As early as November 2016, California voters may consider legalizing and regulating nonmedical use and possession of cannabis.\textsuperscript{i} To prepare for this, the San Francisco Board of Supervisors created the Cannabis State Legalization Task Force via Ordinance in July of 2015. According to the Ordinance, “the purpose of the Task Force shall be to advise the Board of Supervisors, the Mayor, and other City departments on matters relating to the potential legalization of cannabis so that the City's policymakers are fully prepared to address the policy questions through legislation, administrative actions, and otherwise, following the adoption of a State law.”\textsuperscript{1}

In order to fulfill this mandate, The Cannabis State Legalization Task Force will design a set of viable cannabis policy options for consideration by San Francisco’s policymakers. As part of this process, the Task Force will discuss various policy issues, including land use and city agency framework. This issue brief highlights points related to public safety and social environment and identifies relevant provisions outlined in the Control, Regulate and Tax Adult Use of Marijuana Act (AUMA)\textsuperscript{ii} to serve as a basis for Task Force policy development discussions.

\textsuperscript{i}Unless part of a quote or formal name of a statute, organization or regulatory body, the term “cannabis” will be used throughout this document.

\textsuperscript{ii} There have been many adult use initiatives submitted to the California Secretary of State for the November 2016 ballot, and, according to various news reports, the Control, Regulate and Tax Adult Use of Marijuana Act (AUMA) seems to have the most momentum. As such and as mentioned in previous issue briefs, it forms the policy framework for the Task Force’s discussions.
PUBLIC SAFETY CONSIDERATIONS

Road Safety & Driving Under the Influence (DUI)

There is no scientifically-established cannabis intoxication threshold level for driving under the influence—states that have legalized adult use have taken different approaches to enacting DUI standards.

In California, the AUMA would maintain existing California laws criminalizing the operation of a vehicle under the influence of cannabis and provides funding for further research and the development of cannabis DUI protocols.

Cannabis Use and Driving Impairment

California’s Blue Ribbon Commission on Marijuana Policyiii consulted various stakeholders in its process of developing policy options for cannabis regulation in California, and each agreed that “a person impaired and under the influence of marijuana, whether for medical or adult use, should not get behind the wheel of a car.”ii The State of Colorado legalized adult use of cannabis in 2012, and in a report published two years later, the Colorado Department of Public Health and Environment found “substantial evidence that (i) the risk of motor vehicle crash doubles among drivers with recent marijuana use; (ii) combined use of marijuana and alcohol increases motor vehicle crash risk more than use of either substance alone, and (iii) [there exists] a positive relationship between [delta-9-tetrahydrocannabinol] THCiv blood level and motor vehicle crash risk, meaning the higher the level of THC in blood, the higher the crash risk.”iii

Although such evidence indicates that cannabis use may cause driving impairment, there is currently no scientifically established THC threshold level for intoxication in the blood. One challenge of determining this standard is that THC can remain in the bloodstream after the effects of intoxication have worn off, so the presence of THC may not be a reliable measure of intoxication.iv Another challenge is the lack of cannabis roadside impairment tests. While a roadside test such as the Breathalyzer can confirm blood alcohol content, a similar test for cannabis is not currently available.v

DUI Standards in Other States

Among states that have legalized adult use, there are differences in the DUI standards used, which may be a reflection of the aforementioned challenges in establishing cannabis intoxication levels. Oregon and Alaska maintained their existing prohibitions against driving under the influence of

---

iii In anticipation of nonmedical cannabis legalization, California Lieutenant Governor Gavin Newsom and other policy experts formed the California Blue Ribbon Commission on Marijuana Policy in 2013. The Commission has engaged in an effort to examine various cannabis policy options and its most recent report, “Policy Options for Regulating Marijuana in California,” provides a blueprint for the State and local jurisdictions to consider in preparation for possible legalization. More information available at https://www.safeandsmartpolicy.org/.

iv Delta-9-tetrahydrocannabinol is cannabis’ main psychoactive element.
cannabis without specifying a threshold intoxication level, while Colorado and Washington both established a more specific 5ng/mL THC threshold for DUI standards. In Colorado, if a person shows blood test results of 5ng/mL or higher, a jury may infer that the person was under the influence of cannabis, but the person may present evidence to the jury that the permissible inference should not apply in their specific case. Washington establishes a 5ng/mL DUI per se standard, meaning that results above the limit are automatic evidence of impairment—motorists above the limit are guilty of driving under the influence.

