

cdfa california department of food & agriculture





* CALIFORNIA



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STATEMENT OF THE SECRETARY

Here at the California Department of Food and Agriculture (CDFA), the Division of Measurement Standards (DMS) is responsible for the uniform and equitable enforcement of weights and measures laws throughout California.

In recent years, our workload has expanded and modernized considerably to include the "innovation economy," from ridesharing apps like Uber and Lyft to alternative fuels like electricity and hydrogen. The science behind these new-tech developments is exciting, and it is also tied to California's ongoing commitment to climate adaptation. Because these technologies all directly involve consumers, we have a responsibility to make sure fairness, equity and uniformity are built into these new systems.



Karen Ross, Secretary

DMS, in partnership with county weights and measures jurisdictions:

• Determine the accuracy of weighing and measuring devices used for commercial purposes

• Validate weighments of bulk loads of food products and other commodities destined for California's marketplace

• Establish and enforce quality, advertising, and labeling requirements for motor fuels, lubricants, and automotive products. This includes emerging alternative and zero-emission fuels like hydrogen and electricity.

Our state's diverse economy ranks among the top five in the world and the dedicated employees at DMS and county weights and measures jurisdictions do their part to support our diverse economy. Each year, harvested food products and other commodities produced in California are exported to countries all over the world or sold at retail right here in the Golden State. Weights and measures officials are essential to maintaining the transparency and equity of such transactions made between agricultural producers, packers, transporters, distributors, and retailers. This Annual Report to the Legislature is required pursuant to California Business and Professions Code, Division 5, § 12102 and informs California citizens of the state's weights and measures activities during Fiscal Year (FY) 2020/21. In early 2020, in the face of the COVID-19 pandemic, state and county weights and measures officials were deemed essential to keeping California's economy and food supply moving forward, and they continued their duties to support the state's businesses and consumers alike. If you or your staff have questions regarding this report, or if additional information is needed, please contact CDFA's Legislative Unit at 916-403-6726.

Karen Ross CDFA Secretary

EXECUTIVE SUMMARY

While roughly 12% of Americans live in California, the state contributed 14.4% to the U.S. GDP in 2020

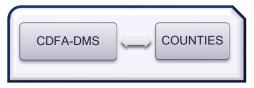
California's GDP grew to \$3.35 trillion in 2020

The programs administered by DMS directly impact nearly \$1.7 trillion, or one-half of the state's GDP

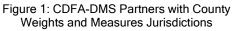
Ensuring fair and accurate transactions is critical to a robust and reliable economy. Our state and county system of enforcement effectively oversees over 1.84 million registered commercial weighing and measuring devices in California (CA). Of the 58 counties in California, six county offices of weights and measures combine their oversight efforts. DMS partners closely with the resulting 55 county jurisdictions of weights and measures to carry out enforcement activities at the local level under the authority and direction of the CDFA Secretary.

In many of its programs, DMS' role is to provide oversight, support, coordination, technical training, and advice to county sealers and their staff.

DMS' oversight of the state/county system helps ensure uniform application of weights and measures laws and regulations statewide.



Enforcement authority is delineated between DMS and county weights and measures jurisdictions through a



memorandum of understanding to prevent overlapping or duplicative efforts. Several programs are administered primarily by county sealers of weights and measures and others directly by DMS. The following report is a compilation of both state and county activities relating to weights and measures activities in FY 2020/21.

COST PER CAPITA

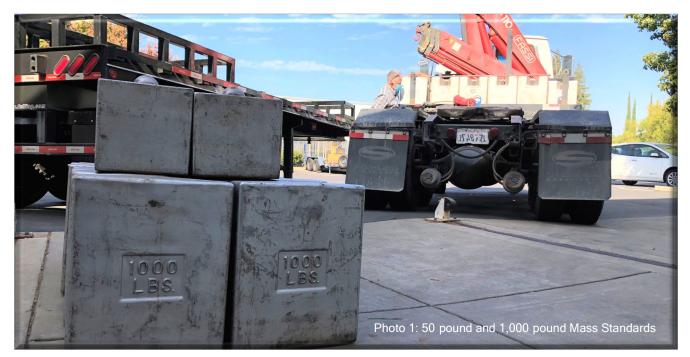
Statewide, DMS and county sealers of weights and measures coordinate their regulatory oversight and commit significant resources to protect the California marketplace. The cost per capita is the statistical ratio of all weights and measures-related expenditures to the current population of California as reported by the California Department of Finance. The enforcement efforts of California weights and measures officials protect those doing business in the state so they can operate confidently in a marketplace that is fair, transparent, competitive, and equitable for all. In turn, California consumers who buy retail goods and services sold by weight, measure, or count are also protected from intentional or unintentional fraud and unfair business practices. The detailed allocation of program hours and expenditures by DMS and each county in their weights and measures enforcement activities is represented in the 2020-21 Fiscal Year Expenditure Report.



Cost Per Capita (Per person/year)

Figure 2: Weights and Measures Protects All California Consumers

DMS PROGRAMS



Metrology

What is metrology and why is it relevant?

Metrology is the science of measurement. CDFA is required to maintain the state's official standards of measurement: mass, volume, length, time, temperature, and electrical energy. These state standards are maintained in the DMS <u>Metrology Laboratory</u>, which is accredited by the National Voluntary Laboratory Accreditation Program (NVLAP).

