

Cannabis in Crisis:

Results from the California Cannabis Count Study

A Sociodemographic Analysis of the Cannabis Industry
in the State of California

May 2025



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EXECUTIVE SUMMARY

The California Cannabis Count (C³) Research Project offers an in-depth, multi-phase evaluation of California's licensed cannabis industry. Through a combination of qualitative interviews, quantitative surveys, and geospatial mapping, this study examined the characteristics of cannabis license holders, business operators, and their licensed cannabis businesses across the state. It sought to better understand the impact and effectiveness of local and state regulatory requirements on business operations, social equity program outcomes, and the overall viability of the legal cannabis market. Researchers conducted interviews with 80 cannabis businesses and surveyed 176 individual participants, assessing topics such as business structures, business barriers and facilitators in the industry, and the impact of regulatory requirements. The researchers also mapped the geographic distribution of cannabis licenses to assess possible associations with key sociodemographic indicators.

Analysis of the interview and survey data revealed widespread systemic challenges affecting the industry. Participants cited excessive taxation, fragmented and inconsistent local regulations, extended licensing delays, and burdensome environmental compliance requirements such as the California Environmental Quality Act (CEQA) and the Marijuana Enforcement Tracking Reporting Compliance (METRC) system. These obstacles have significantly limited the operational efficiency and profitability of legal cannabis businesses, particularly for smaller operators. At the same time, the continued growth of the unlicensed cannabis market—fueled by regulatory inefficiencies and pricing disparities—undermines the legal sector's viability. Social equity programs, while well-intentioned, have been challenged by funding delays, inadequate support, and applicant exploitation.

Geospatial mapping revealed several notable patterns, including correlations between license concentrations and indicators of economic prosperity, as well as race/ethnicity. Inconsistencies in social equity program implementation and city/county licensing policies across the state reflected a regulatory patchwork that creates confusion for businesses and consumers, further challenging equitable and consistent cannabis market development.

The report concludes with a range of policy recommendations, including comprehensive tax reform, improved coordination between state and local authorities, reduced documentation burdens, and streamlined compliance procedures. Overall, this study underscores an urgent need for structural reforms to ensure the long-term sustainability and inclusivity of California's legal cannabis market—an industry in crisis.

BACKGROUND

Volatile Regulations and Compliance Issues

California's cannabis industry faces significant challenges due to the dramatic transformation from its unregulated state under the 1996 Compassionate Use Act (Proposition 215) to today's highly regulated market (Proposition 64). The regulatory framework has become so complex that even large, well-capitalized corporations struggle to navigate it successfully, raising serious equity concerns. While simplified diagrams can help to explain the regulatory structure, they often become outdated or incomplete because of the industry's complexity and its constantly evolving nature.

California Cannabis Regulation Timeline

- Aug 1913** California Legislature criminally prohibits cannabis.
- Nov 1972** Voters reject Proposition 19 to repeal all criminal cannabis prohibitions.
- Nov 1996** Voters approve Proposition 215, Compassionate Use Act.
- Oct 2003** California Legislature enacts Senate Bill 420, clarifying Proposition 215.
- Nov 2010** Voters reject Proposition 19 to repeal all criminal prohibitions and enact regulations.
- Sep 2015** California Legislature enacts the Medical Marijuana Regulation and Safety Act (MMRSA) with Assembly Bill 243, Assembly Bill 266, and Senate Bill 643.
- Jun 2016** California Legislature amends MMRSA with the passage of the Medical Cannabis Regulation and Safety Act (MCRSA).
- Nov 2016** Voters approve Proposition 64, the Adult Use of Marijuana Act (AUMA).
- Mar 2017** Oakland City Council unanimously approves the ordinance for their Cannabis Equity Permit Program.
- Apr 2017** California Department of Food and Agriculture releases draft regulations for medical cannabis cultivation.
- Jun 2017** California Legislature enacts Senate Bill 94, the Medicinal and Adult-Use Cannabis Regulation and Safety Act (MAUCRSA).

- Dec 2017** California's three cannabis licensing authorities release previously adopted emergency cannabis regulations for initial implementation of MAUCRSA .
- City of Los Angeles creates a Cannabis Equity Permit Program.
- Jan 2018** The County of San Francisco creates a Cannabis Equity Permit Program.
- Mar 2018** California Department of Public Health (CDPH) releases their Shared-Facilities Emergency Regulations.
- Jun 2018** California's three cannabis licensing authorities readopt the emergency regulations with significant changes.
- Aug 2018** Sacramento creates a Cannabis Equity Permit Program.
- Sep 2018** California Legislature enacts Senate Bill 1294, the California Cannabis Equity Act, establishing a \$10 million fund for local jurisdictions with cannabis equity ordinances.
- Jan 2019** The State releases new cannabis regulations, surpassing all previous emergency regulations, effective January 16, 2019.
- The State issues one-year temporary licenses are issued under pending legislation (Senate Bill 67).
- Jul 2019** California Legislature enacts Assembly Bill 97, establishing provisional licenses valid until 2022, \$30,000-per-day administrative fine against unlicensed cannabis businesses, and Office of Business and Economic Development authority over state grants for local jurisdictions with social equity programs.
- Nov 2019** The California Department of Tax and Fee Administration (CDTFA) announces a cannabis markup (from 60% to 80%) and cultivation tax rate increase effective January 1, 2020.

- July 2021** California consolidates the Bureau of Cannabis Control, CalCannabis Cultivation Licensing Division, and the Manufactured Cannabis Safety Branch into the Department of Cannabis Control (DCC).¹
- Jun 2022** California Legislature enacts Assembly Bill 195, suspending the cannabis cultivation tax indefinitely and shifting excise tax collection to the retail level starting in 2023; the bill also allows eligible equity retailers to retain 20% of the excise tax they collect.²
- Sep 2022** California Legislature enacts multiple cannabis regulations:
- Senate Bill 988, the Compassionate Access to Medical Cannabis Act or Ryan's Law, allowing terminally ill patients to use medical cannabis within specific types of health facilities. The legislation states that the patient or primary caregiver, as defined, is responsible for acquiring, retrieving, administering, and removing medicinal cannabis, which must be stored securely at all times.³
- Assembly Bill 1885, expanding the purpose of the comprehensive system established by MAUCRSA to include the control and regulation of the cultivation, distribution, transport, storage, manufacturing, processing, and sale of cannabis products intended for use on, or consumption by, animals.⁴
- Assembly Bill 1894, requiring advertisements and marketing for cannabis cartridges and integrated cannabis vaporizers to prominently display language regarding the product's proper disposal as hazardous

¹ Isabella Bloom, "California Opens New Marijuana Agency 5 Years After Legalization, Aiming to Simplify Rules," *Sacramento Bee*, July 2021, accessed May 23, 2025, <https://www.sacbee.com/news/politics-government/capitol-alert/article252810093.html>.

² California State Legislature, *Assembly Bill No. 195, Cannabis Tax Reform*, Chapter 56, Statutes of 2022, approved June 30, 2022. https://leginfo.ca.gov/faces/billNavClient.xhtml?bill_id=202120220AB195.

³ California State Legislature, *Senate Bill No. 988: Compassionate Access to Medical Cannabis Act or Ryan's Law*, Chapter 242, Statutes of 2022, approved September 2, 2022. https://leginfo.ca.gov/faces/billNavClient.xhtml?bill_id=202120220SB988.

⁴ California State Legislature, *Assembly Bill No. 1885: Cannabis and Cannabis Products: Animals: Veterinary Medicine*, Chapter 389, Statutes of 2022, approved September 18, 2022, https://leginfo.ca.gov/faces/billNavClient.xhtml?bill_id=202120220AB1885.

waste. The legislation prohibits packaging, labels, advertisements, and marketing indicating that these products are disposable.⁵

Senate Bill 1326, authorizing the Governor to enter into an agreement with another state or states authorizing medicinal or adult-use commercial cannabis activity, or both, between foreign licensees, who are licensed under the laws of the other state or states, and entities operating with a state license according to MAUCRSA, provided that the commercial cannabis activities are lawful and subject to licensure under the laws of the other state or states.⁶

Assembly Bill 2568, providing that it is not a crime solely for individuals and firms to provide insurance and related services to persons licensed to engage in commercial cannabis activity.⁷

Assembly Bill 2188, Employment Protections for Cannabis Users, states that most California employers cannot penalize employees for off-duty cannabis use detected through non-psychoactive metabolite testing.⁸

Oct 2022 California Attorney General Rob Bonta announces that the State is transitioning from the seasonal Campaign Against Marijuana Planting (CAMP) to the year-round Eradication and Prevention of Illicit Cannabis (EPIC) task force, aiming to disrupt illegal cannabis activities more effectively.⁹

Jun 2024 An investigation reveals that many cannabis products contained pesticide levels exceeding legal limits, with some testing labs accused

⁵ California State Legislature, *Assembly Bill No. 1894: Integrated Cannabis Vaporizer: Packaging, Labeling, Advertisement, and Marketing*, Chapter 390, Statutes of 2022, enacted 2022, https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=202120220AB1894.

⁶ California State Legislature, *Senate Bill No. 1326: Cannabis: Interstate Agreements*, Chapter 396, Statutes of 2022, enacted 2022, https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=202120220SB1326.

⁷ California State Legislature, *Assembly Bill No. 2568: Cannabis: Insurance Providers*, Chapter 393, Statutes of 2022, enacted 2022, https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=202120220AB2568.

⁸ Marijuana Policy Project (MPP). "California." MPP. Accessed May 23, 2025. <https://www.mpp.org/states/california>.

⁹ State of California, Department of Justice, Office of the Attorney General, "Attorney General Bonta Announces Eradication of Nearly One Million Cannabis Plants as Part of Interagency Effort to Combat Illegal Market," October 11, 2022. <https://oag.ca.gov/news/press-releases/attorney-general-bonta-announces-eradication-nearly-one-million-cannabis-plants>.

of falsifying results. Release of the findings leads to increased scrutiny and regulatory actions to ensure product safety.¹⁰

Jul 2024 The California State Fair permits on-site cannabis sales and consumption, marking a significant step in normalizing cannabis use in public venues.¹¹

Sep 2024 Governor Gavin Newsom announces emergency regulations banning the sale of hemp products containing detectable levels of intoxicating cannabinoids, such as delta-8 THC. This measure, intended to protect minors, has faced legal challenges from the hemp industry.¹²

Jan 2025 California Legislature enacts Assembly Bill 1775, legalizing “Amsterdam-style” cannabis cafés that allow on-site consumption of cannabis alongside non-alcoholic food and beverages, and live entertainment.¹³

Mar 2025 The DCC introduces updated sanitation requirements for cannabis cultivation to address microbial contamination risks.¹⁴

Jul 2025 The cannabis excise tax is set to rise from 15% to 19%.¹⁵

Burdensome Taxes

California’s cannabis tax structure imposes significant burdens on industry participants at every stage of the supply chain. Licensed distributors bear substantial responsibilities, as they must oversee all aspects of tax administration, including invoicing, calculating, collecting, reporting, and remitting excise taxes to the California Department of Tax and Fee Administration (CDTFA). Due to federal

¹⁰ Paige St. John and Alex Halperin, “The Dirty Secret of California’s Legal Weed,” *Los Angeles Times*, June 14, 2024, <https://www.latimes.com/california/story/2024-06-14/the-dirty-secret-of-californias-legal-weed>.

¹¹ Ramon Antonio Vargas, “California to Welcome Cannabis for Sale and Consumption at State Fair,” *The Guardian*, June 18, 2024, <https://www.theguardian.com/us-news/article/2024/jun/18/california-cannabis-state-fair-legal>.

¹² Jenna Greene, “Hemp Legal Fights Heat Up in California and Beyond,” *Reuters*, accessed May 23, 2025, <https://www.reuters.com/legal/government/column-hemp-legal-fights-heat-up-california-beyond-2024-10-09>.

¹³ Laura J. Nelson, “California Lawmakers Pass Bill Allowing Amsterdam-Style Cannabis Cafes,” *Los Angeles Times*, August 29, 2024, <https://www.latimes.com/california/story/2024-08-29/california-cannabis-cafes-bill-legislation-sacramento-ab1775-haney>.

¹⁴ California Department of Cannabis Control (DCC), *Notice of Proposed Rulemaking Action: Cultivation Updates; Minimum Sanitation Standards* (Sacramento: DCC, March 2025), https://cannabis.ca.gov/wp-content/uploads/sites/2/2025/03/dcc_cultivation_updates_nopa.pdf.

¹⁵ Seth Kerstein, “Cannabis Tax Revenue Update (2024 Q4),” *California Legislative Analyst’s Office*, March 6, 2025, <https://lao.ca.gov/LAOEconTax/article/Detail/824>.

prohibition, the cash-based nature of these tax payments introduces additional risks and liabilities for licensees. The stakes are high for distributors, who face steep penalties of 50% for any late tax payments, underscoring their critical role in California's cannabis tax collection system.

Reporting and Paying the Cannabis Tax¹⁶

California's cannabis supply chain is tightly regulated and heavily taxed, with businesses required to hold specific licenses and comply with both state and local tax rules. While the repeal of the cultivation tax on July 1, 2022 was intended to ease the financial burden on the industry, it has offered limited relief. Instead, the tax burden has largely shifted to retailers.

The California cannabis industry faces a uniquely burdensome taxation structure characterized by compounding and stacking taxes, where each tax is calculated on a growing base that already includes previous taxes. This creates a phenomenon where consumers and businesses are effectively paying taxes on taxes. For example, the California Department of Tax and Fee Administration (CDTFA) website shows that a cannabis product priced at \$35 is first subject to a 10% local tax, then a 15% state excise tax on the subtotal including delivery, and finally an 8.5% sales tax on the cumulative total. As shown in Table 1, this layered approach results in a final price of \$54.28—over 55% more than the original selling price—highlighting the complexity and economic strain caused by this system. Such a tax structure not only inflates costs but also complicates compliance and accounting, especially for small operators navigating an already tightly regulated market.

This cascading structure significantly inflates the retail price and creates a complex web of calculations for compliance. Small operators in particular face daunting accounting challenges while trying to navigate multiple tax layers—local business taxes, excise taxes, and sales taxes—all computed on expanding bases.

The main challenges faced by the regulated industry include high tax rates and a complex cash-based structure. Operators find it difficult to calculate or manage tax rates, navigate a volatile regulatory landscape, and manage a distorted supply chain while competing against a thriving, unregulated market.

¹⁶ California Department of Tax and Fee Administration, "Cannabis Distributors: Information on Collecting and Paying the Cannabis Excise Tax," March 2019, <https://cannabis.ca.gov/2019/03/cannabis-distributors-information-on-collecting-and-paying-the-cannabis-excise-tax>; California Department of Tax and Fee Administration, "Cannabis Retailers with Cannabis Businesses," n.d., <https://www.cdtfa.ca.gov/industry/cannabis/retailers.htm>.

Table 1: Taxing Taxes

Cannabis Price Component	Price
Selling price of cannabis product	\$35.00
Local cannabis business tax ($\$35.00 \times 10\%$)	\$3.50
Delivery	\$5.00
Subtotal subject to excise tax	\$43.50
Excise tax ($\$43.50 \times 15\%$)	\$6.53
Subtotal ($\$43.50 + \6.53)	\$50.03
Sales tax ($\$50.03 \times 8.5\%$)	\$4.25
Total	\$54.28

Distorted Supply Chain

The majority of California's cannabis production is concentrated in Northern California, with 70% of the state's 13 million pounds of cannabis grown in areas north of San Francisco.¹⁷ Despite this northern concentration of cultivation, the primary market exists in Southern California, which is home to two-thirds of the state's population.

The scale of unregulated operations is substantial with approximately 10 unlicensed cannabis retailers for every licensed establishment.¹⁸ This disparity was further highlighted by a Los Angeles Times investigation, which revealed that 60% of the 365 dispensaries listed on Weedmaps were operating without proper city registration.¹⁹ The article goes on to state:

¹⁷ Cannabis Real Estate Consultants (CREC), "Cannabis Supply Chain and Production Management Issues" (Diagram), April 2019, <https://cannabisrealestateconsultants.com/cannabis-supply-chain-production-management>.

¹⁸ United Cannabis Business Association, "Open Letter to Governor Gavin Newsom and Chief Lori Ajax Regarding Enforcement of Assembly Bill 97," September 11, 2019, PDF file, https://mjbizdaily.com/wp-content/uploads/2019/09/UCBA_Weedmaps-Enforcement-Letter_9.11.19_FINAL.pdf.

¹⁹ Patrick McGreevy, "Two Years In, California's Legal Marijuana Industry is Stuck. Should Voters Step In?" *Los Angeles Times*, December 4, 2019, <https://www.latimes.com/california/story/2019-12-24/two-years-california-legal-marijuana-industry-is-stuck>.

Before the passage of Proposition 64, almost 1,800 dispensaries were selling marijuana for medical purposes, which was legalized by California voters in 1996. So far, 568 retail stores have received licenses, as have 230 delivery firms. By comparison, Colorado – with some 15% of California’s population – has more than 1,000 pot shops.

Thriving Unregulated Market

California’s volatile regulatory landscape has fostered a burgeoning unregulated cannabis industry. Instead of allocating resources to assist entrepreneurs in transitioning to the legal market, the State has opted for traditional enforcement methods, imposing severe financial penalties. At one point, Weedmaps, a widely used online cannabis retail platform, became a vital source for tracking unregulated market activity. According to Marijuana Business Daily, California has only 1,181 legal cannabis operations, including licensed retail stores, delivery services, and microbusinesses (not all of which engage in retail sales). The same report indicates that Weedmaps listings fell from 5,610 on December 31, 2018, to 2,920 by January 3, 2020.²⁰ However, this decrease in online visibility does not necessarily signify a contraction of the unregulated market; these operations persist despite being removed from the platform. Additionally, the unregulated market has bypassed the paid services of Weedmaps and marketed “seshes”²¹ directly to consumers via social media; therefore, while Weedmaps listings may have fallen, cannabis seshes offer consumers to connect with and buy cannabis products directly from the unlicensed and grey market directly.

Amid this intricate and constantly shifting regulatory landscape, California’s cannabis industry presents both significant challenges and critical opportunities, especially for advancing equity, accountability, and small businesses. From burdensome taxes to inconsistent local policies and enforcement, cannabis entrepreneurs and employees alike must navigate a maze of legal, financial, and operational hurdles. These conditions disproportionately impact small businesses and equity applicants, limiting access to the very market reforms that are meant to redress historical injustices. It is within this volatile and inequitable ecosystem that the California Cannabis Count Research Project was launched.

²⁰ In 2019, Weedmaps committed itself to removing unlicensed operators. In 2025, the Los Angeles County Board of Supervisors approved a motion to “deplatform” unlicensed cannabis operators from Google, Yelp and other online platforms.
<https://file.lacounty.gov/SDSInter/bos/supdocs/195518.pdf>.

²¹ A sesh brings together consumers and sellers as a marketplace.

METHODOLOGY

The California Cannabis Count Research Project sought to systematically examine the sociodemographic composition and lived experiences of cannabis license holders and employees, with the goal of informing more inclusive and data-driven public policy, social equity programs, and workforce development initiatives across the state. Through quantitative and qualitative research, this study gathered vital information on licensed cannabis businesses and operators, providing a well-defined foundation for future public health, safety, and social equity licensing programs. The study was carried out in three phases: 1) license-holder/operator surveys, 2) license-holder/operator interviews, and 3) geospatial mapping.

The research team utilized a community-partnered approach to meet study objectives, working closely with Los Angeles Metropolitan Churches and Rowe Policy + Media (RPM):

- Los Angeles Metropolitan Churches is a 501(c)(3) organization that supports training and business development among cannabis industry entrepreneurs and amplifies public policy recommendations and industry guidelines to close system gaps.
- Rowe Policy + Media (RPM) is a Los Angeles-based research firm that develops solutions to policy issues that affect people's safety, well-being, and equity in society.

In addition, the Institutional Review Board (IRB) at the University of California, Los Angeles, provided research oversight to ensure the study complied with ethical standards and protected participants' rights and welfare.

Phase 1: Business Operator Survey Methods

To characterize the licensed cannabis business landscape in California, the C³ research team conducted a statewide survey of owners, operators, and principals of licensed cannabis businesses. The business operator survey aimed to collect detailed information on business operations, licensing, workforce demographics, equity practices, and the impact of COVID-19.

Survey Instrument Development

The research team developed the survey instrument in collaboration with cannabis industry stakeholders, local jurisdiction officials, and policy experts. The instrument included 49 items including closed- and open-ended questions, which were pilot tested with a small group of cannabis business operators to ensure clarity and

relevance. Questions were designed to capture a comprehensive profile of cannabis businesses, including:²²

- **Business Information:** Legal name, DBA, license number, location, license type(s), license status, structure, and ownership history
- **Licensing and Operations:** License acquisition timeline, challenges to operation, operating capital, Certificate of Occupancy, and integration into larger or multi-jurisdictional operations
- **Business Practices:** Product/service offerings, top-selling products, payment methods, supply chain gaps, and COVID-19 impacts
- **Financial Performance:** Self-reported gross revenue and net profit/loss for calendar year 2021
- **Workforce Characteristics:** Total employees by job type, job benefits, use of contractors or temps, background checks, drug testing, and hiring of formerly incarcerated individuals
- **Equity and Community Practices:** Use of equity hiring, sourcing, and promotion practices; environmentally sustainable business practices; participation in social equity programs or academic research
- **Social Equity License Status:** Whether the business held a social equity license and which eligibility criteria applied
- **Owner/Principal Demographics:** Gender identity, race/ethnicity (with specific subgroup detail), age, sexual orientation, education, military service, and income
- **Justice System Involvement:** Justice system history and social equity eligibility due to prior convictions
- **Transition to Licensed Market:** Operation of or transactions with the unlicensed market, and experience seeking support to transition from unlicensed to licensed status

Survey Recruitment

The target population for the business operator survey included all individuals listed as owners, operators, or principals of cannabis businesses holding an active license from the California Department of Cannabis Control (DCC) up to May 2023. A list of

²² This report only presents the most salient and comprehensive findings from the qualitative interviews.

active license holders was requested and obtained from the DCC and used to generate a contact list for direct email invitations. Additional outreach was conducted through cannabis industry associations, local equity offices, and social media channels to enhance coverage and encourage participation across diverse business types and geographic areas. Of those that responded to the invitation, 176 license holders participated in the survey.

Survey Data Collection

The survey was administered online using Qualtrics. Respondents were instructed to complete one survey per licensed operation. If a respondent was affiliated with more than one license, they were asked to answer based on the license most representative of their primary business activities. Respondents accessed the survey via a unique survey link included in email invitations and promotional materials. Participants were compensated for survey participation.

All surveys were completed between 2022 and 2023.

Survey Data Analysis

Data analysis for the business operator survey was purely descriptive and conducted using R (version 4.0.2). Categorical variables were summarized using frequencies and percentages, while continuous variables were summarized using means, standard deviations, medians, and interquartile ranges as appropriate based on the distribution of the data. All analyses were unweighted and intended to characterize the responding sample of licensed cannabis business operators rather than produce population estimates. No inferential statistical tests were performed. Data cleaning and recoding were performed to standardize responses across skip patterns and open-ended fields.

Phase 2: Semi-Structured Interviews with Business Operators

Interview Guide Development

The research team developed a semi-structured interview guide, in collaboration with community partners, including open-ended questions to assess:

- Licensing-specific operations
- Consumer engagement
- Equity and community practices and social equity license status
- Business information and operations

- Financial performance
- General business challenges
- Regulatory and policy recommendations and impact
- Demographic characteristics of the interviewee

The research team aimed to allow for expansion on themes beyond the scripted questions, capturing a broad range of experiences and opinions.

Interview Recruitment

Inclusion criteria for participation in phase 2 were: aged 18 years or older, English-speaking, capable of accessing Zoom, and able to provide informed consent.

All survey participants were invited to participate in a 1-hour, semi-structured interview. The research team also used purposive and snowball sampling approaches to engage interview participants representing the full spectrum of license types, diverse geographic locations, and social equity program participation.

Interview Procedures

All interviews (n=80) were conducted on Zoom, in English, between 2022 and 2023. Interviews were audio-recorded and transcribed verbatim by a certified transcription service.

Dilara Üsküp and Brad Rowe, who have extensive experience conducting qualitative research and have served as investigators in other cannabis research studies, acted as lead interview facilitators. Elena Rosenberg-Carlson and Jade Stuart co-facilitated interviews. Additional study staff attended for administrative purposes.

At the end of the interviews, all participants were compensated for their time.

