

State of California
Department of Cannabis Control
California Code of Regulations, Title 4, Division 19
Initial Statement of Reasons:
Multipack Cannabis Goods

INTRODUCTION

The Department of Cannabis Control (“Department”) is responsible for administering and enforcing the provisions of the Medicinal and Adult-Use Cannabis Regulation and Safety Act (“MAUCRSA,” Bus. & Prof. Code § 26000 et seq.). MAUCRSA establishes a comprehensive regulatory structure governing the cultivation, distribution, transport, storage, manufacturing, processing, testing, and sale of medicinal and adult-use cannabis.

PROBLEM STATEMENT

The Department’s existing regulatory scheme limits final-form cannabis goods to a single type of product containing a single harvest batch or a single manufactured cannabis batch. There has been significant interest from licensees indicating a desire to manufacture and sell cannabis goods that contain more than one batch. Additionally, consumers have expressed an interest in being able to purchase cannabis goods that contain more than a single batch within the package, such as edible cannabis products that contain different flavors, vape devices that contain more than one chamber, and packages of pre-rolls made from different strains.

Cannabis goods are required to be tested in their final form, meaning packaged and labeled as they will be sold at retail. There is currently no compliant method for performing regulatory testing on cannabis or cannabis products that contain more than one batch within a single package. As a result, cannabis goods that contain more than one batch are prohibited from being sold.

ANTICIPATED BENEFITS

The proposed regulations will support the legal cannabis market by providing licensees with additional flexibility in the types of cannabis goods they may produce and sell. At the same time, customers will have access to a wider array of cannabis goods that may be more desirable or convenient than the cannabis goods that are currently being sold.

The proposed regulations will ensure that the regulatory laboratory testing requirements currently applied to cannabis goods can also effectively be applied to multipacks.

SPECIFIC PURPOSE OF, AND RATIONALE FOR, EACH PROPOSED CHANGE

Global Amendments

Use of “shall.”

Shall. This word runs afoul of several basic principles of good drafting. The first is that a word used repeatedly in a given context is presumed to bear the same meaning throughout. (Shall commonly shifts its meaning even in mid-sentence.) The second principle is strongly allied with the first: when a word takes on too many senses and cannot be confined to one sense in a given document, it becomes useless to the drafter. (Shall has as many as eight senses in drafted documents.) The third principle has been recognized in the literature on legal drafting since the mid-19th century: good drafting generally ought to be in the present tense, not the future. (Shall is commonly used as a future-tense modal verb.) In fact, the selfsame quality in shall—the fact that it is a chameleon-hued word—causes it to violate each of those principles.

(Garner, *Garner on Language and Writing* (2009) p. 174.)

The Department is removing the word “shall” from its regulations for the reasons described above and to eliminate any potential for misinterpretation due to inconsistent or incautious drafting. These are non-substantive changes under CCR, title 1, section 100(a)(4). In every instance of its usage to indicate or impose a mandatory requirement, “shall” is being replaced with “must.” In every instance of its usage to disallow or prohibit an action, “shall not” is being replaced with “may not.” The meaning of each provision being amended as described is not being altered by the change in verbiage. In other words, existing mandatory provisions are not being made permissive or optional, and existing prohibitions remain in effect.

Chapter 1. All Licensees

Article 1. Division Definitions and General Requirements

Amend § 15000. Definitions.

New subsection (tt) defines the term “multipack.” Multipacks are a new concept and therefore a definition is necessary to ensure clarity as to what constitutes a multipack. Under existing regulatory provisions, the sale of cannabis goods that contain more than one batch¹ is prohibited. The proposed regulations will allow for the sale of cannabis goods that contain more than one batch. The term multipack and the definition provided in the proposed regulation allows for the clear identification of the products that would be subject to the proposed regulations.

Existing subsection (tt) and all subsequent subsections are renumbered accordingly.

¹ “Batch” is defined in Business and Professions Code section 26001(e) and Title 4, CCR, section 15000(f)

Existing subsection (fff), which defines the term “product identity,” is renumbered to subsection (ggg) and amended to provide examples of specific product identities that may be applied to cannabis and cannabis products. This amendment is necessary to provide additional clarity regarding the definition of the term. These specific examples were chosen to provide a clearer understanding of the product types that could be considered the product identity of a particular cannabis good. These specific examples are product types that the Department currently uses to categorize different types of cannabis goods within the track and trace system. Aligning product identities with categories already used in the existing system would allow for more effective tracking of cannabis goods within the system.

Article 6. Track and Trace Requirements

Adopt § 15049.4. Track and Trace Requirements for Multipacks.

New section 15409.4 requires that licensees categorize multipacks as such within the track and trace system and indicate the number of batches included in the multipack. It is necessary to specifically identify cannabis goods that contain more than one batch as multipacks in the track and trace system so that the Department’s tracking is accurate. Additionally, if recalls or investigatory tracebacks become necessary, the Department needs to know that the cannabis good contains more than one final form product. Finally, further regulatory provisions require that each batch included in the multipack receives its own Certificate of Analysis (COA). Entering the number of batches in the good is necessary for the track and trace system functionality to associate the correct number of COAs to the cannabis good.

Amend §15307. Quality-Assurance Review.

The introductory paragraph in existing section 15307 is amended to become subsection (a). This amendment is necessary to clarify section 15307 by better organizing the language in the section and allowing for the subsection to be cited or cross-referenced more easily. Existing subsections (a) through (g) remain subordinate to the introductory paragraph and are accordingly renumbered to (a)(1) through (a)(7), respectively.

Existing subsection (a) is renumbered to subsection (a)(1) and amended to clarify that for a multipack, each batch within the cannabis good must have its own COA. This is necessary to align with proposed amendments to section 15726, which are described below.

Existing subsections (h), (h)(1), and (h)(2) are renumbered to subsections (b), (b)(1), and (b)(2), respectively. Original subsection (h), now proposed subsection (b), should not have been included in the preceding list, as the provisions in the subsection do not include requirements for a distributor prior to transport. The amendment is correcting that error from removing original subsection (h), now proposed subsection (b), from the list of items in proposed subsection (a).

Chapter 6. Testing Laboratories

Article 3. Sampling Cannabis and Cannabis Products

Amend § 15705. General Sampling Requirements.

Existing subsection (c) is amended to clarify that the sampler must collect a representative sample from each batch within the multipack. Although the existing testing requirements require a representative sample to be collected and tested, the Department is concerned that the existing language is not sufficiently clear for licensees to understand that the requirement applies to each batch within the multipack, not to the multipack in its entirety. The proposed amendment clarifies that testing laboratory employees engaging in sampling are to collect separate samples from each batch within a multipack, rather than homogenizing the multiple batches within a multipack in order to create a sample. This amendment is necessary to ensure that licensees understand that the sampling requirements in the section are to be applied to each separate batch found within a multipack, rather than to each unit of a multipack as a whole.

Amend § 15708. Cannabis Batch and Pre-Roll Sampling.

Existing subsection (a) is amended to state that each batch within a multipack must be sampled in accordance with existing sampling requirements. The Department is concerned that the existing language is not sufficiently clear for licensees to understand that the requirements apply to each batch within the multipack, not to the multipack in its entirety (i.e. combining and homogenizing multiple batches). The proposed amendment clarifies that testing laboratory employees engaging in sampling are to collect separate samples from each batch within a multipack, rather than homogenizing the multiple batches within a multipack in order to create a sample. This amendment is necessary to ensure that licensees understand that the sampling requirements in the section are to be applied to each separate batch found within a multipack, rather than to each unit of a multipack as a whole.

