

2014 MSCVE Annual Report

State of Alaska

Division of Measurement Standards and Commercial Vehicle Enforcement,
Department of Transportation and Public Facilities

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Letter from the Director of MSCVE, Daniel V. Smith



January 10, 2014

As the Director of DOT&PF, MSCVE, it is my pleasure to present the 2014 MSCVE Annual Report. In the following pages you will see ways that MSCVE leverages resources and maximizes efforts to support our mission to enhance motoring public safety, protect public infrastructure, and assure marketplace confidence and equitable trade. Our success would not be possible without the outstanding cooperation of our government and industry partners, and the professionalism of Department personnel who are entrusted with the responsibility to promote safety and market confidence on a daily basis.

Measurement Standards (MS) team members work to ensure a level playing field for the residents and businesses operating in the State of Alaska. Weights and Measures inspectors provide testing and inspection of all commercial weighing and measuring devices used in commerce. Dedicated team members not only enforce statute and regulations, but provide education to device owners. Measurement inaccuracy can cause financial hardship to residents and businesses alike.

The **Commercial Vehicle Enforcement (CVE)** goal is to reduce the number of commercial motor vehicle related crashes and fatalities in Alaska. A transportation system that is safe, reliable, and efficient provides a foundation for economic prosperity. Trucks deliver everything from food, fuel, and clothing to automobiles and mined ore. Buses and motor coaches provide passenger services throughout the State vital to the tourism industry and the Alaskans' that want to go to work, school, or play. Highways in Alaska are safer than they have ever been. CVE efforts in the coming year include; educational training to carriers and drivers, and removing unsafe trucks, buses, and drivers from the road.

The **Commercial Vehicle Customer Service Center** analyzes routes and conducts load calculations to ensure safe routes that protect State infrastructure when movements require oversize and overweight permits. In an effort to protect State roads and bridges, weight restrictions are used to decrease the deterioration of the transportation system. Future enhancements to the on-line permitting system will allow near real-time permit generation for overweight loads upwards of 125%.

We will continue to focus our efforts to protect public infrastructure, enhance safety of the motoring public, and assure marketplace confidence and equitable trade for all of Alaska. Please explore the MSCVE website and allow us to share our accomplishments and plans for the future.

Drive Safely,

Daniel V. Smith, Director

"Keep Alaska Moving through service and infrastructure."

Mission Statement

**“Ensuring Accurate Trade
Measurements and Enforcing
Commercial Vehicle Regulations.”**

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Executive Summary

The purpose of this annual report is to provide information and heighten awareness of the efforts of the State of Alaska, Department of Transportation and Public Facilities, Measurement Standards and Commercial Vehicle Enforcement (MSCVE).

The Division consists of two sections: Measurement Standards (MS) and Commercial Vehicle Enforcement (CVE). MS is responsible for the annual inspection of weighing and measuring devices that are used in any form of commerce and trade. CVE is responsible for commercial motor vehicle safety, size and weight enforcement, and issuing permits, in addition to the enforcement of Federal safety regulations. Information in this report is provided in State, Federal, or calendar year, depending on the Program reporting period.

<u>Year</u>	<u>Period</u>
Federal Fiscal Year 2014 (FY2014)	October 1, 2013 – September 30, 2014
State Fiscal Year 2014 (SFY2014)	July 1, 2013 – June 30, 2014
Calendar Year 2014 (CY2014)	January 1, 2014 – December 31, 2014

Measurement Standards

Measurement Standards (MS) uses multiple approaches of enforcement and regulatory compliance to ensure accurate trade measurements in the market place. These approaches include:

- Checking prepackaged products and commodities to assure accurate pricing
- Inspection and testing of weighing and measuring equipment used in commerce
- Investigating consumer complaints and work towards willful compliance
- Providing educational outreach to device owners and consumers



There were 13,478 Weights and Measures device inspections conducted during SFY2014, compared to 14,820 inspections conducted in SFY2013. Extraordinary efforts by the remaining staff kept the difference to 9% when the workforce reduction was at 30% for most of the year. The photograph to the left highlights a retail dispenser in

Kotzebue in the winter time. MS tests year round in all weather conditions.

The package testing section inspected a total of 338 package lots which were tested for net content(s) accuracy. This total is approximately 30% less than what was reported in 2013. A total of 3,793 packages were sampled which represents 41,000 packages and as a result of this testing, a total of 79 lots failed testing and were placed off-sale. It should be noted that the percentage of packages found to be out-of-compliance increased to 5% in 2014 as compared to 2% reported in 2013. This process helps find devices that are inaccurate and increased testing is extremely effective in meeting our goals of promoting equitable in trade.

Inspectors performed 419 price verification evaluations at retail stores and sampled 20,825 products for accuracy. As a result, 2% of those businesses' measuring devices were not approved and required follow-up inspections. Consumer complaints relating to price inaccuracies are still among the most frequently received from the public.

The State Metrology Laboratory underwent a major space remodel which included expansion of the square footage, improvements to the layout and an upgrade to the air handling unit which will allow higher echelon measurements and will allow us to expand our scope of work. This expenditure is an efficiency that will benefit many in the future as businesses and other government agencies will have an in-state resource for artifact calibrations instead of sending items to out-of-state laboratories.

Commercial Vehicle Enforcement

CVE uses multiple avenues to enhance motoring safety and protect State infrastructure. These include:

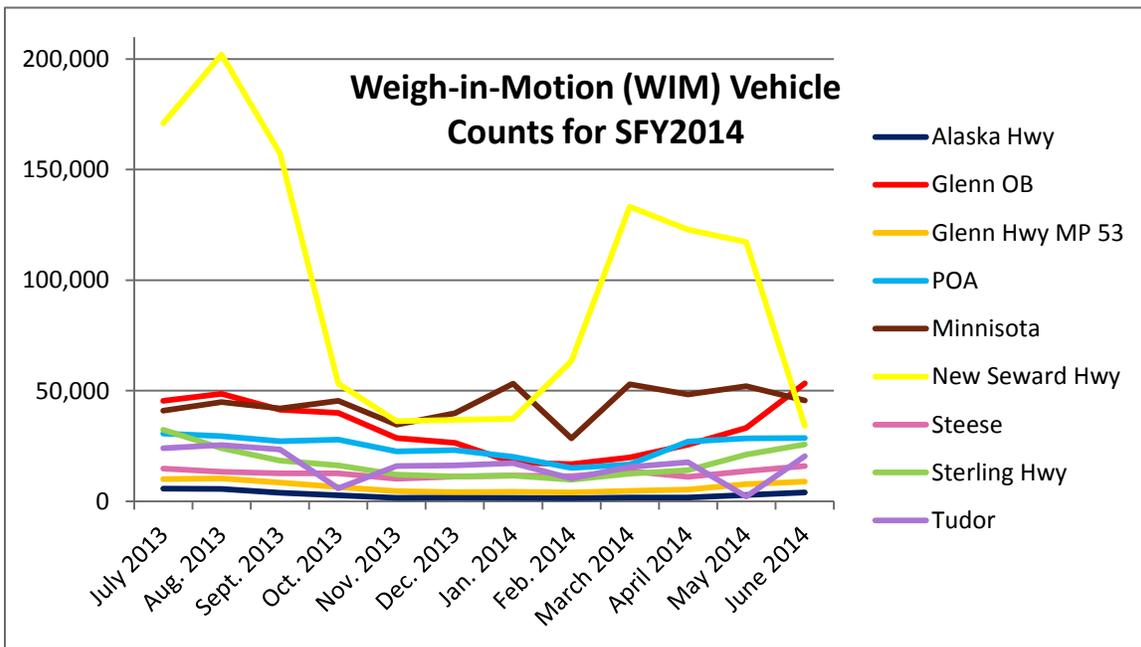
- Conducting Commercial Motor Vehicle (CMV) safety, size, and weight inspections
- Continuing enforcement and training partnerships with local, State, and Federal law enforcement agencies
- Educating property and passenger carriers that operate in Alaska
- Educating hazardous and non-hazardous materials carriers that operate in Alaska

CVEs' two primary activities are to conduct safety, and size and weight inspections on vehicles engaged in commerce and to ensure proper permitting of vehicles operating in Alaska. Commercial vehicle and driver inspections serve to reduce the severity of CMV-related crashes by removing unsafe vehicles and drivers from the road. A total of 441 unsafe vehicles and 159 unsafe drivers were removed from the road during FY2014. In FY2014, a total of 4,919 inspections were conducted by Commercial Vehicle Enforcement Officers (CVEOs). CVEOs documented 5,964 safety violations, which include: 4,270 vehicle, 1,659 driver, and 35 Hazardous Material (HazMat) safety violations.

