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2020 Cannabis Economic Impact Report

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Executive Summary

The cannabis industry has gone through many series of events that has brought it to the billion dollar industry it is today. Since its move from the illicit market, to the legalization of medicinal cannabis in 1996, and continued positive shifts of perceptions of cannabis, there has been exponential growth in the industry. The Office of Business Research and Analysis (OBRA) has analyzed the general impact of the cannabis industry in San Diego County. Throughout this research, OBRA sought to find how adult-use and medicinal cannabis sales increases in revenue and influences the community regarding finances, police enforcement, cannabis license types, public health, and social equity.

The cannabis industry yields a considerable amount of revenue to municipalities from cannabis city taxes. Data from public records requests from the cities of San Diego, La Mesa, and Vista illustrate the amount of money by quarter that each city has brought in since their legalization of medicinal cannabis and or adult-use cannabis. In 2019, medicinal cannabis taxation brought in over $1M to the city of Vista. In 2019, adult-use cannabis taxation yielded over $12M to the city of San Diego and $183K to the city of La Mesa. As additional dispensaries are added, revenue numbers are expected to grow exponentially.

Cannabis business license holders in San Diego County completed a survey created by OBRA that was used to analyze the industry's demographics of those who hold cannabis licenses in the San Diego County region. The survey results indicated that 68% of cannabis business license holders were White, 14% Hispanic, 7% African-American, 3% Middle Eastern, 4% American-Indian, and 4% Asian. Additionally, 87% of cannabis business license holder participants were male and 13% were female. Based on these results, racial diversity within this industry remains an issue. It is advised for jurisdictions in the County to look into other cities that have successfully implemented social equity programs to increase diversity in potential cannabis license holders. Establishing a social equity program in San Diego County could result in more racial diversity and equity within cannabis license holders.

As more new entrants emerge, the cannabis industry will continue to increase in size as long as regulations allow for it. This will result in more revenue brought in by cannabis taxation.

About This Report

This report analyzes the economic impact of the cannabis industry in the San Diego County, CA region. Information within this report was produced by the Office of Business Research and Analysis (OBRA) at California State University San Marcos, which is a joint effort between the College of Business Administration (CoBA), the Department of Economics, and the University Library.

Office of Business Research and Analysis

Founded in 2018, the Office of Business Research and Analysis (OBRA) is a joint partnership between California State University San Marcos' College of Business Administration (CoBA), the Department of Economics, and the University Library. OBRA works directly with the local community in creating a suite of research services, including economic impact reports, industry analyses, and business plans.

California State University San Marcos

Building on an innovative 30-year history, California State University San Marcos (CSUSM) is a forward-focused institution, dedicated to preparing future leaders, building great communities, and solving critical issues. Located on a 304-acre hillside overlooking the City of San Marcos, the University is just a short distance from some of Southern California's best beaches and an hour from the U.S.-Mexico border. CSUSM enrollment is over 14,000 and growing. The University is fully accredited by the Western Association of Schools and Colleges.

COVID-19 Impacts

The findings in this report do not reflect impacts of the COVID-19 pandemic as comprehensive information on economic activity and insights are not yet available.

Research Methodology

The Office of Business Research and Analysis (OBRA) conducted a survey of cannabis business license holders in San Diego County. The survey comprised a series of questions which asked participants about topics including ownership demographics and business gross monthly tax expenses. In total, there were fourteen completed survey responses out of the seventy-two that were distributed from September 2, 2020 to October 28, 2020. This data set is limited; this is attributed to a combination of factors

such as: the difficulty of reaching people, the competitive environment of the industry, and the lack of willingness to share data within the cannabis industry.

Data

The data supporting this report was collected from several sources during 2020. A combination of secondary sources were used to produce information within the report. Each data source has varying effective dates, and every precaution has been taken to ensure relative comparability.

InDesign

InDesign was used to design the layout of this report. This software creates posters, brochures, newspapers, and ebooks through Adobe software. InDesign publishes content in conjunction with Adobe Digital Publishing Suite and exports to multiple platforms. The main users of InDesign include graphic designers and production artists for publications, print media, and posters.

Qualtrics

Qualtrics is a survey tool used to send and track surveys. Qualtrics was used to collect and compile necessary survey data from the local cannabis businesses in and around San Diego County.

Photographs

The photographs used within this report are shots provided by Blue Water Government Affairs to represent the various stages of cannabis production.

Acknowledgements

A very special thank you to Blue Water Government Affairs, representatives of Weedmaps, and retired San Diego County Sheriff's Department Commander David Myers. These organizations and individuals devoted their time to speak with OBRA to provide insight into the cannabis industry.

Public Records Requests

Data for the cities of La Mesa, San Diego, Santa Ana, Los Angeles, and Vista were collected via public records requests between August 2nd and November 20th of 2020. Collection of data covered three topics relevant to this report. Topics include medicinal and adult-use cannabis tax collection for each city between 2018-2020, enforcement costs of shutting down unlicensed dispensaries in Los Angeles between 2019 and 2020,

and quarterly tax collection and cannabis license types in Santa Ana between 2018 and 2020.

Disclaimer

Every effort has been made to verify the findings provided in this report to the best of the ability of CSUSM researchers, including a focus on consistency and clarity of the information provided. Any feedback or corrections may be forwarded to obra@csusm.edu.

Further, the information provided in this research document does not, and is not intended to, constitute legal advice; instead, all information, content, and materials provided are for general informational purposes only. Readers of this document should contact their attorney to obtain advice with respect to any particular legal matter. No reader or user of this document and its content should act or refrain from acting on the basis of the information provided without first seeking legal advice from counsel in the relevant jurisdiction.

A Brief History of Cannabis

The estimated origin of early cannabis derives from ancient Central Asia, where the temperature and environment was temperate and moist. Indigenous people began utilizing oil from the cannabis plant for cooking, fuel, medicine, and soap. The stalks provided long, strong, and durable fibers used to weave twine ropes and baskets, useful for many purposes. Psychoactive effects are thought to have been encountered shortly after the discovery of the multipurpose plant, leading to its use in ritual ceremonies and traditions.

Little is known about exact migration patterns of cannabis from Asia to the Americas. Early evidence suggests that cannabis traveled across the Bering Strait with Homo sapiens around approximately 14,000 BCE.[32,70]

Foundations in the United States

Anti-drug campaigns arose in the 1920s warning of the “marijuana menace” and crimes associated with cannabis use. During the Great Depression concerns continued to escalate about cannabis, claiming a connection between cannabis use and socially deviant behaviors. By 1931, twenty-nine states banned cannabis. Harry Anslinger soon turned his attention to cannabis when he served as first commissioner of the Federal Bureau of Narcotics, laying the groundwork for the Drug Enforcement Agency (DEA). Anslinger had several key points he touched on to attack cannabis and claimed that cannabis caused “mental deterioration, insanity, and violent crime and murder.”[1]

Anslinger also focused on racially driven efforts to focus on cannabis use throughout minority communities. He even went so far as to argue that jazz musicians were creating “satanic” music.[1] A nationwide attitude toward cannabis began to correlate with Anslinger’s; he testified before Congress in hearings for the Marijuana Tax Act. Attributing cannabis as one of the reasons the United States fell into a depression, the Government passed the Marijuana Tax Act in 1937, making cannabis and hemp illegal nationwide.[58] Many have suggested that Anslinger dominated drug policymaking and had support from many organizations that favored strong drug laws throughout his tenure.[64]

The War on Drugs

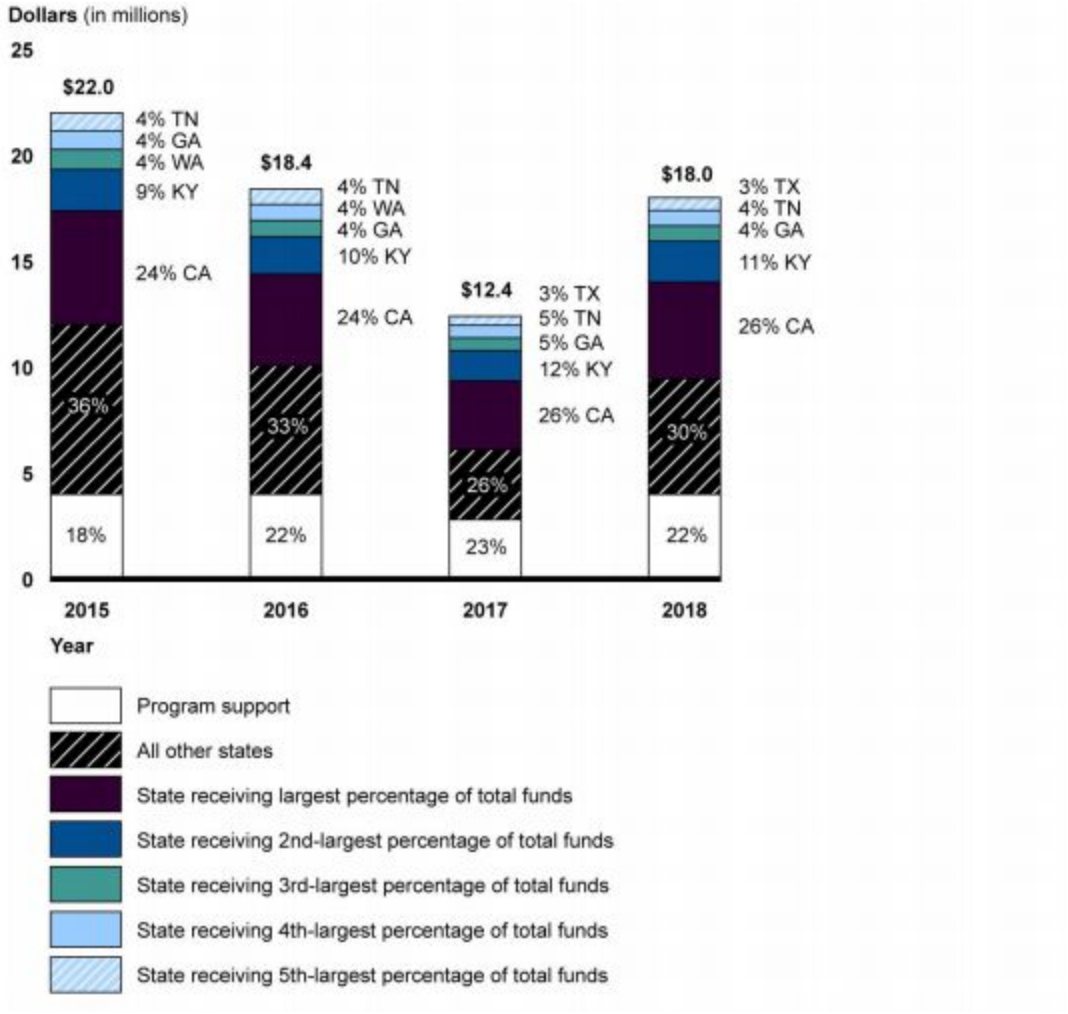
By 1971, the War on Drugs was declared, proposing strict measures and mandatory sentencing laws. In the 1980s, President Reagan reinforced and expanded on these measures. His focus was to continue enacting strict laws and mandatory sentencing for

drug-related crimes, which lead to an influx of incarceration for nonviolent drug offenses. The Anti-Drug Abuse Act, focused on specific drug offenses, triggered the beginning of ramifications criticized as racially discriminatory with enforcement magnified in inner-cities, low income communities, and targeting people of color.[51]

Today, law and policy makers agree that the War on Drugs was a failure, “The number of Americans arrested for possession has tripled since 1980, reaching 1.3M arrests per year in 2015—six times the number of arrests for drug sales.”[69] The Drug Enforcement Agency was established in 1973, which initially started with a budget of $75M and 1,470 agents. As of 2019, the DEA has grown to a budget of $3.13B and over 10,000 employees.[38] Figure 1 illustrates budgetary obligations by state.

FIGURE 1: DEA CANNABIS ERADICATION PROGRAM BY STATE

Figure 5: Funding the Drug Enforcement Administration (DEA) Obligated to the Domestic Cannabis Eradication/Suppression Program (DCE/SP) from 2015 through Fiscal Year 2018



Source: Drug Enforcement Agency. (2018). Staffing and budget. DEA.

Efforts could focus on substance abuse treatment instead of continuing the mass incarceration that resulted from the War on Drugs. New and improved measures are actively being sought to divert offenders and direct them to treatment and various other social services.[77]

Current Cannabis Legislation and Legal Environment

Federal Cannabis Enforcement

Within the United States possessing, growing, and distributing cannabis is federally illegal. States are given the power to create laws and regulations within their boundary limits. Many states have made medical or recreational cannabis legal and, in some cases, have legalized both.

In 2013, Deputy Attorney General James Cole defined the Department of Justice's relaxed enforcement policy with respect to state cannabis laws, including the individuals and businesses who abide by those laws. The Cole memo policy emphasized state regulation on cannabis but it expected the regulation implemented strongly, stating "The Department's guidance in this memorandum rests on its expectation that state and local governments that have enacted laws authorizing cannabis related conduct will implement strong and effective regulatory and enforcement systems."[56]

Former Attorney General Jeff Sessions rescinded that Cole memorandum during his short term in office, but the current Attorney General, William Barr, has since confirmed during a Senate hearing that he will not go after individuals or businesses who obey state laws.[56]

The only way to definitively ensure federal action is not taken against legal cannabis in states across the U.S. is if Congress addresses the blatant contradiction between state and federal laws. As of January 2019, several cannabis reform laws have been introduced to Congress, shown in Figure 2.

FIGURE 2: CURRENT CANNABIS REFORM LAWS

Law Name	Purpose
Marijuana Opportunity Reinvestment and Expungement (MORE) Act of 2019	This legislation would federally decriminalize and deschedule cannabis, thus recognizing state-level legalization. It also contains strong social equity provisions with an emphasis on restorative justice for communities most impacted by cannabis prohibition. Congress passed the MORE Act as of December 4, 2020.
SAFE Banking Act of 2019	This legislation would prevent federal regulators from punishing financial institutions for providing services to cannabis-related businesses operating in compliance with state laws.
Strengthening the Tenth Amendment Through Entrusting States (STATES) Act	This legislation would protect states' rights to enact their own cannabis policies without federal interference.
House Amendment 398 (Blumenauer-McClintock-Norton Amendment) to H.R. 3055 (Further Continuing Appropriations Act, 2020, and Further Health Extenders Act of 2019)	This is an amendment to the appropriations bill to prohibit the Department of Justice from interfering with state cannabis programs.
The Compassionate Access, Research Expansion and Respect States (CARERS) Act of 2019	This legislation would permit states to implement medical cannabis programs without federal intervention. It would also allow physicians with the U.S. Department of Veterans Affairs to recommend cannabis to veterans. Sen. Cory Booker (D-NJ) is expected to introduce a Senate companion bill.
Regulate Marijuana Like Alcohol Act	This legislation would remove cannabis from the federal Controlled Substances Act. It would also transfer cannabis enforcement authority from the Drug Enforcement Administration to a renamed Bureau of Alcohol, Tobacco, Marijuana, Firearms, and Explosives.