Interview Data Analysis

Thematic analysis is fundamentally an investigative approach to uncover significant patterns and themes illuminating the phenomenon under study.²³ At its core, this analytical method requires meticulous engagement with the data through multiple readings and interpretations enabling researchers to identify recurring patterns that establish the foundation for analytical categories.

²³ Jennifer Fereday and Eimear Muir-Cochrane, "Demonstrating Rigor Using Thematic Analysis: A Hybrid Approach of Inductive and Deductive Coding and Theme Development," *International Journal of Qualitative Methods* 5, no. 1 (2006): 80-92.

For this project, the research team implemented a hybrid thematic analysis that merged two complementary approaches: Boyatzis's²⁴ data-driven inductive methodology and Crabtree and Miller's²⁵ deductive coding framework. The coding process required careful attention to meaningful moments in the data, followed by interpretative analysis, with successful codes capturing the essential qualitative depth of the phenomenon.²⁶ According to Boyatzis, a theme represents "a pattern in the information that at minimum describes and organizes the possible observations and at maximum interprets aspects of the phenomenon."²⁷ While this analysis incorporated this inductive element, it began with a structured deductive approach described by Crabtree and Miller.²⁸ This deductive framework was developed a priori based on the research questions and theoretical framework rather than through preliminary data scanning, providing an initial organizational structure for our textual analysis and subsequent interpretation.

The analytical process began with a comprehensive dataset of 80 interviews conducted with license holders across various segments of California's cannabis industry. The research team employed a primarily deductive approach, using 122 pre-defined codes selected to align with the study's objectives. As the analysis progressed, the team identified an additional 37 codes through inductive reasoning, bringing the total number of codes to 159. This combination of deductive and inductive coding approaches facilitated a systematic investigation of predetermined themes while remaining open to emerging patterns and insights from the data.

The coding process involved applying 159 codes to 2,828 excerpts from the interview transcripts, with codes applied 5,390 times. The higher number of code applications compared to excerpts reflects the complexity and multi-dimensional nature of the participants' responses, as many excerpts contained content relevant to multiple themes and were therefore assigned multiple codes. To efficiently manage this extensive coding process and maintain analytical rigor, the research team utilized

²⁴ Richard E. Boyatzis, *Transforming Qualitative Information: Thematic Analysis and Code Development* (Thousand Oaks, CA: Sage Publications, Inc., 1998).

²⁵ Benjamin F. Crabtree and William F. Miller, "A Template Approach to Text Analysis: Developing and Using Codebooks," in *Doing Qualitative Research*, vol. 3 of *Research Methods for Primary Care*, 93-109 (Thousand Oaks, CA: Sage Publications, Inc., 1992).

²⁶ Richard E. Boyatzis, *Transforming Qualitative Information: Thematic Analysis and Code Development* (Thousand Oaks, CA: Sage Publications, Inc., 1998).

²⁷ p. 161

²⁸ Benjamin F. Crabtree and William F. Miller, "A Template Approach to Text Analysis: Developing and Using Codebooks," in *Doing Qualitative Research*, vol. 3 of *Research Methods for Primary Care*, 93-109 (Thousand Oaks, CA: Sage Publications, Inc., 1992).

Dedoose (version 9.2.14).²⁹ This specialized qualitative data analysis software platform facilitated the organization, coding, and analysis of the interview data.

Phase 3: Geospatial Mapping

Data Collection

Licensed Cannabis Businesses and Social Equity Programs

To plot the geocoordinates of cannabis business addresses provided by the Department of Cannabis Control (DCC), the latitude, longitude, and zip code of licensed locations were converted through Geocodio, which also matched coordinates to congressional districts.

Geocodio could not locate or incorrectly geocoded approximately 3,000 of the approximate 12,600 addresses provided by the DCC. (Examples of incorrectly geocoded addresses include coordinates plotted in other states and countries.) Since these missing or incorrect addresses lack the correct zip code and congressional district, they were filtered out from zip code counts. However, most are captured in county and city-level data, and have been geocoded by approximate city location; Though 66 addresses list “Data Not Available” for city and county, and have therefore not been geocoded or captured in county or city-level maps. Missing or incorrectly geocoded addresses are also represented in the congressional district “Unknown.” Many of them are listed as “Unincorporated.”

Data regarding where cannabis businesses are allowed or prohibited was obtained from the DCC. Social equity program data was obtained from the California Governor’s Office of Business and Economic Development (GO-Biz). Additional datasets include a Topologically Integrated Geographic Encoding and Referencing (TIGER)/Line shapefile downloaded from the U.S. Census Bureau to designate City boundaries.

Social Vulnerability Index (SVI)

County Social Vulnerability Index (SVI) data was obtained from the Centers for Disease Control and Prevention (CDC) Agency for Toxic Substances and Disease Registry (ATSDR). Social vulnerability refers to the potential negative effects on communities caused by stressors on human health, which may include natural or human-caused disasters, or disease outbreaks. The Social Vulnerability Index (SVI) uses 16 U.S. Census variables to assist local officials in identifying communities that may need increased support before, during, or after disasters.

²⁹ SocioCultural Research Consultants. Version 9.2.14, 2024

SVI ranks census tracts and counties on these 16 social factors, including unemployment, racial and ethnic minority status, and disability, and groups them into 4 related themes (Socioeconomic Status, Household Characteristics, Racial & Ethnic Minority Status, and Housing Type & Transportation). Each tract and county receives a ranking for each Census variable, the 4 themes, and an overall ranking. Rankings closer to 1.0 indicate higher social vulnerability. Note: This dashboard uses county SVI measures of poverty based on 150% of the Federal Poverty Level.³⁰

Race and Income

The ATSDR dataset additionally provided American Community Survey (ACS) Census data, including race (2016-2020 ACS Table DP05) and poverty status (2016-2020 ACS Table S1701). Median household income data were queried from the Census Reporter (2017-2021 ACS Table B19013). Race includes the following Census categories:³¹

- Hispanic or Latino (of any race)
- American Indian and Alaska Native, Not Hispanic or Latino
- Asian, Not Hispanic or Latino
- Black and African American, Not Hispanic or Latino
- Native Hawaiian and Other Pacific Islander, Not Hispanic or Latino
- White, Not Hispanic or Latino
- Two or More Races, Not Hispanic or Latino
- Other Races, Not Hispanic or Latino

The maps follow the style guide endorsed by the MacArthur Foundation, among others, which capitalizes “White” in addition to “Black.” As the MacArthur Foundation declares, “Choosing to not capitalize White while capitalizing other racial and ethnic identifiers would implicitly affirm Whiteness as the standard and norm. Keeping White lowercase ignores the way Whiteness functions in institutions and communities.”³²

³⁰ U.S. Department of Health and Human Services, HealthCare.gov, “Federal Poverty Level (FPL),” <https://www.healthcare.gov/glossary/federal-poverty-level-fpl>.

³¹ See Appendix C for more on how the characteristic of race is collected by the US Census Bureau.

³² Kristen Mack and John Palfrey, “Capitalizing Black and White: Grammatical Justice and Equity,” *MacArthur Foundation Perspectives*, August 26, 2020, <https://www.macfound.org/press/perspectives/capitalizing-black-and-white-grammatical-justice-and-equity>.

BUSINESS OPERATOR SURVEY FINDINGS

This survey gathered comprehensive data from 176 licensed cannabis business operators across the state, though 1 respondent did not complete the survey and is not included in the figures provided in this section. All respondents were executive leaders with operational knowledge, aged 21 or older, and held active licenses, with 54% having annual licenses and 44% provisional licenses.

Business Structure

In terms of business structure, the majority of businesses were organized as Limited Liability Companies (LLCs) at 43%, followed by C Corporations at 33%. Other structures included S Corporations (14%), sole proprietorships (4.6%), and a small percentage of general partnerships, limited liability partnerships, and for-benefit corporations.

Table 2: Distribution of Business Structures Among Respondents

Business Structure	Count (%)
C Corporation	57 (33%)
For Benefit Corporation	4 (2.3%)
General Partnership	1 (0.6%)
Limited Liability Company (LLC)	75 (43%)
Limited Liability Partnership	1 (0.6%)
Other	1 (0.6%)
S Corporation	24 (14%)
Sole Proprietorship	8 (4.6%)

Financing and Financial Performance

Financing for these businesses primarily came from personal funding (53%), with multiple methods of financing being used by 34% of respondents. Family and friends contributed to 6.9% of the funding, while community investors and publicly traded options were less common.

Table 3: Distribution of Financing Among Respondents

Financing	Count (%)
Community investor(s)	4 (2.3%)
Family/friends	12 (6.9%)
Multiple Methods	59 (34%)
Other	5 (2.9%)
Personal funding	92 (53%)
Publicly traded	3 (1.7%)

Annual revenue varied widely among businesses, with 18% earning between \$1 and \$50,000, and 17% reporting no revenue. A notable 10% earned between \$1 million and \$2.5 million, while 9.3% earned \$10 million and above. However, financial performance showed that 46% of businesses experienced losses of \$100,000 or more, while only 13% reported profits of \$100,000 or more.

Tax obligations were also diverse, with 49% paying property, income, and other taxes as California residents.

License Types and Classes

The survey also detailed the types of licenses held by these businesses. A significant portion held adult-use licenses (75%), while 57% had medical licenses. The businesses were involved in various activities, with 33% engaged in cultivation, 14% operating storefronts without on-site consumption, and 11% running microbusinesses. Other activities included manufacturing, distribution, and testing laboratories.

Table 4: Distribution of License Types Among Respondents

License Type	Count (%)
Medical (M-Type license)	99 (57%)
Adult-use (A-Type license)	131 (75%)
Other	20 (11%)

Table 4: Distribution of License Classes Among Respondents

Main License Class ³³	Count (%)
Cultivation	57 (33%)
Event (event organizer)	3 (1.7%)
Manufacturing	15 (8.6%)
Type 10: Storefront retailer (with on-site consumption)	5 (2.9%)
Type 10: Storefront retailer (without on-site consumption)	25 (14%)
Type 11: Distribution (distributor)	17 (9.7%)
Type 12: Microbusiness	20 (11%)
Type 13: Distribution (transport-only distributor)	2 (1.1%)
Type 8: Testing laboratory	9 (5.1%)
Type 9: Non-storefront retailer (delivery only)	18 (10%)

Additional data from the latest analysis provided further insight into the business landscape. Most businesses (96%) obtained their licenses through application, while a small percentage (4.1%) purchased existing licensed businesses. About 52% required a Certificate of Occupancy, and 36% were awaiting permits.

Business Type

Most businesses (65%) operated as standalone entities, while 20% were part of multi-license operations within the same jurisdiction. A smaller percentage were part of multi-license operations across multiple jurisdictions or states. Regarding vertical integration, 26% of businesses were vertically integrated, while 66% were not.

³³ This is the main license for each respondent and does not include any additional licenses they may hold for cannabis business operations.

Table 6: Distribution of Business Types Among Respondents

Business Type	Count (%)
A standalone operation	114 (65%)
Other	2 (1.1%)
Part of a multi-license operation in multiple jurisdictions in California	18 (10%)
Part of a multi-license operation in multiple states (i.e., multi-state operator or MSO)	2 (1.1%)
Part of a multi-license operation in this jurisdiction	35 (20%)

Table 7: Distribution of Vertical Integration Among Respondents

Vertically Integrated	Count (%)
I don't know	10 (5.7%)
No	115 (66%)
Yes	46 (26%)

Equity and Community Practices

Community and equity practices were also highlighted. Many businesses practiced gender (58%) and racial equity (57%) in hiring and pay, and 70% hired people from the surrounding community. Additionally, 45% purchased from social equity or minority-owned suppliers, and 25% participated in social equity networks. Volunteering and hosting community events were common, with 46% and 26% of businesses engaging in these activities, respectively.

Social Equity License Status

Twenty-seven percent (27%) of businesses held social equity licenses. The criteria for these licenses included low income (22%), residing in opportunity zones (15%), and being from impacted areas (20%). Some respondents had cannabis-related arrests (12%) or family members with such arrests (5.2%).

Respondent Demographic Tables

Table 8: Respondent Distribution by Region

Region	Count (%)
Los Angeles County	29 (16%)
North Coast	56 (32%)
San Diego/Imperial	3 (2%)
Central Coast	23 (13%)
Inland Empire	3 (2%)
Orange County	2 (1%)
San Francisco Bay Area	33 (19%)
Superior California	15 (9%)
San Joaquin Valley	3 (2%)
Unknown	6 (3%)
Not Answered	3 (2%)

Table 9: Respondent Gender Identity

Gender	Count (%)
Man (cisgender)	116 (65%)
Woman (cisgender)	45 (25%)
Other (please specify):	3 (1%)
Transman	1 (0%)
Prefer not to respond	5 (2%)
Nonbinary/nonconforming	1 (0%)
Transwoman	1 (0%)
Not Answered	4 (2%)

Table 10: Respondent Sexual Orientation

Sexual Orientation	Count (%)
Straight/Heterosexual	149 (84%)
Bisexual	6 (3%)
Queer	8 (4%)
Other (please specify):	2 (1%)
Prefer not to respond	4 (2%)
Gay	3 (1%)
Not Answered	4 (2%)

Table 11: Respondent Ethnicity

Hispanic, Latino, or Spanish origin	Count (%)
No, not of Hispanic, Latino, or Spanish origin	152 (86%)
Yes, Mexican, Mexican-American, Chicano	14 (7%)
Yes, of another Hispanic, Latino, or Spanish origin	5 (2%)
Yes, Cuban	1 (0%)
Not Answered	4 (2%)

Table 12: Respondent Race

Race	Count (%)
American Indian or Alaska Native	8 (4%)
Asian	13 (7%)
Native Hawaiian or other Pacific Islander	1 (0%)
Black or African American	15 (8%)
White	125 (71%)
Some Other Race	23 (13%)
Not Answered	4 (2%)

Table 13: Respondent Educational Attainment

Highest Level of Education	Count (%)
Graduate or professional degree (MA, MS, MBA, PhD, JD, MD, DDS, etc.)	41 (23%)
Bachelor's degree	54 (30%)
Some college, but no degree	50 (28%)
High school diploma or GED	11 (6%)
Associates or technical degree	15 (8%)
Some high school or less	1 (0%)
Not Answered	4 (2%)

Table 14: Respondent Military Status

Ever served (currently or in the past) on active duty in the U.S. Armed Forces, Reserves, or National Guard	Count (%)
No	146 (82%)
Yes	5 (2%)
Not Answered	25 (14%)

Table 15: Respondent Gross Income for Calendar Year 2022

Income before taxes in calendar year 2022	Count (%)
\$0 to \$10,000	17 (9%)
\$10,001 to \$20,000	12 (6%)
\$20,001 to \$30,000	16 (9%)
\$30,001 to \$40,000	20 (11%)
\$40,001 to \$50,000	10 (5%)
\$50,001 to \$60,000	14 (7%)
\$60,001 to \$70,000	6 (3%)
\$70,001 to \$80,000	7 (3%)
\$80,001 to \$90,000	8 (4%)
\$90,001 to \$100,000	10 (5%)
\$100,001 to \$250,000	35 (19%)
\$250,001 to \$500,000	10 (5%)
\$500,001 or more	7 (3%)
Not Answered	4 (2%)

Table 16: Prop 215 Operations Among Respondents

Ever hold a medical marijuana collective license under Prop 215	Count (%)
No	86 (48%)
Yes	86 (48%)
Not Answered	4 (2%)

Table 17: Justice System Involvement Among Respondents

Felony conviction or misdemeanor conviction	Count (%)
Felony	16 (9%)
Misdemeanor	53 (30%)
No felony or misdemeanor convictions	102 (57%)
Prefer not to respond	9 (5%)
Not Answered	4 (2%)

Table 18: Social Equity Program Eligibility Among Respondents

Eligible for social equity programs	Count (%)
No	35 (19%)
Yes	18 (10%)
I don't know	8 (4%)
Not Answered	115 (65%)

Table 19: Unlicensed Cannabis Operations Among Respondents

Operated an unlicensed cannabis business in the State of California	Count (%)
Yes, before 2016	65 (36%)
Yes, during or after 2016	9 (5%)
No	82 (46%)
Prefer not to respond	22 (12%)
Not Answered	4 (2%)

SEMI-STRUCTURED INTERVIEW FINDINGS

As mentioned previously, this study draws from 80 semi-structured interviews conducted via Zoom between 2022 and 2023 with licensed cannabis business operators across California. Participants were initially recruited through survey invitations and further identified through purposive and snowball sampling to ensure representation across license types, geographic regions, and social equity program participation. The research team applied a hybrid thematic analysis using 159 codes across 2,828 excerpts to identify patterns and themes discussed in the following sections.

Challenges with Local Regulatory Processes

The interview data reveal significant challenges with local cannabis regulation in California. At the heart of these issues is a complex system where local authorities wield considerable power over licensing and operation. This fragmented approach, lacking standardized statewide policies, has created a maze of bureaucratic inefficiencies and inconsistencies. Operators frequently report excessive waiting periods for local approvals. Meanwhile, basic functions like license renewals and inspections face persistent delays. As one North Coast³⁴ operator noted, “preexisting licenses in this county took three to six years”³⁵ while new cultivation permits were mysteriously “fast-tracked within six to 12 months.”³⁶ This experience is echoed across jurisdictions, as one Central Coast operator explained, “The county was a little bit more challenging because they kept moving the goal post.”³⁷

A particularly troubling theme identified from the interviews is the perception of favoritism and improper practices at the local level. Multiple operators described witnessing preferential treatment in licensing processes, with some noting that new applications were fast-tracked. In contrast, legacy operators who operated before Proposition 64 faced extended delays. As one operator explained, “you took a billion-dollar black market³⁸ industry and...you gave the power not to high up government officials, but you put it in the charge of building and planning directors...board of

³⁴ Throughout this report, references to specific cities and counties have been aggregated to regions, as specified by the US Census. We aggregated this data to ensure participant confidentiality.

³⁵ Participant ID 33

³⁶ Participant ID 33

³⁷ Participant ID 43

³⁸ Research team note: The term “black market” is no longer a term used in research as it suggests racial bias or discrimination. The terms “unlicensed market” or “illicit market” are used in the authors’ descriptions. We have, however, left the term “black market” in this document when it has been used as a direct quote (approximately a dozen times in the report). Each time this phrase is used by a respondent it is footnoted with a reference back to this statement.

supervisors,"³⁹ leading to what they described as a system where "it's easy for a board of supervisors to make sure his son's farm gets approved faster than other people's."⁴⁰

One Los Angeles County⁴¹ business owner captured the sentiment shared by many, "It's been an absolute nightmare doing anything with them. They pretty obviously don't want to have cannabis in their city. They've made that pretty clear with us."⁴²

The financial burden of local regulation presents another significant challenge. High licensing fees and taxes at the local level, combined with state requirements, create substantial costs for operators. One cultivator noted that building a "little...14 by 25 shed with a loft" cost \$100,000 more than I expected,⁴³ due to commercial building requirements. The interviews revealed numerous examples of predatory practices, particularly from landlords who exploit their position in the licensing process. One Los Angeles County operator said, "I got raided in September 2017... We didn't get that license until 2021. So, we rented a building... This is the biggest problem I can see in licensing: you're asking me to get site control, and I'm paying rent to get site control because there ain't nobody on the planet that's going to give me site control unless I secure a lease of some sort or I pay rent. And it could be years before I get that license."⁴⁴

The burden extends beyond direct costs. Local jurisdictions often impose sudden, costly requirements with unrealistic timelines. One delivery service operator was given just 30 days to build "an enclosed structure for my drivers,"⁴⁵ including "a hallway to the car...certificate of occupancy and sprinkler heads and electrical, and a fire door rated."⁴⁶ This led to a 163-day closure during which they "lost probably a quarter million dollars in expired product,"⁴⁷ and "probably spent half a million dollars on the structure."⁴⁸ These challenges are compounded by excessive licensing

³⁹ Participant ID 33

⁴⁰ Participant ID 33

⁴¹ Specifically, cities within Los Angeles County (and not including unincorporated regions) that allow cannabis business operations.

⁴² Participant ID 21

⁴³ Participant ID 36

⁴⁴ Participant ID 74

⁴⁵ Participant ID 51

⁴⁶ Participant ID 51

⁴⁷ Participant ID 51

⁴⁸ Participant ID 51

fees, as one operator noted regarding Los Angeles County, “It’s expensive. It’s about \$300,000 a year.”⁴⁹

The interviews also highlighted the challenge of navigating complex regulatory requirements without adequate professional support. As one operator explained, “We didn’t find anybody a professional that...could guide us with how to set up our taxes, do our bookkeeping, and what was deductible or not.”⁵⁰ They noted that even “city inspectors...don’t know what they’re supposed to look for because the industry itself is so new,”⁵¹ leading to impractical requirements like mandatory “hand sink[s] in the cultivation room”⁵² that add unnecessary costs and complexity. As the operator observed, “Yeah, it’s in the health code, but is that practical? Whoever puts that, the hand sink has to be in the cultivation room, is just—why? Because now that adds so much more labor and engineering.”⁵³

Many operators suggested that stronger state oversight or standardized statewide policies could address these local regulatory challenges. Some jurisdictions have attempted to streamline processes; for instance, a county in the North Coast implemented a countywide California Environmental Quality Act (CEQA) permit because, as one operator explained, “it’s impossible...or...doesn’t make any economic sense whatsoever for a 10,000-square-foot cultivation to spend all of that money on a CEQA permit.”⁵⁴ However, such solutions remain rare. The interviews suggest that while state-level interactions are generally straightforward and efficient, with one operator noting “the state’s easy...the joke is the state’s a rubber stamp”⁵⁵ The current system’s reliance on local control continues to impede the development of a stable and equitable legal cannabis market in California. As one operator summarized the state of the industry, “They want your taxes, but they don’t want to regulate.”

Property Requirements in the Pre-License Application Phase

One of the fundamental challenges is the requirement to secure and maintain property before receiving operating approval. As one distributor noted, “I had to pay rent for a building at \$2 a square foot for almost two years before we could operate,”⁵⁶ due to permitting delays. Property location and zoning requirements are

⁴⁹ Participant ID 153

⁵⁰ Participant ID 32

⁵¹ Participant ID 32

⁵² Participant ID 32

⁵³ Participant ID 32

⁵⁴ Participant ID 24

⁵⁵ Participant ID 58

⁵⁶ Participant ID 78

particularly stringent, with businesses facing specific parking and facility configuration challenges. For example, one delivery business owner described parking requirements, “We initially had challenges because the designated space required additional parking. It was initially supposed to be built as a retail space, meaning you had to have additional parking spaces.”⁵⁷

Environmental requirements represent some of the most significant hurdles, particularly compliance with the California Environmental Quality Act (CEQA). For small and independent operations, these requirements can be especially burdensome. As one interviewee explained, “For a lot of people that are independent family farms growing up in hills on these 40 acres or less, that is hard stuff to prove because you have to hire an archeologist, you have to hire a botanist, you have to hire somebody to do mapping...”⁵⁸ One operator reported spending “hundreds of thousands of dollars in biological studies to prove to them that there was nothing in my area within a mile of my grow.”⁵⁹

Some counties have attempted to address this by implementing blanket CEQA coverage. One cultivator described how a North Coast County “did a countywide CEQA permit that covered all of the licensing in [that county]. So, as an applicant in [that county], I just point to [that county’s] CEQA, which covers me as far as the state is concerned.”⁶⁰

Water-related requirements add another layer of complexity and cost, including water rights documentation, California Department of Fish and Wildlife (CDFW) Lake and Streambed Alteration (LSA) agreements, and water storage capabilities. One cultivator explained, the storage requirements are particularly demanding, “If it’s 50 million gallons that you use that year, you have to store the entire amount.”⁶¹ Security requirements can be especially burdensome for rural properties, with one cultivator saying, “They require me to have 24/7 monitoring lights. We’re off-grid with cameras...I have to install a solar power system just to power the cameras. I have to provide Wi-Fi now for the cameras.”⁶²

The financial impact of these requirements is substantial, with businesses incurring costs for extended periods of rent, costly studies and assessments, infrastructure

⁵⁷ Participant ID 57

⁵⁸ Participant ID 63

⁵⁹ Participant ID 63

⁶⁰ Participant ID 24

⁶¹ Participant ID 23

⁶² Participant ID 17

modifications, and professional services from architects, engineers, and consultants. One licensee stated that beyond the significant time investment, there was a “minimum of \$50,000, just for the permitting process.”⁶³ The timeline for fulfilling these requirements often extends well beyond initial expectations, with interviewees reporting two or more years for permitting, multiple rounds of modifications, and delays due to changing requirements.

