



# **An Alameda County Health Impact Assessment of Proposition 64**

*Assessing the health and equity impacts of  
adult-use cannabis legalization in  
Alameda County*



A report from the Cannabis Human Impacts Subcommittee of the Alameda County  
Interdepartmental Cannabis Working Group

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## Executive Summary

### I. Purpose

In 2016, California voted “yes” on Proposition 64, legalizing adult-use cannabis for those age 21 and over and bringing the state into new and uncharted territory. The history, variety of uses, and impacts associated with adult-use cannabis make it a unique substance to regulate, and Alameda County has been working to determine appropriate regulations for this new industry. Recognizing the interest across sectors in examining a broader set of human impacts associated with legalizing adult-use cannabis, and to ensure that issues of health and equity are considered up front by decision-makers, a Cannabis Human Impacts Subcommittee of Alameda County’s Interdepartmental Cannabis Working Group was established in 2018.

Members of the Cannabis Human Impacts Subcommittee include representatives from the County Administrator’s Office, Health Care Services Agency Office of the Agency Director, Behavioral Health Department, Public Health Department, Community Development Agency Planning Department, Sheriff’s Office, Public Defender’s Office, and the Probation Department. The Subcommittee elected to use Health Impact Assessment (HIA) as a method to identify the potential impacts that Proposition 64 could have on health and equity in Alameda County and to recommend ways for decision makers to minimize risks and capitalize on opportunities to improve health for communities in Alameda County.

An HIA is not intended to be an exhaustive study, but rather to bring the best available research together with qualitative and quantitative data to understand the potential impacts, both positive and negative, of a policy or plan. HIA also aims to address the social determinants of health, and/or the structures and systems that are responsible for the conditions in which people live, and that are shaped by the distribution of money, power, and resources at global, national, and local levels.

The Alameda County HIA of Proposition 64 looks broadly at the ways in which the legalization of adult-use cannabis will affect:

- Health
- Youth and schools
- Land use and regulations
- Public safety
- Criminalization, and
- Economic opportunity

Although Proposition 64 legalizes cannabis use for adults, the Cannabis Human Impacts Subcommittee and other Alameda County stakeholders were interested in examining the potential unintended impacts of Proposition 64 on youth and schools. However, since medical cannabis was legalized more than two decades ago under California Proposition 215, the HIA does not focus on the impacts of medical cannabis.

## II. Main Findings

### Health

- More research is needed to understand the health risks and benefits associated with adult-use cannabis.
- New points of entry for referring and engaging youth and adults in substance abuse treatment and services are needed.

### Youth and Schools

- Research shows that rates of cannabis use among youth have remained relatively stable since legalization of adult use cannabis.
- While many youth are not using cannabis, its use has become more normalized.
- Youth are inundated with advertisements about cannabis consumption.
- For many youth, abstinence only messaging is ineffective.

### Land Use and Regulations

- Regulations imposed on cannabis businesses pose barriers to entry and hinder efforts to promote equity in the cannabis industry.
- The location and density of cannabis businesses have the potential to disproportionately burden certain populations.

### Public Safety

- Crimes surrounding legal cannabis businesses in unincorporated Alameda County remain low since legalization.
- Illegal cannabis growing operations can have significant impacts on the health and safety of surrounding land and communities.

### Criminalization

- There is widespread misunderstanding about the laws surrounding cannabis and the discrepancies between local, state, and federal policy.
- While there has been a general decrease in cannabis-related arrests in areas which have legalized cannabis, people of color still disproportionately come into contact with the criminal justice system for cannabis-related offenses.
- Lack of safe and legal places to consume cannabis disproportionately impacts low-income individuals and people of color.

### Economic Opportunities

- Legal cannabis businesses continue to face competition from the illegal market.
- Access to economic opportunities in the cannabis industry are limited, particularly for those with limited financial resources and those with a felony conviction record.
- Cannabis Equity Programs currently face barriers to promoting equitable access to the cannabis industry, including for communities adversely impacted by previous criminalization of cannabis activities.

### III. Recommendations

The following recommendations respond to the HIA findings, and reflect input from members of the Cannabis Human Impacts Subcommittee, key informant interviews and focus groups, and available research and literature. They apply to a variety of stakeholders including (but not limited to) the Alameda County Board of Supervisors, City Administrators, school districts and school administrations, service providers and law enforcement.

- Support public education campaigns that promote understanding about current cannabis laws and policies, including where there are discrepancies at the local, state and federal levels.
- Support:
  - Promising models of cannabis education for youth that focus on the health impacts of cannabis use and that promote self-agency. Campaigns should avoid fear-based messaging.
  - Training for adults that work with youth (including providers, educators and parents) about the impacts of cannabis and effective ways to connect with youth about issues related to cannabis use.
- Continue to adjust cannabis regulations and tax and fee structures to encourage legal participation in the industry, and to offer equitable opportunities for residents to benefit from access to the cannabis industry.
- To address the decrease in treatment and service referrals from the criminal justice system, develop new and collaborative methods and systems to identify and engage residents in need of substance abuse treatment and services.
- Develop and implement comprehensive cannabis equity programs to lower barriers to entry into the cannabis industry, particularly for residents who have been adversely impacted by policies that previously criminalized cannabis. Equity programs should reflect the unique history, context and populations of the local jurisdiction being served, as well as lessons learned from successes and challenges of other cannabis equity programs throughout the state and country.
- Minimize the time that people eligible under Proposition 64 have to wait to have their criminal records expunged, and to be notified once the record has been expunged; and allocate resources for public education campaigns that educate residents about their rights and about the impacts of criminal conviction records and expungement processes.
- In order to track the impacts of Proposition 64 over time, consistent and disaggregated data related to the impacts of Proposition 64 should be collected from schools, law enforcement and other agencies. This information should be centralized, made accessible and collected regularly to show disparities such as by race/ ethnicity, age, gender identity and sexual orientation, so that trends can be identified.

## I. Background

Adult-use cannabis was legalized in California when voters approved Proposition 64 in 2016; the legislation went into full effect on January 1, 2018.<sup>1</sup> The proposition made it legal for adults 21 years of age and older to possess, buy, and grow cannabis for non-medical purposes and established the basis of a legal framework for commercial cannabis activities throughout the state.<sup>2</sup> State and local governments have been working since 2016 to implement Proposition 64 and determine appropriate regulations for the new commercial cannabis industry in California.

Since 1996 when California became the first state to legalize medical cannabis under Proposition 215, it has been regulated as a medicine.<sup>3</sup> After many decades when the use of cannabis was criminalized, the implementation of Proposition 64 establishes that cannabis is now regulated as a substance for non-medical purposes, which is referred to in California as “adult-use” cannabis. However, both medical and adult-use cannabis is still illegal under federal law and is classified as a Schedule 1 drug under the Controlled Substances Act, creating a conflict between California’s Proposition 64 and the federal government. **The history, variety of uses, and impacts associated with cannabis make it a unique substance to regulate.** Many are quick to make comparisons between cannabis and other legal substances such as tobacco and alcohol, but existing regulations do not fit the nature of cannabis, leaving states and local jurisdictions where cannabis is legal to craft new policies which reflect the needs and conditions of their local communities.

Legal adult-use of cannabis brings potential economic opportunity for Californians, including for communities that have been disproportionately burdened by policies which previously criminalized cannabis activities. Regulations associated with Proposition 64, however, can also pose barriers to entry into the cannabis industry, preventing economic opportunities from being accessible and equitable. Legalization of adult-use cannabis also brings potential risks to health, and these impacts may affect populations in Alameda County disproportionately.<sup>1</sup> **Alameda County stakeholders have worked across sectors to develop and implement regulations and ordinances to align with Proposition 64, and there is significant interest in examining a broader set of human impacts associated with legalizing adult-use cannabis, and to ensure that issues of health and equity are considered up front by decision-makers. Stakeholders are also interested in preparing county decision-makers and agencies within the county to apply for statewide cannabis tax revenue funds that are soon to be made available to local jurisdictions.** These funds could be applied to implement mitigation measures that would help alleviate adverse impacts and maximize the benefits of Proposition 64.

When Proposition 64 was implemented in 2018, the Alameda County Board of Supervisors Transportation and Planning Committee raised questions about the human impacts of the legalization of adult-use cannabis. Similar questions were raised by the County Interdepartmental Cannabis Working

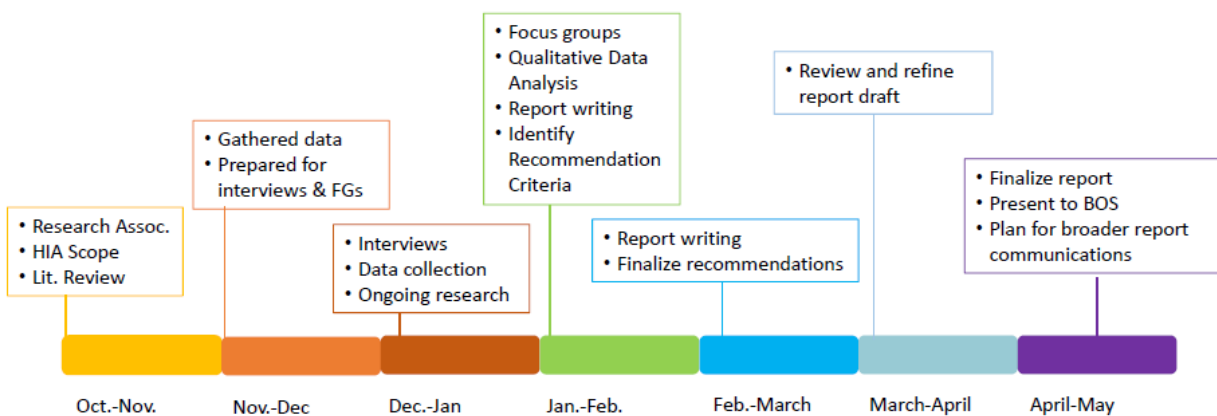
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<sup>1</sup> Note that many of the HIA findings align with the recently released findings of the Alameda County Youth Cannabis Education Campaign Baseline Survey. Social Changery LLC. March 2019.

Group, which subsequently established a Cannabis Human Impacts Subcommittee to examine the human impacts of Proposition 64 in Alameda County. The Cannabis Human Impacts Subcommittee was formed in May 2018 and has met monthly since that time. The Subcommittee is comprised of representatives from several County agencies and is convened by Kimi Watkins-Tartt, Director of the Alameda County Public Health Department and Pete Coletto, Principal Administrative Analyst from the Alameda County Administrator's Office. Members of the Subcommittee include representatives from the County Administrator's Office, Health Care Services Agency Office of the Agency Director, Behavioral Health Department, Public Health Department, Community Development Agency Planning Department, Sheriff's Office, Public Defender's Office and the Probation Department.

After learning about different methodologies for analysis, the Cannabis Human Impacts Subcommittee elected to conduct a Health Impact Assessment (HIA) of the impacts of Proposition 64. The Subcommittee served as the Steering Committee for the Cannabis HIA, which was conducted between October 2018 and May 2019. The HIA was managed by a Public Health Department staff person and a Research Associate. Human Impact Partners, a national nonprofit organization specializing in Health Impact Assessment, provided technical assistance.

### Alameda County Proposition 64 HIA Timeline of Activities



## II. Health Impact Assessment Methodology

**A Health Impact Assessment (HIA) brings together scientific data, health expertise and public input to identify the potential—and often overlooked—health effects of new policies and programs.** HIAs offer practical recommendations for ways to minimize risks and capitalize on opportunities to improve health, providing decision makers and key stakeholders with information which can help promote community health.<sup>4</sup>

In order to assess how policies and projects impact health outcomes and health inequities, Health Impact Assessments address the social determinants of health, or the structures and systems that are responsible for the conditions in which people live, and that are shaped by the distribution of money, power and resources at global, national and local levels.<sup>5,2</sup> For the purposes of this HIA equity is defined as “fairness and justice in policy, practice and opportunity consciously designed to address the distinct challenges of non-dominant social groups, with an eye to equitable outcomes.”<sup>6</sup>

The Alameda County HIA of Proposition 64 looks broadly at the ways in which the legalization of adult-use cannabis will affect:

- Health
- Youth and schools
- Land use and regulations
- Public safety
- Criminalization, and
- Economic opportunity

In addition to reviewing published literature and research, 22 key informant interviews were conducted with individuals representing a diverse set of key stakeholders in Alameda County affected by Proposition 64. In addition, six focus groups were conducted with youth in grades 8–12 from different jurisdictions within Alameda County, and one focus group was conducted with Student Services Directors from school districts throughout the county. *(See Appendix D for more detail about interviews and focus groups conducted for this HIA)*

The geographic focus of this HIA is Alameda County, and where possible this report includes local Alameda County data. *(See Appendix E for more detail about the quantitative data collected for this report)* Where possible this report also includes data and information for all the jurisdictions within Alameda County’s boundaries, but in some cases the HIA specifically profiles opportunities and impacts in the unincorporated areas of Alameda County, which the Board of Supervisors has jurisdiction over in relation to land use decisions (Planning Department) and law enforcement (Alameda County Sheriff’s Office).

While research referenced in this report includes studies in states such as Colorado, Oregon and Washington where adult-use cannabis has been legalized, it should be noted that laws and policies related to the legalization of cannabis differ from state to state. Additionally, California’s unique history and population also differs from that in other states where research on the impacts of cannabis has been conducted.

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<sup>2</sup> According to County Health Rankings, 20% of health outcomes are determined by health care, 30% by health behaviors, 40% by socioeconomic factors, and 10% by the physical environment. (County Health Rankings & Roadmaps. <http://www.countyhealthrankings.org/explore-health-rankings/measures-data-sources/county-health-rankings-model>)



**The Alameda County Health Impact Assessment of Proposition 64 brings the best available research about the impacts of the legalization of adult-use cannabis together with quantitative and qualitative data about existing conditions in Alameda County to understand the potential impacts, both positive and negative, that Proposition 64 could have and will continue to have on health and equity in Alameda County.**

The scope of the HIA is focused on the impacts of the legalization of adult-use cannabis and does *not* examine the merits of medical cannabis or the impacts of Proposition 215. Since medical cannabis was legalized more than two decades ago, medical cannabis programs have been operational throughout the state. This assessment intends to examine the impacts of the recent legalization of adult-use cannabis to contribute to an understanding of the potential impacts of this new policy in California and help to guide future policy making in this currently uncharted territory.

Although California's Proposition 64 legalizes cannabis for use by adults 21 and older, the Cannabis Human Impacts Subcommittee and key Alameda County stakeholders affected by Proposition 64 were interested in understanding whether the new law has had or could have any unintended impacts on youth and schools. The Youth and Schools section of the HIA aims to highlight the perspectives of youth and adults working with youth in schools as they relate to the legalization of adult-use cannabis.

The findings presented in this report highlight where there are disproportionate adverse impacts of Proposition 64 and where there are unintended advantages for some populations. The report does not attempt to explain the causes of disparities identified, but brings attention to the need for further exploration and study to understand why certain populations disproportionately bear the burden of adverse impacts associated with cannabis and cannabis-related policies.

This report concludes with a list of recommendations that respond to the HIA's findings and that apply to a broad variety of stakeholders. The recommendations reflect input from members of the Cannabis Human Impacts Subcommittee, key informant interviews, and focus groups conducted for this HIA.

## III. Health Impact Assessment Findings

### A. Health

National and statewide data provide insights into cannabis use and perceptions of health risks

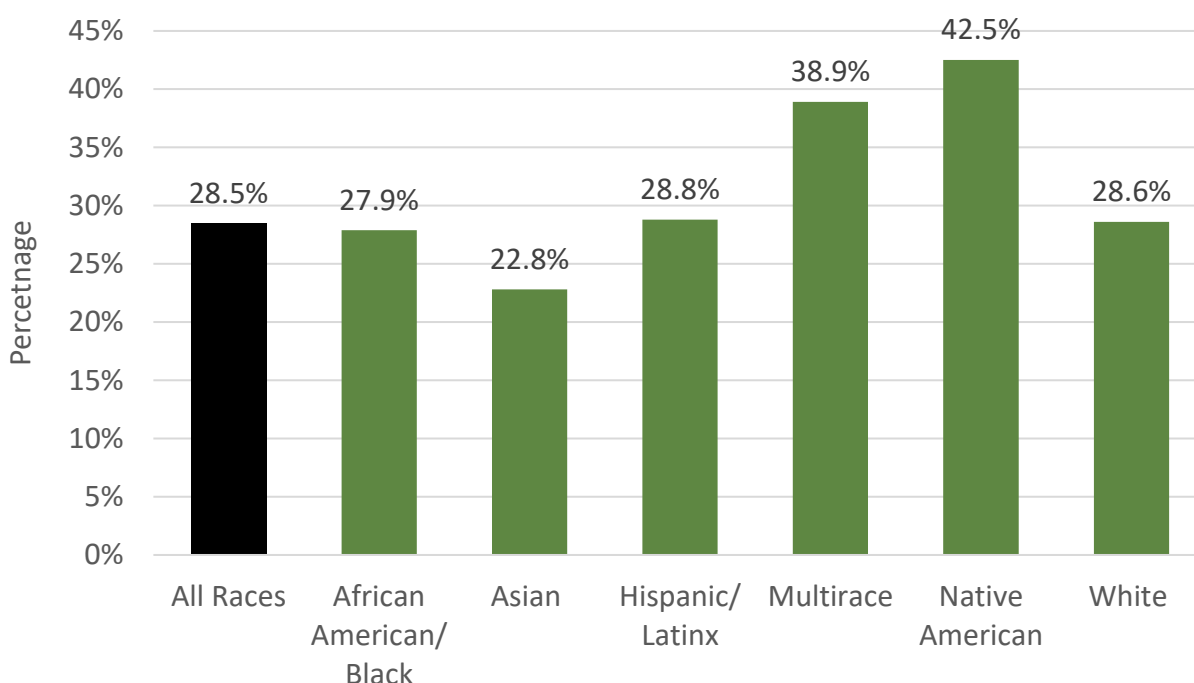
- In 2017, the National Survey on Drug Use and Health found 22 percent of respondents between the ages of 18 and 25 reported they had used cannabis in the past month compared to 7.9 percent of adults age 26 or older and 6.5 percent of youth ages 12 to 17.<sup>7</sup>



- Data from the 2017 California Health Interview Survey showed 28 percent of California adults (18 and over) reported using cannabis within the past month.
- In 2002, the National Survey on Drug Use and Health found six percent of respondents (age 12 and older) perceived no risk was involved with smoking cannabis once or twice a week; in 2017 this number increased to 19 percent.<sup>8</sup>

Figure 1 below shows rates of cannabis use among California adults are similar for Hispanic/Latinx, Whites and African American/Black residents, and that they are higher for Native Americans and those of two or more races, but lower for Asians (*See additional detail in Appendix E*)

**Figure 1: Cannabis Use Within the Past Month, Adults 18+ Years, California. 2017**



Source: CAPE, with Data from California Health Interview Survey, 2017

**More research is needed to better understand the health risks and benefits associated with adult-use cannabis**

**It should be noted that research on the effects of adult-use cannabis on health outcomes (both positive and negative) is limited.** Much of the existing research and literature is focused on medical cannabis and was published before the advent of adult-use cannabis legalization. More robust research is needed to fully understand how adult-use cannabis impacts health, especially as methods for cultivating and manufacturing cannabis change and the adult-use legal cannabis industry continues to grow.

Cannabis can be consumed in many ways, including smoking, vaping, eating, or applying it to the skin. (*See Appendix B for a list of common cannabis-related terms*) Smoking in any form poses a risk to lung

health, and this is true of cannabis - which is consumed commonly by smoking, heating, or vaping.<sup>9</sup> Research shows smoking cannabis daily or near daily can cause chronic bronchitis, inflammation of airways, and wheezing or shortness of breath.<sup>10</sup> There is conflicting research about whether smoking cannabis is associated with lung cancer, chronic obstructive pulmonary disease, emphysema, or respiratory infections; however, evidence suggests smoke from cannabis combustion contains many of the same toxins, irritants, and carcinogens as tobacco smoke.<sup>11,12</sup> Additionally, secondhand cannabis smoke has been shown to adversely affect cardiovascular health and impair blood vessel function, though research in this area is limited.<sup>13</sup>

Cannabis use has also been found to be associated with cognitive effects. There is substantial evidence cannabis use can impair memory (which can last days past the initial period of intoxication) and induce acute psychotic symptoms.<sup>14,15</sup> Tetrahydrocannabinol (THC), an active ingredient in cannabis, is known to cause psychoactive effects on cognition. This is notable, because research has found the THC content in adult-use cannabis products tripled between 1995 and 2014, from 4 percent to 12 percent.<sup>16</sup> This increase is attributed to changes in cultivation techniques and increased competition in the cannabis market.<sup>17</sup> Concentrated cannabis products used for vaping and dabbing can contain more than 90 percent THC.<sup>18</sup> Edible products infused with cannabis also contain higher amounts of THC, but the amount is often difficult to measure. **More research and testing are needed to understand the impacts this significant change in THC content could have on human health and cognition.**

**People consume cannabis for a variety of reasons; for some it is purely social, while for others it is used as medicine.** The medicinal uses of cannabis were widely discussed by a broad base of stakeholders when the legalization of medical cannabis was being considered in California. The use of medical cannabis was legalized in California in 1996 under Proposition 215, allowing patients with a doctor's recommendation to possess and cultivate cannabis for personal medical use. Physicians recommend medical cannabis to patients for a variety of reasons including chronic pain, anxiety, cancer, symptoms associated with HIV/AIDS, and arthritis.<sup>19</sup> Others use cannabis to cope with stress, anxiety, and other mental health conditions. Some research has shown that allowing legal access to cannabis may help to reduce opioid overdose deaths and untreated opioid use disorders.<sup>20, 21</sup>

As with other regulated substances, cannabis use is also associated with a risk of addiction and abuse. It is estimated that close to nine percent of cannabis users become addicted and this rate increases to 25 percent for those who use daily.<sup>22</sup> Furthermore, Cannabis Use Disorder is also a risk. Cannabis Use Disorder is described as "the continued use of cannabis despite clinically significant distress or impairment which usually includes: a strong desire to take cannabis, difficulties in controlling its use, persisting in its use despite harmful consequences, a higher priority given to cannabis use than to other activities and obligations, increased tolerance, and sometimes a physical withdrawal state."<sup>23</sup>

Research demonstrates cannabis use can adversely affect the health of certain populations including youth, individuals with certain mental health conditions, and pregnant people and their children; however, additional research is needed to better understand these impacts

Research shows regular cannabis use during adolescence can have cognitive impacts such as harming memory, affecting learning ability, and capacity for attention.<sup>24</sup> Studies suggest that cannabis use at a young age (under 25 years old) when the brain is still developing could lead to permanent adverse impacts, and that risks linked to cannabis use tend to be more significant and persistent in adults who started using during adolescence.<sup>25</sup> Other adverse impacts of cannabis use on youth include:

- An association with impaired school performance.<sup>26</sup>
- Increased addiction to cannabis and difficulty in quitting cannabis use associated with early-onset cannabis use.<sup>27</sup>

Cannabis use is highly discouraged during pregnancy, though more robust research is needed to understand its impact on newborns. Research has shown that cannabis use during pregnancy can lead to adverse outcomes for children such as low birth weight, impaired cognitive function and attention, increased depression symptoms, and decreased academic ability as a child develops.<sup>28, 29, 30</sup> Some of the effects of cannabis use during pregnancy may not present themselves until adolescence.<sup>31</sup> Despite these risks, rates of cannabis use among pregnant people are on the rise in at least some parts of the state. From 2009 to 2016, cannabis use among pregnant females 12 years or older insured with Kaiser Permanente Northern California increased from 4 percent to 7 percent.<sup>32</sup> A recent study conducted in Alameda County by the Social Changery found that 25 percent of youth (between the ages of 14 and 25) surveyed did not know that cannabis use is not safe during pregnancy.<sup>33</sup> There is not enough data to discern how cannabis used by breastfeeding parents might affect newborns, but it is discouraged.<sup>34, 35</sup>

Research about the impact of cannabis use on mental health is divided and limited. For example, a 2017 study conducted by the National Academy of Sciences concluded “cannabis use is likely to increase risk of schizophrenia and other psychosis; the higher the use, the greater the risk.”<sup>36</sup> A related study found cannabis and its link to psychosis “may be multidirectional and complex”, and another study suggested those who suffer from schizophrenia are more likely to cope by self-medicating with cannabis.<sup>37, 38</sup> More in-depth study is needed to understand the impacts that adult-use cannabis might have on mental health, especially for those with existing mental health conditions.