Source: Marijuana Policy Project. (n.d.). Federal Enforcement Policy on State Marijuana Laws

California

Proposition 215 and Senate Bill 420

California Proposition 215, also known as the Medical Use of Marijuana Initiative, was approved by 55.8% of voters in the November 5, 1996, general election. This monumental legislation allowed physicians to prescribe patients and defined caregivers the ability to possess and cultivate cannabis, prohibiting criminal laws or charges to be brought against licensed physicians. By 2008, approximately 200,000 physician-approved patients existed in California.[16]

SB420 took effect in January 2004, expanding and clarifying the scope of Prop 215. Within the Senate Bill, details of how much cannabis patients could grow and possess as well as a voluntary patient ID card system were defined. Under this new legislation, patients were allowed to possess 6 mature or 12 immature plants and up to one half-pound of dried, processed cannabis statewide, although counties and cities had the authority to adjust that limit higher. Very ill patients could be exempt from state limitations if they received a physician's approval for more than the state limit. Other provisions of SB420 include:

- Recognizes the right of patients and caregivers to associate collectively or cooperatively to cultivate medical cannabis.
- Does not authorize medical cannabis smoking in no smoking zones, within 1,000 feet of a school or youth center except in private residences, on school buses, in a motor vehicle that is being operated, or while operating a boat.
- Protects patients and caregivers from arrest for transportation and other miscellaneous charges not covered in 215.
- Allows probationers, parolees, and prisoners to apply for permission to use medical cannabis; however, such permission may be refused at the discretion of the authorities.
- Makes it a crime to fraudulently provide misinformation to obtain a card, to steal or misuse the card of another, to counterfeit a card, or to breach the confidentiality of patient records in the card program.[18]

Proposition 64

Proposition 64, also known as the Control, Regulate and Tax Adult-Use of Marijuana Act, is a California law passed by voters in 2016. For adults who are at least 21 years old, the law decriminalizes certain cannabis charges and allows for the possession, cultivation, and recreational use of a specified amount of cannabis.[75]

Additionally, this law allows the State of California to collect tax revenue on the sale and cultivation of cannabis by licensed businesses or dispensaries. Recreational cannabis

sales are subject to a “15 percent cannabis excise tax upon purchasers of cannabis and cannabis products.” Cannabis cultivation is taxed in the amount of “$9.65 per dry-weight ounce” on cannabis flowers, and “$2.87 per dry-weight ounce” on cannabis leaves.[20]

The California Department of Tax and Fee Administration (CDTFA) reports that, “since January 2018, total program revenue to date is $1.03B, which includes $498.1M in cannabis excise tax, $123.4M in cultivation tax, and $403.1M in sales tax.”[12] To put that into perspective, Proposition 56 increased the state tax on tobacco from $0.87 to $2.87 per pack of cigarettes. This tax is projected to generate $1.41B in the 2019-2020 fiscal year.[66]

Prop 64 allows for some changes in what were formerly criminal cannabis violations, but cannabis possession and use are still heavily regulated. The Commission on Peace Officer Standards and Training (POST) is a state organization charged with assisting law enforcement with training, among other policies and procedures.[73] A video released by POST for the purposes of preparing California law enforcement for the changes under Prop 64 emphasizes four key points:

“1) Recreational use of cannabis in public is still illegal,

2) Car searches for cannabis are still legal with specific articulable facts,

3) Standardized Field Sobriety Tests still determine impairment, and

4) Cannabis chemicals are still dangerous to the environment and to people”[75]

The video by POST suggests that the reference to dangerous chemicals mentioned above are specific to chemicals used in a cannabis growing operation and not to the cannabis plant itself.[74] It is important to note that although Prop 64 allows for the legal cultivation and sale of cannabis under the State of California, it does not supersede local ordinances. Under Prop 64, cannabis cultivation by licensees must be “conducted in accordance with state and local laws.”

Additionally, under the local control section of Prop 64, it further states that, “This division shall not be interpreted to supersede or limit the authority of a local jurisdiction to adopt and enforce local ordinances to regulate businesses licensed under this division, including, but not limited to, local zoning and land use requirements, business license requirements…,” et cetera.[3]

The City of Poway, California, is a great example of this distinction between the state and local level. A 2017 article by the San Diego Union Tribune states that the Poway

City Council passed an ordinance that “permanently prohibits the establishment of marijuana dispensaries, collectives and cooperatives, and prohibits marijuana cultivation, delivery, manufacturing, and storage, whether for medical or recreational use throughout the city.”[53] This means that although Prop 64 is in effect at the state level, cannabis business licensees cannot legally operate in Poway, California, because cannabis-related activity is not legal at the city level.

Size and Growth

Employee Compensation within the Industry

California supported 39,804 full-time cannabis employees and generated $2.03B in sales during 2019’s fiscal year. The industry has evidently created many jobs supported by legal cannabis and has grown at a rate faster than any other industry in the past four years.[54] The average pay grade for budtenders in the cannabis industry averages to $17.14 per hour (Glassdoor). The average dispensary manager makes $95,251 in San Diego[45] On average, trimmers make $25,123.[46] On average, a compliance manager in San Diego with average skill levels can make $77,005 or $149,000 and higher for compliance managers with a lot of experience.[44] Extractors can make $72,000 on average. More experienced extractors can make up to $191,000 per year.[6] Master growers make $88,000 on average or $47,000 for less experienced growers. The pay grade for California in the cannabis industry ranges extensively based on the skill of the job. The more involved a person is in the process of creating the product, the higher the pay versus basic retail, which has average pay for California with the opportunity for tips.

San Diego

Between the passage of Prop 215 in 1996 and Prop 64 in 2016, the journey towards the legalization of cannabis has been wrought with controversy and mixed opinions. In particular, San Diego’s legislative journey has moved in small increments towards the legalization of cannabis. In 2000, UCSD received a grant to study the medical application of cannabis and created the Center for Medicinal Cannabis Research (CMCR).

In 2009, the San Diego City Council established a Medical Marijuana Task Force charged with creating regulations for medical cannabis dispensaries within the city. In order to keep medical cannabis dispensaries away from homes, schools, playgrounds,

and other areas, in 2011 the San Diego City Council voted to confine dispensaries to industrial areas.

In 2014, an ordinance was approved that allowed for dispensaries to operate legally in San Diego with an approved permit; the first legal medical cannabis dispensary in San Diego opened later that year.[63] Then in November of 2016, Prop 64 was passed, allowing for the recreational cultivation and use of cannabis for adults who are at least 21 years of age.

Cannabis Laws

Though medical and recreational cannabis are legal in California through Prop 64, the majority of cities within the state still do not allow certain activity when it comes to cannabis. In regards to the County of San Diego, some jurisdictions within the County ban cannabis. Cities that have cannabis bans include: Coronado, Del Mar, El Cajon, Escondido, Poway, San Marcos, Santee, Solana Beach, and San Diego County. On September 17, 2019, the National City, City Council voted to draft an ordinance to permit licensing and regulating cannabis business, however, cannabis activity still remains prohibited within National City.[15]

There are cities within San Diego County that do allow cannabis activity. Lemon Grove,[25] Oceanside,[26] and Vista[31] allow medicinal-only cannabis businesses. Cities that have allowed both medicinal and adult-use cannabis businesses include: Chula Vista,[21] Imperial Beach,[22] La Mesa,[24] and San Diego.[28] Additionally, as of the 2020 election, Encinitas also allows medicinal and adult-use cannabis businesses to operate.[29]

Enforcement on Criminal Actions

Enforcement Costs

If police efforts for enforcement are unable to shut down an unlicensed cannabis facility, it is typically due to costs associated with enforcement. An article titled, “Estimating Enforcement Costs in Legal States and Correlation to Marijuana Policy: Whack-A-Mole Cannabis Enforcement,” provided insight from a former police officer who stated that raids on cannabis businesses typically involve a team of 8 to 10 officers who are likely to be senior officers with greater pay.[79]

When a raid is conducted, officers first secure the business, search the whole business, take photos of evidence, log in the evidence found, and lastly transport the evidence and, in some cases, individuals back to headquarters for analysis. This process can

take up to 20 hours to complete, which does not include the additional time needed for the approval of a warrant.[79]

As an example, the City of La Mesa spent approximately 30 hours shutting down a dispensary in 2019 which included surveillance, operations, enforcement, and report completion. However, the Police Services Manager of the city stated that 30 hours was only an estimate, as hours traced on this type of operation are not normally done. The estimated cost for an enforcement raid on a single cannabis business can cost anywhere from $50,000 to $100,000. According to information retrieved via a public records request, the total average cost incurred by the City of Vista for shutting down an unlicensed cannabis dispensary totaled $39,304.37. However, the city claims this is a draft number. Additionally, the problem with enforcement continues because once the cannabis business is shut down, cannabis operators often seek to re-open again despite police enforcement.[79]

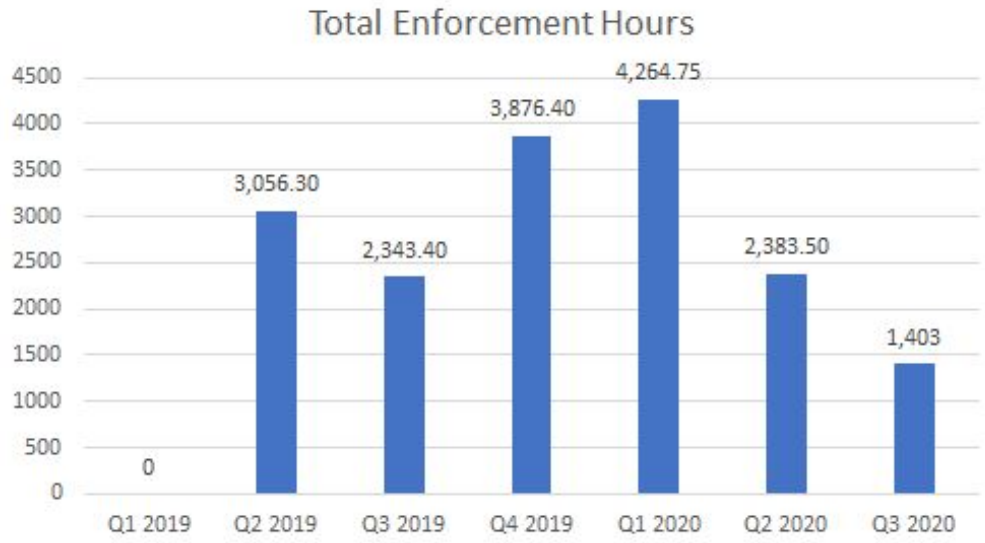
The San Diego County Sheriff's Department has recorded 83 unlicensed cannabis dispensary cases since 2018. The cost in dollars for the number of hours committed to unlicensed dispensaries totaled $140,808 in 2018, $54,372 in 2019, and costs from January to August in 2020 totaled $18,876. Figure 3 illustrates the amount in dollars San Diego County spent on enforcement costs. Hours spent on regulation by the sheriff’s department were not provided.

FIGURE 3: SAN DIEGO COUNTY ENFORCEMENT COSTS

The City of Los Angeles also tracks enforcement costs. Figure 4 shows total enforcement costs and Figure 5 shows the total number of hours spent shutting down unlicensed cannabis dispensaries in the City of Los Angeles. The data from Figure 4 and Figure 5 was provided by the Department's Gang and Narcotics Division, Cannabis Support Unit.

FIGURE 4: CITY OF LOS ANGELES TOTAL ENFORCEMENT COSTS

FIGURE 5: CITY OF LOS ANGELES TOTAL ENFORCEMENT HOURS



There are discrepancies in enforcement costs between San Diego County and the City of Los Angeles, which may be attributed to a multitude of reasons. One potential reason may be due to the size of the illicit market. Bigger cities such as Los Angeles have experience dealing with illegal cannabis businesses. Observers in the City of Los Angeles say there were more than 1,000 illegal cannabis dispensaries operating before licensing was established. As of 2019, the City of Los Angeles only had 187 licensed cannabis shops.[67]

Based on this information and the data that was provided to us by the City of Los Angeles and the County of San Diego regarding enforcement costs, it can be concluded that illegal cannabis enforcement costs are tied to the number of illegal cannabis storefronts.

Enforcement Insights

Former Sheriff's Commander of San Diego County Sheriff's Department, David Myers, met with the Office of Business Research and Analysis (OBRA) team to provide insight into the enforcement of unlicensed cannabis facilities in the county. Myers retired in June 2018 after working in law enforcement for 35 years. Over his career, Commander Myers' duties included the oversight of jails and courts within San Diego County, and providing law enforcement services to unincorporated cities in San Diego County as well incorporated cities under contract. Myers ultimately gained valuable experience regarding cannabis law enforcement. Throughout his career, Commander Myers has witnessed the legal journey cannabis has taken and how enforcement actions have shifted over time in response (D. Myers, personal communication, September 14, 2020).

One of the questions posed to Commander Myers included how the County of San Diego finds unlicensed cannabis retailers. His response to this was through cannabis search websites. Through these websites, users discover cannabis products, brands, and reviews. These cannabis search websites also help people find cannabis dispensaries, deals, and delivery services near them. Before January 2020, some cannabis search websites listed unlicensed facilities, which provided police an easy means to find these retailers to shut them down (D. Myers, personal communication, September 14, 2020).

Currently, the police department receives calls from members of the public to alert them of any suspicious activity. Licensed facilities have specific requirements they have to meet, such as their hours of operation and user-friendly parking for customers. Unlicensed facilities, on the other hand, operate during all hours of the day and usually have heavy traffic going in and out of these facilities, so neighbors often realize the difference in the licensed versus unlicensed cannabis businesses (D. Myers, personal communication, September 14, 2020).

Once an unlicensed cannabis facility is identified, how law enforcement chooses to handle it differs from jurisdiction to jurisdiction. The municipalities that have legalized

cannabis tend to try and eliminate as many unlicensed facilities as possible so that cannabis purchases are being made in licensed facilities, which contribute to revenue for the city. Myers mentioned that in the unincorporated areas of the county, the Sheriff's Department tends not to be very aggressive towards shutting down unlicensed facilities unless the police station receives many citizen complaints. If there are not a multitude of complaints, then Myers said that police are most likely going to ignore it. Myers pointed out that this happens because prosecutions are unlikely if the facilities only have cannabis products. In some cases, methamphetamine, prescription drugs, and people with criminal backgrounds could be found in these unlicensed facilities, which could result in prosecutions (D. Myers, personal communication, September 14, 2020).

