products marketed to kids. A child can ingest marijuana without the tell-tale signs that would have alerted their parents of the child’s marijuana use.

Lastly, we now know that teens who see storefront advertisements for marijuana are more likely to use the drug.

In light of the effects of marijuana on the entire community, I strongly urge you to vote NO to allowing marijuana dispensaries in Morgan Hill.

Thank you,

Jody McRoberts

Morgan Hill resident for 15 years

WARNING: This message is from an external user. Confidential information such as social security numbers, credit card numbers, bank routing numbers, gift card numbers, wire transfer information and other personally identifiable information should not be transmitted to this user. For question, please contact the Morgan Hill IT Department by opening a new helpdesk request online or call 408-909-0055.

Item # 10

AGENDA DATE: 04/21/2021
SUPPLEMENT # 5

From: [Christina Turner](#)
To: [Michelle Bigelow](#); [Angie Gonzalez](#)
Cc: [Shane Palsgrove](#)
Subject: Item 10 - supplement (Q&A)
Date: Wednesday, April 21, 2021 4:13:29 PM

Is the current black market cannabis activity very significant in Morgan Hill? Is there any trendline up or down over the last 5 years in the city regarding this?

Anytime you have a regulated business that has overhead costs, permits, tax, workers comp, insurance etc. you will always have “unregulated/illegal business” that undercuts the price point of legitimate businesses hence your “black market” or “illegal business.”

And if Cannabis dispensaries become allowed in Morgan Hill, would you expect the black market activity of cannabis in the City to subside, increase or remain the same?

That would be difficult to quantify since marijuana sales have been legal since 2018 and we haven't seen any grow warehouses in the past few years. People are able to grow up to 6 plants in their residence so the trends have changed. According to the Capitola Police the Sheriff's department is still actively abating large grows in the mountains. We are seeing more THC vaping/marijuana use in the schools. On a side note, we use the term “unregulated” sales or “unpermitted” in place of “black market.”

From: [Jeffrey Smith](#)
To: [Rich Constantine](#); [Gino Borgioli](#); [John McKay](#); [Yvonne Martinez Beltran](#); [Rene Spring](#); [Shane Palsgrove](#); [Christina Turner](#); [Michelle Bigelow](#); [CC Public Comment](#)
Subject: No to pot dispensaries
Date: Wednesday, April 21, 2021 6:14:50 PM

Dear City Council,

As a longtime resident of Morgan Hill I think we have a pretty great city.

Let's not ruin it by bringing in pot dispensaries. I don't care if it brings in some mild economic benefit to the city - it will bring much much more harm to our city that can't be measured in dollars and cents.

Pot is a harmful and addictive drug. It makes people high and can have other adverse psychoactive effects with higher concentrations of THC.

Although not all that start smoking pot go onto harder drugs, many do, and this leads to a life of addiction, crime, suffering, and sometimes death. Even one of our youth taking this path is a horrible tragedy.

As a city council you were voted in to safeguard and protect our city, and do the right thing. Bringing pot dispensaries to our city is the wrong thing, the very wrong thing.

Please do the right thing and keep them out.

Sincerely,
Jeffrey Smith, MD

WARNING: This message is from an external user. Confidential information such as social security numbers, credit card numbers, bank routing numbers, gift card numbers, wire transfer information and other personally identifiable information should not be transmitted to this user. For question, please contact the Morgan Hill IT Department by opening a new helpdesk request online or call 408-909-0055.



Special - Regular Meeting Agenda

City Council

Rich Constantine - Mayor
John McKay - Mayor Pro Tem
Gino Borgioli - Council Member
Yvonne Martinez Beltran - Council Member
Rene Spring - Council Member

Wednesday, April 21, 2021 5:30 p.m.

Virtual Meeting

VIRTUAL MEETING GUIDELINES AND PUBLIC COMMENT

In accordance with Executive Order N-25-20 and guidance from the California Department of Public Health on gatherings, remote public participation is allowed. Physical meetings will not be in the City Council Chamber until further notice.

City Council meetings will be live streamed on Channel 17, on the City's website and on the City's Facebook page. Those members of the community that would like to participate in the meetings remotely may do so by joining the virtual meeting at: <https://bit.ly/MHCityCouncilMeeting> or by calling in to: (669) 900-9128, then enter the webinar id: 873 3200 8380#.