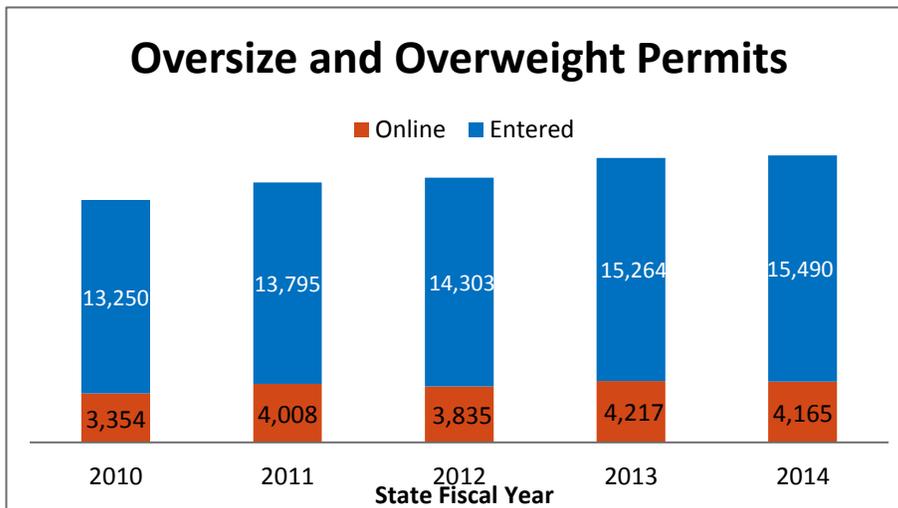
Weight compliant CMVs do not contribute to premature deterioration of Alaska's roads and bridges. The image to the right shows a CMV being ticketed for striking the support girder of a bridge, damaging it. Inspection efforts focus on maintaining a high level of CMV weight compliance at fixed weigh stations and roadside inspections which are away from fixed facilities. In FY2014, total of 44,530 CMVs were weighed for compliance at weigh stations throughout Alaska; an additional 541 vehicles were weighed during roadside weight inspections. There were 469 unpermitted overweight trucks discovered, and 224 received a written citation. The SFY2014 weight compliance was 98.6%, just short of the goal of 99.0%. Continued size and weight enforcement throughout Alaska is expected to increase weight compliance in FY2015.



The state operates and maintains seven fixed facilities where safety inspections are conducted. The state also maintains nine fixed weight-in-motion (WIM) sites for monitoring traffic flows. Using the data provided by the WIM, MSCVE was able to focus efforts in locations of high traffic volumes. The following figure highlights the monthly traffic flows, for vehicle classes 5-13, for each WIM in SFY2014.



Oversized and overweight vehicles without a permit are a safety hazard to the motoring public. The Commercial Vehicle Customer Service Center (CVCSC) analyzes routes to process permits that ensure safe routes that protect the State’s infrastructure when movements require oversize and overweight permits. The CVCSC produced 19,655 oversize and overweight permits in SFY2014; an additional 9,094 temporary truck/trailer registration permits were processed. The overall oversize and



overweight permits issued has increased between SFY2010 and SFY2014.

Experienced, safety-conscious CMV drivers are at risk of engaging in driving behaviors that could lead to a crash when the road conditions are bad. Impaired performance due to

fatigue, inattention or distracted driving, or an unexpected external distraction can all lead to a devastating crash. In an effort to heighten CMV awareness, CVE conducts educational workshops year-round at carrier facilities and schools. The MSCVE website is periodically updated with links and information for the CMV industry and public.

Financial Position

MSCVE is funded through a combination of the State of Alaska and the Federal government. As per the SFY2014 Governor’s Operating Budget (December 15, 2014), during SFY2014, MSCVE spent approximately \$5,740,000.

- \$4,151,900 – General Funds
- \$ 6,000 – Interagency Receipts
- \$1,263,200 – Capital Improvement Projects Receipts
- \$ 318,900 – Unified Carrier Registration Receipts

MSCVE relies on State funding to leverage Federal grant funding. Federal funding supports a portion of enforcement personnel, equipment, technology, research, the Mobile Inspection Station, Infra-Red Inspection System, and the Commercial Vehicle Information System Network.

Future Challenges

Measurement Standards (MS) will need effective management and personnel to meet statutory requirements. Scales, meters, and scanners are required to be tested annually per AS 45.75.080 – General Testing. The anticipated challenges are to perform inspections and take enforcement actions on all weighing & measuring devices throughout the State. These inspections ensure accurate trade measurements for wholesalers, retailers, and Alaskans who purchase items based on weight, volume, or measure.

Weights and Measures inspectors operate out of Anchorage, Fairbanks, and Juneau and travel to outlying areas in order to service the entire state. Inspectors require specialized tools and training to keep up with technological advances in measuring as it relates to device design, applications, and inspections. An on-going challenge for MS is the retention of trained staff. MS works closely with the National Conference on Weights and Measures (NCWM) to provide a Professional Development Program that encourages employee retention. More recently, MS has worked closely with the states of Washington and Utah to leverage financial training resources from the NCWM Associates Membership and have set up centralized training programs in Salt Lake City. Out-of-state travel is required in order to participate in this training.

Commercial Vehicle Enforcement (CVE) is the lead agency for safety inspections and enforcement activities in all areas of the State. CMV safety inspections in urban and rural locations reduce CMV crashes, fatalities, and injuries. An expected increase in large loads moving oil-field related merchandise will both increase the demand for permits and the volume of CMVs throughout the state. According to five years of data, 80% of permits are processed by in-house staff as opposed to online.

CVE has experienced a reduction in federal funding. MAP-21, the Moving Ahead for Progress in the 21st Century Act (P.L. 112-141), was signed into law by the President on July 6, 2012. Funding surface transportation programs for FY2013 and FY2014, MAP-21 is the first long-term highway authorization enacted since 2005. On-going changes in available funding will continue to create an environment of ambiguity which complicates long-term strategic planning. Hiring and retention of effective leadership will become essential in an exponentially competitive grant environment.

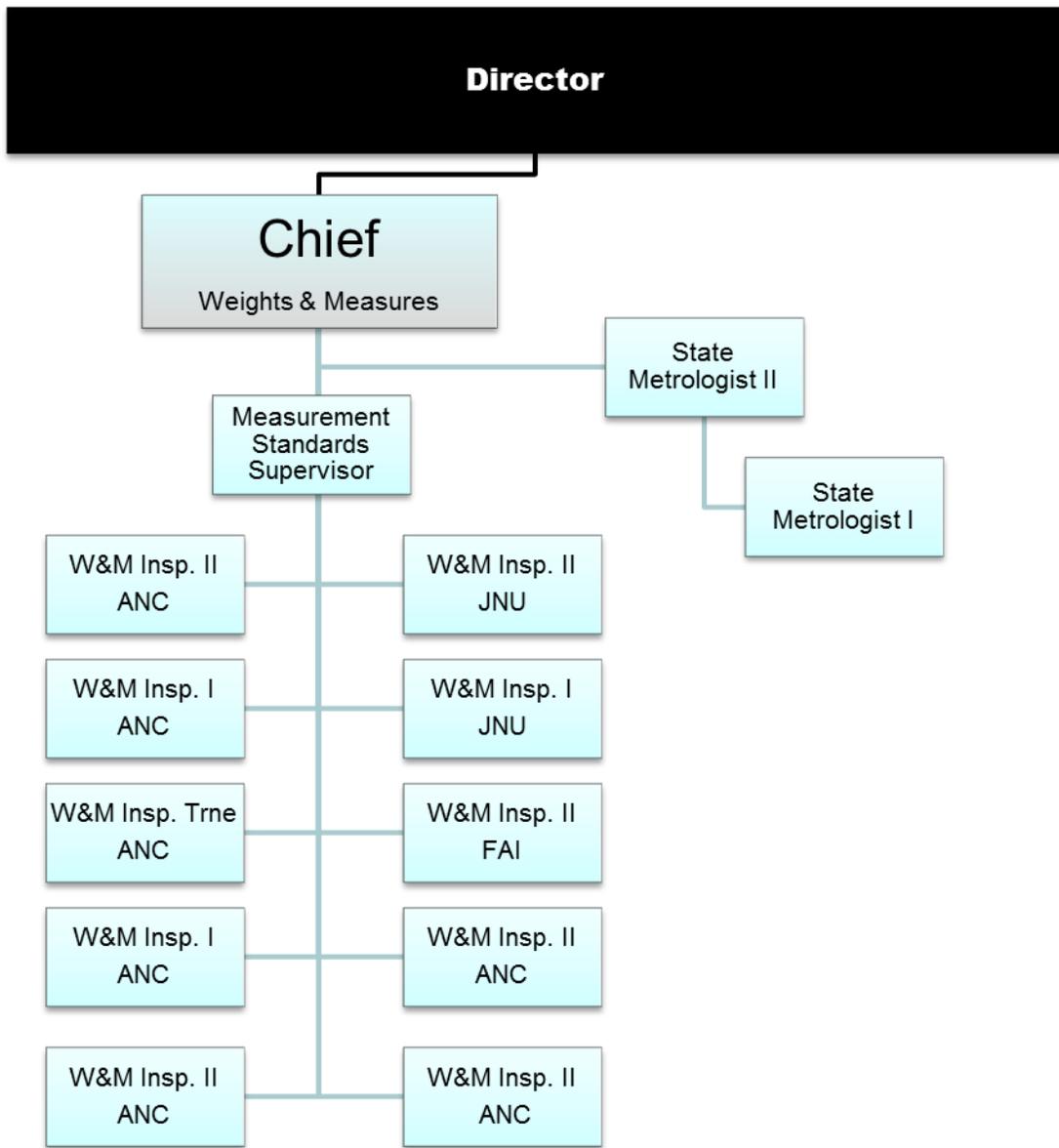
The full report is distributed to stakeholders, interested parties, and is available for download at:

www.dot.alaska.gov/mscve

Measurement Standards



Measurement Standards – Section Organizational Chart



As of November 20, 2014

Measurement Standards – Inspections and Testing

The goal of Measurement Standards (MS) is to assure marketplace confidence and equitable trade with the objective of safeguarding the public and industry in matters involving commercial determinations of quantity. Inspection and testing procedures are designed to ensure the accuracy of



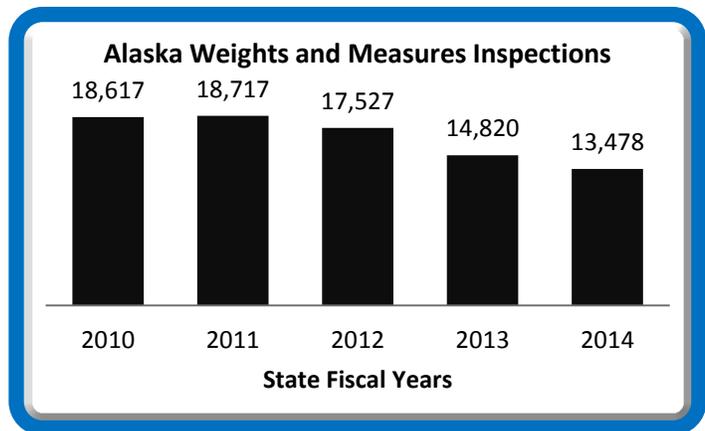
all transactions when merchandise is bought or sold by weight, measure, or count, and to eliminate the potential for fraud, carelessness, and misrepresentations during these transactions.

Activities to accomplish the goal include the testing of commercial scales and meters. The image to the left highlights a large meter testing in Dillingham prior to the beginning of fishing season.

Additionally, inspectors perform price verification evaluations and check the accuracy of advertised net content labeling. Emphasis has been placed on testing weight and measurement devices annually, increasing large fuel meter inspections, and improving inspector productivity.

Device Inspections

There were 13,478 Weights and Measures device inspections conducted during SFY2014, compared to 14,820 inspections conducted in SFY2013. Staffing levels are anticipated to be back to 100% for the spring surge in workload and these numbers are expected to increase to more normal levels in SFY2015.



Package Testing Program

The Package Testing Program protects consumers from purchasing weighed products that have less than the amount stated (e.g. a box of king crab legs is labeled 100 pounds. The actual weight is 90 pounds. Assuming the price is \$15 per pound; the consumer was overcharged by \$150). Products that are mislabeled have negative financial impacts on retailers and consumers. For example the image to the left highlights a seafood product that was mislabeled as extra lean ground beef.



The package testing program has expanded with the purchase of new tools and staff

training to allow for higher levels of testing. An evaluation of the national handbooks used to conduct

legal product testing was undertaken by our staff and recommendations to adopt the latest versions have been accepted. MS continually monitors changes that might affect regulation. Updates to current regulations are anticipated to be finalized in CY2015.

Focus on the Future

Industry compliance with statute and regulation is directly dependent on the frequency of inspections and the presence of Weights & Measures Inspectors. Frequent testing ensures accurate trade measurements for wholesalers, retailers, and all Alaskans who purchase items based on weight, volume, or measure. MS continue to assist businesses with legal packaging and labeling requirements for products intended to be sold in the national or international market.

MS works to reduce the travel costs of inspections to all communities, including those which are accessible only by air and/or ferry. MS have invested in additional test weights and measures that are located in specific communities. MS contracts with device owners to conduct weight and measure inspections that require additional test weights in support of remote road and airport construction projects.

The SFY2013 bail amounts for habitual offenders were implemented in an effort to bring devices into compliance or remove them from public use. MS has carefully monitored the results and found the program to be a success. MS has reports of willful compliance from business. The bail amounts, located in Rule43.11—Weights and measures Bail Forfeiture Schedule, range from \$100.00 to \$500.00 dollars depending on the offense.

Measurement Standards – Metrology Laboratory

Metrology is defined as the science and practice of precision measurement, and is a prerequisite aspect of weights and measures regulation. Although this function is relatively low in profile, the Metrology Laboratory provides the critical link that allows the Division to assure confidence in



measurements made within the State, particularly in regard to commerce and law enforcement. The Metrology Laboratory provides calibration and certification for the standards used by Weights and Measures Inspectors. This includes mass standards to 1,000 pounds, volumetric provers to 1,000 gallons, speed detection devices, and portable weight enforcement scales. All calibrated equipment is traceable to national standards. In the image to the left a metrologist is calibrating a test measure with the state five gallon volume standard.

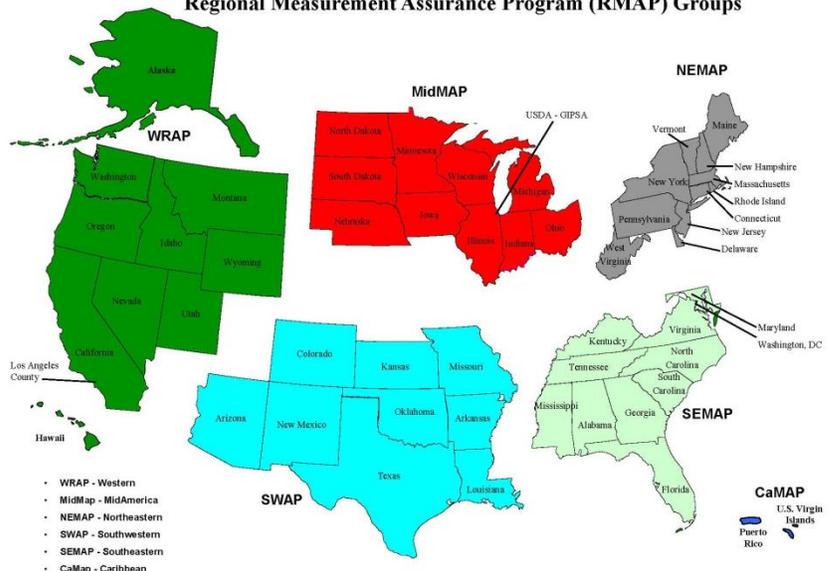
The laboratory provides test results for measuring devices of mass, volume, and frequency. Examples of these devices include tuning forks for use with speed detection equipment, portable wheel load weighers, stainless steel and cast iron test weights, and various sizes of volumetric provers. The

primary customers of the laboratory are the State Weights and Measures inspectors, but services are also provided to local law enforcement agencies, scale service companies, fuel distribution, and support organizations, medical service companies, and the military. A person who submits a weighing and measuring device for registration may incur a nominal fee, as set by 17 AAC 90.920. – Device Registration Fees.