Amend § 15726. Certificate of Analysis (COA).

Existing subsection (a) is amended to require each sample associated with a batch from a multipack to have a separate COA. The existing regulatory testing scheme requires each batch of cannabis product to have an associated COA. The Department is concerned that the existing language is not sufficiently clear that each batch within a multipack must have a separate COA; therefore, the proposed clarification is necessary to ensure that multipacks are compliantly tested. Additionally, this amendment is necessary to ensure that any individual reviewing the COAs can obtain the information specific to each batch within the multipack.

Existing subsection (c) is amended to remove the requirement that licensed laboratories email a copy of each COA to the Department. The removal of this requirement is necessary to improve efficiency by removing redundant reporting requirements for

COAs. As the Department is receiving COAs through the track and trace system, receiving an additional copy via email is not necessary.

Existing subsection (d) is amended to align with amended subsection (c).

Existing subsections (e)(2), (e)(3), and (e)(4) are amended to remove the requirement to include the licensed premises address for the laboratory, distributor, and cultivator or manufacturer associated with the COA. Licensees have expressed concerns that including the premises address on a COA exposes them to potential security risks, as the addresses are not currently readily available to the public. Including the premises address for each licensee is not required to identify the licensees involved with the COA because the Department can already effectively identify licensees by their license number. This amendment will address a potential public safety risk without compromising the Department's oversight authority.

Existing subsection (e)(6) is amended to replace the term "unique sample identifiers" with the term "UID assigned to the test sample." This amendment clarifies the existing requirement by using defined terminology for consistency with the rest of this chapter.

Existing subsection (e)(11) is amended to add the qualifier "if applicable" to the end of the provision. The density of a sample is only used and reported for liquid samples. Solid samples do not need to have the density measured or reported. This amendment is necessary to clarify that the reporting of the density of the cannabis or cannabis product is only required if density is an applicable form of measurement for that cannabis product.

Existing subsection (e)(13) is amended to change the phrase "supervisory or management employee" to "supervisory or management-level employee." This amendment allows for additional flexibility in who within a licensed laboratory is authorized to sign the attestation on a COA.

Existing subsections (f)(2), (f)(3), and (f)(4) are non-substantively amended to remove the phrase "the licensed laboratory shall." Existing subsection (f) clearly indicates that licensed laboratories must engage in the subsequently listed subsections; the deleted phrase is surplusage.

Existing subsection (f)(5) is non-substantively amended for improved grammar and readability.

New subsection (g) prohibits testing lab licensees from calculating or reporting cannabinoid content in a manner that differs from what is described in the chapter. This clarification is necessary to eliminate any potential confusion and ensure that cannabinoid content is being calculated and reported consistently.

Existing subsections (g) and (h) are renumbered without substantive amendment to subsections (h) and (i), respectively.

Chapter 10. Cannabis and Cannabis Products

Adopt §17303.2. Additional Requirements for Multipacks.

New subsection (a) limits the number of different batches that may be contained within a multipack to three batches. The restriction is necessary to ensure that the number of different batches within a multipack does not impair the Department's ability to effectively track the product and ensure that all regulatory requirements, including proper testing, are met. The Department has determined that allowing more than three batches within a multipack would exponentially increase the amount of data associated with the final cannabis good, negatively impacting the Department's ability to fulfill its mandate to track cannabis and cannabis products, particularly in cases of tracebacks and recalls. Information for each batch within a multipack is accessible through the track and trace system. All information pertaining to the product is displayed within the system. At the point where more than 3 batches are assigned to a multipack, the information being displayed becomes too voluminous, making it difficult to view and navigate. Allowing multipacks to contain up to three batches is effective in providing licensees with flexibility and sufficiently addresses existing product types and consumer demand.

New subsection (b) requires that all batches within the multipack have the same product identity, which is defined in section 15000(fff). This restriction will minimize the risk of error or confusion in tracking the product by requiring that multipacks are recorded in the track and trace system under product identities that are currently being tracked within the system. The track and trace system does not currently account for all of the possible permutations that may result from combining different product identities within a single multipack. The track and trace system is not currently able to effectively track the nearly infinite number of product identities that could result if this were allowed. Allowing multiple product identities within one multipack unit offered for sale would introduce a level of complexity that would make it more difficult for the Department to effectively monitor, regulate, and enforce the specific requirements for these products.

New subsection (c) requires that each batch within a multipack be packaged in a way that is physically separate and distinct from each other. Consumers and licensees need to be able to associate the required label information and COA to the specific batch within the multipack, so physical separation of each batch is necessary to ensure that batches can be distinguished.

Article 2. Cannabinoid Concentration Limits

Amend § 17304. THC Concentration Limits.

New subsection (e) requires that multipacks must meet current standards for THC limits per serving and package as required in section 17304. This is necessary to maintain protection of public health and safety by safeguarding against accidental overconsumption.

Initial Statement of Reasons

Chapter 11. Labeling and Packaging Requirements

Article 3. Labeling Requirements

Amend § 17402. General Provisions.

New subsection (d) has been added to identify the existing labeling requirements that must be complied with for each batch within the multipack. The labeling requirements found within 17407 would be required for each batch within a multipack, as the cannabinoid content will differ for each batch. The labeling requirements under section 17406 require the labeling of information that may apply to a multipack as a whole or to each individual batch within the multipack. The proposed subsection clarifies which of these requirements apply to the multipack as a whole and only need to appear on the packaging once, and which of these requirements apply to each batch within the multipack and are required to be provided for each batch separately. This is necessary to ensure each multipack is properly labeled in accordance with existing standards.

TECHNICAL, THEORETICAL, AND/OR EMPIRICAL STUDIES, REPORTS, OR DOCUMENTS

None

ECONOMIC IMPACT ASSESSMENT

The Economic Impact Assessment for this proposed action was performed by ERA Economics, LLC and is included as Attachment 1 to this statement of reasons.

CONSIDERATION OF ALTERNATIVES

Alternative 1: Allow an unlimited number of batches to be included in a multipack, rather than just three.

This alternative was rejected because it would negatively impact the Department's ability to fulfill its mandate to track cannabis and cannabis products by exponentially increasing the amount of data associated to the final cannabis good. This could pose a threat to public health in cases of tracebacks or recalls.

Alternative 2: Allow for multiple product identities within a single multipack

This alternative was rejected because allowing for different combinations of product identities within a single multipack would result in a near infinite number of potential product types that the track and trace system cannot currently track. Additionally, there is an existing method that would allow licensees to achieve nearly the same result by producing separate products that could be sold together at retail.

Alternative 3: Allow for a maximum of 2 batches within a single multipack, instead of 3 batches.

This alternative was rejected because allowing for more than 2 batches within a single multipack provides licensees with more flexibility in the variety of products that may be produced. This also provide customers with a wider selection of products available for purchase. The Department has determined that increasing the maximum number of batches in a multipack to 3 batches would not significantly impair the Department's ability to track these products.

**ATTACHMENT 1:
ECONOMIC IMPACT ASSESSMENT**

Economic and Fiscal Impact Analysis

2026 Multi-Batch Product Regulations

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Prepared for:

Department of Cannabis Control

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1. Introduction

The Department of Cannabis Control (Department) is proposing amendments to existing regulations and adoption of additional regulations in the California Code of Regulations, Title 4, Division 19. The purpose of the regulations and amendments is to support licensed cannabis businesses by enacting regulations to accommodate multipack products¹. These regulations would allow licensed cannabis businesses to meet growing consumer demand for multipack products and keep these products formally within the licensed market.