The involvement of multiple agencies with sometimes conflicting demands complicates the process even further. Interviewees consistently recommended consolidating oversight under a single agency to reduce conflicts and streamline the process, with one suggesting, “All those agencies need to work with the DCC, and we interface only with the DCC, nobody else.”⁶⁴ Others advocated for cost controls, suggesting that “There needs to be a limit on how much money a person can spend... You can look at a person and how much money they make. You can take 10%, 20%, 30%, or whatever it is to pay for whatever that agency wants.”⁶⁵ Many interviewees also suggested making requirements proportional to operational size.

These property requirements have created significant barriers to entry in the legal cannabis market, particularly affecting smaller operators and those with limited capital resources. The complex web of regulations, coupled with the necessity for substantial upfront investment before obtaining operating approval, has led to ongoing challenges in California’s cannabis industry transitions from an unregulated to a regulated market.

Long Wait Times for Feedback on Applications Submitted

The interviews reveal a persistent pattern of extended wait times and delayed feedback in California’s cannabis licensing process, which creates significant challenges for businesses trying to enter the legal market. Early in the program, communication from regulatory agencies was particularly problematic. One licensee noted, “It took them 3 months to respond to any questions at the beginning. They’ve gotten much better since then. But at the beginning, every little thing they asked for took them 3 months to respond.”⁶⁶ Even with improvements, current response times can still extend to “usually at the long end two weeks.”⁶⁷

⁶³ Participant ID 78

⁶⁴ Participant ID 23

⁶⁵ Participant ID 23

⁶⁶ Participant ID 18

⁶⁷ Participant ID 28

Testing laboratories experience particularly long wait times for application reviews and feedback. One lab operator said the process was frustrating, “Took 2 years to get the license after that. And it wasn’t 2 years of me sitting there, it was 2 years of me harassing them to answer my questions or to tell me where we are.”⁶⁸ The same operator noted how responses came sporadically with redundant requests, “Two months later, they asked me for the same documentation, give them the same documentation. Six months later, a year later, they asked me for the same documentation that I provided multiple times.”⁶⁹

Communication challenges extend beyond just slow response times. Multiple interviewees described a “black hole” effect when submitting applications.⁷⁰ As one operator explained, “the real problem with the DCC is you upload into ‘Ghost Town.’ You send the application in and hope you’ll hear from somebody. It’s completely, virtually different. You can’t track your application at all.”⁷¹ The same licensee shared, “I had issues with one of the employees when I went the second time, when I went to go get the micro license where the lady that was handling my accounts didn’t answer me for, she gave me an extraordinarily long time to get back to her, like 6 months. I returned to her 2 weeks later with the stuff they asked me for. And I’m waiting, waiting, waiting. It’s like 2 and a half months.”⁷²

The process becomes particularly challenging when applicants face deadlines but do not receive timely regulatory responses. One interviewee highlighted this disconnect: “That has created concerns because it can prohibit the licensing process, especially when we, as licensees, are bound to deadlines with our temporary licensing deadlines and the department isn’t tied to them in the same way.”⁷³

Many operators attributed these delays to staffing and resource constraints at regulatory agencies. However, several expressed frustration that these internal challenges significantly impact businesses while agencies face no consequences. As one operator noted, “If I told them I couldn’t pay my license fee because I didn’t have

⁶⁸ Participant ID 61

⁶⁹ Participant ID 61

⁷⁰ The slow pass of work may be attributed to their lack of funding and current deficit of more than \$25M. Because they are funded by licensing and other fees, as the number of regulated companies in California decreases the DCC has not been able to maintain their funding levels. This is also a problem because tax revenues from cannabis do not go back into the system to support social equity operators or even current non-equity operators.
<https://cannabis.ca.gov/2025/03/report-on-the-condition-and-health-of-the-cannabis-industry>.

⁷¹ Participant ID 74

⁷² Participant ID 74

⁷³ Participant ID 80

enough people to do payroll or to pay license fees, they wouldn't be like, 'Okay, that's okay with me. Don't worry about it. You don't have to pay me this year'." ⁷⁴

The impact of these delays is particularly severe because businesses often must maintain properties and other overhead costs while waiting for responses. One delivery business owner reported applying and waiting two years before receiving temporary approval. Another operator described how "It takes months. They're just burning your money," ⁷⁵ awaiting application processing and feedback.

Multiple interviewees also noted that staff turnover or reassignment could reset or delay the process. Each new reviewer might request different or additional information, even if it had been previously provided. As one operator described, this creates a situation where "the goalpost kept getting moved farther and farther." ⁷⁶ The delays and uncertainty have led some operators to seek intervention through other channels, with one noting they "had to call somebody, like the auditing department, to get a hold of the person that was supposed to take care of it." ⁷⁷

The experiences shared in these interviews suggest that while response times have improved somewhat since the early days of legalization, substantial delays continue to pose a significant challenge in California's cannabis licensing process. These delays incur additional costs for businesses, prolong the timeline for entering the legal market, and contribute to ongoing frustration with the regulatory system.

Changing Regulations and Insufficient Time to Respond

Cannabis operators in California consistently face challenges due to rapidly changing regulations and insufficient time to implement necessary changes. The evolving regulatory landscape places significant operational and financial burdens, particularly when operators have made substantial investments in compliance with previous requirements.

One cultivator described the frustrating cycle of changing regulations: "All the things that they've canceled out now, 5 years later. Finally, they removed the cultivation tax. Finally, they said excise tax, not for distributors, but for the retailer. These are common sense that should have happened from inception, but didn't." ⁷⁸ The operator explained how these changes created financial losses: "Oh, 6 months later,

⁷⁴ Participant ID 61

⁷⁵ Participant ID 61

⁷⁶ Participant ID 7

⁷⁷ Participant ID 74

⁷⁸ Participant ID 25

we realize that that doesn't work after all these cannabis companies lobbying, saying that it doesn't work, but we've already lost the money. You made us do it 6 months ago, so we did it."⁷⁹

Infrastructure investments become particularly problematic when requirements change. As one operator explained, "when you said that we needed 25,000 gallons of water for storage because Cal Fire needed that, I bought 5,000-gallon tanks. I have five 5,000-gallon-tanks on my farm that just, 'Oh, that's stupid' later. But I already invested because I needed to do that because you said I needed to do that to get my license."

The situation is compounded by what operators describe as insufficient communication about changes. As one licensee explained, "I feel like there are a lot of things we've gotten guidance with, but I recall, when we first started working on these temporary licenses, the bureau had a FAQ, right? They were accessible, and that was always running and always open. I felt, at that very beginning, there was a greater exchange of information than we see now as we've seen gone through agency consolidation."⁸⁰

Some operators report that agencies implement changes without sufficient industry input. One noted "the DCC is notoriously uninterested in industry input. They say they are, but it doesn't seem like they are."⁸¹ Another operator suggested that regulations often fail to consider operational realities: "There's a lot of discrepancy between when a regulation comes into place, trying to solve a problem. A lot of times it doesn't solve that problem and it creates a bunch of others."⁸²

Adapting to these changes is particularly burdensome for businesses struggling with tight margins. One operator summarized the cumulative impact: "It's like they vomit first and say, 'Here's your dinner, here's your dinner,' then you're like, 'But it's vomit, though. How am I supposed to eat this?' They're like, 'No, no. That's what we got. That's your dinner,' and then you got sick because you were hungry."⁸³

This pattern of rapid regulatory changes, lacking adequate implementation periods, has contributed to business failures and market exits. Operators consistently recommend extended implementation periods for new requirements, improved

⁷⁹ Participant ID 25

⁸⁰ Participant ID 80

⁸¹ Participant ID 42

⁸² Participant ID 34

⁸³ Participant ID 25

communication about upcoming changes, and more consideration of operational impacts when making regulatory changes.

Licensees requested that regulators “leave the industry as it is for a while.” The interviews reveal a consistent pattern of operators struggling with the compliance burden created by frequently changing requirements. Many operators express frustration not only with the requirements themselves but also with the constant flux that prevents businesses from establishing stable operations.

Several operators specifically called for a period of regulatory stability. One licensee emphasized “that enforcement’s going to be important, and good operators should look at that too. And we need to continue to push for financial reforms, too.”⁸⁴ Another noted that “it was apparent that anybody who watched Washington [State] go down knew that the states never want to take responsibility for the medical model. They consistently allow it to be done by initiative, because it’s the third rail for politicians.”⁸⁵

The impact on packaging requirements exemplifies the compliance burden resulting from frequent changes. A manufacturer explained that “sometimes it takes us over a year to get through all that packaging, and by the time Prop 65 changes again, we have to throw away a bunch of packaging that’s no longer compliant... If we’re not going to throw packaging away, which we try to avoid, then we have to spend a lot of time having our staff relabel... Putting a sticker over that, and then... So that’s the biggest challenge on the packaging and labeling side: when they change something, it costs us so much time and money, and new packaging changes from one requirement to another.”⁸⁶

This regulatory instability contributes to market exits and consolidation. One operator observed that “there are controversies there in the local area. And then at the state level, anyone cultivating 10,000 square feet or under, you have no chance in this game if you have to keep paying these fees.”⁸⁷ Another summarized the cumulative impact: “We’ve been doing that for 5 freaking years, and it’s put everybody out of business.”⁸⁸

⁸⁴ Participant ID 80

⁸⁵ Participant ID 20

⁸⁶ Participant ID 34

⁸⁷ Participant ID 33

⁸⁸ Participant ID 25

Multiple operators emphasized that the industry requires stability to enable businesses to establish sustainable operations. The interviews indicate that constantly changing requirements pose not only a financial burden but also foster an environment of uncertainty, complicating effective planning, investment, and operations for businesses.

Documentation Burdens

Cannabis operators throughout California consistently face significant challenges related to documentation requirements in the licensing and compliance process. These challenges include excessive paperwork demands, redundant documentation requests, and vague expectations.

The volume of required documentation is often cited as overwhelming.⁸⁹ One microbusiness operator explained that “regardless of the size, you have to submit various plans like a manufacturing plan, a hazardous waste plan, a security plan, and water plans. It’s a lot of plans. Regardless of whether you say we plan to be a zero-waste facility, which is what I plan to do, you still have to submit documents. And if you don’t submit documents, they won’t approve your license types.”⁹⁰

Documentation requirements can be particularly challenging for small operators who lack extensive administrative resources. One operator explained that “we have to do everything ourselves physically. And when you see what they’re requiring, no matter if you have huge equipment or not, it cancels out a lot of people from pursuing it and moving forward.”⁹¹

Early in the program, documentation requirements were less stringent. One operator recalled, “Our partner initially told me it was extremely easy. As an equity applicant, the process was... I mean, they were submitting hand-drawn schematics of the facility, which they won’t accept that type of thing anymore.”⁹²

The documentation burden is particularly challenging given tight timelines.⁹³ One operator described receiving only 15 days to provide updated documentation or risk

⁸⁹ The DCC has acknowledged a number of the problems and errors with California’s cannabis Track-and-Trace system, to the point that they note that the errors and problems with METRC are contributing an unknown amount to diversion into the unregulated market.

⁹⁰ Participant ID 45

⁹¹ Participant ID 45

⁹² Participant ID 52

⁹³ This is why many have argued for a more unified system that takes some of the regulatory power and requirements away from local jurisdictions and move them to the state level. For example, social equity certifications and licensing approvals for operators.

having their permit canceled. Another noted that documentation requests would arrive with unrealistic deadlines while the agencies took months to respond.

The interviews indicate a need for streamlined documentation requirements that better reflect operational realities, especially for smaller operators. Many operators advocate reducing redundant requirements and establishing more reasonable timelines for documentation submission.

Track-and-Trace Challenges

Participating in California's METRC track-and-trace system results in significant challenges while offering limited benefits to cannabis operators. One of the most prominent concerns is the environmental impact of METRC's tagging requirements. Per one cultivator, "tagging every single plant is practically not viable. We grew about 20 acres and planted around 5,000 plants per acre. So, we have 100,000 plants. That means we required 100,000 Radio Frequency Identification (RFID), those little METRC tags, which are not environmentally friendly."⁹⁴ The tags create substantial plastic waste, with another operator noting having "250,000 tags under a plastic tarp outside because I no longer have a room for them."⁹⁵ Multiple respondents emphasized that these non-biodegradable tags must be stored for years.

The system experiences performance and technical issues, with many operators reporting that METRC is slow, prone to crashes, and suffers from poor customer service. As one respondent noted, "METRC will slow down every afternoon, and then it takes us 3 times as long to get our products out."⁹⁶ Another mentioned that "getting questions answered when you have a problem with METRC is a 2 to 3 day job."⁹⁷ The system incurs significant operational costs through required software, labor hours, and compliance work, with one retailer noting: "It requires us to have a certain type of software that's anywhere between \$150 to \$300 a month."⁹⁸ Some operations even need dedicated staff for METRC compliance, with one noting: "We have 5 people who work in our metric department."⁹⁹

Technical limitations and integration challenges further complicate operations. The system is "notorious for not interfacing with other software well,"¹⁰⁰ and operators

⁹⁴ Participant ID 43

⁹⁵ Participant ID 28

⁹⁶ Participant ID 80

⁹⁷ Participant ID 20

⁹⁸ Participant ID 34

⁹⁹ Participant ID 33

¹⁰⁰ Participant ID 20

report that “their report functions leave out critical fields.”¹⁰¹ Many interviewees question whether METRC achieves its goals of preventing diversion, with one stating plainly, “If you want to divert, it doesn’t stop you from diverting, not even close.”¹⁰² Another noted, “Track-and-Trace is only as reliable as inputting information. The information that gets put into it is not reliable.”¹⁰³

Despite these challenges, some operators noted benefits: “Analytics from METRC are good...really, how else are we going to get all that data to see how the industry’s doing?”¹⁰⁴ Others found METRC was “good for us as a way to keep track of my inventory.”¹⁰⁵ Testing labs generally reported fewer issues with the system compared to cultivators. However, the system appears to impose disproportionate burdens on smaller operators. One interviewee noted that “that social equity person, they don’t have the money to hire a Track-and-Trace person. So, the same person buying and running the store and doing human resources is now dealing with this ridiculously structured Track-and-Trace system.”¹⁰⁶

Several respondents called for reform or replacement of the system with something more efficient and environmentally sustainable while still maintaining necessary oversight of the legal cannabis market. As one operator summarized, “the intent is great, but the technology that governs it and manages it looks a little outdated.”¹⁰⁷ The overwhelming sentiment from the interviews suggests that while some form of tracking system may be necessary, the current implementation through METRC creates significant operational, financial, and environmental burdens while potentially falling short of its primary regulatory objectives.

CEQA Fish and Wildlife Compliance

Cannabis operators face significant challenges when engaging with state agencies, especially regarding California Environmental Quality Act (CEQA)¹⁰⁸ compliance and interactions with the Department of Fish and Wildlife (CDFW).

CEQA requirements present a significant hurdle for cannabis operators, especially for small farmers. One operator explained, “It’s impossible for a small scale... well, I don’t

¹⁰¹ Participant ID 20

¹⁰² Participant ID 11

¹⁰³ Participant ID 17

¹⁰⁴ Participant ID 7

¹⁰⁵ Participant ID 44

¹⁰⁶ Participant ID 10

¹⁰⁷ Participant ID 58

¹⁰⁸ Governor’s Office of Land Use and Climate Innovation, “California Environmental Quality Act (CEQA)”, <https://lci.ca.gov/ceqa>.

know if it's impossible. I guess it's not impossible because folks have done it in [a North Coast] County. Still, I don't think it makes any economic sense whatsoever for a 10,000 square foot cultivation to spend all that money on a CEQA permit."¹⁰⁹ CEQA is uniquely required for cannabis: "It's the only agriculture that has to do CEQA; no other agriculture has to do CEQA."¹¹⁰

CDFW's approach to cannabis operations seems particularly stringent. Operators report that CDFW often mandates extensive and costly modifications to properties. One cultivator described replacing culverts because "the algorithm said I needed 40. So, get to dig and get to spend it. That's what they said. Fix them." These requirements can cost hundreds of thousands of dollars.

Some operators perceive CDFW's enforcement as hostile. One operator stated, "Fish and Wildlife is a 'criminal agency.' They have no oversight. They work through the same tactics the mafia uses. They use coercion. They use blackmail."¹¹¹ Another noted that "CDFW is like a Boy Scout agency."¹¹²

A significant challenge is the lack of coordination between agencies. One operator explained: "Department of Agriculture says you need to do it this way, and the enforcement divisions are... We haven't seen them in years. Once they came and went through a full thing, we haven't seen them back, because I think we kind of embarrassed them. After all, what they said on the canopy was wrong about what they told us."¹¹³

The process can be particularly challenging for legacy operators transitioning to the legal market. One participant noted that "it was a little bit onerous at first. There are many hurdles when going from an unregulated market where you know you can do whatever you want because nobody's looking at anything... But there were a whole lot of agencies that had to become involved. CDFW, the water resource board, had a lot. And those agencies weren't exactly set up to handle the onslaught of cannabis applications."¹¹⁴

Many operators argue for streamlining the process and working with just one agency. As one stated, "All those agencies need to work with the DCC, and we interface only

¹⁰⁹ Participant ID 24

¹¹⁰ Participant ID 11

¹¹¹ Participant ID 23

¹¹² Participant ID 63

¹¹³ Participant ID 67

¹¹⁴ Participant ID 46

with the DCC, nobody else.”¹¹⁵ Others suggest that counties could help by providing blanket CEQA coverage, as some have done: “[a North Coast] County did a countywide CEQA permit that covered all of the licensing in the county. So, as an applicant, I just point to [the] County CEQA, which covers me as far as the state is concerned.”¹¹⁶

These regulatory challenges have created significant business hardships and sometimes forced operators to exit the legal market altogether. The complexity and cost of compliance, especially with CEQA and CDFW requirements, disproportionately affect smaller operators and legacy farmers trying to transition to the legal market.

Excessive Taxes

Excessive taxation poses a significant challenge for California’s cannabis industry. The tax burden exists at various levels, and many operators find it unsustainable.

Multiple operators describe a complex system of compounding taxes that creates an excessive burden. One retailer broke down the tax structure: “You’ve got your local tax, let’s say it’s a \$10 item. You’ve got your local tax, which is 8%, and on top of that, that 8%, you compound the excise tax on that, and on top of the compound, your sales tax. It’s like tax on top of tax, on top of tax.”¹¹⁷

Another operator provided a specific example of how taxes compound on a \$20 product: “I’m adding a dollar of local tax onto that. Then I’m adding 15% state excise tax because we have to add the local tax, and then the excise tax compounds the local tax. Then we’re adding \$3.15 of state excise tax onto your \$20 purchase. Then we add our 7.875% state sales tax, another \$1.91. You just added \$6.50 worth of tax onto that \$20 product.”¹¹⁸

Many operators report that the tax burden makes profitability extremely difficult. One operator stated, “I probably paid 1.5 million in taxes. Why is 25% of all my income going to them? That makes no sense.”¹¹⁹ Another operator shared a striking example: “Guy made \$4 million, right? Gross sales. He did not turn a profit. He paid \$800,000 in taxes...He took an \$800,000 loss after doing \$4 million in gross.”¹²⁰

¹¹⁵ Participant ID 23

¹¹⁶ Participant ID 24

¹¹⁷ Participant ID 32

¹¹⁸ Participant ID 41

¹¹⁹ Participant ID 51

¹²⁰ Participant ID 5

The high tax burden makes it challenging for legal operators to compete with the unlicensed market. One operator explained “the tax structure in California, combined with the unlicensed market and then layered on top of the federal tax structure in 280E, is killing this industry. That is not exaggeration.”¹²¹

While some tax reforms have been implemented, such as eliminating the cultivation tax, operators report that the burden has largely shifted rather than decreased. One cultivator explained: “Well, I mean it was so great they did that, but by the time they did it, the prices of stuff had plummeted, and then here goes the... It’s just been shifted over to the retailer.”¹²²

The tax burden particularly impacts social equity programs. One operator observed that “it’s not equity to give someone a license when a license to a system almost designed to fail by taxation.”¹²³

The interviews indicate that the current tax structure is unsustainable and contributes to business failures, market consolidation, and ongoing competition from the unlicensed market. Many operators advocate for comprehensive tax reform to promote a more viable legal cannabis industry.

Overtaxation and high fees also do not deter the growth of the unregulated market. The Tax Foundation has observed that tax rates exceeding 30% did not prevent the unregulated market in Colorado or Oregon,¹²⁴ and California’s rate is 40%. Underlying this entire process is IRS Code 280E, which prohibits cannabis companies from utilizing the federal tax code to offset expenses and costs. For example, most companies can claim a tax deduction for employee costs, purchasing equipment, and virtually any other legitimate business expense. This is the most pressing issue that can only be addressed by the US Congress. To make an industry work, the government should focus on reducing the barriers to entry and the barriers to remaining open, like high taxation.

Feeling Punished for Entering the Licensed Market

Licensed operators feel unfairly disadvantaged compared to unlicensed operators, mainly due to regulatory burdens and tax structures.

¹²¹ Participant ID 31

¹²² Participant ID 58

¹²³ Participant ID 77

¹²⁴ Tax Foundation. “Recreational Marijuana Taxes by State, 2025,” April 1, 2025, <https://taxfoundation.org/data/all/state/recreational-marijuana-taxes>.

Licensed operators are frustrated with competing against unlicensed businesses that don't incur the same costs. One operator explained: "So you kind of built this large foundation of new businesses that are trying to operate in the space, and they're going out of business, and many of them are returning to the black market."¹²⁵ So that's just truly hard to compete against people that don't pay taxes, people that aren't paying workers' comp, people that have a lot of financial, a substantial financial edge over the people trying to do it the right way."¹²⁶

The regulatory costs compel licensed operators to charge higher prices, driving consumers toward the unlicensed market. As one operator described: "Now we've got all these newbies that don't even care about the culture, the compassion, the cancer patients, because that's why we were doing it back in the day... So, the process has completely perverted and turned into a highly taxed thing that nobody can afford anymore. So many people are returning to the black market,"¹²⁷ which is thriving due to it."¹²⁸

Some licensed operators witness their legitimate competitors resorting to unlicensed activities and operating in the "grey market"¹²⁹ to survive. One operator observed that "more licensed operators revert to illegal and illicit activities. That should be expected... People will try to hang on and start getting desperate to hang on. And when people get desperate, they do desperate things."¹³⁰

The price differential makes it challenging to retain customers in the licensed market. One operator noted that "people don't like to pay taxes. But it was embedded in the price. That's one thing. But now, it's more transparent to the consumer the tax they're paying, and they don't like that. And so, they're like, 'I can buy on the black market'¹³¹ for half the price and pay no tax."¹³²

Some operators described how the unlicensed market affects their local sales: "Let's just say come about November, December, my flower sales to local customers go way down because people can pick up bulk cannabis from one of their friends who

¹²⁵ See footnote #64 regarding the use of this term.

¹²⁶ Participant ID 43

¹²⁷ See footnote #64 regarding the use of this term.

¹²⁸ Participant ID 5

¹²⁹ A grey market in California's cannabis industry refers to businesses operating in a legally ambiguous space, typically with some form of local approval but without full state licensing or compliance with all regulations.

¹³⁰ Participant ID 51

¹³¹ See footnote #64 regarding the use of this term.

¹³² Participant ID 43

grew it for 500 bucks a pound rather than \$35, \$40 an eighth from me. That affects our revenue.”¹³³

There’s frustration regarding the lack of enforcement against unlicensed operators. One operator shared, “I think if California puts in an earnest effort to enforce black market¹³⁴ and gray market activity, maybe the industry can become truly profitable. But until then, the future does not look very good.”¹³⁵

The interviews reveal that pursuing the legal pathway has created significant disadvantages for licensed operators, who must compete against unlicensed businesses while bearing substantial regulatory and tax burdens. This dynamic threatens the sustainability of the legal market and may encourage some operators to return to or engage in unlicensed activities.

“Green Premiums” Charged for Cannabis Operations

Cannabis businesses face significant challenges related to banking and insurance access, with many being forced to pay exceptionally high premiums or primarily operate in cash.

Cannabis businesses typically incur exceptionally high monthly fees for basic banking services. One operator mentioned paying “\$300 a month to have an account,” only allowing “cash in, cash out” with no credit line.¹³⁶ Another used a cannabis-specific bank and paid “\$250 a month”¹³⁷ in fees. These banking services are often limited and unreliable—one interviewee noted having their “bank account shut down” and finding it “hard to pay taxes and buy packaging.”¹³⁸

The lack of proper banking access creates significant operational and safety concerns. As one business owner explained, “We can’t even have a bank account. But they want us to operate a normal business. Everything’s got to be done through money orders, running around, and paying cash. Even when we had employees, we did payroll checks but paid them in cash.”¹³⁹

¹³³ Participant ID 41

¹³⁴ See footnote #64 regarding the use of this term.