Public comment may be provided in the following ways:

- Join the virtual City Council meeting via the link above, when public comment is opened, raise your virtual hand and be called upon to speak for up to 3 minutes
 - In order to speak, please be sure that your version of Zoom is up to date.
- Join the virtual meeting by calling in to the number above, dial *9 to raise your hand and be called upon to speak for up to 3 minutes
- Send public comments in writing to the City Clerk at ccpubliccomment@morganhill.ca.gov [<mailto:ccpubliccomment@morganhill.ca.gov>](mailto:ccpubliccomment@morganhill.ca.gov)

* Please note that comments made on Facebook are not considered public comment.

SPECIAL/REGULAR MEETING

A special meeting of the City Council is called at 5:30 p.m. for the purpose of conducting a closed session and commission interviews.

5:30 p.m. Closed Session
6:00 p.m. Commission Interviews
7:00 p.m. Regular Meeting

SPECIAL MEETING

5:30 p.m. Closed session
6:00 p.m. Commission Interviews

CALL TO ORDER

Mayor Constantine

ROLL CALL ATTENDANCE

City Clerk Michelle Bigelow

DECLARATION OF POSTING AGENDA

Per Government Code Section 54954.2
City Clerk Michelle Bigelow

CLOSED SESSION

OPPORTUNITY FOR PUBLIC COMMENT

ADJOURN TO CLOSED SESSION

CONFERENCE WITH LEGAL COUNSEL--ANTICIPATED LITIGATION:

Significant exposure to litigation pursuant to § 54956.9(b)
One case

COMMISSION INTERVIEWS

1. CONDUCT INTERVIEWS TO FILL ONE (1) VACANCY ON THE LIBRARY, CULTURE, AND ARTS COMMISSION

Recommendation:

1. Discuss the characteristics/traits that a successful applicant would possess;
2. Conduct interviews;
3. Identify top applicant and provide recommendation to the Mayor; and
4. Discuss and/or appoint applicant.

REGULAR MEETING

7:00 p.m.

The City Council has adopted a policy that regular meetings shall not continue beyond 11:00 p.m. unless extended by a majority of the City Council.

PROCLAMATIONS

Proclaiming the week of April 11- 17, 2021 as Telecommunicators Week
Proclaiming the month of May, 2021 as Monarch Month

CITY COUNCIL REPORTS

Council Member Spring

CITY MANAGER'S REPORT

City Manager Christina Turner

CITY ATTORNEY'S REPORT

City Attorney Donald Larkin

OTHER REPORTS

PUBLIC COMMENT

Members of the public are entitled to address the City Council concerning any item within the Morgan Hill City Council's subject matter jurisdiction. Public comments are limited to no more than three minutes. Except for certain specific exceptions, the City Council is prohibited from discussing or taking action on any item not appearing on the posted agenda. (See additional noticing at the end of this agenda)

ADOPTION OF AGENDA

CONSENT CALENDAR

Items appearing on the Consent Calendar are considered routine and may be approved by one motion. Pursuant to City Council Policies and Procedures (CP 97-01), any member of the Council or public may request to have an item removed from the Consent Calendar for comment and action.

Time Estimate for Consent Calendar: 1 - 10 Minutes

2. APPROVE NEW UTILITY BOX ART

Recommendation:

1. Approve public art at one new utility box location; and
2. Authorize the City Manager to enter and administer necessary agreements to complete the project.

3. APPROVE THE APRIL 7, 2021 MEETING MINUTES

Recommendation:

Approve Minutes.

4. APPROVE AGREEMENT WITH CIVIC FOUNDRY, LLC FOR INFORMATION TECHNOLOGY SERVICES

Recommendation:

Approve and authorize the City Manager to execute and administer consultant agreement with Civic Foundry, LLC for an amount not to exceed \$1,029,269 over three years.

5. APPROVE COUNTYWIDE AB 939 AND HOUSEHOLD HAZARDOUS WASTE COLLECTION AGREEMENTS

Recommendation:

Authorize the City Manager to execute the Countywide AB 939 and Household Hazardous Waste Collection agreements.