California law requires that a rulemaking agency provide an assessment of the fiscal impacts its regulations would have on state and local governments and assess the potential economic impact on state businesses and individuals. This economic and fiscal impact assessment (EFIA) describes the data, methods, and analytic approach applied to quantify the economic impacts and fiscal impacts of the proposed regulation and alternative that the Department considered. The methods are consistent with the economic and fiscal impact analyses conducted to support prior rulemaking for Department regulations. This EFIA applies the data and economic frameworks from a 2016/17 Standardized Regulatory Impact Analysis (SRIA) and subsequent Department EFIA and economic analyses, which have been periodically updated and were further updated for this assessment of the proposed regulations.

1.1 Overview of Proposed Regulations

There are several components of the proposed regulations and amendments. Important regulatory changes in the proposed multipack regulatory package are as follows:

- Chapter 1. All Licensees
 - Article 1. Division Definitions and General Requirements
 - §15000. Add definition of “multipack cannabis good.”
 - Article 6. Track and Trace Requirements
 - §15409.4. Specify California Cannabis Track and Trace (CCTT) requirements for multipack cannabis goods.

¹ “Multipack products,” also referred to as “multi-batch products,” are licensed manufactured cannabis products that have different flavors or strains, consist of cannabis products that are part of (or should be part of) more than one harvest or manufactured batch, or that include any other non-homogenous inputs. Examples of multipack or multi-batch products include packages of edibles that contains gummies of different flavors within a single package, packages of pre-rolls containing two or more pre-rolls with the flower in each pre-roll coming from separate and distinct cannabis batches, and dual-chambered or multiple-chambered cartridge vapes.

- §15307. Update quality-assurance review requirements including laboratory testing and labeling.
- Chapter 6. Testing Laboratories
 - Article 3. Sampling Cannabis and Cannabis Products
 - §15705. Update general sampling requirements.
 - §15708. Update cannabis product batch and pre-roll sampling requirements.
 - §15726. Specify that for a multipack cannabis good, there must be a Certificate of Analysis (COA) for each batch. Change COA submission requirements such that licensed laboratories no longer need to email COAs to the Department. Additional, non-substantive clarifying edits and corrections to this section.
 - Article 2. Cannabinoid Concentration Limits
 - §17304. Specify that a multipack cannabis good must adhere to per-serving and per-package THC concentration limits.
- Chapter 10. Cannabis and Cannabis Products
 - §17303.2. Specify additional requirements for multipack cannabis goods, including that they may not contain more than three separate batches.
 - §17304. Specify that multipack goods must adhere to per serving and per package limits.
- Chapter 11. Labeling and Packaging Requirements
 - Article 3. Labeling Requirements
 - § 17402. Specify what information the label of a multipack good must include.

The proposed regulatory changes would permit the manufacturing, distribution, and sale of multipack cannabis products and establish CCTT recording, laboratory testing, cannabinoid concentration, and labeling requirements. The regulations would additionally remove a requirement that licensed testing laboratories must email COAs to the Department (they would still be required to upload COAs to CCTT per current regulations).

The proposed regulations would generate measurable economic benefits for the licensed cannabis industry by enabling the sale of multipack products. Allowing multipacks would increase consumer choice and drive demand for licensed products, resulting in greater retail sales, increased consumer surplus (an economic measure of consumer benefits), and additional gross output across the licensed cannabis industry supply chain. Testing laboratories would

realize higher revenues from new batch testing requirements, in addition to cost savings from simplified reporting requirements. Retailers and related businesses would benefit from increased customer spending and brand exposure (and other unquantified marketing benefits). Overall, the regulations would create an economic benefit for the licensed cannabis industry, resulting in increased sales, market opportunities, and resulting job creation and business activity in the licensed cannabis businesses and related industries.

Multipacks help shift consumer demand away from the illicit market. Multipacks allow retailers and manufacturers to diversify offerings, improve marketing, and meet evolving consumer preferences. This includes multipacks for popular product categories such as edibles, vapes, and pre-rolls. The proposed regulations would expand product offerings/variety. This would help the competitiveness of licensed businesses relative to illicit businesses.

1.2 Public Outreach and Input

The fiscal and economic analysis of the proposed regulations leverages the most current data, economic models, and information, including elements developed for prior rulemaking that has been initiated by the Department. ERA Economics and the Department also conducted targeted outreach in preparing this analysis. This included outreach to stakeholders and industry experts to understand current market conditions. The outreach also included discussing the potential effect of components of the regulations on businesses and individuals (e.g., compliance time and associated costs) and discussing potential benefits (e.g., multipacks market potential). Analyses in this report rely on information gathered from the following groups from both prior assessments and for the proposed regulatory changes:

- Industry professionals to review current market conditions, update cost of production information, verify industry data, and receive general feedback on industry trends, challenges, and changes.
- Researchers to discuss industry trends and feedback from other outreach/survey efforts.
- Department staff to assess potential effects on short- and long-term staff level of effort to manage changes (fiscal impacts).

These data were used to develop the economic and fiscal analysis approach.

1.3 Major Regulation Determination

A Major Regulation is a proposed action, amendment, or repeal that would result in an economic impact on businesses and individuals in the State greater than \$50 million in the 12-month period following full implementation of the regulations. (Gov. Code, § 11342.548).

The total estimated economic impact (including all costs, benefits, market effects, and indirect and induced effects) equals \$29.24 million in the 12-month period following full implementation of the proposed regulations. These include:

- Total benefits of \$28.36 million to businesses and individuals:
 - \$0.57 million decrease in costs for licensed cannabis testing labs,
 - \$5.73 million increase in consumer surplus,
 - \$1.66 million increase in direct, indirect, and induced gross output for licensed cannabis testing labs, and
 - \$21.54 million increase in direct, indirect, and induced gross output for cannabis products at retail.
- Total costs of \$0.88 million to businesses and individuals:
 - \$0.70 million increase in costs for licensed cannabis distributors,
 - \$0.04 million increase in costs for licensed cannabis manufacturers, and
 - \$0.14 million decrease in gross output for cannabis businesses from cost increases.

In summary, the analysis estimates around \$12 million in additional retail sales, translating into a total economic benefit of \$28.6 million when including multiplier effects. Testing laboratories would see higher revenues from new batch testing requirements, alongside cost savings from streamlined reporting, while retailers and related businesses benefit from increased customer spending and marketing. The regulations would create more than 260 new jobs.

The fiscal impacts to the Department or other state or local agencies would include small costs related to compliance and system updates to the California Cannabis Track and Trace (CCTT) system to accommodate multipack products. The estimated fiscal impact is a one-time cost of \$250,000, and this would be absorbed within the Department's existing budget authority. The increase in sales of cannabis products could result in greater Department license fee revenue (for businesses with license fees set by gross revenue tiers). The increase in sales of products sold at retail (\$11,960,000) is expected to increase fee revenue by as much as \$120,000; however, sales increases would be spread across many different businesses, and this may lead to no measurable change in license fee revenue.

Therefore, the estimated total economic and fiscal impact (\$29.49 million) is below the Major Regulation threshold of \$50 million.

1.4 Report Organization

The report is structured as follows. Section 2 describes the analytic approach and data used to quantify (monetize) economic and fiscal impacts attributable to the proposed regulations. Section 3 provides an overview of the important baseline conditions used to evaluate fiscal and economic impacts of the proposed regulations. Section 4 summarizes the economic and fiscal impacts of the proposed regulations. Section 5 summarizes an alternative to the proposed regulations that the Department considered.