¹³⁵ Participant ID 42

¹³⁶ Participant ID 26

¹³⁷ Participant ID 49

¹³⁸ Participant ID 79

¹³⁹ Participant ID 67

Insurance costs are similarly inflated. One operator noted they “pay more in auto insurance than the worth of my vehicles.”¹⁴⁰ Another described insurance in the industry as “a scam,” sharing an experience where their equipment was damaged and they discovered their coverage was inadequate: “we’re dealing with an issue now where our instruments were damaged and insurance came back and was like, ‘Okay, well, you don’t have this instrument coverage.’ And then the brokers like, ‘Oh, that’s not offered.’”¹⁴¹

Many interviewees called for state-level solutions instead of waiting for federal action. As one operator argued, “I can’t believe California hasn’t devised a plan to open its cannabis bank. How hard can it be?”¹⁴² Another suggested: “They need to set up their state bank for cannabis... give out loans, have your own cannabis SBA, since we can’t qualify for normal SBA loans.”¹⁴³

While federal banking reform through the SAFE Banking Act was mentioned as a potential solution, some operators felt that state action was more urgent. One interviewee noted that “legalization is a completely different beast, and you shouldn’t combine them. But banking and tax reform. We’re a legitimate business with legitimate employment, employees, and employers. We want to pay our taxes. We want to run a safe business that doesn’t have to deal with cash.”¹⁴⁴

Lack of Coordination Between Municipal Agencies and the State DCC

There appears to be significant friction and a lack of coordination between local and state cannabis regulatory departments in California, resulting in considerable challenges for cannabis businesses.

Local jurisdictions often have requirements that conflict with state regulations. As one cannabis business owner explained regarding license requirements: “The State is a little angel sent from heaven... When we submitted our micro business application, it went through so fast... The State, basically, in my experience, honestly, they have never visited... They visited once for the lab but never for the micro business, and they take money and review our documents.”¹⁴⁵ However, they faced much more stringent requirements and delays at the local level.

¹⁴⁰ Participant ID 78

¹⁴¹ Participant ID 64

¹⁴² Participant ID 60

¹⁴³ Participant ID 64

¹⁴⁴ Participant ID 58

¹⁴⁵ Participant ID 17

Many interviewees noted that local jurisdictions struggle to implement cannabis regulations effectively. As one operator observed: "I don't think the counties had the knowledge or the resources to do that properly, which is why things are not moving locally. As you know, you need a local license to be eligible for a state license. I think that really could use a little bit more attention."¹⁴⁶

Several interviewees described extensive delays at the local level, which are holding up state licensing. One cultivator in a north coast county explained: "Our county has 6 annual licenses... We have 2,000 people who are cultivating cannabis, and we have 6 licenses that are fully annualized. Everybody else is on a provisional license, probation, or weird in-between place... All I need for the county to do is approve my Appendix G, and I can submit that to the state, and my state license will transition from a provisional to an annual license."¹⁴⁷

Some interviewees noted that the state funds local jurisdictions but does not adequately oversee how the funds are used. As one operator noted, "The state is giving the different cities money, but they're not overseeing what the cities are doing with the money or how it is allocated. So, even if you give a city \$4 million, are you ensuring that money goes where it should go?"¹⁴⁸

Many operators described situations where they received state approval but faced local resistance. One interviewee noted: "We are in [a city in Los Angeles County] and it has been an absolute nightmare doing anything with them. They pretty obviously don't want to have cannabis in their city... And every time we go to the city hall, they have different rules about what we must do. They've given us the runaround and made us waste a lot of time and money. Compared to the city, the DCC is a cakewalk."¹⁴⁹

These coordination challenges seem to create significant barriers for legal cannabis businesses in California. One operator summarized, "Even when the state tries hard to help, they're not giving the oversight needed to ensure that the local jurisdiction gets the money to the equity participants. There's no follow-up. There's this giant feeling of, 'Oh no, no local knows what to do. The counties have this.' No, they don't!"¹⁵⁰

¹⁴⁶ Participant ID 41

¹⁴⁷ Participant ID 46

¹⁴⁸ Participant ID 45

¹⁴⁹ Participant ID 21

¹⁵⁰ Participant ID 17

Duplication of Track-and-Trace for Cultivators in Some Counties

Duplication and inconsistency in how counties manage agricultural tracking requirements, especially for cannabis cultivation pose significant challenges.

One cultivator highlighted the stark difference between cannabis and other agricultural products: “If I’m being honest, as a testing lab, I don’t have too much of an issue with it, just because a lot of the stuff that we aren’t inputting into Track-and-Trace is pretty... I mean, it’s pretty easy procedurally. But I’ve heard from other people who have farms where they have to tag their plants. They must switch out the tags if they move it from room A to room B.”¹⁵¹

The duplicative measurement requirements between county and state systems were also highlighted: “They measure things differently, the county and the state. The state measures the beds and the canopy, the county measures the whole greenhouse, whether it’s being used, the ends, and the aisles. That causes so much more work and waste.”¹⁵²

One grower provided a stark example of how this impacts operations: “If you look at other industries, probably pharmaceuticals would be the most closely akin to that tight lot control of the production of products. But the difference is the margins... Within the cannabis supply chain, again, in big part because you’re competing so directly and so intensely with the black market¹⁵³, you’re not looking at significant margins, so every marginal increase in your operational overhead is impactful to the business.”¹⁵⁴

Notably, some operators pointed out that this dual-tracking system doesn’t achieve its intended goals. One interviewee stated, “If you want to skirt the law there, you can take a clone from a tag plant and have another plant, what will that tag do? There’s no way to oversee it. I had 34,000 plants on my property this year.”¹⁵⁵

This duplicative tracking system appears to create substantial operational challenges while possibly failing to meet its regulatory objectives. The differences in how other agricultural products are tracked and regulated have been repeatedly highlighted as evidence of an unnecessarily burdensome system specific to cannabis cultivation.

¹⁵¹ Participant ID 7

¹⁵² Participant ID 56

¹⁵³ See footnote #64 regarding the use of this term.

¹⁵⁴ Participant ID 14

¹⁵⁵ Participant ID 63

The Critical Need for Social Equity Programs

The implementation of social equity programs across California's cannabis industry represents both a moral imperative and a practical necessity, yet is still working to achieve its intended goals of creating sustainable opportunities for those impacted by the War on Drugs. As one operator emphasized, "Black people hold less than 2% of license types. I think that if we want to value a diverse industry that is serving the constituency that has paid the highest price [with] the War on Drugs, yes, I do think that these programs are going to be critical to the success."¹⁵⁶ The need for these programs is rooted in historical injustice, as another participant noted: "you have those who literally were targeted and hunted like animals during this specific time and have lost time off their life now... And yet you have people and they had acres upon acres growing up in the mountains that authorities knew about, and you all never arrested any of them."¹⁵⁷

For many operators, social equity programs represent the only viable pathway into the legal cannabis industry. One heritage farmer explained the necessity of transitioning legacy operators: "Minorities have been moving cannabis for a long, long time. It's been people's livelihoods for long periods of time, especially here in California. And we should offer a legal way for those people to transition... 'Look, you've been doing it good for 10 years. Let's transition you to the legal market so you can make your money legally 'cause you're already good at it."¹⁵⁸

Fundamental Design Flaws and Implementation Failures of Social Equity Programs

Despite their necessity, many interviewees described the programs as fundamentally flawed in execution, with one manufacturer bluntly stating: "I think it's just a setup for people to fail. Maybe it looks great on paper. In reality, it's not working."¹⁵⁹ The most glaring issue is the severe undercapitalization of social equity businesses, with grant amounts proving woefully inadequate for success in this highly regulated industry. As one industry participant explained: "Quarter-million dollars for the social equity applicant... you can't get a retail going, you can't get a manufacturing going, and you can't get a cultivation going... it doesn't even get you a compliant build out."¹⁶⁰

¹⁵⁶ Participant ID 14

¹⁵⁷ Participant ID 109

¹⁵⁸ Participant ID 33

¹⁵⁹ Participant ID 32

¹⁶⁰ Participant ID 32

The inadequacy of funding is particularly stark when considering the capital requirements for different license types. One successful social equity operator noted that a San Francisco Bay Area city “has loans, low/no-interest loans that they offer up to \$300,000. [A city in Los Angeles County] is coming online right now with their social equity program with \$300,000 in grant funding for each participant selected. But we need to see more of that across the board. Without having some sort of funding, it’s like you could have offered these people a nuclear power plant license. ‘Yay, I’ve got a license.’ I cannot actualize said license without money.”¹⁶¹

Predatory Practices and Corporate Exploitation of Social Equity Operators

The vulnerability of social equity applicants to exploitation is particularly concerning given the power dynamics at play. As one operator explained: “if you have someone who’s social equity, doesn’t have the funding, is really out here trying to do a mom-and-pop type thing, and yet you’re not social equity and you see that you need a social equity person, you’re going to do whatever you can to take what they have. And that happens a lot in the industry.”¹⁶² Another noted that predatory investors offer “whatever it is. Because we may be in a tight spot, you’re going to try to do things off paper... next thing you know, you’re getting pushed out of your business.”¹⁶³

One experienced social equity operator described the challenging investment landscape: “I definitely think that our rent is inflated, but not to the point in time where I’m like, it is ... No, I’m probably paying 20% more rather than the doubling that a lot of people are seeing. I’ve been offered all sorts of bad contracts in regards to investment and I’ve heard it all when it comes to that sort of thing, which is disappointing because at the end of the day, the idea behind equity is the idea that these people are running a business and these investors are investing in a business. What it turns out to be is that these investors are running their business on the backs of these equity applicants who then don’t really get to run their own business at all.”¹⁶⁴

Administrative Failures and Bureaucratic Barriers of Social Equity Programs

Administrative failures have further undermined program effectiveness. One participant described the licensing process as “like catching sunlight in your hands in

¹⁶¹ Participant ID 14

¹⁶² Participant ID 109

¹⁶³ Participant ID 45

¹⁶⁴ Participant ID 14

the dark,”¹⁶⁵ highlighting the complexity of regulations and frequent rule changes. The psychological toll of navigating these systems can be particularly severe for applicants who have experienced trauma. One operator noted: “The whole concept of social equity is to prop up people were formerly incarcerated or who’ve been impacted negatively and disproportionately. And instead, what we’re doing is we’re dragging them back down through the dregs of their life, whether it was alcoholism or terrible abuse or whatever the situation was... I can’t tell you how many friends were talking to me and they were crying because one’s like, ‘Oh, now I have to go deal with the thoughts of my ex-husband who used to beat me, and I had to do this.’ Because in order to qualify, you had to go and get all this stuff. So I’m like, why are we doing this to these people?”¹⁶⁶

Some operators perceive that local jurisdictions have mismanaged funds intended for equity applicants. As one operator explained, “The county absorbed the money. I filled out my documents not once but sent them in over 10 times, and they still haven’t issued me one flattened red penny.”¹⁶⁷ The systemic nature of this problem is evident as another participant noted: “the cities, they sit back and they don’t help. I’ve spoken about that at [a Los Angeles County city] City Hall, I’ve spoken about that at [another Los Angeles County city] City Hall and how they’re technically setting us up to fail.”¹⁶⁸

Lack of Business Support and Education for Social Equity Operators

Perhaps most troublingly, the programs lack holistic support for business success. As one participant noted: “Most of them [other operators] don’t even know what an excise tax is... and if they don’t know it, who will do it for them? Then they’re going to have to hire a professional... they keep just milking those poor people for money.”¹⁶⁹ Without adequate education, mentorship, and operational support, many equity businesses struggle to navigate industry complexities.

The challenge extends beyond basic business knowledge to the complex political landscape of cannabis regulation, where operators must effectively advocate. One social equity operator described the learning curve: “It’s the most hugest undertaking I’ve ever had to do, mainly because I’ve had to become very political. I’m not a politician, but in order to do this work, you need to learn who is who, you need to be

¹⁶⁵ Participant ID 45

¹⁶⁶ Participant ID 19

¹⁶⁷ Participant ID 35

¹⁶⁸ Participant ID 109

¹⁶⁹ Participant ID 32

able to read and understand the regs. You need to know what makes sense in the law and what doesn't."¹⁷⁰

Social Equity Program Success Stories and Alternative Approaches

Despite systemic failures, some social equity programs have achieved success through different approaches. One operator credited their success to engagement and support systems: "Me personally, social equity has worked for me, you know what I'm saying? Because again, I've been on this since day one and when they say stuff, I do it. And the people I met along the way have also helped me a lot."¹⁷¹ Another successful operator described the importance of early engagement and proper support: "We went to a mixer [in a city in the San Francisco Bay Area] that they hosted back in May of 2017, about the equity program. We ended up meeting our social equity incubator at that mixer, which was [a cannabis edibles corporation]¹⁷²...we were able to get licensed and ready to sell by Jan 1, 2018."¹⁷³

Some operators have developed innovative approaches to supporting social equity, moving beyond individual grants to community-focused models. One entrepreneur described their foundation concept, "I wanted to set up a minority[-owned business]... like a foundation, we'll call it, I guess, which was essentially a fund that cannabis businesses could contribute X percentage of their revenues into this fund every year and then that fund would be used solely to fund minority[-owned] businesses... give them that opportunity to get some funding that is actually derived straight from cannabis revenues."¹⁷⁴ Another operator emphasized community-based approaches, "I have those 40 different brands, all minority[-owned] brands. I have about 20 other social equity applicant personnel that I personally help. I don't ask them for money. I don't ask them for anything because I already know they don't have it and it's okay because we're going to build this empire together."¹⁷⁵

Regional and Cultural Social Equity Considerations

The definition and implementation of social equity varies significantly across California's diverse regions. In rural areas like counties in the North Coast, operators struggle with how social equity applies to their communities. As one cultivator explained, "A lot of us here in [a North Coast county] have been through some of the

¹⁷⁰ Participant ID 166

¹⁷¹ Participant ID 170

¹⁷² Names of businesses directly referenced by respondents have been redacted.

¹⁷³ Participant ID 138

¹⁷⁴ Participant ID 19

¹⁷⁵ Participant ID 162

most intensive expense of the campaign against marijuana planting... And many of us have for a long time worked with Black and Brown friends who are in the urban areas, and they suffered in different ways and in longer timeframes, obviously. So a lot of us have been struggling with what that means, what social equity means."¹⁷⁶

This regional variation highlights the need for more nuanced approaches that recognize different forms of harm from cannabis prohibition while maintaining focus on the communities most severely impacted.

Measuring Social Equity Program Success Beyond Profit

Some operators argue for redefining success in social equity programs beyond simple profitability metrics. One operator noted: "I don't think that they're necessary for the success of the cannabis industry. If you measure success by typical standards of profitability... But if you measure success the way that we do, and that is success being the progressive realization of a worthy ideal... then absolutely I would say that these programs are instrumental."¹⁷⁷ This perspective emphasizes the broader societal goals of social equity programs beyond individual business success.

Slow Rollouts of Social Equity Programs

Cities implementing social equity programs in Los Angeles County and the North Coast underscore how administrative delays and structural barriers have diminished program effectiveness, even when funding was available. For example, a Los Angeles County city accumulated substantial equity funding but faced challenges in distributing it to qualified applicants, reaching a point where "the State said, 'We're going to take your money back if you don't disperse it by this date.'"¹⁷⁸ The qualification requirements proved to be a significant obstacle, with one interviewee confronting city officials about this disconnect: "You mean to tell me that you have \$1.8 million sitting in the bank, you now have this library full of social equity applicants, and you don't see the disconnect that you all are placing the bar so high that we can't get in?"¹⁷⁹

The situation in a North Coast county revealed similar challenges but with different manifestations. The county received state funding through the Local Equity Entrepreneur Program (LEEP), but applicants reported extensive delays and unfulfilled promises. One equity applicant described waiting since November 2021

¹⁷⁶ Participant ID 5

¹⁷⁷ Participant ID 153

¹⁷⁸ Participant ID 32

¹⁷⁹ Participant ID 42

for their grant, with the first installment supposed to be \$50,000, followed by a follow-up payment of \$30,000. The County's handling of LEEP funds drew particular criticism, as much of the funding was absorbed by administrative costs rather than reaching applicants. As one interviewee noted, while the county promised various support services, "Do you know how many people got bookkeeping classes? None. Do you know how many people got business plan writing classes? None."¹⁸⁰

These implementation challenges were compounded by the complex requirements for maintaining property while awaiting approval. The Los Angeles County city eventually developed a Letter of Intent grant program to address this issue; however, the process remained challenging. One interviewee highlighted the fundamental problem with the current approach: "You're asking me to get site control and I'm paying rent to get site control because there ain't nobody on the planet that's going to give me site control unless I secure a lease of some sort or I pay rent. And it could be years before I get that license."¹⁸¹

While both jurisdictions have taken steps to address these challenges, the interviews reveal persistent barriers to program success. An interviewee from a Los Angeles County city described how the city eventually responded to criticism about their approach, "Well, we'll work on something and we'll put it together." However, the fundamental challenge of providing timely, accessible support while meeting regulatory requirements complicates the implementation of social equity programs in both regions.

The Path Forward for Social Equity Programs

While well-intentioned, the harsh reality is that these programs are still working to create sustainable businesses or meaningful economic opportunities. Even those who support the concept acknowledge its poor implementation. As one licensee stated, "I do think social equity is essential. I think government money to help these businesses is essential, based on the whole point of the program... Does it come out that way? No."¹⁸²

The unintended consequences have particularly impacted those the programs were meant to help. One participant observed, "The people that qualify, I think, are not the people that you think the State intends to help with these programs... And it's a big, rich company buying the name or the persona of someone who fits that category."

¹⁸⁰ Participant ID 17

¹⁸¹ Participant ID 74

¹⁸² Participant ID 49

And so, you're just kind of enriching corporations."¹⁸³ Rather than building sustainable community wealth, the current system often results in licenses being consolidated by significant corporate interests, perpetuating rather than addressing historical inequities in the cannabis industry.

However, the necessity of these programs remains clear. As one operator emphasized, "we need the program, it's absolutely essential that we have it, and not only that we have it, that it functions as it's supposed to. Because it's one thing to have the program and have 2 people that are in the program, but it's another thing to have the program and people actually get helped."¹⁸⁴ The challenge lies not in the concept of social equity, but in creating effective implementation strategies that truly serve their intended beneficiaries.

Mental Health Crisis Among Cannabis Operators

The interviews reveal a disturbing pattern of severe mental health challenges among cannabis operators, particularly cultivators, stemming from regulatory pressures, financial strain, and harassment from enforcement agencies. One cultivator in a North Coast county expressed acute psychological distress, stating, "I wake up every day, I want to kill myself. That's all I think about, every day."¹⁸⁵ Despite running "the leading company out of [a North Coast county]," this operator described living "in a kind of fear where you tremble every minute of every day"¹⁸⁶ while supporting 3 children on \$35,000 a year.

The regulatory environment has had devastating impacts on entire communities. One operator described how enforcement actions led to tragedy, "I had a best friend blow his brains out because of it, because he lost his entire family farm. He lost his family."¹⁸⁷ The ripple effects extended beyond individual operators, "My sister lost her property. She lives in Texas now. I had a friend who lost five pieces of property, and then they came after his home and took everything he had."¹⁸⁸

The physical and mental health toll of operating in the legal market has been severe. One equity operator on the North Coast described how "the stress was so big that my doctors feel that that's what gave me a pulmonary embolism and almost ended my

¹⁸³ Participant ID 42

¹⁸⁴ Participant ID 109

¹⁸⁵ Participant ID 23; Note: The research team offered mental health resources to anyone that expressed suicidal ideation.

¹⁸⁶ Participant ID 23

¹⁸⁷ Participant ID 23

¹⁸⁸ Participant ID 23

life. Just from the stress, throwing clots, sitting here doing the paperwork.”¹⁸⁹ Another operator noted how the demands of compliance tracking were depleting their resources: “You’re already taking my financial resources, now you’re sapping all of my time resources. What’s next? My health resources are affected because that happens once you take my time and money resources.”¹⁹⁰

Interestingly, many operators entered the cannabis industry specifically seeking relief from mental and physical health conditions. One operator described using cannabis to manage anxiety after receiving a diagnosis. Another operator used cannabis to treat Lyme disease that had “progressed through the spine, went into the bone marrow, ate a good portion of the jawbone, ate part of L-4, L-5, herniated my nerve roots, and my sacrum.”¹⁹¹ Others reported using cannabis for seizures, gastrointestinal issues, and as an alternative to opiates and antidepressants.

The regulatory and financial pressures can create mental health distress among operators that demands urgent attention. As one cultivator put it, they are “trapped into a system that I hate,”¹⁹² highlighting how the combination of high operational costs, aggressive enforcement, and limited exit options has fostered conditions of extreme psychological distress in the legal cannabis industry.

Compassionate Care Operators Left Behind

Cannabis prices have dramatically declined across California, severely impacting profit margins throughout the supply chain, particularly for cultivators and manufacturers. The data show prices have fallen sharply from their peaks during COVID-19.

Several cultivators reported that flower prices have dropped from \$1,000 to \$2,500 per pound to current prices of \$300 to \$450. As one cultivator noted: “Two years ago, pricing might have been closer to \$2,000 to \$2,600 a pound, and now we’re down to \$1,200 to \$1,600 a pound. And our cost to produce a pound is anywhere from \$800 to \$1,100, so margin is very, very tight.”¹⁹³ Another farmer described even lower prices of \$350 to \$450.¹⁹⁴ For outdoor growers, the situation is particularly dire, with

¹⁸⁹ Participant ID 17

¹⁹⁰ Participant ID 17

¹⁹¹ Participant ID 79

¹⁹² Participant ID 23

¹⁹³ Participant ID 66

¹⁹⁴ Participant ID 63

some reporting, “they sell their units or pounds so forth, so cheap. Sometimes they have difficulty selling it at \$250, \$300 a pound.”¹⁹⁵

The decline in extract prices has been equally dramatic. One manufacturer reported, “We’d paid at one point \$12,000 for distillate, and I’ve paid as little as \$800 recently.”¹⁹⁶ Another striking example came from a manufacturer discussing the price of a liter of distillate, “\$7,500 for the first liter, and then the last liter I bought costs \$800... Four years ago, yeah. That’s what I- It’s incredible. I don’t see how people stay in business.”¹⁹⁷

The price compression has been particularly challenging for smaller operators. As one interviewee explained, “So many farmers that I know that have licenses are just... At this point, they’re just selling to sell the weed so that they have enough money to grow this year. It is not a profitable entity.”¹⁹⁸ Some farmers have had to sell at prices below their production costs just to move inventory: “I sold everything for only \$10 a pound to an extract company, and it didn’t even cover my costs, land notes, food, and trimming costs. It was a straight-up loss, but I wanted to get the stock out so I could start fresh.”¹⁹⁹

Even trim, once a valuable byproduct, has experienced significant price declines. One operator noted: “Even past just the bulk pound prices, my business made a half million dollars selling trim in 2017. That trim, worth \$120 per pound last year, was at \$5.” The combination of falling prices and high operational costs has pushed many operators to the brink, with some choosing to exit the market entirely.

The market dynamics seem to be driven by oversupply and intricate regulatory requirements that sustain high operational costs, even as prices decline. As one cultivator summarized, “The prices are already so low that cultivators can’t make a profit, but if there weren’t the unlicensed sales going on, we would all just be a sinking ship because there’s way too much cannabis in California right now.”²⁰⁰

Carveouts for Small Operators Requested

Some cannabis operators advocate for establishing guaranteed price floors for flowers to stabilize farmers’ incomes and support small cultivators. One farmer

¹⁹⁵ Participant ID 32

¹⁹⁶ Participant ID 4

¹⁹⁷ Participant ID 44

¹⁹⁸ Participant ID 63

¹⁹⁹ Participant ID 35

²⁰⁰ Participant ID 78

articulated this view directly, suggesting that farmers need “incentives” and “need to know that they’re going to get paid between \$1,500 a pound to \$3,500 a pound, and that way they can afford Fish and Game and Wildlife fees.”²⁰¹ She argued that without such price supports, “anybody with half a brain is going to take the first mule smoking out of the cannabis industry because it’s the fast track to poverty.”²⁰²

However, the interviews suggest that implementing price floors would face significant challenges. The existence of a robust unlicensed market indicates that enforcement mechanisms would be necessary to prevent undercutting of minimum prices. Additionally, several operators pointed to oversupply as a fundamental driver of low prices. Price floors alone may not address the underlying market dynamics without additional supply management measures.

The interviews also indicate that some industry participants perceive price floors as contradicting market principles. Some operators advocated for reducing taxes and regulatory costs to help farmers remain profitable at current market prices instead of artificially maintaining higher prices through government intervention.