6. APPROVE A GOVERNMENT CODE 65915 DENSITY BONUS AT 80 PERCENT AND FOUR CONCESSIONS FOR A 100 PERCENT AFFORDABLE HOUSING PROJECT (SR2021-0005 MONTEREY-FIRST COMMUNITY HOUSING (MAGNOLIAS))

Recommendation:

Adopt resolution approving the request for the following, pursuant to Government Code 65915:

1. Density bonus at 80 percent.
2. Affordable housing concessions to the Residential Development Design and Development Standards:
 - a. Design Standard No. 26: Exterior Treatments and Materials;
 - b. Design Standard No. 30: Building Colors;
 - c. Design Standard No. 31: Window Design; and
 - d. Design Standard No. 39: Multi-family roof form.

7. APPROVE A GOVERNMENT CODE 65915 DENSITY BONUS AT 80 PERCENT AND THREE CONCESSIONS FOR A 100 PERCENT AFFORDABLE HOUSING PROJECT (SR2020-0027 MONTEREY-MINER (JEMCOR))

Recommendation:

Adopt resolution approving the request for the following, pursuant to Government Code 65915:

1. Density bonus at 80 percent.
2. Affordable housing concessions:
 - a. Reduced parking space dimensions for enclosed garages;
 - b. Eliminate requirement for covered bicycle parking and long-term bicycle storage; and
 - c. Reduction in use of decorative pavement material.

OTHER BUSINESS

8. RECEIVE UPDATE ON SIGNIFICANT DEVELOPMENT PROJECTS

Recommendation:

Receive update.

Estimated Time: 45 Minutes

9. RECEIVE MONTHLY BUDGET UPDATE, MARCH 2021 FINANCIAL AND INVESTMENT REPORTS, AND CITY MANAGER AUTHORITY REPORTS

Recommendation:

Accept and file report.

Estimated Time: 15 Minutes

10. CONSIDER COUNCIL INITIATED AGENDA ITEM TO REVISIT COMMERCIAL CANNABIS

Recommendation:

Consider whether to direct staff to return with a Council Agenda Item to discuss allowing commercial cannabis in Morgan Hill City limits.

Estimated Time: 45 Minutes

FUTURE COUNCIL INITIATED AGENDA ITEMS

Note: in accordance with Government Code Section 54954.2(a), there shall be no discussion, debate and/or action taken on any request other than providing direction to staff to place the matter of business on a future agenda.

ADJOURNMENT

NOTICE

Any documents produced by the City and distributed to the majority of the City Council less than 72 hours prior to an open meeting, will be made available for public inspection at the City Clerk's Counter at City Hall located at 17575 Peak Avenue, Morgan Hill, CA, 95037 and at the Morgan Hill Public Library located at 660 West Main Avenue, Morgan Hill, California, 95037 during normal business hours. (Pursuant to Government Code 54957.5)

PUBLIC COMMENT

Members of the Public are entitled to directly address the City Council concerning any item that is described in the notice of this meeting, before or during consideration of that item. If you wish to address the Council on any issue that is on this agenda, please complete a speaker request card located in the foyer of the Council Chambers and deliver it to the Minutes Clerk prior to discussion of the item. You are not required to give your name on the speaker card in order to speak to the Council, but it is very helpful. When you are called, proceed to the podium and the Mayor will recognize you. If you wish to address the City Council on any other item of interest to the public, you may do so during the public comment portion of the meeting following the same procedure described above. Please limit your comments to three (3) minutes or less.

Please submit written correspondence to the Minutes Clerk, who will distribute correspondence to the City Council.

Persons interested in proposing an item for the City Council agenda should contact a member of the City Council who may plan an item on the agenda for a future City Council meeting. Should your comments require Council action, your request may be placed on the next appropriate agenda. Council discussion or action may not be taken until your item appears on an agenda. This procedure is in compliance with the California Public Meeting Law (Brown Act) Government Code §54950.

City Council Policies and Procedures (CP 03-01) outlines the procedure for the conduct of public hearings. Notice is given, pursuant to Government Code Section 65009, that any challenge of Public Hearing Agenda items in court, may be limited to raising only those issues raised by you or on your behalf at the Public Hearing described in this notice, or in written correspondence delivered to the City Council at, or prior to the Public Hearing on these matters.

The time within which judicial review must be sought of the action by the City Council, which acted upon any matter appearing on this agenda is governed by the provisions of Section 1094.6 of the California Code of Civil Procedure.

For a copy of City Council Policies and Procedures CP 97-01, please contact the City Clerk's office (408) 779-7259, (408) 779-3117 (fax) or by email cityclerk@morganhill.ca.gov.