International relevance:

The state standards maintained by the DMS Metrology Laboratory are metrologically traceable to national standards safeguarded at the National Institute of Standards and Technology (NIST), an agency within the United States Department of Commerce. In turn, NIST's national standards are metrologically traceable to the International System of Units (SI) standards agreed upon by the International Bureau of Weights and Measures (BIPM, Bureau International des Poids et Measures) in France. This network of traceability makes



Photo 2: Various Certified Mass Standards

California's standards uniform with other standards held throughout the United States and worldwide.

How this pertains to California's well-being:

California is a globally important economic engine, and many of California's commodities, goods, and services are sold by weight, measurement, or count. DMS' Metrology Laboratory supports California's export economy via certified state and county standards which form the legal basis for most commercial transactions in California.

What we do:

The principal purpose of the DMS Metrology Laboratory is to certify the physical standards used by the county offices of weights and measures and private businesses who test commercial weighing and measuring devices.

Use of standards that are not certified to be accurate can result in a device erroneously being approved or rejected, thus causing financial harm to either buyer or seller. This may result in overturned enforcement actions or court cases. It may also cause financial liability for the entity who tested and sealed the commercial device.



Photo 3: 5-gallon Liquid Measure Standards (Provers) to Test the Delivery of Liquid Fuel. Inset: Viewing Gage of Prover

FY 2020/21 results:





Type Evaluation

What is type evaluation and why is it relevant?

Before any new type or design of weighing, measuring, or counting device can be sold and used for commercial purposes in California, it must be type evaluated and approved by DMS. Type evaluation certifies that a new commercial weighing or measuring device complies with all applicable specifications and tolerances, is accurate and correct, and is designed to help prevent tampering.

Type Evaluation - CTEP

DMS' <u>California Type Evaluation Program (CTEP)</u> evaluates a device according to California's regulations. Once a device is approved, it receives a CTEP Certificate of Approval.

Type Evaluation - NTEP

CTEP also participates in the National Type Evaluation Program (NTEP) operated by the National Conference on Weights and Measures (NCWM). As an NTEP-approved laboratory, DMS is authorized to evaluate weighing and measuring devices intended for the national marketplace. Certificates of Conformance issued under NTEP are accepted in all states and U.S. territories.

International relevance:

Manufacturers from all over the world submit devices to DMS for type evaluation. This year, CTEP received 30 applications requesting type evaluation. Most applicants are U.S.-based, but this year companies from Canada, Switzerland, and the Netherlands applied for California type evaluations as well. NTEP assigned 22 type evaluations to DMS. Of those, four were from device manufacturers located in Australia, Germany, and Denmark.

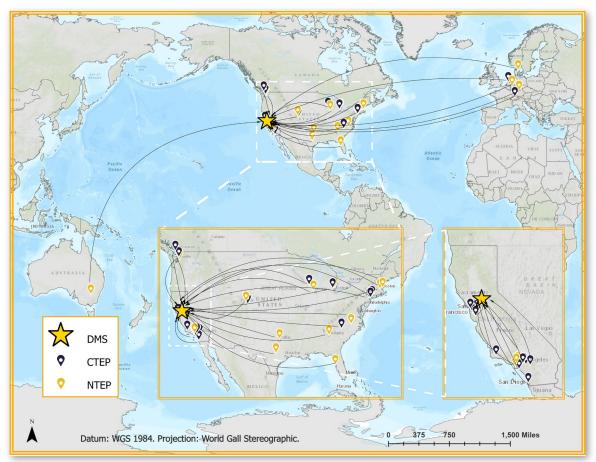


Figure 3: FY 2020/21 World Map of Devices Submitted for CTEP and NTEP Evaluations

How this pertains to California's well-being:

After completion of a successful type evaluation, the manufacturer may sell that specific model of the device for commercial use anywhere in California. This year, CTEP began evaluating electric vehicle charging stations, also known as commercial electric vehicle supply equipment (EVSE). Two were completed this fiscal year with more in queue to be evaluated in the coming months.

FY 2020/21 results:



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Commercial Devices

What are commercial weighing and measuring devices and why are they relevant?

Examples of common weighting and measuring devices include supermarket scales, fuel dispensers, vehicle and livestock scales, taximeters, and propane meters, to name a few. Devices recently introduced into the marketplace include hydrogen fuel dispensers, EVSE, and mobile applications used for personal transportation, e.g., Uber and Lyft. These devices have a direct impact on the cost of commodities and services.

How this pertains to California's well-being:

Since the determination of weight or measure directly impacts the cost of most goods and services bought and sold, a fundamental obligation of state government to its citizens is the effective oversight of commercial weighing and measuring devices.

What we do:

County sealers of weights and measures are responsible for inspecting and testing all newly installed commercial devices in their jurisdiction and again on an established frequency thereafter. County sealers may test them more frequently as they deem necessary.

DMS' Device Enforcement Program is responsible for providing various training courses and

technical support to county weights and measures officials. Staff at DMS continued to offer essential training on devices by following safety protocols during the COVID-19 pandemic.

Devices found to be accurate and correct receive an official county approval seal. As an example, here is a 2020/2021 approval seal from the County of Placer Agricultural Department / Weights & Measures.