2. Analytic Approach and Data

The analysis applies public and private industry data. When data are not available, judgment and discretion based on industry outreach are applied. It is important to note that data for the cannabis industry is limited because the industry is still relatively young and there is no single source of industry statistics. CCTT data are primarily relied upon, along with license data, tax data, and information obtained during outreach. All prices and costs are inflation-adjusted and reported in current (2025) dollars.

2.1 Overview of Economic and Fiscal Impacts

The proposed regulations would result in quantifiable and unquantifiable (i.e., non-monetized) costs and benefits for licensed cannabis businesses and the Department. As described under the Overview of the Proposed Regulations section, the regulations would generate monetizable economic benefits for the licensed cannabis. Enabling the sale of multipack products allows businesses to innovate with marketing and responding to evolving consumer preferences. This increases the demand for licensed cannabis products, which all else equal puts upward pressure on licensed cannabis prices. These effects are expected to be modest (small change in total demand) but result in substantial economic benefits when considered across the entire licensed market. The proposed regulations would impose some reporting costs on businesses. However, testing laboratories would realize greater revenues from new batch testing requirements, cost savings from streamlined reporting. The proposed regulations would be a net economic benefit for the licensed market.

The economic analysis follows a standard sequential approach. The direct costs (e.g., additional reporting) and benefits (e.g., shift in licensed cannabis demand, laboratory testing) are quantified. These changes affect the market (supply and demand) for licensed and illicit cannabis. These so-called market effects are quantified using an economic model of the licensed and illicit cannabis markets. This ensures that industry-wide economic costs and benefits are captured. Finally, these market adjustments also indirectly affect other businesses (e.g., businesses that sell to or purchase from cannabis firms) and employees. These so-called indirect and induced effects (also called multiplier effects) are quantified using a standard economic model. The total economic impact (including costs and benefits) includes these direct costs, the resulting market effects, and indirect and induced changes in related industries and employee spending.

After economic impacts are quantified, this shows how the licensed industry would adjust after the proposed regulations are implemented. Fiscal impacts (i.e., costs to the Department or other state agencies) are then quantified. This ensures that fiscal impacts reflect how the market would change in response to the proposed regulations.

Economic and fiscal impacts were quantified using a standard sequential approach:

1. **Direct economic impacts.** These represent direct costs and benefits to businesses and individuals that are attributable to the regulation and can be quantified. These include one-time benefits and costs (e.g., capital investments) as well as ongoing annual benefits and costs.
2. **Market economic effects.** The direct economic costs or benefits can represent a change in the cost to produce cannabis and/or the demand for cannabis products. Industry supply changes in response to direct costs or benefits to producers, while demand changes with consumer preferences. Both can affect the market price and quantity of cannabis produced. These market equilibrium changes affect the broader industry as well as consumers.
3. **Indirect and induced economic impacts.** So-called “multiplier” effects on other businesses and individuals result from the direct costs or benefits and changes in the equilibrium market conditions for the industry. These are assessed using a standard input-output model, IMPLAN².
4. **Fiscal impacts.** The fiscal impact analysis follows from the economic impact analysis and quantifies the fiscal cost of the regulation to the Department and other state/local agencies. Fiscal costs are calculated after accounting for the industry adjustments that are reflected in the economic impact analysis.

2.1.1 Baseline for Analysis

The economic impacts of the proposed regulations are measured relative to the defined baseline. The baseline condition is the most cost-effective set of regulatory measures that ensure full compliance with the authorizing statute or other law being implemented.³ This ensures that the economic impacts only measure the incremental changes attributable to the regulation.

In this case, the baseline condition is allowing the sale of multipack products to continue without the introduction of any regulations to explicitly permit their sale. This would result in no new costs or benefits. Since there would be no new costs or products introduced to the market in this case, the baseline condition is effectively the current market condition. All economic impacts are measured relative to this baseline.

2.1.2 Direct Economic Impacts

Direct impacts are costs and benefits that directly affect the businesses and individuals in the industry. In the case of the proposed regulations, businesses that would be directly impacted are

² Impacts for Planning and Analysis. MIG Inc.

³ Government Code of California, Title 2, Division 3, Part 1, Chapter 3.5, Article 5, §11346.3 (e)

licensed cannabis manufacturers, distributors, retailers, and laboratories. Other related businesses (e.g., cultivators, etc.) would be indirectly impacted. These impacts are summarized in the analysis of indirect and induced impacts discussed in Section 2.1.4.

The potential monetizable direct economic impacts of the regulatory changes include:

- Benefits
 - Increase in product variety available to consumers.
 - Estimated based on the current market for multipack products and distribution of availability across licensed retailers.
 - Resulting increase in demand captured in the market effects analysis.
 - Additional revenue for licensed laboratories as a result of more product batches requiring compliance testing.
 - Cost savings for all licensed laboratories that no longer need to email COAs to the Department.
- Costs
 - Current distributors of multipack products incur costs for additional compliance tests for the multiple batches used in these products.
 - Current manufacturers of multipack products incur small costs to change their labeling system to accommodate multiple batches.

2.1.3 Market Effects

The regulation would affect the supply of and demand for cannabis products. This analysis uses an economic Equilibrium Displacement Modeling (EDM) approach to estimate the potential market effects of the proposed regulations. The EDM is widely applied for evaluating the effects of changes in production costs, trade policies, advertising, taxes, and regulation of agricultural commodities. For example, it has been extensively applied to crop and livestock systems such as the dairy sector, beef production, sheep production, marketing, and research and development (Alston et al., 1995; Alston et al., 2006).

The basic EDM for the aggregate cannabis industry, which modeled both licensed and unlicensed markets, was developed for the 2017 SRIA following Muth (1964), Gardner (1988), Wohlgenant (1993), and Atwood and Brester (2019). The EDM used in this analysis updates the original version to allow for different supply and demand shifts in different parts of the cannabis supply chain, including manufacturing, distribution, and retail.

The market effect from permitting cannabis multipack products would be an increase in overall demand for licensed cannabis products. Cost increases from additional compliance testing and

product labelling are very small relative to the size of the industry and therefore do not affect the market analysis.

The market effect results in changes to prices, quantities, consumer surplus, producer surplus, and gross output. The EDM is applied to quantify these effects.

2.1.4 Indirect and Induced Impacts

The analysis of indirect and induced impacts evaluates the overall effect of changes in income and gross output on jobs, taxes, and value-added across the State. The direct impacts (including market effects) summarized above are inputs into the analysis of indirect and induced impacts.

The total economic impact is the sum of direct, indirect, and induced impacts. The direct impacts in this analysis include a change in gross output for retailers, an increase in spending (and decrease in income) for manufacturers, a decrease in spending (and increase in income) for testing laboratories, and increased gross output for testing laboratories. The indirect impacts capture changes in intermediate input purchases by the primary industry from other sectors of the economy. For example, cannabis retailers purchase inputs from other suppliers in the state. This includes wholesale cannabis products and services from other cannabis businesses (e.g., testing labs), as well as technology such as POS systems and other supplies required to run a retail business. Induced impacts capture the change in expenditures by proprietors and employees in the primary industry and all linked industries.

This analysis uses the Impacts for Planning and Analysis (IMPLAN) model with a California county-level 2014 dataset as the baseline year for the analysis.⁴ The IMPLAN software is an input-output economic model that estimates the effects of exogenous changes in final demand within a specified geographic region (in this case, California). The model uses a comprehensive dataset of national and regional economic accounts that document purchasing relationships between industries through multiple rounds of spending. The software also incorporates institutional demand and inter-institutional transfers that reflect purchases made by households and government agencies.

A limitation of the IMPLAN model or any input-output model is that the default IMPLAN model data do not include any businesses in the cannabis industry. Customized sectors for cannabis production have been developed by ERA and applied in the analysis.