Alternative Enforcement Approaches

An article published by Campaign Zero goes in-depth about the policing practices of the San Diego Police Department and the San Diego Sheriff's Department. Campaign Zero has identified new enforcement approaches that may replace previous methods used to regulate cannabis-related offenses. These approaches are not currently in effect and are merely suggestions based on Campaign Zero's data to decrease the rate of arrests and incarceration related to cannabis-related offenses.

A handful of cannabis felonies are considered lower-level crimes, meaning that they pose no threat to the community or property. Some of these offenses involved drug possession, status offenses, or quality of life offenses. For this reason, alternative responses could be implemented or expanded to enforce crimes of this nature. Rehabilitative approaches such as offering services from substance abuse counselors, mental health specialists, or other similar responders at the scene can provide services and support to people. Offering these services could create more jobs and opportunities for health professionals and could decrease the rate of cannabis-related arrests and incarceration in the City of San Diego.[71]

Crime Rates and Cannabis Dispensaries

The legalization of cannabis and cannabis dispensaries has caused some community apprehension and public criticism. Whether medicinal or adult-use, the primary concern raised by opponents of cannabis retailers is the potential for increased crime rates in the surrounding areas. As license holders continue to open new dispensaries, recently conducted studies have produced data and evidence that illustrate cannabis storefronts are not positively associated with increased criminal activity.[65] A decrease in crime rates may be the result of public safety benefits like 24-hour video surveillance and security

personnel; safety measures that are not common in other retail businesses. Additionally, the high level of customer foot traffic may serve as a crime deterrent.

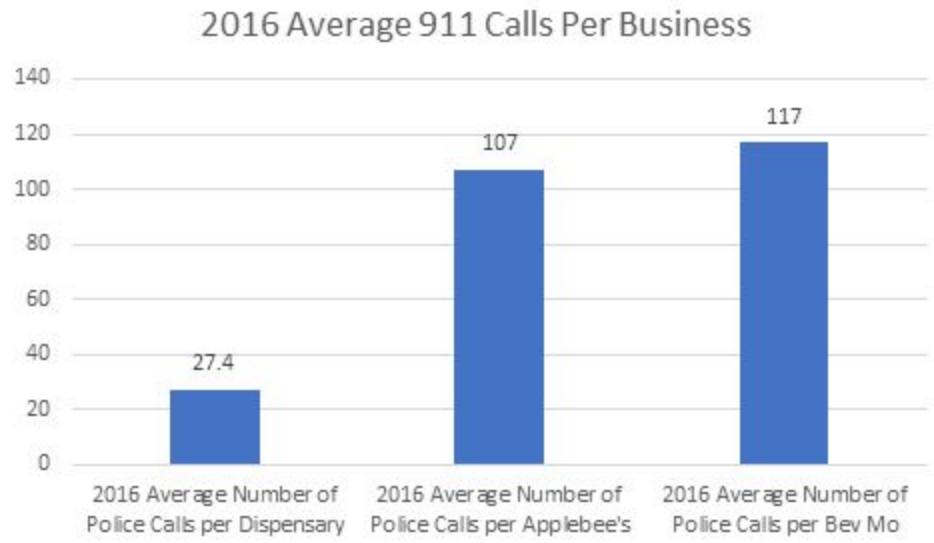
A study conducted by the National Organization for Reform of Marijuana Laws (NORML) documented the pattern of retail dispensary locations over time using micro-level data from Denver, Colorado. The resulting information concluded that within a one-month period, each additional dispensary opened in a neighborhood resulted in a reduction of 17 crimes per 100,000 residents. This directly correlates to a 19% decrease in the average crime rates in the same sample period.[65]

Cannabis Retail Misinformation

Former San Diego Police Chief Shelly Zimmerman brought up concerns in 2017 about dispensaries in San Diego. She claimed dispensaries were responsible for 274 police reports of violent crimes such as armed robbery, burglary, and shootings amongst 10 cannabis dispensaries from two years prior. However, the number of reports did not represent actual crimes committed near dispensaries. According to a report published by the San Diego Chapter of Americans for Safe Access, Chief Zimmerman's statement was misleading due to the fact that only 96 of the police reports were related to dispensaries over a two year time period. Of those 96 reports, 35 of them were related to false burglary calls due to faulty equipment or accidental triggering, and only one incident of armed robbery was reported in that time frame.[68] Reports of crimes affiliated near cannabis dispensaries have not been entirely accurate and can be misleading.

As shown in Figure 6 when compared to other local commercial businesses, primarily alcohol-related, cannabis dispensaries correlated to the fewest number of 911 calls in 2016.

FIGURE 6: AVERAGE 911 CALLS IN THE CITY OF SAN DIEGO PER BUSINESS IN 2016



Source: San Diego Chapter of Americans for Safe Access

Financial Impact

Tax Revenue Impact

In order to determine the general economic impact of an individual cannabis business in the cities of San Diego, La Mesa, and Vista, a few calculations need to be performed. Both the number of cannabis businesses that were operating each quarter and the amount of tax revenue collected by each city were used to derive these general revenue figures. Figures 7, 8, and 9 outline the amount of tax revenue collected by each of these three cities from each quarter, since the second quarter of the 2018 calendar year. These tax revenue figures were then divided by the appropriate tax rate for each city to estimate the gross taxable sales generated by all cannabis businesses in that quarter. The last column of each of these three tables outlines the general economic impact of an individual cannabis business in that quarter by dividing the estimated gross sales figure by the number of operating businesses in that quarter.

The cities of San Diego and La Mesa both follow the calendar year and only collect tax revenue on adult-use cannabis sales. The City of Vista follows the fiscal year, ending on June 30, and only collects tax revenue on medicinal-use cannabis sales.

Please note that these numbers were derived generally. The limitations of these calculations are that the city tax revenue figures, although collected directly from each city via public records requests, may include revenue from sources other than strictly from sales tax. Additionally, a blanket tax rate was applied to these tax revenue figures to estimate the gross taxable sales, and this tax rate may not represent the actual tax rate applied by each city.

Figure 7 outlines the number of businesses, city tax revenue, estimated gross taxable sales, and the general economic impact of individual cannabis businesses for each quarter, since the second quarter of 2018, for the City of San Diego. It is important to note that the $1.1M increase in cannabis tax revenue, between the second and third quarters of 2019, can be attributed to the increase in cannabis business tax, from 5% to 8% on July 1, 2019.[27] Therefore, the estimated gross taxable sales were derived by applying a 5% tax rate to city revenue figures from the second quarter of 2018 to the second quarter of 2019. Beginning in the third quarter of 2019, an 8% tax rate was applied to estimate the gross taxable sales for each quarter.

FIGURE 7: CITY OF SAN DIEGO ESTIMATED LOCAL CANNABIS MARKET VALUE BY QUARTER

Adult-Use Cannabis - Estimated Market Value by Quarter in San Diego				
Tax Period (Quarter)	Number of Businesses	Tax Revenue	Gross Sales	Impact per Business
2nd Q 2018 (Apr-Jun)	13	$1,480,566	$29,611,323	$2,277,794
3rd Q 2018 (July-Sep)	14	$1,527,271	$30,545,427	$2,181,816
4th Q 2018 (Oct-Dec)	14	$1,806,083	$36,121,665	$2,580,119
1st Q 2019 (Jan-Mar)	14	$2,093,097	$41,861,948	$2,990,139
2nd Q 2019 (Apr-Jun)	15	$2,528,494	$50,569,885	$3,371,326
3rd Q 2019 (July-Sep)	16	$3,663,110	$45,788,874	$2,861,805
4th Q 2019 (Oct-Dec)	18	$4,346,239	$54,327,984	$3,018,221
1st Q 2020 (Jan-Mar)	19	$4,116,438	$51,455,469	$2,708,183
2nd Q 2020 (Apr-Jun)	20	$4,550,483	$56,881,044	$2,844,052
3rd Q 2020 (July-Sep)	20	$3,940,968	$49,262,094	$2,463,105

Information retrieved via City of San Diego public records requests on August 12, 2020 and November 2, 2020.

Figure 8 outlines the number of businesses, city tax revenue, estimated gross taxable sales, and the general economic impact of individual cannabis businesses for each quarter, since the second quarter of 2018, for the City of La Mesa. Please note that

although Figure 8 begins with the second quarter of 2018, the City of La Mesa did not begin collecting cannabis business tax until the first quarter of 2019. The estimated gross taxable sales were derived by applying a 4% tax rate to city revenue figures.[27] The revenue figures for La Mesa in the second quarter of 2019 are not available; the City of La Mesa finance department maintains that there are “no responsive records for this time period (R.C., Piper, personal communication, November 2, 2020).” The City of La Mesa further explained that, “an omission in the La Mesa Municipal code from the original tax measure was discovered and corrected at the end of quarter 2. No taxes were collected during that quarter until the correction was made (R.C., Piper, personal communication, November 16, 2020).”

FIGURE 8: LA MESA ESTIMATED LOCAL CANNABIS MARKET VALUE BY QUARTER

Adult-Use Cannabis - Estimated Market Value by Quarter in La Mesa				
Tax Period (Quarter)	Number of Businesses	Tax Revenue	Gross Sales	Impact per Business
2nd Q 2018 (Apr-Jun)	0	-	-	-
3rd Q 2018 (July-Sep)	0	-	-	-
4th Q 2018 (Oct-Dec)	1	-	-	-
1st Q 2019 (Jan-Mar)	1	$49,415	$1,235,367	$1,235,367
2nd Q 2019 (Apr-Jun)	1	-	-	-
3rd Q 2019 (July-Sep)	1	$29,815	$745,384	$745,384
4th Q 2019 (Oct-Dec)	3	$104,438	$2,610,959	$870,320
1st Q 2020 (Jan-Mar)	3	$142,663	$3,566,576	$1,188,859
2nd Q 2020 (Apr-Jun)	3	$263,860	$6,596,505	$2,198,835

Information retrieved via City of La Mesa public records request on August 12, 2020.

Figure 9 outlines the number of businesses, city tax revenue, estimated gross taxable sales, and the general economic impact of individual cannabis businesses for each quarter, since the fourth quarter of the 2017-2018 fiscal year, for the City of Vista. The number of cannabis businesses per quarter for the City of Vista was generally derived by looking at each individual cannabis business in the city. A combination of processes were used to estimate when each business began operating, including looking at their earliest social media presence, reviews on Yelp, Weedmaps, and Google. The

estimated gross taxable sales were derived by applying a 7% tax rate to city revenue figures.

FIGURE 9: VISTA ESTIMATED LOCAL CANNABIS MARKET VALUE BY QUARTER

Medicinal-Use Cannabis - Estimated Market Value by Quarter in Vista				
Tax Period - Fiscal Year (Quarter)	Number of Businesses	Tax Revenue	Gross Sales	Impact per Business
4th Q 17-18 (Apr-Jun)	0	-	-	-
1st Q 18-19 (Jul-Sep)	0	-	-	-
2nd Q 18-19 (Oct-Dec)	0	-	-	-
3rd Q 18-19 (Jan-Mar)	0	-	-	-
4th Q 18-19 (Apr-Jun)	0	-	-	-
1st Q 19-20 (Jul-Sep)	0	-	-	-
2nd Q 19-20 (Oct-Dec)	4	$107,524	$1,536,057	$384,014
3rd Q 19-20 (Jan-Mar)	6	$417,872	$5,969,602	$994,934
4th Q 19-20 (Apr-Jun)	6	$833,003	$11,900,037	$1,983,339
1st Q 20-21 (Jan-Mar)	6	$1,081,538	$15,450,537	$2,575,089

Information retrieved via City of Vista public records request on August 11, 2020 and November 5, 2020.

License Types

The cannabis industry has multiple license types available. Each of these license types refers to phases within the supply chain of the industry. The majority of cannabis

licenses fall into five categories: cultivation, distribution, manufacturing, retailers, and testing. Professionals within the industry can hold multiple licenses at the same time, allowing for an integrated business model. All licensees are required to get a license from a state and local agency. Licenses are expensive and can cost an entrepreneur starting just one cannabis business location upwards of "$1 million" or more.[36] See Figure 10 for license type information.

FIGURE 10: LICENSE TYPES AND REQUIREMENTS

Type of License for Cannabis Industry	State License Agency	Phase in Supply Chain
Cultivator	Department of Food and Agriculture	Producing Raw Materials
Distributors	Bureau of Cannabis Control	Supply Chain Management
Manufacturing	Department of Public Health	Extraction, Infusion and Packaging Materials
Retailers	Bureau of Cannabis Control	Dispensary Stores
Testing	Bureau of Cannabis Control	Quality Control Services

Source: Cox, C. (2020a, October 27). How to Get a Cultivation License in California in 2020

California does not consider cannabis exempt from taxes; it comes with a tax for "tangible personal property" that includes "an item that can be seen, weighed, measured, felt, or touched".[19] The only exemption from taxation is when the cannabis is grown or sold for medicinal use.

The government calculates excise taxes based upon market pricing. The California Department of Tax and Fee Administration (CDTFA) is required to review the mark-up pricing on cannabis every six months. For cultivation taxes, the government uses weight and category type (flower, leaves or plant based) that is measured within a two-hour window of harvesting.[19]

Cultivation

Cultivation of cannabis includes engaging in the business of "planting, growing, harvesting, drying, curing, grading, or trimming cannabis."[19]

The cannabis industries in the cities of Santa Ana and San Diego are comparable; they have the same cannabis tax rate and number of licensed retailers. Additionally, these two cities are similar in their demographics. Figure 11, in the section below, shows the cannabis revenue collected by the City of Santa Ana for each license type. This figure illustrates the revenue collected by the City of Santa Ana through cannabis cultivation tax revenue. Between the third and fourth quarter of 2020 and the first quarter of 2021, the City of Santa Ana collected $109,855 in total.

Manufacturing

According to the CDTFA, cannabis manufacturers do three things:

- Produce or prepare cannabis or cannabis products
- Package or repackage cannabis or cannabis products
- Label or relabel packages of cannabis products

Cannabis manufacturers are also required to collect a cultivation tax from cultivators upon receipt of cannabis or cannabis products, and then pay that tax to distributors. This cultivation tax is based on the weights of cannabis flowers, cannabis leaves, and fresh cannabis plants, meaning, “the flowers, leaves, or a combination of adjoined flowers, leaves, stems, and stalk from the cannabis plant that is either cut off just above the roots, or otherwise removed from the plant.”[19]

Figure 11, in the section below, illustrates the revenue collected by the City of Santa Ana. In total, the City of Santa Ana made $122,720 in the second, third, and fourth quarters of 2020 and the first quarter of 2021 from the cannabis manufacturing tax revenue.