The Metrology Laboratory is recognized by the US Department of Commerce, National Institute of Standards and Technology (NIST) through the State Laboratory Measurement Assurance Program. This program is limited to government laboratories that support regulatory weights and measures programs in specific measurement areas. It is through this program that the Metrology Laboratory has established its capability to safe-keep traceable calibrations, supporting the accuracy of its data for legal applications.



U.S. State Metrology Laboratories Regional Measurement Assurance Program (RMAP) Groups



The State Metrology Lab is one of a few state laboratories to receive a multi-year recognition from NIST during this recognition cycle. This accomplishment, combined with the improvements that have been made over the last year, gives us the confidence to apply for accreditation recognition from the National Voluntary Laboratory Accreditation Program (NVLAP). Meeting the standards of this governing body will give Alaska the credentials to be recognized as meeting globally accepted standards of excellence in the calibrations performed by staff.

Measurement Standards – Information and Contacts

The MSCVE web site is designed to be a “One Stop” portal to access information about the Measurement Standards section, get answers to questions and present concerns. On this website, the public can obtain contacts, file a complaint, or register a device for testing.

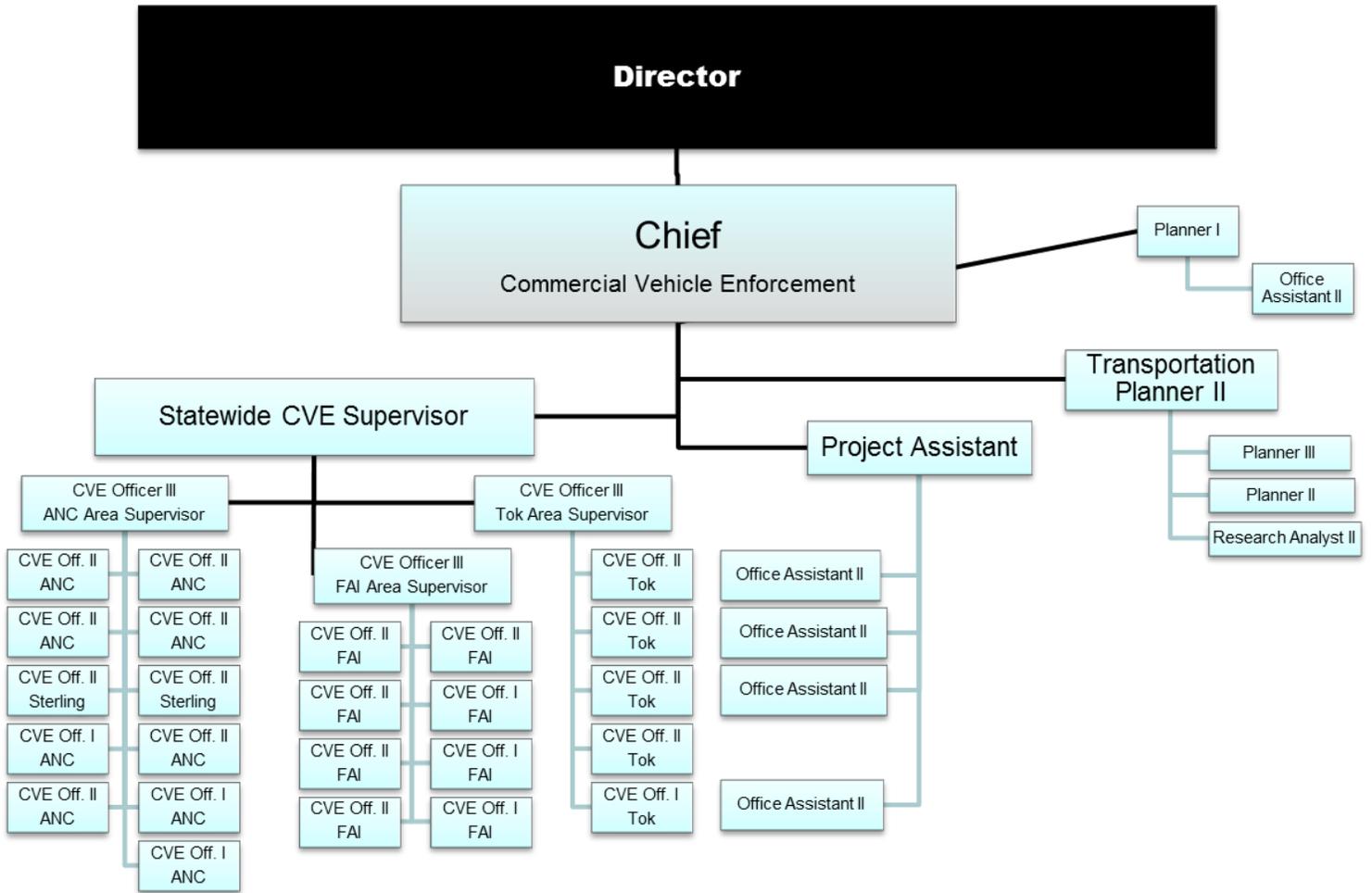
<http://dot.alaska.gov/mscve/index.cfm?go=mscve.wm>

<i>City</i>	<i>Name</i>	<i>Title</i>	<i>Phone</i>	<i>Fax</i>	<i>Email</i>
<i>Anchorage</i>	Doug Deiman	Chief, Weights & Measures	907-365-1222	907-365-1275	doug.deiman@alaska.gov
<i>Anchorage</i>	Don Brewer	Measurement Standards Supervisor	907-365-1235	907-345-2313	donald.brewer@alaska.gov
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<i>Fairbanks</i>	Stephen Pockock	Inspector II	907-451-3134	907-451-2864	stephen.pockock@alaska.gov
<i>Juneau</i>	Marty Holmberg	Inspector II	907-789-9763	907-789-0069	marty.holmbuerg@alaska.gov

Commercial Vehicle Enforcement



Commercial Vehicle Enforcement – Section Organizational Chart

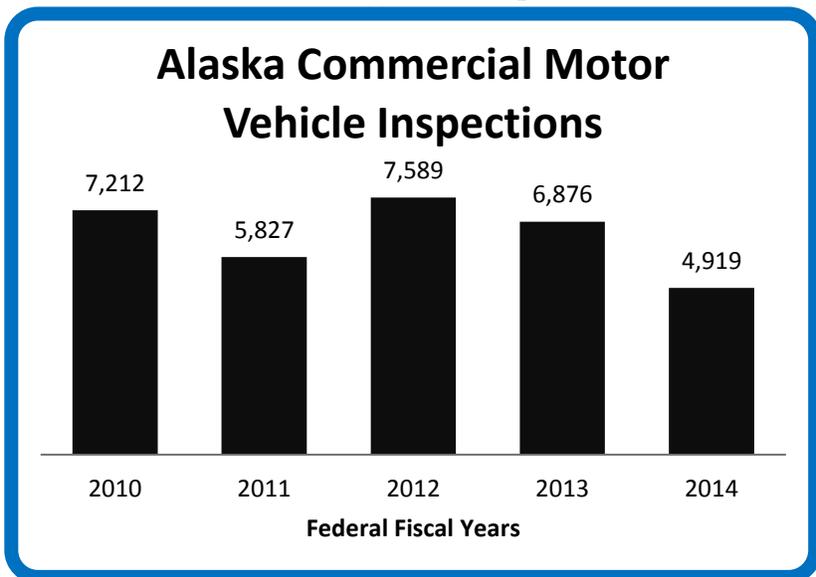


As of November 20, 2014

Commercial Vehicle Enforcement – Inspection Program

History of the CMV Inspection Program

The State of Alaska began participation in the Federal Motor Carrier Safety Assistance Program (MCSAP) in 1988 with a \$25,000 grant. In 1989, the U.S. Department of Transportation (US DOT), Federal Motor Carrier Safety Administration (FMCSA) awarded a \$125,000 grant, and four inspectors were hired in July, 1990. The new inspection program was administered by the Department of Public Safety and consisted of four inspectors, two State troopers, and one clerk. During FY1993, 631 inspections were conducted. In July 1997, the State of Alaska, Department of Transportation and Public Facilities (DOT&PF) became the Lead Agency for commercial motor vehicle safety. It was created by executive order to become the Measurement Standards and Commercial Vehicle Enforcement (MSCVE) Division by combining staff, functions, and responsibilities of groups formerly in the Alaska Departments of Commerce, Public Safety, and Transportation and Public Facilities. MSCVE is responsible for the enforcement of Commercial Motor Vehicle (CMV) safety regulations, including size and weight regulations. During FY2014, a total of 4,919 safety inspections were conducted on CMVs, as seen in the following figure.