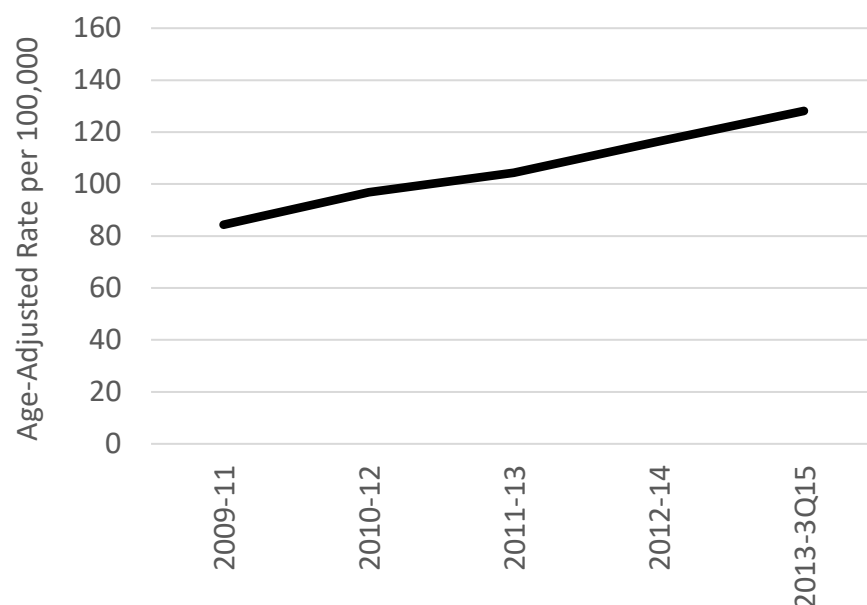
States where adult-use cannabis has been legalized have seen increases in cannabis-related hospitalizations and emergency department visits, though they remain relatively uncommon

Between 2012 and 2016, annual rates of cannabis-related emergency department (ED) visits went up 52 percent in Colorado, which legalized recreational cannabis in 2014.<sup>39</sup> However, hospitalizations related to cannabis made up less than one tenth of one percent of all hospitalizations in Colorado in 2014.<sup>40</sup> A recent

study found Colorado’s cannabis-related ED visits were more frequently attributable to inhaled cannabis than to edible cannabis (which comprised about 10.7 percent of the state’s cannabis-related ED visits in 2016), although edibles are associated with more acute psychiatric visits.<sup>41,42</sup> Central Oregon has also seen a large increase in ED visits due to cannabis poisoning.<sup>43,3</sup>

As Figure 2 shows, rates of cannabis-related hospitalizations in Alameda County increased between 2009 and 2015. It should be noted that for the vast majority of people with a cannabis-related hospitalization in Alameda County, cannabis is not the *primary* diagnosis or reason for visit. For example, between 2013 and 2015 only 22 hospital visits in Alameda County had a *primary* diagnosis related to cannabis, compared to 5,687 visits which were assigned an *associated* diagnosis related to cannabis (meaning it was anywhere in diagnosis codes 2-25). In these cases (associated diagnosis related to cannabis), 50 percent of the primary diagnoses were for mental disorders. It is worth noting that hospital visits with an associated diagnosis related to cannabis constitute approximately one percent of all hospitalizations in a given year in Alameda County. (For more detail see Appendix E)

**Figure 2: Cannabis Abuse- and Dependence-Related Hospitalizations, Alameda County**



Source: CAPE, with data from OSHPD 2009 – 3Q2015

**In Alameda County African American/Black and individuals 15-24 years of age have the highest rates of cannabis-related hospitalizations. Because African American/Black individuals do not have a higher rate of cannabis use than individuals of other race/ethnicities, more study is needed to understand the factors that may be contributing to this elevated rate of cannabis-related hospitalizations.**<sup>44</sup> (See Appendix E for more detail.)

<sup>3</sup> Oregon’s Measure 91, passed in 2014, legalized non-medical cultivation and uses of cannabis

## New points of entry for referring and engaging youth and adults in substance abuse treatment and services are needed

Prior to the implementation of Proposition 64 penalties for cannabis related activities for juveniles and adults were similar; an infraction for possession of under 1 ounce of cannabis and a misdemeanor for possessing over one ounce of cannabis (which could result in an arrest).<sup>45, 46</sup> Under Proposition 64, when a minor (age 18 and under) commits a cannabis-related violation, they are given a citation, fined up to \$100 and sentenced to free drug education, counseling and/or community service for cannabis-related offenses.<sup>47, 48</sup> Records for cannabis offenses will be destroyed and sealed two years after a minor turns 18.<sup>49</sup> Adult-use cannabis is now legal for those 21 years of age and over, and penalties for cannabis-related violations have been reduced for adults.<sup>50</sup>

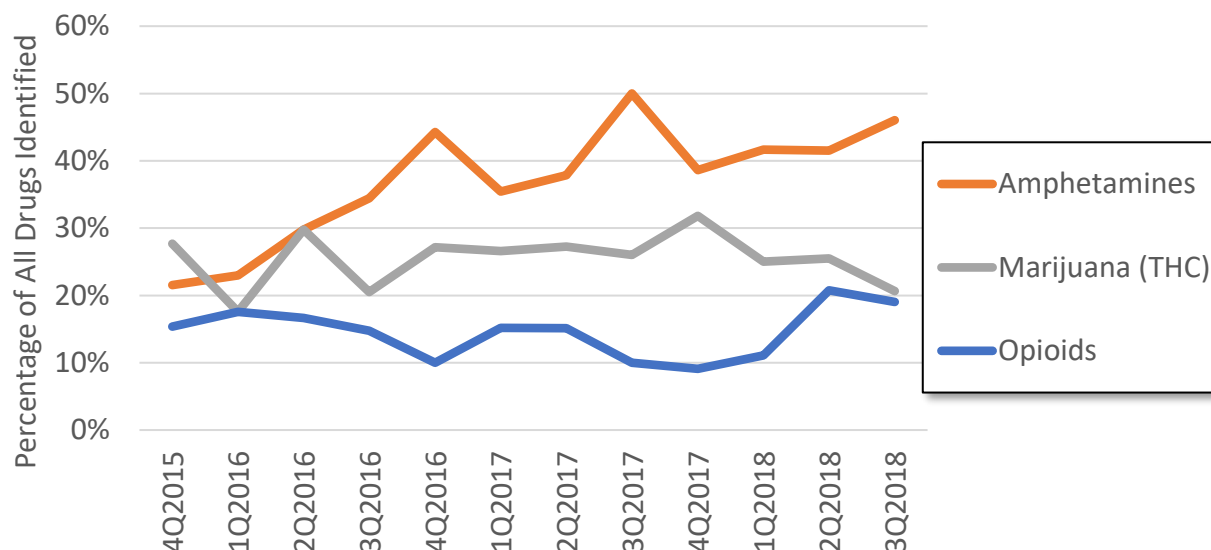
Prior to Proposition 64 and Proposition 47,<sup>4</sup> many California youth and adults accessing substance abuse treatment and counseling services had been referred through contact with the criminal justice system as behaviors associated with substance abuse disorders often led to arrest and incarceration. **An unintended impact of the decriminalization of cannabis activities under Proposition 64 has been a decrease in referrals to treatment programs and service providers.** One school-based provider interviewed for this HIA reflected that in the recent past she has seen referrals of youth to treatment programs drop from between 10 -12 per week to 1-2 per week.

Figure 3 below from the Adult Drug Court (also referred to as the Collaborative Courts) in Alameda County illustrates that cannabis is one of the three most frequent drugs for which individuals come into contact with these courts. A Principal Analyst from the Alameda County Collaborative Court System interviewed for this HIA indicated that individuals referred to treatment services through the drug courts are often using cannabis even if it is not considered their primary drug problem.

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<sup>4</sup> California Proposition 47 recategorized some nonviolent offenses as misdemeanors rather than felonies.

*Figure 3: Most Frequent Drug Problems in Drug Court, As Proportions of Total Primary, Secondary, and Tertiary Drugs, Alameda County*



Source: CAPE with data from Alameda County Drug Court

Providers in Alameda County (for example, the Delinquency Prevention Network) are working to adapt to the new realities of Proposition 64 and 47 and to ensure that residents in need, including those who may be reluctant to treatment for a substance abuse disorder, are identified and engaged appropriately so that they are able to access needed treatment and services. **Finding sources for referrals from the community that do not require contact with the criminal justice system could further decriminalize and destigmatize substance use disorders.** The process of creating and adjusting to new systems is time and resource-intensive, and those who may have otherwise been connected to services could be left unidentified in the interim.

**“We want to create a system that is not focused on criminalization but on identifying and directing those [youth] in need to services and treatment providers.”**

**– Alameda County Youth and Family Services Director**

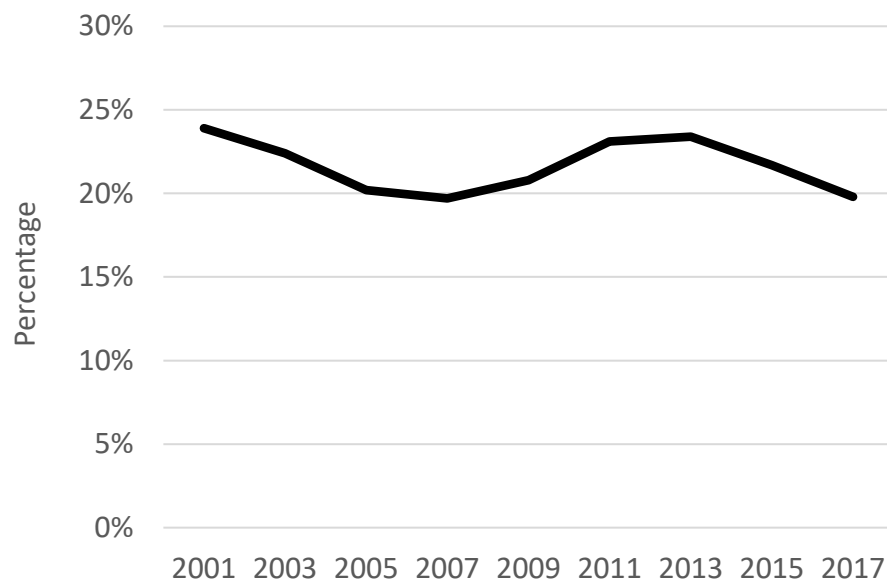
Although California’s Proposition 64 legalizes cannabis for use by adults 21 and older, the Cannabis Human Impacts Subcommittee and key Alameda County stakeholders affected by Proposition 64 were interested in understanding whether this new law has had or could have any unintended impacts on youth and schools. The Youth and Schools section of the HIA aims to highlight the perspectives of youth and adults working with youth in schools as they relate to the legalization of adult-use cannabis.

A word cloud of marijuana-related terms. The most prominent words are 'marijuana', 'weed', 'dope', 'fire', 'ganja', 'flower', 'pot', 'marijuana', 'weed', 'trees', 'dope', 'tree', 'cannabis', 'reefer', 'grass', 'loud', 'reggie', 'gateway', 'drug', 'leaf', 'bag', '420', 'jane', 'gas', 'dank', 'kush', 'mota', 'doja', 'mary', 'thutthut', 'peyote', 'maryjane'.

Research shows that rates of cannabis use among youth have remained relatively stable since legalization of adult-use cannabis

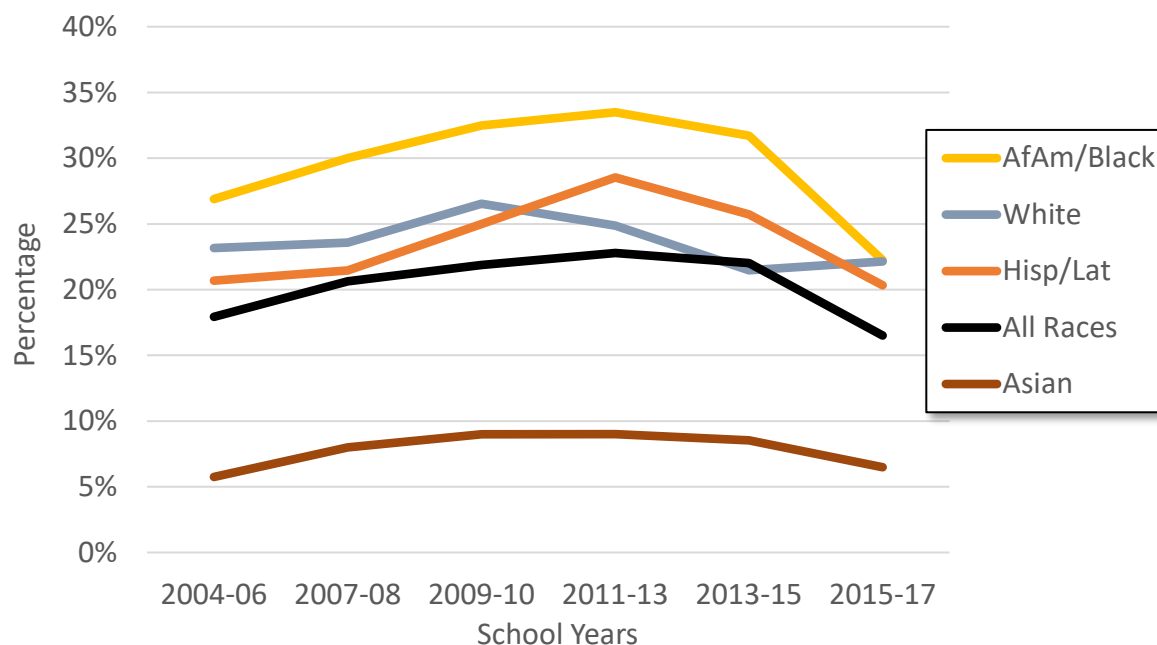
Figure 5 below shows data collected by the Youth Risk Behavioral Surveillance System which indicates that self-reported cannabis use among 11<sup>th</sup> graders throughout the United States remained relatively stable between 2005 (21 percent) and 2017 (22.6 percent). In Alameda County self-reported cannabis use rates were lower than the national rates, with 16 percent of 11<sup>th</sup> graders reporting past month cannabis use in 2015-17.



*Figure 5: Prevalence of Current Cannabis Use, 11<sup>th</sup> Graders, United States*

Source: CAPE, with Data from Youth Risk Behavioral Surveillance System 2005 – 2017

Data from the California Healthy Kids Survey shown in Figure 6 indicates that after considerable fluctuations over time, rates of reported cannabis use among 11<sup>th</sup> graders in Alameda County are currently similar for most races, with the exception of Asians, who report markedly lower rates of cannabis use.

*Figure 6: Used Cannabis in Past 30 Days, 11th Graders, Alameda County*

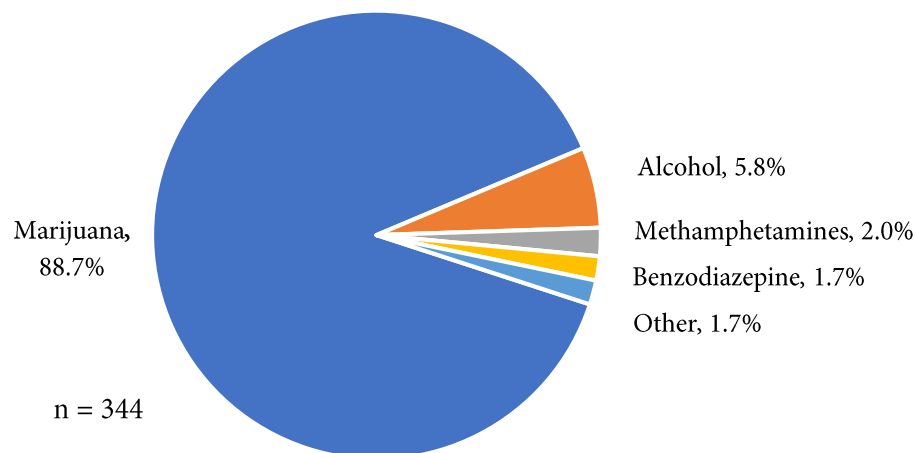
Source: CAPE, with data from California Healthy Kids Survey, 2004 – 2017

Data from Colorado, Washington, and Alaska where recreational cannabis is legal for adult-use indicates that past month cannabis use among adolescents has remained stable before and after legalization and resembles rates at the national level.<sup>51</sup>

### Many youth admitted to substance abuse treatment programs are being treated for cannabis use

In fiscal year 2014 – 2015 the California Department of Health Care Services reported that 78 percent of youth under 18 who underwent residential drug treatment for a substance use disorder in state facilities did so for cannabis.<sup>52</sup> In Alameda County the majority of youth being admitted to substance abuse treatment programs are being treated for cannabis use. Figure 7 illustrates that **in FY2017-18, 88.7 percent of youth ages 12 to 17 who were admitted to substance abuse treatment programs supported by Alameda County were admitted for a cannabis use disorder.**<sup>53 5</sup>

*Figure 7: Primary Drug Treated by Alameda County Behavioral Health Care Services, 12 - 17 Years, Alameda County*



Source: CAPE, with Data from Alameda County Behavioral Health Care Services (BHCS), FY2017 – 2018

### While many youth are not using cannabis, its use has become more normalized

In focus groups and key stakeholder interviews, youth and professionals conveyed their observations that cannabis use is common among youth throughout the county. However, a recent study conducted by the Social Changery found that 60 percent of Alameda County youth surveyed had never tried cannabis in any form.<sup>54</sup>

<sup>5</sup> Note that this data represents youth served in Alameda County Behavioral Health Care Services outpatient treatment programs that serve only some of the schools in Alameda County. A current list of adolescent Substance Abuse Disorder treatment programs can be found at <http://www.acbhcs.org/adolescent-youth-substance-abuse/>

Stakeholders interviewed for this HIA agreed that cannabis use among youth was already an issue prior to the implementation of Proposition 64, though the climate leading up to and since legalization has continued to promote acceptance of cannabis use in general, which may have amplified the issue of youth cannabis use. Staff and students also agree cannabis use is not isolated among certain groups of students but is common across youth of different cultures, races, and social groups. **Youth in grades 8 through 12 who participated in focus groups across Alameda County shared their perceptions that legalization has not led to more youth consumption, but it has made youth feel more comfortable being public about their cannabis use.**

**“It’s not the legalization of weed, it’s the normalization of weed.”**

**– Alameda County youth focus group participant**

Based on perspectives from youth in focus groups discussions, smoking and vaping seem to be the most prevalent ways youth consume cannabis, but youth also mentioned an increase in consumption of edible cannabis products. Some youth in the focus groups convened for this HIA expressed feeling concerned about consuming shared food items at school for fear of accidentally consuming cannabis.

**According to youth focus group participants, Proposition 64 does not appear to have made cannabis significantly more accessible to youth.** Youth we spoke to indicated they have no trouble accessing cannabis (including purchasing cannabis in school, from smoke shops, via social media, and from adults of legal age), and this was the case prior to Proposition 64 as well. However, youth did share their observations that those selling cannabis to youth have more (quantity and variety) cannabis products to sell now that cannabis is legal for adults. For example, youth mentioned it’s becoming more common for students to use “vape pens” (small vaping devices) to consume cannabis at school compared to in the past where most students smoked the actual cannabis flower (using a joint or pipe).

### Perceived health risk associated with cannabis use among youth has declined

**“It’s not that serious, it’s not like you have a gun”**

**– Alameda County youth focus group participant**

In 2009, 52 percent of high school seniors nationally thought regular cannabis use was harmful, and by 2016 that number had decreased to 31 percent.<sup>55</sup> One of the concerns this trend raises is the lack of understanding young people may have about the specific risks cannabis use poses to their health. Most youth focus group participants we spoke to affirmed this, indicating that while youth are aware of some of the general risks (typically of smoking cannabis), perception of harm to their health is not a common deterrent to cannabis use. They also mentioned that since people do not overdose or have visibly severe impacts from using cannabis like they do from alcohol or other drugs, cannabis seems safer. It’s worth

noting that youth who had attended health classes with a specific curriculum and opportunities to learn about cannabis were more hesitant to use cannabis out of concern about its health impacts. **The availability of curricula or classes that expose students to the health impacts of cannabis use, or provide a place to discuss issues related to cannabis use, is inconsistent in districts and schools throughout the county.**

Many youth we spoke to for this HIA had never heard of Proposition 64 and didn't know adult-use cannabis had been legalized. Youth focus group participants shared their perceptions that even prior to Proposition 64 law enforcement often did nothing of consequence when they encountered youth using cannabis, and that this is still the case. Some youth were more fearful of the consequences of their parents finding out about their cannabis use than of being apprehended by law enforcement. Students in focus groups explained there is typically no repercussion for students who attend school under the influence of cannabis.

**“Teachers don’t even punish you. They say, ‘go outside and spray perfume on yourself’. I think they should be saying something more to the youth. How am I gonna let a student come into class all high?”**

**– Alameda County student and focus group participant**

### **Youth are inundated with advertisements about cannabis consumption**

Research has found that youth who view medical cannabis advertising are more likely to use cannabis and have a more accepting perception of it.<sup>56</sup> One of the striking takeaways from the focus groups conducted with youth for this HIA was the ubiquity and intensity with which youth are exposed to advertisements promoting cannabis.

**In addition to billboards advertising cannabis businesses and posters advertising cannabis conventions, young people are inundated with messages about cannabis on social media and in the music they listen to.** On social media sites like Instagram and Snapchat, youth may be seeing or posting images of their friends (or people they are influenced by) using and selling cannabis. These sites' algorithms also often end up filling their media feeds with cannabis advertisements. To this end, youth focus group participants indicated that in addition to advertisements promoting cannabis products, they may also be targeted with ads from the FDA and other sites which post information about the health risks of cannabis use for youth – leaving them with a constant stream of sometimes conflicting messages about cannabis.

The US Centers for Disease Control and Prevention reports that middle and high school students are also increasingly being exposed to advertising for electronic cigarettes, which has been linked to use of e-cigarettes among youth.<sup>57</sup> Vaping devices used for e-cigarettes may also be used by youth to vape cannabis, and e-cigarette use has been found to predict subsequent cannabis use among youth.<sup>58</sup>

## Youth use cannabis to be social as well as to cope with stress, anxiety, depression, and trauma

When asked about the reasons young people consume cannabis, youth in focus groups throughout the county indicated “positive” reasons such as it being a fun way to socialize with friends, be physically active, and to get outdoors. Youth focus group participants also talked about using cannabis as a response to peer pressure, and mentioned they are seeing kids of younger and younger ages use cannabis to emulate older kids and to seem “tough.” Other youth participants mentioned using cannabis to alleviate pressure they feel to perform in school and to be seen as successful by their families. In all focus groups conducted with young people around the county, youth indicated cannabis is commonly used by young people to cope with trauma, stress, anxiety, and depression.