Figure 4: 2021 Approval Seal of the County of Placer Agricultural Department / Weights & Measures

FY 2020/21 Results:

The <u>2020-21 Fiscal Year Expenditure Report</u> tallies over 1.84 million registered commercial weighing and measuring devices. This number is expected to grow in the coming years as new EVSE and other alternative fuel dispensers are installed.

Measuring Devices



1,712,714 registered commercial measuring devices

Examples of registered • 719,468 Water

- commercial measuring devices 354,063 Electric
 - include these types of meters 309,499 Vapor
- - 289,307 Retail Motor Fuel
 - 40,377 Other

For more information, visit:

https://www.cdfa.ca.gov/dms/notices/general/2022/G-22-03 2020-21 Fiscal Year Expenditure Report.pdf

Weighing Devices



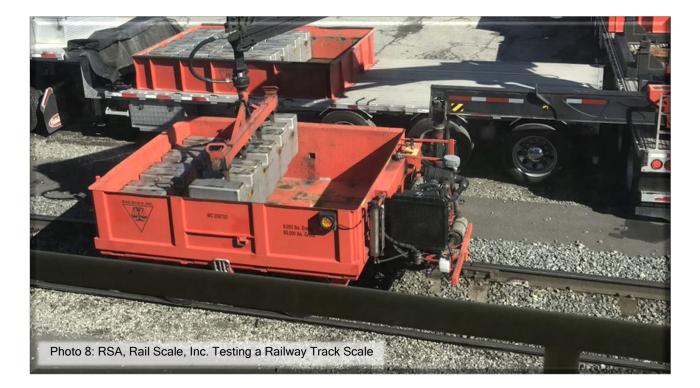
127,594 registered commercial weighing devices

Examples of registered • 75,550 Computing commercial weighing devices • 20,484 Dormant Platform include these types of scales • 13,243 Counter

- 5,013 Vehicle
- 13,304 Other

For more information, visit:

https://www.cdfa.ca.gov/dms/notices/general/2022/G-22-03 2020-21 Fiscal Year Expenditure Report.pdf



Registered Service Agencies

What are Registered Service Agencies and why are they relevant?

Business owners of commercial weighing and measuring devices must ensure their equipment operates properly throughout the year, not just when inspected. To meet this requirement, they rely on companies called Registered Service Agencies (RSAs) who specialize in device installation, service, and repair.

How this pertains to California's well-being:

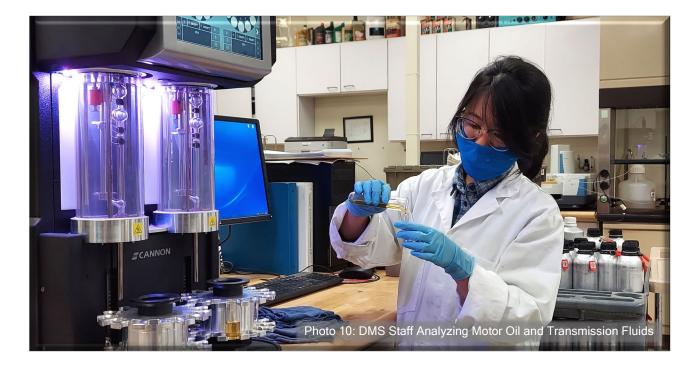
After completing their work, RSAs have the authority to place a device into service pending official inspection by a weights and measures official. This delegated authority minimizes device downtime and business interruption after installation or repair.

What we do:

DMS' <u>Registered Service Agency Program</u> oversees the work of these companies and their employees. RSA companies must register with DMS and prove they have sufficient certified standards for the work they perform. Their employees (service agents) must pass an exam and be licensed before they may legally perform RSA work in California.

FY 2020/21 results:





Fuels, Lubricants, and Automotive Products

What are Fuels, Lubricants, and Automotive Products and why are they relevant?

One of the most in-demand and widely consumed resources in the world is petroleum. The fuels derived from petroleum, such as gasoline and diesel fuel, are used in daily life, most

commonly as engine fuel in vehicles. DMS' <u>Fuels</u>, <u>Lubricants</u>, and <u>Automotive Products Program</u> (<u>FLAPP</u>) oversees the regulation of automotive products and lubricants like motor oil, transmission fluid, brake fluid, diesel exhaust fluid (DEF), and engine coolants that are essential to the proper function of a motor vehicle.

How this pertains to California's wellbeing:

Every day, 43 million gallons of retail motor vehicle fuel is sold in California. In FY 2020/21, the state's annual total sales of gasoline and diesel topped 16 billion gallons. This significant decrease in sales was primarily because of the COVID-19 pandemic. However, California's motorists

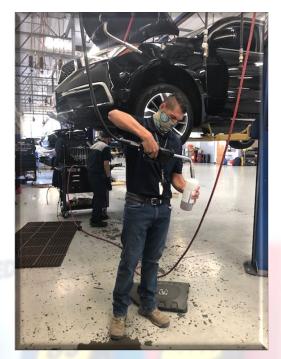


Photo 11: DMS Staff Collecting Bulk Motor Oil Samples



Photo 13: DMS Staff Analyzing Diesel Fuel Samples



Photo 12: DMS Staff Testing Gasoline Samples to Calculate Octane Rating



Photo 14: DMS Staff Analyzing Automotive Product Samples

DMS staff test the performance and quality of fuels, lubricants, and automotive products to protect motorists and their vehicles. and commercial transporters of food and commodities still needed and expected to receive the proper grade and quality of fuel they paid for.