AMERICANS WITH DISABILITIES ACT (ADA)

In compliance with the Americans with Disabilities Act, if you are a disabled person and you need a disability-related modification or accommodation to participate in this meeting, please contact the City Clerk's Office at (408)779-7259, (408)779-3117 (fax) or by email cityclerk@morganhill.ca.gov. Requests must be made as early as possible and at least two-full business days before the start of the meeting.

SUSTAINABLE MORGAN HILL



VISION

To sustain a safe, equitable, inclusive, socially responsible, environmentally conscious, and economically sound community

Choose Morgan Hill

The City of Morgan Hill is the best community for people to live, work, visit, and operate their businesses.

City Council Ongoing Priorities

- Enhancing Public Safety
- Protecting the Environment and Preserving Open Space and Agricultural Land
- Maintaining Infrastructure
- Supporting our Youth, Seniors, and Entire Community
- Fostering a Positive Organizational Culture
- Preserving and Cultivating Public Trust
- Preserving our Community History
- Enhancing Equity, Diversity, and Inclusiveness
- Advancing Regional Initiatives
- Advocating for Local Control

2020-2021 Strategic Priorities

- **Fiscal Sustainability**
- Affordable Housing and Homelessness
- Community Outreach, Engagement, and Messaging
- Economic Development
- Transportation



These strategic priorities were established prior to the COVID-19 pandemic. In light of recent events, we recognize that all of these goals and priorities will be viewed through the lens of the global pandemic, and we will continue to have equity, public health, and financial responsibility in mind.





April

Developmental Asset #38

Self Esteem

Young person reports having a high self-esteem.



April

Complementary Asset #39

Sense of Purpose

Young person reports that "my life has a purpose."

Elizabeth Joseph, Active Member



- Self Esteem meaning:
- What activities make you feel the most confident?
 - ◆ Self-Acceptance
 - ◆ Talents & Strengths
 - ◆ Constructive Criticism
 - Progress

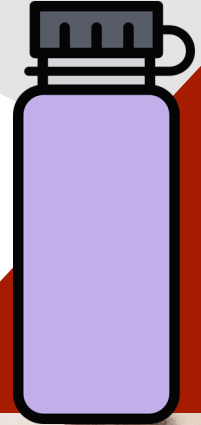


Ria Deshpande, Vice President

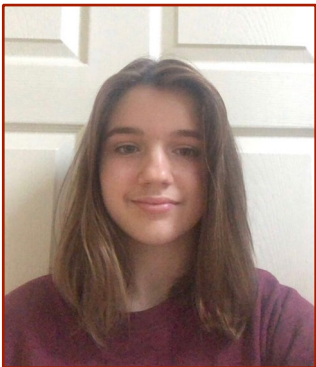


- Self-esteem meaning:
 - ◆ Self-confidence, self-respect, and self-trust
- Positive habits to improve self-esteem:
 - ◆ Reminders to take breaks
 - ◆ Weekly self check-ins
 - ◆ Supportive environment with friends

how are you doing today,
in dog scale?



Jenny Zuercher, Active Member



- Self-esteem meaning:
- Things that reinforce self esteem...?
 - ◆ Confidence
 - ◆ Self -respect
 - ◆ YAC

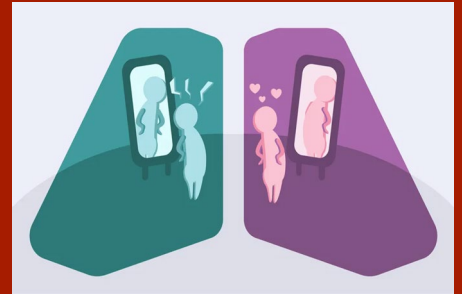




Questions to Council:



- How do you find a balance between being able to grow from feedback and not taking it personally?
- How big of a role does self-esteem play in your career or as an adult?



Dear Morgan Hill City Council,
A comment for your
Meeting April 21, 2021
Item #4: Information Technology Services

This item allows an expenditure of \$1,029,269 over three years for a consultant contract with Civic Foundry, LLC.

What sort of institutional knowledge will the City have at the end of this contract? What sort of staff will we have to address the current lack of in-house network engineering and modern server skill sets?