⁴ The IMPLAN 2014 data for California counties is used for consistency with the 2016/17 SRIA and other previous economic and fiscal analyses of the cannabis industry. Importantly, this model includes custom cannabis industry sectors. The default IMPLAN model does not have these sectors and is therefore not appropriate to apply for this analysis. All values are reported in current, inflation-adjusted (2025) dollars and therefore reflect current period economic impacts. A review of IMPLAN data from 2015 to 2022 for the industries identified to be similar to cannabis shows little variation in IMPLAN multipliers from this 2014 data. The economic multipliers in the 2014 IMPLAN database, with custom cannabis sectors, are appropriate for this impact analysis.

2.1.5 Fiscal Impacts

Fiscal impacts are changes to public agency costs and revenues associated with the regulations. Potential fiscal impacts of the proposed regulations to the Department that were identified include:

1. Possible additional revenue from license fees related to increases in revenue for retailers, manufacturers, testing laboratories and distributors handling or selling multipack products (because these license fees are based on gross revenue).
2. Costs to verify that licensees are correctly following new regulations for multipacks during inspections.
3. Costs to implement changes in CCTT so that businesses can correctly identify multipack products.

Costs would be absorbed within the Department's existing budget authority. The gross increase in sales of products at retail would be spread across many different businesses and is unlikely to result in a measurable change in Department license fee revenue.

3. Cannabis Industry Baseline Overview

Current baseline conditions for the cannabis industry were developed using cultivation license data, industry data developed for the 2017 SRIA and other previous DCC SRIAs, previous DCC economic/fiscal impact assessments, California Cannabis Track and Trace (CCTT) data, the Department’s online Cannabis Unified License Search (ULS), and other updated data developed for this analysis. The proposed regulatory amendments would directly affect licensed manufacturers, distributors, laboratories, microbusinesses, and retailers. Therefore, this section focuses on these parts of the licensed cannabis supply chain in California.

3.1 Current Market for Multipack Products

There are currently no regulations that facilitate the retail sale of multipack cannabis products, but an array of these products are currently available at retail. Accordingly, there is no field in CCTT data to denote a product as a multipack, but there are key words found in item names that suggest a product is a multipack (e.g., “Mix”, “Dual-Chamber”, or “Blends”). These and other key words were identified by reviewing online listings for products from Weedmaps.com. Identification is imperfect, as these key words are not exclusive to multipacks, and some multipacks contain no such keywords in their title.

Analysis of the current market for multipack products is based on cleaned CCTT retail sales data for the first half of 2025. There were \$9.0 million in sales identified as likely multipacks of the \$2,226.0 million in total sales, or 0.4 percent of total sales during this period. The total monthly sales of multipacks by product category varied widely across stores, with most stores having \$0 in sales identified as multipacks for most product categories. However, some stores with small sales quantities had 100% of their sales volumes identified as multipacks for some item categories in some months.

An estimated 779 product batches of multipacks have been identified via laboratory testing data over the past 12 months at 21 different labs (20 of which are currently active). There are currently 48 licensed manufacturers who make these identified multipack products, 273 distributors who have handled identified multipack products, and 53 microbusinesses who have engaged in transfers of these products.

The proposed regulations would directly impact licensed cannabis distributors (excluding transport only), testing labs, manufacturers, retailers, and microbusinesses. There are currently 2,736 businesses holding at least one of these licenses.

4. Economic and Fiscal Impacts: Proposed Regulations

Economic and fiscal impacts were evaluated for two alternatives: the proposed regulations and one alternative to the proposed regulations that was considered by the Department. This section presents the results of the analysis of the proposed regulations. Economic impacts are assessed in terms of direct economic benefits, direct economic costs, market effects, and indirect and induced effects.

4.1 Direct Economic Benefits

This section summarizes the estimated direct benefits to businesses from the proposed regulations. The primary direct benefits are increased revenue and cost savings for licensed cannabis testing laboratories. There would also be an increase in demand for cannabis products as a result of regulations to allow the sale of multipacks. This is described in Section 4.3.

4.1.1 Increase in Revenue for Licensed Cannabis Testing Laboratories

Part of the proposed regulations is the requirement that licensed cannabis distributors handling multipack products would need to have a separate COA for each of the batches used in the multipack product. It has been observed that some businesses already offer products that appear to be multipack products. It is unknown how the distributors handling these products have been applying COAs, but it is likely that some have been applying only one COA per multipack product, despite the product including components that should have been identified as different product batches.

It is difficult to determine, with the information currently available, how many different product batches have been included (or should have been included) in products currently marketed as multipack products. Many product names (e.g., dual-chambered vape cartridges) imply that they consist of (or should consist of) components from two different product batches. However, it is possible that some multipack products consist of more than two product batches. This assessment applies three batches as the average number of batches that are included in (or should be included in) existing multipack products. This assumes that many of these products contain two batches, while others may have more. Based on this, and the understanding that current distributors of multipack products are likely only providing one COA per multipack product, existing multipack products would need to have two additional COAs produced per product type. This would represent an increase in compliance testing (and resulting revenue) for licensed testing laboratories.

Based on a review of CCTT data, in the past 12 months 779 different product batches have been used in products that have been identified as multipack products. That is, there have been an estimated 779 different multipack product types. Therefore, this assessment applies 1,558 (779 multiplied by 2) as the number of additional batches that would need to be sampled for

compliance testing. Compliance tests cost approximately \$450 per batch sample. Therefore, the estimated additional revenue for licensed testing laboratories is \$701,100.

4.1.2 Decrease in Costs for Licensed Cannabis Testing Laboratories

The proposed regulations would remove the requirement that testing labs would need to email all COAs to the Department. They would only need to upload COAs to CCTT, which is already an existing requirement. The estimated total number of compliance tests (and resulting COAs produced) over the observed 12-month period across the whole industry is 114,315. The estimated amount of time saved to email each COA is 5 minutes. The estimated cost per hour of labor for an employee at a testing lab (including overhead) is \$60 per hour. Therefore, the estimated total cost savings associated with this regulatory change is \$571,575.

4.1.3 Other Unquantified Benefits

In addition to the quantified costs savings described in the previous section, and the increase in demand for cannabis products described in the market effects analysis, other benefits could result from the proposed regulations that were not quantified. Introducing multipacks could help producers in the licensed market compete better with the unlicensed market. Any decrease in demand for unlicensed cannabis would have long-term benefits to the health and safety of Californians.

The availability of multipacks could also help new and existing cannabis consumers understand and compare more product types, allowing consumers to make more informed purchasing decisions. The availability of multipacks could also help bolster sales at burgeoning cannabis consumption lounges. These unquantified benefits could result in long-run increases in demand beyond those identified in the market effects analysis. However, these benefits would be realized and spread over many years and would not be likely to affect the quantified demand increase in the first 12 months following implementation of the proposed regulations.

4.2 Direct Economic Costs

This section summarizes the estimated direct costs to businesses from the proposed regulations. This primarily consists of costs incurred by existing licensed cannabis distributors and manufacturers currently handling or producing multipack products. These distributors would need to spend more on compliance tests, and manufacturers would incur small costs associated with changing their labeling practices.

4.2.1 Increase in Compliance Testing Costs for Licensed Cannabis Distributors

As described in Section 4.1.1, licensed cannabis distributors would spend more on compliance tests under the proposed regulations. This represents a benefit to testing laboratories, but it is a cost to distributors. As shown in Section 4.1.1, the total cost would be \$701,100.