DMS continued its work of sampling and testing the state's fuel supply and checked that the advertised prices of fuel and automotive products were the same as what the consumer was charged.

Samples of fuels, lubricants, and automotive products are purchased by state and county officials, either openly or undercover at service stations, retail stores, or quick lube and automotive repair shops. Samples are taken to one of two DMS laboratories in Anaheim and Sacramento where fuels, lubricants, and automotive products are tested using procedures developed by ASTM International and SAE International.

What we do:

DMS and county weights and measures staff conduct fuel

station inspections to ensure

prices match on street signs and dispensers

discount price advertising is not confusing or misle<u>ading</u> air and water dispensing equipment is in good working order



Photo 15: DMS Staff Inspecting a Retail Motor Fuel Dispenser



Photo 16: DMS Staff Inspecting an Air and Water Dispenser

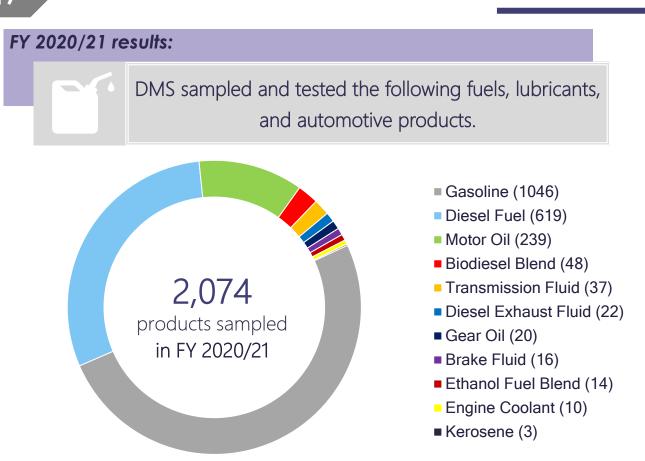


Chart 1: Fuels, Lubricants, and Automotive Products Sampled

Compliance Rates			
Gasoline	92.7%	Motor Oil	91.4%
Ethanol Fuel Blend	66.7%	Gear Oil	71.4%
Diesel	91.3%	Transmission Fluid	72.0%
Biodiesel Fuel Blend	81.8%	Diesel Exhaust Fluid	100.0%
Kerosene	N/A	Brake Fluid	85.7%
		Engine Coolant	100.0%

Table 1: Compliance Rates of Samples

DMS staff take immediate action when a violation occurs. Field staff will take enforcement action based on the laboratory results. That enforcement action may include removing a product from sale.



Alternative Fuels

What are alternative fuels and why are they relevant?

Alternative fuels are low- and zero-emission motor vehicle fuels that produce less greenhouse gas (GHG) emissions and ultimately reduce the effects of climate change. Roughly 40% of California's GHGs come from the transportation sector. For this reason, California has the nation's most aggressive short- and long-term goals for improving air quality, reducing dependence on petroleum-based motor fuels, and lowering vehicular emissions of GHGs. In support of these critical environmental efforts, the <u>Alternative Fuels Quality & Oversight</u> <u>Program</u> regulates low-carbon and zero-emission motor vehicle fuels such as E85, diesel and biodiesel made from non-petroleum sources, renewable compressed and liquefied natural gas, hydrogen gas, and electricity.

DMS' Anaheim and Sacramento Alternative Fuel Laboratories are equipped with state-of-the-art instruments to test hydrogen fuel quality in accordance with SAE International J2719 specifications.



Photo 18: Gas Chromatograph (GC)





Photo 19: Cavity Ring-Down Instrument

Photo 20: Fourier Transform Infrared (FTIR) Spectrometer

How this pertains to California's well-being:



Californians are early adopters of zero-emission vehicle (ZEV) transportation including battery electric vehicles and hydrogen fuel cell vehicles. The state's infrastructure of Electric Vehicle Supply Equipment (EVSE), also known as electric vehicle charging stations, is growing rapidly, and is expected to substantially increase

over the next several years to meet the state's zero-emission transportation goals by 2035. California also leads the nation with the most service stations that offer hydrogen gas for sale as motor vehicle fuel.

What we do:

DMS' fuels programs, address the quality, method of sale, labeling, and advertising of all motor vehicle fuels including ZEV motor fuels. DMS' regulatory and oversight activities have standardized California's zero-emissions fueling infrastructure and made the method of sale uniform for all businesses in this industry. DMS conducted EVSE training for weights and measures officials in Monterey, San Joaquin,