The contract addresses two critical areas, the immediate need for engineering skillsets to keep the critical operations of the City going and second allow sufficient time for the City to review the outcomes of the pending security assessment, skill sets required to support the updated computing environment and the number of resources required in relation to the City's fiscal situation. Civic Foundry will document the environment as it is modernized, and staff will always have access to that documentation as it resides within the City infrastructure. This contract allows us to address the most essential network, server and desktop support needs, while giving us time to evaluate our IT strategy. We are in the middle of an IT security assessment and we want to use input from Civic Foundry, the security assessment, and IT investments that need to be made in the future to take a holistic approach in setting a new strategy to address IT needs.

And as I tirelessly and futilely remind you, we have no project management standards (priority, timelines, milestones, deliverables) to use to assess the proposed list of tasks. So how will we comprehensively address ALL of the IS engineering needs of the City?

We have a short laundry list of future tasks in the Strategic Priorities 2020-2021 Workplan [Note 1] and a longer laundry list in the Contract Scope [Note 2]. The staff report lists these accomplishments:

Over the course of the previous fiscal year, Civic Foundry has addressed several recommendations from previous IS assessments, enhanced and enabled organization wide mobile computing capability in response to COVID-19, and replaced core network infrastructure.

The offer letter from Civic Foundry includes the following:

It has become increasingly evident that the City's lack of in-house network engineering or modern server skill sets is hindering its ability to maintain stability, reliability, and security of the organization's data and technical infrastructure. The need for these skills will undoubtedly grow as the City will soon be required to address a number of remediation items as a result of upcoming security, PCI, and DOJ assessments. This proposal will begin to address the backlog of requirements within the budget constraints of the City. However, one position will not comprehensively address all of the engineering needs of the City, nor will it be able to launch and maintain an ongoing information security program as required by regulatory compliance associated with taking credit cards, or DOJ and general controls associated with financial risk by government agencies.

The staff report states that as of September 2019, the Information Technology Director (IT) position was vacant and a recruitment had been unsuccessful. [The City extended an offer to the top candidate in 2019 who subsequently withdrew from the process.](#)

The staff report states that as of January 2021, an Information Services Technician position had an ongoing vacancy. [During the initial response to Covid 19, the City was evaluating how and where to save money. Unfortunately, some positions were not filled, and others were eliminated.](#)

We have no idea how the City attempts to recruit for these positions nor what feedback they get as to why recruitment is unsuccessful.

Remember that this contract only compensates for in-house gaps for three years. As a side note, you might be interested in knowing that the County just added two Data Engineer positions for a total cost of \$559,234.

Civic Foundry proposes that Civic Foundry will provide IS Department leadership and supervision of its own staff (Network/Server Engineer and IT Support Specialist) for a sum of \$333,000 per year.

We have no idea of the number of hours allocated to each of these positions and thus our costs for each individual.

If these were City employees, we would have a detailed pay breakdown from the yearly Compensation report. Of particular concern to me is whether the City getting the real equivalent of Department Manager in the "executive level technology leadership"? [The City has already received and will continue to receive executive level technology leadership from Civic Foundry. Civic Foundry leadership team is engaged for day-to-day issues, such as the implementation of Cityworks asset management system and have been available to City leadership 24x7 for critical issues over the past year. They helped us with the pandemic response by transitioning the organization to remote work including increasing required internet bandwidth and deploying new remote access solutions for employees who needed to abruptly start working from home. They enabled us to move our aquatics and CRC programs outside and supported streaming classes online. They addressed urgent time-sensitive issues as the recent fiber cuts, and they provide leadership in various capital projects like the fiber build out for City facilities and the Magical Bridge playground project. The Civic Foundry leadership team that the City works with have held executive level government leadership positions in public, private and non-profit sectors and we have been able to leverage their expertise in many areas. We feel confident we can expect the same in the new contract.](#)

Civic Foundry proposes that the Police Department will directly manage City IS staff (Programmer Analyst and IS Technician).

The 2020 City compensation report does not identify a Programmer Analyst position in Information Services. [The Programmer Analyst Management position is listed on page 6 of the report. It shows a total compensation of \\$178,510.](#)

The City Information Systems Technician had Total Compensation in 2020 of \$175,689.

Since the Information Services Manager position does not appear in 2020, we only have the 2019 Total Compensation of \$181,472 as a hint as to what the City might offer.

It never made sense to me to put Information Services under the Police Department. Was this anything more than availability of warm bodies?

Bonus Item: What happened to enhancing the Strategic Priorities

2020-2021 Workplan from the last Goals Workshop with project management standards (priorities, timelines, milestones, deliverables)?