Personal Savings Are Lost to Slow Program Rollouts

Many cannabis operators have encountered substantial financial challenges due to extended licensing and opening processes, often depleting their life savings before they can begin operations.

For example, one operator in Los Angeles County described how unexpected delays and COVID-related challenges drained their capital reserves, “We had delays at the city level that lasted from, I mean, we applied September 3rd, 2019, by October they had confirmed positioning. Then they went into an audit that did not stop until June and July 2021. It was incredibly long and we still had to move forward because we still had to pay rent on this month after month, which sucked a lot of our cash reserves dry.”²⁰³

The high costs of entering the industry often far exceed initial estimates. One operator with an engineering degree shared, “I was probably told it would be maybe a hundred to \$150,000 to get the permit, rent, all that. I probably spent \$400,000

²⁰¹ Participant ID 35

²⁰² Participant ID 35

²⁰³ Participant ID 22

without trying because the permit costs so much.”²⁰⁴ They emphasized that capital is the most significant barrier to entry, stating bluntly, “You have to have money.”²⁰⁵

Even relatively small amounts of support from local programs may not be enough to cope with such lengthy delays. As one operator explained, “If you give me \$50,000 and say, ‘Hey, put it towards this or put it towards that,’ but I still need \$550,000, how much did it help me if I can’t open my doors?”²⁰⁶

The financial burden is particularly challenging because traditional funding sources are unavailable. One operator noted that “being federally illegal, we can’t get funding from banks or anywhere, even though we have good businesses. So, access to capital is the biggest challenge.”²⁰⁷ This forces many to rely on personal savings or family funds, as another operator explained: “For us it’s hard just to keep borrowing money from friends and family.”²⁰⁸ These financial pressures create patterns of intergenerational debt rather than wealth, as families deplete retirement savings and borrow against future security to fund cannabis businesses with uncertain returns.

These delays and capital requirements create significant barriers, particularly for small operators and equity applicants seeking to enter the industry. One cultivator observed, “It takes money to get into this industry, to sustain yourself, and I think that disadvantages a lot of people, in particular people of color and people who have different backgrounds, as this is very difficult to break into.”²⁰⁹

Changing Regulations and Economics Make Financial Projections Difficult

Cannabis operators have faced significant challenges in business planning and projections due to constantly changing regulations and declining economic conditions in California’s legal market.

Many operators describe an industry in flux where initial business assumptions have been completely upended. As one operator explains, “Nobody predicted it would go down the following year, literally 1 year later... It’s too tumultuous. Nobody can get it right now.”²¹⁰ Even experienced business professionals have been caught off guard, with the same operator noting, “I know some savvy businesspeople that are

²⁰⁴ Participant ID 51

²⁰⁵ Participant ID 51

²⁰⁶ Participant ID 72

²⁰⁷ Participant ID 78

²⁰⁸ Participant ID 32

²⁰⁹ Participant ID 31

²¹⁰ Participant ID 25

scratching their heads, that are ripping their heads out of their hair like, 'How could we have gone so wrong?'"²¹¹

The transition from medical to recreational markets represented a significant shift many didn't anticipate. As one interviewee notes, "We were just medical, helping out the patients. And then once it became recreational, the whole industry changed from being medicinal, that's helping people, into a cash cow."²¹² This led to overexpansion and investment that proved unsustainable.

Regulatory changes have been particularly disruptive. One significant example was California's decision to remove cultivation caps. "California, in the 11th hour, decided to let people stack medium-sized licenses. And instead of establishing the 1-acre cap, they just let [business name redacted] and all these huge mega investment corporations grow as much weed as they wanted. And so, it's been oversaturated since the first year of legalization."²¹³

These conditions have created a challenging environment for conservative business planning. As one operator summarizes, "I think what happened a few years ago is being refined, and I think the State is moving towards standardization... But right now, from the testing perspective, if you don't test above 20 or 21% THC, it's like, forget it. It's not being sold in the legal market at all."²¹⁴ This rapid market evolution makes it nearly impossible to make reliable long-term business projections.

No Hope That the Industry Will Turn Around

Many cannabis operators express deep despair about the industry's future and their considerable personal losses, with some perceiving a return to the unlicensed market as their only viable option, despite their wish to operate legally.

One operator emphasizes the devastating personal financial impact: "We've lost half of the revenue that place once had... I've seen such a steady decline. Every single month has shown a reduction in retail revenue."²¹⁵

Many operators describe feeling trapped in a failing system. As one explains, "In [a North Coast county], we were slaves... because if you're in the system, I can't just say, 'I don't want to be a cannabis farmer anymore.' If I don't make that farm work, they

²¹¹ Participant ID 25

²¹² Participant ID 32

²¹³ Participant ID 78

²¹⁴ Participant ID 46

²¹⁵ Participant ID 31

abate me.”²¹⁶ The same operator notes, “If you want to leave your farm in [that county], they make you remove all the infrastructure. The infrastructure is worth more than the farm. So you’re forced to move forward with licensing.”²¹⁷

The pressure to return to the unlicensed and gray markets²¹⁸ is mounting. One operator observes, “More licensed operators revert to illegal and illicit activities... People will try to hang on and start getting desperate.”²¹⁹ Another notes that many former legal operators are “jumping ship and moving on to other things as the word out on the street.”²²⁰

The situation appears particularly dire for small operators. As one participant explains, “I’m never going to come up with \$4 million in crap that Fish and Wildlife and the Water Board want... Right now, all of those licenses, all of that time, if I can’t come up with 8 grand in 2 weeks, it’s all over.”²²¹ Another operator summarizes the bleak outlook, “I just watched 500 farms lose everything in the world. I hope you guys get something done here, and I hope I’m alive by the time you publish your report.”²²²

License-holders Lack Recourse/Adjudication Options

Cannabis license holders face significant challenges when dealing with regulatory agencies, such as experiencing limited recourse and adjudication options. The licensing process lacks clear appeal mechanisms and due process protections, leaving businesses vulnerable to potentially arbitrary decisions and delays.

One particularly illustrative case comes from a license holder who described how agencies could shut down businesses simply by delaying responses, “The way that they impact you the most is by denying you your due process. They all know your rules and what you’re supposed to get. All they have to do is sit on it. If it’s [the California Department of] Fish and Wildlife, the [State] Water [Resources Control] Board, they know everything falls on the individual. Nothing ever falls on the agency.

²¹⁶ Participant ID 23

²¹⁷ Participant ID 23

²¹⁸ A grey market in California’s cannabis industry refers to businesses operating in a legally ambiguous space, typically with some form of local approval but without full state licensing or compliance with all regulations.

²¹⁹ Participant ID 31

²²⁰ Participant ID 67

²²¹ Participant ID 23

²²² Participant ID 23

So they can just wait a year, change the rules, make you redo the report, start from scratch, and they can do it repeatedly.”²²³

The lack of recourse is particularly evident when different agencies have conflicting requirements. As one operator explained: “My firm, the first one that I worked with, the owner of the firm happened to be the brother of one of the heads of the Water Department... She stood before my greenhouse on my property and told me I would never have to move my pond. I just had to fix a couple of things, and I would never have to move that greenhouse because it was a structure. Then after that, she threw me to the dogs.”²²⁴

The financial burden of these delays and changing requirements can be devastating, with limited ability to appeal or seek a remedy. One licensee reported: “I have 4 or 5 million dollars worth of things to overcome to get my licenses, and they’re all united. All those licenses are all one business, and they just required a bunch of licenses so they can look at it as if it’s all chopped up.”²²⁵

Even when businesses attempt to comply with requirements, they may encounter arbitrary enforcement with limited opportunities for appeal. One operator described how enforcement proceeded despite local authorities acknowledging an error, “The head of the planning department called the sheriff early in the morning and said, ‘You’re not supposed to be on that property. You’re there in error.’ The sheriff said, ‘Yes, I know I’m here in error, but I’m going to destroy his crop anyway.’”²²⁶

These experiences indicate a critical need for improved due process protections and precise appeal mechanisms within the cannabis licensing system. The existing structure appears to leave businesses with limited options for recourse when faced with potentially arbitrary or unfair decisions made by regulatory agencies.

Inefficient Use of DCC Grant Resources by Municipalities

Significant issues arise concerning how municipalities utilize and distribute DCC grant resources, particularly in ways that may not optimally serve the intended beneficiaries. This is especially evident in the local management of social equity and Local Equity Entrepreneur Program (LEEP) grant funds.

²²³ Participant ID 23

²²⁴ Participant ID 23

²²⁵ Participant ID 23

²²⁶ Participant ID 23

For example, one social equity license holder in a North Coast county described applying for a LEEP grant in January but has yet to receive it, noting that “many other people in [the county] are in the same situation.”²²⁷ While the interviewee supported some grant money going to County operations, stating “a lot of it has gone to our county, paying taxes, paying local fees, paying building and planning fees... which our county deserves and needs,”²²⁸ they also noted that “very few farmers I know personally have gotten their checks issued.”²²⁹

The inefficient use of resources extends beyond direct grants. One jurisdiction, Mendocino County, was denied a fourth round of equity funds because “our county wasn’t specific enough in the criteria for applicants when it came to significantly being impacted by the War on Drugs.”²³⁰ This indicates that poor administrative execution at the local level can lead to the loss of valuable state resources that could benefit operators.

This mismanagement of resources appears to impact small operators, particularly. One operator in Los Angeles County explained, “I’ve never gotten any fee waivers from the City. I get grant money, but I have been able to get grant money because I’ve been paying rent for an extraordinarily long time.” This suggests that grant resources may not reach operators during the critical early stages when support is most needed.

The issue appears particularly acute in Los Angeles County jurisdictions, where one interviewee noted that the local cannabis regulation office “could never get the funding from the city council, who meanwhile has a very high tax in their city for cannabis.”²³¹ This emphasizes how municipalities may prioritize tax revenue over effectively distributing and utilizing grant resources to support the industry’s development.

Conflicting State and Local Priorities

Conflicting state priorities and regulatory requirements have created significant challenges for California’s cannabis industry. Multiple interviewees described how different state agencies often have contradictory requirements, making compliance difficult and costly. For example, one operator noted that “between the two

²²⁷ Participant ID 38

²²⁸ Participant ID 38

²²⁹ Participant ID 38

²³⁰ Participant ID 38

²³¹ Participant ID 29

departments, they're not communicating the same thing,"²³² with one agency requiring chemicals to be stored in one location and another agency citing them for not having them elsewhere. This lack of coordination extends to enforcement, where inconsistent oversight has allowed some operators to take advantage of regulatory gaps while compliant businesses struggle to compete.

The state's track-and-trace system (METRC)²³³ exemplifies these challenges. While designed to provide oversight, it has created opportunities for manipulation and imposed significant administrative burdens on legitimate operators. One nursery operator described how there is "no scrutiny on what's grown versus what's sold, except for that METRC ID tag number,"²³⁴ allowing some operators to relabel products to increase sales. Multiple operators mentioned that, while METRC requires substantial time and money to track "everything down to the smallest detail,"²³⁵ they question whether the State is making meaningful use of the data.

The dual state-local licensing structure further complicates these issues. One operator described how, after 5 years, they still couldn't obtain an annual license because "the City and the State can't figure out how to communicate."²³⁶ Local jurisdictions often impose requirements beyond state regulations, creating what one operator called "duplicative" compliance burdens where they have to "conform to 2 different regulatory agencies."²³⁷ This regulatory complexity carries significant financial implications. One distributor mentioned spending \$2,500 on specialized van cages that they believe serve no practical purpose, while another operator described building a \$100,000 shed to meet building requirements.

The cumulative effect of these conflicting priorities and requirements has led to what one operator termed an "extinction event,"²³⁸ in which many businesses, particularly smaller operators, struggle to remain viable under the regulatory burden. Several interviewees advocated for more streamlined, coherent regulatory approaches with better coordination between agencies and jurisdictions. The situation is particularly challenging for smaller operators who must compete with unlicensed businesses that

²³² Participant ID 67

²³³ METRC stands for "Marijuana Enforcement Tracking Reporting Compliance" and is a state-required system used to monitor the movement and sale of cannabis.

²³⁴ Participant ID 27

²³⁵ Participant ID 16

²³⁶ Participant ID 67

²³⁷ Participant ID 79

²³⁸ Participant ID 46

don't have to bear these regulatory costs while trying to navigate sometimes contradictory requirements from various state and local agencies.

Concerns Regarding Medical Cannabis Access and Incentives

The interviews reveal significant concerns about medical cannabis access in California's regulated market, particularly regarding the affordability and availability of specific medical products. Many operators express frustration that the transition from Proposition 215 to Proposition 64 has made it more difficult for medical patients to access affordable cannabis, with one interviewee noting that "patients that are no longer able to access their product type because everyone's moved toward high THC, [and] the products are no longer full spectrum anymore. So, you have a bunch of sick people who have had to go back to the illicit market because they can't find their products in a legal dispensary."²³⁹

According to Dr. Bonni Goldstein, any medical patients are kept at low doses and do not want to "get high."²⁴⁰ The objective is to stay at the minimum effective dose, as patients do not want to build tolerance, because they get side effects. Some conditions are best treated with very high THC content, which cannot be accessed affordably in the adult market.

While Senate Bill 34 (the Brownie Mary Act) allows compassionate use programs to provide free cannabis to medical patients, operators describe various challenges in its implementation. One cultivator explained the logistical difficulties: "We're giving them our product...but then they have to get a transporter to come pick it up, and then they have to give it to another person to manufacture it...by the time it gets said and done and it's in a package thing, well too many people have touched it."²⁴¹ These complications led some operators to forgo donation programs entirely, with one noting they "composted an entire field last year because we couldn't sell it"²⁴² rather than navigate the complex donation process.

Many operators emphasize the importance of medical access, particularly for seniors and those with severe conditions. One retailer described working with a woman "diagnosed with stage 4 stomach cancer who was not a candidate for surgery... She's been doing a serious, heavy-duty cannabis protocol for 2 years. She is doing

²³⁹ Participant ID 15

²⁴⁰ Note: Dr. Goldstein runs a medical practice devoted to educating patients about the use of cannabis for serious and chronic medical conditions; Canna-Centers Wellness & Education, "About Us", <https://www.canna-centers.com/useful-information/about>.

²⁴¹ Participant ID 33

²⁴² Participant ID 33

remarkably well. Her doctors are amazed."²⁴³ Another operator implementing SB 34 donations explained their motivation, "In California in particular, legal cannabis... is so expensive, but it's these senior citizens who should be able to have access to clean products that are affordable to them."²⁴⁴

The current regulatory structure's limitations on direct-to-consumer sales also affect medical access. One manufacturer noted that even though they produce CBD-only products, they "cannot sell that product online"²⁴⁵ because it was created in a licensed cannabis facility, limiting access for medical patients who might benefit. Multiple interviewees suggested that the regulatory framework needs reform to better serve medical patients. One operator stated, "I think when people have access to our cannabis... most people are pretty grateful for that experience. And being able to do that in a legal market is awesome."²⁴⁶ However, they emphasized that current regulations and tax structures make it challenging to provide medical cannabis at accessible price points sustainably.

Retail operators also face challenges supporting medical cannabis users while remaining within their scope of expertise and within regulatory bounds. One retailer noted, "We are seen as a lot of people's last resort when modern medicine isn't working for them, and they come to us expecting real medical advice, knowledge, and understanding. We're like, 'We're not nurses and doctors.' We have to train our budtenders how to walk that fine line. We know our products, and we know how cannabis can help with certain conditions and things, but we can't give medical advice."²⁴⁷

This creates a complicated situation where cannabis businesses must carefully phrase their guidance. As one operator explained: "I have to be careful, the FDA has not proved these things. They have not proved the studies, so [there is] only so much you can say about cannabis and its potential health benefits."²⁴⁸ Instead, many retailers rely on accumulated experiential knowledge, with one noting they "give them information about the different cannabinoids and what we've learned from other people who have similar conditions, who have used cannabis."²⁴⁹ This creates a

²⁴³ Participant ID 41

²⁴⁴ Participant ID 49

²⁴⁵ Participant ID 34

²⁴⁶ Participant ID 46

²⁴⁷ Participant ID 60

²⁴⁸ Participant ID 41

²⁴⁹ Participant ID 41

system where patients must often be “more individually involved in what will work for you. That may change over time. That may change daily.”²⁵⁰

Burden of Compassionate Use Implementation on Operators

The interviews reveal significant financial and administrative burdens that cannabis operators face when implementing compassionate use programs under SB34 (the Brownie Mary Act). Even when operators are motivated to provide free or reduced-cost medicine to needy patients, they encounter numerous regulatory hurdles and costs. One operator explained their SB34 program, “trying to figure out how to be more hands-on with that but also being cognizant of how much time we have to do it and stuff like that.”²⁵¹ The program requires careful documentation and verification of medical status.

The regulatory framework imposes significant financial burdens on operators running compassionate programs. Donated products must still undergo required testing and packaging, incurring additional costs for the operators. Some patients have returned to the unregulated market because they cannot find or afford suitable medical products in licensed shops. While operators are eager to provide compassionate access programs, particularly for seniors and medical patients, the regulatory and financial obstacles present substantial challenges to effectively implementing these programs.

Accounts Receivable Fiscal Cliff

The California cannabis industry is facing a severe crisis regarding accounts receivable and accounts payable, resulting in a destructive cycle of unpaid bills throughout the supply chain. This issue appears to be systemic and particularly devastating for smaller operators.

Multiple interviewees describe a “bubble” of unpaid bills, with one respondent explaining, “the big accounts receivable bubble pretty much everybody’s struggling with, where the retailers aren’t paying the distributors and the distributors aren’t paying the brands and the brands aren’t paying the farmers. So, everybody’s financing their business through their accounts receivable, and just not paying their bills is how everybody’s still in business right now.”²⁵²

²⁵⁰ Participant ID 41

²⁵¹ Participant ID 49

²⁵² Participant ID 43

The scale of unpaid bills is staggering. One interviewee revealed that “between our 3 companies, we are owed \$50 million,” and estimates suggest “California retailers... owe companies further down the supply chain at least \$700 million.”²⁵³ Some individual operators report substantial losses, with one noting they were “burned for a hundred thousand by a customer” and “burned for \$75,000 to a \$100,000 by a distributor.”²⁵⁴

Many interviewees identify the distribution layer as particularly problematic. One cultivator reports, “We currently have hundreds of thousands of dollars of bills or invoices we’re sending to [distributors] because people just aren’t paying their bills.”²⁵⁵ Some distributors, termed “burn distributors”²⁵⁶ by interviewees, appear to operate predatorily. “They take your product and they’re never going to pay you. They’re in it for 2 or 3 years; they take in as much as possible. They don’t pay anyone, and they get the hell out.”²⁵⁷

The lack of standard business protections and remedies exacerbates the problem. As one interviewee explained, “you can make contracts, you can make written agreements, you can make verbal agreements, you can make whatever agreements you want. They’re not enforceable, no matter what.”²⁵⁸ Another notes that “cannabis companies cannot declare bankruptcy,”²⁵⁹ leaving few options for resolving unpaid debts.

The situation has forced many operators to shift to cash-on-delivery (COD) terms, creating challenges. As one interviewee explained, “you can’t go to someone and say, ‘Hey, pay me COD for my product,’ because they won’t do it because there’s a thousand other cultivators that’ll hand them the product without it.”²⁶⁰ Some operators report writing off massive portions of their accounts receivable, with one stating they’re “putting \$100 out the door and getting \$25 back.”²⁶¹

This crisis is especially challenging for testing laboratories, which must maintain regular payments to their suppliers despite receiving inconsistent payments from cannabis clients. One lab operator noted, “I don’t have a choice. If I want to keep my

²⁵³ Participant ID 47

²⁵⁴ Participant ID 20

²⁵⁵ Participant ID 43

²⁵⁶ Participant ID 33

²⁵⁷ Participant ID 33

²⁵⁸ Participant ID 27

²⁵⁹ Participant ID 47

²⁶⁰ Participant ID 33

²⁶¹ Participant ID 4

lab open, I must pay for my methanol. There's no leeway saying, 'Hey, the producer's not paying me this week, I got to wait to pay you.'"²⁶²

State Approach to Industry Consolidation and Regulatory Efficiency

Many cannabis operators believe that California's regulatory environment and market conditions are driving consolidation toward large corporate entities, often at the expense of smaller businesses. Several interviewees contend that this consolidation is not coincidental but rather a deliberate result of state policy.

One operator went on to say that "they made it so expensive... they want these big companies... they squeezed out the majority of people and said, 'Okay, only corporate people are going to be distributors and only corporate people are going to own the retail.'"²⁶³ This sentiment is echoed by another interviewee who notes that "what happened a few years ago is being refined... 3 years from now, big tobacco and big alcohol are going to come in and just pick over the carcasses. And we're going to have 3 major players."²⁶⁴

The regulatory burden appears particularly challenging for smaller operators. One interviewee described how "if I'm going to do a 10,000 square foot grow, it's going to cost me pretty much the same as a six-acre grow in terms of permitting."²⁶⁵ This creates inherent advantages for larger operations that can distribute compliance costs over greater production volumes.

Several interviewees point to what they perceive as predatory market dynamics. One operator described how larger companies are "operating at losses" deliberately, using "predatory market-grabbing practice[s]" learned from other industries: "if you want to be the biggest, if you want to outsell, cut price, sell cheaper."²⁶⁶

The perceived consolidation pressure extends to social equity programs as well. One operator stated, "big corporations... have burned money... but that wasn't the intent. I remember we had medical patients... we were helping people."²⁶⁷ Another suggested that even social equity programs are "a setup for people to fail" that ultimately benefits larger operators, "big corporations that have a lot of the capital behind them are failing and now you're putting the social equity applicant for them to

²⁶² Participant ID 68

²⁶³ Participant ID 33

²⁶⁴ Participant ID 47

²⁶⁵ Participant ID 24

²⁶⁶ Participant ID 63

²⁶⁷ Participant ID 32

fail, but to obtain a license where the corporation can go take over, becomes a corporate takeover."²⁶⁸

These interviewees view the State's approach as fundamentally transforming the industry from its medical cannabis roots of "Mom and Pops back in 2006 into one dominated by corporate interests. As one operator summarized, "if you don't have sophisticated shelf space where you can control your cultivation and prices, you're just going to get... We're going to see a big shakeout this year, 2023. I thought 2022 was bad. 2023 is going to be brutal. There will be a lot of folks leaving the industry and giving up."

²⁶⁸ Participant ID 32

GEOSPATIAL MAPPING

The geographic distribution of cannabis licenses in California reveals several notable patterns that reflect broader socioeconomic and demographic trends. Across multiple maps, a consistent correlation emerges between license concentrations and indicators of economic prosperity. Counties with higher median household incomes and lower Social Vulnerability Index (SVI) scores generally exhibit a greater number of cannabis licenses. This trend is particularly evident in wealthier regions such as the Bay Area, Central Coast, and Southern California. However, exceptions such as Humboldt County and Los Angeles County demonstrate that this relationship is not universal, emphasizing the importance of considering local context when interpreting these patterns.

Racial and ethnic demographic patterns suggest differences in how cannabis licenses are distributed across communities; however, these observations are not intended to imply causation. Maps analyzing these factors suggest that counties with a higher proportion of non-Hispanic White residents tend to have more cannabis licenses, while more racially diverse counties often have fewer. Los Angeles, again, stands out as an exception, having both a high level of diversity and a substantial concentration of licenses. While these patterns suggest disparities in access to cannabis business opportunities across demographic lines, the data do not support causal conclusions and should be interpreted as correlational.

Despite the establishment of social equity programs in various California jurisdictions, only a small number of cities and counties had issued equity licenses as of July 2022. Specifically, only 2 counties (Humboldt and San Francisco), along with 6 cities (including Los Angeles, Oakland, and Sacramento) had awarded licenses under these programs. This points to a gap between policy creation and implementation.

The legal framework governing cannabis in California is also highly fragmented. Map 10, Legal Landscape, illustrates the inconsistencies in licensing policies, with some counties prohibiting all cannabis activity while individual cities within those counties permit it—and vice versa. In some instances, neighboring counties may have significantly different cannabis policies. This regulatory patchwork creates confusion for businesses and consumers alike, particularly in central and inland regions of the state, and poses challenges for equitable and consistent cannabis market development.