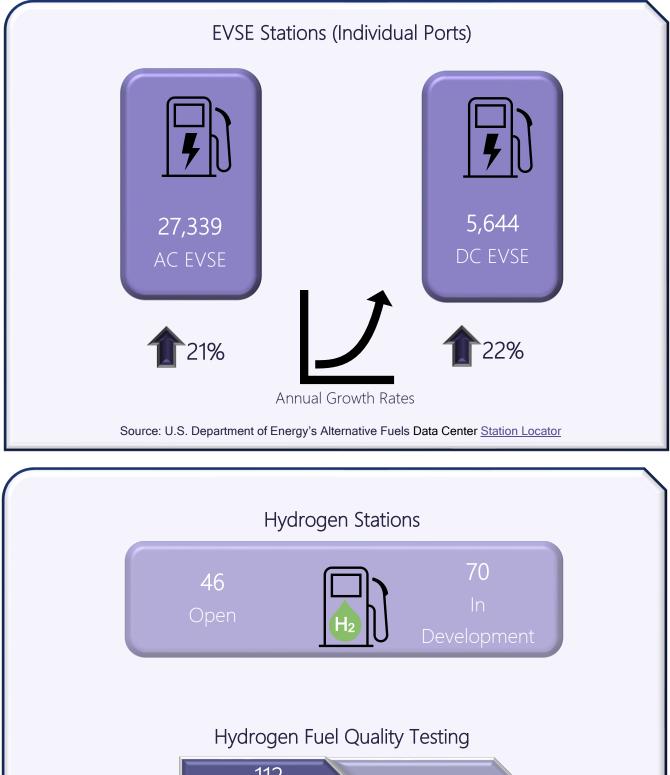
Photo 21: Consumer Refueling a Hydrogen **Fuel Cell Vehicle**



AC EVSE

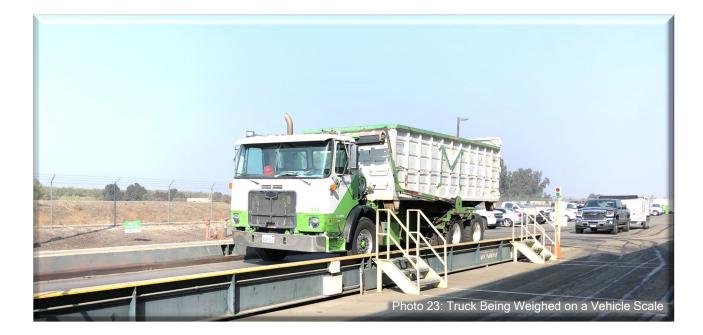
amount of fuel they paid for.

Kern, San Diego, Orange, and Santa Barbara counties. DMS currently owns two EVSE field test standards and is in the process of procuring five additional field test standards to assist counties with EVSE testing. Calendar year 2021 marks the first year DMS and county weights and measures began testing and sealing (issuing a seal of approval for) AC EVSE for accuracy of delivery. DMS tests and seals hydrogen fuel dispensers for accuracy of delivery as well. This assures drivers of electric and hydrogen fuel cell vehicles that they are getting the





Source: California Fuel Cell Partnership Stations Map



Weighmasters

What are Weighmasters and why are they relevant?

A "weighmaster" is an individual or business licensed by DMS to certify that the weight, measurement, or count of a commodity is accurate. Weighmasters fill a critical role, especially in agriculture, because many times neither the seller nor the buyer is present to witness the weighment of the commodity. Weighmasters work at businesses in a variety of industries, e.g., wineries, cement plants, scrap metal yards, dairy co-ops, moving and storage companies, livestock dealers, guarries, and feed mills, to name a few. Throughout the food distribution chain, fruits, nuts, vegetables, and other farm commodities are weighed or measured multiple times by weighmasters as the harvest is moved from the grower to processor, eventually reaching the retail store where it is made available for purchase.



Photo 24: A Sample of Tomatoes Being Taken from a Truck Load

How this pertains to California's well-being:

Often, international farmers, food distributors, and those who package food products buy or sell their harvest in California. Having established standards for California weighmasters assures international businesses that accurate records are kept of the sale of products destined for California's marketplace. Similar to international business transactions, the same standards upheld by weighmasters apply to California growers and food processors who can rest assured that their transactions are fair and they are being paid correctly for the amount of product they are selling. Accurate weighing, measuring and counting of food commodities benefits consumers in California who are directly affected by the cost of food and commodites when they are eventually sold at retail.

What we do:

DMS' <u>Weighmaster Enforcement Program</u> oversees weighmasters including having authority to audit a company's weighmaster certificates and other records, verify proper weighing procedures, reweigh vehicles and containers to confirm accurate net-weight statements and conduct undercover sales at weighmaster companies.



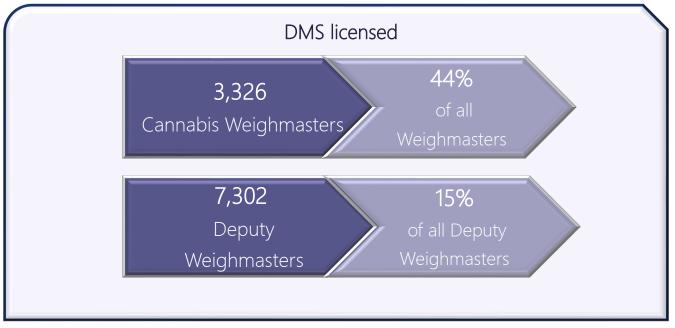
FY 2020/21 results:

Cannabis Weighmasters

Accurate measurements are essential to the success of the cannabis industry. Due to the high dollar value of the product, small amounts diverted (or illegally grown product inserted) during processing and distribution can significantly impact marketplace equity and compliance with cannabis laws and regulations.