**“It’s an escape from my reality, my life.”**

**“When people are going through stuff, weed is what they go for.”**

### – Alameda County youth focus group participants

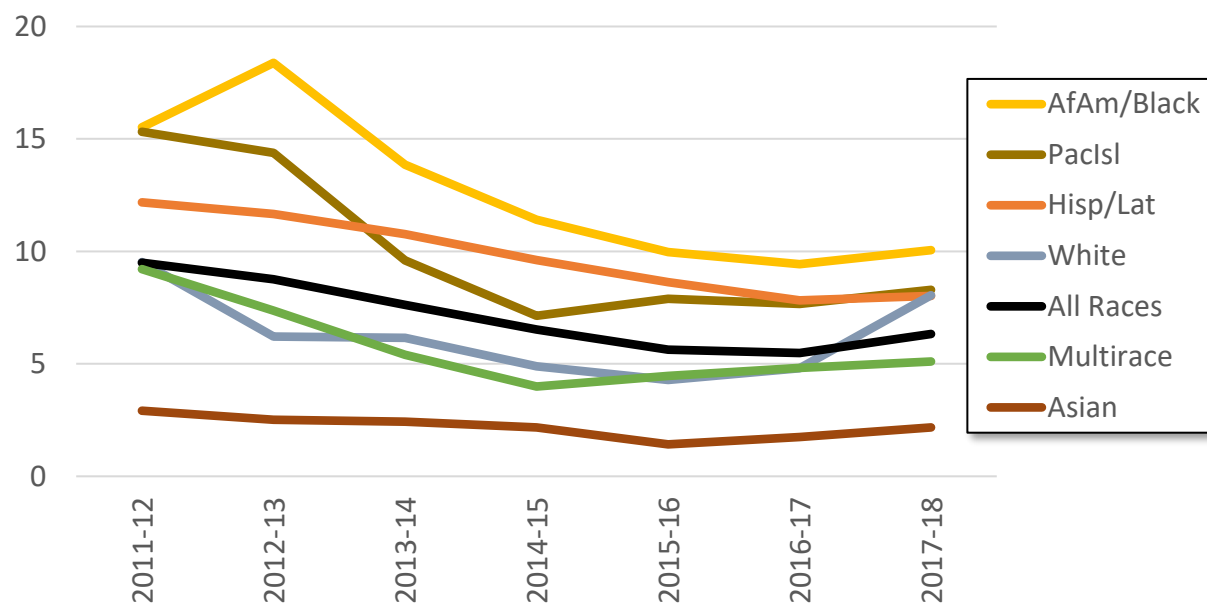
School staff and providers working in prevention, education, and substance abuse treatment programs echoed what we heard from youth; that young people at risk of being most adversely impacted by substance use are those who have experienced trauma, depression, and negative self-image, and as a result, use substances such as cannabis as a way to cope with these issues. Providers underscored youth of color (particularly African American/Black and Hispanic/Latinx youth) they serve disproportionately struggle with these underlying issues which elevate risk for substance abuse disorders. They also indicated they are increasingly seeing students of younger ages use substances to deal with these same issues, but lack allocated resources to work on prevention and education with middle or elementary school students. **Service providers who work with youth emphasized cannabis is not the root cause of substance abuse disorders – but it’s the underlying issues which need to be addressed in order to build resilience and prevent youth from engaging in substance use as a coping mechanism.**

## Cannabis-related school suspensions impact students throughout the county, but interventions to address school suspensions lack consistency among school districts

In a focus group, student services directors from school districts across the county indicated they are seeing an increase in school suspensions related to cannabis. **However, data indicates overall school suspensions for illicit drugs in Alameda County school districts have been decreasing between the**

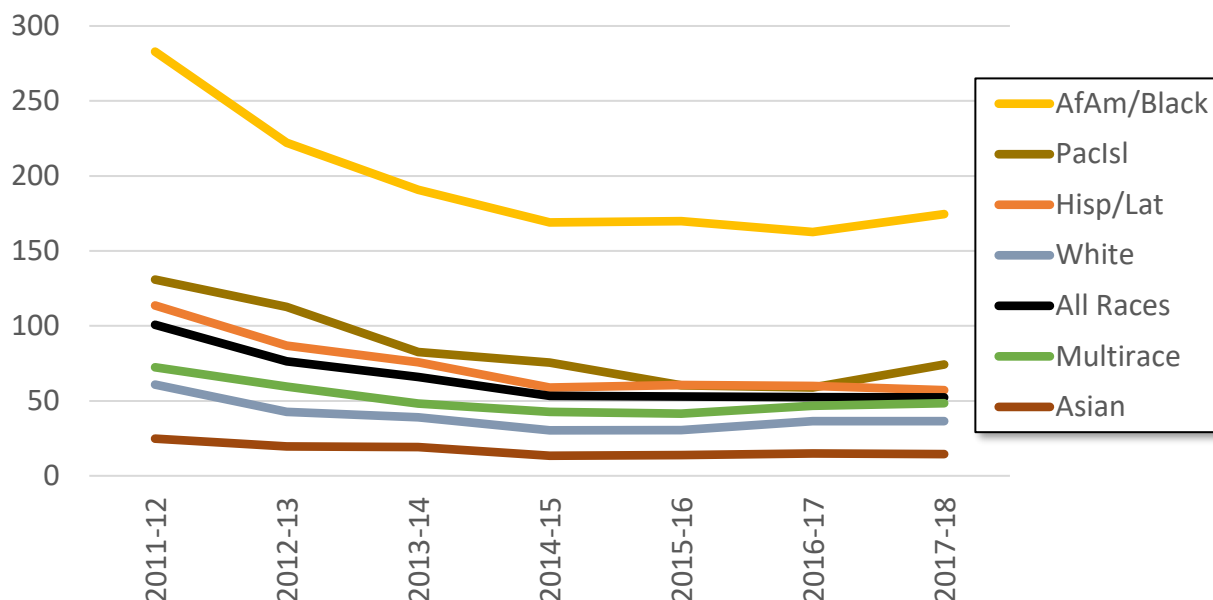
**2011-2012 and 2017-2018 school years.**<sup>6</sup> Figure 8 and 9 below show that African American/Black students in Alameda County school districts are disproportionately affected by illicit drug suspensions as well as by overall school suspensions, though rates of suspensions for this population have been declining since the 2011-2012 school year.

*Figure 8: Illicit Drug Suspension Rate by Race per 1,000 Enrollment, Alameda County*



Source: CAPE, with data from DataQuest, California Department of Education, 2011-12 to 2017-18 School Years

<sup>6</sup> Data for illicit drug-related suspensions includes alcohol and captures the following types of suspensions: sale of controlled substance; possession of controlled substance; possession, use, sale or furnishing a controlled substance, alcohol, intoxicant; offering, arranging, or negotiating sale of controlled substances, alcohol, intoxicants; offering, arranging, or negotiating sale of drug paraphernalia; offering arranging or negotiating sale of Soma (carisoprodol).

**Figure 9: Total Suspension Rate by Race per 1,000 Enrollment, Alameda County**

Source: CAPE, with data from DataQuest, California Department of Education, 2011-12 to 2017-18 School Years

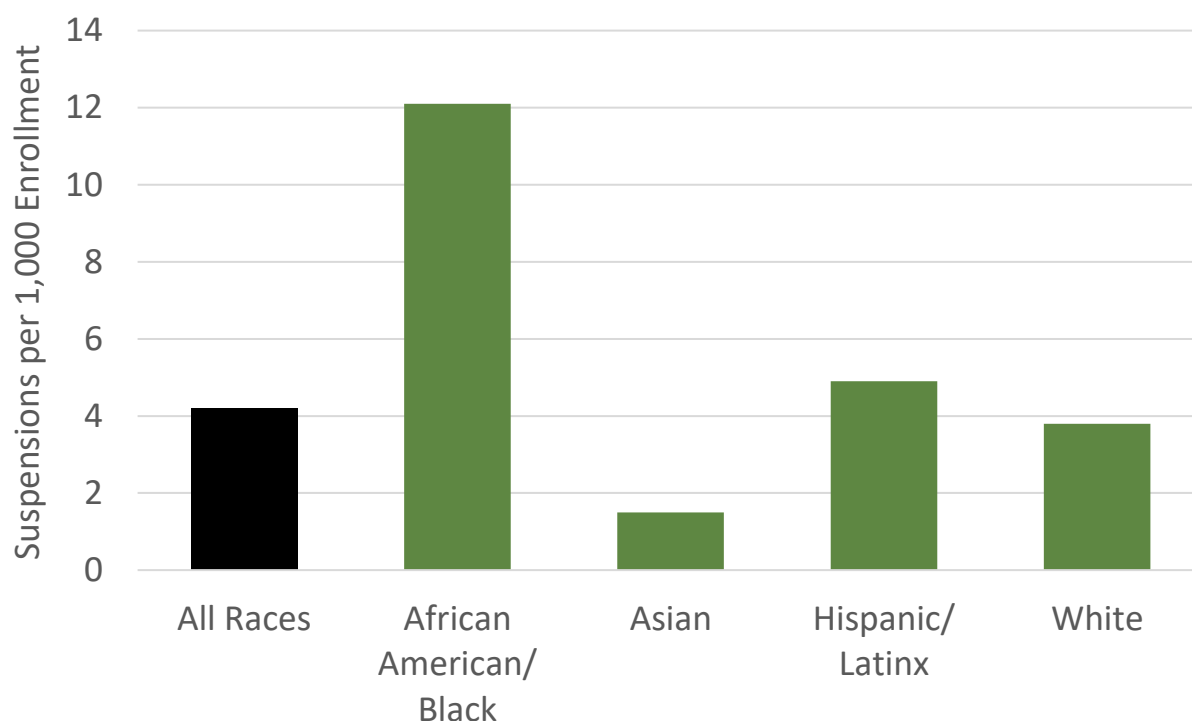
Data available for illicit drug suspension rates in Alameda County does not identify the proportion of suspensions for cannabis-related infractions specifically. It also does not reflect students with cannabis infractions who are diverted from suspensions into treatment, education, and prevention programs. Several county school districts indicated they have developed and implemented diversion programs to prevent an increase in suspensions resulting from cannabis-related infractions, but these programs do not exist in all schools or districts, and do not have consistent policies and practices to determine in which cases students are diverted and/or suspended.

For this report, specific data on cannabis-related suspensions was collected from four of Alameda County's 18 school districts and analyzed by race/ethnicity. This data (illustrated in Figure 10 below), demonstrates for the school districts which provided data (Pleasanton, Berkeley, New Haven, and Hayward) African American/Black and Hispanic/Latinx students in Alameda County are more likely to be suspended for cannabis-related infractions than White and Asian students, despite current rates of cannabis use which are relatively similar among African American/Black, Hispanic/Latinx, and White students in Alameda County<sup>7</sup> (See *Health* section for additional detail) (See *appendix E* for original data collected from these school districts)

<sup>7</sup> This was based on a pool of nearly 60,000 enrolled students from the four school districts (Pleasanton, Berkeley, New Haven, and Hayward).



*Figure 10: Cannabis Suspensions by Race/Ethnicity, Pleasanton, Berkeley, New Haven, and Hayward School Districts*



Source: CAPE, with data from Pleasanton, Berkeley, New Haven, and Hayward School Districts, 2017 – 2018 School Year

### For many youth, abstinence only messaging is ineffective

Youth in focus groups conducted throughout the county were clear that messaging which takes an abstinence-only or a fear-based approach to cannabis use does not resonate with young people. Providers were also clear an abstinence approach to cannabis use isn't effective. Often, however, funding for education and prevention (such as from Medi-Cal and other federal sources) cannot be used to encourage reduced use of any drug that remains federally illegal, including cannabis. Overall funding for education and prevention remains very low.

Youth in focus groups felt that young people using cannabis are generally aware of the risks and still choose to use it, indicating that effective messaging to prevent cannabis use among youth may need to expand beyond basic information about the health risks. **Providers and youth interviewed for this report both indicated that programs effective in reaching young people include the following elements:**

- Youth/peer-to-peer model (including youth courts and youth councils)
- A focus on identifying and addressing reasons that youth use cannabis (or other substances)
- Communicating using culturally appropriate messaging that also reflects the specific realities and context youth live and go to school in

**Service providers also emphasized the need for education about the health impacts of cannabis not just for young people, but for parents and caregivers, families, and other adults, including school staff.** Perceptions about cannabis use and its impacts among parents and caregivers can have a significant influence on youth. Parents and caregivers may have a culture of cannabis use at home and may also have misconceptions about the risks of cannabis use on the health of young people. A recent study conducted in Alameda County by the Social Changery found that 28 percent of parents surveyed were unaware of the impacts that cannabis use can have on brain development for individuals under the age of 25.<sup>59</sup> Providers emphasized the importance of programs which involve communication with parents about the issues their children are dealing with (including cannabis use) and the importance of not alienating parents and caregivers by demonizing their views and practices.

### **Youth lack safe spaces to talk about cannabis and are unaware of prevention, education, and treatment programs available to them**

Youth from all areas of the county indicated they lack safe spaces to talk about cannabis use and other related issues. Some students talked about experiences where they or their friends had talked with a school counselor and that counselor had relayed what they shared back to parents, and in some cases to law enforcement. Others mentioned feeling they would be judged by adults at school or home if they shared they use cannabis, or they felt cultural differences made it uncomfortable for them to approach a school counselor or program. Many of the youth we spoke with were not sure where they could turn if they or a friend needed help with a substance use related issue, and reported relying on their friends. However, youth also indicated they believe having trusted relationships with an adult is beneficial and would help young people navigate issues related to cannabis use.

**“We want adults to be open minded and listen to young people, get their perspectives and not assume that someone is a bad person because they smoke weed.”**

**“When adults don’t take youth seriously that’s when they turn to the drugs. Relationships youth have with parents and trusted adults matter – they need to talk with youth about marijuana.”**

**– Alameda County youth focus group participants**

While providers we interviewed for this HIA talked about the success that many of their programs have in reaching at-risk youth, they also emphasized the limitations a lack of funding puts on their ability to consistently reach a broader base of youth.

**“We are not desperate for ideas about how to address issues with cannabis but lack a fair funding model. We constantly have to decide where that one dollar we are given will go.”**

**– Alameda County School District Student Services Director**

Providers also noted, due to lack of funding, there is little evaluation of education, prevention, and treatment programs. Evaluation is needed to ensure successful programs receive ongoing funding and support.

## C. Land Use and Regulations

Under Proposition 64 cannabis businesses must adhere to both state and local regulations; and local jurisdictions do not have uniform policies and regulations around adult-use cannabis

Commercial cannabis businesses in California are regulated by a dual licensing scheme which requires that businesses must obtain a license first from their local jurisdiction and then from the state. Local jurisdictions can ban or regulate commercial cannabis activity within their boundaries. **As of 2019, out of the 15 local jurisdictions in Alameda County (14 cities, plus the unincorporated area) eight allow for commercial cannabis activity.<sup>60</sup> These include Oakland, Berkeley, Union City, San Leandro, Hayward, Emeryville, the City of Alameda, and unincorporated Alameda County.** The Community Development Agency (CDA) is responsible for administering regulations for the cannabis industry within the unincorporated areas of Alameda County, and each of the cities within the county's boundaries is responsible for these activities within its jurisdiction. Figure 11 below depicts all the retail and cultivation businesses that are currently operating in both the incorporated and unincorporated areas of the county.<sup>8</sup>

**The ability of various locations throughout the county to successfully accommodate commercial cannabis businesses depends on a wide range of factors, including compatibility with pre-existing uses, consistency with zoning ordinances and strategic land use planning objectives, proximity to sensitive uses (e.g. schools, parks etc., which are required by the state to have a buffer of at least 600 feet from commercial cannabis premises), and capacity of the land to accommodate additional uses (e.g. for cultivation, the availability of water and potential for odor impacts on neighboring properties).** In making decisions about whether and where to allow commercial cannabis businesses to be located, all jurisdictions in Alameda County will take these factors into account. They will also go through a public consultation process to determine community attitudes and the perspectives of the elected decision-makers at the City Council or County Board of Supervisors level. The eight jurisdictions within the county which have decided so far to allow some extent of commercial cannabis activity within their borders have each gone through a process of developing a regulatory scheme that is appropriate for their location.

There are multiple types of cannabis businesses that play essential roles in the supply chain of the newly regulated commercial cannabis industry. Below is a list of each business type and a brief description of their role:

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<sup>8</sup> A number of businesses that are currently going through a permitting process or are permitted but are not yet operational across the jurisdictions within the County are not shown on this map. Due to the availability of data, the map also does not show businesses which have been granted a license for other business types, including manufacturing, distribution and testing labs.

- **Cultivation**– refers to growing cannabis in a commercial facility. Commercial cannabis cultivation can occur outdoors or indoors, but this may be regulated by the local jurisdiction.
- **Manufacturing**– a licensee that conducts the production, preparation, or compounding of cannabis or cannabis products either directly or indirectly or by extraction methods, or independently by means of chemical synthesis, or by a combination of extraction and chemical synthesis at a fixed location that packages or repackages cannabis or cannabis products or labels or relabels its container. Examples of manufactured cannabis products include vaporizer pens/cartridges, shatter, crumble, sugar, diamonds, live resin, and terp sauce.
- **Distribution**– the procurement, sale, and transport of cannabis and cannabis products between licensees.
- **Testing**– a laboratory, facility, or entity in the state that offers or performs tests of cannabis or cannabis products. Tests are conducted to identify and measure any contaminants as well as levels of THC and CBD. All cannabis products are subject to testing (similar to food and alcohol).
- **Retail**– licensed premises and physical locations from which the sale of commercial cannabis products occurs (often referred to as dispensaries, which was the name for medical cannabis outlets prior to cannabis legalization for adult-use).
- **Delivery**– the commercial transfer of cannabis or cannabis products to a customer by delivery to a non-licensed location. A retailer may utilize a technology platform such as a website or app to enable customers to place orders for delivery.
- **Microbusinesses**– licensees who engage in at least three of the following four commercial cannabis activities: cultivation (less than 10,000 square feet), manufacturing (except for extraction using volatile solvents), distribution, or retail sales.

Alameda County currently allows cannabis retail, cultivation, and delivery businesses in the county's unincorporated areas.<sup>61</sup> Many features of the county's ordinances and regulations pertaining to cannabis businesses in the unincorporated areas were developed in the years prior to the implementation of Proposition 64. The county continues to review and develop its commercial cannabis ordinances, including changes to fully incorporate and respond to Proposition 64. County regulations currently allow for up to five retail cannabis businesses and up to 10 cultivation sites in the unincorporated areas. Currently, two retail businesses are licensed and operating in the western part of the County. Both businesses were established prior to Proposition 64 and previously operated as medical cannabis dispensaries. No cannabis cultivation sites are currently operational, though eight cultivation businesses were awarded permits and several of those are in the course of applying for required conditional use permits. While they are allowed, to date only one business has so far obtained a permit for cannabis delivery in unincorporated Alameda County. Despite this, multiple delivery services do serve the unincorporated areas illegally, without the necessary local and state licenses.<sup>62</sup>

Alameda County cannabis business stakeholders interviewed for this report noted they would like to see all cannabis business types (throughout the supply chain) allowed in the county. They feel that this would promote the success of the cannabis industry and help legal businesses in the county to thrive. This could

also be a way to open more jobs and economic opportunities to Alameda County residents that could benefit the new, legal cannabis industry. Allowing businesses in other parts of the supply chain (e.g. cannabis microbusiness, distribution and testing labs) is currently under consideration in Alameda County.<sup>63</sup>

Fees and processes for obtaining permits to operate cannabis businesses differ substantially among jurisdictions. To obtain an operating license from the county for a cannabis business in unincorporated Alameda County, prospective owners must go through a permitting process and pay fees to the county. County fee rates adopted by the Board of Supervisors for the unincorporated areas were based on a comprehensive fee study which determined the financial cost that would be incurred by the county to implement, administer, and oversee cannabis-related regulations. Each city within the county that has adopted a cannabis regulatory scheme has gone through a similar process of determining which license types to allow, in which locations, and which fees should apply.

In addition to licensing, taxes are levied by the state on cannabis businesses, in some cases, additional taxes are also levied by the local jurisdiction. To date Alameda County has decided not to levy a tax on cannabis businesses for the unincorporated areas however, other jurisdictions including the cities of Berkeley and Oakland, do.

### Regulations imposed on cannabis businesses pose barriers to entry and hinder efforts to promote equity in the cannabis industry

**Stakeholders interviewed for this HIA consistently noted the lack of diversity in the cannabis industry as well as the barriers posed by the high cost of entering the legal industry and the shortage of financial assistance available.** In 2017, only an estimated four percent of U.S. cannabis businesses were owned by African Americans/Black residents, while 81 percent were owned by Whites.<sup>64</sup>

**“Unless you have financial backing or have been established in this industry for an extended period, the ability to access the industry is challenging.”**

#### **- Prospective cannabis cultivator**

In addition to high licensing fees, lengthy permitting processes, and high tax rates have been identified as barriers to entry for prospective cannabis business owners, especially those without access to financial assistance. As an example, the one-time application fees to obtain a retail and cultivation permit in Alameda County are \$14,000. The county’s annual fees for costs associated with monitoring and compliance are \$25,700 for cannabis retailers and \$32,300 for cultivation sites. Retail stores and cultivators must also obtain a conditional use permit (CUP), which has recently been recommended by the Board of Supervisors Transportation and Planning Committee to be capped at a maximum of \$5,000 per application. Local licensing and permitting costs are in addition to state and local fees and taxes, costs of procuring space for operations, and other costs associated with starting a business.

The licensing and permitting process for cannabis businesses is also time consuming. In unincorporated Alameda County for example, it can take between six months to a year to obtain a conditional use permit, which is after an applicant has gone through the process to obtain an initial cannabis permit through a request for proposals process.

**The lack of banking and loan options is an additional burden on cannabis businesses and another barrier to promoting equity.** Banking services are still widely unavailable for the cannabis industry because of federal regulations. According to one estimate, only 30 percent of cannabis business have access to a bank account.<sup>65</sup> While banks can service legal cannabis businesses, it is often costly, time consuming, and risky to adhere to federal regulations, which still classify cannabis as a schedule 1 substance.<sup>66</sup>

Recognizing the barriers to entry into the legalized commercial cannabis industry for people without access to financial resources and those who have been most disproportionately impacted by policies that previously criminalized cannabis activities, the City of Oakland introduced a comprehensive equity program which seeks to provide practical, technical and financial assistance to these populations to become involved in the early, foundational years of the legalized cannabis industry. *(See the Economic Opportunity section of this report for more detail about this program)*

### Residents in Alameda County notice an increasing number of cannabis billboard advertisements throughout the county

Data about the specific number of cannabis billboards displayed throughout the county was unavailable for this HIA, however, interview and focus group participants readily pointed out they notice an increasing number of billboards advertising cannabis businesses located throughout the county, especially in the Oakland and Berkeley areas.

**“[Billboards] are colorful, big, and attractive to young kids. They make little kids want to try [cannabis].”**

**– Alameda County youth focus group participant**

The state and county allow for all types of cannabis-related billboards on any highway which does not cross into another state.<sup>67</sup> Local jurisdictions can also place their own restrictions on billboard advertisements.