**The Control, Regulate and Tax Adult Use of Marijuana Act (AUMA) Road Safety Provisions**

The AUMA maintains existing laws under California Vehicle Code (23152(e) VC) criminalizing the operation of a vehicle under the influence of cannabis. The initiative does not set a threshold cannabis intoxication level, but does provide funding for the California Highway Patrol to establish cannabis DUI protocols and allows for possible grants to research organizations to develop driving impairment tools. Provisions in the ballot initiative also allocate funding for public education campaigns regarding the dangers of operating a vehicle while impaired and provides resources to local government for enforcement of DUI laws and programs to enforce traffic laws.

**Cannabis as a Cash-Only Industry**

Due to federal banking restrictions, many cannabis businesses operate on a cash-only basis, which may present public safety concerns in areas where cannabis is legalized. The AUMA contains security measures for cannabis businesses that may help to address such concerns.

Federal cannabis policy bars cannabis businesses from accessing banking services. As a result, media reports that cannabis businesses instead operate as cash-only entities and that large quantities of cash may therefore be stored on-site, making cannabis businesses susceptible to theft and burglary and posing safety risks to both workers and patrons.

**AUMA Cannabis Business Security Provisions**

The AUMA includes provisions that require cannabis retailers and microbusinesses to implement security measures, including but not limited to, restricting access to areas containing cannabis products and storing products in secure and locked areas to prevent theft. With regard to delivery services, the proposed Bureau of Marijuana Control will establish security and transportation safety requirements, such as minimum qualifications for delivery personnel and vehicle type.
**THC Extraction Methods**

The manufacture of cannabis products can involve the use of highly flammable solvents, such as butane. To decrease this public safety risk, the AUMA requires that manufacturers obtain a license in order to engage in such practices in the commercial sector.

To produce more concentrated cannabis extracts such as hash oil, volatile solvents, e.g. butane, are often used. Due to their highly flammable nature, butane solvents can lead to dangerous explosions if not handled safely. Since adult use legalization began in Colorado in 2012, media reports that the State has seen an increase in butane-related explosions, particularly from THC extraction operations in residential settings, which can cause injury and damage property within the vicinity of the explosions. To address this, the City and County of Denver has since passed an ordinance limiting hash oil extraction operations to those with licenses. The AUMA employs a similar method of addressing this public safety concern, requiring a license for the manufacture of cannabis products with volatile solvents in the commercial sector.

---

**THE ILLICIT MARKET**

The Illicit Market’s Connection to Adult Use Legalization Policy Areas

Any adult use legalization structure will be in competition with the illicit market for consumers, and this implicates other policy areas, such as youth access, public safety and taxation.

The illicit market operates outside of legally established rules of operation, and it is an important consideration for any cannabis legalization framework. This is because a tension exists between the legal and illicit markets, where one would compete with the other for consumers. If one legalization goal is to create a pathway for the legal sale of cannabis, reducing the illicit market would be of chief concern. California’s Blue Ribbon Commission on Marijuana Policy names the reduction of the illicit market as one of its core strategy recommendations for cannabis legalization, since, according to the Commission, that goal is essential to a well-functioning cannabis market. As part of its work, the Commission established three main working groups: (1) Youth Education and Prevention, (2) Public Safety and (3) Taxation and Regulation, and concerns about the illicit market were apparent in all three policy areas.

With respect to youth education and prevention, the working group found that effective regulation and taxation focused on youth protection could also reduce cannabis availability within the illicit...
market. Among the Public Safety working group’s concerns was the need for clear separation between the legal and illicit markets. According to the working group’s findings, these lines can be blurred in cases where cannabis is diverted from the legal market into the illicit market or vice versa. Finally, taxation is one of the many factors that would impact the illicit market’s existence, since an ill-devised taxation structure could encourage users to patronize and hence bolster the illicit market.16

Other States’ Experiences with the Illicit Market

In Washington, a reduction in the cannabis excise tax is seen as a way to reduce the illicit market, and Colorado currently faces a legal challenge from neighboring states alleging cannabis trafficking across state lines.

Washington - Reduced Excise Tax and Delivery Services Pilot Program

Adult use sales began in Washington State in mid-2014, and in December 2015, roughly a year and a half later, best estimates from the State Liquor and Cannabis Board’s state that adult use outlets claim 35 percent of the market, the medical cannabis markets claim 37 percent, and the illicit market’s share is 28 percent.17 One Washington State bill introduced earlier this year may make an impact on these figures. House Bill 2347 would reduce the cannabis excise tax from 37 percent to 25 percent, and, according to the House Bill Report, its proponents view it to be an “essential step in eliminating the marijuana black market in order to realize the public safety and public health goals of the legalization initiative.” They contend that lowering the overall price of legal cannabis this way would discourage the purchase of cannabis in the illicit market.18 The bill is currently making its way through the legislative process.