In January 2019, the CalCannabis Division within CDFA and the California Department of Public Health adopted regulations requiring cannabis cultivators and distributors to use certified scales and become licensed weighmasters.

FY 2020/21 results:



Agreements with CalRecycle

Since 2015, DMS' Weighmaster Program has maintained an interagency agreement (IAA) with the California Department of Resources Recycling and Recovery's (CalRecycle) Covered Electronic Waste Program to help improve compliance with electronic waste recycling requirements. Payments to e-waste collectors and/or recyclers are based on weight and count; it is vital that these weights and quantities are summed and recorded accurately.

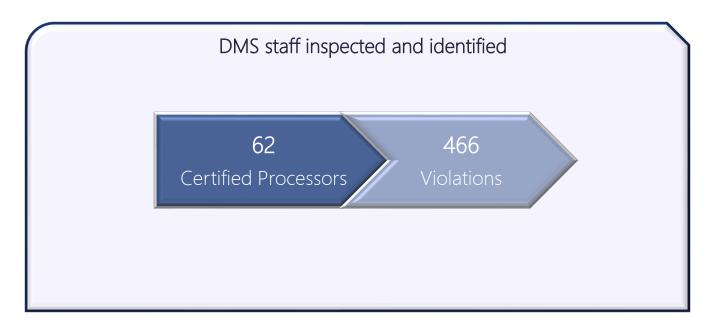
FY 2020/21 results:



23



Consumers receive California Refund Value (CRV) refunds when they redeem empty beverage containers at a Recycling Center. The recycling centers then sell these materials to Certified Processors who package them into large bales and receive payment from CalRecycle for the recycled materials. CalRecycle has authority to audit Certified Processors for compliance with recordkeeping, reporting, and operational requirements. DMS' role is to inspect Certified Processors for compliance with CalRecycle's requirements and all applicable Weighmaster Program laws and regulations.



Quantity Control

What is Quantity Control and why is it relevant?

The Quantity Control (QC) Program's

responsibilities include: checking packages for accuracy of net-content statements, verifying that businesses request only the correct amount of payment when customers make purchases, and enforcing "Fair Packaging and Labeling Act" requirements, including laws against misleading and deceptive packages or advertisements. County weights and measures officials conduct these inspections. Most retail stores use scanning systems to identify items, track inventory, and maintain



Photo 26: Net Contents Statement on a Cereal Box

current prices in their database. The posted or advertised price of an item must agree with the price charged. Charging customers a higher price than advertised is a violation of weights and measures law.

How this pertains to California's well-being:



Regardless of product origin, manufacturers of commodities that are packaged in the state or abroad are required to follow the state's laws and regulations for labeling requirements and accurate net-content statements. From time to time, consumers have received a short measure package or have been overcharged. To any single consumer, the harm may appear minor. However, for business

competitors, small errors can add up and create an unfair pricing advantage.

What we do:

DMS currently does not have an active Quantity Control Program. General Fund shortfalls in 2011 eliminated state funding for this program, but some counties still have active QC inspection programs.

100 - 1.5g (0.05 OZ) BAGS / TOTAL NET WT 150g (5.29 OZ)

FY 2020/21 results:

QC Data (All Counties)

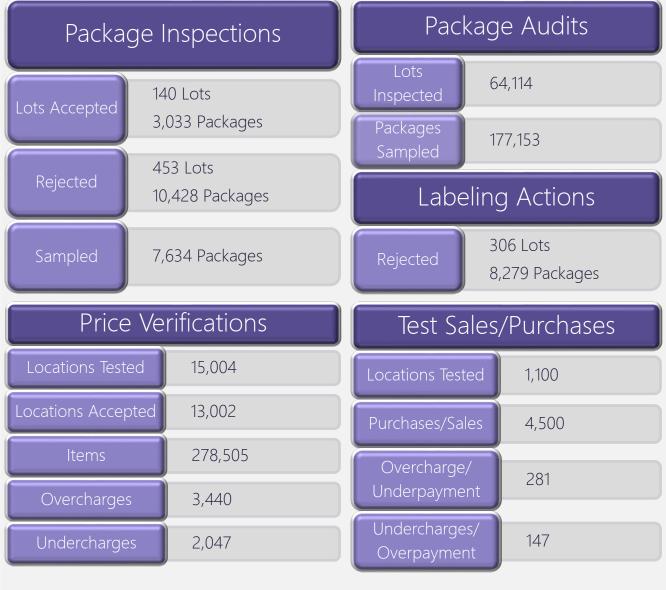


Table 2: FY 2020/21 County Cumulative QC Data

For more information, visit:

https://www.cdfa.ca.gov/dms/notices/general/2022/G-22-03 2020-21 Fiscal Year Expenditure Report.pdf



Country of Origin Labeling

What is COOL and why is it relavent?

<u>Country of Origin Labeling (COOL)</u> is a federal consumer labeling law administered by the United States Department of Agriculture, Agricultural Marketing Service (USDA/AMS). Grocery stores must notify shoppers of the country of origin of certain regulated commodities. USDA/AMS contracts with DMS to audit retailer compliance. Annual audits are conducted at preselected regulated retail locations. DMS conducts two types of audits for the COOL program: an initial audit and a follow-up audit. USDA/AMS posted a YouTube video that provides an <u>overview of COOL</u>.