Council Member Spring requested this but the City Manager replied that she could do that if that is what the Council wanted. She did not poll the Council Members at that time. Who takes the next step to see if other Council Members see this recommendation as appropriate?

The workplan is posted [here](#) with information on progress.

Thank you for your consideration, Doug Muirhead, Morgan Hill

[Note 1] Strategic Priorities 2020-2021 Workplan

Police & Information Technology (Fiscal Sustainability)

#37 Implement processes that enhance productivity and increase efficiencies such as helpdesk system, disaster recovery plan, remote assistance tools, and mobile device management system

[Note 2] EXHIBIT A SCOPE OF SERVICES

- Provide executive level technology leadership to the City organization · Provide equivalent of one server engineer resource · Provide equivalent of one on-site helpdesk technician for a live-answer helpdesk
- Provide tier-one troubleshooting of helpdesk requests · Provide daily maintenance and administration of the City's network · Provide daily maintenance and administration of the City's wired and wireless networks
- Administer and maintain the City's firewalls · Provide daily maintenance and administration of the City's servers (moves, adds, changes, upgrades, etc.) · Perform server patching · Provide network support for public safety systems and to City's IS technician
- Plan cooperatively with the City and begin remediation efforts of findings on security audits
- Scope network projects for time, resources, and funding · Draft hardware specifications for technology purchases and/or budget forecasting
- Draft budget proposals for future IT investments that maximize the City's return-on-investments or address critical infrastructure or security needs
- Draft a five-year strategic plan for technology

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City Council Meeting Item #9 Monthly Budget Update



April 21, 2021

Overview



- Monthly Budget Update
- Staff does not recommend any budget adjustments at this time

General Fund



- Changes reflect updated property tax and sales tax numbers
- Better numbers in property tax and sales tax are partially offset by reduced other revenue categories:
 - Recreation Services: Additional \$1.6 million loss
 - TOT: Additional \$0.5 million loss

Development Services



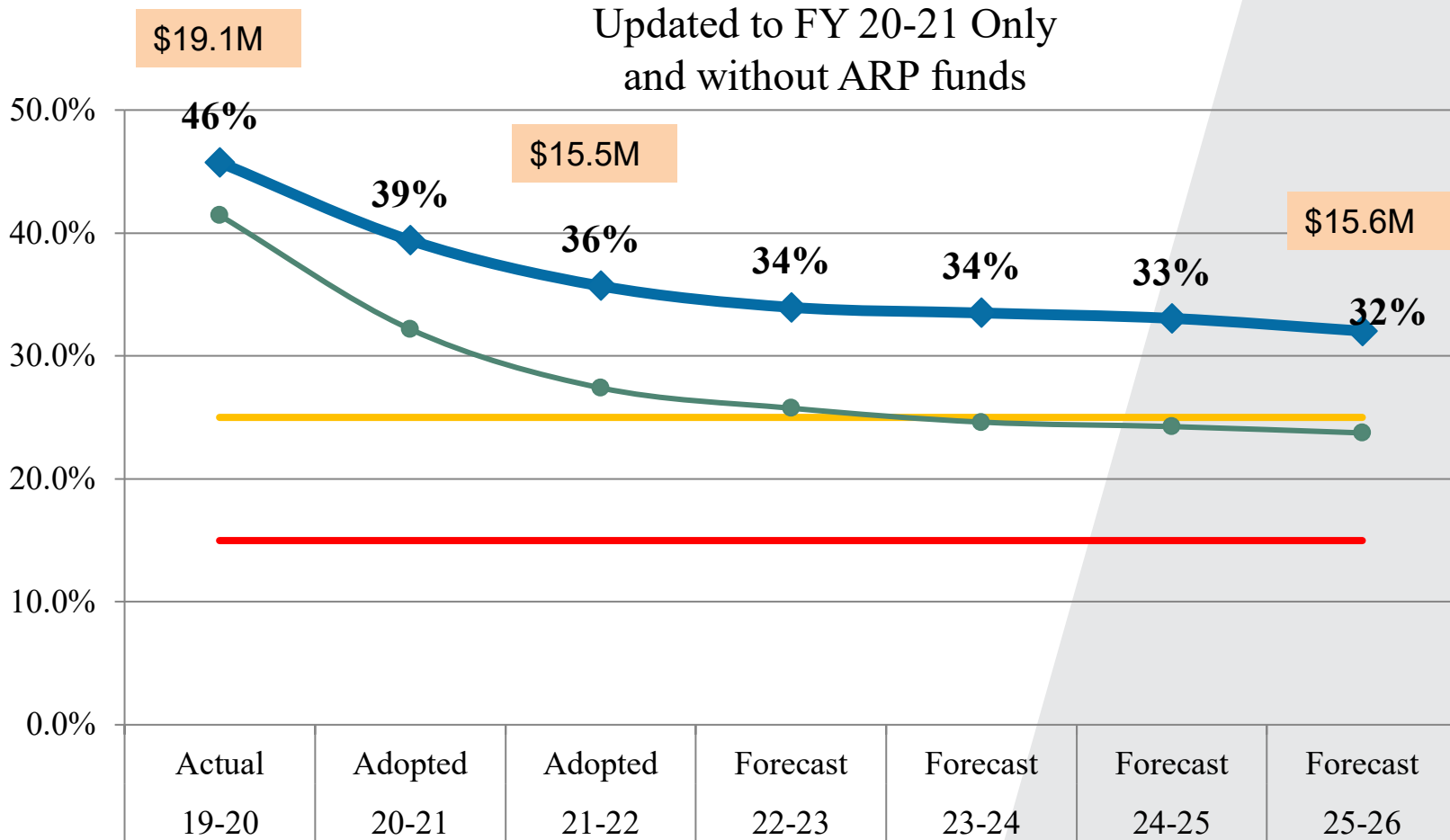
- Revenues are tracking higher than budget
- \$3.6 million received to date or 96% of budget (without \$1.0 million loan)