### The location and density of cannabis businesses have the potential to disproportionately burden certain populations

Research on the impacts of residing in close proximity to locations where cannabis is legally permitted for sale is limited and primarily focuses on medical cannabis dispensaries.<sup>68</sup> These studies indicate cannabis dispensaries have tended to locate in areas with higher proportions of lower-income residents and communities of color.<sup>69</sup> The research also links the location of cannabis dispensaries with current

cannabis use, lower age of first-time cannabis use, and hospitalizations for Cannabis Use Disorder.<sup>70</sup> One study conducted on the relationship between physical availability of medical cannabis and cannabis use found dispensaries and delivery services per roadway mile were positively associated with marijuana use and increased regularity of use.<sup>71</sup> Another study on the impacts of dispensary density on marijuana abuse and dependence discovered each additional one dispensary per square mile in any zip code was associated with a 6.8 percent increase in the number of marijuana hospitalizations.<sup>72</sup> Additional research found individuals who grow up in areas within 20km of a dispensary are more likely to use at a younger age.<sup>73</sup>

Although Proposition 64 allows for jurisdictions to ban commercial cannabis activity within their boundaries, residents may patronize any of the county's commercial cannabis businesses (or those outside the county). **This means that jurisdictions that allow commercial cannabis will be disproportionately affected by any of the impacts associated with proximity to commercial cannabis activities compared to jurisdictions that ban commercial cannabis businesses.**

**In Alameda County a higher percentage of African American/Black and Hispanic/Latinx residents currently live in areas within a half mile of an operational retail business or cultivation site compared to Whites and Asians, and the poverty rate among households within a half mile of operational cannabis retail and cultivation sites within the county is nearly twice that found in Alameda County generally.**<sup>9,10</sup> Given the lack of representation of people of color in the cannabis industry, this finding indicates that cannabis business ownership is not reflective of the communities where cannabis businesses tend to be located.<sup>11</sup>

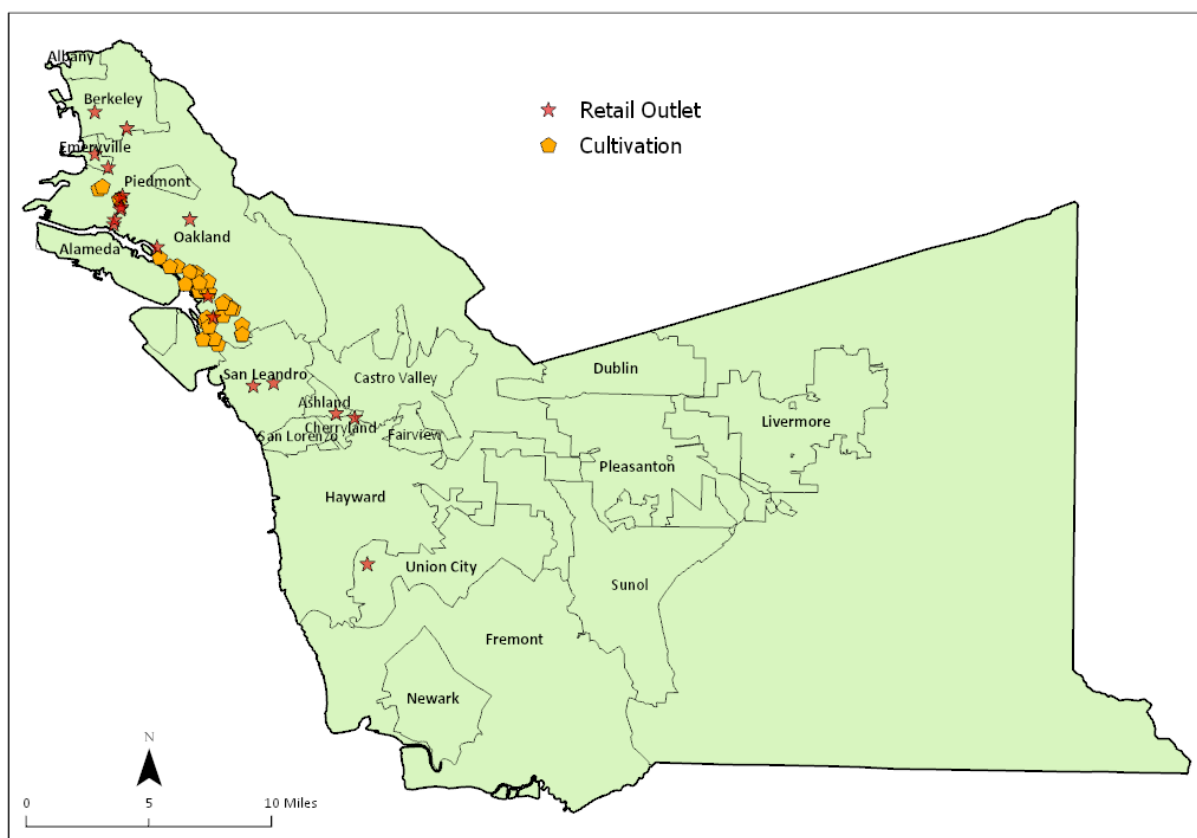
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<sup>9</sup> In a ½ mile buffer around existing cannabis retail and cultivation sites in Alameda County 53 percent of residents are Hispanic/Latinx and African American/Black, while in the county overall less than 31% of residents are Hispanic/Latinx and African American/Black. Source: Community Assessment Planning and Evaluation of the Alameda County Public Health Department/ Health Care Services Agency, with data from California Bureau of Cannabis Control and California Department of Food and Agriculture.

<sup>10</sup> Note that a number of newly permitted but not yet operational cannabis cultivation sites in unincorporated Alameda County would be located in the eastern part of the county.

<sup>11</sup> In 2017 a survey found that just 17 percent of executive positions at U.S. cannabis businesses were held by minorities. (Marijuana Business Daily, September 5, 2017)



*Figure 11: Cannabis Retail Operations and Cultivation Sites*

Source: ACPHD HEPP and CAPE.

Source: CAPE, with data from California Bureau of Cannabis Control and California Department of Food and Agriculture

## D. Public Safety

The impact of cannabis use on Driving Under the Influence (DUI) related incidents both across the county and statewide remains uncertain in large part due to the need for scientifically valid methods of testing impairment from cannabis consumption

Robust and reliable research is needed to better understand the impact that driving under the influence of cannabis has on public safety. A recent study by the RAND Corporation found an association between counties that allowed cannabis dispensaries and an increased rate of DUI arrests.<sup>74</sup> However, the number of DUI arrests declined in both Colorado and Washington after the legalization of adult use cannabis.<sup>75, 76</sup>

**Unlike alcohol, there is not a clear correlation between levels of THC in the bloodstream and impairment, and standard field sobriety tests for impairment from cannabis use are still being developed and tested for accuracy.<sup>77</sup>**

Over the past decade as cannabis has grown in use and acceptance, more resources have been allocated towards addressing the issue of cannabis-involved DUI cases. Some states, such as Colorado, have

adopted a THC blood level limit akin to California's blood alcohol limit.<sup>78</sup> However, California has not established such a limit, and there is no test similar to a breathalyzer to analyze THC content on the spot. Representatives from the Alameda County Sheriff's Office interviewed for this report described the challenges in being able to accurately test for impairment among drivers they believe are under the influence of cannabis. They indicated there has been an increase in training for law enforcement to conduct roadside impairment testing, but without a legal limit of THC, it is difficult to convict someone of a DUI. A portion of California's cannabis tax revenue will be allocated to the California Highway Patrol (CHP) to develop protocols to determine whether a vehicle driver is impaired due to marijuana consumption.<sup>79</sup> The CHP has established an impaired driving task force to develop recommendations for best practices, protocols, proposed legislation, and other policies that will address the issue of impaired driving in California. The task force will examine the use of technology, including field testing technologies and validated field sobriety tests, to identify drivers under the influence of cannabis as well as prescription drugs, and controlled substances.<sup>80</sup>

### Crimes surrounding legal cannabis businesses in unincorporated Alameda County remain low since legalization

A common concern about legalization has and continues to be that cannabis businesses will attract crime. **A recent study by the RAND corporation using county-level data from California found that there is "no relationship between county laws that legally permit [cannabis] dispensaries and reported violent crime."** The study actually found there was a "negative and significant relationship between dispensary allowances and property crime rates", though researchers noted this could be due to "pre-existing trends" in an area.<sup>81</sup> The report suggests cannabis dispensaries/businesses may decrease crime by inhabiting what otherwise would have been vacant buildings and providing additional security in the area. The researchers also note legalizing a previously illegal market frees up law enforcement to apply their resources to alleviate other crimes.

The Alameda County Sheriff's Office has described the currently licensed cannabis businesses in the county's unincorporated areas as being responsible operators, and notes that crime has remained low in the areas surrounding their businesses.<sup>12</sup> They emphasized the county's ordinances have helped establish practices (such as good communication with the Sheriff's Office and mandated on-site security) that protect community safety and security. Being perceived as safe and not attracting crime is in the interest of communities living in proximity to cannabis businesses as well the businesses themselves who do not want to lose their "coveted permit" or become the target of a violent crime.

According to the Alameda County Sheriff's Office, illegal cannabis operations such as illegal cultivation sites (a.k.a. "illegal grows") and selling operations in the county's unincorporated areas have and continue to attract violent crime including hostile robberies and other gang related activity.

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<sup>12</sup> For the purpose of this HIA, we did not have the opportunity to interview representatives from city police departments in jurisdictions that permit commercial cannabis activities to confirm if their experience has been similar to that in the unincorporated areas.

In Colorado, burglaries were the most frequent crime associated with cannabis between 2012 and 2014.<sup>82</sup> In 2012, 13 percent of permitted cannabis dispensaries in Denver were robbed compared with two percent of liquor stores.<sup>83</sup> These findings were all prior to Colorado's legalization of adult-use cannabis, and only include data for medical cannabis dispensaries.

Federal limitations on banking also leave legal cannabis operations at a higher risk for theft and violent crimes, because they are often forced to deal in cash (for customer transactions, payments to employees, etc.).

### Illegal cannabis growing operations can have significant impacts on the health and safety of surrounding land and communities

While legalization has helped mitigate some effects of the illegal cannabis market, illegal cannabis growing operations are still apparent in many communities and jurisdictions throughout the county. Illegal grows are often found inside regular homes which have been redeveloped into indoor greenhouses set up to grow cannabis plants. Illegal grows present several public safety threats, including environmental harms. Illegal grows often use pesticides and unregulated chemicals to help with the growth of cannabis plants.<sup>84</sup> These hazardous substances can pollute nearby neighborhoods and run-off onto land and into water sources. Illegal grows also require substantial amounts of electricity to power their operations, leading operators of these grows to rewire homes to accommodate more electricity, which can substantially increase the risk of fire.<sup>13</sup> **An illegal grow operation can leave a home in an uninhabitable condition, and once identified, these locations are often condemned by code enforcement or law enforcement. Illegal grow operations are also often the target of violent crime and theft (of cannabis plants, equipment, or cash from sales of cannabis products).**

Because many illegal grows go undetected, it is not clear how large of an issue they are in the county. In the past three years there have been 25 illegal grow operations found and shut down by the Alameda County Sheriff's Office in the unincorporated areas of the county.<sup>85</sup> Twenty of these cases occurred in 2018, most of which were from 11 operations shut down in one day which were connected to a larger criminal network. It is unclear whether legalization played a role in the increase of identified illegal grows in 2018, but illegal grows continue to be an issue of concern in Alameda County.

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<sup>13</sup> A 2012 study on the carbon footprint of indoor cannabis production (both legal and illegal) estimated that in production-intensive states like California, indoor cannabis production amounts to 3 percent of overall electricity in the state. Mooney, C. One surprising downside of marijuana legalization: major energy use. March 23, 2015. Available at [[https://www.washingtonpost.com/news/energy-environment/wp/2015/03/23/one-surprising-downside-of-marijuana-legalization-major-energy-use/?noredirect=on&utm\\_term=.071eb068dbbb](https://www.washingtonpost.com/news/energy-environment/wp/2015/03/23/one-surprising-downside-of-marijuana-legalization-major-energy-use/?noredirect=on&utm_term=.071eb068dbbb)].

## E. Criminalization

Proposition 64 legalized adult-use cannabis, eliminating most criminal penalties for cannabis-related offenses, however, various cannabis-related activities remain illegal

Prior to the implementation of Proposition 64 cannabis related activities such as possession or cultivation of non-medical cannabis could result in arrest and incarceration. Proposition 64 allows for adults age 21 and older to possess, process, transport, purchase or give away (only to other adults) up to 28.5 grams of cannabis and 8 grams of concentrated cannabis; they are permitted to smoke or ingest in a private home or at a business licensed for on-site cannabis consumption.<sup>14</sup> Individuals 21 years or older can also cultivate up to six non-medical cannabis plants within a private residence for personal use, if the space is fully enclosed, secured, and not visible publicly.<sup>86</sup> Criminal penalties for cannabis-related violations have also been reduced.<sup>87</sup>

**Under Proposition 64, individuals with previous convictions for cannabis offenses can petition a court to have their convictions retroactively reduced, reclassified as lesser offenses, or dismissed all together.**<sup>88</sup> This applies to people who are in jail or prison, on probation or parole, or who have already completed their sentence. This type of dismissal or criminal record “expungement” can help people gain access to jobs, housing, and educational opportunities. The California State Department of Justice estimates there are over 220,000 cannabis conviction cases in California that are eligible for resentencing and reclassification under Proposition 64.

Applying to have past cannabis convictions cleared or reduced can be a difficult process to navigate, particularly for people with limited income and who may lack the resources to hire an attorney to help navigate this process, or for those who live in rural areas where accessing offices and services that could process expungements may be difficult. In 2019, California enacted AB 1793 to help remove the burden on individuals to petition for expungement of previous cannabis convictions. The legislation requires the State Department of Justice to identify all Californians potentially eligible for reduction or expungement per Proposition 64 and provide this information to District Attorneys’ Offices throughout the state for review and proactive record modification by July 2020.<sup>89</sup> It should be noted AB 1793 does not require the District Attorneys’ Offices to notify individuals when their records have been expunged.

Prior to the implementation of AB 1793, a number of California counties including Alameda, San Francisco, Sacramento, San Diego, Yolo and Sonoma had taken proactive steps to address Proposition 64 expungements. The Alameda County District Attorney’s Office is in the process of sending notifications to all of the known addresses associated with previous convictions potentially eligible for expungement under Proposition 64 to share information about how individuals can proactively pursue an expungement of their record. The District Attorney’s Office has also engaged the services of Code for America to work

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<sup>14</sup> Under California’s Proposition 215, residents at least 18 years of age with qualifying medical conditions are eligible to receive a medical cannabis card and to purchase and consume medical cannabis per a doctor’s recommendation.

through the records of approximately 7500 potentially eligible defendants who have marijuana related convictions within the guidelines of AB 1793.

There are still various cannabis-related activities which remain illegal under Proposition 64. These include smoking or ingesting cannabis in public places; operating a motor vehicle, boat, vessel, aircraft, or other vehicle used for transportation while under the influence of cannabis; and possessing an open container of cannabis while operating or riding in the passenger seat of these vehicles.<sup>90</sup> Possession on the grounds of a school, day care center, or youth center while children are present remains illegal, and smoking cannabis within 1,000 feet of these sites are also prohibited.<sup>91</sup>

**As Proposition 64 is implemented, it has become apparent that aspects of the law are unclear, or subject to interpretation.** One example is whether it is legal, Under Proposition 64, for law enforcement to use the smell of cannabis as a basis for stopping and searching someone for criminal activity. A case challenging this practice is currently under review by the California Supreme Court.<sup>15</sup> An amicus brief filed by the ACLU and the Drug Policy Alliance in support of the case states that there are a number of reasons why a person may smell of cannabis that do not involve criminal activity (e.g. working in a cannabis retail store or operation, lingering smell in a car or a ride share), and the practice of using cannabis odor as a probable cause for searching someone for criminal activity opens the door to unreasonable stops and searches which are subject to bias.<sup>92</sup>

### There is widespread misunderstanding about the laws surrounding cannabis and the discrepancies between local, state, and federal policy

Several stakeholders interviewed for this HIA shared that the lack of information about cannabis policies and the discrepancy between local, state, and federal laws has left many residents misinformed. A recent survey of parents and youth in Alameda County similarly found that there is a general misunderstanding of cannabis-related laws and their impacts.<sup>93</sup> **People can get entangled between federal and state laws and systems because of the significant differences in the way the federal government and state/local government regulate cannabis.** Additionally, because law enforcement has generally relaxed their enforcement of laws and policies related to cannabis, people may perceive certain activities are acceptable even though they are not actually legal (e.g. public consumption of cannabis). Lack of clarity about the local, state, and federal cannabis laws and policies can have adverse impacts including:

- **Job loss.** Although cannabis is now legal in California, people living in the state who are employed by federal agencies could lose their jobs if they are found to be using cannabis.
- **Difficulty finding a job.** Young people seeking federally funded jobs may not realize that using cannabis could disqualify them from federal/federally funded jobs, or that they could be subject to drug testing for cannabis when applying for these jobs.
- **Eviction.** People living in federally subsidized housing or other buildings prohibiting the use of cannabis on the premises may not realize using cannabis could put them at risk of being evicted.

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<sup>15</sup> Lamar Cotton v. Superior Court (Mar. 22, 2018), First Appellate District, Division One, Case No. A153718

- **Arrest under federal law.** Traveling with cannabis across state or country borders (by automobile or airplane, etc.) is not legal, even with cannabis purchased legally. People can be at risk if they are not aware of both state and federal laws and regulations that pertain to cannabis possession and travel.

The discrepancy in federal and state law can also put undocumented California residents at risk. If they are taken into custody by federal agents and found to have used or to possess cannabis, they would be considered to have committed a federal crime, which can be considered grounds for deportation.

### Throughout the nation, state, and county there is a well-documented history of racial inequities in cannabis-related arrests

Numerous research studies at the national, state and local level have identified evidence of racial discrimination in general policing activities (stops, searches, handcuffing, and arrests) as well as among charges, conviction, and incarceration rates, disproportionately impacting African American/Black and Hispanic/Latinx populations in particular.<sup>94, 95, 96</sup> **The ACLU reports that between 2001 and 2010, 88 percent of the 2.2 million cannabis arrests nationally were for cannabis possession, and that African American/Black individuals were 3.73 times more likely to get arrested for cannabis possession than Whites.**<sup>97</sup> A review of cannabis arrests in the City of Oakland revealed consistent disparities, for African American/Black individuals, for whom cannabis arrests were as high as 90 percent in 1998, when they were just 3.91 percent for Whites.<sup>98</sup> Though overall arrests for cannabis use or possession have decreased significantly over the last decade, disproportionate arrest rates have been seen more recently in California, as shown in the table below.

*Figure 12: Cannabis Arrests in California (2016)*

	Marijuana-Related Arrest Rate per 100,000			
	All Races	White	African American/Black	Hispanic/Latino
All arrests	35.2	27.4	86.3	39.3
Misdemeanor arrests	14.9	13.3	23.9	19.2
Felony arrests	20.3	14.0	62.4	20.1

Source: Drug Policy Alliance. From Prohibition to Progress: A Status Report on Marijuana Legalization. January 2018.

**In 2016, the African American/Black individuals in Oakland represented 30 percent of the population but accounted for 66 percent (237 of 355 total arrests) of cannabis-related arrests.**<sup>16, 99, 100</sup> The

<sup>16</sup> Note that statewide data on cannabis use shows similar rates of use for Hispanic/Latinx, Whites and African American/Black individuals. See section of this report on *Health Benefits and Risks of Cannabis Use*.



Hispanic/Latinx population made up 23 percent of cannabis-related arrests, the White population 4 percent the Asian population 2 percent and other racial groups made up 4 percent.<sup>101, 102</sup>

**A criminal record can impede an individual's ability to access a wide swath of social services and jobs, affecting the health and well-being of the individual as well as their family and community.** Families with incarcerated individuals experience increased economic hardship; as a result, they are significantly more likely to live in poverty, experience homelessness, and have worse health. High incarceration rates can impact a community as well, as removing high numbers of individuals in their 20s, 30s, and 40s can damage economic mobility in neighborhoods that are already concentrated with poverty.<sup>103</sup>

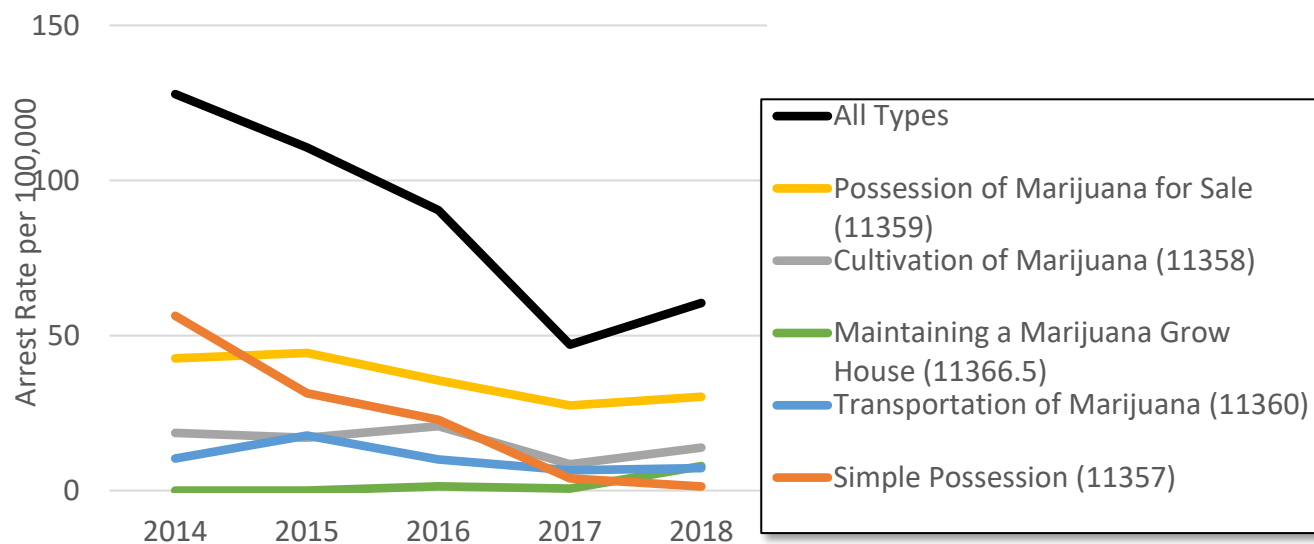
With the passage of Proposition 64, some jurisdictions, including Oakland, have taken steps to remedy the years of unjust incarceration of people of color related to cannabis through Cannabis Equity Programs (*See Economic Impacts and Opportunities Section for more information on Cannabis Equity Programs*)

While there has been a general decrease in cannabis-related arrests in areas which have legalized cannabis, people of color still disproportionately come into contact with the criminal justice system for cannabis-related offenses

Alameda County Sheriff's Office staff interviewed for this report indicated over the past decade few people were being arrested or sent to jail for cannabis-related crimes unless the crimes were very serious (i.e. involving large scale drug trafficking). As such, they remarked that Proposition 64 has not had a major impact on arrests and incarceration rates in the unincorporated areas of Alameda County. Data from the Alameda County Sheriff's Office demonstrates this trend, showing declining rates of cannabis-related arrests between 2014 and 2018.<sup>104</sup> **The most dramatic decline has been in arrests for simple possession of cannabis which went from an average of 56.4 per 100,000 residents in 2014 to an average of 1.3 per 100,000 residents in 2018.**

Arrests by the Sheriff's Office for "maintaining a marijuana grow house (11366.5)" did see an increase between 2017 and 2018 (from 0.7 per 100,000 people to 7.9 per 100,000 people). The Sheriff's Office notes that this particular increase in arrests is not necessarily an indication of an increase in the number of Grow Houses in their jurisdiction, but it's likely attributed to the more uniform classification of these specific crimes (*See section on Public Safety for more about the impacts of illegal grow operations*). (*See Appendix E for more information on measures presented in this section, including an analysis of cannabis arrest charges by race/ethnicity for the unincorporated areas of Alameda County*)

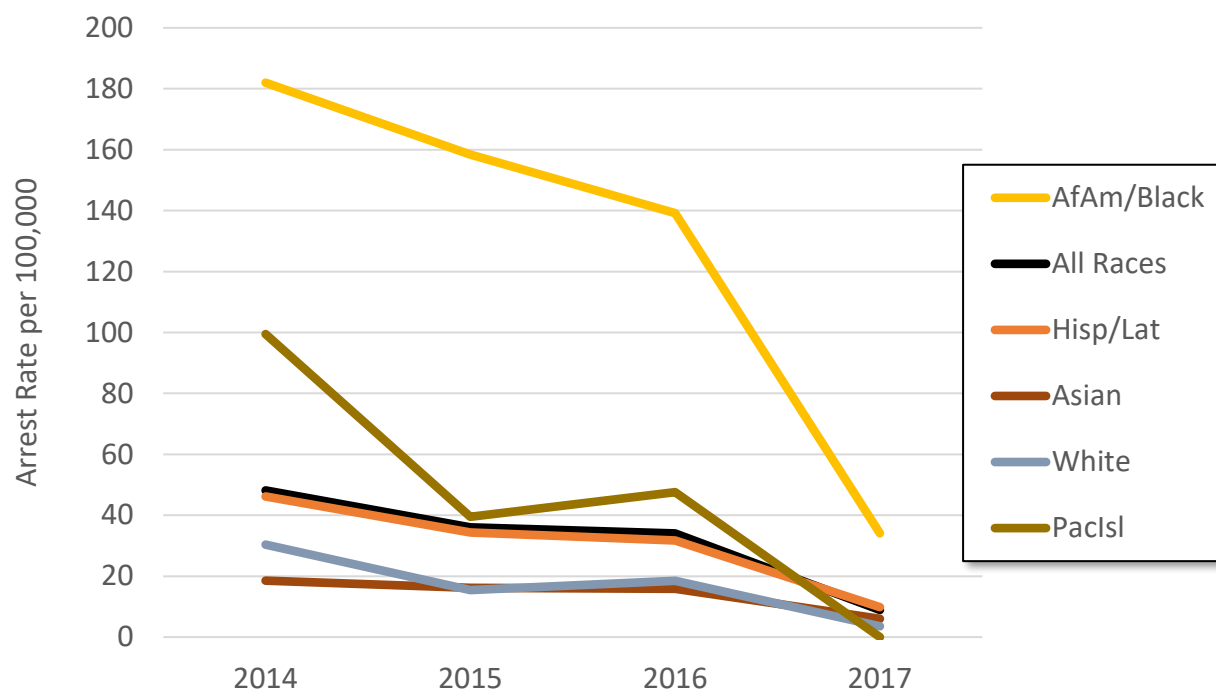


*Figure 13: Cannabis Arrests by Charge, Unincorporated Area of Alameda County*

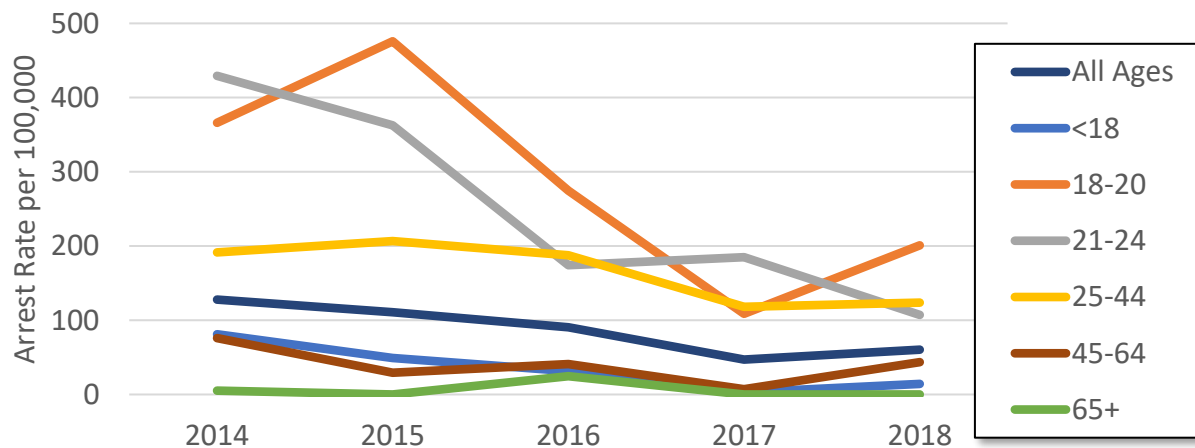
Source: CAPE, with data from Alameda County Sheriff's Office, 2014 - 2018

Data for all of Alameda County's combined jurisdictions shows similar trends of overall declining cannabis-related arrests between 2014 and 2017.<sup>105 17</sup> Looking at this data by race, we see that **overall cannabis arrest rates in Alameda County currently remain highest for African American/Black and Hispanic/Latinx residents.**<sup>106</sup> In terms of age, those age 24 and under (includes ages 21-24, 18-20 and <18) have the highest rates of arrest countywide.