Activities

MSCVE uses multiple approaches for enforcement and regulation compliance.

Inspections are conducted at weigh stations, roadside pull-outs, during traffic stops, and at terminal locations. Terminal inspections provide additional safety benefits for industry and training for MSCVE personnel. MSCVE partners with the Alaska State Troopers, and Police Departments throughout Alaska to remove impaired CMV drivers and unsafe vehicles from the highways with ongoing and effective enforcement initiatives. To ensure maximum operational effectiveness and efficiency, MSCVE has dedicated resources to support the following safety programs:

- Conduct Driver and Vehicle Safety Inspections
- Conduct Traffic Enforcement Operations
- Educate Carriers and Drivers about Hazardous Materials (HazMat) Safety
- Enforce HazMat Regulations

MSCVE is funded through a combination of sources. State of Alaska appropriations, Unified Carrier Registration (UCR) receipts, and Federal government grants constitute 100% of the funding sources for MSCVEs efforts. Safety programs supported by Federal and State funds include:

Motor Carrier Safety Assistance Program (MCSAP)

MCSAP is an international, coordinated, and uniform program of inspections and enforcement activities related to intrastate and interstate commercial vehicles and drivers. The program is designed to place unqualified drivers and defective vehicles out of service until they are in compliance. Coordinated efforts between State and industry helps reduce fatalities, injuries, property damage, and hazardous material incidents.

Border Enforcement Grant (BEG) Program

The BEG program provides financial assistance to a State that shares a land border with another country. BEG funds are utilized to ensure cargo and passenger motor carriers operating trucks and buses entering the United States from a foreign country are in compliance with commercial vehicle safety standards and regulations, financial responsibility regulations and registration requirements of the United States, and to ensure drivers of those vehicles are qualified and properly licensed to operate a CMV. The BEG program is intended to enhance a State's existing MCSAP initiatives.

Safety Data Improvement (SaDIP) Grant Program

The SaDIP grant program provides funding to Alaska for activities to improve the accuracy, timeliness, and completeness of safety data including, but not limited to, large truck and bus crash data, roadside inspection, enforcement, driver citation, and registration data. These funds are used to purchase equipment, train law enforcement officers in collecting crash and inspection data, enter crash data, and revise outdated crash report forms.

Performance and Registration Information Systems Management (PRISM) Program

The PRISM program was developed to meet the challenge of reducing the number of commercial vehicle crashes by targeting the highest-risk carriers. The PRISM program requires that motor carriers improve their identified safety deficiencies or face progressively more stringent sanctions up to the ultimate sanction of a Federal Out-of-Service order and concurrent State registration suspensions.

MCSAP High Priority Grant Program

High Priority grants are intended to assist in the development or implementation of national programs for uniform enforcement of Federal and State rules and regulations concerning commercial motor vehicle safety.

Commercial Vehicle Information Systems and Networks (CVISN)

CVISN is a key component of MSCVEs drive to improve commercial motor vehicle safety. The CVISN Program supports MSCVE goals by: focusing safety enforcement on high-risk operators, improving efficiency through electronic screening of commercial vehicles, improving commercial vehicle data sharing within states and between states and FMCSA, and reducing State and industry regulatory and administrative costs.

Unified Carrier Registration (UCR)

The UCR Agreement is a base-state system for the collection of fees levied on motor carriers and related entities. Motor carriers, motor private carriers, freight forwarders, leasing companies and brokers based in the United States, Canada, Mexico, or any other country that operate in interstate or international commerce in the United States must register under the UCR program. Non-payment of UCR fees subject carriers, forwarders and leasing companies

to enforcement action. These enforcement actions may include the issuance of a violation (§392.2 UCR) on a CMV Inspection Report. Alaska also conducts Safety Audits and Compliance Reviews in addition to inspections to ascertain if all of the proper fees have been paid.

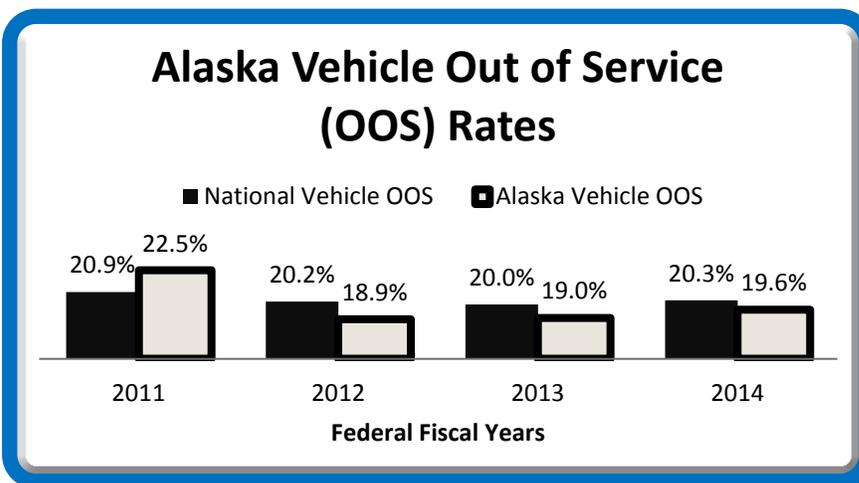
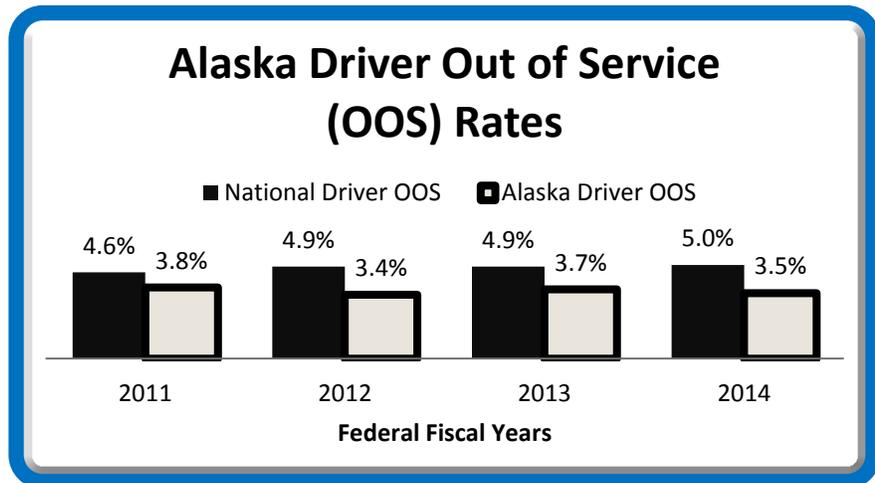
CMV Safety in Alaska (Out of Service Rates)

One measurement of the overall safety of commercial motor vehicle traffic is the Out of Service (OOS) rate. Consistent enforcement and education can improve carrier and driver behaviors.

Repeated inspections help drivers and carriers comply with State and Federal safety regulations, thereby reducing driver and vehicle OOS rates.

Removing drivers from the road for unsafe or fatigued driving, and/or controlled substance violations reduces the risk of crashes. Fatalities

in Alaska are relatively rare events, so MSCVE utilizes a combination of the reduction of CMV crashes and OOS rates to measure the safety of CMV traffic.



Through repeated inspections and educational outreach the driver OOS has been reduced from 3.8% in FY2011 to 3.5% in FY2014 as seen on the above figure. The reduction in driver OOS rates indicates a higher level of compliance. Alaska consistently remains less than the

national average for driver OOS rates after FFY2012. The reduction in driver OOS rates indicates a higher level of compliance. The vehicle OOS rate decreased from 22.5% in FY2011 to 19.6% in FY2014 as seen on the previous figure. Alaska consistently remains below the national average of vehicle OOS rates.