Enterprise Funds



- Expecting higher water revenue as well as increased wastewater flows due to higher levels of stay at home residents
- Number of accounts delinquent steady but with higher balance

Updated General Fund Forecast



GF Six Year Forecast April 21, 2021

Fund Balance Goal of 25% of Revenues

Fund Balance Minimum Level of 15% of Revenues

GF Six Year Forecast Budget Adoption June 17, 2020

Questions?



From: Matt Wendt <[REDACTED]>

Date: April 16, 2021 at 10:52:42 PM PDT

To: Rich Constantine <Rich.Constantine@morganhill.ca.gov>, Gino Borgioli <Gino.Borgioli@morganhill.ca.gov>, john.mckay@morganhill.ca.gov, Yvonne Martinez Beltran <yvonne.martinezbeltran@morganhill.ca.gov>, Christina.Turner@morganhill.ca.gov, Rene Spring <Rene.Spring@morganhill.ca.gov>, Shane Palsgrove <Shane.Palsgrove@morganhill.ca.gov>

Subject: Agenda Item 10: Vote NO to Marijuana Stores in Morgan Hill

Mayor, Councilmembers and City Manager,

I ask you to say NO when asked whether staff should bring back a future agenda item to vote on marijuana dispensaries in Morgan Hill.

I am speaking for the vast majority of parents with young children we know through our kids' schools, sports, activities, etc. Most of these parents are too busy working and raising kids to take the time to write or appear before to city council, debate on social media or take surveys.

I understand the City Council has decided twice already within the last few years that now is not the time to bring marijuana stores to Morgan Hill. I urge the council to reject a third attempt to bring it back for a vote that is procedurally questionable, but more importantly lacks substance as not enough time has elapsed since the last votes to see how the true impact on other cities. Initial returns are negative on marijuana dispensaries per my prior email that the Denver Post is unhappy with what's happened there and how it impacted their youth.

Morgan Hill City Councils throughout the years offered many positive programs for its residents and their kids; a beautiful state of the art swim center, outdoor sports complex, Magical Bridge Playground, Downtown Parks, Pony Baseball, Pop Warner Football, Morgan Hill's Girls' Spirit Soft Ball, Camps, Dance, Karate and more.

These programs are all designed for the purpose of keeping our kids healthy in mind, body, spirit and soul, and busy so they won't abuse drugs, get into trouble and hurt their shot at a good, meaningful and fulfilling life.

Unfortunately, these healthy programs for our youth would be undermined and circumvented if the city council approves of pot stores in Morgan Hill. It would send the message to our youth that smoking pot is acceptable and cool.

Why would we throw away all our city leaders have built up for a culture of drug abuse like we see in nearby Santa Cruz whose kids are drowning in drugs, drug addiction, mental illness, homelessness and drug overdose deaths, all because Santa Cruz long ago sent the message to their children that abusing drugs is acceptable and cool.