Distribution

Distribution of cannabis includes “transporting goods between licensees, arranging for testing of cannabis goods, and conducting the quality assurance review of cannabis goods to ensure compliance with all packaging and labeling requirements”.[9] Distribution licenses are referred to as either Type 11 or Type 13 licenses. Type 11 allows for the movement of cannabis items, accessories, and other related materials.

Figure 11, in the section below, illustrates the revenue collected by the City of Santa Ana through cannabis distribution tax revenue. In total, the City of Santa Ana collected $605,201 between the fourth quarter of 2019 and the first, second, third, and fourth quarter of 2020.

Transportation

Type 13 licensees can legally transport cannabis goods. However, Type 13 licensees are slightly different from Type 11 as they are not allowed to "transport any cannabis goods, except for immature cannabis plants and/or seeds, to a licensed retailer."[8] With a cannabis distributor transport only license, licensees can only transport cannabis accessories, cannabis goods, and branded merchandise [8] from one cannabis licensee to the following:

- Licensed cultivators
- Licensed manufacturers
- Licensed distributors[11]

Testing

Cannabis testing licenses legitimize individuals to perform quality control inspections on all cannabis products. Be Green Legal summarizes the testing role as: to gather samples from distributor locations by following standard operating procedures, keeping accurate records or all material movement, hire and train staff for packaging inspections, work with the state to deliver sampled results from distributor locations, and review product adjustments for products that are not meeting quality standards.[35]

Figure 11, in the section below, illustrates the revenue collected by the City of Santa Ana through cannabis testing tax revenue. In total, the city collected $300,981 between the third and fourth quarter of 2019 and the first, second, third, and fourth quarter of 2020.

Municipal Cannabis Taxation and License Types: Santa Ana

The City of Santa Ana issues cannabis licenses (cultivation, distribution, manufacturing, testing, and retail) for both adult-use cannabis and medical cannabis purposes. Santa Ana allows for "up to 30 adult-use retailers and 20 medicinal retailers (they can be co-located), but unlimited non-retail businesses." In Santa Ana, cannabis for medicinal use has been legal since the passage of Measure BB in November 2014. Adult-use retail cannabis has been legal since January 1, 2018, testing laboratories have been legal since March 2018, and all remaining cannabis license types have been legal since April 2018 (A. Pezeshkpour, personal communication, November 16, 2020). The City of Santa Ana collects tax revenue from cannabis businesses, based on license type, which include two things:

- Business license tax fees collected annually
- Monthly tax based on their monthly gross sales or gross square footage

How the city calculates these tax rates is outlined as follows:

> "These figures represent the business license tax fees (which are collected on an annual basis) as well as the monthly tax based on their monthly gross sales, or a tax amount which is calculated based on the gross square footage of their business location (whichever is greater).
>
> Because both are considered a tax and both are attributed to the business license, they are tracked together. Sales tax is collected by the State, therefore it is not accounted for in these figures.
>
> FYI, the annual [Cannabis] Business License Tax is a flat rate of $2,040; the monthly tax rate for each cannabis business activity is as follows:
>
> - Adult-Use Retail – 8% of monthly gross sales
> - Cultivation, Distribution, Manufacturing, Medical Marijuana – 6% of monthly gross sales
> - Testing Facility – 1% of monthly gross sales (D. Camacho, personal communication, October 21, 2020)."

Cannabis revenue for Santa Ana for fiscal years 2018 through the first quarter of the 2021 fiscal year, made from different license types, is shown below in Figure 11. These data may also include fees, penalties, and revenue from other sources.

FIGURE 11: SANTA ANA CANNABIS TAX REVENUE (2018-2021)

Santa Ana Cannabis License Quarterly Tax Collection

Tax Period (Quarter)	Adult-Use Retail	Cultivation	Distribution	Manufacturing	Medical Cannabis	Testing Laboratory
1st Q 17-18 (Jul-Sep)	-	-	-	-	$573,237	-
2nd Q 17-18 (Oct-Dec)	-	-	-	-	$555,786	-
3rd Q 17-18 (Jan-Mar)	-	-	-	-	$593,499	-
4th Q 17-18 (Apr-Jun)	-	-	-	-	$417,771	-
1st Q 18-19 (Jul-Sep)	-	-	-	-	$355,176	-
2nd Q 18-19 (Oct-Dec)	-	-	-	-	$237,506	-
3rd Q 18-19 (Jan-Mar)	$1,453,927	-	-	-	$215,429	$62,913
4th Q 18-19 (Apr-Jun)	$2,943,391	-	$31,738	-	$276,046	$105,194
1st Q 19-20 (Jul-Sep)	$1,302,412	-	$20,812	-	$68,840	$52,822

2nd Q 19-20 (Oct-Dec)	$2,527,325	-	$80,513	$12,657	$144,318	$16,708
3rd Q 19-20 (Jan-Mar)	$2,551,431	$26,862	$94,411	$46,552	$137,466	$16,462
4th Q 19-20 (Apr-Jun)	$4,566,235	$58,365	$249,089	$43,120	$350,743	$33,845
1st Q 20-21 (Jul-Sep)	$1,339,045	$24,628	$128,638	$20,391	$117,357	$13,037

Information retrieved via City of Santa Ana public records requests on October 6, 2020 and November 16, 2020.

Information about the number of cannabis operators each quarter that contributed to city revenue is not tracked by the City of Santa Ana (D. Camacho, personal communication, December 1, 2020). However, information about the number of active cannabis licenses by quarter, from fiscal years 2019 through 2021, was available. Using this information, it was possible to derive the general economic impact of various cannabis license types in Santa Ana between those two years. The following table displays the number and type of active cannabis licenses that contributed to Santa Ana tax revenue by quarter (see Figure 12).

FIGURE 12: SANTA ANA NUMBER OF CANNABIS LICENSES (2019-2021)

Santa Ana Number of Active Cannabis Licenses by Quarter

Tax Period (Quarter)	Adult-Use Retail	Cultivation	Distribution	Manufacturing	Medical Marijuana	Testing Laboratory
1st Q 18-19 (Jul-Sep)	0	0	0	0	17	0
2nd Q 18-19 (Oct-Dec)	17	1	2	0	18	2
3rd Q 18-19 (Jan-Mar)	17	1	2	0	18	2
4th Q 18-19 (Apr-Jun)	19	1	6	2	19	2
1st Q 19-20 (Jul-Sep)	19	3	7	2	19	2
2nd Q 19-20 (Oct-Dec)	19	3	9	3	19	2
3rd Q 19-20 (Jan-Mar)	19	3	9	3	19	2
4th Q 19-20 (Apr-Jun)	23	3	11	4	18	3
1st Q 20-21 (Jul-Sep)	24	3	13	4	19	3

Information retrieved via City of Santa Ana public records request on November 20, 2020.

With information about both the cannabis tax revenue per quarter and the number of cannabis licenses that contributed to that revenue per quarter, it is possible to determine the general economic impact of each individual cannabis license type. This information is general because the revenue figures from Figure 11 may also include fees, penalties, and revenue from other sources.

Figure 13 below displays the calculation of cannabis revenue by quarter, from Figure 11, and divides it by the number of active cannabis licenses in that quarter, from Figure 12. In Figure 13 below, the number in each cell is a general revenue figure that represents the economic impact of each individual cannabis license type for that particular quarter. For example, each of the nineteen active cannabis adult-use retail licenses in the fourth quarter of the 2018-2019 fiscal year had a general impact of $154,915 to city revenue that quarter.

Please note that section 21-81 of the Santa Ana municipal code prohibits the city from disclosing the exact revenue made by any individual cannabis business; these numbers had to be derived generally.

FIGURE 13: SANTA ANA GENERAL CANNABIS ECONOMIC IMPACT (2019-2021)

Santa Ana General Economic Impact of Individual Cannabis Licenses by Type

Tax Period (Quarter)	Adult-Use Retail	Cultivation	Distribution	Manufacturing	Medical Marijuana	Testing Laboratory
1st Q 18-19 (Jul-Sep)	-	-	-	-	$20,893	-
2nd Q 18-19 (Oct-Dec)	-	-	-	-	$13,195	-
3rd Q 18-19 (Jan-Mar)	$85,525	-	-	-	$11,968	$31,457
4th Q 18-19 (Apr-Jun)	$154,915	-	$5,290	-	$14,529	$52,597
1st Q 19-20 (Jul-Sep)	$68,548	-	$2,973	-	$3,623	$26,411
2nd Q 19-20 (Oct-Dec)	$133,017	-	$8,946	$4,219	$7,596	$8,354
3rd Q 19-20 (Jan-Mar)	$134,286	$8,954	$10,490	$15,517	$7,235	$8,231
4th Q 19-20 (Apr-Jun)	$198,532	$19,455	$22,644	$10,780	$19,486	$11,282
1st Q 20-21 (Jul-Sep)	$55,794	$8,209	$9,895	$5,098	$6,177	$4,346

Taxes Levied

Cannabis retailers are the segment of the cannabis supply chain that directly serves the community. The tax levied upon retail sales is imposed by municipalities. These taxes have a direct and indirect impact on both the legal and illicit market. The higher the tax on the legal market the more difficult it is for licensed retailers to compete with the illicit market. According to an HDL Report for the City of Oceanside, “Consumer demand for cannabis is assumed to generally be constant, regardless of its legal status or the availability of retailers, and so it’s reasonable to expect that more retailers would mean fewer customers for each and, thus, lower gross receipts.”[50]

Greater local taxes can cause a city to be less desirable for the industry because many distributors and manufactures will choose to relocate. This results in consumers having a lack of options for legal cannabis purchases, potentially pushing consumers to illicit sales. The decline of legal sales will have an inverse reaction to illicit sales. According to the HDL report, “The Bureau of Cannabis Control projects that more than half of the adult-use purchases currently in the illicit market will transition to the legal market to avoid the inconvenience, stigma, and risks of buying unknown products through an unlicensed seller.” Consumers will shift to the legal market when cannabis becomes cheaper and easier to access. Currently, the City of Vista has six operating storefronts that are serving cannabis consumers. Cannabis retailers average 120 customers per day with an average transaction price point of $73. The average consumer visits a retail store twice a month, which leads to annual gross receipts between $21.7M and $47.5M.[50]

Multistate Operators in San Diego

Multistate Operators (MSO’s) are cannabis businesses under one brand name that operate across states that have legalized cannabis. These operators hold many advantages compared to single-state operators in the cannabis industry.[7] One example being that they own retail businesses in highly populated areas that have legalized cannabis for either recreational or medical use. There are currently 3 MSO’s[72] in San Diego that contributed to the $8.2M in total revenue during the 2019 fiscal year.[42] MSOs are beginning to spread out into major cities, like San Diego, and influence the trends and expectations of cannabis products.

Advantages and Disadvantages of MSOs

MSO’s have an advantage over smaller cannabis businesses because of their ability to access larger amounts of resources through capital. They are also able to achieve cost

advantages due to economies of scale. The cannabis industry is already saturated with startups and businesses looking to profit off of the growing demand in this billion dollar market. MSOs can and have pushed smaller businesses out of the market because of their ability to rebrand, reorganize, and market products creating a more appealing line to consumers or by offering millions to take over their business and reduce competition. It is possible that monopolies can form if MSOs continue to grow without regulation by states. This can shut out smaller companies' opportunities for potential growth.[7]

MSOs are stronger due to their ability to react to market trends and avoid or handle problems better than smaller companies. In turn, it is advantageous for states to allow these organizations to continue their growth. One of the most powerful advantages that MSOs hold over smaller businesses is that they are more likely to acquire state licensing because the standard operating procedures and license application process have been tested and created in other states. State licensee committees prefer promising companies with access to capital and the ability to afford high-tech options for both operations and management of facilities. MSO's now battle for intellectual property (IP) in order to stand out. It is part of each brand's strategic plan for building value and growth.[7]

Retail Density

Figure 14 below describes the retail density for each jurisdiction and the average tax revenue from April-June 2020. This was possible by taking the most up-to-date census population and dividing by the number of operating dispensaries in a given jurisdiction. To determine the average tax revenue between April-June 2020, the tax revenue provided by the public records was divided by the number of dispensaries.

FIGURE 14: Retail Density Per Jurisdiction

Population by Jurisdiction

City of San Diego	Vista	La Mesa	Unincorporated San Diego County
1,423,851	101,638	59,249	505,675

Number of Operating Dispensaries Per Jurisdiction

City of San Diego	Vista	La Mesa	Unincorporated San Diego County
20	7	5	5

Retail Density by Dispensaries

City of San Diego	Vista	La Mesa	Unincorporated San Diego County
1,423,851 / 20 = 71,192	101,638 / 7 = 14,519	59,249 / 5 = 11,849	505,675 / 5 = 101,135

Tax Revenue by Jurisdiction (April-June 2020)

City of San Diego	Vista	La Mesa	Unincorporated San Diego County
$4,550,483	$833,003	$263,860	-

Average Tax Revenue Per Number of Retail Stores

City of San Diego	Vista	La Mesa	Unincorporated San Diego County
$4,550,483 / 20 = $227,524	$833,002.57 / 7 = $119,000	$263,860 / 5 = $52,772	-

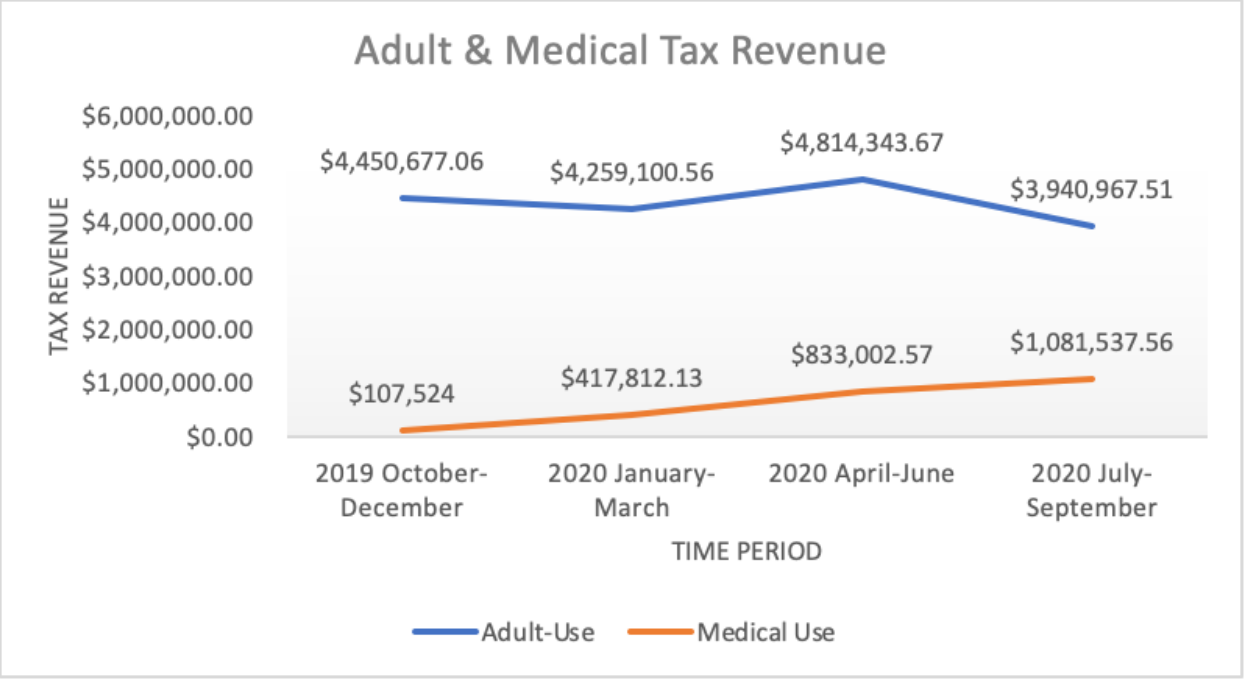
By looking at the most up-to-date population from the United States Census Bureau from each jurisdiction and how many dispensaries are fully operational, it is possible to analyze the retail density for the cannabis industry. Vista has a total population of 101,638 and seven open dispensaries. The retail density for Vista is 14,519, which translates into one dispensary servicing 14,519 residents. In La Mesa, the total population is 59,249 with five open dispensaries which translates into one dispensary servicing 11,849 residents. The total population for the City of San Diego is 1,423,851 and 20 open dispensaries which shows one dispensary servicing 71,192 residents.