Alaska CMV Inspection Program

MSCVE officers are Department of Transportation & Public Facilities employees authorized to enforce permits, and size and weight regulations, and commercial vehicle safety. The Alaska Department of Public Safety has issued Special Police Commissions for all officers to assure authority in the area of commercial vehicle enforcement. They are trained to conduct traffic stops to enforce commercial vehicle regulations. As the lead agency for commercial motor vehicle enforcement, MSCVE has the authority to stop, inspect and, if necessary, suspend operation of any

carrier or driver. The Alaska commercial vehicle size, weight, and permit regulations are contained in 17 AAC Chapter 25.

To standardize safety inspections within Alaska, the Commercial Vehicle Safety Alliance (CVSA) North American Standard (NAS) Inspection Levels are utilized.

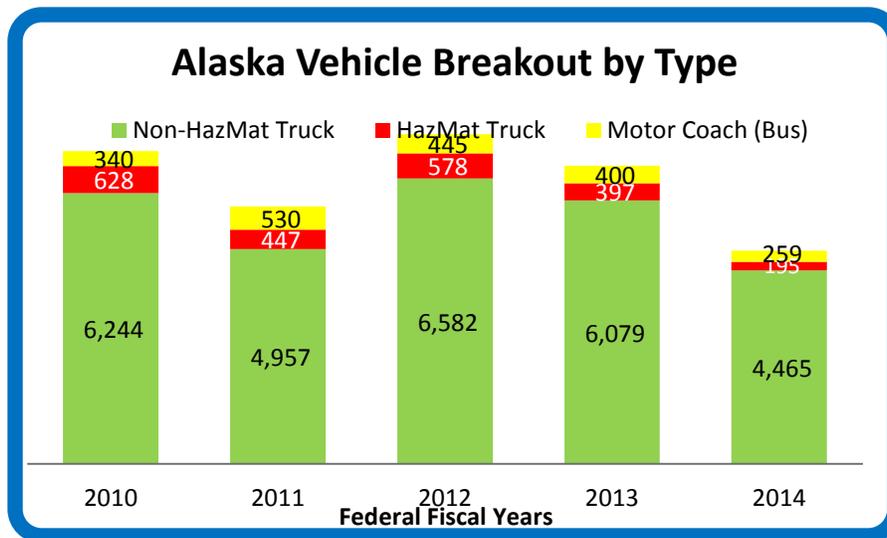
- Level I (Full Inspection)
- Level II (Walk-Around Vehicle and Driver Inspection)
- Level III (Driver/Credential Inspection)
- Level IV (Special Inspection)
- Level V (Vehicle-Only or Carrier Terminal Inspection)

As seen in the following table, during FY2014, a total of 4,919 CMV safety inspections were conducted by CVEOs. The total safety inspections that were conducted during FY2014 are broken down by the inspection level in the table. Based on the five year average, for FFY2010 through

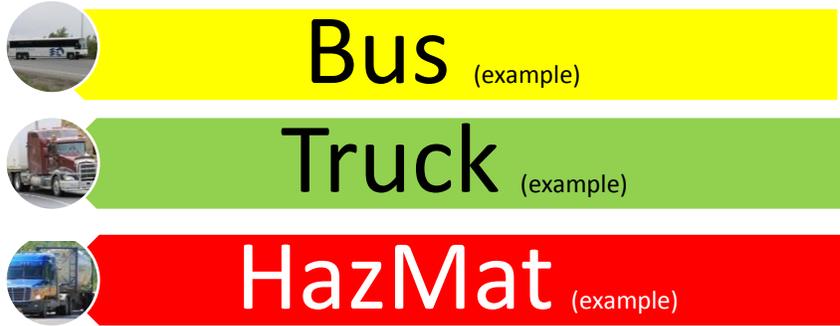
FFY2014, the safety inspections completed during FFY2014 is primarily below the average. However, safety inspections that were conducted at Level IV (Special Inspection) were above the average.

Inspection Level	2010	2011	2012	2013	2014	Five Year Average
1	2,309	1,878	2,584	1,686	1,436	1,979
2	1,673	1,589	1,703	1,380	783	1,426
3	2,995	2,156	3,091	3,473	2,474	2,838
4	48	114	76	104	95	87
5	186	197	151	233	131	180
Grand Total	7,212	5,934	7,605	6,876	4,919	6,510

The number of motor coach¹ and HazMat inspections decreased in FY2014 as seen in the following figure. As a result of statewide enforcement efforts, 441 unsafe trucks and six unsafe buses were removed from the road. There were 159 unqualified truck drivers and three unqualified bus drivers removed from the road during FY2014.



¹ For the purpose of this Annual Report, the terms motor coach and bus have the same meaning.



Rural Truck and Motor Coach Enforcement

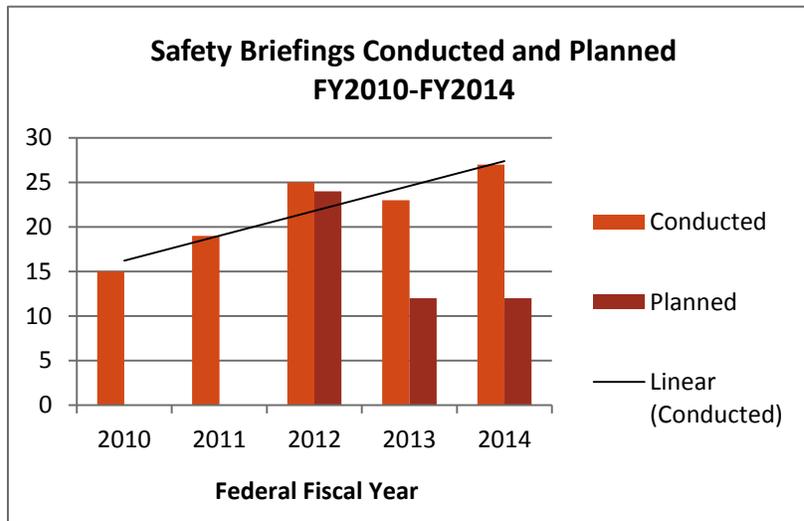
Mobile inspection statistics have shown the vehicles that do not pass through a weigh station are more likely to have a safety violation, which will place it out of service. This is also true of trucks and buses that operate in rural areas that don't have a weigh station. For the fifth year, MSCVE deployed the Mobile Inspection Station (MIS), as seen above. The MIS is a mobile CMV inspection station with all the necessary tools to conduct NAS Level I inspections at roadside locations. The MIS allowed for extended deployments to rural communities on and off the State Highway System not serviced by weigh station facilities.

MIS deployed seven times in FY2014 to rural areas around Alaska. Rural areas included along the Parks Highway, Richardson Highway, Seward Highway, and Livengood. At safe rural roadside locations, warning signs advise CMV drivers where the MIS is deployed. Secure wireless connectivity allows driver license and warrant checks in addition to US DOT carrier authority checks. Rural areas of the State may not have wireless or cellular coverage; therefore CVEOs are equipped with Alaska Land-based Mobile Radios (ALMR) to conduct a driver license, warrant, and vehicle registration checks. The MIS is also equipped with portable Haenni scales, as seen to the right, to allow checks for weight compliance.



Educational Outreach and Law Enforcement Partnerships

Outreach efforts improve the CMV awareness of all highway users to minimize the risk of a crash with a large truck, and the resulting injury and/or fatality. The fundamental strategy is to educate the public about sharing the road safely with CMVs. MSCVE continues working with stakeholders interested in commercial vehicle safety to develop and deploy new avenues of timely information



and effective outreach. In FY2014, there were 27 safety briefings conducted throughout the state, which is an increase from the 23 done in FY2013. From FY2010 through FY2014 there is a linear trend increase in the number of safety briefings conducted.

Commercial Vehicle Enforcement – Size and Weight Compliance

Division inspection efforts continue to focus on maintaining a high level of compliance at weigh stations and improving compliance at roadside inspection sites. Size and weight inspection efforts focus on identifying and correcting non-compliant oversize and overweight vehicles as both have negative impacts on highway safety and public infrastructure, including roads and bridges. The SFY2014 weight compliance was 98.6%, just short of the goal of 99.0%. Continued enforcement and carrier education is expected to increase weight compliance in SFY2015 to 99.0%.