4.2.2 Increase in Labeling Costs for Manufacturers

Manufacturers that are currently producing multipack products would also incur a small cost to adjust their labeling system to accommodate listing multiple batches. This is expected to be a simple change made based on the number of multipack product types offered. As described previously in Section 4.1.1, an estimated 779 different multipack product types have been produced in the past year. It is estimated that a manager would need to spend about 30 minutes per product type to create labels displaying additional batch numbers. Applying the high-end estimate for a manager of a cannabis business (\$100 per hour, which includes overhead), the total cost to manufacturing businesses would be \$38,950.

4.2.3 Other Unquantified Costs

Some other possible, long-term, costs have been identified but were not quantified. Some stakeholders have shared concerns that the new products would result in additional waste due to the nature of their packaging. Other stakeholders have shared concerns that multipack products could be seen as making cannabis products more attractive to minors. However, there is insufficient evidence to suggest these effects would change costs relative to the baseline conditions. Furthermore, the potential for the proposed regulations to shift some sales from the unlicensed market to the licensed market would benefit health and safety, including reduced waste and access for minors.

4.2.4 Total Costs and Cost Savings

Table 1 summarizes the total quantified costs and cost savings of the proposed regulations. Licensed testing laboratories would see total cost savings across all labs of \$571,575. Licensed distributors currently handling multipack products would see an increase in costs of \$701,100 across all businesses for increased compliance testing. However, as explained in Section 4.1.1, this would also represent an increase in gross revenue for licensed testing labs. Current manufacturers of multipack products would also see an increase in costs related to updating labeling, which would total \$38,950 across affected businesses.

Table 1. Total Costs and Cost Savings

Description	Cost (or Cost Savings)
Decreased Costs for Testing Labs	(\$571,575)
Total Cost Savings for Cannabis Businesses	(\$571,575)
Increased Compliance Testing Costs for Distributors	\$701,100
Increased Costs for Manufacturers to Update Labels	\$38,950
Total Costs to Cannabis Businesses	\$740,050
Net Costs to Cannabis Businesses	\$168,475

Net costs after accounting for savings to laboratories would be \$168,475. This is roughly 0.01 percent of the wholesale value of cannabis and therefore would not result in economically

significantly market effects. Therefore, these direct cost impacts are not included in the market effects analysis.

4.3 Market Effects

The market effects of the proposed regulations were evaluated using an equilibrium displacement model (EDM) of the California cannabis market. The EDM is used to assess how the market would respond to the change in multipack product availability. The cannabis market EDM was developed by ERA Economics and initially applied in the 2017 SRIA of the CalCannabis Cultivation Licensing Program (and Medical Cannabis Cultivation Program). The market structure has changed since the initial assessment based on new laws, regulations, better industry data, industry interviews, and various economic studies. The EDM framework has been updated to reflect this new information.

The EDM evaluates the effect on market price and wholesale quantity⁵ attributable to the proposed regulations, and the model includes potential changes to the following California market segments due to the proposed regulations:

- Licensed cannabis supply and demand,
- Illicit cannabis supply and demand.

The exogenous shock used in the EDM is the expected change in demand for licensed cannabis in response to the increased availability of multipacks caused from the proposed regulations. As described in the previous section, the proposed regulations would explicitly permit the sale of cannabis products that are comprised of multiple product batches.

To evaluate the market impacts of the proposed regulations, an expected demand shift range was calculated and implemented in the EDM. That is, there is not a direct increase in the quantity supplied of cannabis via multipacks, but rather a shift of existing products to multipacks. This is simulated as an increase in advertising/marketing efforts, resulting in increased quantity demanded for licensed cannabis products. The expected range for the change in demand was based on the current market for multipack products.

The market potential for multipacks is unknown. To determine a potential range for multipack sales post-regulatory change, the distribution of current multipack shares across products and stores was examined. Products such as edibles, vapes, and pre-rolls are more commonly sold in multipacks relative to other products such as flower, extracts, and concentrates. Therefore, different ranges of potential market share are estimated separately for edibles, vapes, and pre-rolls versus all other products.

⁵ The EDM evaluates the wholesale market. All production is expressed on dry flower equivalent basis.

Lower Bound. The overall share of sales identified as multipacks was 0.4 percent; this estimate is treated as the post-regulation lower bound for products other than edibles, vapes, and pre-rolls. The item category with the highest quantity of sales identified as multipacks was pre-rolls, with 1.1 percent of sales as multipacks during the first half of 2025. This estimate is treated as the lower bound of the post-regulation multipack market share for edibles, vapes, and pre-rolls.

Upper Bound. The 90th percentile of stores had 3.2 percent of their pre-rolls sales identified as likely being multipacks. This estimate is treated as the post-regulation upper bound of overall multipack market share for edibles, vapes, and pre-rolls. Examining multipack sales across stores, the 90th percentile had 1.0 percent of total sales identified as multipacks. This estimate is treated as the upper bound for other products.

In summary, the expected post-regulation market share of multipacks for edibles, vapes, and pre-rolls is 1.1–3.2 percent with a midpoint of 2.15 percent. The post-regulation market share for all other products is 0.4–1.0 percent with a midpoint of 0.7 percent. The overall weighted average market share of multipacks is 0.81–2.30 percent with a midpoint of 1.56 percent. This would be an overall increase of 1.16 percent on average from the current multipacks market share of 0.4 percent, with a standard deviation of 0.37 percent.

An increase in market share of multipacks would not translate to a direct 1-to-1 increase in sales, as multipacks would replace sales of other products to some extent. That is, consumers of multipacks would most likely have bought some other cannabis product in the absence of the multipack option. However, variety packs are often viewed in other markets (e.g., beer) as effective means of advertising a brand's other products and increasing future sales. To test this hypothesis, an econometric model was developed to test the relationship between stores' overall sales within a product category and sales of multipacks.

The econometric model accounted for unobservable temporal and store characteristics, as well as stores' past sales by product category. A model using sales data from two previous periods was best at predicting current multipacks' share of sales. Results indicated that a 1 percent increase in the share of multipack sales increased the quantity of units sold for that product category by 0.38 percent (0.12 percent standard error). This effect is expected to diminish as more multipacks are introduced to the market, and it is unknown if the estimated demand increase would persist; therefore, the estimate of 0.38 percent is treated as the upper bound of the expected sales increase. The average expected sales increase is 0.26 percent (one standard deviation below the upper bound estimate).

The ranges for the increase in post-regulation multipack market share (mean = 1.16 percent, standard deviation = 0.37 percent) and the effect of increased multipack share on total sales (mean = 0.26 percent, standard deviation = 0.06 percent) were combined as independent random variables to determine a distribution of potential demand shocks (mean = 0.30 percent, standard deviation = 0.12 percent) to evaluate expected market effects. These are described in Section 4.3.

Table 2 summarizes the estimated range of percent changes in demand for licensed cannabis products from the proposed regulations. The range corresponds to an approximate 95 percent confidence interval. The lower bound increase in demand for licensed cannabis products is 0.06 percent, the midpoint increase is 0.30 percent, and the upper bound increase is 0.54 percent.

Table 2. Demand Change Range

Estimate	Percent Change in Demand
Lower Bound	0.06%
Midpoint	0.30%
Upper Bound	0.54%

The percent changes in the demand for licensed cannabis were entered as inputs to the EDM model and used to evaluate the effect on the overall market. Table 3 summarizes the results of the EDM market analysis. The proposed regulations would affect the price and quantity of cannabis at the farm and at retail. The analysis shows average and upper/lower bounds to provide context for the potential range of outcomes.