<sup>17</sup> Data for Alameda County cannabis related arrests includes arrests for both felonies and misdemeanors, and includes data for all jurisdictions within Alameda County.

*Figure 14: Cannabis Arrests by Race/Ethnicity, Alameda County (all jurisdictions)*

Source: CAPE, with data from California Department of Justice MACR files, 2014 – 2017

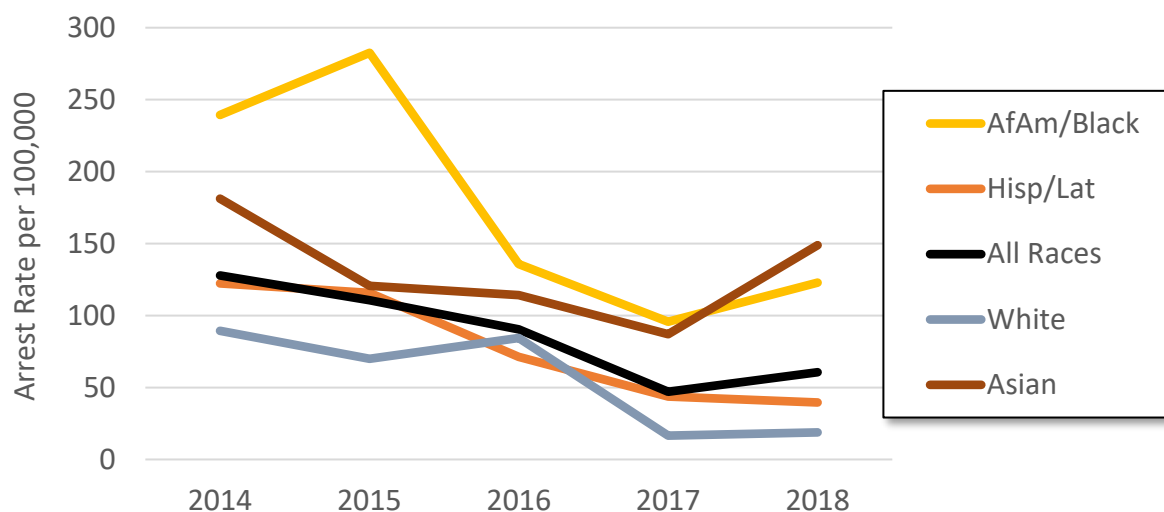
*Figure 15: Cannabis Arrests by Age Group, Alameda County (all jurisdictions)*

Source: CAPE, with data from California Department of Justice MACR files 2014 – 2017

Cannabis-related arrest data from the Alameda County Sheriff's Office from 2014 to 2018 for the county's unincorporated areas shows arrest rates for African American/Black individuals were higher than for other races from 2014 through 2017, but in 2018, compared to other races, arrest rates were highest for Asians, followed by African American/Black individuals. *(See additional detail on arrest data in Appendix E)*

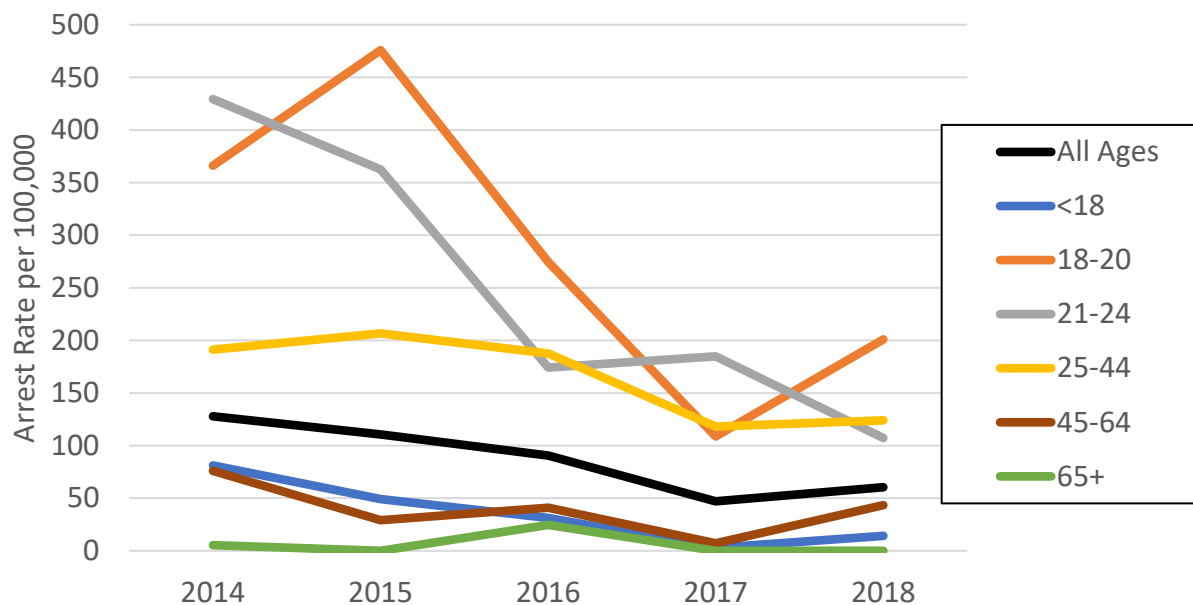
**Rates of arrest by the Alameda County Sheriff's Office by age show a big decline for residents ages 18-24 between 2015 and 2017. However, the rate of arrest nearly doubled for 18-20-year-olds in 2018 (from 109 per 100,000 residents in 2017 to 201 in 2018).**

*Figure 16: Cannabis Arrests by Race/Ethnicity, Unincorporated Area of Alameda County*



Source: CAPE, with data from Alameda County Sheriff's Office, 2014 – 2018

**Figure 17: Cannabis Arrests by Age Group, Unincorporated Area of Alameda County**



Source: CAPE, with data from Alameda County Sheriff's Office, 2014 – 2018

Data from the Alameda County Probation Department shows after the implementation of Proposition 64, their cannabis-related probation caseload reduced by 61 percent. However, despite the reduction in the overall number of clients with marijuana-related offenses, there remains a disproportionate representation of people of color (African American/Black individuals in particular) in the existing caseload. In 2018, 44.8 percent of clients for cannabis-related offenses were African American/Black individuals (up from 38.9 percent in 2016), 24.0 percent were Asian/Pacific Islanders (up from 20.6 percent in 2016), 14.6 percent were Hispanic/Latinx (down from 21.9 percent in 2016), and 13.5 percent were White (down from 14.6 in 2016).<sup>107</sup> These findings align with trends seen in the arrest data from Alameda County jurisdictions.

**Figure 18: Individuals with a Marijuana-related offense as the first or second sustained offense, 2016 and 2018, Alameda County Probation Department**

	12/12/2016		12/31/2018	
	# Clients	Percentage of Total	# Clients	Percentage of Total
Female	16	6.5%	15	15.6%
Male	231	93.5%	81	84.4%
18-24	30	12.1%	8	8.3%
25-34	106	42.9%	43	44.8%
35-44	54	21.9%	29	30.2%
45-54	42	17.0%	12	12.5%

55-64	14	5.7%	3	3.1%
65+	1	0.4%	1	1.0%
African American/Black	96	38.9%	43	44.8%
Asian/Pacific Islander	51	20.6%	23	24.0%
Hispanic/Latinx	54	21.9%	14	14.6%
White	36	14.6%	13	13.5%
All Other Races	10	4.0%	3	3.1%

Source: Alameda County Probation Department. 2018

### Lack of safe and legal places to consume cannabis disproportionately impacts low-income individuals and people of color

While some residents, such as homeowners, have access to private property where they can safely consume cannabis, other people do not have a safe and legal place to consume. For example, consumption of cannabis in federally funded housing is prohibited, and landlords can prohibit use as well.<sup>108</sup> **Even in California where adult-use cannabis is legal, tenants can be evicted for using or possessing cannabis.** Cannabis consumption is also not legal in moving vehicles or public spaces, and there are currently no designated public spaces for cannabis use, like there are for tobacco.<sup>109</sup> Research for this HIA found conflicting perspectives about where consuming cannabis in a parked car is legal. This type of uncertainty or misunderstanding regarding where cannabis consumption is legal under Proposition 64 is an additional factor that can put people at risk for violating the law, and **citations and fines assessed for public consumption can be costly and lead to debt, poor credit ratings, additional fines, and contact with the justice system.**

Data from other legalized jurisdictions show racial disparities when looking at who is criminalized for illegal public consumption of cannabis. For example, in Washington, D.C. although approximately 49 percent of the population is African American/Black and they use cannabis at similar rates to White residents, an African American/Black resident is 11 times more likely to be arrested for consuming marijuana in public compared to a White person.<sup>110</sup>

## F. Economic Impact & Opportunities

In the initial years of Proposition 64 implementation, statewide cannabis tax funding has proven to be uncertain. While California originally projected \$1 billion of annual tax revenue in the first year of legal cannabis sales, the state has currently only collected an estimated \$345 million.<sup>111</sup> The cannabis industry suggests this shortfall is due to the pressure of regulatory fees and taxes, sustained bans on cannabis in jurisdictions throughout the state, and the continued presence of an illegal cannabis market.<sup>112</sup> However, many caution we are only in the initial stage of cannabis legalization and that with time the legal market will likely strengthen.

Below is an outline showing the proposed allocation of tax revenues generated from Proposition 64.<sup>113</sup>

## Specific Allocations

- \$10 - \$50 million—Governor’s Office of Business and Economic Development
  - Community Grants to those affected by the War on Drugs
- \$10 million—Public university or universities in California
  - To evaluate the measure
- \$3 million—Highway Patrol
  - Create methods to measure impaired driving
- \$2 million—UC San Diego Center for Medical Cannabis Research
  - Study risks and benefits of medical cannabis

## Remaining Allocations (of tax revenues once the above funds have been distributed)

- 60 percent—Youth education, prevention, early intervention, and treatment
- 20 percent—Environmental restoration and protection
- 20 percent—Programs designed to reduce driving while impaired and combat public health and safety risks

## Legal cannabis businesses continue to face competition from the illegal market

Stakeholders interviewed for this report observed that licensing fees and taxes are sending both cannabis users and businesses to the illegal market, where cannabis products are reportedly less expensive. According to an LA Times report an estimated 80 percent of cannabis sales in California are from the illegal market, which generated an estimated \$3.7 billion in revenue in 2018.<sup>114</sup> **If this estimate is accurate, this trend is problematic, because cannabis being sold within the illegal market is not regulated or tested and therefore is potentially less safe for consumption.** The illegal cannabis market is also in competition with the legal market, potentially hindering its ability for growth.

Some Bay Area governments are responding to pressure on the legal cannabis market by lowering local cannabis tax rates. The Berkeley City Council recently reduced their tax on cannabis by half, and Oakland voters passed Measure V in 2018, giving the City Council power to lower taxes on cannabis.<sup>115</sup> State legislators are also considering a bill which would lower the state cannabis retail tax rate from 15 percent to 11 percent and eliminate the taxes on cultivators altogether until June 2022.<sup>116</sup>

## Access to economic opportunities in the cannabis industry are limited, particularly for those with limited financial resources and those with a felony conviction record

**Stakeholders interviewed for this report emphasized that the lack of general education, training opportunities, and formal certification programs available to those interested in entering the cannabis industry, or those interested in shifting from operating in the illegal to the legal market, are also a barrier to economic opportunity.** Legal assistance to navigate the regulations associated with starting a cannabis business is also an unmet need for many with limited finances who would like to start

a cannabis business. The county does host a cannabis stakeholders' group which cannabis business owners have noted has been extremely helpful and supportive to businesses interested in and newly navigating the cannabis industry.

**Those with a felony conviction on their record may be denied a cannabis business license by the State of California under Proposition 64.**<sup>117</sup> State law specifies grounds for denial include applicants who have a record of a felony conviction that is “substantially related to the qualifications, functions or duties of the business profession for which the application is made.” This includes convictions for a violent or serious felony, felony conviction involving fraud, or use of a minor for transporting controlled substances or drug trafficking.<sup>118</sup> However, a felony conviction involving possession, sale, cultivation or transportation of a controlled substance may *not* be the sole grounds for denying a cannabis business license.<sup>118</sup> For any cannabis business application which is denied, an applicant can file a petition to have a hearing to review the decision.<sup>119</sup>

For the unincorporated areas, Alameda County's local cannabis ordinances specifically prohibit any person who has been convicted of a felony within the past three years from being engaged in the operation of a cannabis facility.<sup>119 120</sup>

**Cannabis Equity Programs currently face barriers to promoting equitable access to the cannabis industry, including for communities adversely impacted by previous criminalization of cannabis activities**

**In the years leading up to the passage of Proposition 64, many touted the potential economic opportunity that would result from cannabis legalization, including for communities most heavily burdened by the adverse impacts of previous cannabis policies. However, to date the cannabis industry largely lacks representation from these communities.**<sup>121</sup>

**Several cannabis equity programs have been established in legalized jurisdictions, aiming to provide access and opportunities to the cannabis industry for people who were disproportionately harmed by the war on drugs.** Currently, the only such program within Alameda County is the City of Oakland's Cannabis Equity Program. The program, initiated in 2017, was established to “minimize barriers to cannabis licensing for Oakland residents who have been the most victimized by the war on drugs.”<sup>122</sup> Under this program, 50 percent of all of the cannabis permits in the City of Oakland are awarded to applicants who live in areas designated as zones with high rates of cannabis-related arrests over the past decade, or that have been charged with a cannabis-related offense anytime since November of 1996.<sup>123</sup> Equity applicants must also show an annual income at or less than 80 percent of the 2016 Oakland

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<sup>118</sup> Drug trafficking generally refers to the sale and distribution of illegal drugs. Penalties for federal drug trafficking convictions vary according to the quantity of the controlled substance involved in the transaction.

<sup>119</sup> Sections 6.108.100(A)(4), 6.108.120(A)(12), and 6.108.125(A)(9) of the retail sales ordinance and Sections 6.106.060(B)(3), and 6.106.100(A)(4) of the cultivation ordinance.



Average Medium Income thresholds.<sup>124</sup> In its inaugural year, over 300 applicants applied to Oakland's equity program, and initially only four were granted cannabis business licenses. Along with Los Angeles, the City of Oakland, has been a leader around this work in the state.<sup>125</sup>

Stakeholders interviewed about Oakland's equity program describe the successful process of identifying and providing licenses for equity applicants/businesses, but also note the challenges the program has faced in its initial year of operation. **These challenges include a lack of training, education, and funding to allow equity applicants to adequately succeed along with their industry counterparts.** While Oakland's equity applicants have the advantage of eligibility for obtaining a license to open a cannabis business, once they receive that license they are still subject to the same constraints and challenges that any cannabis business faces, though they are less likely than their wealthy industry counterparts to have the finances, training or education to overcome potential barriers (such as finding real estate to locate cannabis operations, etc.). Evaluating the success of equity programs and businesses is another common challenge. Since Oakland's Equity Program is just getting off the ground, the city does not yet have information about the success of its initial cannabis equity applicants/businesses.

The barriers facing Oakland's cannabis equity program are not unique to Alameda County. The limited number of equity programs operating throughout the state and country seem to be facing similar challenges. Massachusetts was the first state to implement a statewide cannabis equity program and has been lauded for requiring 50 percent of all cannabis business licenses go to African American/Black and Hispanic/Latinx applicants. However, to date, few have applied to the Massachusetts Cannabis Equity program, citing the burden of taxes, fees, and anxiety associated with interfacing with government agencies.<sup>126</sup>

The barriers equity applicants (and others without access to financial resources) face are further magnified by the lack of banking options for cannabis businesses. Most U.S. banks are prohibited from providing loans or other banking services to cannabis businesses while cannabis remains illegal at the federal level. This puts those with broader access to financing (and without need for banking loans for real estate and other startup costs) at a significant advantage in the cannabis industry.

To address the many barriers facing cannabis equity programs and the lack of opportunities to promote equity in the cannabis industry, California state legislators recently passed SB 1294, which provides for the distribution of grants to jurisdictions with cannabis equity programs (such as Los Angeles, Oakland, Sacramento, and San Francisco). Funding through this legislation will allow existing cannabis equity programs to offer equity applicants and licensees business loans or grants, licensing fee waivers, technical assistance, and other supportive services.<sup>127 128</sup>

Aside from the limited number cannabis equity programs in the state and country, there are few programs that focus on creating economic opportunities in the cannabis industry for individuals who were previously incarcerated for cannabis-related offenses and are now re-entering society seeking employment

and opportunities to build skills and experience. One of the programs that has launched is the Freedom House Reentry Education and Employment Corporation (FREE). FREE recently started a project which will create two million square feet of cannabis grow facilities throughout California, and will target employment to formerly incarcerated individuals, their families, and local residents. The project also aims to pay their employees a living wage and provide health and retirement benefits.<sup>129</sup>

## IV. Addressing Disproportionate Impacts of Cannabis Policies in Alameda County

This HIA has identified where the adverse impacts of Proposition 64 and the use of cannabis disproportionately impacts specific populations in Alameda County. These findings include:

- **Cannabis-related hospital visits** – The rate of cannabis-related hospital visits is highest for African American/Black individuals and individuals 25-34 years of age.
- **School suspensions** – Countywide, school suspensions for illicit drugs disproportionately impact African American/Black students.
- **Location of cannabis businesses and facilities** - In Alameda County a higher percentage of African American/Black and Hispanic/Latinx residents live in areas within a half mile of a retail businesses or cultivation sites compared to Whites and Asians, and the poverty rate among households within a half mile of Alameda County's cannabis retail and cultivation sites is nearly twice that found in Alameda County overall.
- **Cannabis-related arrests and criminalization** - While there has been a general decrease in cannabis-related arrests in Alameda County's jurisdictions, people of color are still disproportionately represented among those who are arrested for cannabis-related offenses.
- **Access to economic opportunity in the cannabis industry** – California's cannabis industry is growing rapidly, but financial, regulatory, and other barriers limit equitable access to economic opportunities created by this industry. The cannabis industry also largely lacks representation from communities who were most adversely impacted by the previous criminalization of cannabis activities.

**It is crucial to further investigate and understand what is causing these racial inequities. Stakeholders ranging from community residents and organizations to decision makers and people with specific skills and expertise should be engaged to assess and address the root causes of these outcomes.<sup>20</sup> This study did not attempt to explain the causes of the inequities we found but does bring attention to the need for further exploration to understand why certain populations disproportionately bear the burden of adverse impacts associated with cannabis and cannabis policy. Historical discriminatory**

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<sup>20</sup> Understanding and addressing inequities, particularly those around race and ethnicity, aligns with Alameda County's participation in the Government Alliance on Race and Equity (GARE), and the county's commitment to achieving racial equity.

**policies, disparate living conditions and implicit bias and are all factors that may play a role in the inequitable outcomes highlighted in this report.<sup>130</sup>**

## V. Conclusions

The implementation of Proposition 64 marks an unprecedented time in California. Navigating the legalization of adult-use cannabis is uncharted territory, as it is unlike other substances that decision makers and experts are familiar with regulating. The Alameda County Health Impact Assessment of Proposition 64 provides a snapshot of existing evidence about how the legalization of adult-use cannabis is currently, and may in the future, impact residents of Alameda County.

This Health Impact Assessment also illuminates ways that legalization of adult-use cannabis affects a broad base of stakeholders in Alameda County, including: youth, school administrators, treatment providers, law enforcement, and county agencies and departments overseeing land use planning, public health, behavioral health, and criminal justice laws and policies. The HIA findings identify issues where additional study and attention are warranted and where disproportionate impacts exist and could be exacerbated. The HIA recommendations provide guidance for county leaders and other stakeholders as they make decisions which will affect the future of adult-use cannabis – and local communities and their residents – in Alameda County.

Although we do not yet have a road map to guide how Alameda County addresses the impacts associated with the legalization of adult-use cannabis, this HIA provides some direction. While it is just a starting point, the opportunity to bring together perspectives of stakeholders from throughout the county, to highlight findings from existing studies as well as local data, and to acknowledge areas where research and the law itself is unclear has proven to be insightful and valuable.

## VI. Recommendations

This Health Impact Assessment explores a range of issue areas that are affected by Proposition 64, and, as such, the recommendations included in this report apply to a variety of stakeholders including (but not limited to) the Alameda County Board of Supervisors, City Administrators, school districts and school administrations, service providers, and law enforcement. The recommendations listed below reflect input from members of the Cannabis Human Impacts Subcommittee of the Alameda County Interdepartmental Cannabis Working Group, key informant interviews and focus groups conducted for this HIA, and available research and literature.

### Recommendation Criteria

These recommendations were prioritized for inclusion in this report by the Cannabis Human Impacts Subcommittee members, using the following criteria:

#### Applies Locally

- Aligns with criteria and priorities for statewide cannabis tax funds that our county (and local partners) may apply for
- Is realistically implementable
- Includes actionable items for the Alameda County Board of Supervisors
- Is inclusive and relevant for all of Alameda County (not just one jurisdiction)
- Builds on programs, policies, and issues that the county is already working on but that may not have a focus on cannabis

#### Fills an Existing Gap

- Addresses inequities and populations disproportionately impacted by cannabis use and policies that previously criminalized cannabis activities
- Addresses areas where data indicates there are significant issues
- Addresses “grey” areas where impacts may be uncertain
- Presents an opportunity for collaboration between key stakeholders

#### Additional considerations:

- Resonates widely and is easily communicated
- Was raised widely by participating stakeholders
- Could support implementation/ advocacy at the state level

### HIA Recommendations

Below is a full list of recommendations developed as part of the Alameda County Proposition 64 Health Impact Assessment. The recommendations in **bold** represent those for which the Cannabis Human Impacts Subcommittee recommends immediate review and action by the Alameda County Board of Supervisors and other Alameda County officials. Given the potential uncertainties associated with

statewide cannabis tax revenues, local jurisdictions should allocate local resources, support, and funds to achieve the recommendations included in this Health Impact Assessment.

#### Public Education and Awareness

- **Support public education campaigns that promote understanding about current cannabis laws and policies, including where there are discrepancies at the local, state and federal levels.**

#### Health Services and Treatment

- **Provide education about the health risks of cannabis use and incorporate this information into perinatal service programs.**
- Provide training and resources around cannabis use prevention and substance abuse treatment widely to case managers in locally funded programs.