Regulated Commodities:

The muscle cuts and ground meat of lamb, chicken, and goat; wild-caught and farm-raised fish and shellfish; fruits, vegetables, and ginseng; and peanuts, pecans, and macadamia nuts. Fish markets, butcher shops, restaurants, and other food service establishments, e.g., cafeterias, lunchrooms, and institutions, are exempt from COOL requirements.

Examples of COOL Labeling Requirements:

- For U.S. origin muscle cut chicken, lamb, and goat products, the label must state, "Born/Hatched, Raised, and Slaughtered/Harvested in the U.S."
- Fish and shellfish must include country of origin and method of production at the point of sale.
- For fruits, vegetables, peanuts, pecans, macadamia nuts, and ginseng, the country of origin declaration is the location where the product was harvested.

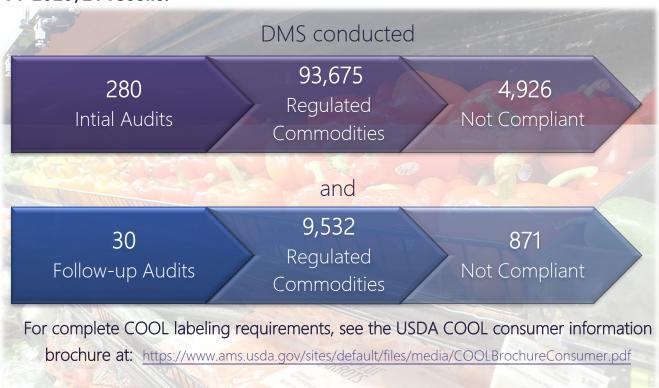
These signs are not compliant with COOL Requirements.



Photos 28, 29, and 30: Signs and Labels that are Not Compliant with COOL Requirements.



Photo 31: Compliant Signage for Corn



FY 2020/21 results:

FRAUD PREVENTION

What are payment card "skimmers" and why is it important to prevent them from being used in California?

A major method of fraud in California is consumer theft by means of a payment card "skimmer." Payment card skimmers allow a defrauder to steal credit and debit payment card information, including personal identification numbers (PINs), collected from each transaction. The account information is used by criminals to make counterfeit cards, which can then be used to drain consumers' bank accounts or make fraudulent in-store or Internet purchases. According to the National Association of Convenience Stores (NACS), 75% of all purchases at fuel stations are made using a credit or debit card.



There are two general types of payment card skimmers that can be installed in a matter of seconds: external skimmers and internal skimmers. The external skimmer typically uses an overlay that matches up with and looks like the buttons of the actual point-of-sale (POS) keypad underneath it. This kind of skimmer collects payment card information as the consumer keys in their payment information using the fraudulent keypad. The most common locations to find skimmers in California are at retail fueling stations.

The internal skimmer is installed inside of a motor fuel dispenser cabinet. A consumer's payment card information is stolen when the card is inserted. Being inside the dispenser and out of sight, the internal skimmer is undetectable by the consumer at the time of purchase. Defrauders then use various methods of wireless communication to retrieve the card information - without ever having to reopen the fuel dispenser!



Photo 33: Internal Skimmer Found Inside a Fuel Dispenser Cabinet

How this pertains to California's well-being:

Although skimmers have been found in every part of California, popular locations for thieves to hide skimmers include service stations with higher-than-average sales, stations located near a busy highway, and locations that have weak security deterrents or none at all.

Once a fuel dispenser cabinet has been opened, it takes as little as 5 seconds to install an internal skimmer.

What we do:

State and county weights and measures officials have authority to open fuel dispenser cabinets and inspect inside for internal skimmers, and check for external skimmers on dispensers and inside convenience stores. Many jurisdictions check these things while they are conducting other routine inspections at these locations.



FY 2020/21 results:

FINANCIAL STATEMENT

FY 2020/21 Financial Data

REVENUE	Budgeted	Actual
Federal (United States Department of Agriculture)	\$ 290,025	\$ 261,322
CDFA (General Fund)	\$ 461,229	\$ 461,229
Industry (Fee-Based Funds)	\$ 8,326,610	\$ 7,493,761
Other (Cost of Implementation)	\$ 1,585,000 <	\$ 1,585,000
Inter-Agency (CalRecycle)	\$ 644,195	\$ 284,647
Total Revenue	\$ 11,307,059	\$ 10,085,959

EXPENDITURES	Budgeted	Actual	
Personnel Services	\$ <mark>6,310,817</mark>	\$ 4,692,373	
Operating Expenses (minus County payments)	\$ 5,955,991	\$ 3,972,835	
Total County Payments	\$ 689,535	\$ 689,535	
Total Expenditures	\$ 12,956,343	\$ 9,354,743	

Table 3: DMS Financial Data for FY 2020/21

APPENDICES

Appendix 1 - Glossary of Acronyms, Abbreviations, and Definitions

Acronyms and Abbreviations

AC - Alternating Current (electricity)

AMS - Agricultural Marketing Service, administered by USDA

ASTM - American Society for Testing and Materials, International

ATM - Automated Teller Machine

BIPM - International Bureau of Weights and Measures

BPC - California Business and Professions Code

CalCannabis - CalCannabis Cultivation Licensing Division, within CDFA

CalRecycle - California Department of Resources Recycling and Recovery

CDFA - California Department of Food and Agriculture

COOL - Country of Origin Labeling Program, Administered by the USDA/AMS

CRV - California Refund Value

CTEP - California Type Evaluation Program

DC - Direct Current (electricity)