Unincorporated San Diego County has a total population of 505,675 and has five open dispensaries which translates to one dispensary servicing 101,135 residents. It is possible to determine the financial impact from April-June 2020 for each retail location by averaging the total sales by the number of retail shops in each jurisdiction. The city of Vista has a total of seven dispensaries with an average of $119,000 tax revenue per dispensary. The city of La Mesa has a total of five dispensaries with an average of $52,772 per dispensary. The city of San Diego has a total of 20 dispensaries with an average $227,524 per dispensary.

Adult & Medical Tax Revenue Comparison

Figure 15 below tracks the changes of the adult and medical tax revenue between October 2019-September 2020. The figures below were provided via public records request.

FIGURE 15: Adult & Medical Tax Revenue (October 2019-September 2020)



Source: Information retrieved via City of San Diego, City of La Mesa, and City of Vista public records requests on August 11 & 12 and November 2 & 5

Figure 16 below shows the total tax revenue provided from the public records for both adult-use and medical-use from October 2019-September 2020. In order to calculate the total tax revenue for this time period, all the adult-use and medical-use tax revenue were added together. To calculate the average tax revenue per quarter, the total tax revenue was divided by four. To calculate the average tax revenue per dispensary per quarter, the total tax revenue was divided by 32: the total number of dispensaries.

FIGURE 16: Total Tax Revenue & Average Tax Revenue Per Dispensary Per Quarter

Cannabis Tax Revenue

2019 October-December		2020 January-March		2020 April-June		2020 July-September	
City of San Diego and La Mesa Adult-Use	Vista Medical Use	City of San Diego and La Mesa Adult-Use	Vista Medical Use	City of San Diego and La Mesa Adult-Use	Vista Medical Use	City of San Diego and La Mesa Adult-Use	Vista Medical Use
$4,450,677	$107,524	$4,259,101	$417,872	$4,814,344	$833,003	$3,940,968	$1,081,538

Total Tax Revenue

$19,905,025

Total Adult Use Tax Revenue

$17,465,089

Total Medical Use Tax Revenue

$2,439,936

Average Tax Revenue Per Quarter

$19,905,025 / 4
= $4,976,256

Average Tax Revenue Per Dispensary Per Quarter

$4,976,256 / 32
= $155,508

Considering the sales in Figure 16, it is possible to analyze the financial impact of adult-use and medical cannabis sales. The previous four quarters brought in a total revenue of $19,905,025. The City of Vista currently only sells cannabis for medical purposes and their total contribution for these four quarters was $2,439,936. The cities of San Diego and La Mesa currently only sell cannabis for adult-use and their total contribution was $17,465,089. The total number of dispensaries in Vista, La Mesa, and the City of San Diego is 32. On average, the total financial output for both cannabis usage types per quarter was $4,976,256 with an average of $155,508 per dispensary.

Public Health

Hospital Visits

The California Health and Human Services Agency (CHHS) maintains an open data portal that allows for public access to health and human services data. The CHHS page on hospital emergency department data includes data sets that show thousands of diagnoses from emergency room visits and are organized by year. One such diagnosis code (F12.10) is used to record the number of uncomplicated cannabis diagnoses, aptly named, “cannabis abuse, uncomplicated.” From 2016 to 2017, the number of “cannabis abuse, uncomplicated” diagnoses rose from 61,200 to 63,459. In 2018, these diagnoses dropped to 59,686, and then dropped further in 2019 to 55,669.[52] This drop in F12.10 diagnoses might be a result of the development of higher quality cannabis products over time as well as increased education on licensed cannabis, including dosage.

The legalization of cannabis has been associated with an increase in the number of hospital visits. According to an article by KPBS, San Diego has seen a rise in cannabis-related emergency room visits since cannabis was legalized in California in 2016. Data from the Office of Statewide Health Planning and Development (OSHPD) is referenced, saying, “visits for cannabis poisoning have gone up by 35 percent in San Diego County, from 606 in 2016 to 820 last year.” Dr. Richard Clark, Director of the Division of Medical Toxicology at University of California San Diego (UCSD), was quoted in the article as attributing this rise in emergency room visits to the increase in cannabis use by tourists. Dr. Clark makes the assertion that tourists may be attracted to try cannabis while visiting California because of its accessibility, but that their unfamiliarity with dosage, especially where edibles are concerned, sometimes leads to cannabis intoxication.

However, Dr. Clark suggested that ultimately no harm is done for adult cannabis users and that the patients are usually “better in an hour or two."[76] Although cannabis intoxication can create unpleasant effects like paranoia, nausea, and even hallucinations, the effects of cannabis alone are not life threatening. According to the National Institute on Drug Abuse (NIDA), “There are no reports of teens or adults dying from marijuana alone.”[62]

Opioid Addiction

Cannabis has the potential to meaningfully impact the national opioid crisis by serving as an alternative to opioids for pain management. A 2018 study done by the University of Georgia found states that had medical cannabis laws (MCLs) showed significantly lower daily opioid doses as well as fewer opioid prescriptions under Medicare Part D. The study focused on states with MCLs that allowed either dispensaries to operate or the home cultivation of cannabis. After comparing states that had MCLs and the daily doses of opioid medication, the study found that "states with active dispensaries saw 3.742 million fewer daily doses filled . . . states with home-cultivation-only MCLs saw 1.792 million fewer filled daily doses." Additionally, the study revealed that "prescriptions for all opioids decreased by 3.742 million daily doses per year when medical cannabis dispensaries opened." The study suggests that in these states, patients who would otherwise turn to opioids for pain relief, or other symptoms, chose instead to use medical cannabis.[33]

Another study published in 2014 examined the relationship between opioid analgesic overdose mortality rates in states that had MCLs against states that did not. The study looked at death certificates between 1999 and 2010 in all 50 states. This study found that states with MCLs "were associated with lower rates of opioid analgesic overdose mortality, which generally strengthened in the years after passage."[5]

In 2017, a lawsuit was filed against the federal government arguing that the Schedule I classification of cannabis, under the Controlled Substances Act (CSA), is unconstitutional. This case, Washington v. Sessions, was initially thrown out, then reinstated by the U.S. Court of Appeals for the Second Circuit because the case involves the health of two minors who depend on cannabis for its medical application.[49] The initial 89-page complaint argued that, "the Federal Government has recognized that cannabis does not meet (or come close to meeting) two of the three Schedule I requirements."[78]

Substance Use

As cannabis increases in popularity and consumption, questions arise as to its relationship to alcohol in terms of use. As cannabis has gradually become legalized from state to state, and therefore more available, a substitution effect between cannabis and alcohol has been observed. A 2019 study reviewed this potential substitution effect by surveying college students, between 18 and 26 years of age, across the country from 2008 to 2018. The study broke up survey respondents based on whether or not their state had recreational cannabis laws (RMLs). After reviewing 10-years worth of data, it was observed that cannabis use increased when RMLs were adopted in any given

state. However, although cannabis use increased, the adoption of RMLs was also associated “with decreased binge drinking prevalence among college students age 21 and older” as well as “increased sedative misuse among minors.”[4] The sedatives referenced by the study refer to prescription sedatives.

There are some theories as to why millennials prefer cannabis to alcohol. A recent article by the Chicago Tribune suggests there are several reasons for this preference:

- Cannabis does not cause hangovers
- Cannabis is less expensive than alcohol
- Cannabis is the preferred choice when trying to relax
- Cannabis has zero calories
- Cannabis is perceived to be non-toxic

The article then cites additional reasons in favor of the legalization of cannabis, including the effect of decriminalization and investment opportunities.[48] However, like any substance, cannabis can be misused. A research article from the Proceedings of the National Academy of Sciences of the United States of America (PNAS) examined the effects of long-term cannabis use and associated neuropsychological impairment. This study examined participants in 1984 and 1985, prior to cannabis use, and then again between 2010 and 2012. In participants who used cannabis, a decrease in IQ was observed. This decrease in IQ was highest among participants in the “persistent cannabis-dependence group.”[60]

Social Equity

Social equity programs (SEPs) are designed and established to recognize and repair the damage caused by the War on Drugs as well as cannabis prohibition and the unequal treatment of cannabis arrests.[17] States across the United States, such as California, have implemented social equity provisions in their cannabis policies to make the cannabis industry more equitable for individuals who live in communities negatively impacted by cannabis criminalization. These provisions, however, are not a requirement for jurisdictions to implement.

For example, the City of San Diego does not have a social equity program, despite allowing cannabis. Nor does any other incorporated city in San Diego County that allows licensed cannabis. It is important to note that each state is approaching social equity in different ways with varying results.[59] Through California’s Bureau of Cannabis Control, there are equity grant funds available for jurisdictions in the state to apply for and use to develop, implement, and fund a social equity program in their communities.[10]

Cannabis Equity Grants Program

The Cannabis Equity Grants Program is a California state program for local jurisdictions. The California Cannabis Equity Act and the California Bureau of Cannabis Control entered into an interagency agreement along with GO-Biz to conduct the Cannabis Equity Grants Program for Local Jurisdictions. The objective of the Cannabis Equity Grants Program for Local Jurisdictions is to help eliminate obstacles faced by equity program applicants and to create a positive impact on individuals that have been affected by the War on Drugs. Having this equity approach in order, individuals and communities get the resources, support, and treatment based on their needs, which may result in equitable outcomes.

In terms of funding, $15M is available for the 2020-2021 fiscal year. Jurisdictions have the option of applying for one of the two application types. In 2020, Funding Request Type 1 can request up to $75,000 for the use of either establishing a social equity program in their jurisdiction or for the use of conducting an equity assessment. Grants received from Funding Request Type 1 are allowed to use no more than $40,000 conducting their equity assessment. Funding Request Type 2 can request up to $5M to aid social equity applicants from local jurisdictions to attain entry to, and operate in, California's cannabis marketplace.[14]

It is important to note that the money from Funding Request Type 1 is only available to jurisdictions in California that have allowed cannabis businesses to operate and that want to develop a social equity program. Funding Request Type 2 is only available to jurisdictions in California that have allowed cannabis to operate in their communities and have a social equity program in place. Jurisdictions that do not allow cannabis are unable to participate in applying for grant money from Funding Request Type 2. For example, no jurisdictions in San Diego County receive the Cannabis Equity Grant funds because they have not adopted a social equity program. San Diego city council member, Chris Ward, thinks it is important for San Diego to become eligible for funds the city cannot currently access. Ward states, "We need to stop leaving money on the table and do our part for equity at the local level."[40]

In 2019, the Bureau of Cannabis Control (BCC) awarded $10M in equity grant funding to ten different jurisdictions in California. Figure 17 shows the jurisdiction and the amount in dollars they received from the BCC.

FIGURE 17: 2019 BCC AWARDED GRANT FUNDS

Jurisdiction	Amount in Dollars
City of Los Angeles	$1,834,156.38
City of Oakland	$1,657,201.65
County of Humboldt	$1,338,683.13
City and County of San Francisco	$1,338,683.13
City of Sacramento	$1,197,119.34
City of Long Beach	$913,991.77
City of San Jose	$560,082.30
City of Santa Cruz	$560,082.30
City of Coachella	$500,000.00
City of Palm Springs	$100,000.00

Source: Malsbury, A. (2020, June 15). California Cannabis Equity Programs are Getting a Boost From State and Private Sources

In April of 2020, the Bureau of Cannabis Control (BCC) awarded $30M in funding through the Cannabis Equity Grants Program for Local Jurisdictions to sixteen different jurisdictions in California. This was a significant increase in the amount the state is funding these programs compared to 2019, and shows the state's effort in trying to repair the damage caused by the War on Drugs. Figure 18 shows the jurisdictions and the amount in dollars they received.