Another way that some State policymakers are seeking to address concerns about the illicit market is through a new program for cannabis home deliveries. Washington State law currently prohibits cannabis home delivery services, but these services are being offered in violation of this law and outside of the regulated market, which, according to Seattle Mayor Ed Murray, is undermining legal retail sales. To address this problem, he is currently supporting a State bill that would authorize a pilot program to legalize delivery services and, from his City’s point of view, “reduce the illicit market for marijuana.”19 The bill is currently making its way through the legislative process.

Colorado – Lawsuit from Neighboring States

In Colorado, alleged diversion to the illicit market across State lines has led to a lawsuit from its neighboring states. In March 2015, sheriffs in Nebraska and Kansas filed a lawsuit in Colorado District Court, claiming that cannabis illegally entering neighboring states has unfairly burdened law enforcement officers in those states. In the Complaint, the Plaintiff sheriffs contend that:

the result of the increased Colorado-sourced marijuana being trafficked in [their] count[ies] due to [Colorado’s legalization initiative] has been the diversion of a
significant amount of [staff time and resources] to counteract the increased trafficking and transportation of marijuana which is illegal in his jurisdiction.\textsuperscript{20}

For these reasons, the Plaintiff sheriffs are asking the Court to invalidate Colorado’s legalization initiative. In March 2016, the lawsuit moved through the court system up to the Supreme Court, which declined to hear the case.\textsuperscript{21}

The AUMA Approach to the Illicit Market

The AUMA contains provisions aimed at reducing the illicit market and preventing illegal diversion of cannabis.

Among other purposes noted within the AUMA, the initiative seeks to “tax the growth and sale of marijuana in a way that drives out the illicit market for marijuana and discourages use by minors, and abuse by adults.”\textsuperscript{22} To achieve these goals, the AUMA requires the Bureau of Marijuana Control, i.e. the agency with primary responsibility for regulating the adult use system at the State level, to establish an advisory group that ensures that the regulatory environment does not lead to an enhanced illicit market.\textsuperscript{23} It also requires the California Legislative Analyst’s Office to submit a report to the Legislature with recommendations for cannabis tax rate adjustments that undermine the illicit market.\textsuperscript{24}

Another stated goal of the AUMA is to “prevent the illegal diversion of marijuana from California to other states or countries or to the illegal market.”\textsuperscript{25} One of the strategies for achieving this goal is a “seed to sale” tracking system for every step in the cannabis supply chain. The Medical Marijuana Regulation and Safety Act of 2015 (MMRSA)\textsuperscript{vi} created this track and trace system for medical cannabis, and the AUMA would authorize the California Department of Food and Agriculture, the Bureau of Marijuana Control and the Board of Equalization to expand the program to include cannabis in the adult use market.\textsuperscript{26}

\textsuperscript{vi} In October of 2015, California Governor Jerry Brown signed three bills into law that are collectively known as the Medical Marijuana regulation and Safety Act (MMRSA). Taken together, MMRSA gives the State more regulatory control over the medical cannabis industry, from cultivation to sale.
SOCIAL ENVIRONMENT CONSIDERATIONS

Public Consumption

Factors such as product type and location may be considered in regards to how and where cannabis is consumed, and given the multiple ways in which consumption may occur, the Task Force may consider policy options based on those differences.

The AUMA allows local jurisdictions discretion to permit on-site consumption at licensed cannabis retail locations, and it may be useful to consider existing public consumption laws.

The questions of where and how cannabis may be consumed are central to social environment policy considerations. Cannabis can be consumed in multiple ways (e.g., smoking, ingesting, and vaping) and a variety of factors related to each method may be considered in developing consumption policies. Within that context, policy tools may be used to address issues related to (1) access, availability, and use by youth; (2) driving under the influence; (3) the risk of problematic use or overconsumption; (4) consumption of contaminated cannabis products and/or products of unknown potency; and (5) concurrent use of alcohol and cannabis, particularly in public settings and as it relates to driving impairment. According to the Blue Ribbon Commission, examples of such tools include advertising and public consumption limits to prevent youth exposure, and education campaigns to discourage problematic use and educate consumers about health risks associated with such use.