#### Youth and Schools

- **Expand and develop programs and services for youth that address cannabis use. This includes:**
  - Programs that offer trauma-informed prevention services
  - Brief and early intervention
  - Opportunities for youth to develop trusted relationships with skilled and experienced adults as well as their peers
  - Prevention education that reach younger students in middle and elementary schools
- **Provide opportunities for school-based providers, educators, students/youth and parents to have a meaningful role in identifying how funds to address cannabis related issues are applied in schools and for youth programs.**
- **Leverage and expand the county's existing efforts with school districts and behavioral health care providers to address issues related to cannabis use among youth in Alameda County.**
- **Support:**
  - Promising models of cannabis education for youth that focus on the health impacts of cannabis use and that promote self-agency. Campaigns should avoid fear-based messaging.
  - Training for adults that work with youth (including providers, educators and parents) about the impacts of cannabis and effective ways to connect with youth about issues related to cannabis use.
  - Promising, evidenced-based programs and services that have a successful track record in schools.
  - Programs that provide safe spaces for youth to receive social support and that address issues which may put youth at risk for substance abuse (i.e. stress, trauma, etc.).
  - Programs that divert students from being suspended for cannabis related infractions and instead offer them counseling, preventive education and other supportive services.

- Research that helps to develop a better understanding of the attitudes and messages that reinforce cannabis use among youth in different neighborhoods and areas of the county.
- Promote the consistent and equitable implementation of practices and policies around cannabis-related suspensions and alternatives to suspension among school districts and schools in Alameda County.

#### Land Use and Regulations

- **Support policies that regulate cannabis advertisements throughout the county.**
- **Continue to adjust cannabis regulations and tax and fee structures to encourage legal participation in the industry, and to offer equitable opportunities for residents to benefit from access to the cannabis industry.**
- Support and encourage the success of local cannabis businesses, for example, by providing incentives, such as tax breaks and technical or financial assistance, to cannabis businesses that invest in and contribute to the communities they operate within.
- To avoid disproportionate impacts, cannabis regulations should promote an equitable distribution of cannabis businesses and prevent cannabis businesses from becoming concentrated in certain areas.

#### Public Safety and Criminalization

- **To address the decrease in treatment and service referrals from the criminal justice system, develop new and collaborative methods and systems to identify and engage residents in need of substance abuse treatment and services.**
- **Minimize the time that people eligible under Proposition 64 have to wait to have their criminal records expunged, and to be notified once the record has been expunged; and allocate resources for public education campaigns that educate residents about their rights and about the impacts of criminal conviction records and expungement processes.**
- **Allocate resources for legal and other services that promote access to employment for people with previous criminal convictions related to cannabis.**
- **Local regulations and policies should address the need for equitable access to safe and legal spaces to consume cannabis.**
- **Given the disproportionate impacts that cannabis related arrests and infractions continue to have on certain populations, develop an action plan to address these trends and the impacts that they have.**
- **Support proven diversion strategies such as Collaborative Courts and other programs designed to prevent people, including juveniles, from coming into the criminal justice system. In addition, promote restorative justice programs and policies.**
- Cannabis regulations should be crafted to promote equitable access to the cannabis industry, including for those adversely impacted by policies that previously criminalized cannabis activities.

- In order to promote public safety, fund and support public education about how cannabis use can impair driving, and follow best practices to track the impact of cannabis use on driving.
- Identify and implement strategies to curb the presence and impacts of illegal cannabis cultivation/growing operations.
- Direct financial resources into programs that support communities adversely impacted by policies which previously criminalized cannabis activities.

#### Economic Opportunities

- **Develop and implement comprehensive cannabis equity programs to lower barriers to entry into the cannabis industry, particularly for residents who have been adversely impacted by policies that previously criminalized cannabis. Equity programs should reflect the unique history, context and populations of the local jurisdiction being served, as well as lessons learned from successes and challenges of other cannabis equity programs throughout the state and country.**
- Support cannabis equity programs that expand beyond a focus on cannabis business permits and offer job training, technical skill building and other education that will help equity applicants thrive and develop the skills necessary to be competitive for employment in the cannabis industry and beyond.
- Establish a network or working group for cannabis equity applicants and businesses in Alameda County so they can work together, support each other, and benefit from being connected.
- Provide opportunities for current and potential small cannabis businesses to obtain training, skills and access to funding and loans that will support their success in the cannabis industry.
- Establish local hiring requirements for Alameda County cannabis businesses.
- The distribution of funds from statewide cannabis tax revenues should reflect best practices from models of small business development (e.g. Mandela Marketplace)

#### Data Collection

- **In order to track the impacts of Proposition 64 over time, consistent and disaggregated data related to the impacts of Proposition 64 should be collected from schools, law enforcement and other agencies. This information should be centralized, made accessible and collected regularly to show disparities such as by race/ ethnicity, age, gender identity and sexual orientation, so that trends can be identified.**
- Support efforts to continue monitoring the impacts of Proposition 64 in Alameda County. Identify appropriate agencies and departments to collect and analyze data for indicators identified in this Health Impact Assessment.

#### State Level Advocacy

- **Advocate for research into the short and long term effects of both medicinal and recreational cannabis consumption, in order to better understand the impacts of cannabis in all of its forms and on different populations.**



- Advocate for investment into research that examines the most effective and scientifically accurate approaches to detecting impairment among drivers under the influence of cannabis.
- Advocate to allow Proposition 64 funding to be allocated specifically for prevention services and job training.
- Support statewide efforts to establish health and exposure standards for cannabis products (e.g. organic vs non organic, indoor vs outdoor cultivated plants, use of different pesticides and chemicals, etc.), as impacts from these exposures are still not well understood.
- Support efforts to address the lack of banking options for cannabis businesses as a way to promote equitable access to the cannabis industry as well as public safety in and around legal cannabis businesses.
- Support efforts to clarify aspects of Proposition 64 where there are ambiguous interpretations or that have led to misunderstanding of the law.

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# **Alameda County Health Impact Assessment of Proposition 64**

## **Appendices A – F**

## Appendix A: Summary of HIA Findings

### Health

- National and statewide data provide insights into cannabis use and perceptions of health risks
- More research is needed to better understand the health risks and benefits associated with adult-use cannabis
- Research demonstrates cannabis use can adversely affect the health of certain populations including youth, individuals with certain mental health conditions, and pregnant people and their children; however, additional research is needed to better understand these impacts
- States where adult-use cannabis has been legalized have seen increases in cannabis-related hospitalizations and emergency department visits, though they remain relatively uncommon
- New points of entry for referring and engaging youth and adults in substance abuse treatment and services are needed

### Youth and Schools

- Research shows that rates of cannabis use among youth have remained relatively stable since legalization of adult-use cannabis
- Many youth admitted to substance abuse treatment programs are being treated for cannabis use
- While many youth are not using cannabis, its use has become more normalized
- Perceived health risk associated with cannabis use among youth has declined
- Youth are inundated with advertisements about cannabis consumption
- Youth use cannabis to be social as well as to cope with stress, anxiety, depression, and trauma
- Cannabis-related school suspensions impact students throughout the county, but interventions to address school suspensions lack consistency among school districts
- For many youth, abstinence only messaging is ineffective
- Youth lack safe spaces to talk about cannabis and are unaware of prevention, education, and treatment programs available to them

### Land Use and Regulations

- Under Proposition 64 cannabis businesses must adhere to both state and local regulations; and local jurisdictions do not have uniform policies and regulations around adult-use cannabis
- Regulations imposed on cannabis businesses pose barriers to entry and hinder efforts to promote equity in the cannabis industry
- Residents in Alameda County notice an increasing number of cannabis billboard advertisements throughout the county
- The location and density of cannabis businesses have the potential to disproportionately burden certain populations

### Public Safety

- The impact of cannabis use on Driving Under the Influence (DUI) related incidents both across the county and statewide remains uncertain in large part due to the need for scientifically valid methods of testing impairment from cannabis consumption
- Crimes surrounding legal cannabis businesses in unincorporated Alameda County remain low since legalization
- Illegal cannabis growing operations can have significant impacts on the health and safety of surrounding land and communities

### Criminalization

- Proposition 64 legalized adult-use cannabis, eliminating most criminal penalties for cannabis-related offenses, however, various cannabis-related activities remain illegal
- There is widespread misunderstanding about the laws surrounding cannabis and the discrepancies between local, state, and federal policy
- Throughout the nation, state, and county there is a well-documented history of racial inequities in cannabis-related arrests
- While there has been a general decrease in cannabis-related arrests in areas which have legalized cannabis, people of color still disproportionately come into contact with the criminal justice system for cannabis-related offenses
- Lack of safe and legal places to consume cannabis disproportionately impacts low-income individuals and people of color

### Economic Impact & Opportunities

- Legal cannabis businesses continue to face competition from the illegal market
- Access to economic opportunities in the cannabis industry are limited, particularly for those with limited financial resources and those with a felony conviction record
- Cannabis Equity Programs currently face barriers to promoting equitable access to the cannabis industry, including for communities adversely impacted by previous criminalization of cannabis activities

## Appendix B: List of Terms and Acronyms

**Cannabis:** The scientific term for marijuana, weed, hemp, etc.

**Cannabidiol (CBD):** It is one of at least 111 cannabinoids identified in cannabis, accounting for up to 40% of the plant's extract. CBD is not psychoactive like THC and is more commonly used for medicinal purposes.

**Cannabinoids:** A group of active chemical compounds found in marijuana that interact with specific cannabinoid receptors present in the human central nervous system leading to altered moods, pain relief and other medical benefits. The cannabis plant has at least 111 cannabinoids with THC (or tetrahydrocannabinol) being described as the most common cannabinoid known for its psychoactive properties.

**Cannabis Use Disorder:** the continued use of cannabis despite clinically significant distress or impairment which usually includes: a strong desire to consume cannabis, difficulties in controlling its use, persisting in its use despite harmful consequences, giving a higher priority to cannabis use than to other activities and obligations, increased tolerance for cannabis use, and sometimes a physical withdrawal state.

**Concentrate:** a highly potent THC concentrated mass obtained by the use of a solvent to dissolve essential oils and resinous cannabinoids from the plant material. Cannabis concentrates can deliver high potency THC via dabbing and use of vaporizers. Concentrates are referenced under different names like BHO, wax, oil, shatter or crumble.

**Cultivation:** refers to growing cannabis in a commercial facility. Commercial cannabis cultivation can occur outdoors or indoors but is regulated by a local jurisdiction.

**Dabbing/Shattering:** The dabbing process involves specialized equipment that is available at many smoke shops. The shatter is placed on a pre-heated surface called a "nail." The user then inhales the vapors through a specialized pipe called a "rig."

**Delivery:** the commercial transfer of cannabis or cannabis products to a customer by delivery to a non-licensed location. A retailer may utilize a technology platform such as a website or app to enable customers to place orders for delivery.

**Distribution:** the procurement, sale, and transport of cannabis and cannabis products between licensees.

**Drug Trafficking:** generally refers to the sale and distribution of illegal drugs. Penalties for federal drug trafficking convictions vary according to the quantity of the controlled substance involved in the transaction.

**Edibles:** food items infused with marijuana. Edibles come in many forms such as brownies, cookies, candies, gummies, chocolate bars or drinks. Unlike smoking cannabis, edibles take longer to take effect but may result in a more intense high. This is because eating cannabis introduces cannabinoids through the gastrointestinal tract where it is digested much more slowly.

**Extraction:** the process of obtaining THC-rich cannabis concentrates from the marijuana plant. The concentrates are



produced in a scientific manner that utilizes solvents like butane, alcohol or carbon dioxide. The methods for extraction include BHO, ethanol or supercritical CO2 or water processes.

**Illegal Grow:** Illegal market cannabis cultivation operations which exist illegally and do not adhere to state and/or local regulations.

**Manufacturing:** a licensee that conducts the production, preparation, propagation, or compounding of cannabis or cannabis products either directly or indirectly or by extraction methods, or independently by means of chemical synthesis, or by a combination of extraction and chemical synthesis at a fixed location that packages or repackages cannabis or cannabis products or labels or relabels its container.

**Medicinal and Adult-use Cannabis Regulation and Safety Act (MAUCRSA):** Legislation which regulates California’s medical and recreational cannabis.

**Medical Cannabis:** cannabis and cannabinoids that are recommended to patients by physicians.

**Microbusiness:** licensees who engage in at least three of the following commercial cannabis activities: cultivation (less than 10,000 square feet), manufacturing (except for extraction using volatile solvents), distribution, or retail sales.

**Proposition 64:** a 2016 voter initiative to legalize cannabis in California. The full name of the legislation is the Control, Regulate and Tax Adult Use of Marijuana Act.

**Adult-Use (Recreational) Cannabis:** Recreational drugs, including recreational cannabis, are used to intentionally change one’s state of consciousness, often producing feelings

of happiness and exhilaration. In the cannabis industry, adult-use cannabis can be purchased at a recreational dispensary by anyone (either from the state or from outside the state) who is 21 years or older with a valid government-issued ID.

**Retail Dispensaries/Outlets:** licensed premises and physical locations from which the sale of commercial cannabis products occurs.

**Testing Laboratory:** a laboratory, facility, or entity in the state that offers or preforms tests of cannabis or cannabis products. Tests are conducted to identify and measure contaminants as well as levels of THC and CBD. All cannabis products are subject to testing (akin to food and alcohol).

**Tetrahydrocannabinol (THC):** One of at least 111 cannabinoids identified in cannabis. THC is the principal psychoactive constituent of cannabis.

**Vaporizer/Vape Pen:** A vape pen is a portable, handheld vaporizer that contains a battery powered heating element that vaporizes pre-filled cannabis oils, waxes and dry herbs without releasing smoke. Vaporizers used for cannabis work like e-cigarettes and can be used discreetly in public places. The three main types of vape pens include oil vaporizer pens, wax vaporizer pens and dry herb vape pens.

**War on Drugs:** In 1971, President Nixon declared a “war on drugs”, dramatically increasing the size and presence of federal drug control agencies and promoting policies with severe penalties criminalizing drug-related activities. The War on Drugs has had significant and disproportionate impacts on communities of color in the U.S.; particularly affecting African American and Latinx populations.

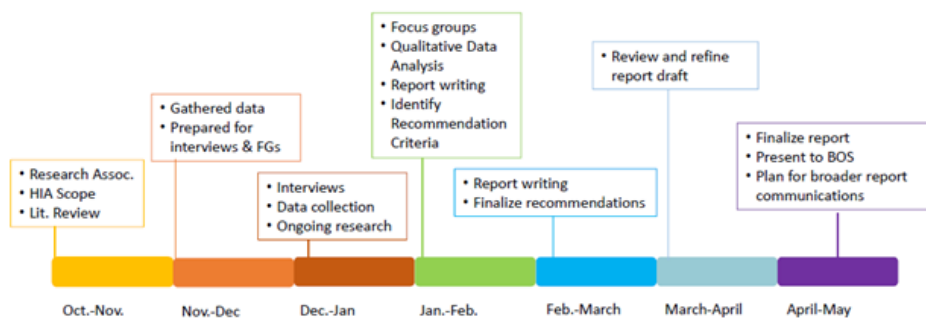
## Appendix C: Cannabis Human Impacts Subcommittee and HIA Research Scope

### Alameda County Cannabis Human Impacts Subcommittee

When Proposition 64 was implemented in 2018, the Alameda County Board of Supervisors Transportation and Planning Committee directed the County Interdepartmental Cannabis Working Group to explore the human impacts of the legalization of adult-use cannabis. The County Interdepartmental Cannabis Working Group thus established a Cannabis Human Impacts Subcommittee. The Cannabis Human Impacts Subcommittee was formed in May 2018 and has met monthly since that time. The Subcommittee is comprised of representatives from several County agencies and is convened by Kimi Watkins-Tartt, Director of the Alameda County Public Health Department and Pete Coletto, Principal Administrative Analyst from the Alameda County Administrator's Office. Members of the Subcommittee include representatives from the County Administrator's Office, Health Care Services Agency, Behavioral Health Department, Public Health Department, Community Development Agency Planning Department, Sheriff's Office, Public Defender's Office and the Probation Department.

After learning about different methodologies for analysis, the Cannabis Human Impacts Subcommittee elected to conduct a Health Impact Assessment (HIA) of the impacts of Proposition 64. The Subcommittee served as the Steering Committee for the Cannabis HIA, which was conducted between October 2018 and May 2019. The HIA was managed by a Public Health Department staff person and a Research Associate. Human Impact Partners, a national nonprofit organization specializing in Health Impact Assessment, provided technical assistance.

### Alameda County Proposition 64 HIA Timeline of Activities



### Health Impact Assessment Research Scope

The Alameda County Health Impact Assessment of Proposition 64 brings together the best available research about the impacts of the legalization of adult-use cannabis together with quantitative and qualitative data about existing conditions in Alameda County to understand the potential impacts, both positive and negative, that Proposition 64 could have and will continue to have on health and equity in Alameda County. The assessment focuses specifically on the ways in which legalization of adult-use cannabis will affect:

- Health
- Youth and schools
- Land use and regulations

- Public safety
- Criminalization, and
- Economic opportunity

The findings presented in this report highlight where there are disproportionate adverse impacts of Proposition 64 and the use of cannabis in Alameda County. The report does not attempt to explain the causes of disparities, but brings attention to the need for further exploration and study to understand why certain populations disproportionately bear the burden of adverse impacts associated with cannabis and cannabis-related policies.

#### Overarching research question that the HIA intended to answer:

What are the potential impacts, both positive and negative, of Cannabis legalization on children, youth, adults, and communities in Alameda County? Where might these impacts be disproportionate/ inequitable?

#### Research Questions by HIA Topic<sup>1</sup>

##### Health Benefits and Risks Associated with Cannabis Use

What are the potential benefits and risks of cannabis use on different populations in Alameda County? Are there disproportionate impacts (inequities)?

- What are the potential impacts of the legalization of adult-use cannabis on rates of hospitalizations, emergency department visits and substance abuse treatment in Alameda County?
- Can cannabis use have benefits to some populations but pose risks to others?
- What are the physical and mental health benefits and risks of short and long-term cannabis use on sensitive populations, including:
  - Youth
  - Pregnant women
- What is known about the different modes, frequencies, and durations of cannabis use?

##### Land Use and Regulations

How will cannabis activities (e.g. retail, cultivation, manufacturing, cultivation) affect land use in Alameda County?

- How will different areas of the county (urban, rural, unincorporated) be affected?
- What are the environmental impacts of illegal grows in Alameda County?
- What populations live in the areas that will be most affected by these impacts (i.e. demographic characteristics such as income, race/ethnicity and age)?
- What are the impacts of cannabis related advertisements/ billboards throughout the county?
  - Are there disproportionate impacts of these types of advertisements in certain areas or neighborhoods in the county?

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<sup>1</sup> The original set of research questions for this HIA did not include a section for “Youth and Schools”

### Public Safety

What are the potential public safety impacts of adult-use cannabis legalization on all populations in Alameda County? Are there disproportionate impacts (inequities)?

- What are the potential impacts of cannabis legalization on public safety, including:
  - Driving while intoxicated/ DUI
  - Perceptions of neighborhood safety
  - Crime and vandalism
    - What kinds of crime might be associated with the legalization of adult-use cannabis?
    - Would possible crime associated with the legalization of adult-use cannabis have disproportionate impacts in certain geographic areas or on certain populations in the county?

### Criminal Justice

What are the potential impacts of the legalization of adult-use cannabis on criminal justice for Alameda County communities? Are there disproportionate impacts (inequities)?

- What are the historic trends around the criminalization of cannabis activities by race, geography and age in Alameda County?
- What is the process for criminal conviction expungement under Proposition 64?
- What has been the impact of the legalization of adult-use cannabis on arrest rates and other contact with the criminal justice system (for youth and adults)?
- How are suspensions and expulsions in schools being impacted by Proposition 64?

### Economic Impact & Opportunities

What are the potential impacts of the legalization of adult-use cannabis on economic opportunities for Alameda County residents? Are there disproportionate impacts (inequities)?

- What are the potential economic opportunities resulting from the legalization of adult-use cannabis (e.g. jobs generated, wealth-building opportunities)?
  - Which populations will have access to these opportunities and which populations may face barriers to accessing these opportunities?
    - Does the legalization of adult-use cannabis present any potential opportunities for groups that were disproportionately affected by policies that previously criminalized cannabis activities?
    - What economic barriers might prevent residents or small businesses from benefiting from economic opportunities generated by Proposition 64?

## Appendix D: Methodology

### Key Informant Interview Methodology

Twenty-two interviews were conducted with individuals representing a diverse set of key stakeholders in Alameda County that are affected by Proposition 64. All but two of the interviews were conducted by phone (two were conducted in-person), and each interview lasted an average of 45 minutes. The report authors referred to both audio recordings as well as written notes from the interviews to inform the report content.

### Key Informant Interviews

**Alameda County Sheriff's Office**  
Commander Miles and Sergeant Scheuller

**Center for Healthy Schools and Communities**  
Tuere Anderson, Clinical Director

**Youth and Family Service Bureau, City of Hayward Police Department**  
Emily Young, Administrator

**Project Eden/Horizon Services, Inc.**  
Rochelle Collins, Program Director

**TUPE Program/ Oakland Unified School District**  
Robert Dousa, Program Manager/ CHKS Administrator

**Alameda County Probation Department**  
Chief Wendy Still, MAS  
Assistant Chief, Esa Ehmen Krause  
Deputy Chief, Marcus Dawal

**OHS Chemical Dependency Programs**  
Victor Salinas, Manager

**Alameda County District Attorney's Office**

**Alameda County Public Defender's Office**  
Brendon Woods, Public Defender  
Sadie Wathen, Clean Slate Attorney

**Rosciano Farms, LLC, Cultivator**

**We Are Hemp, Retail Dispensary**

**Fog City Extracts, Cannabis Manufacturer** (Type 7 License)

**Ella Baker Center**  
Tunisia Owens, Policy Manager

**Wood, Smith, Henning & Berman LLP**  
Dominic Ripoli, Associate

**ChangeLab Solutions**  
Derek Carr, Staff Attorney  
Maya Hazarika Watts, Staff Attorney  
Heather Wooten, Former Senior Vice President of Program Strategy

**Resilient Wellness**  
Daisy Ozim, Founder

**East Oakland Youth Development Center**  
Regina Jackson, President and CEO

**Alameda County Community Development Agency Planning Department**  
Sophie McGuinness, Planner III  
Liz McElligott, Assistant Planning Director

**Alameda County Community Development Agency, Code Enforcement**  
Edward Labayog, Senior Code Enforcement Investigator

**City of Oakland**  
Greg Minor, Assistant to the City Administrator

**Alameda County Office of Collaborative Courts**  
Gavin O'Neil, Principal Analyst

**Drug Policy Alliance**  
Rodney Holcombe, Staff Attorney

### Qualitative Interview Questions for Key Informant Interviews

The following are the unique series of questions that were used to guide each of the key informant interviews. The same set of interview questions was used for interviews with key informants that held similar professional positions. Key informants were sent interview questions in advance of the interviews. Each interview began with brief introductions, a description of the Health Impact Assessment project and how the interview data would be used in the HIA report.

#### **Alameda County Sheriff's Office:**

1. Can you tell us about yourself and your work within the Sheriff's Office?
2. Have particular populations been disproportionately stopped, arrested, prosecuted, and/or incarcerated for cannabis activities in the past?
  - How could that change in the future as a result of Prop 64?
3. What type of data does the Sheriff's Office collect about arrest, prosecution and/ or incarceration related to cannabis (by race, age and location of residence)? Can this data be shared with us for the HIA?
4. In general, what type of impacts have cannabis activities had on public safety issues such as property crime or violent crime - before and since legalization?
  - What kind of data does the Sheriff's Office collect about public safety issues related to cannabis activities, and could we access this data for the HIA?
5. What types of crime, if any, have you seen in areas surrounding cannabis dispensaries in the unincorporated areas? Have you seen a change in these crimes or their frequency since legalization?
6. How has Proposition 64 affected the prevalence of people driving under the influence of cannabis?
7. Have you seen a change in the amount of public consumption of cannabis in the county since Proposition 64 went into effect?
8. Where could we access data on arrests related to public consumption of cannabis (by race/ethnicity and age) for the HIA?
9. Can you tell me about illegal cannabis cultivation in the unincorporated areas of the county?
  - What are the primary impacts of these illegal grows (environmentally, in terms of health and safety, etc.) Which populations are most adversely affected by them?
  - How many are there in the county? How do you locate them?
10. What recommendations do you have for implementing cannabis related policy in Alameda County?