DEF - Diesel Exhaust Fluid

DMS - Division of Measurement Standards, within CDFA

EVSE - Electric Vehicle Supply Equipment

E-waste - Electronic Waste

FLAPP - Fuels, Lubricants, and Automotive Products Program

FY - Fiscal Year; July 1 through June 30 of the Following Year

GDP - Gross Domestic Product

IAA - Interagency Agreement

NACS - National Association of Convenience Stores

NCWM - National Conference on Weights and Measures

NIST - National Institute of Standards and Technology

NOV - Notice of Violation

NTEP - National Type Evaluation Program

NVLAP - National Voluntary Laboratory Accreditation Program

OIML - International Organization of Legal Metrology

POS - Point-of-Sale

QC - Quantity Control

RSA - Registered Service Agency / Registered Service Agent

SAE - Society of Automotive Engineers, International

USDA - United States Department of Agriculture

Definitions

The following definitions are technical and industry trade terms that are defined either in Division 5 of the BPC; NIST Handbook 44, *Specifications, Tolerances, and Other Technical Requirements for Weighing and Measuring Devices* that is adopted and incorporated by reference in CCR Title 4, Sections 4000-4002.10.; or by DMS within the scope and purpose of this report.

Accurate - A commercial device is "accurate" when its performance or value - that is, its indications, its deliveries, its recorded representations, or its capacity or actual value, etc., as determined by tests made with suitable standards - conforms to the applicable tolerances and other performance requirements. Equipment that fails so to conform is "inaccurate" (NIST Handbook 44).

Alternating Current (AC) - An electric current that reverses direction in a circuit at regular intervals (NIST Handbook 44).

Alternative Fuel(s) - Are the following motor vehicle fuels: Biodiesel; Biodiesel Blend; Renewable Diesel; Dimethyl Ether; Electricity; Ethanol; Ethanol Fuel Blend; Hydrogen; Methanol Fuel Blend; Natural Gas; Propane; and other alternative fuels as determined by the CDFA Secretary (BPC Section 13400).

Charging Station - See Electric Vehicle Supply Equipment (EVSE).

Commercial Equipment / Commercial Device / Device - Weights, measures, and weighing and measuring devices, instruments, elements, and systems or portion thereof, used or employed in establishing the measurement or in computing any basic charge or payment for services rendered on the basis of weight or measure. As used in this definition, measurement includes the determination of size, quantity, value, extent, area, composition (limited to meat and poultry), constituent value (for grain), or measurement of quantities, things, produce, or articles for distribution or consumption, purchased, offered, or submitted for sale, hire, or award (NIST Handbook 44 and BPC Section 12531). **Correct** - A commercial device is "correct" when, in addition to being accurate, it meets all applicable specification requirements. Equipment that fails to meet any of the requirements for correct equipment is "incorrect" (NIST Handbook 44).

Direct Current (DC) - An electric current that flows in one direction (NIST Handbook 44).

Electric Vehicle Fueling Systems (EVFS) - The title of NIST Handbook 44, Section 3.40. Also see Electric Vehicle Supply Equipment (EVSE).

Electric Vehicle Supply Equipment (EVSE) - A device or system designed and used specifically to transfer electrical energy to an electric vehicle, either as charge transferred via physical or wireless connection, by loading a fully charged battery, or by other means (NIST Handbook 44). Also known as electric vehicle charging stations.

Enforce / Enforcement / Enforcement Action - Actions of a sealer, allowed by statute or regulation, that may be non-punitive, punitive, or administrative against a regulated party that is observed to be out of compliance with statute or regulation. Some examples of enforcement action include issuing the regulated party a(n): Notice of Violation; Administrative Civil Penalty, Citation, Civil/Criminal Complaint, or revocation of a registration or license (defined by DMS within the scope and purpose of this report).

Metrological Traceability - Property of a measurement result whereby the result can be related to a reference through a documented unbroken chain of calibrations, each contributing to the measurement uncertainty (OIML V 2-200, International Vocabulary of Metrology).

Sealer - When used without qualification, includes the State Sealer, county sealers and their deputies and inspectors (BPC Section 12008). Also known as "officials."

Service Agency - A person, as defined in BPC Section 12011, that for hire, award, commission, or any other payment or any kind, repairs a commercial device (BPC Section 12531).

Service Agent - A person employed by a service agency to repair a commercial device (BPC Section 12531).

Skimmer - A mechanical or electronic device installed on or in a commercial device or its point-of-sale component, that is not part of the manufacturer's design specification, used to illegally capture consumer data from a payment card; installed at ATMs, fuel dispensers, and other commercial devices equipped with a point-of-sale component (defined by DMS within the scope and purpose of this report).

Specification - A requirement usually dealing with the design, construction, or marking of a weighing or measuring device. Specifications are directed primarily to the manufacturers of devices (NIST Handbook 44).

Submeter - A meter furnished, owned, installed, and maintained by the customer who is served through a utility owned master meter (4 CCR 4027.1).

Tolerance - A value fixing the limit of allowable error or departure from true performance or value (NIST Handbook 44).

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