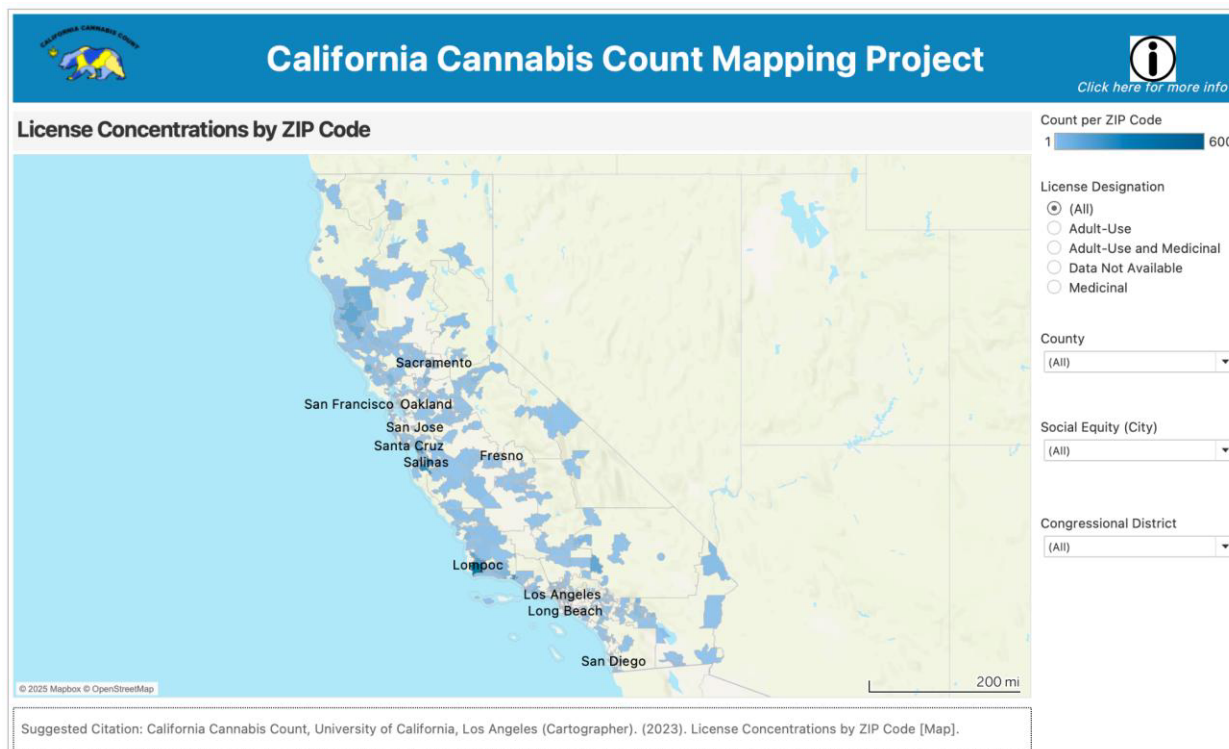
Again, it is important to note that the relationships highlighted in this analysis are correlational, not causal. The observed associations between license concentrations

and demographic, economic, and social factors do not imply direct cause-and-effect relationships. Rather, they offer insights into spatial patterns and potential inequities in the distribution of cannabis licenses across California. These findings should be interpreted with caution and in context, with further research needed to understand the underlying factors shaping cannabis market dynamics in the state.²⁶⁹

²⁶⁹ Census Reporter, "Median Household Income in the Past 12 Months (In 2021 Inflation-Adjusted Dollars) ACS 5-Year Estimates [Table B19013]" (2017-2021), <https://censusreporter.org/data/table/?table=B19013>; Centers for Disease Control and Prevention/Agency for Toxic Substances and Disease Registry (CDC, ATSDR), "CDC/ATSDR Social Vulnerability Index, Database California Counties," (2020), https://www.atsdr.cdc.gov/placeandhealth/svi/data_documentation_download.html; California's Governor's Office of Business and Economic Development (GO Biz), "Cannabis Equity Grants Program for Local Jurisdictions Annual Report to the Legislature" (July 2022), <https://business.ca.gov/wp-content/uploads/CEG-Progam-Annual-Report-2022.pdf>; Department of Cannabis Control (DCC), "Where Cannabis Businesses Are Allowed" (updated February 2023), <https://cannabis.ca.gov/cannabis-laws/where-cannabis-businesses-are-allowed>; U.S. Census Bureau, "TIGER/Line Shapefile, 2016, State, California, Current Place State Based" (updated January 15, 2021), <https://catalog.data.gov/dataset/tiger-line-shapefile-2016-state-california-current-place-state-based>.

Maps

Map 1: License Concentrations by Zip Code



Map 1 highlights the concentration of licenses in zip codes located in major cities across the Bay Area, Central Coast, and Southern California. The highest concentration appears around Lompoc, though a range of other zip codes are also represented.

Map 2: License Concentrations by City



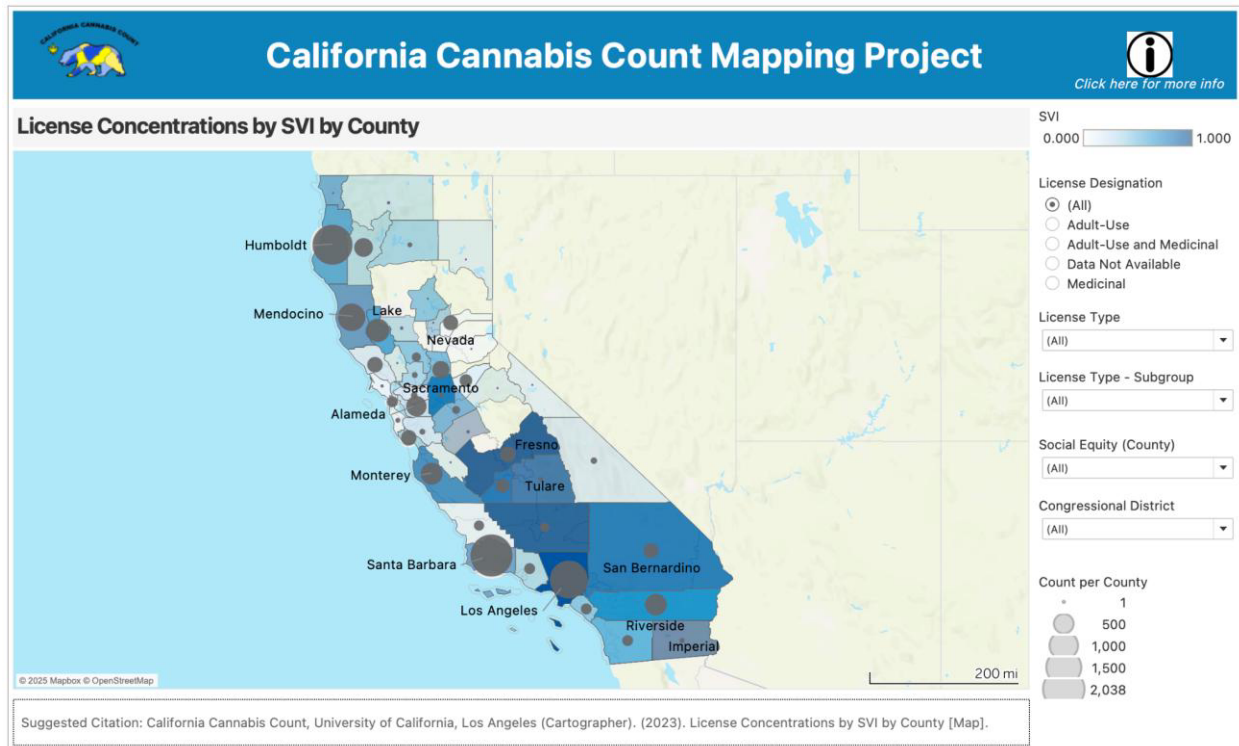
Map 2 shows that cities in the Bay Area and Southern California have the highest concentrations of cannabis licenses in California, which aligns with regional demographic and income patterns.

Map 3: Retail License Concentrations by Zip Code



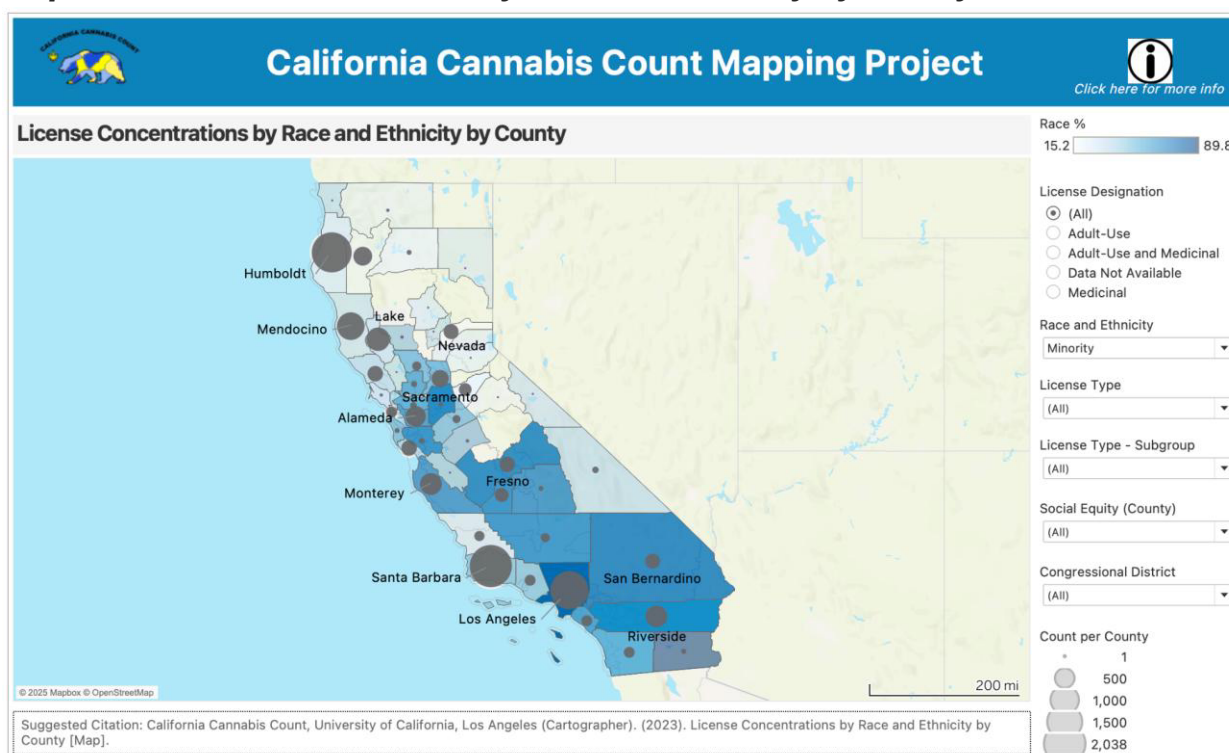
Map 3 indicates that cannabis retail licenses are primarily located in larger cities such as Oakland, San Francisco, and Los Angeles. This distribution aligns with factors such as higher population density, higher median incomes, and local regulations that permit cannabis retail-related activities.

Map 4: License Concentrations by SVI by County

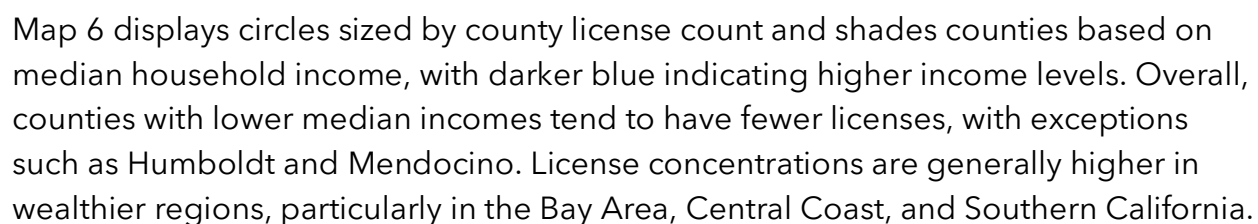


Map 4 displays circles sized by county license count and shades counties according to the Social Vulnerability Index (SVI). Darker blue indicates higher social vulnerability, meaning communities may be more impacted by external stressors. Overall, the map illustrates the nuanced relationship between license concentration and social vulnerability: while some counties with higher SVI scores have fewer licenses and some with lower SVI scores have more, this pattern is not consistent across the state.

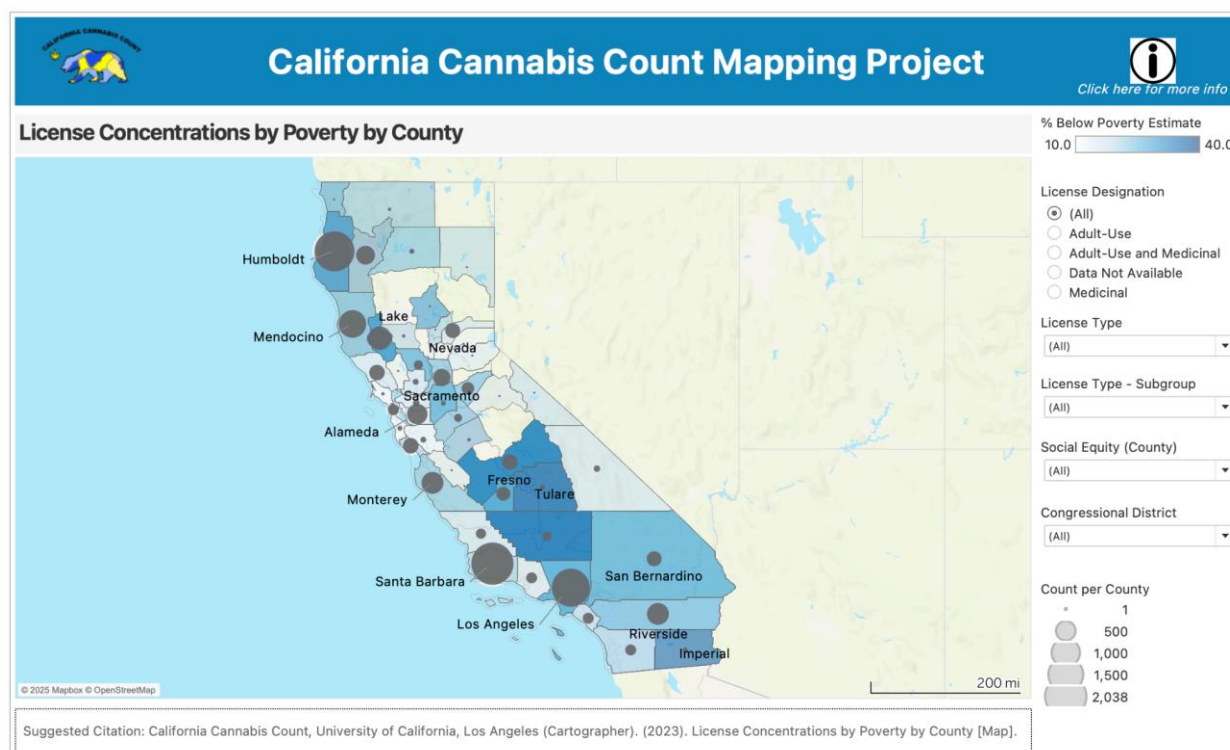
Map 5: License Concentrations by Race and Ethnicity by County



Map 5 presents circles scaled by county license count and shades counties based on the percentage of minority populations (excluding non-Hispanic White residents). Darker blue indicates a higher percentage of non-Hispanic White residents. Overall, counties with a higher share of non-Hispanic White residents tend to have fewer licenses, with Los Angeles as a notable exception. Northern California areas with a high concentration of cultivation licenses generally have smaller minority populations, while more diverse counties such as San Bernardino and Riverside have fewer licenses compared to less diverse counties like Santa Barbara.



Map 7: License Concentrations by Poverty by County



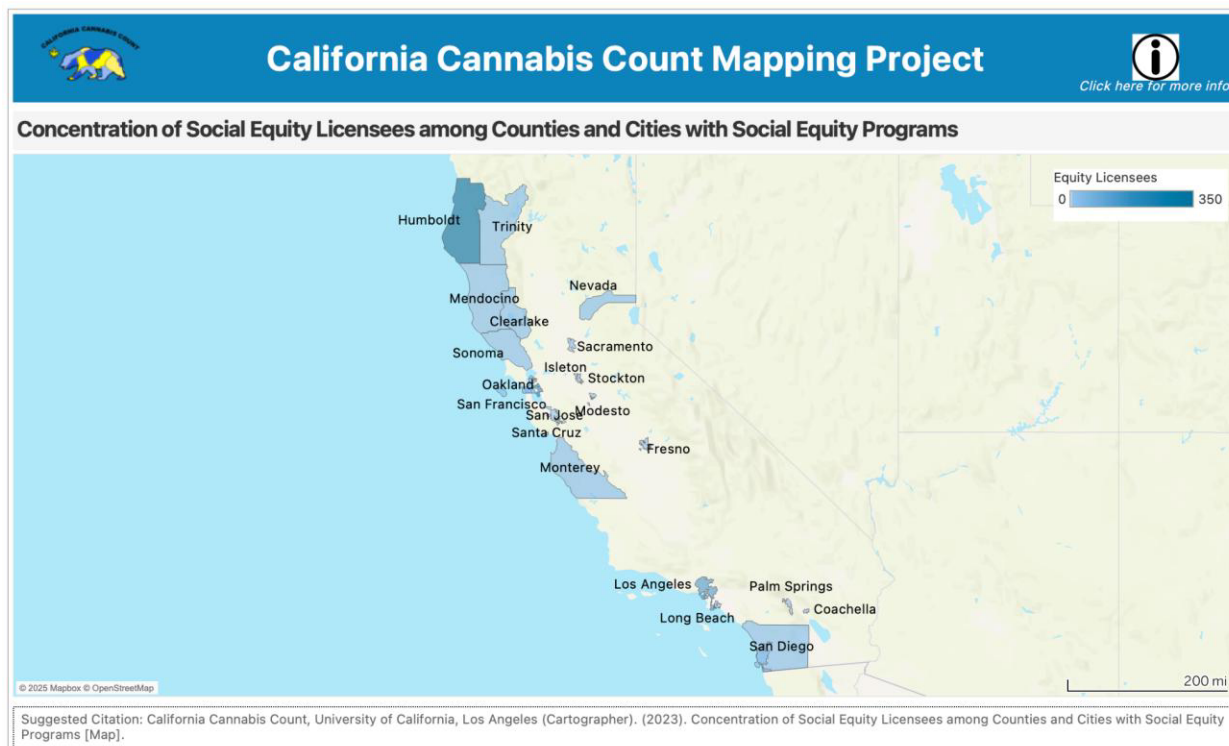
Map 7 features circles sized by county license count and shades counties based on the percentage of residents living below 150% of the federal poverty level. Darker blue indicates a higher level of poverty. Similar to previous patterns, and excluding cultivation-heavy counties in Northern California, licenses tend to be more concentrated in counties with lower poverty rates.

Map 8: Counties and Cities with Social Equity Programs



Map 8 shows that as of July 2022, only a limited number of counties and cities had implemented social equity programs. As seen in previous maps, these jurisdictions also tend to have high concentrations of cannabis licenses and are typically located in cultivation-focused, densely populated, or more affluent areas.

Map 9: Concentration of Social Equity Licenses among Counties and Cities with Social Equity Programs



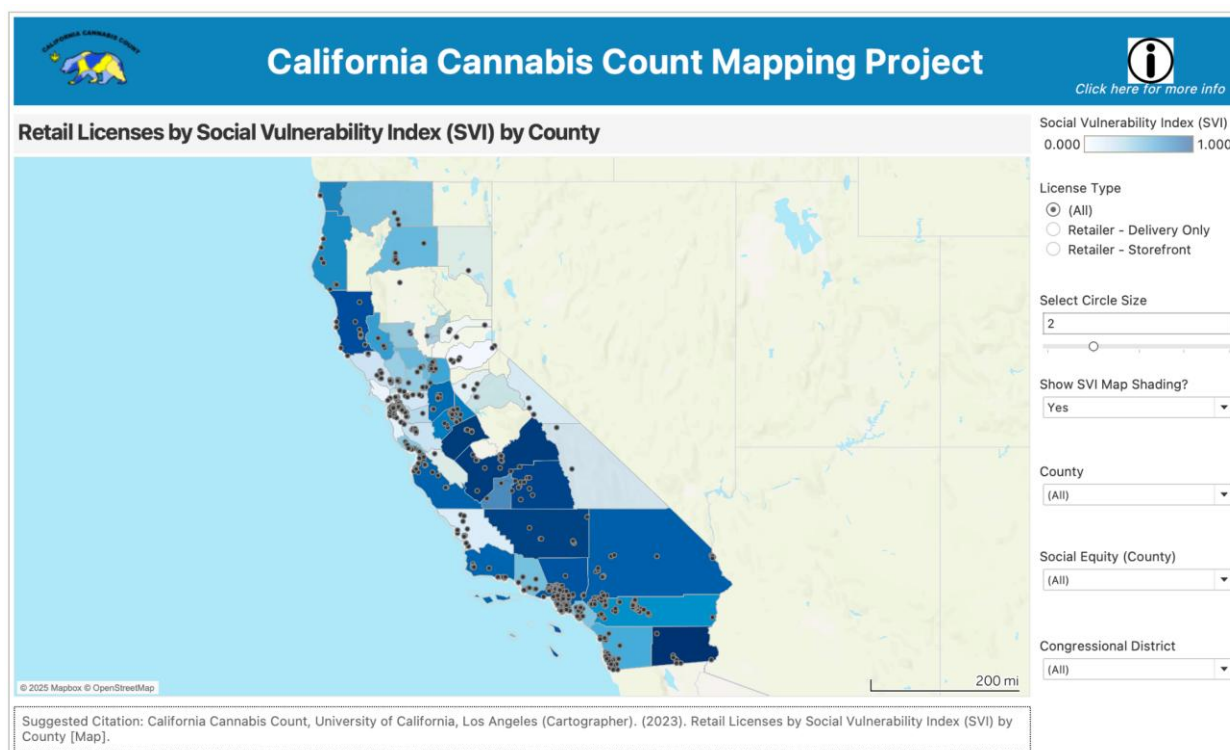
Map 9 illustrates that while several counties had established social equity programs by July 2022, most had not yet issued equity licenses. At that time, the only counties to have distributed equity licenses were Humboldt and San Francisco. The only cities to do so were Coachella, Long Beach, Los Angeles, Oakland, Palm Springs, and Sacramento.

Map 10: Legal Landscape



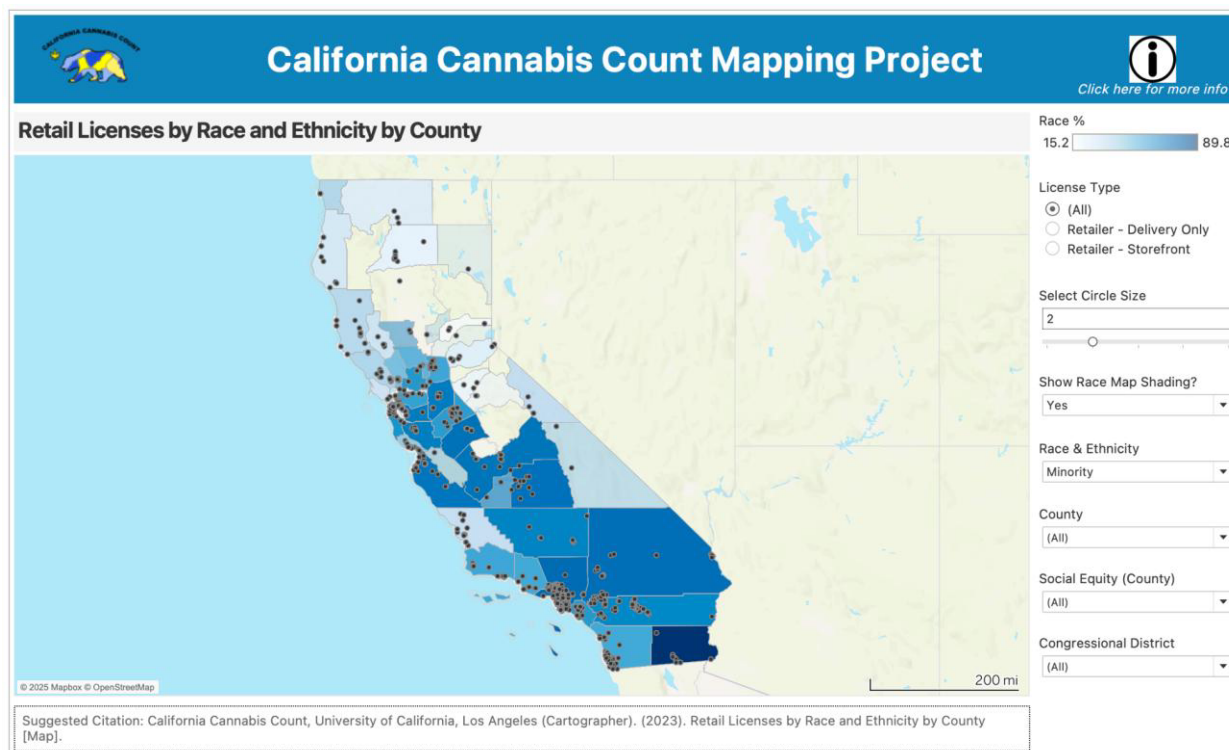
Map 10 illustrates which counties and cities permitted some form of licensed cannabis activity (blue) and which prohibited all cannabis business licenses (gold) as of February 2023. Many counties in Central California and the Inland region had full prohibitions in place, though certain cities within those counties allowed cannabis businesses. This created a fragmented and often confusing regulatory landscape for operators.