#### **Alameda County Probation Department:**

1. Can you tell us about yourself and your work within the Probation Department?
2. In general, what kind of impact have cannabis-related activities and policies had on your department?
  - Has this impact changed in adult-use cannabis was legalized?
3. What types of changes (if any) have you seen in cannabis related crimes since legalization went into effect?
4. What, if any, disparities have you seen in your work with individuals who have a past history of cannabis-related arrests?
  - For example, are there certain populations that have been affected more than others by past or current policies that criminalized cannabis activities?

5. What kinds of resources, if any, exist for individuals who were previously incarcerated for a cannabis related crime prior to legalization?
  - Are there economic opportunities for these individuals to engage in the cannabis industry?
  - How accessible are these opportunities to people re-entering society?
6. What recommendations do you have for implementing cannabis related policy in Alameda County?

**Alameda County Cannabis Businesses:**

1. Can you tell us about your background and your interest and experience in the cannabis industry?
2. How accessible do you feel it has been for you to start or enter into the cannabis industry in Alameda County? *[clarify that this includes for cities within the county]*
3. Could you tell us what the experience has been like in terms of timeline, financial requirements, etc.?
4. What types of barriers (i.e. money, time, regulations, etc.) exist for you or others in starting a cannabis business? Do you think these barriers affect some populations more than others?
5. How much diversity do you see in terms of race/ethnicity, culture, socioeconomic status, education or otherwise among those who own or operate cannabis businesses?
6. What is your overall understanding and perception of the ordinances and regulations on cannabis businesses in Alameda County?
7. Do you feel you are/would be able to adequately compete with the larger cannabis businesses that are emerging and growing in the county and state?
8. What type of support have you received from local jurisdiction(s) to help start and/ or maintain your cannabis business?
9. What does the future for Alameda County's small business owners interested in the cannabis industry look like from your perspective?
10. What recommendations do you have for implementing cannabis related policy in Alameda County?

**Alameda County Development Agency, Planning Department:**

1. Can you tell us about your work with the Alameda County Development Agency, Planning Department?
2. What have been the impacts your department has experienced since adult-use cannabis was legalized?
3. Can you provide a brief overview the process for obtaining a permit to operate a cannabis business in Alameda County?
4. Can you give us a sense of the costs associated with obtaining a permit to operate a cannabis business in Alameda County?
5. There are documented racial disparities among who is able to enter the cannabis industry. Is the Planning Department doing anything to monitor and/or mitigate these disparities? Do you have data that you can share with us about the demographic characteristics of people who have been able to gain/access cannabis permits in the county?
6. How does the county coordinate with the state in terms of permitting and regulating cannabis businesses?
7. How does a cannabis retail business gain the ability to allow cannabis consumption on-site?
8. Are there local environmental or health impacts associated with cannabis businesses? (i.e. water pollution, odor, etc.) Are the impacts you are seeing affecting certain populations in particular?

- How is your department working to mitigate these impacts?
- 9. Do you see or anticipate that cannabis dispensaries will be disproportionately concentrated in certain areas of the county?
- 10. Does the county have any regulations around cannabis advertisements?
- 11. What do you think the next five years look like for the cannabis industry in Alameda County?
- 12. What recommendations do you have for implementing cannabis related policy in Alameda County?

**Alameda County Public Defender:**

1. Can you tell us about your work with the Public Defender's Office?
2. How has your department been impacted by Proposition 64?
3. What types of crimes are you seeing people being charged with now that adult-use cannabis is legal?
4. Do you see disparities among those being charged with crimes related to cannabis?
5. Do you (or others in the county) have processes in place to mitigate these disparities and their impacts?
6. What data/statistics specific to Alameda County does your office collect that would be relevant to this project?  
How might we obtain that data?
7. What do cases involving DUIs related to cannabis look like for you and your department?
8. Do you have a role in the Proposition 64 expungement process?
  - How is the process going in your opinion? Are there barriers that need to be addressed?
9. Can you explain how the tension between local laws and federal laws around cannabis impact the work and mission of this department?
10. In your opinion what is the biggest impact that adult-use cannabis legalization has had on your department and its work?
11. What recommendations do you have for implementing cannabis-related policy in Alameda County?

**Prevention and Treatment Providers:**

1. Can you tell us about the work you do with Alameda County Behavioral Health Care Services?
2. Please describe any programs you work with that focus on cannabis.
3. Can you briefly describe the notable risks (for youth and adults) associated with cannabis use based on existing research and testing?
  - How prevalent are these associated risks with clients you have worked with in the county?
4. Can you briefly describe the notable benefits associated with cannabis use based on existing research and testing?
  - How prevalent are these benefits with clients you have worked with in the county?
5. How has your work been impacted by Prop 64?
6. How has adult-use cannabis legalization changed the way in which you treat individuals with a drug problem associated with cannabis use?
7. How do the risks associated with cannabis compare relative to the risks associated with other notable controlled substances (alcohol, tobacco, etc.)? Are these comparisons fair?
8. Do you see disparities in terms of which populations use cannabis or who you are treating within your program?
9. How have you seen cannabis use change among youth since the implementation of Prop. 64?



- How do social and environmental conditions impact cannabis use among youth?
  - Are there programs or interventions that can address the reasons that youth may be using cannabis, even before they may be considered to have a substance abuse issue or problem?
10. How has the implementation of Prop. 64 impacted youth involvement with the justice system? Are more or fewer youth facing criminal charges related to cannabis than before January of 2018?
- Are certain populations of youth (by race, age range or location in the county) being more adversely impacted than others?
11. What recommendations do you have for implementing cannabis policy in Alameda County or beyond?

**Advocacy Organizations:**

1. Can you tell us about your work as it relates to cannabis policy?
2. What impacts have you seen previous policies that criminalized cannabis activities have on individuals, families, and communities?
  - a. Which populations were most impacted?
3. How has your organization worked to address these impacts?
4. What are your thoughts on the implementation of Prop. 64 and how will this policy change things for the communities you work with?
5. What recommendations do you have for implementing cannabis policy in Alameda County?

**DUI Programs:**

1. Can you tell us about your work with the XX DUI Program?
2. Can you explain how the program has worked on issues related to cannabis use and impairment?
3. How has Proposition 64 impacted your work?
4. What is the process for testing for cannabis-related impairment among drivers?
5. How have rates of DUIs involving cannabis changed since Prop. 64 was implemented?
6. How does your program work with individuals who have been charged with a DUI related to cannabis?
7. What type of relationship does your program have with local law enforcement when it comes to handling DUIs related to cannabis?
8. Are there disparities (by race/ethnicity, age or otherwise) among those being charged with a DUI related to cannabis?
9. What recommendations do you have for implementing cannabis policy in Alameda County and beyond?

**Oakland Cannabis Equity Program:**

1. Can you tell us about Oakland's Cannabis Equity Program?
2. What are the criteria for selecting equity applicants and how were those criteria established?
3. What type of support, training, funding or other infrastructure is offered to equity applicants and cannabis equity businesses in Oakland?
4. How many equity applicants are operating in Oakland, and how are their businesses doing?
  - What have been the primary challenges
  - Where have been some of the biggest areas of success

5. How accessible do you feel it is for Oakland residents (or Alameda County residents) to enter into the cannabis industry in general? What are the barriers (ie time, finances, regulations compliance etc.)?
6. What is the process like for residents (equity applicants and non-equity applicants) seeking a permit to operate a cannabis business in Oakland (timeline, financial requirements, etc.)?
7. How has Oakland worked to address the illegal market for cannabis in Oakland/ Alameda County?
8. Do you feel you that small/ local cannabis businesses are adequately able to compete with the larger cannabis businesses that are emerging and growing in the county and state?
9. What does the future for Oakland's Cannabis Equity Program look like from your perspective?
10. What recommendations do you have for implementing equity programs in Alameda County (or in the state)?

### Focus Group Methodology

Seven focus groups were conducted as part of this Health Impact Assessment; one with Alameda County Student Service Directors from school districts throughout the county, and six with high school age youth from school districts around the county. Focus groups were all facilitated by staff in the Health Equity, Policy and Planning Unit of the Alameda County Public Health Department (Jennifer Lucky, MPH and Matthew Lardner, MPP). Each focus group was audiorecorded and notes on the discussion were taken by Public Health Department Staff. The focus groups were each an hour a half in duration. Themes and quotes from all seven of the focus groups were integrated throughout the HIA report.

Alameda County Public Health Department Staff worked with youth development organizations in each of the 5 Alameda County Supervisorial Districts to identify and recruit youth participants for the focus groups. Youth focus group participants were asked to have a parent or guardian complete a permission form for their participation in the focus group. Participating youth were offered a \$30 gift card and provided with a catered meal (during the focus group) as compensation for their time and participation. The location of each of the youth focus groups as well as the demographic characteristics of the youth participating in each of the focus groups is listed below:

The focus group with Alameda County Student Service Directors was organized in collaboration with the Alameda County Office of Education.

Focus group limitations include potential bias, confidentiality concerns and the subjective nature of focus group discussions. Verbal assurances and written consent forms may not have convinced participants that they would remain anonymous. Youth participating in the focus groups may not have felt comfortable giving honest feedback in the presence of their peers, or they may have feared that their contributions would be recognizable in the final HIA report.

### Focus Group Demographics

#### **REACH Ashland Youth Center, Ashland (Supervisorial District 4):**

- Focus group participant's city of residence:
  - San Leandro (8)

- San Lorenzo (2)
  - Oakland (1)
- Age of focus group participants ranged from 13 to 18 years
- Gender:
  - Female (8)
  - Male (3)
- Race/ Ethnicity
  - Hispanic/Latino (4)
  - Black/African American (5)
  - American Indian or Alaska Native (1)
  - More than one race identified (1): American Indian or Alaska Native + Native Hawaiian or Other Pacific Islander

**East Bay Asian Youth Center, Oakland (Supervisory District 3):**

- Focus group participant's city of residence:
  - Oakland (8)
- Age of focus group participants ranged from 14 to 17 years
- Gender:
  - Female (2)
  - Male (6)
- Race/Ethnicity:
  - Hispanic/Latino (4)
  - Black/African American (2)
  - Asian (2)

**A consortium of TriValley students hosted at the Pleasanton Unified School District (Supervisory District 4):**

- Focus group participant's city of residence:
  - Livermore (2)
  - Pleasanton (3)
  - Dublin (2)
- Age of focus group participants ranged from 16 to 18 years
- Gender:
  - Female (5)
  - Male (2)
- Race/Ethnicity:
  - Hispanic/Latino (3)
  - Asian (3)
  - Native Hawaiian or Other Pacific Islander (1)

**Union City Family Center, Union City (Supervisory District 2):**

- Focus group participant's city of residence:
  - Hayward (2)
  - Union City (6)
- Age of focus group participants ranged from 13 to 18 years
- Gender:
  - Female (5)
  - Male (3)
- Race/Ethnicity:
  - Hispanic or Latino (5)
  - Black/African American (1)
  - Asian (1)
  - South Asian Middle Eastern\* (1)

*\* This response was added by the participant*

**Alternatives in Action, McClymonds High School, West Oakland (Supervisory District 5):**

- Focus group participant's city of residence:
  - Oakland (6)
  - Richmond (1)
- Age of focus group participants ranged from 16 to 19 years
- Gender:
  - Female (2)
  - Male (5)
- Race/Ethnicity:
  - Hispanic Latino (1)
  - Black/African American (3)
  - American Indian/Alaska Native (1)
  - White (2)

**Horizons Family Counseling Center, Livermore (Supervisory District 1):**

- Focus group participant's city of residence:
  - Livermore (5)
  - Tracy (1)
- Age of focus group participants ranged from 14 to 18 years
- Gender:
  - Female (3)
  - Male (3)
- Race/Ethnicity:
  - Hispanic/Latino (3)
  - White (3)

### Youth Focus Group Discussion Questions

The following are questions that were used to guide discussions in each of the six youth focus groups. Each focus group began with an introduction from the Alameda County Public Health Department facilitators, which included a brief description of the HIA project and how information from the focus groups would be used.

1. How many people have heard of Proposition 64? *(After youth weigh in explain Prop 64 (what it means for adults and youth; Explain legalization of cannabis for adults over 21 years of age.)*
2. Do you think that the legalization cannabis use for adults has been a good or bad thing?
  - a. What have you noticed as a result of legalization?
2. How common do you think it is for youth to use cannabis *(either at or outside of school)?*
  - a. Do you notice more kids smoking weed/ using cannabis in the past year than before?
3. What are some of the reasons you think youth smoke weed/ use cannabis?
4. For youth you know and may go to school with, how easy or hard is it to get weed/ cannabis? *(Do they get it at home, school, or other places)?*
5. Do you see cannabis/ weed advertised a lot? *(On billboards, social media, in music, etc.)*
6. How do you think this affects young people to see these kinds of ads?
7. What do you know about how cannabis use affects your health? *(Probes: Physical health, Impacts of smoking, Mental health, Addiction, Medical uses, Special populations: Youth, Pregnant women)*
  - a. Are there ways that cannabis benefits health?
  - b. What about ways that cannabis use can be bad for your health – or for certain people’s health?
  - c. Do you think adults think about how cannabis affects health in the same way that you do?
8. Do you notice that law enforcement/ the police have changed the way that they react when they see or find youth smoking or possessing cannabis/ weed? *(Are there more or less serious consequences now than there were a couple of years ago? What happens?*
  - a. Is this different from how police operated before?
9. What happens when a young person is caught by the police when they are smoking weed/cannabis or have weed/cannabis in their possession?
10. Are youth treated differently by law enforcement depending on their age or race?
11. What happens in school if students are found with weed or caught smoking?
12. In what ways do you see weed/cannabis affecting your community?
  - a. Are there ways that you see weed/ cannabis having negative impacts in your community?
  - b. What about ways that weed/ cannabis has brought any good things to your community?
13. In your school or in organizations for youth are there programs that share information about how smoking/using weed/cannabis can affect young people? What do you think of these programs?
14. If a young person has an issue or maybe unhealthy relationship to using weed/cannabis, do you know of programs or places where they can go to get help? Is it easy for young people to get help if they need it?

### Focus Group Discussion Questions for Alameda County Student Services Directors

The following are questions that were used to guide the focus group discussion with Student Services Directors from school districts throughout Alameda County. The began with an introduction from the Alameda County Public Health Department facilitators, which included a brief description of the HIA project and how information from the focus groups would be used.

1. What have been the impacts that your school/s have experienced since January of 2018 when adult-use cannabis was legalized (under Proposition 64)?
  - For example:
    - i. Have you noticed shifting trends in cannabis use among students, or shifts in the methods of cannabis consumption?
    - ii. Have you experienced shifts in school culture or safety as a result of these impacts?
    - iii. Have you noticed more medical issues as a result of students coming to school having consumed excess amounts of cannabis?
2. How do Alameda County schools collect data about substance use in schools? Is there specific data about cannabis use or does data about suspensions, etc. identify whether there is any cannabis related activity associated with this type of infraction?
3. Are the impacts of cannabis use you are seeing/ experiencing affecting certain populations of students in particular?
  - How have your school/s responded to these impacts?
  - For example, has there been an increase in suspensions?
  - What other ways have staff and teachers responded to any new trends in cannabis use in schools?
4. What type of data is collected about the reason for disciplinary actions (such as suspensions) in schools? Is this data collected or aggregated on an individual school level, or at a county or state level? How would we access this type of data for our HIA project?
5. What resources do Alameda County schools have (or not have) to deal with the impacts of cannabis use among students?
  - For example, what services are being provided by school sites vs by outside service providers?
6. Based on what you know and have seen in your work, what is the general perception of cannabis use among students in your schools?
  - i.e. are they aware of the associated risks and benefits?
7. Do schools in the county provide education to youth on the effects of cannabis, and if so, what do these programs look like? (e.g. do schools have drug prevention education and how are they framing the rhetoric around cannabis)
8. What support or actions are needed to help reduce or avoid adverse impacts that cannabis use is having on youth in schools?
9. What recommendations do you have for implementing cannabis related policy in Alameda County?
10. Given what we've discussed and the scope of this project, are there other data sources that you can provide or think we should explore to include in our assessment?

### Cannabis Terms Identified by Youth Focus Group Participants

The following is a list and word cloud of responses by youth focus group participants to the question: What are some of the common terms that young people use for ‘cannabis’?

*See section on Youth and Schools for word cloud image of terms listed below*

- Marijuana
- Weed
- Reefer
- Ganja
- Dank
- Dope
- Tree
- Fire
- Mota
- Leaf
- Mary Jane
- Gas
- Dro
- Loud
- Flower
- Thut-Thut
- Doja
- Gateway Drug
- Pot
- A bag
- Reggie
- 420

## Appendix E: Supplemental Data

### Cannabis Use Within the Past Month, Adults 18+ Years, Alameda County, California. 2017

	%	95% CI	Adults 18+ years ever tried marijuana or hashish
Hispanic/Latinx	32.2*	5.9 - 58.6	44,000
White	31.9*	12.2 - 51.5	105,000
African American/Black	39.8*	7.8 - 71.9	35,000
Native American	-	-	-
Asian	9.7*	0.0 - 23.5	16,000
Pacific Islander	-	-	-
Two or More Races	15.3*	0.0 - 50.3	5,000
All Races	27.7	16.8 – 38.7	211,000

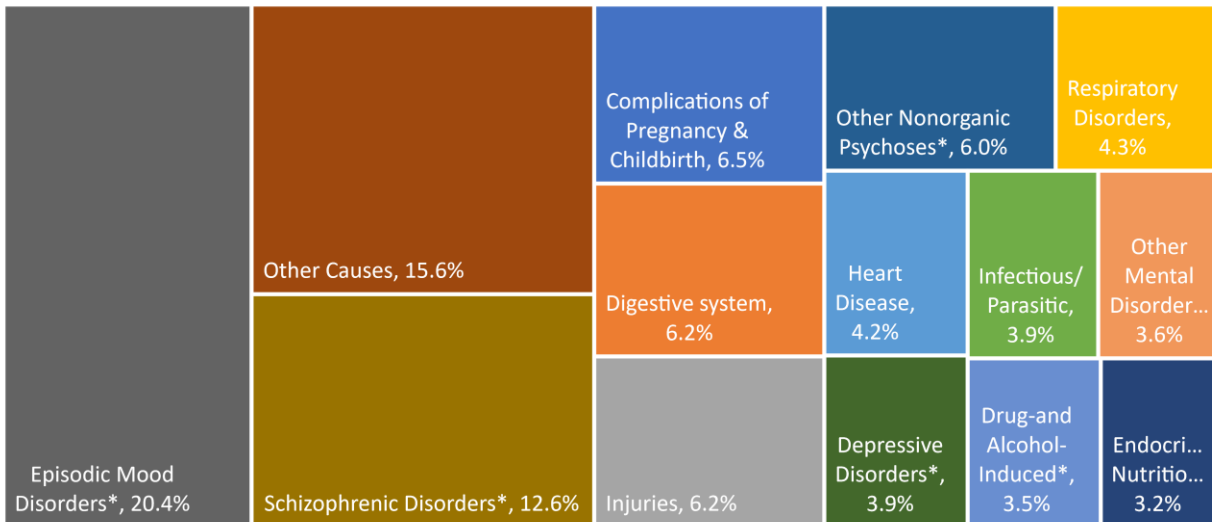
Source: California Health Interview Survey, 2017

\* = statistically unstable

### Primary Diagnosis for Cannabis Abuse and Dependence-Related Hospitalizations, Alameda County

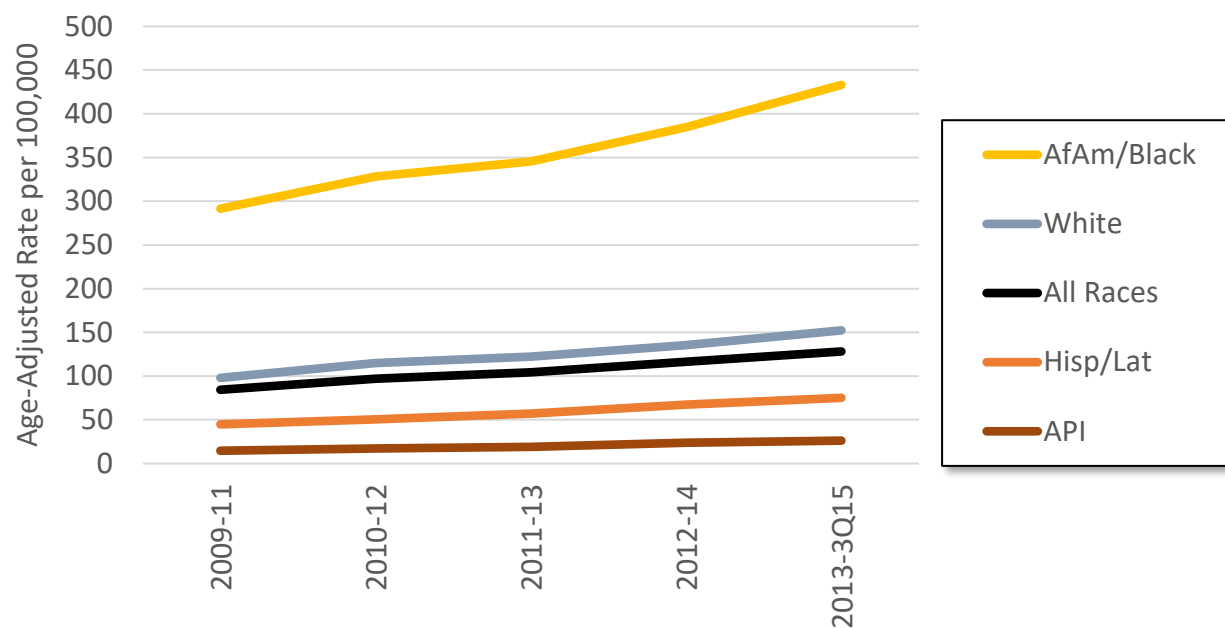
The graphic below shows the primary diagnoses for hospital visits where cannabis was an associated (non-primary) diagnosis. Fifty percent of these primary diagnoses were for mental disorders, which included episodic mood disorders (which includes bipolar and major depressive disorders), schizophrenic disorders, other nonorganic psychoses, depressive disorders not elsewhere classified, as well as other types of drug and alcohol induced mental disorders. Other common primary diagnoses were related to pregnancy complications, digestive problems, injuries, respiratory, and heart problems.





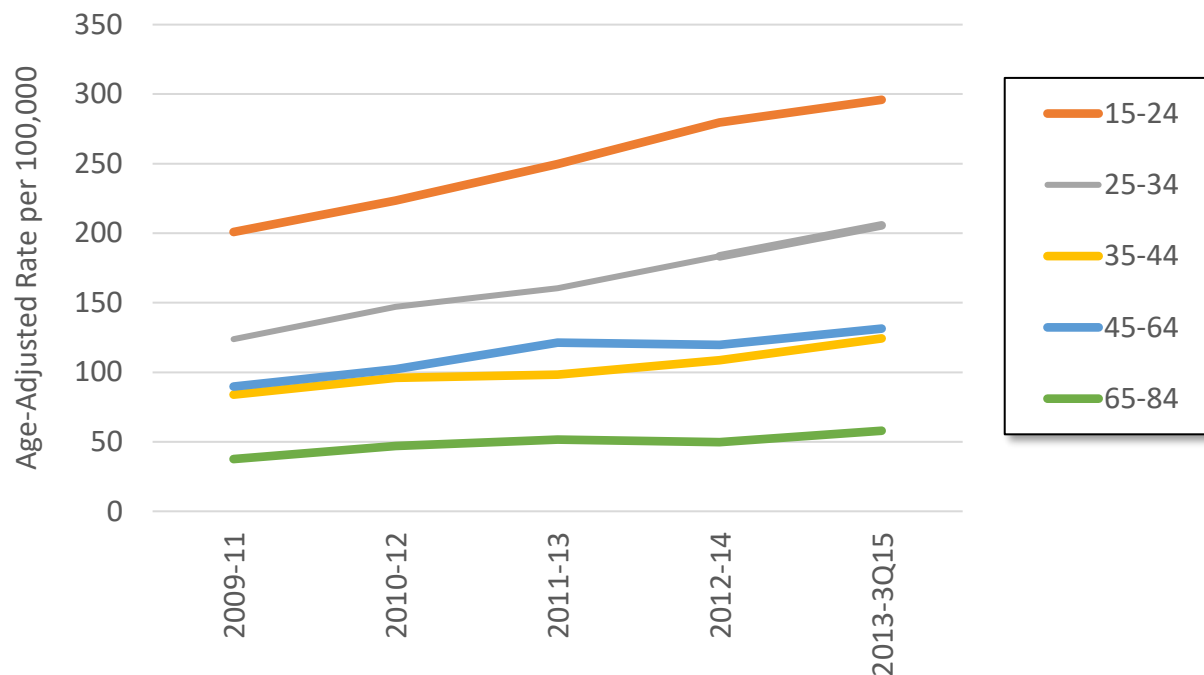
Source: CAPE, with data from OSHPD 2013 – 3Q2015

### Cannabis Abuse and Dependence-Related Hospitalizations by Race/Ethnicity, Alameda County



Source: CAPE, with Data from OSHPD 2009 – 3Q2015

### Cannabis Abuse and Dependence-Related Hospitalizations by Age Group, Alameda County



Source: CAPE, with Data from OSHPD 2009 – 3Q2015

### Cannabis Related Suspensions (Alameda County School Districts)

Specific data on cannabis related suspensions collected from four out of the 18 Alameda County school districts.