Table 3. EDM Analysis Market Effects Results

Description	Lower Bound	Upper Bound	Midpoint
	<i>Percent Change</i>		
Quantity of licensed cannabis	0.06%	0.29%	0.18%
Price of licensed cannabis, retail	0.03%	0.16%	0.10%
Price of licensed cannabis, farm	0.07%	0.32%	0.20%

Table 4 summarizes the market effect changes in consumer surplus, cannabis cultivator (producer) surplus, and gross retail sales of cannabis products in the first year following multipack regulatory changes. Increases in price and quantity both contribute to increased producer surplus, resulting in surplus gains for producers ranging from \$0.70 to \$3.28 million and a gross increase in retail sales of \$4.18 to \$19.68 million. Consumers also benefit from the increased variety of cannabis products, with consumer surplus (a measure of benefit) gains ranging from \$2.01 to \$9.44 million.

Table 4. Market Effects Changes in Surplus and Gross Revenue

Description	Lower Bound	Upper Bound	Midpoint
	<i>Change, \$1,000,000</i>		
Consumer surplus	\$2.01	\$9.44	\$5.73
Cannabis cultivator surplus	\$0.70	\$3.28	\$1.99
Cannabis gross retail revenue	\$4.18	\$19.68	\$11.96

Increases in consumer and producer surplus are gross benefits of the proposed regulations. Changes in retail sales of cannabis products would also cause indirect and induced impacts to related businesses through changes in purchases/sales in related businesses (e.g., additional lab

testing), employee wages, and similar ripple effects. These indirect and induced (or so-called multiplier) effects are described in the next section.

4.4 Indirect and Induced Effects

The total economic impact is the sum of the direct, indirect, and induced impacts. Indirect and induced (together also called secondary) economic impacts include other changes in spending resulting from the direct impacts of the proposed regulations. Indirect impacts are changes in business-to-business spending, and induced impacts are changes in spending related to changes in income to employees and owners. Indirect and induced impacts are estimated using multipliers from regional input-output models, also called multiplier models.

Multiplier models are calibrated using national tax data. Since there is no federal licensed cannabis market, these models do not have defined cannabis businesses sectors. To capture the impacts to the California cannabis market, the model approximates the market through emulating the relationships of existing similar sectors:

- A custom retail cannabis sector was developed using the “Retail - Health and personal care stores” sector in IMPLAN as a base. ERA reviewed IMPLAN sectors and identified this sector as best approximating the spending and employment patterns of a licensed cannabis dispensary. Spending patterns were modified to reflect wholesale purchases of cannabis from custom cannabis cultivation sectors and from a custom cannabis labs sector.
- Cannabis labs are adapted from the “Diagnostic labs” sector in IMPLAN. This sector best reflects the market relationships, spending, and employment patterns of cannabis labs testing retail products for safety.

The IMPLAN model geographic scope covers all of California because the economic impacts of the proposed regulations would apply to the entire state. Economic impacts are summarized in terms of jobs, gross output (total value of all business activity), value added (gross domestic product), and labor income (proprietor income and employee wages).

There are three components of the IMPLAN analysis:

- The increase in demand for cannabis products due to the introduction of multipack products will result in increased gross output in the cannabis retail sector. As shown in Table 3, the average expected increase in gross cannabis retail revenue is \$11.96 million.
- Licensed cannabis testing laboratories would see an increase in gross revenue of \$701,100.

- The small net total increase in costs for businesses would result in a small decrease in total proprietor income. As shown in Table 1, the net costs for businesses would be \$168,475.

Table 5 summarizes the results of the IMPLAN analysis. As shown, the \$11.96 million increase in retail sales of cannabis results in a total impact (sum of direct, indirect, and induced impacts) of \$21.54 million increase in gross output, \$12.80 million in value added, \$8.64 million in labor income, and 255 jobs.

Table 5. Indirect and Induced Effects

Sector, Effect	Impact Type	Employment	Labor Income	Value Added	Output
		<i>Count</i>		<i>Millions</i>	
Retail, Demand Increase	Direct Effect	193	\$4.67	\$6.67	\$11.96
	Indirect Effect	31	\$1.99	\$2.62	\$3.71
	Induced Effect	31	\$1.98	\$3.51	\$5.87
	Total Effect	255	\$8.64	\$12.80	\$21.54
Increased Output for Labs	Direct Effect	2	\$0.28	\$0.30	\$0.70
	Indirect Effect	3	\$0.21	\$0.33	\$0.54
	Induced Effect	2	\$0.14	\$0.25	\$0.42
	Total Effect	7	\$0.63	\$0.88	\$1.66
Change in Proprietor Income	Direct Effect	0	(\$0.17)	\$0.00	\$0.00
	Indirect Effect	0	\$0.00	\$0.00	\$0.00
	Induced Effect	-1	(\$0.05)	(\$0.09)	(\$0.14)
	Total Effect	-1	(\$0.22)	(\$0.09)	(\$0.14)
Net Impact	Total	261	\$9.05	\$13.59	\$23.07
	Indirect & Induced Only	66	\$4.27	\$6.62	\$10.41

The \$0.70 million increase in output for licensed cannabis testing labs results in a total impact of \$1.66 million in gross output, \$0.88 million in value added, \$0.63 million in labor income, and 7 jobs.

The \$0.17 million net decrease in proprietor income results in a total impact of \$0.14 million lost in gross output, \$0.09 million lost in value added, \$0.22 million lost in labor income, and 1 job lost.

The total net impact includes an increase in gross output of \$23.07 million, an increase in value added of \$13.59 million, an increase in labor income of \$9.05 million, and an increase of 261 jobs.

4.4.1 Employment (Job) Estimated Effects

As shown in Table 5, the total employment effect (sum of direct, indirect, and induced effects) would be an increase of 261 jobs. This includes an increase of 255 jobs resulting from increased cannabis sales, an increase of 7 jobs due to increased testing lab revenue, and a decrease of 1 job resulting from a decrease in proprietor income.

4.5 Other Economic Impacts Summary

This section summarizes other economic impacts of the proposed regulations. Table 6 summarizes the key economic outcomes of the proposed regulations. The economic impacts reported in Table 6 are used to determine whether the proposed regulations reach the threshold of a major regulation. The total economic impact is not expected to exceed \$50 million in the first 12 months of implementation. All values reported in Table 6 were derived in previous sections of this EFIA, and are reported in the accompanying STD 399 Economic Impact Statement.

Table 6. Total Economic Impact Summary

Description	Unit	Value
Total statewide benefits for businesses and individuals	\$, millions	\$28.63
Total statewide costs for businesses and individuals	\$, millions	\$0.88
Businesses impacted	Count	2,763
Share of businesses that are small	Percent	97.1%
Businesses eliminated	Count	0
Jobs created	Count	262
Jobs eliminated	Count	1
Initial costs per business (manufacturers)	\$, thousands	\$0.8
Average annual ongoing costs per business (distributors)	\$, thousands	\$16.0
Average annual ongoing benefits per business (retailers and labs)	\$, thousands	\$9.9

Note: Total statewide benefits for businesses and individuals are calculated as the sum of laboratory cost savings, consumer surplus, and total direct, indirect, and induced gross output increases. Total statewide costs for businesses and individuals are calculated as the sum of distributor and manufacturer costs and total direct, indirect, and induced gross output decreases.

4.5.1 Estimated Effects on a Typical Business and Small Business

The total gross output increase for retailers is \$21.54 million per year, as show in Table 5. Most retailers are estimated to have fewer than 100 employees or annual gross receipts of \$15 million or less and therefore qualify as small businesses. Hence, small businesses are also considered to be typical businesses in the industry, and the expected recurring annual benefits are the same for each type. The average benefit to the 1,427 retailers currently engaging in the sale of multipack products would therefore be \$15,100 per business.