San Francisco’s Current Smoking Laws

San Francisco Health Code, Article 19F defines smoking as “inhaling, exhaling, burning or carrying any lighted smoking equipment for tobacco or any plant or other weed, including cannabis.” Smokeless forms of cannabis that can be inhaled and/or require use of heat, such as vaping and dabbing, are included in the smoking definition. Ordinances identify smoke-free zones that prohibit smoking in certain public spaces (e.g., parks, playgrounds, athletic fields) and in buildings, enclosed structures, and certain unenclosed areas (e.g., government buildings, restaurants, bars, common areas of multi-unit residences, public housing), with the exception of qualified patients who consume medical cannabis at a licensed dispensary. The purpose of these smoking laws is to reduce exposure to secondhand smoke and reduce the extent to which youth view smoking as a social norm.

Edibles

Edible cannabis products (e.g., cannabis-infused baked goods, candies, drinks) do not produce second hand smoke, but present other important considerations. Because metabolism of THC via digestion is slower compared to inhalation through smoking, it can take longer to feel the effects of THC from edibles and can cause individuals to consume more than they originally intended.
Another consideration for edible products is the risk of accidental consumption by both children and adults, as some edibles can be mistaken for foods that do not usually contain cannabis.

**Other States’ Experiences**

Colorado, Washington, and Oregon all prohibit public consumption of cannabis and cannabis products. Alaska allows for on-site consumption at cannabis retail locations at the discretion of localities and monitoring the implementation of this provision may be an important consideration for California and its localities. Also, it is important to note that due to federal prohibitions, it is still illegal to smoke or consume cannabis on federal property, such as national parks, even in states that have legalized cannabis use.

**AUMA Provisions for Public Consumption**

Under the AUMA, consumption of cannabis and other cannabis products in public remains illegal and smoking cannabis is prohibited in locations where smoking tobacco is also prohibited. But similar to Alaska, the AUMA allows local jurisdictions to determine whether or not to allow on-site consumption. Localities may permit on-site consumption at licensed retailers under the following minimum conditions: (1) access is restricted to persons 21 years of age and older; (2) consumption is not visible from a public place or non-age restricted area; and (3) sale or consumption of alcohol or tobacco is not allowed at the retailer.

Licensed businesses are required to package cannabis and cannabis products in child-resistant containers and comply with labeling requirements that include potency information and specific health warning language.

The AUMA also establishes a standard dosage (not to exceed ten milligrams of THC per serving) for edible cannabis products, and the product must be scored into serving sizes if the product contains more than one serving.

**Youth Access and Exposure**

Youth are one of the groups most at risk for experiencing harms associated with regular cannabis use.

The AUMA contains various provisions to minimize youth access and exposure.

**Minimizing Youth Access and Exposure**

One of the guiding principles for the California’s Blue Ribbon Commission on Marijuana Policy is to protect youth and limit youth exposure to cannabis. According to the Commission, teens who become regular or excessive users are also at “greater risk for problems with alcohol and other substance abuse, disciplinary and other problems in school and are more likely to get caught up in the criminal justice system.”
In its discussion of youth access, the Blue Ribbon Commission noted evidence indicating that regular or heavy cannabis use at an early age may affect cognitive development\textsuperscript{42} and can be associated with reduced educational attainment and educational development.\textsuperscript{43} As such, it is important to design policy tools and education programs that help to prevent youth initiation and uptake of cannabis use and delay such use until adulthood.\textsuperscript{44} Lessons learned from tobacco control show that restriction of marketing and advertising\textsuperscript{45} and implementation of evidence-based educational programs, such as school-based and broad-based campaigns aimed at the general public, are effective prevention strategies.\textsuperscript{46}

\textbf{AUMA Provisions to Minimize Youth Access and Exposure}

The AUMA contains various provisions to protect youth and reduce youth exposure. These provisions include, but are not limited to, the following:

- Cannabis retailers may not be located within a 600 foot radius from a school, day care, or youth center unless State or local jurisdictions specify a different radius.
- Licensed retailers must check identification cards to ensure that the consumer is a medical cannabis patient or age 21 and over.
- Cannabis products must be packaged in child resistant containers and may not be made appealing to youth or easily confused with commercially sold candy or foods that do not contain marijuana.
- Advertising or marketing to persons under 21 years of age or within 1,000 feet of a school, day care, or youth center is prohibited.
- Sixty percent of revenue generated from cannabis taxes will be allocated to support youth education, prevention, early intervention, and treatment programs.\textsuperscript{47}

\textbf{CONCLUSION}

Adult use legalization within the public safety and social environment context raises many points for Task Force discussion and consideration. While the AUMA provides provisions to regulate the cannabis industry, the proposed ballot initiative also gives local jurisdictions considerable control on how these provisions are implemented within their jurisdictions. It will therefore be essential for the Task Force to design policy options that both highlight and reflect these considerations.
References


9 See issue brief #2 for more information.