Berkeley Unified School District Data

Count of Student ID	Grade Level	Reported Race	Gender	Hispanic	Two or More Races	White	Grand Total
School Site Name		Asian Male	Black or African American Male	Female	Female	Female	
Berkeley High School	10			1	1	2	5
	11		1			1	3
Berkeley Technology Academy	10			1			1
	11			1			1
	12			2	1		3
Grand Total			1	5	2	1	13

**Berkeley USD**

I believe the model we have With New Bridge where they send us a counselor to run small group educational series is effective but it's only for our 8th graders. More education and prevention groups that start in 6th grade would be helpful since some of our 6th graders are already experimenting. Also having a counselor to refer students for 1-1 sessions is useful but we need more hours than we currently have.

Maybe also instead of having science teachers run project alert, we hire dynamic, effective specifically drug educator presenters to do drug prevention education in the classrooms.

Our counseling team provides a lot of regular 1-1 support that is helpful and if we had more money to spend I would recommend a professional drug and alcohol counselors who could actually carry a caseload at the school.

In addition to doing reactive post use education, we could use the drug counselor to help develop protective factors for students we are concerned about. The same with our affinity groups. Our counseling team runs a number of affinity groups that provide protective factors for high-risk students. For example our very active queer straight alliance. And our 8th grade leadership class, whose students are trained tupe peer educators. And our restorative justice counselor who runs our young men's group. These are the type of activities that develop resiliency and hope in our students, thus reducing the likelihood of substance use.

We refer our students to our new bridge counselor and/ or to our counseling team.

Hayward Unified School District Data

**Hayward USD**

We partner with Project Eden for D&A education and prevention/early intervention counseling onsite. We can also refer to them offsite for treatment services.

Would Like to add: Evidence Based Strategies, including stress management strategies.

**In 2017/18 in HUSD there were 2 expulsion cases related to marijuana:**

**48900 C (possession) and 48915 C3 (sales)**

2 male, Hispanic

1 grade 9, 1 grade 11

**This is the 2017/18 summary of the data for suspensions related to Marijuana, 48900 C:**

Gender/Ethnicity

Row Labels	Count of Gender
<b>EC 48900(c) Poss, Use, Sale, or Furn a Cont Subs, Alc, Intox</b>	<b>127</b>
<b>F</b>	<b>47</b>
7	1
African American	8
American Indian	2
Asian	4
Caucasian	4
Filipino	1
Hispanic	26
Pacific Islander	1
<b>M</b>	<b>80</b>
African American	26
American Indian	3
Asian	3
Caucasian	1
Hispanic	43
Pacific Islander	4
<b>Grand Total</b>	<b>127</b>

Note - ethnicity code 7 is two or more races

New Haven Unified School District Data

Here is information from New Haven.

2017-2018 Students (by gender) suspended/expelled for being intoxicated, high, or in possession of cannabis under Ed Code 48900 (c) and (d) & 48915 (C)

	7th Grade		8th Grade		9th Grade		10th Grade		11th Grade		12th Grade		TOTAL
	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	
Suspended - 48900 (c) & (d)	0	0	13	4	5	4	3	3	1	9	1	5	48
Expelled - 48915 (c)						1							1

2017-2018 Students (by ethnicity) suspended/expelled for being intoxicated, high, or in possession of cannabis under Ed Code 48900 (c) and (d) & 48915 (C)

	Am. Indian	As. Indian	Black	Campodian	Chinese	Totals
Suspended - 48900 (c) & (d)	1		8			9
Expelled - 48915 (c)						0
	Filipino	Hawaiian	Hispanic	Japanese	Korean	Totals
Suspended - 48900 (c) & (d)	1	1	33			35
Expelled - 48915 (c)			1			1
	Other Asian	Other PacI	Somoan	Vietnamese	White	Totals
Suspended - 48900 (c) & (d)						
Expelled - 48915 (c)	1			1	2	4
						0
	TOTAL					
Suspended - 48900 (c) & (d)	48					
Expelled - 48915 (c)	1					

Marcus Lam

Director of Pupil Services  
New Haven Unified School District  
Educational Services Center  
34200 Alvarado-Niles Road, Union City CA 94587  
510-471-2625

Pleasanton Unified School District Data

Pleasanton Unified School District  
Cannabis Related Off-Campus Suspension Incidences/Expulsions [Violation of 48900(c) and 48900(d)]  
2017/2018 School Year

Grade Level:	American Indian		Asian		Filipino		Pacific Islander		Hispanic		Black		White		Declined to State		Total	TOTAL
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female		
<b>OFF CAMPUS SUSPENSION INCIDENCES</b>																		
<b>Ninth</b>																		
Annador			1								1		4	3			6	3
Foothill				1									2				2	1
Village									1				1				0	2
<b>TOTAL NINTH:</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>6</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>8</b>	<b>6</b>
Drug Diversion Prg	1	1											3	3			4	4
<b>Tenth</b>																		
Annador			1								1		1				3	1
Foothill													2				2	0
Village									1					1			0	2
<b>TOTAL TENTH:</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>1</b>	<b>0</b>	<b>3</b>	<b>1</b>	<b>0</b>	<b>5</b>	<b>3</b>
Drug Diversion Prg	1	1							1				2	1			3	2
<b>Eleventh</b>																		
Annador					1				1		1		5				8	0
Foothill			2	2					1		1		2				6	2
Village									1				1	4			0	6
<b>TOTAL ELEVENTH:</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>7</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>14</b>	<b>8</b>
Drug Diversion Prg	2	2	1						2	1	1		7	2			13	5
<b>Twelfth</b>																		
Annador			1										3				4	0
Foothill			1						2		1		4	1			8	1
Village			1										2				3	0
<b>TOTAL TWELFTH:</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>9</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>15</b>	<b>1</b>
Drug Diversion Prg	2	2							2				7				11	0
<b>ALL GRADES</b>																		
Annador	0	0	3	0	1	0	0	0	1	1	3	0	13	3	0	0	21	4
Foothill	0	0	3	3	0	0	0	0	3	0	2	0	10	1	0	0	18	4
Village	0	0	1	0	0	0	0	0	0	3	0	1	2	6	0	0	3	10
<b>TOTAL ALL GRADES:</b>	<b>0</b>	<b>0</b>	<b>7</b>	<b>3</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>4</b>	<b>5</b>	<b>1</b>	<b>25</b>	<b>10</b>	<b>0</b>	<b>0</b>	<b>42</b>	<b>18</b>
Drug Diversion Program	0	0	6	3	1	0	0	0	4	2	1	0	19	6	0	0	31	11
<b>EXPULSIONS: TWELFTH</b>			1										1				2	0
Stipulated Exp													1					

Data Source: 2017/2018 "Q" Behavior Analysis Report  
Z:\1 School Year 18 19\SUSPENSIONS\ACHCSA Cannabis Survey 17 18 2/28/2019 4:52 PM

Cannabis Related Arrest Data. Source: Alameda County Sheriff's Office

Cannabis Arrests by Race/Ethnicity (per 100,000 residents) Unincorporated Alameda County					
	2014	2015	2016	2017	2018
African American/Black	239.4	282.6	135.8	95.7	123.0
Asian	181.2	120.7	114.2	87.0	148.8
Hispanic/Latinx	122.3	115.8	71.3	43.7	39.6
White	89.4	70.1	84.5	16.6	18.7
All Races	127.9	110.6	90.4	47.0	60.5

Source: Alameda County Sheriff's Department

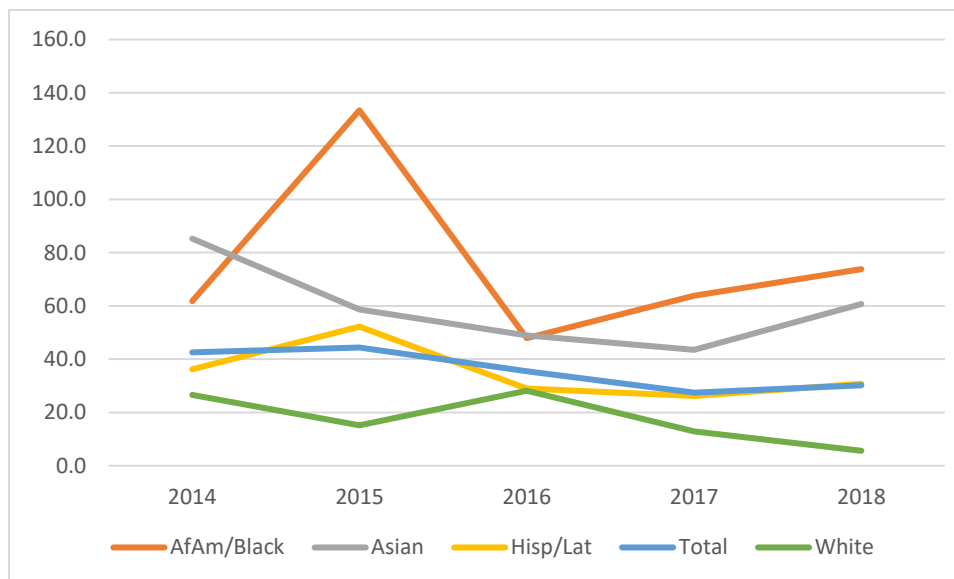
Cannabis Arrests by Charge (per 100,000 residents). Unincorporated Alameda County					
	2014	2015	2016	2017	2018
Simple Possession (11357)	56.4	31.4	22.8	3.9	1.3
Cultivation of Marijuana (11358)	18.6	17.1	20.8	8.5	13.8
Possession of Marijuana for Sale (11359)	42.6	44.4	35.5	27.4	30.3
Transportation of Marijuana (11360)	10.3	17.8	10.0	6.5	7.2
Maintaining a Marijuana Grow House (11366.5)	0.0	0.0	1.3	0.7	7.9
Total	127.9	110.6	90.4	47.0	60.5

**Cannabis Arrests by Age Group (per 100,000 residents).  
Unincorporated Alameda County**

	2014	2015	2016	2017	2018
<18	81.2	49.3	31.3	2.8	14.3
18-20	366.0	475.9	274.7	108.7	201.0
21-24	429.3	362.4	174.1	185.0	107.2
25-44	191.3	206.7	187.6	118.2	123.9
45-64	76.0	29.3	41.1	7.1	43.4
65+	5.3	0.0	24.6	0.0	0.0
Total	127.9	110.6	90.4	47.0	60.5

Source: Alameda County Sheriff's Department

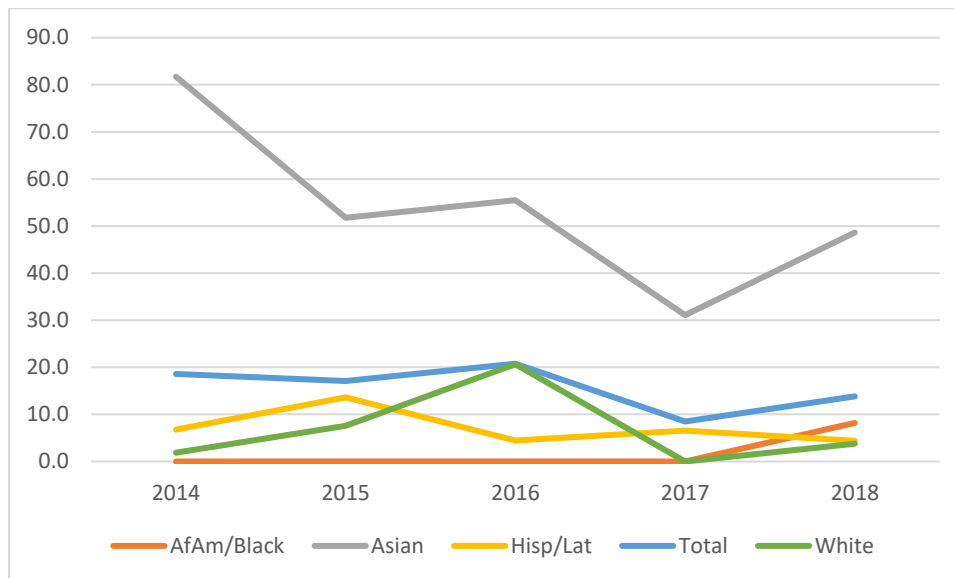
**11359 - Arrests for Possession of Marijuana for Sale (rate per 100,000 residents) by race/ethnicity. Unincorporated Alameda County**



Source: Alameda County Sheriff's Department

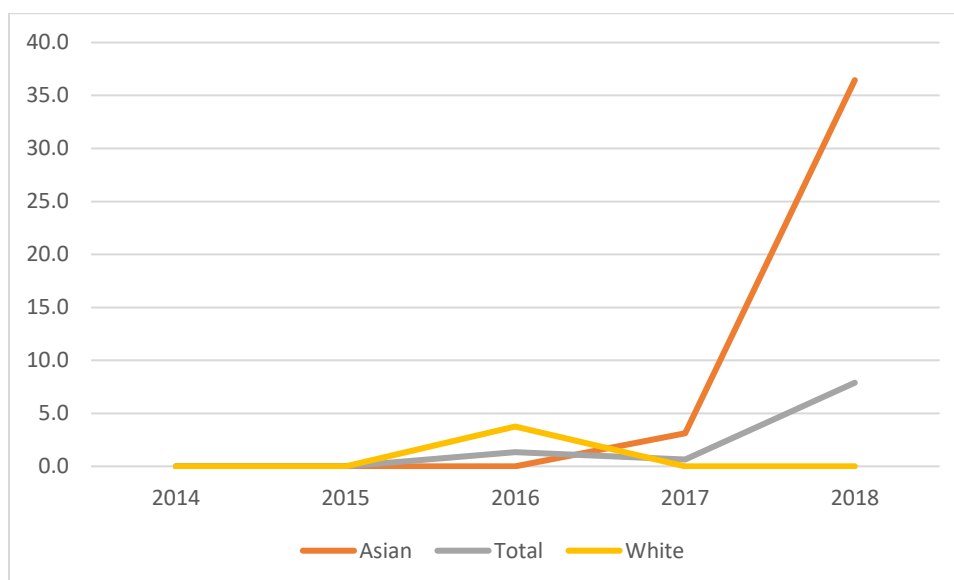


**11358 - Arrests for Cultivation of Marijuana (rate per 100,000 residents) by race/ethnicity. Unincorporated Alameda County**



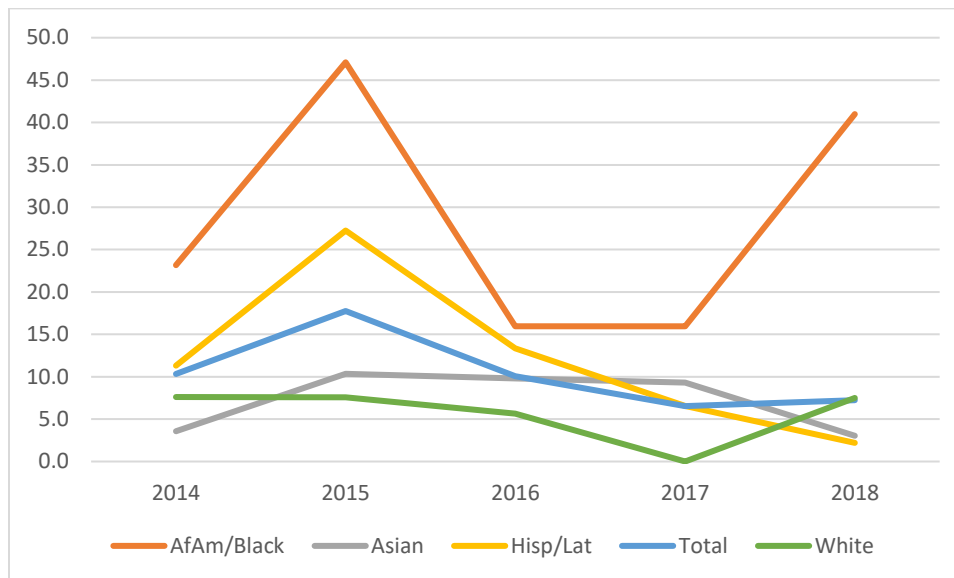
Source: Alameda County Sheriff's Department

**11366.5 - Arrests for Maintaining a Marijuana Grow House (rate per 100,000 residents) by race/ethnicity. Unincorporated Alameda County**



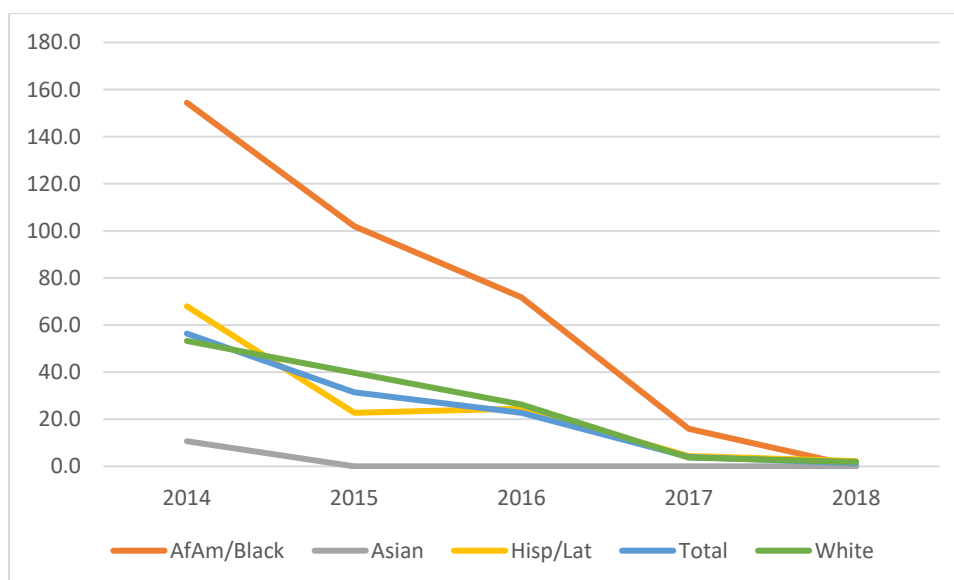
Source: Alameda County Sheriff's Department

**11360 - Arrests for Transportation of Marijuana (rate per 100,000 residents) by race/ethnicity. Unincorporated Alameda County**



Source: Alameda County Sheriff's Department

**11357 - Arrests for Simple Possession of Marijuana (rate per 100,000 residents) by race/ethnicity. Unincorporated Alameda County**



Source: Alameda County Sheriff's Department

Cannabis Related Arrests in Alameda County (all jurisdictions). Source: California Department of Justice Monthly Arrest and Citation Register

Cannabis Arrests by Age Group, Alameda County (all jurisdictions), rate per 100,000 residents					
	2014	2015	2016	2017	Total
<18	1201.3	970.8	908.3	494.6	890.4
18-20	1220.3	1436.1	1209.7	862.5	1179.2
21-24	745.8	826.9	663.8	407.1	659.3
25-44	255.8	299.3	288.3	219.2	265.2
45-64	75.8	87.0	88.5	68.8	79.9
65+	3.1	3.0	8.1	8.4	5.8
Total	457.0	432.7	396.5	248.5	381.9

Source: California Department of Justice Monthly Arrest and Citation Register (MACR)

Cannabis Arrests by Race/Ethnicity, Alameda County (all jurisdictions), rate per 100,000 residents					
	2014	2015	2016	2017	Total
All Races	457.0	432.7	396.5	248.5	381.9
White	426.1	421.5	395.3	218.9	364.3
African American/Black	588.5	534.8	492.3	342.4	490.1
Asian	57.2	47.0	47.0	52.3	50.9
Hispanic/Latinx	945.0	902.0	825.3	499.4	790.1
Native American*	1023.0	1155.3	744.1	767.4	923.0

Pacific Islander	356.4	268.6	229.8	215.3	266.2
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Source: California Department of Justice Monthly Arrest and Citation Register (MACR)

\*Note: Due to differences in reporting for this category, data is variable causing rates to appear elevated

# Appendix F: Medicinal and Adult Use Cannabis Regulation and Safety Act (MAUCRSA) Full Text (June 27, 2017)<sup>1</sup>

## Senate Bill No. 94<sup>2</sup>

### CHAPTER 27

An act to amend Sections 26000, 26001, 26011, 26012, 26013, 26014, 26030, 26031, 26038, 26040, 26043, 26044, 26050, 26052, 26053, 26054, 26054.2, 26055, 26057, 26058, 26060, 26061, 26063, 26065, 26066, 26070, 26070.5, 26080, 26090, 26104, 26106, 26120, 26130, 26140, 26150, 26151, 26152, 26153, 26154, 26155, 26160, 26161, 26180, 26181, 26190, 26191, 26200, 26202, 26210, and 26211 of, to amend the heading of Chapter 10 (commencing with Section 26100) and the heading of Chapter 13 (commencing with Section 26130) of Division 10 of, to amend the heading of Division 10 (commencing with Section 26000) of, to amend and renumber Section 26101 of, to add Sections 26010.5, 26011.5, 26013.5, 26046, 26047, 26051.5, 26060.1, 26062.5, 26070.1, 26121, 26131, 26132, 26133, 26134, 26135, 26156, 26162, 26162.5, 26180.5, 26190.5, and 26210.5, to, to add Chapter 6.5 (commencing with Section 26067) and Chapter 22 (commencing with Section 26220) to Division 10 of, to add and repeal Section 26050.1 of, to repeal Sections 26054.1, 26056, 26056.5, 26064, 26067, 26100, and 26103 of, to repeal Chapter 3.5 (commencing with Section 19300) of Division 8 of, to repeal Chapter 17 (commencing with Section 26170) of Division 10 of, and to repeal and add Sections 26010, 26032, 26033, 26034, 26045, 26051, 26062, 26102, and 26110 of, the Business and Professions Code, to amend Sections 1602 and 1617 of the Fish and Game Code, to amend Sections 37104, 54036, and 81010 of the Food and Agricultural Code, to amend Sections 11006.5, 11014.5, 11018, 11018.1, 11018.2, 11018.5, 11032, 11054, 11357, 11358, 11359, 11360, 11361, 11361.1, 11361.5, 11362.1, 11362.2, 11362.3, 11362.4, 11362.45, 11362.7, 11362.71, 11362.715, 11362.765, 11362.768, 11362.77, 11362.775, 11362.78, 11362.785, 11362.79, 11362.795, 11362.8, 11362.81, 11362.83, 11362.85, 11362.9, 11364.5, 11470, 11478, 11479, 11479.2, 11480, 11485, 11532, 11553, and 109925 of, to amend the heading of Article 2 (commencing with Section 11357) of Chapter 6 of Division 10 of, and to repeal Section 11362.777 of, the Health and Safety Code, to amend Sections 34010, 34011, 34012, 34013, 34014, 34015, 34016, 34018, 34019, and 34021.5 of, to amend the heading of Part 14.5

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<sup>1</sup> California Office of Attorney General. Control, Regulate and Tax Adult Use of Marijuana Act (“the Adult Use of Marijuana Act”). December 7, 2015. Retrieved from [https://www.oag.ca.gov/system/files/initiatives/pdfs/15-0103%20\(Marijuana\)\\_1.pdf?](https://www.oag.ca.gov/system/files/initiatives/pdfs/15-0103%20(Marijuana)_1.pdf?)

<sup>2</sup> The legislature adopted some amendments in AB-133, which was published a few months after SB 94.