FIGURE 18: 2020 BCC AWARDED GRANT FUNDS

Jurisdiction	Amount in Dollars
City of Oakland	$6,576,705.76
City of Los Angeles	$6,042,014.23
City and County of San Francisco	$4,995,000.00
City of Sacramento	$3,831,955.93
City of Long Beach	$2,700,000.00
City of Humboldt	$2,459,581.02
City of Mendocino	$2,245,704.40
County of Lake	$150,000.00
County of Monterey	$150,000.00
County of Nevada	$149,999.95
City of Palm Springs	$149,397.90
City of San Jose	$149,300.37
City of Santa Cruz	$147,666,75
City of Clearlake	$98,890.43
City of Coachella	$93,783.26
City of Stockton	$60,000.00

Source: California Governor's Office of Business and Economic Development. (2020, April 21). California Cannabis Equity Grants Program Provides $30 Million in Grant Funding for Local Jurisdictions

History of Cannabis Arrests in San Diego

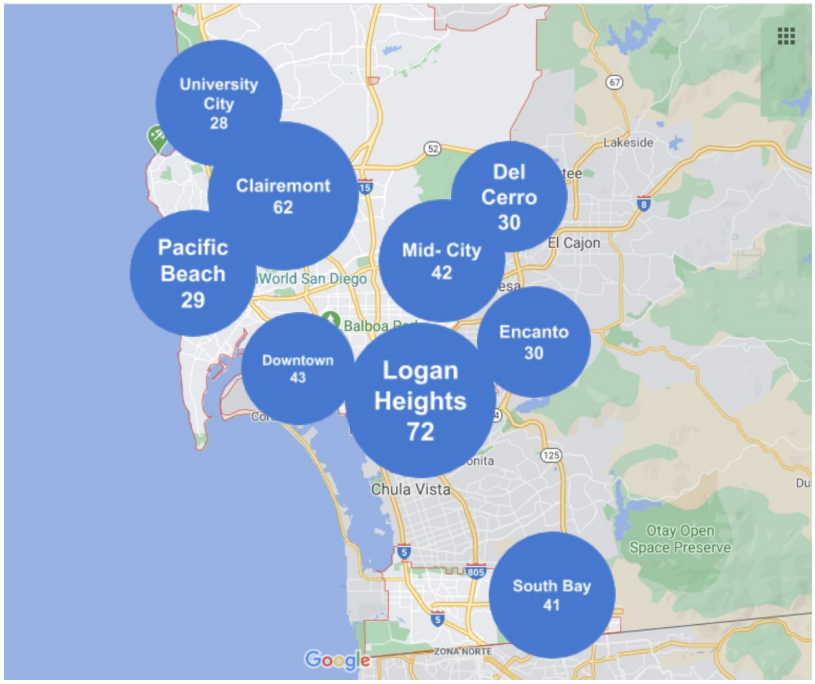
Historically, people of color have been criminalized and put into jail when police officials find them in possession of cannabis. Studies show that both people of color and White Americans consume cannabis at similar rates, yet people of color are charged at a disproportionate rate for possession.

Juvenile Convictions

Regarding the City of San Diego, the rate of arrests for crimes associated with cannabis has gone down since 2017. However, children and teens of color in San Diego are the ones that face the most charges.[57] For example, Latinx San Diegans made up half of all juvenile citations associated with cannabis between January 2017 and October 2019, yet they make up 30% of the city's population. Black Americans in San Diego make up only 5.5% of the population but make up 16% of juvenile cannabis citations, with the most common cannabis charge among minors being cannabis possession on school property. Punishment for this involves counseling and community service hours.[57]

Juvenile citations are most prominent within lower income neighborhoods in the City of San Diego. Figure 19 shows the neighborhoods with the greatest amount of juvenile arrests for cannabis.

FIGURE 19: SAN DIEGO JUVENILE CANNABIS CITATIONS BY NEIGHBORHOOD



Source: Marx, J. (2019, December 3). Post-Legalization, Marijuana Enforcement Still Hits Minorities Harder.

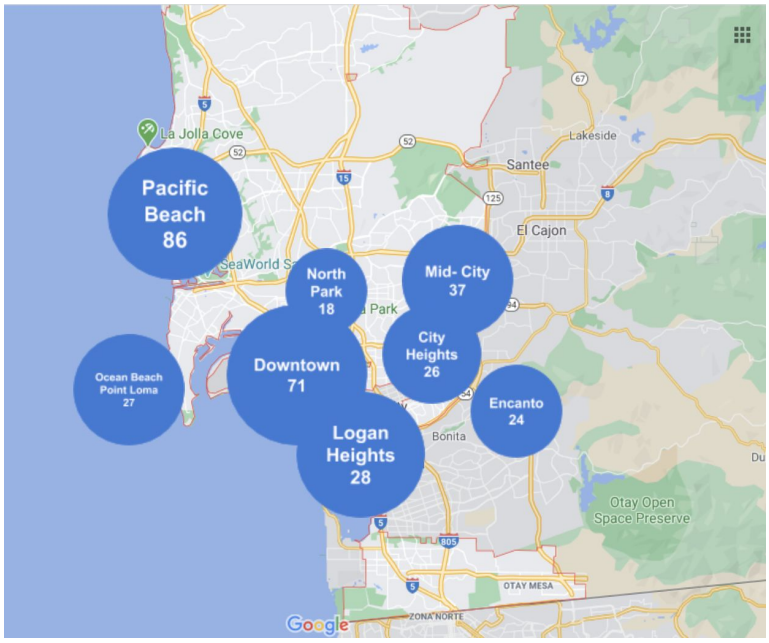
Adult Convictions

Regarding adults in the City of San Diego, studies show that people of color are arrested at greater rates than White San Diegans.[57] Black Americans in San Diego make up only 5.5% of the population but make up 29% of adult cannabis arrests. The most common reason why adults in the city were charged was due to their possession of more than an ounce of cannabis. Punishment for this type of offense involves up to 6 months in jail.

Racial disparities among adults are also seen with felony arrest rates. According to the Cannabis Equity Study conducted by Mid-City Advocacy Network, Black adults are seven times more likely than White adults in San Diego to be arrested for a cannabis-related charge.[61]

Adult citations are most prominent within lower income neighborhoods in San Diego. Figure 20 shows the neighborhoods with the greatest number of adult arrests for cannabis.[57]

FIGURE 20: SAN DIEGO ADULT CANNABIS ARRESTS BY NEIGHBORHOOD



Source: Marx, J. (2019, December 3). Post-Legalization, Marijuana Enforcement Still Hits Minorities Harder.

Based on the statistics presented, some communities in the City of San Diego have been impacted more than others when it comes to cannabis criminalization. If the City of San Diego intends to use tax revenue from cannabis in order to advocate for social equity, they should devote revenue to communities that are affected the most from the criminalization of cannabis and the enforcement of cannabis regulations.

Social Equity Program Efforts

The Cannabis Equity Grants Program was passed by the California Legislature in 2018 and helps individuals in the cannabis marketplace who are from communities disproportionately impacted by cannabis criminalization. The cities of Los Angeles and San Francisco have started their equity programs with the help of the grant provided by the state legislature. The City of San Diego does not currently have a social equity program. According to an article published by Voice of San Diego, San Diego city council members Chris Ward and Monica Montgomery are making an effort to help communities that have been affected by crimes associated with cannabis. Former city council member Chris Ward recognizes that there is unequal treatment of people of color and Whites even though the use of cannabis between the two populations runs at similar rates. Ward and Montgomery both have proposed a “cannabis equity” program that would allocate millions of dollars from city cannabis tax revenue to programs, like drug prevention for at-risk youth. Additionally, according to an article by the San Diego

Tribune, the program will try to also give low-income neighborhoods, affected by the War on Drugs, help in opening up cannabis businesses local to the area.[41]

Social Equity Programs in California

While a number of municipalities in California have implemented social equity programs in their communities, it is important to note that all of them have varying results, and there is not one that is considered entirely successful. As shown in Figure 17 and Figure 18, there were many jurisdictions that applied for and received the BCC funds in 2019 and in 2020. Major cities such as Los Angeles, Oakland, San Francisco, and Sacramento implemented social equity programs with varying outcomes. Comparing and contrasting social equity programs from major cities such as these can help other jurisdictions, such as San Diego, identify best practices when it comes to providing equal opportunities to individuals in their communities that have been impacted by cannabis criminalization.[39]

Oakland

The City of Oakland has an established social equity program that has been widely accepted as one of the most successful out of the social equity programs in the other nine jurisdictions. Features in the success of Oakland's social equity program include:

- Making half of all permits available only to qualified social equity applicants.
- Only issuing permits to the people who have previously been convicted of cannabis offenses or have lived in a place identified as a community impacted by the War on Drugs.
- Making it a requirement for a general applicant to provide three years of free rent to a social equity applicant and provide access to at least 1,000 square feet for business operations.[39]

Los Angeles

The City of Los Angeles has received criticism for their social equity program. Co-founder of the California Minority Alliance, Donnie Anderson, stated that "I don't think we've passed the point where the social equity program can't satisfy its intent, but Los Angeles' program looks like it was set up to fail."[2] Complications from Los Angeles' social equity program include:

- Staffing and funding shortages.
- Long wait times regarding applicants applying for a business license.

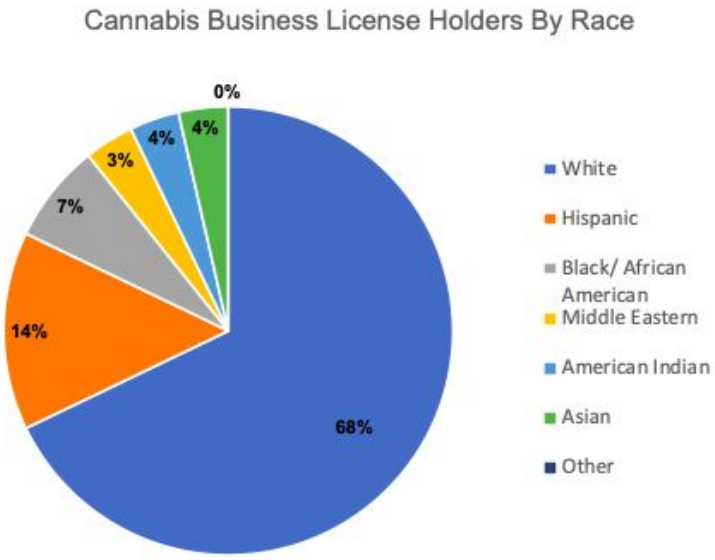
- Little oversight of partnership arrangements regarding social equity applicants and investors. This is significant because this has led people to believe that it is a way for social equity applicants to lose their share of their business.[2]

A Survey of San Diego Cannabis License Holder Demographics

The Office of Business Research and Analysis (OBRA) conducted a survey for cannabis business license holders in the San Diego County region. One objective of the survey was to determine demographics information about cannabis license holders in the San Diego area. The survey, which was conducted from September 2, 2020 to October 28, 2020, included fourteen different responses varying from one to three cannabis license holders per business. Demographic survey questions included race, gender, and age.

Figure 21 illustrates a breakdown of cannabis license holders by race based on the survey results. Based on this illustration, it is clear that racial diversity in the cannabis industry is still an issue; White adults in San Diego continue to dominate the industry. Establishing a social equity program in San Diego County could encourage more racial diversity and equity within the cannabis industry.

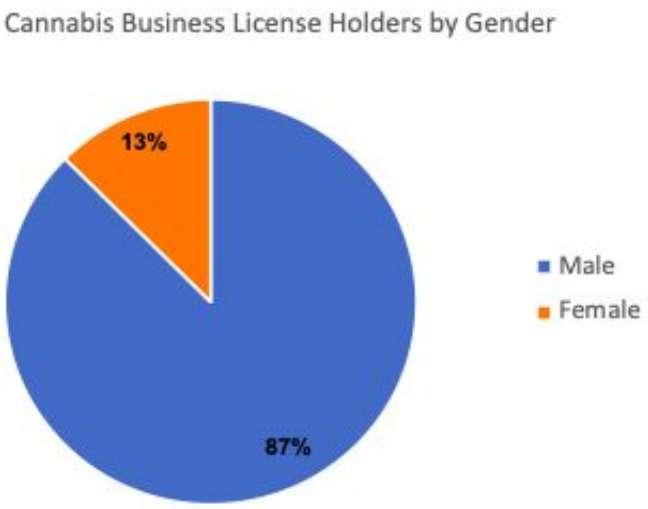
FIGURE 21: CANNABIS BUSINESS LICENSE HOLDERS BY RACE



Source: The Office of Business Research and Analysis. (2020). Cannabis EIR report survey.

Figure 22 illustrates a breakdown of cannabis license holders by gender based on the survey results of license holders in San Diego County. The figure clearly demonstrates that a majority of survey respondents identify as male. These results suggest that there may be a lack of gender diversity within the local cannabis industry. It is possible that more effort could be made to encourage women to obtain a cannabis business license and, in doing so, help to increase the gender diversity within the cannabis business community in San Diego.

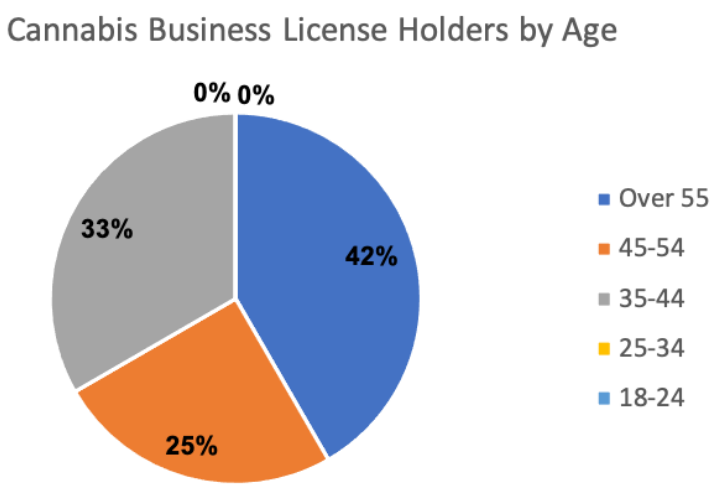
FIGURE 22: CANNABIS BUSINESS LICENSE HOLDERS BY GENDER



Source: The Office of Business Research and Analysis. (2020). Cannabis EIR report survey.

Figure 23 illustrates a breakdown of cannabis license holders by age based on the survey results. From looking at the illustration, most license holders in the San Diego region are over the age of 55. Figure 23 also illustrates that of survey respondents, no one between the ages of 18-34 owns a cannabis business license. There may be many reasons for this age disparity, but San Diego County could consider making the business license process more accessible for younger cannabis entrepreneurs so that there is more variability in ages.

FIGURE 23: CANNABIS BUSINESS LICENSE HOLDERS BY AGE



Source: The Office of Business Research and Analysis. (2020). Cannabis EIR report survey.

Future Research / Next Steps

Cannabis laws in the United States are slowly changing and being reformed. Most recently, the Marijuana Opportunity Reinvestment and Expungement (MORE) Act of 2019 was passed by the House of Representatives on December 4, 2020. This bill would decriminalize cannabis at the federal level. The MORE Act would have removed criminal penalties for individuals who manufacture, distribute, or possess cannabis, as well as remove prior convictions and allow for sentence hearings for federal cannabis offenses.[37] The bill successfully passed in the House, but was not taken up in the Senate for a vote. As a result the bill died in Congress.[47]

The passage of similar legislation in the future will undoubtedly result in positive changes within the cannabis industry and may allow for growth within the social equity field. Social equity programs across municipalities in California struggle to successfully implement a program that is universally accepted. Additionally, legislation like the MORE Act becoming law would allow for more cannabis licensing and employment opportunities for lower income individuals.[37]

Comparisons Between Cannabis and Craft Brewery Retail Density

Potential areas for new research are vast but could include drawing comparisons between the cannabis industry and other, similar industries; comparisons could be drawn between retail, sales density, and location zoning. The craft brewing industry is one potential industry ideal for comparison. Similar to the cannabis industry, the craft brewing industry was viewed in a negative light in its infancy.