Map 11: Retail Licenses by Social Vulnerability Index (SVI) by County



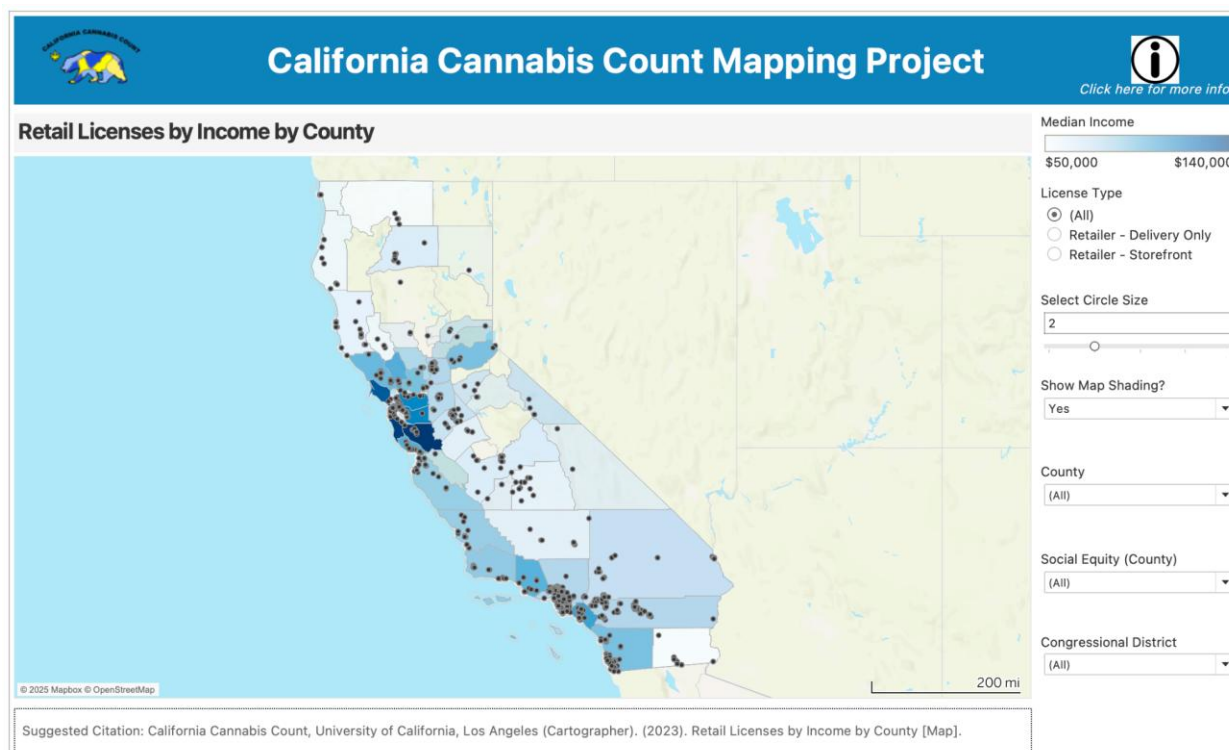
Map 11 displays the distribution of retail licenses (represented by circles) and shades counties according to the Social Vulnerability Index (SVI), with darker blue indicating higher vulnerability. Overall, retail licenses tend to be more concentrated in counties with lower SVI scores, though there are a few notable exceptions.

Map 12: Retail Licenses by Race and Ethnicity by County



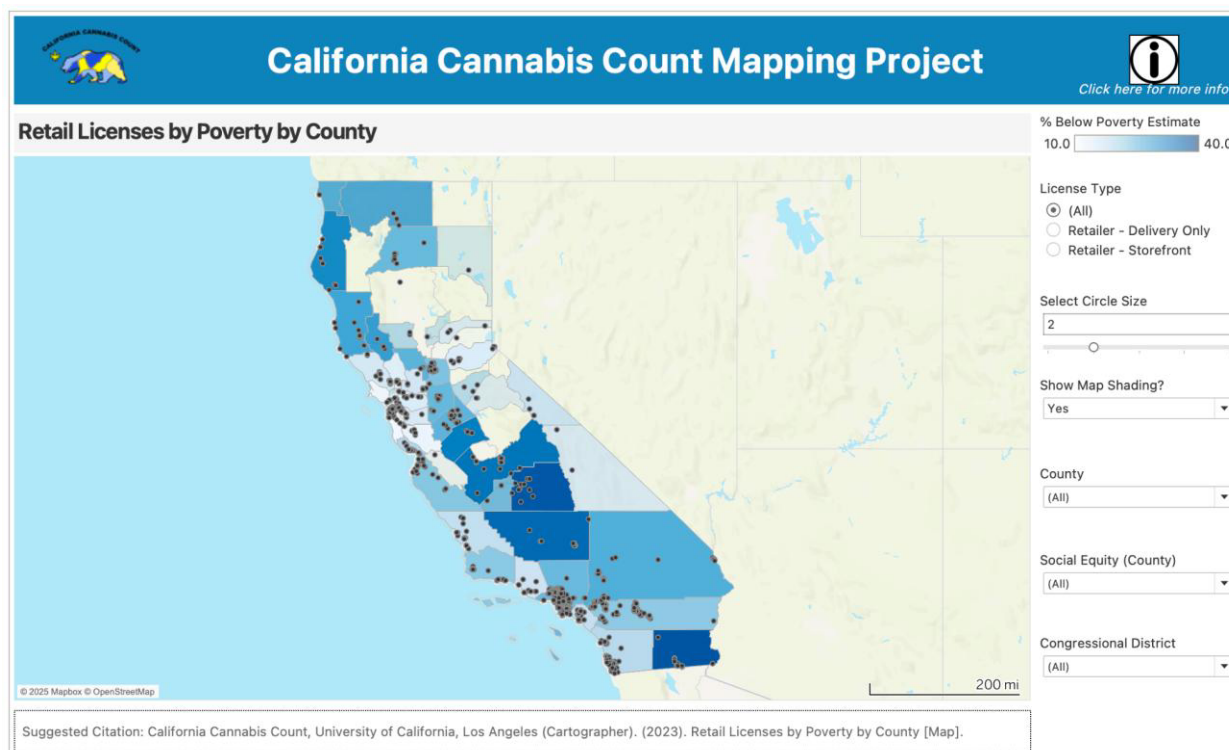
Map 12 reinforces several previously observed patterns, including a correlation between less diverse areas and a higher number of retail license locations. However, there are also counties with a high percentage of minority (non-Hispanic White) populations that have a substantial number of retail licenses.

Map 13: Retail Licenses by Income by County



Map 13 shows the distribution of retail license locations and shades counties based on median household income (as of 2021), with darker blue indicating higher income levels. The map highlights a clear relationship between the number of retail license locations and county-level affluence, particularly in the Bay Area, Central Coast, and Southern California.

Map 14: Retail License by Poverty by County



Map 14 shows the distribution of retail license locations and shades counties based on the percentage of residents living below 150% of the federal poverty level. Darker blue indicates a higher level of poverty. While there are a few exceptions, areas with higher poverty levels generally have fewer retail licenses.

POLICY RECOMMENDATIONS

Findings from this study highlight a wide range of factors that are hindering the success and social equity of the licensed cannabis industry in California. In particular, the results of these surveys and interviews portray a passionate, resourceful, and weary community of license-holders and operators, many of whom who are fighting to stay afloat in an arduous and ever-evolving regulatory environment. Effective policy reforms are needed to stabilize and support this struggling industry.

Policy recommendations and associated activities for consideration are provided below and in the following pages. In the interest of presenting varied policy approaches, complementary or competing strategies are included where applicable.

1. Reform Local Regulatory Processes

- a. **Standardize local licensing requirements:** Create a uniform statewide framework for cannabis licensing with baseline standards and deadlines to reduce jurisdictional disparities.
- b. **Mandate transparency in local licensing:** Require cities and counties to publish clear criteria, timelines, and public dashboards for application processing, in plain English on their websites. Designate specific staff to answer emails and calls regarding licensing requirements.
- c. **Eliminate double fees** (one fee for application renewal, another fee for annual licensing).
- d. **Implement State oversight of local processes:** Establish a DCC-led or independent oversight body to investigate complaints of unfair practices, misconduct, or unreasonable delays at the local level.
- e. **Enhance transparency and establish baseline uniform standards for selecting consultants** tasked with reviewing cannabis license applications in competitive processes across municipalities. This includes implementing open and publicized selection criteria, standardized qualifications, and conflict of interest disclosures to ensure fairness, accountability, and consistency statewide.

2. Streamline State-Local Coordination

- a. **Mandate interagency coordination protocols:** Require regular coordination between the California Department of Cannabis Control, California Department of Fish and Wildlife, California State Water

Resources Control Board, and local jurisdictions to align compliance standards and application reviews.

- b. **Enforce use of state funds:** Condition local grant disbursements on performance benchmarks, including timely licensing and equitable distribution of support.

3. Address Financial and Capital Access Barriers

- a. **Establish a California State cannabis bank or lending program** to provide low-interest loans and basic financial services to licensed and equity cannabis operators.
- b. **Incentivize banks to normalize cannabis business accounts** by charging the same fees that they do to other businesses and end disparities in account fees.
- c. **Offer basic financial services classes** for licensed cannabis operators.
- d. **Offer licensing fee reductions for small and equity operators:** Pro-rate fees based on company revenue or square footage to reduce barriers for entry and sustainability.

4. Stabilize and Reform the Regulatory Environment

- a. **Institute a regulatory moratorium period:** Freeze major new rules for a defined period (e.g., 3 years) to allow businesses to stabilize.
- b. **Mandate Economic Impact Statements for new rules:** Require agencies to assess and publish the financial impact of new regulations on small businesses and equity applicants.
- c. **Create an appeals mechanism and independent review panel:** Provide due process when regulatory decisions or delays.
- d. **Establish a Cannabis Arbitration Panel** composed of cannabis lawyers to mediate business disputes.

5. Reform Taxation to Support Market Viability

- a. **Lower and restructure cannabis taxes:** Consider a flat excise tax split between the state and local jurisdiction or remove local stacking taxes. Limit local taxes no more than 5%.
- b. **Align taxes with product type and intended use:** Offer reduced or zero tax rates for medical cannabis and compassionate use products.

- c. **Provide tax credits or rebates for compliance costs:** Offset licensing, METRC, and environmental compliance costs through targeted tax credits.

6. Improve Social Equity Program Implementation

- a. **Create a state level social equity program beyond fee waivers.**
- b. **Fund wraparound services at the beginning of the licensing process:** Require jurisdictions to provide education, legal support, bookkeeping, and technical assistance as conditions of receiving equity funding. Participants must complete mandatory training for funding.
- c. **Mandate minimum grant amounts based on license type:** Ensure grant funding aligns with real capital requirements (e.g., \$100K+ for retail/cultivation).
- d. **Strengthen anti-predatory provisions:** Require enforceable ownership retention standards and profit-sharing protections for equity applicants.
- e. **Void contract provisions that include predatory language:** Predatory clauses or language should be excluded or deemed unenforceable in contracts. Enable exit strategies for social equity operators when investors do not perform according to the contract.
- f. **Establish a Social Equity Services Division** that includes an arbitration panel to hear social equity disputes and issues.
- g. **Authorize State investigations of municipal cannabis programs,** particularly social equity initiatives. Implement State takeover mechanisms for jurisdictions failing to effectively manage cannabis licensing or social equity programs. Establish direct state application processes for social equity programs when local administration proves inadequate.

7. Overhaul Track-and-Trace Systems (METRC)

- a. **Examine other seed-to-sale platforms** that are user friendly, reliable, and cost effective. Implement yearly evaluation of track-and-trace vendors to ensure they are accountable to operators' feedback.
- b. **Adopt a tiered compliance model:** Exempt or modify METRC requirements for low-output operators (e.g., <5,000 sq ft canopy).
- c. **Mandate sustainable tagging practices:** Replace RFID tags with biodegradable or digital alternatives. Reduce waste storage requirements.

- d. **Upgrade software integration and customer support:** Require METRC to improve software interoperability and provide dedicated support staff for small operators.
- e. **Mandate that METRC deliver comprehensive reports,** including quantitative impacted assessments on affected businesses, for every system outage or offline instance. Establish standardized reporting categories: system failures, hardware issues, demand overload, other factors. Use data to inform future system requirements and vendor accountability measures.
- f. **Improve data accessibility and transparency** by providing public access through METRC dashboards of aggregate data for pricing trends and market analysis. Develop regular market reporting based on track-and-trace data. Ensure data availability to all industry participants to promote informed decision-making. Implement yearly evaluation of Track-and-Trace vendor and ensure the vendor is accountable to operators' feedback.

8. Expand and Protect Medical Cannabis Access

- a. **Simplify SB 34 implementation:** Allow operators to donate directly to qualified patients with streamlined documentation and reduced burdens.
- b. **Reinstate medical-specific license types and product channels:** Offer product exemptions for low-THC or full-spectrum formulations geared toward medical use.
- c. **Incentivize Compassionate Care Programs:** Provide tax relief or grant reimbursements for operators who donate to qualified medical patients.

9. Prioritize Illicit Operation Suppression and Support Licensed Operators

- a. **Phase in regulations gradually** to allow businesses time to adapt and comply without devastating financial impact.
- b. **Develop transition programs** for unlicensed operators to become licensed operators with clear pathways, affidavit processes, and support mechanisms
- c. **Focus enforcement efforts on unlicensed operators** rather than over-regulating compliant businesses.
- d. **Create off-ramps and amnesty programs** for unlicensed operators seeking to enter the legal market.
- e. **Establish a compliance task force** including community stakeholders to shutdown unlicensed operations.

- f. **Identify, notify, and track landlords who are leasing to unlicensed cannabis operators.** Fine landlords who do not remove unlicensed tenants.

10. Strengthen Laboratory Testing Standards and Enforcement

- a. **Establish clear regulations for license revocation** of labs providing false results or engaging in potency inflation.
- b. **Implement immediate suspension** protocols for labs found to be non-compliant.
- c. **Incentivize investment in sensitive instrumentation** capable of detecting adulterants and providing accurate testing.
- d. **Create mandatory proficiency testing** programs for all licensed laboratories.
- e. **Develop public reporting systems** for lab performance and compliance.

11. Strengthen Oversight of Provisional Licenses and Enforce Municipal Accountability

- a. **Give municipalities clear timelines** for converting provisional to annual licenses. Hold them accountable for delays.
- b. **Enforce use of state funds:** Condition local grant disbursements on performance benchmarks, including timely licensing and equitable distribution of support.
- c. **Maintain equity infrastructure** by ensuring provisional licenses allow social equity operators the same operational opportunities as non-equity operators.
- d. **Demonstrate state commitment to social equity** through continued provisional license support.

12. Incentivize the Licensed Market

- a. **Create incentive structures** to encourage support for social equity businesses.
- b. **Reduce barriers to entry** through legislative and DCC action on local restrictions.
- c. **Eliminate the property requirement for the application stage.** Property requirements only mandated when the applicant wins the license.

13. Address California Environmental Quality Act (CEQA) Compliance Burdens

- a. **Develop cannabis-specific CEQA provisions** that recognize the unique challenges of agricultural conversion.
- b. **Create reasonable modification standards** that don't not require hundreds of thousands in property improvements for minor cultivation operations.
- c. **Establish a dedicated CEQA section** for social equity operators and cannabis licensees.
- d. **Provide technical education** regarding CEQA and its importance.
- e. **Provide financial assistance or fee waivers** for CEQA compliance for small operators.

14. Address Distribution Tax Collection Challenges

- a. **Provide CDTFA assistance for distributors** facing massive tax collection requirements.
- b. **Develop predictive tax models** based on previous year performance to ease cash flow burdens.
- c. **Create payment plan options** for large tax obligations to prevent business closures.

CONCLUSION

The findings of the C³ project point to a legal cannabis system in California that is overly complex, financially burdensome, and deeply fragmented. Despite the State's efforts to legalize and regulate cannabis through legislation such as Proposition 64, the implementation of this framework has created a series of obstacles that have disproportionately impacted small business owners and social equity applicants. The regulatory environment—marked by high taxes, confusing and overlapping jurisdictional mandates, and slow administrative response times—has driven many licensed operators to financial instability or closure. Some have even returned to the unregulated market out of necessity.

Moreover, social equity programs throughout the state have struggled to meet their objectives. Intended to provide restitution to the communities most harmed by the War on Drugs, these programs instead suffer from underfunding, delayed disbursement, excessive bureaucracy, and a lack of technical support. As a result, many equity applicants are left vulnerable to predatory partnerships and fail to establish sustainable operations. Simultaneously, the lack of enforcement against unlicensed businesses continues to erode the competitiveness of the legal market.

To address these challenges, the cannabis regulatory framework in California must be fundamentally restructured. Streamlining regulatory requirements, establishing a single point of compliance oversight, reforming taxation policies, and ensuring direct and timely distribution of equity funds are essential steps toward creating a fair and functional marketplace. Without decisive action, California risks losing the very businesses and communities it aimed to empower, as well as the broader legitimacy and effectiveness of its legal cannabis industry.

APPENDIX A: DEMOGRAPHICS BY RESPONDENT

ID	Region	Social Equity License?	Position in business	Gender Identity	Sexual Orientation	Hispanic / Latino / Spanish?	Race	Income before taxes in 2022
1	North Coast	No	Owner / licensee	Other (please specify):	Other (please specify):	No, not of Hispanic, Latino, or Spanish origin	Some other race (please specify):	\$0 to \$10,000
2	North Coast	Yes	Owner / licensee	Man (cisgender)	Straight / Heterosexual	Yes, of another Hispanic, Latino, or Spanish origin (please specify):	Some other race (please specify):	\$0 to \$10,000
3	North Coast	Yes	Owner / licensee	Woman (cisgender)	Straight / Heterosexual	No, not of Hispanic, Latino, or Spanish origin	White	\$30,001 to \$40,000
4	Los Angeles County	No	Owner / licensee / Manager	Man (cisgender)	Straight / Heterosexual	No, not of Hispanic, Latino, or Spanish origin	Some other race (please specify):	\$90,001 to \$100,000
5	Unknown	Yes	Owner / licensee / Manager	Man (cisgender)	Straight / Heterosexual	No, not of Hispanic, Latino, or Spanish origin	White	\$30,001 to \$40,000
6	North Coast	No	Owner / licensee	Man (cisgender)	Straight / Heterosexual	No, not of Hispanic, Latino, or Spanish origin	White	\$250,001 to \$500,000
7	Los Angeles County	No	Other (please specify):	Man (cisgender)	Straight / Heterosexual	No, not of Hispanic, Latino, or Spanish origin	White	\$60,001 to \$70,000
8	North Coast	No	Owner / licensee	Man (cisgender)	Straight / Heterosexual	No, not of Hispanic, Latino, or Spanish origin	White	\$10,001 to \$20,000
9	San Francisco Bay Area	No	Owner / licensee / Investor / shareholder	Man (cisgender)	Straight / Heterosexual	No, not of Hispanic, Latino, or Spanish origin	White	\$250,001 to \$500,000
10	Superior California	No	Owner / licensee	Man (cisgender)	Straight / Heterosexual	No, not of Hispanic, Latino, or Spanish origin	White	\$100,001 to \$250,000

ID	Region	Social Equity License?	Position in business	Gender Identity	Sexual Orientation	Hispanic / Latino / Spanish?	Race	Income before taxes in 2022
11	North Coast	No	Owner / licensee	Man (cisgender)	Straight / Heterosexual	No, not of Hispanic, Latino, or Spanish origin	White	60,001 to \$70,000
12	Central Coast	No	Owner / licensee / Investor / shareholder / Manager	Man (cisgender)	Straight / Heterosexual	Yes, Cuban	Some other race (please specify):	\$90,001 to \$100,000
13	San Francisco Bay Area	No	Owner / licensee / Investor / shareholder / Manager	Man (cisgender)	Straight / Heterosexual	No, not of Hispanic, Latino, or Spanish origin	White	\$100,001 to \$250,000
14	Los Angeles County	Yes	Owner / licensee	Woman (cisgender)	Straight / Heterosexual	No, not of Hispanic, Latino, or Spanish origin	Black or African American	\$40,001 to \$50,000
15	North Coast	No	Owner / licensee	Man (cisgender)	Straight / Heterosexual	No, not of Hispanic, Latino, or Spanish origin	White	\$10,001 to \$20,000
16	North Coast							
17	Los Angeles County	No	Manager	Transman	Queer	No, not of Hispanic, Latino, or Spanish origin	White	\$50,001 to \$60,000
18	North Coast	No	Other (please specify):	Woman (cisgender)	Straight / Heterosexual	No, not of Hispanic, Latino, or Spanish origin	White	\$90,001 to \$100,000
19	Central Coast	Yes	Owner / licensee	Woman (cisgender)	Straight / Heterosexual	No, not of Hispanic, Latino, or Spanish origin	White	\$250,001 to \$500,000
20	Central Coast	No	Owner / licensee / Investor / shareholder / Manager	Man (cisgender)	Straight / Heterosexual	No, not of Hispanic, Latino, or Spanish origin	White	\$100,001 to \$250,000

ID	Region	Social Equity License?	Position in business	Gender Identity	Sexual Orientation	Hispanic / Latino / Spanish?	Race	Income before taxes in 2022
21	San Francisco Bay Area	No	Owner / licensee	Man (cisgender)	Straight / Heterosexual	No, not of Hispanic, Latino, or Spanish origin	Asian	\$20,001 to \$30,000
22	San Francisco Bay Area	Yes	Owner / licensee	Man (cisgender)	Straight / Heterosexual	No, not of Hispanic, Latino, or Spanish origin	Asian	\$80,001 to \$90,000
23	Central Coast	No	Owner / licensee / Investor / shareholder	Man (cisgender)	Straight / Heterosexual	No, not of Hispanic, Latino, or Spanish origin	White	\$100,001 to \$250,000
24	Superior California	No	Owner / licensee / Investor / shareholder / Manager	Man (cisgender)	Straight / Heterosexual	No, not of Hispanic, Latino, or Spanish origin	White	\$100,001 to \$250,000
25	North Coast	No	Owner / licensee	Man (cisgender)	Straight / Heterosexual	No, not of Hispanic, Latino, or Spanish origin	White	\$40,001 to \$50,000
26	Inland Empire	No	Manager	Woman (cisgender)	Straight / Heterosexual	Yes, Mexican, Mexican-American, Chicano	White	\$30,001 to \$40,000
27	Inland Empire	No	Owner / licensee	Man (cisgender)	Straight / Heterosexual	No, not of Hispanic, Latino, or Spanish origin	White	\$100,001 to \$250,000
28	Inland Empire	No	Owner / licensee	Man (cisgender)	Straight / Heterosexual	No, not of Hispanic, Latino, or Spanish origin	White	\$250,001 to \$500,000
29	North Coast	Yes	Owner / licensee	Woman (cisgender)	Straight / Heterosexual	No, not of Hispanic, Latino, or Spanish origin	White	60,001 to \$70,000
30	North Coast	No	Owner / licensee	Man (cisgender)	Straight / Heterosexual	No, not of Hispanic, Latino, or Spanish origin	White	\$70,001 to \$80,000
31	Superior California	Yes	Owner / licensee	Man (cisgender)	Straight / Heterosexual	No, not of Hispanic, Latino, or Spanish origin	White	\$90,001 to \$100,000