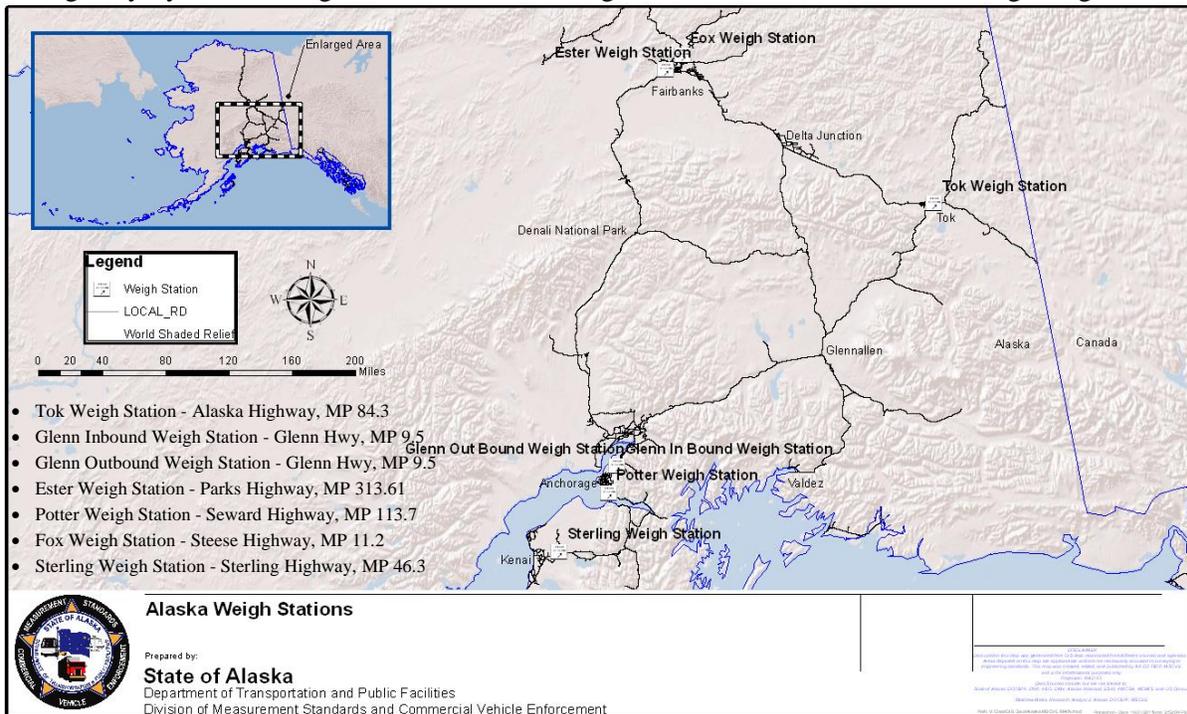


Potter Weigh Station.

Weigh stations provide areas for thorough inspection of a commercial motor vehicle and driver credentials. Fixed scales, equipped to detect axle group weight and gross vehicle weight violations, are installed at seven weigh stations statewide. The locations of the fixed weigh stations in the State generally do not

allow large commercial vehicles to take alternate routes and bypass the facility. MSCVE has ongoing efforts to catch carriers who evade an open weigh station. Enforcement vehicles will overtake the vehicle and perform a traffic stop. At minimum, the driver will have a safety violation listed on their Drivers Inspection Report. The driver may be further cited as noted in 17 AAC 25.310 – Failure to Stop at a Weigh Station, and fined up to \$300.00.

As represented in the following image, all Alaska fixed weigh stations are located on the National Highway System. During FY2014, MSCVE weighed 38,310 CMVs at the following Weigh Stations:



Two new scale houses on the Richardson Highway, located southeast of Fairbanks, are scheduled for construction in FY2015. These scale houses will be the **Northbound and Southbound Richardson Weigh Stations**. The original scales were removed as part of the Badger Road Overpass Construction Project in 2001. These scales will be important to the safety of the motoring public during the construction of an Alaska natural gas pipeline.



MSCVE continues to employ broad-based size and weight enforcement deployment strategies; evaluating traffic patterns to determine appropriate locations for portable weigh scale operations. Portable weigh scales are used at roadside locations by CVEOs. MSCVE shares portable scales with local police departments when needed.

Commercial Vehicle Information Systems and Networks (CVISN)

The Commercial Vehicle Information Systems and Networks (CVISN) program helps improve commercial motor vehicle safety by:

- focusing safety enforcement on high-risk operators
- integrating systems to improve the accuracy, integrity, and verifiability of credentials
- improving efficiency through electronic screening of commercial vehicles

CVISN refers to the information systems that support local CVE activities. Systems that support CVE activities consist of the following components:

- **Weigh in Motion (WIM) sites** – WIM allows the weight of a vehicle to be estimated for screening purposes while maintaining traffic flow. WIM is used to measure approximate axle weights as a vehicle moves across sensors in the pavement, and to determine the gross vehicle weight and classification based on the axle weights and spacing's. These devices provide data that helps MSCVE study the traffic patterns of CMVs for the efficient deployment of enforcement personnel. During FY2014 over 2.26 million CMVs (class 5-13) crossed over established WIMs within the State.
- **Virtual Weigh Station** – A Virtual Weigh Station is comprised of additional components in addition to the WIM to allow the weight of a vehicle to be transmitted to a fixed location for screening purposes while maintaining traffic flow. These components include cameras to capture images of commercial vehicles passing over the WIM, and software and hardware to transmit the image and weigh data to



either weigh stations or a web location. Currently, virtual weigh stations are at the Port of Anchorage, the Seward Highway, and the Glenn Highway. Data from the Glenn Highway WIM, Automated Vehicle Identification (AVI), and Video Identification (VID) are transmitted to the nearby weigh stations for the purpose of prescreening the weight compliance of vehicles.

- Bypass system – This system adds to the Virtual Weigh station through the use of transponders, provided free of charge in Alaska. A bypass system is active at the Outbound Glenn Highway weigh station. In addition to cost savings to the industry, the reduction in CMV idling emissions reduces the carbon footprint of the weigh station.

Border Enforcement

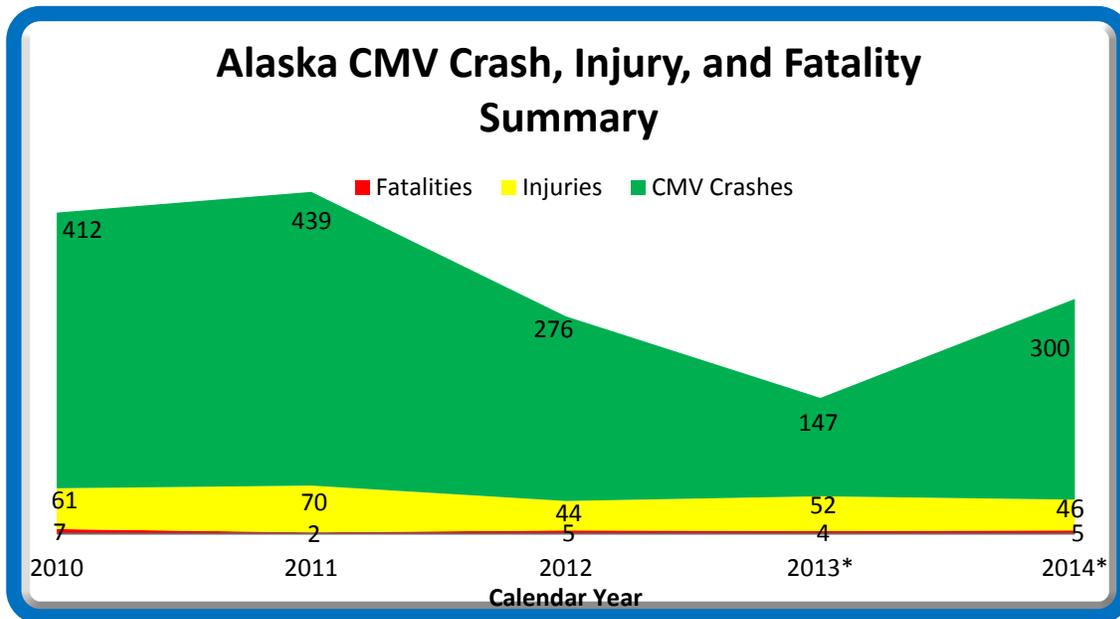
Alaska shares five road border crossings with Canada. Two of these are located in Interior Alaska: at the Alcan Port-of-Entry on the Alaska Highway and Poker Creek on the Top of the World Highway. Two others are located in Southeast Alaska: the Dalton Cache station on the Haines Highway and the U.S. Border station near Skagway on the South Klondike Highway. The fifth border crossing is located on the Stewart-Hyder Access Road, located in the southeast of Alaska, geographically closer to Seattle, Washington than to Anchorage.