We should not promote to our youth the abuse of drugs, which marijuana is and is a gateway to other illegal drugs, heroin, fentanyl, cocaine among many others. I have personally witnessed growing up how marijuana was a gateway drug to other drugs. I knew a bright young man from my high school who died from an overdose, which was tragic for his family and the community.

Why would we want to put your community and her kids at risk of at minimum damaging their development and at worse ruining their futures when they become hopeless drug addicts? Especially when we know that marijuana's THC levels, that kids are abusing, have sky rocketed to over 80% and causing an epidemic in addiction to marijuana causing increased hospitalizations and treatments at places like the Beacon House in Pacific Grove and/or Narconon in Watsonville for treating their addiction and psychosis caused by marijuana abuse; a very expensive treatment [\$70K+] that takes over a year to cure in most cases.

Further, marijuana stores bring out-of-town crime to a city. District Attorneys and law enforcement officers say that there is increased crime due to marijuana stores. You can't tell me that the pot sold at these stores (including edibles that look like kids' candy like cigarette manufacturers used to do to our youth) won't end up in the hands of our kids or worse yet being vaped or ate during school hours, which teacher or parents won't be able to catch.

Finally, the only decent argument from the marijuana lobby and dispensary building owners is that the sales tax revenue will be meaningful (even then it wouldn't be worth it if it hurt our youth), but this is not true when you consider the history of marijuana dispensaries over-promising returns... without getting into specifics it doesn't put a dent in the overall budget issues. And that's before you factor in the other city officials you have to hire to police the dispensaries and surrounding areas and monitor a cash based business, which lends itself to all sorts of other problems as you could imagine.

Thank you for your consideration. This community pleads with you to do the right thing and don't bring back a future vote on marijuana stores in Morgan Hill at this time.

Best Regards,

Matt Wendt

“Be more concerned with your character than your reputation, because your character is what you really are, while your reputation is merely what others think you are.”

John Wooden



April

Developmental Asset #38

Self Esteem

Young person reports having a high self-esteem.



April

Complementary Asset #39

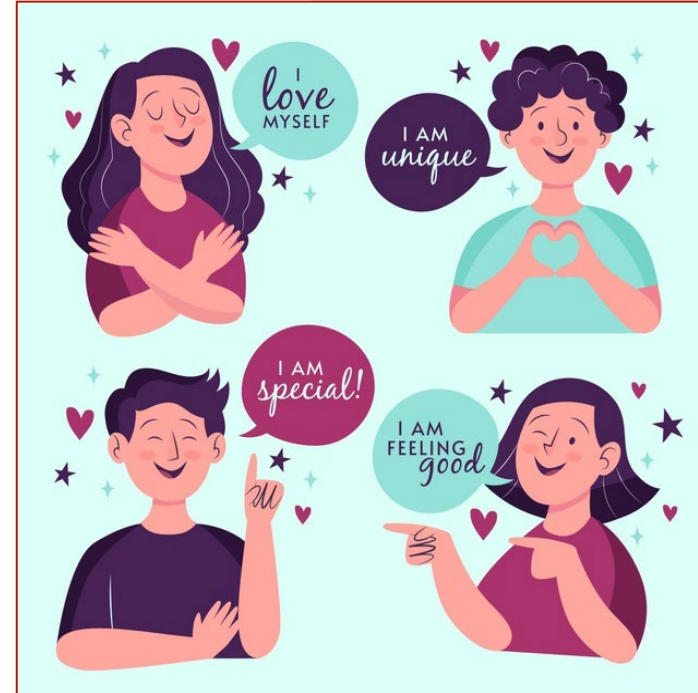
Sense of Purpose

Young person reports that "my life has a purpose."

Elizabeth Joseph, Active Member



- Self Esteem meaning:
- What activities make you feel the most confident?
 - ◆ Self-Acceptance
 - ◆ Talents & Strengths
 - ◆ Constructive Criticism
 - Progress

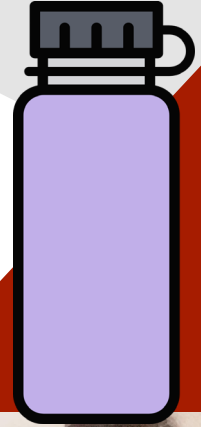


Ria Deshpande, Vice President



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