ID	Region	Social Equity License?	Position in business	Gender Identity	Sexual Orientation	Hispanic / Latino / Spanish?	Race	Income before taxes in 2022
32	Central Coast	No	Owner / licensee	Man (cisgender)	Straight / Heterosexual	Yes, Mexican, Mexican-American, Chicano	White	\$50,001 to \$60,000
33	San Francisco Bay Area	Yes	Owner / licensee / Manager	Man (cisgender)	Straight / Heterosexual	No, not of Hispanic, Latino, or Spanish origin	American Indian or Alaska Native / Black or African American	\$100,001 to \$250,000
34	Superior California	Yes	Owner / licensee	Woman (cisgender)	Straight / Heterosexual	No, not of Hispanic, Latino, or Spanish origin	Black or African American	\$50,001 to \$60,000
35	San Francisco Bay Area	No	Owner / licensee	Man (cisgender)	Straight / Heterosexual	No, not of Hispanic, Latino, or Spanish origin	White	\$0 to \$10,000
36	Los Angeles County	No	Owner / licensee	Man (cisgender)	Straight / Heterosexual	No, not of Hispanic, Latino, or Spanish origin	Some other race (please specify):	\$60,001 to \$70,000
37	San Francisco Bay Area							
38	North Coast	No	Owner / licensee	Man (cisgender)	Straight / Heterosexual	No, not of Hispanic, Latino, or Spanish origin	White	\$0 to \$10,000
39	Superior California	No	Owner / licensee	Man (cisgender)	Straight / Heterosexual	No, not of Hispanic, Latino, or Spanish origin	White	\$50,001 to \$60,000
40	San Francisco Bay Area	No	Manager	Prefer not to respond	Prefer not to respond	No, not of Hispanic, Latino, or Spanish origin	Some other race (please specify):	\$70,001 to \$80,000

ID	Region	Social Equity License?	Position in business	Gender Identity	Sexual Orientation	Hispanic / Latino / Spanish?	Race	Income before taxes in 2022
41	Los Angeles County	Yes	Owner / licensee	Nonbinary / nonconforming	Queer	Yes, of another Hispanic, Latino, or Spanish origin (please specify):	White / Some other race (please specify):	\$20,001 to \$30,000
42	Superior California	No	Owner / licensee / Manager	Man (cisgender)	Straight / Heterosexual	No, not of Hispanic, Latino, or Spanish origin	White	\$0 to \$10,000
43	Orange County	Yes	Owner / licensee	Man (cisgender)	Queer	Yes, Mexican, Mexican-American, Chicano	White	\$30,001 to \$40,000
44	Unknown	No	Other (please specify):	Man (cisgender)	Straight / Heterosexual	No, not of Hispanic, Latino, or Spanish origin	White	\$100,001 to \$250,000
45	San Francisco Bay Area	No	Owner / licensee	Man (cisgender)	Straight / Heterosexual	No, not of Hispanic, Latino, or Spanish origin	Some other race (please specify):	\$20,001 to \$30,000
46	San Francisco Bay Area	Yes	Owner / licensee	Man (cisgender)	Straight / Heterosexual	No, not of Hispanic, Latino, or Spanish origin	White	\$10,001 to \$20,000
47	North Coast	No	Owner / licensee	Man (cisgender)	Straight / Heterosexual	No, not of Hispanic, Latino, or Spanish origin	White	\$40,001 to \$50,000
48	San Francisco Bay Area	No	Owner / licensee / Manager	Woman (cisgender)	Straight / Heterosexual	No, not of Hispanic, Latino, or Spanish origin	White	\$20,001 to \$30,000
49	Central Coast	No	Owner / licensee	Woman (cisgender)	Bisexual	No, not of Hispanic, Latino, or Spanish origin	Asian	\$50,001 to \$60,000
50	San Francisco Bay Area	No	Owner / licensee / Investor / shareholder / Manager / Other (please specify):	Man (cisgender)	Straight / Heterosexual	No, not of Hispanic, Latino, or Spanish origin	White	\$0 to \$10,000

ID	Region	Social Equity License?	Position in business	Gender Identity	Sexual Orientation	Hispanic / Latino / Spanish?	Race	Income before taxes in 2022
51	Los Angeles County	Yes	Owner / licensee	Man (cisgender)	Straight / Heterosexual	No, not of Hispanic, Latino, or Spanish origin	White	\$50,001 to \$60,000
52	North Coast	No	Owner / licensee	Woman (cisgender)	Straight / Heterosexual	No, not of Hispanic, Latino, or Spanish origin	Asian	\$30,001 to \$40,000
53	Superior California	No	Owner / licensee	Prefer not to respond	Straight / Heterosexual	No, not of Hispanic, Latino, or Spanish origin	White	\$100,001 to \$250,000
54	San Joaquin Valley	No	Owner / licensee	Man (cisgender)	Straight / Heterosexual	No, not of Hispanic, Latino, or Spanish origin	White	\$10,001 to \$20,000
55	Central Coast	No	Owner / licensee / Investor / shareholder	Man (cisgender)	Straight / Heterosexual	Yes, of another Hispanic, Latino, or Spanish origin (please specify):	White	\$0 to \$10,000
56	Central Coast	No	Manager	Woman (cisgender)	Straight / Heterosexual	No, not of Hispanic, Latino, or Spanish origin	American Indian or Alaska Native / White	\$90,001 to \$100,000
57	Unknown	Yes	Owner / licensee	Woman (cisgender)	Straight / Heterosexual	No, not of Hispanic, Latino, or Spanish origin	White	\$100,001 to \$250,000
58	North Coast	No	Owner / licensee / Manager	Woman (cisgender)	Straight / Heterosexual	No, not of Hispanic, Latino, or Spanish origin	White	\$50,001 to \$60,000
59	Central Coast	No	Owner / licensee / Investor / shareholder	Man (cisgender)	Straight / Heterosexual	No, not of Hispanic, Latino, or Spanish origin	White	\$30,001 to \$40,000
60	San Francisco Bay Area	No	Other (please specify):	Woman (cisgender)	Queer	No, not of Hispanic, Latino, or Spanish origin	White	\$100,001 to \$250,000

ID	Region	Social Equity License?	Position in business	Gender Identity	Sexual Orientation	Hispanic / Latino / Spanish?	Race	Income before taxes in 2022
61	Orange County	No	Owner / licensee	Woman (cisgender)	Straight / Heterosexual	No, not of Hispanic, Latino, or Spanish origin	White	\$100,001 to \$250,000
62	North Coast	No	Owner / licensee	Man (cisgender)	Straight / Heterosexual	No, not of Hispanic, Latino, or Spanish origin	White	\$250,001 to \$500,000
63	Los Angeles County	No	Owner / licensee	Man (cisgender)	Straight / Heterosexual	No, not of Hispanic, Latino, or Spanish origin	White	\$250,001 to \$500,000
64	San Francisco Bay Area	No	Owner / licensee / Manager	Man (cisgender)	Straight / Heterosexual	No, not of Hispanic, Latino, or Spanish origin	Some other race (please specify):	\$500,001 or more
65	Central Coast	No	Manager	Man (cisgender)	Straight / Heterosexual	No, not of Hispanic, Latino, or Spanish origin	Asian	\$100,001 to \$250,000
66	North Coast	No	Owner / licensee	Man (cisgender)	Straight / Heterosexual	No, not of Hispanic, Latino, or Spanish origin	White	\$30,001 to \$40,000
67	North Coast	No	Owner / licensee / Investor / shareholder / Manager	Man (cisgender)	Straight / Heterosexual	No, not of Hispanic, Latino, or Spanish origin	White	\$70,001 to \$80,000
68	San Francisco Bay Area	No	Owner / licensee	Man (cisgender)	Straight / Heterosexual	No, not of Hispanic, Latino, or Spanish origin	White	\$0 to \$10,000
69	Los Angeles County	No	Manager	Man (cisgender)	Straight / Heterosexual	No, not of Hispanic, Latino, or Spanish origin	White	\$100,001 to \$250,000
70	San Francisco Bay Area	No	Owner / licensee	Man (cisgender)	Straight / Heterosexual	No, not of Hispanic, Latino, or Spanish origin	White	\$20,001 to \$30,000
71	San Francisco Bay Area	No	Owner / licensee	Man (cisgender)	Straight / Heterosexual	No, not of Hispanic, Latino, or Spanish origin	Asian	\$100,001 to \$250,000

ID	Region	Social Equity License?	Position in business	Gender Identity	Sexual Orientation	Hispanic / Latino / Spanish?	Race	Income before taxes in 2022
72	North Coast	No	Owner / licensee	Man (cisgender)	Straight / Heterosexual	No, not of Hispanic, Latino, or Spanish origin	Asian	\$500,001 or more
73	Los Angeles County	No	Manager	Woman (cisgender)	Straight / Heterosexual	Yes, Mexican, Mexican-American, Chicano	American Indian or Alaska Native	\$100,001 to \$250,000
74	Superior California	Yes	Owner / licensee / Investor / shareholder / Manager	Man (cisgender)	Straight / Heterosexual	Yes, of another Hispanic, Latino, or Spanish origin (please specify):	Some other race (please specify):	\$30,001 to \$40,000
75	San Francisco Bay Area	No	Manager	Woman (cisgender)	Straight / Heterosexual	No, not of Hispanic, Latino, or Spanish origin	White	\$80,001 to \$90,000
76	San Francisco Bay Area							
77	North Coast	No	Owner / licensee / Investor / shareholder / Manager	Man (cisgender)	Straight / Heterosexual	No, not of Hispanic, Latino, or Spanish origin	White	\$100,001 to \$250,000
78	Los Angeles County	Yes	Owner / licensee	Man (cisgender)	Straight / Heterosexual	Yes, Mexican, Mexican-American, Chicano	Some other race (please specify):	\$30,001 to \$40,000
79	San Francisco Bay Area	No	Owner / licensee	Woman (cisgender)	Straight / Heterosexual	No, not of Hispanic, Latino, or Spanish origin	White	\$100,001 to \$250,000
80	Unknown	Yes	Owner / licensee	Man (cisgender)	Straight / Heterosexual	No, not of Hispanic, Latino, or Spanish origin	Black or African American	\$0 to \$10,000

APPENDIX B: LICENSE AND BUSINESS CHARACTERISTICS BY RESPONDENT

ID	License Status	License Class	Business Characteristics	Vertically Integrated ?	Gross Sales	Net Profits / Losses
1	Active - Annual	Manufacturing	A standalone operation	No	\$50,001 to \$100,000	Losses of \$100,000 or more
2	Active - Provisional	Distribution (distributor)	Part of a multi-license operation in multiple jurisdictions in California	Yes	\$2.5 million to \$5.0 million	Losses of \$100,000 or more
3	Active - Provisional	Cultivation	A standalone operation	No	\$1 to \$50,000	Losses of less than \$100,000
4	Active - Provisional	Microbusiness	A standalone operation	Yes	\$10 million and above	Losses of \$100,000 or more
5	Active - Annual	Cultivation	Part of a multi-license operation in this jurisdiction	No	\$50,001 to \$100,000	Break even
6	Active - Annual	Cultivation	Part of a multi-license operation in this jurisdiction	I don't know (please explain):	\$250,001 to \$500,000	Losses of \$100,000 or more
7	Active - Provisional	Cultivation	A standalone operation	No		Break even
8	Active - Annual	Cultivation	A standalone operation	No		Losses of less than \$100,000
9	Active - Annual	Storefront retailer (with on-site consumption)	Part of a multi-license operation in this jurisdiction	Yes	\$10 million and above	Losses of \$100,000 or more
10	Active - Provisional	Distribution (distributor)	Part of a multi-license operation in multiple jurisdictions in California	Yes		Losses of \$100,000 or more

ID	License Status	License Class	Business Characteristics	Vertically Integrated ?	Gross Sales	Net Profits / Losses
11	Active - Annual	Distribution (transport-only distributor)	Part of a multi-license operation in this jurisdiction	No	\$250,001 to \$500,000	Profit of less than \$100,000
12	Active - Provisional	Cultivation	A standalone operation	No	\$5.0 million to \$10.0 million	Losses of less than \$100,000
13	Active - Provisional	Testing laboratory	A standalone operation	No	\$2.5 million to \$5.0 million	Profit of \$100,000 or more
14	Active - Annual	Storefront retailer (without on-site consumption)	A standalone operation	No	\$1 to \$50,000	Losses of \$100,000 or more
15	Active - Provisional	Cultivation	A standalone operation	No	\$1 to \$50,000	Losses of less than \$100,000
16	Other (please specify):					
17	Active - Annual	Cultivation	Part of a multi-license operation in multiple jurisdictions in California	I don't know (please explain):	\$250,001 to \$500,000	Losses of \$100,000 or more
18	Active - Annual	Manufacturing	Part of a multi-license operation in this jurisdiction	Yes	\$2.5 million to \$5.0 million	Losses of \$100,000 or more
19	Active - Provisional	Storefront retailer (without on-site consuming)	A standalone operation	No	\$2.5 million to \$5.0 million	Profit of \$100,000 or more
20	Active - Annual	Manufacturing	Part of a multi-license operation in this jurisdiction	Yes	\$5.0 million to \$10.0 million	Losses of \$100,000 or more
21	Active - Annual	Non-storefront retailer (delivery only)	Part of a multi-license operation in this jurisdiction	Yes	\$1 to \$50,000	Losses of \$100,000 or more
22	Active - Annual	Non-storefront retailer (delivery only)	A standalone operation	No	\$1 million to \$2.5 million	Profit of less than \$100,000

ID	License Status	License Class	Business Characteristics	Vertically Integrated ?	Gross Sales	Net Profits / Losses
23	Active - Provisional	Distribution (distributor)	Part of a multi-license operation in this jurisdiction	Yes	\$2.5 million to \$5.0 million	Profit of \$100,000 or more
24	Active - Annual	Non-storefront retailer (delivery only)	A standalone operation	No	\$250,001 to \$500,000	Break even
25	Active - Annual	Manufacturing	A standalone operation	No	\$250,001 to \$500,000	Losses of less than \$100,000
26	Active - Provisional	Non-storefront retailer (delivery only)	A standalone operation	No	\$100,001 to \$250,000	Break even
27	Active - Annual	Distribution (distributor)	A standalone operation	Yes	\$1 to \$50,000	Losses of \$100,000 or more
28	Active - Annual	Cultivation	Part of a multi-license operation in this jurisdiction	No	\$10 million and above	Profit of \$100,000 or more
29	Active - Annual	Cultivation	A standalone operation	No	\$250,001 to \$500,000	Break even
30	Active - Annual	Distribution (distributor)	Part of a multi-license operation in multiple jurisdictions in California	No	\$5.0 million to \$10.0 million	Profit of \$100,000 or more
31	Active - Annual	Manufacturing	Part of a multi-license operation in this jurisdiction	Yes	\$50,001 to \$100,000	Losses of \$100,000 or more
32	Active - Annual	Non-storefront retailer (delivery only)	A standalone operation	No		Losses of \$100,000 or more
33	Active - Annual	Manufacturing	A standalone operation	No		Losses of less than \$100,000
34	Active - Annual	Non-storefront retailer (delivery only)	A standalone operation	No		Losses of less than \$100,000
35	Active - Annual	Distribution (distributor)	Part of a multi-license operation in this jurisdiction	Yes	\$1 to \$50,000	Losses of \$100,000 or more

ID	License Status	License Class	Business Characteristics	Vertically Integrated ?	Gross Sales	Net Profits / Losses
36	Active - Provisional	Distribution (distributor)	Part of a multi-license operation in this jurisdiction	I don't know (please explain):	\$50,001 to \$100,000	Losses of less than \$100,000
37	Other (please specify):					
38	Active - Provisional	Cultivation	A standalone operation	No	\$100,001 to \$250,000	Losses of less than \$100,000
39	Active - Annual	Manufacturing	A standalone operation	No	\$10 million and above	Profit of less than \$100,000
40	Active - Provisional	Cultivation	Other (please specify):	No	\$1 million to \$2.5 million	Profit of \$100,000 or more
41	Active - Annual	Manufacturing	Part of a multi-license operation in this jurisdiction	No		Losses of \$100,000 or more
42	Active - Annual	Distribution (distributor)	A standalone operation	No	\$500,001 to \$1 million	Break even
43	Active - Annual	Non-storefront retailer (delivery only)	A standalone operation	No	\$5.0 million to \$10.0 million	Break even
44	Active - Annual	Cultivation	Part of a multi-license operation in multiple jurisdictions in California	Yes		Losses of \$100,000 or more
45	Active - Annual	Manufacturing	Part of a multi-license operation in this jurisdiction	No	\$250,001 to \$500,000	Losses of \$100,000 or more
46	Active - Provisional	Microbusiness	A standalone operation	Yes	\$1 to \$50,000	Losses of less than \$100,000
47	Active - Annual	Non-storefront retailer (delivery only)	A standalone operation	No	\$1 million to \$2.5 million	Losses of \$100,000 or more

ID	License Status	License Class	Business Characteristics	Vertically Integrated ?	Gross Sales	Net Profits / Losses
48	Active - Annual	Manufacturing	Part of a multi-license operation in this jurisdiction	Yes	\$1 million to \$2.5 million	Losses of \$100,000 or more
49	Active - Provisional	Manufacturing	Part of a multi-license operation in this jurisdiction	No	\$1 million to \$2.5 million	Losses of \$100,000 or more
50	Active - Annual	Distribution (distributor)	Part of a multi-license operation in this jurisdiction	Yes	\$1 million to \$2.5 million	Losses of \$100,000 or more
51	Active - Annual	Distribution (distributor)	A standalone operation	No	\$250,001 to \$500,000	Break even
52	Active - Annual	Microbusiness	A standalone operation	I don't know (please explain):		Losses of less than \$100,000
53	Active - Provisional	Storefront retailer (with on-site consumption)	Part of a multi-license operation in this jurisdiction	Yes	\$2.5 million to \$5.0 million	Losses of less than \$100,000
54	Active - Provisional	Storefront retailer (without on-site consumption)	A standalone operation	No	\$250,001 to \$500,000	Losses of less than \$100,000
55	Active - Annual	Cultivation	Part of a multi-license operation in this jurisdiction	No	\$10 million and above	Losses of \$100,000 or more
56	Active - Annual	Storefront retailer (with on-site consumption)	A standalone operation	No	\$10 million and above	Profit of \$100,000 or more
57	Active - Annual	Storefront retailer (without on-site consumption)	Part of a multi-license operation in multiple jurisdictions in California	No	\$10 million and above	Profit of \$100,000 or more
58	Active - Annual	Storefront retailer (without on-site consumption)	A standalone operation	No	\$500,001 to \$1 million	Losses of less than \$100,000

ID	License Status	License Class	Business Characteristics	Vertically Integrated ?	Gross Sales	Net Profits / Losses
59	Active - Provisional	Storefront retailer (without on-site consumption)	A standalone operation	I don't know (please explain):	\$500,001 to \$1 million	Losses of \$100,000 or more
60	Active - Provisional	Cultivation	A standalone operation	No	\$1 to \$50,000	Losses of \$100,000 or more
61	Active - Provisional	Manufacturing	Part of a multi-license operation in multiple jurisdictions in California	Yes	\$5.0 million to \$10.0 million	Profit of less than \$100,000
62	Active - Provisional	Storefront retailer (without on-site consumption)	A standalone operation	No	\$10 million and above	Losses of less than \$100,000
63	Active - Annual	Cultivation	Part of a multi-license operation in this jurisdiction	Yes		Losses of \$100,000 or more
64	Active - Annual	Microbusiness	A standalone operation	Yes	\$10 million and above	Profit of \$100,000 or more
65	Active - Provisional	Testing laboratory	A standalone operation	No	\$1 million to \$2.5 million	Losses of \$100,000 or more
66	Active - Provisional	Storefront retailer (without on-site consumption)	A standalone operation	No	\$500,001 to \$1 million	Losses of \$100,000 or more
67	Active - Provisional	Cultivation	A standalone operation	No	\$100,001 to \$250,000	Losses of \$100,000 or more
68	Active - Annual	Distribution (transport-only distributor)	A standalone operation	No	\$1 to \$50,000	Losses of \$100,000 or more
69	Active - Provisional	Distribution (distributor)	Part of a multi-license operation in multiple jurisdictions in California	Yes	\$10 million and above	Profit of \$100,000 or more

ID	License Status	License Class	Business Characteristics	Vertically Integrated ?	Gross Sales	Net Profits / Losses
70	Active - Provisional	Microbusiness	A standalone operation	No	\$100,001 to \$250,000	Losses of less than \$100,000
71	Active - Annual	Storefront retailer (without on-site consumption)	A standalone operation	No	\$50,001 to \$100,000	Profit of less than \$100,000
72	Active - Annual	Storefront retailer (without on-site consumption)	A standalone operation	Yes	\$10 million and above	Profit of \$100,000 or more
73	Active - Provisional	Storefront retailer (without on-site consumption)	A standalone operation	No	\$500,001 to \$1 million	Losses of \$100,000 or more
74	Active - Provisional	Non-storefront retailer (delivery only)	A standalone operation	No	\$100,001 to \$250,000	Losses of \$100,000 or more
75	Active - Annual	Storefront retailer (without on-site consumption)	Part of a multi-license operation in multiple jurisdictions in California	Yes	\$1 million to \$2.5 million	Losses of \$100,000 or more
76	Other (please specify):					
77	Active - Annual	Storefront retailer (without on-site consumption)	Part of a multi-license operation in multiple jurisdictions in California	Yes	\$2.5 million to \$5.0 million	Losses of \$100,000 or more
78	Active - Provisional	Storefront retailer (without on-site consumption)	A standalone operation	No		Losses of \$100,000 or more
79	Active - Annual	Storefront retailer (without on-site consumption)	A standalone operation	No	\$5.0 million to \$10.0 million	Profit of \$100,000 or more
80	Active - Annual	Storefront retailer (without on-site consumption)	A standalone operation	Yes		Break even

APPENDIX C: A NOTE ON RACE

According to the U.S. Census Bureau²⁷⁰:

The U.S. Census Bureau collects race data in accordance with guidelines provided by the U.S. Office of Management and Budget (OMB), and these data are based on self-identification. The racial categories included in the census questionnaire generally reflect a social definition of race recognized in this country and not an attempt to define race biologically, anthropologically, or genetically. In addition, it is recognized that the categories of the race item include racial and national origin or sociocultural groups. People may choose to report more than one race to indicate their racial mixture, such as “American Indian” and “White.” People who identify their origin as Hispanic, Latino, or Spanish may be of any race.

OMB requires five minimum categories (White, Black or African American, American Indian or Alaska Native, Asian, and Native Hawaiian or Other Pacific Islander) for race. OMB permits the Census Bureau to also use a sixth category - Some Other Race.

Respondents may report more than one race.

The concept of race is separate from the concept of Hispanic origin.

- **White:** A person having origins in any of the original peoples of Europe, the Middle East, or North Africa. It includes people who indicate their race as “White” or report responses such as German, Irish, English, Italian, Lebanese, and Egyptian. The category also includes groups such as Polish, French, Iranian, Slavic, Cajun, Chaldean, etc.
- **Black or African American:** A person having origins in any of the Black racial groups of Africa. It includes people who indicate their race as “Black or African American,” or report responses such as African American, Jamaican, Haitian, Nigerian, Ethiopian, or Somali. The category also includes groups such as Ghanaian, South African, Barbadian, Kenyan, Liberian, Bahamian, etc.
- **American Indian and Alaska Native:** A person having origins in any of the original peoples of North and South America (including Central America) and who maintains tribal affiliation or community attachment. This category includes people who indicate their race as “American Indian or Alaska Native” or report entries such as Navajo Nation, Blackfeet Tribe, Mayan, Aztec, Native

²⁷⁰ U.S. Census Bureau, “Race” (Updated Annually),
<https://www.census.gov/quickfacts/fact/note/US/RHI625221>.

Village of Barrow Inupiat Traditional Government, or Nome Eskimo Community.

- **Asian:** A person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent including, for example, India, China, the Philippine Islands, Japan, Korea, or Vietnam. It includes people who indicate their race as "Asian Indian," "Chinese," "Filipino," "Korean," "Japanese," "Vietnamese," and "Other Asian" or provide other detailed Asian responses such as Pakistani, Cambodian, Hmong, Thai, Bengali, Mien, etc.
- **Native Hawaiian and Other Pacific Islander:** A person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands. It includes people who indicate their race as "Native Hawaiian," "Chamorro," "Samoa," and "Other Pacific Islander" or provide other detailed Pacific Islander responses such as Palauan, Tahitian, Chuukese, Pohnpeian, Saipanese, Yapese, etc.
- **Two or more races:** People may choose to provide two or more races either by checking two or more race response check boxes, by providing multiple responses, or by some combination of check boxes and other responses. The race response categories shown on the questionnaire are collapsed into the five minimum race groups identified by OMB, and the Census Bureau's "Some Other Race" category. For data product purposes, "Two or More Races" refers to combinations of two or more of the following race categories: White, Black or African American, American Indian or Alaska Native, Asian, Native Hawaiian or Other Pacific Islander, or Some Other Race."