The total gross output increase for testing laboratories is \$1.66 million per year, as show in Table 5. Almost all active laboratories are estimated to have fewer than 100 employees or annual gross

receipts of \$15 million or less and therefore qualify as small businesses. Hence, small businesses are also considered to be typical businesses in the industry, and the expected recurring annual benefits are the same for each type. The average benefit to the 20 laboratories currently engaging in testing of multipack products would therefore be \$83,000. Cost savings of \$572,000 per year would be split among the 20 active laboratories, bringing the overall impact to \$111,600 per laboratory.

The weighted average annual recurring benefits for retailers and laboratories would be \$16,000 per business.

Distributors would incur annual costs of \$701,000 for additional laboratory tests. Most distributors are estimated to have fewer than 100 employees or annual gross receipts of \$15 million or less and therefore qualify as small businesses. Hence, small businesses are also considered to be typical businesses in the industry, and the expected recurring annual benefits are the same for each type. The \$701,000 in costs would be split among the 273 distributors engaging the transfer of multipack products, implying an average cost per distributor of \$2,600. These would be annual, on-going costs.

Manufacturers would incur one-time costs of \$39,000 from updating labels. Most manufacturers are estimated to have fewer than 100 employees or annual gross receipts of \$15 million or less and therefore qualify as small businesses. Hence, small businesses are also considered to be typical businesses in the industry, and the expected one-time costs are the same for each type. The \$39,000 in costs would be split among the 48 manufacturers producing multipacks, implying an average cost per manufacturer of \$800. These are one-time costs.

4.5.2 Other Economic Impacts to Businesses, Individuals, Worker Safety, and the State's Environment

The proposed regulations would encourage the expansion of businesses in the State. The proposed regulations would increase retail sales of cannabis, which would bring opportunities for expansion for all businesses in the licensed cannabis supply chain.

The proposed regulations would not result in the elimination of businesses in California. There is a possibility of expansion of businesses resulting from the increase in retail sales of cannabis. However, the market analysis shows that while the proposed regulations would cause an increase in gross sales of cannabis-based products, the increase is modest (average expected increase of 0.3%) relative to the size of the licensed market in California. It would be a modest expansion of existing businesses but would not significantly increase the number of businesses in operation. The proposed regulations would not otherwise increase or decrease investment in the State.

The proposed regulations would not negatively affect the ability of businesses in the State to compete with those in other states. Cannabis-derived products made in other states cannot be sold in California and therefore there is no competition.

The proposed regulations would not require additional business reports or the use of specific technologies or equipment.

The proposed regulations would not impact housing costs.

The proposed regulations would incentivize innovation in products, materials, or processes. This innovation is expected to result in increased demand for licensed cannabis products during the first 12 months following implementation, as described in the market effects analysis, and further product innovations following the first 12 months could provide additional benefits. This assessment did not quantify the potential long-term impacts of this product innovation.

The proposed regulations would benefit the State's environment. They would help to make the licensed market more competitive with the unlicensed market. The licensed market participants follow strict environmental regulations while the unlicensed market participants do not. Therefore, any shift in sales from the unlicensed market to the licensed market would benefit the State's environment in the long run.

4.5.3 Department Fiscal Impacts

The fiscal impact of the proposed regulations follows from the estimated economic impacts of the proposed regulations. That is, the economic analysis measures how the industry would adjust and quantifies defined economic impacts; and the fiscal impact evaluates the resulting changes to state and local budgets. The fiscal impact estimated by the Department is the cost for system upgrades to CCTT to accommodate multipack products and associated batch tracking. This is estimated to be a one-time cost of \$250,000. This cost would be absorbed within the Department's existing budget.

4.5.4 Other State and Local Public Agencies Fiscal Impacts

Other State and local agencies generally defer to DCC regulations for ensuring the health and safety of manufactured cannabis products. Therefore, these agencies are not expected to incur new fiscal costs. A full review of all local agencies' regulations regarding manufactured products and any mention of multipack products was not conducted for this assessment. However, any local agency that may strictly prohibit multipack products would be able to continue the prohibition on these products and not be affected, or they may choose to update their regulations to accommodate these products.

The only anticipated impact to local agencies (assuming they do not strictly prohibit multipack products) is possible increased sales tax revenue from increased sales of cannabis products as estimated in the Market Effects section above. Relative to the size of the licensed cannabis market, the increase in retail sales would be small, and these would be spread across the state's large number of local agencies that regulate and tax cannabis. Therefore, no local agencies would be significantly impacted.

5. Economic and Fiscal Impacts: Proposed Alternative

This section presents the results of the economic and fiscal impact analysis of one alternative to the proposed regulations that was considered by the Department. The alternative is summarized as follows:

- Instead of limiting the number of batches included in multipack products to three, allow an unlimited number of batches per multipack.

5.1 Economic and Fiscal Impacts of Regulation Alternative 1

Alternative 1 is generally anticipated to result in similar overall impacts to the proposed regulations, as described in the following sections.

5.1.1 Alternative 1 Direct Economic Benefits

The only quantified benefits of the proposed regulations were increased revenue for licensed testing laboratories and decreased costs for licensed testing laboratories. The increased revenue for testing laboratories is based on multipack products currently being manufactured that would need to follow the new regulations. This would not change under this alternative. The decrease in costs for licensed testing laboratories under the proposed regulations is related to new language regarding submission of COAs that would be the same under this alternative.

5.1.2 Alternative 1 Direct Economic Costs

The quantified direct economic costs of the proposed regulations include increased costs for licensed manufacturers who are currently making multipack products and would need to comply with the new regulations. This would not change under this alternative.

5.1.1 Alternative 1 Market Effects

The increase in demand estimated for the proposed regulations is based on the general estimated increase in demand for multipack products and is not specific to the number of batches that would be included. It is difficult to differentiate between the potential demand increase related to introducing multipacks in general and introducing multipacks, but with limits on the number of products per pack. Conceptually, the demand increase would be greatest with the least restrictions. However, given that most observed multipack products currently offered would include two batches, it seems unlikely that there would be a significant difference. Therefore, the market effects under this alternative are expected to be the same as under the proposed regulations.

5.1.2 Alternative 1 Indirect and Induced Effects

Given that the direct impacts and market effects under this alternative are expected to be the same as under the proposed regulations, the indirect and induced impacts would also be the same.

5.1.3 Employment (Job) Estimated Effects under Alternative 1

These impacts are expected to be the same as under the proposed regulations.

5.1.4 Estimated Effects on a Typical Business and Small Business under Alternative 1

These impacts are expected to be the same as under the proposed regulations.

5.1.5 Other Economic Impacts to Businesses, Individuals, Worker Safety, and the State's Environment under Alternative 1

These impacts are expected to be the same as under the proposed regulations.

5.1.6 Department Fiscal Impacts under Alternative 1

These impacts are expected to be the same as the proposed regulations (namely, a one-time cost of around \$250,000 to make changes to CCTT that would be absorbed within the Department's budget).

5.1.7 Other State and Local Public Agencies Fiscal Impacts under Alternative 1

These impacts are expected to be the same as under the proposed regulations.

5.1.8 Basis for Rejecting Alternative 1

Alternative 1 was rejected due to having higher expected fiscal costs for the Department from anticipated Metrc cost increases but no increase in expected benefits. That is, the alternative would increase Department costs for Metrc software development to manage more (more than 3) multipacks in CCTT, but it would not result in any expected increase in economic benefits.