When comparing the retail density of the cannabis and craft brewing industries it is possible to analyze the means by which the craft brewing industry was able to distance itself from that original, negative light. According to the City of Vista's website, one brewery accounts for 7,000 residents in Vista and one brewery accounts for every 19,000 residents in the City of San Diego.[30] The retail density between the craft brewing and cannabis industries are vastly different. In the City of Vista, one dispensary accounts for 14,519 residents. Conversely, in the City of San Diego, one dispensary accounts for 71,192 residents. The retail density for the cannabis industry is twice the amount in the City of Vista and, in the City of San Diego, it is nearly five times the amount.

Additionally, craft breweries were first allowed in industrial areas, which has also been the case for cannabis businesses. Lastly, creating industry benchmarks and comparing these benchmarks over time could be a valuable future research endeavor.

References

[1]Adams, C. (2017, May 16). *The man behind the marijuana ban for all the wrong reasons*. CBS News. https://www.cbsnews.com/news/harry-anslinger-the-man-behind-the-marijuana-ban/.

[2]Adams, C. (2018, December 3). *Challenges and controversy swirl around marijuana social equity programs in California*. GreenEntrepreneur. https://www.greenentrepreneur.com/article/324139.

[3]Adult Use of Marijuana Act (AUMA), Proposition 64 § 26200 (2016). https://leginfo.legislature.ca.gov/faces/codes_displayText.xhtml?lawCode=BPC&division=10.&title=&part=&chapter=20.&article

[4]Alley, Z. M., Kerr, D. C., & Bae, H. (2020). Trends in college students' alcohol, nicotine, prescription opioid and other drug use after recreational marijuana legalization: 2008–2018. *Addictive Behaviors*, 102, 2–3. https://doi.org/10.1016/j.addbeh.2019.106212

[5]Bachhuber, M. A., Saloner, B., Cunningham, C. O., & Barry, C. L. (2014). Medical cannabis laws and opioid analgesic overdose mortality in the United States, 1999-2010. *JAMA Internal Medicine*, *174*(10). https://doi.org/10.1001/jamainternmed.2014.4005

[6]Barcott, B. (2019, March). *Special report: Cannabis jobs count*. Leafly. https://leafly-cms-production.imgix.net/wp-content/uploads/2019/03/01141121/CANNABIS-JOBS-REPORT-FINAL-2.27.191.pdf

[7]Borchardt, D. (2019, March 20). *The cannabis industry's top 12 u.s. multi-state operators.* Green Market Report. https://www.greenmarketreport.com/the-cannabis-industrys-top-12-u-s-multi-state-operators/.

[8]Bureau of Cannabis Control. (2019, August). *Cannabis distributor transport only (type 13) fact sheet*. https://cannabis.ca.gov/wp-content/uploads/sites/13/2019/08/BCC_Distributor_Transport_Only_Fact_Sheet.pdf

[9]Bureau of Cannabis Control. (n.d.). *Distributors*. https://bcc.ca.gov/licensees/distributors.html

[10]Bureau of Cannabis Control. (2020). *Local jurisdiction equity grant funding*. https://bcc.ca.gov/about_us/equity_grant.html#:~:text=The%20California%20Cannabis%20Equity%20Act,that%20focus%20on%20the%20inclusion

[11]Cal Cannabis Law. (n.d.). *California cannabis distributors*. http://www.calcannabislaw.org/california-cannabis-business-license-compliance-distributor-transport-only-medicinal-m-type-13

[12]California Department of Tax and Fee Administration (CDTFA). (2020, March 6). *California department of tax and fee administration reports cannabis tax revenues for the fourth quarter of 2019*. https://www.cdtfa.ca.gov/news/20-03.htm.

[13]California Governor's Office of Business and Economic Development. (2020, April 21). *California cannabis equity grants program provides $30 million in grant funding for local Jurisdictions.* https://business.ca.gov/california-cannabis-equity-grants-program-provides-30-million-in-grant-funding-for-local-jurisdictions/

[14]California Governor's Office of Business and Economic Development. (2020a, December). *Cannabis equity grants program for local jurisdictions*. https://static.business.ca.gov/wp-content/uploads/2020/12/CEG-Program-Grant-Solicitation-FY-2020-21.pdf

[15]California National City. (n.d.). *Commercial cannabis information*. National City. https://www.nationalcityca.gov/government/city-manager/economic-development/commercial-cannabis.

[16]California Proposition 215, the Medical Marijuana Initiative. (n.d.). Ballot Pedia. https://ballotpedia.org/California_Proposition_215,_the_Medical_Marijuana_Initiative_(1996)

[17]Cannabis Control Commissions. (n.d.). *Equity programs*. https://mass-cannabis-control.com/equityprograms/.

[18]CaNORML. *SB 420 establishes prop. 215 guidelines, voluntary patient identification card system*. (2019, March 07). https://www.canorml.org/california-laws/sb-420-establishes-prop-215-guidelines-voluntary-patient-identification-card-system/

[19]CDTFA. (n.d.). *Tax guide for cannabis businesses*. https://www.cdtfa.ca.gov/industry/cannabis.htm.

[20]CDTFA. (n.d.-a). *Tax rates – special taxes and fees*. https://www.cdtfa.ca.gov/taxes-and-fees/tax-rates-stfd.htm.

[21]City of Chula Vista. (n.d.). *Commercial cannabis*. City of Chula Vista. https://www.chulavistaca.gov/departments/city-manager/cannabis-marijuana-informaton

[22]City of Imperial Beach. (n.d.). *Imperial Beach municipal code*. City of Imperial Beach. http://qcode.us/codes/imperialbeach/?view=desktop&topic=4-4_60-4_60_010

[23]City of La Mesa. (n.d). *Cannabis business tax*. City of La Mesa. https://www.cityoflamesa.us/1511/Cannabis-Business-Tax.

[24]City of La Mesa. (n.d.-a). *Cannabis businesses*. City of La Mesa. https://www.cityoflamesa.us/1628/Cannabis-Businesses

[25]City of Lemon Grove. (n.d.). *Marijuana Operations*. The City of Lemon Grove. https://www.lemongrove.ca.gov/city-hall/development-services/planning-zoning/marijuana-operations.

[26]City of Oceanside. (n.d.). *Cannabis facilities*. City of Oceanside. https://www.ci.oceanside.ca.us/gov/dev/cannabis_facilities/default.asp

[27]City of San Diego. (n.d.). *Cannabis business tax*. City of San Diego. https://www.sandiego.gov/treasurer/taxesfees/cannabistax.

[28]City of San Diego. (n.d.-a) *Cannabis information*. City of San Diego. https://www.sandiego.gov/development-services/cannabis

[29]City of San Diego. (2020). *Official final election results*. San Diego County Registrar of Voters.https://www.livevoterturnout.com/SanDiego/LiveResults/en/Index_10.html

[30]City of Vista. (n.d.). *Barreling business: A look at Vista's brewing and economic development plan. City of Vista*. https://www.cityofvista.com/business/economic-development/business-news-insights/barreling-business-a-look-at-vista-s-brewing-economic-development-growth

[31]City of Vista. (n.d.-a). *Cannabis business*. City of Vista. https://www.cityofvista.com/business/cannabis-business

[32]Clarke, C., Merlin, M. (2013, September 1) *Cannabis: Evolution and ethnobotany. University of California Press*. https://ebookcentral.proquest.com/lib/csusm/detail.action?docID=1249494

[33]Cogan, P. S. (2020). Reality and legality: Disentangling what is actual from what is tolerated in comparisons of hemp extracts with pure CBD. *Journal of Dietary Supplements*, 17(5), 527–542. https://doi.org/10.1080/19390211.2020.1790710

[34]Cox, C. (2019, December 20). *How to get a dispensary license in california in 2020*. Begreenlegal. https://www.begreenlegal.com/how-to-get-a-dispensary-license-in-california/

[35]Cox, C. (2020, February 5). *How to open a licensed cannabis testing lab in california in 2020.* Begreenlegal. https://www.begreenlegal.com/how-to-open-a-licensed-cannabis-testing-lab-in-california/

[36]Cox, C. (2020a, October 27). *How to get a cultivation license in california in 2020: Be Green Legal*. Begreenlegal. https://www.begreenlegal.com/how-to-get-a-cultivation-license-in-california/

[37]Dezenski, L., Stracqualursi, V. (2020, December 4). *House passes bill decriminalizing marijuana*
at federal level. CNN Politics. https://www.cnn.com/2020/12/04/politics/house-vote-more-act-marijuana-legislation/index.html

[38]Drug Enforcement Agency. (2018). *Staffing and budget*. Drug Enforcement Agency. https://www.dea.gov/staffing-and-budget.

[39]Edwards, K., Ewing, L., & Mulkey, W. (2020, June 10). *Social equity - or lack thereof - in the cannabis industry.* Simplifya. https://www.simplifya.com/social-equity-or-lack-thereof-in-the-cannabis-industry/.

[40]Garrick, D. (2019, November 17). *Battle heating up over san diego's proposed cannabis equity program.* The San Diego Union Tribune. https://www.sandiegouniontribune.com/communities/san-diego/story/2019-11-17/battle-heating-up-over-san-diegos-proposed-cannabis-equity-program

[41]Garrick, D. (2019a, September 24). *Proposal would devote millions in san diego marijuana taxes to low-income communities.* The San Diego Union Tribune. https://www.sandiegouniontribune.com/communities/san-diego/story/2019-09-24/proposal-would-devote-millions-in-san-diego-marijuana-taxes-to-low-income-communities

[42]Garrick, D. (2019b, November 6). *San Diego boosts marijuana tax revenue with crackdown on outside suppliers.* The San Diego Union Tribune. https://www.sandiegouniontribune.com/communities/san-diego/story/2019-11-06/san-diego-boosting-marijuana-tax-revenue-with-crackdown-on-outside-suppliers

[43]Glassdoor. (2020) *Cannabis & glass budtender hourly pay*. Glassdoor. www.glassdoor.com/Hourly-Pay/Cannabis-and-Glass-Budtender-Hourly-Pay-E1386115_D_KO19,28.htm.

[44]Glassdoor. (2020a). *Compliance manager salaries in San Diego.* Glassdoor. https://www.glassdoor.com/Salaries/san-diego-compliance-manager-salary-SRCH_IL.0,9_IM758_KO10,28.htm?clickSource=searchBtn

[45]Glassdoor. (2020b). *Dispensary manager salaries in San Diego.* Glassdoor.

https://www.glassdoor.com/Salaries/san-diego-dispensary-manager-salary-SRCH_IL.0,9_IM758_KO10,28.htm?clickSource=searchBtn

[46]Glassdoor. (2020c). *Trimmers salaries in San Diego*. Glassdoor. https://www.glassdoor.com/Salaries/san-diego-trimmers-salary-SRCH_IL.0,9_IM758_KO10,18.htm?clickSource=searchBtn

[47]Govtrack. (n.d.). *H.R. 3884 (116th): MORE act of 2020*. Govtrack. https://www.govtrack.us/congress/bills/116/hr3884

[48]Harper, T. (2020, February 26). *Millennials are fueling the cannabis economy.* chicagotribune.com. https://www.chicagotribune.com/marijuana/sns-tft-millennials-fuel-cannabis-economy-20200226-hf3aqwtx2napvdzctusdkmykxy-story.html.

[49]Hasse, J. (2019, May 31). *Federal appeals court rules DEA, federal govt. must 'promptly' reassess marijuana's illegality.* Forbes. https://www.forbes.com/sites/javierhasse/2019/05/31/federal-appeals-court-rules-dea-federal-govt-must-promptly-reassess-marijuanas-illegality/?sh=55094d4c7be9

[50]HdL Companies. (2020, November 1). *Fiscal analysis of the commercial cannabis industry* [report for the City of Oceanside]. HdL Companies. https://www.ci.oceanside.ca.us/civicax/filebank/blobdload.aspx?blobid=52998

[51]History Channel. (2017, May 31). *War on drugs*. History.com. https://www.history.com/topics/crime/the-war-on-drugs.

[52]Hospital Emergency Department - Diagnosis, procedure, and external cause codes. California Health and Human Services Open Data Portal. https://data.chhs.ca.gov/dataset/hospital-emergency-department-diagnosis-procedure-and-external-cause-codes.

[53]Jones, J. H. (2017, September 6). *Pot dispensaries banned permanently in Poway*. San Diego Union-Tribune. https://www.sandiegouniontribune.com/communities/north-county/sd-no-poway-pot-20170906-story.html.

[54]Leafly. (2020). *Leafly Jobs Report 2020*. https://leafly-images.imgix.net/Leafly-2020-Jobs-Report.pdf

[55]Malsbury, A. (2020, June 15). *California cannabis equity programs are getting a boost from state and private sources*. Harris Bricken. https://harrisbricken.com/cannalawblog/california-cannabis-equity-programs-are-getting-a-boost-from-state-and-private-sources/.

[56]Marijuana Policy Project. (n.d.). *Federal enforcement policy on state marijuana laws*. Marijuana Policy Project. https://www.mpp.org/federal/federal-enforcement-policy-on-state-marijuana-laws/

[57]Marx, J. (2019, December 3). *Post-legalization, marijuana enforcement still hits minorities harder.* Voice of San Diego. https://www.voiceofsandiego.org/topics/public-safety/post-legalization-marijuana-enforcement-still-hits-minorities-harder/

[58]McNearney, A. (2018, April 20). *The complicated history of cannabis in the US*.

History.com. https://www.history.com/news/marijuana-criminalization-reefer-madness-history-flashback.

[59]McVey, E. (2019, August 20). *Chart: Not all states' cannabis social equity programs are equal.* Marijuana Business Journal. https://mjbizdaily.com/chart-not-all-states-cannabis-social-equity-programs-are-equal/

[60]Meier, M. H., Caspi, A., Ambler, A., Harrington, H., Houts, R., Keefe, R. S. E., … Moffitt, T. E. (2012). Persistent cannabis users show neuropsychological decline from childhood to midlife. *Proceedings of the National Academy of Sciences*, 109(40). https://doi.org/10.1073/pnas.1206820109

[61]Mid-City Advocacy Group. (2019, August). *Cannabis equity study*. https://onbase.sandiego.gov/OnBaseAgendaOnline/Documents/ViewDocument/CannabisEquityReport.pdf.pdf?meetingId=1692&documentType=Agenda&itemId=40043&publishId=232573&isSection=false

[62]National Institute on Drug Abuse. (2020, July 24). *Marijuana drug facts*. National Institute on Drug Abuse. https://www.drugabuse.gov/publications/drugfacts/marijuana.

[63]NBC 7 San Diego. (2014, November 4). *Timeline: Medical marijuana in San Diego*. https://www.nbcsandiego.com/news/local/marijuana-pot-legal-timeline-san-diego-califor nia-medical-prop-215/1947797/

[64]Nicholas, P., & Churchill, A. (2012). *The Federal Bureau of Narcotics, the states, and*

the origins of modern drug enforcement in the United States, 1950-1962. Contemporary Drug Problems, 39(4), 595–640. https://doi-org.ezproxy.csusm.edu/10.1177/009145091203900402

[65]NORML. (n.d.). *Societal impacts of cannabis dispensaries/retailers*. NORML. https://norml.org/marijuana/fact-sheets/societal-impacts-of-cannabis-dispensaries-retailers/

[66]Proposition 56 Revenues: Reductions in fixed allocations. *The 2019-20 budget: Proposition 56 revenues: Reductions in fixed allocations*. (2019, February 14). https://lao.ca.gov/Publications/Report/3939.

[67]Romero, D. (2019, September 20). *California's cannabis black market has eclipsed its legal one*. NBC News.com. https://www.nbcnews.com/news/us-news/california-s-cannabis-black-market-has-eclipsed-its-legal-one-n1053856.

[68]San Diego Chapter of Americans for Safe Access. (n.d.) *San Diego dispensary crime*.

[69]Sawyer, W. & Wagner, P. (2018). *Mass incarceration: The whole pie 2018*. https://www.prisonpolicy.org/reports/pie2018.html.

[70]Seeds, S. (2020, April 27) *Cannabis history: How cannabis came to America.* Sensi Seeds. https://sensiseeds.com/en/blog/cannabis-history-how-cannabis-came-to-america/

[71]Sinyangwe, S. (n.d.). *Evaluating policing in San Diego*.

https://policescorecard.org/assets/san-diego/police-scorecard-san-diego-report.pdf?ac=96311f5bfec6b6910d817135e2ded1675467dba3

[72]Smith, J. (2020, December 21) *Marijuana MSO MedMen fights to turn around finances, but challenges linger.* Marijuana Business Daily. https://mjbizdaily.com/marijuana-mso-medmen-fights-to-turn-around-finances/

[73]State of California Commission on Peace Officer Standards and Training. (2020, September 24). *About POST*. About Us. https://post.ca.gov/About-Us.

[74]State of California Commission on Peace Officer Standards and Training. (2020a, September 30). *Resources*. Commission on POST > Home. https://post.ca.gov/Did-You-Know-Adult-Use-Cannabis.

[75]State of California Commission on Peace Officer Standards and Training. (2020b, June 2). *Resources*. Proposition 64 - The Control, Regulate and tax Adult Use of Marijuana Act. https://post.ca.gov/proposition-64-the-control-regulate-and-tax-adult-use-of-marijuana-act.

[76]Trageser, C. (2019, December 18). *Marijuana tourists mean more visits to California hospitals*. KPBS Public Media. https://www.kpbs.org/news/2019/dec/18/has-legal-weed-increased-er-visits-and-use-among-t/.

[77]Vera Institute of Justice. (2020, November 4). *The state of opioids*. Vera.

https://www.vera.org/state-of-justice-reform/2017/the-state-of-opioids

[78]Washington v. Sessions. United States District Court Southern District of New York. 4 (2017). https://assets.documentcloud.org/documents/3900180/Complaint-Washington-Bortell-Belen-Cotte-CCA-vs.pdf

[79]WM Policy. (2017, August 14). *Estimating enforcement costs in legal states and correlation to marijuana policy: Whack-a-mole cannabis enforcement.* https://www.womeningovernment.org/sites/default/files/Estimating%20Enforcement%20Costs.pdf.

Appendix A: Public Record Requests

County of San Diego - Enforcement Costs for Unlicensed Cannabis Operations 2018-2020

"The Sheriff's Department has investigated 83 unlicensed marijuana dispensary cases since 2018. That includes our contract cities and unincorporated areas. We do not know how many unlicensed dispensaries currently operate in the county. The cost for manpower hours for those 83 operations is broken down as CY 2018: $140,808. CY 2019: $54,372. CY 2020: $18,876.

City of Los Angeles PRA Request - Annual Enforcement Costs for Unlicensed Facilities

2. Annual enforcement costs and the number of actions for unlicensed facilities in Los Angeles for 2018, 2019, and 2020.

RESPONSE: The Department's Gang and Narcotics Division, Cannabis Support Unit tracks civil enforcement costs recorded as follows:

2018: Not tracked

2019: 1st Quarter - not tracked
2nd Quarter - 3056.3 hours / $615,836.70
3rd Quarter - 2343.4 hours / $352,443.16
4th Quarter - 3876.4 hours / $443,011.15

2020: 1st Quarter - 4264.75 hours / $587,193.40
2nd Quarter - 2383.5 hours / $349,241.86
3rd Quarter - 1403 hours / $205,395.73

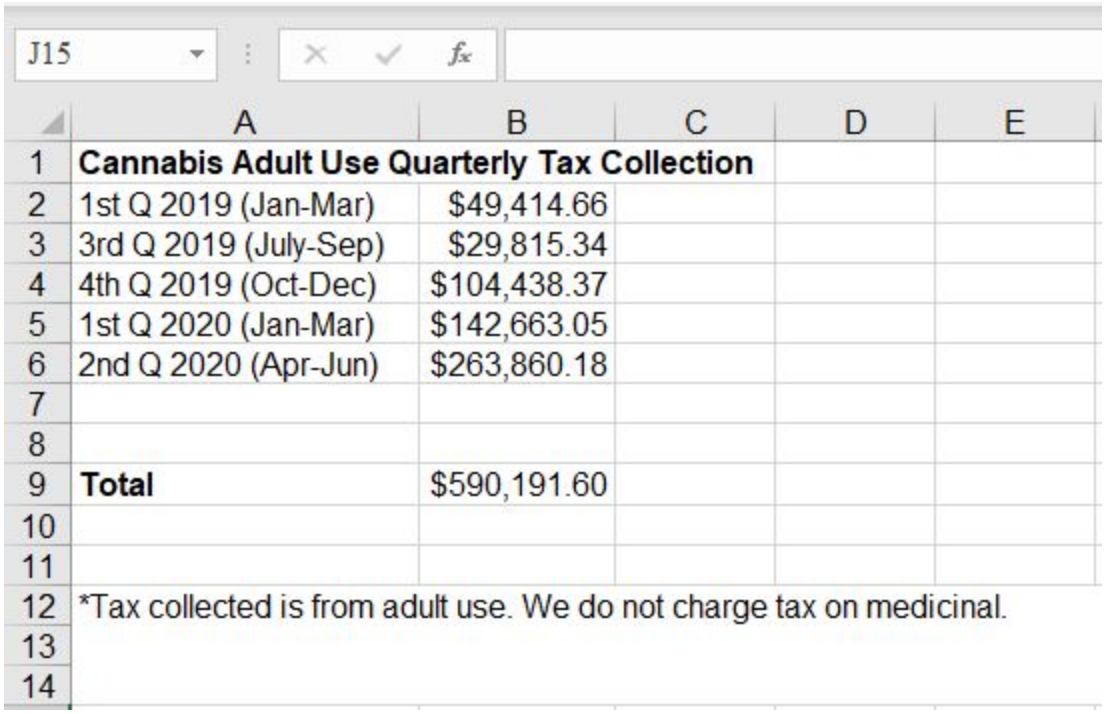
La Mesa PRA Request - Average Cost of Shutting Down a Cannabis Facility

A search of our records showed one illegal marijuana dispensary that was shut down in 2019 by detectives in our Special Investigations Unit. They spent approximately 30 hours on this operation (surveillance, operations, enforcement and report completion). This is only an estimate, as they do not normally track their hours for this type of an operation.

These are records for the Police Department only. The City Code Enforcement Division may have further information on any enforcement actions they may have handled.

Please let me know if you have any questions.

La Mesa PRA Request - Cannabis Tax Revenue Calendar Years 2018-2020



	A	B	C	D	E
1	**Cannabis Adult Use Quarterly Tax Collection**				
2	1st Q 2019 (Jan-Mar)	$49,414.66			
3	3rd Q 2019 (July-Sep)	$29,815.34			
4	4th Q 2019 (Oct-Dec)	$104,438.37			
5	1st Q 2020 (Jan-Mar)	$142,663.05			
6	2nd Q 2020 (Apr-Jun)	$263,860.18			
7					
8					
9	**Total**	$590,191.60			
10					
11					
12	*Tax collected is from adult use. We do not charge tax on medicinal.				
13					
14					

Santa Ana PRA Request - Cannabis License Revenue Fiscal Years 2018-2020

	2018				2019				2020			
Cannabis Type	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Adult-Use Retail	$ -	$ -	$ -	$ -	$ -	$ -	$ 1,453,927.49	$ 2,943,391.25	$ 1,302,411.64	$ 2,527,325.12	$ 2,551,431.25	$ 4,566,235.26
Cultivation	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 26,861.52	$ 58,365.16
Distribution	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 31,738.06	$ 20,812.47	$ 80,512.63	$ 94,410.91	$ 249,089.44
Manufacturing	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 12,656.95	$ 46,552.00	$ 43,119.73
Medical Marijuana	$ 573,237.27	$ 555,786.09	$ 593,499.47	$ 417,770.54	$ 355,176.30	$ 237,505.85	$ 215,428.65	$ 276,046.19	$ 68,839.97	$ 144,317.75	$ 137,465.71	$ 350,743.22
Testing Laboratory	$ -	$ -	$ -	$ -	$ -	$ -	$ 62,913.36	$ 105,193.76	$ 52,821.65	$ 16,707.85	$ 16,462.41	$ 33,845.26

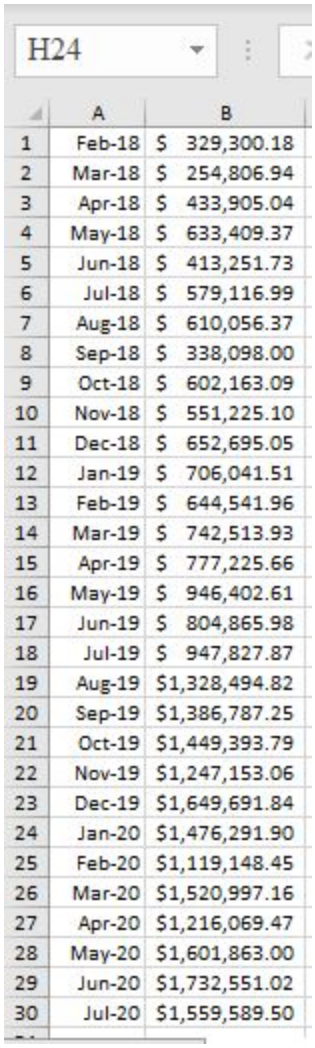
Santa Ana PRA Request - Cannabis License Revenue Fiscal Year 2020-2021

License Type	Q1 2021 Revenue
Adult-Use Retail (including delivery)	$ 1,339,044.77
Cultivation	$ 24,627.82
Distribution	$ 128,638.12
Manufacturing	$ 20,390.57
Medical Marijuana Retail	$ 117,356.75
Testing Facility	$ 13,037.04

Santa Ana PRA Request - Active Cannabis Licenses by Quarter Fiscal Years 2019-2021

	2018-19 FY				2019-20 FY				2020-21 FY			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Medical Marijuana	17	18	18	19	19	19	19	18	19	N/A	N/A	N/A
Adult-Use Retail	0	17	17	17	19	19	19	23	24	N/A	N/A	N/A
Cultivation	0	1	1	1	3	3	3	3	3	N/A	N/A	N/A
Distribution	0	2	2	6	7	9	9	11	13	N/A	N/A	N/A
Manufacturing	0	0	0	2	2	3	3	4	4	N/A	N/A	N/A
Testing Facility	0	2	2	2	2	2	2	3	3	N/A	N/A	N/A

San Diego PRA Request - Cannabis Tax Revenue Calendar Years 2018-2020



	A	B
1	Feb-18	$ 329,300.18
2	Mar-18	$ 254,806.94
3	Apr-18	$ 433,905.04
4	May-18	$ 633,409.37
5	Jun-18	$ 413,251.73
6	Jul-18	$ 579,116.99
7	Aug-18	$ 610,056.37
8	Sep-18	$ 338,098.00
9	Oct-18	$ 602,163.09
10	Nov-18	$ 551,225.10
11	Dec-18	$ 652,695.05
12	Jan-19	$ 706,041.51
13	Feb-19	$ 644,541.96
14	Mar-19	$ 742,513.93
15	Apr-19	$ 777,225.66
16	May-19	$ 946,402.61
17	Jun-19	$ 804,865.98
18	Jul-19	$ 947,827.87
19	Aug-19	$1,328,494.82
20	Sep-19	$1,386,787.25
21	Oct-19	$1,449,393.79
22	Nov-19	$1,247,153.06
23	Dec-19	$1,649,691.84
24	Jan-20	$1,476,291.90
25	Feb-20	$1,119,148.45
26	Mar-20	$1,520,997.16
27	Apr-20	$1,216,069.47
28	May-20	$1,601,863.00
29	Jun-20	$1,732,551.02
30	Jul-20	$1,559,589.50

San Diego PRA Request - Quarter 3 Cannabis Tax Revenue Calendar Year 2020

Description	C/F Budget	Original Budget	Budget Ch	Current Budget	Pre Encun	Encumbra	Actuals	Available Budget	% Util
416227 Recreational Cannabis Business Tax	0	-19676611	0	-19676611	0	0	-3940967.51	-15735643.49	20.0287
416228 Recreational Cannabis Business Tax Penalty	0	0	0	0	0	0	-7143.09	7143.09	0

Vista PRA Request - Cannabis Tax Revenue Fiscal Years 2019-2020

CANNABIS TAXABLE GROSS SALES-0010003.403106					
FY19/20	OCT-DEC	JAN-MAR	Apr-20	May-20	Jun-20
Total	$1,536,057.17	$5,969,601.86	$3,421,477.34	$4,134,698.22	$4,343,861.10

Vista PRA Request - Cannabis Tax Revenue Fiscal Year 2021

CANNABIS TAX REVENUE-0010003.403106			
FY20/21	JULY	AUGUST	SEPTEMBER
Monthly Total	$352,678.35	$367,652.55	$361,206.66
YTD	$352,678.35	$720,330.90	$1,081,537.56

Vista PRA Request - Average Cost of Shutting Down a Cannabis Facility

Answer to Question 3.

TOTAL AVERAGE COST $39.304.37

Please note this number is a DRAFT number. Calculation of costs had not been completed prior to the passing of Measure Z. After the passage of Measure Z, the City discontinued tracking costs.