The portion of the Alaska Highway running from the United States/Canada border to the Tok Weigh Station (WS) is the first point of contact. It is also the single most heavily traveled corridor for international commerce into and out of the State of Alaska. Vehicles operating in interstate and international commerce represent about 92% of the inspections that occurred at the Tok WS in FY2014. Of the total border related enforcement activities 73% of them occurred at the Tok WS in FY2014.

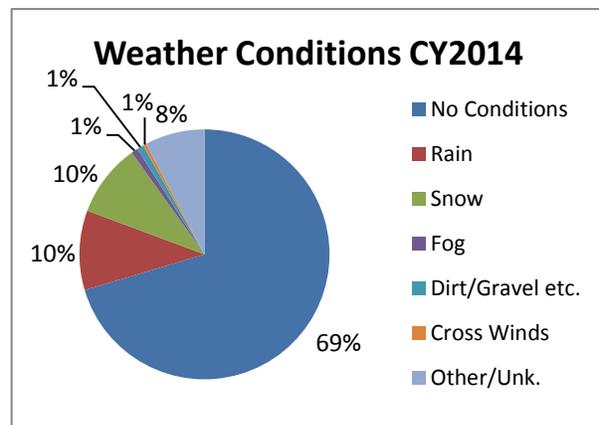
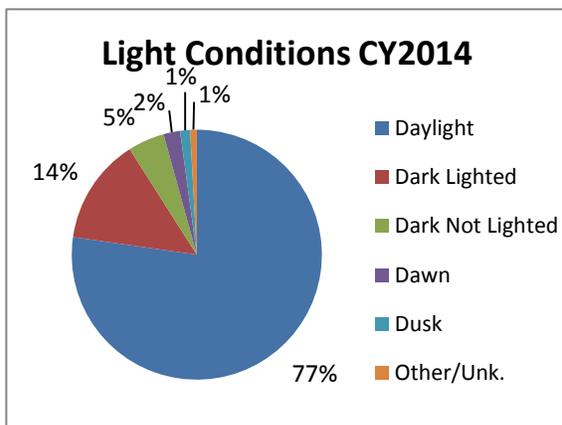
In the State of Alaska, vehicles engaged in international commerce typically operate during the summer season. This is primarily due to motor coaches, as they typically operate during the summer season. In FY2014, 20 motor coaches operating in foreign or domestic commerce were inspected. Of the 20, 75% of them occurred during the summer season. Multiple deployments are anticipated to occur in FY2015.

Commercial Vehicle Enforcement – Crash Reporting

The downward trend in CMV crashes in Alaska mirrors the nationwide trend. Alaska’s efforts to reduce crashes and their causes have resulted in a goal consistent with the *FMCSA CMV Fatality Reduction Goal* of 0.16 fatalities per 100M total Vehicle Miles Traveled (VMT). In the FY2014 Alaska Commercial Vehicle Safety Plan (CVSP) the goal was to reduce the number of CMV-related crashes below 322. As seen on the next figure, preliminary data indicates the goal was achieved; during CY13 there were 147 CMV related crashes in Alaska.

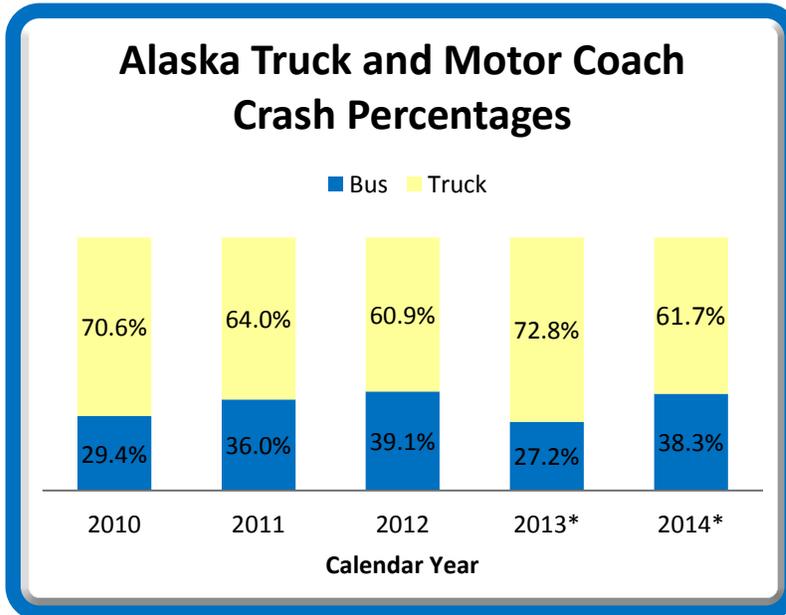


Driver errors, both CMV and non-CMV, are prominent contributing factors in crashes involving a CMV. An example, of a factor that is frequently considered a prominent contributing factor in crashes but the facts says otherwise, is environmental factors such as weather conditions and time of day. The figures below highlight how daylight hours and weather conditions are not a contributing factor to the frequency of crashes. All of the five fatalities crashes that occurred in 2014 happened during daylight hours, while three occurred when there were no adverse conditions and two when it was raining.



*Preliminary data

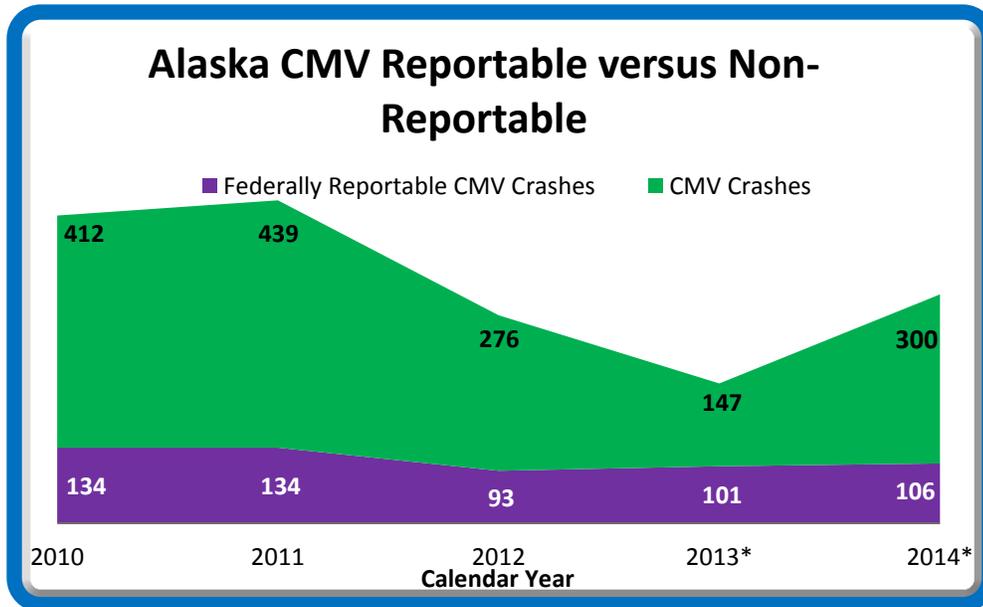
Motor coaches are vital modes of transportation for the Alaskan tourism industry and the general public. Unlike large trucks, motor coaches generally have many passengers aboard. In the past five



years, approximately 35% of CMV crashes in the State have involved a motor coach. During CY2014, 38.3% of CMV crashes involved a motor coach, as seen on the figure. Crashes involving motor coach operations are a national focus, and enforcement operations are focused on minimizing crashes related to motor coaches.

As seen on the next figure, in CY2014 there were 300 CMV crashes. Of those 300 crashes, 106 resulted in a vehicle being

towed away, an incapacitating injury or fatality. These were entered into SAFETYNET and then uploaded to the Federal Motor Carrier Management Information System (MCMIS). The remaining 200 CMV crashes had minimal, if any, personal property or vehicle damage.



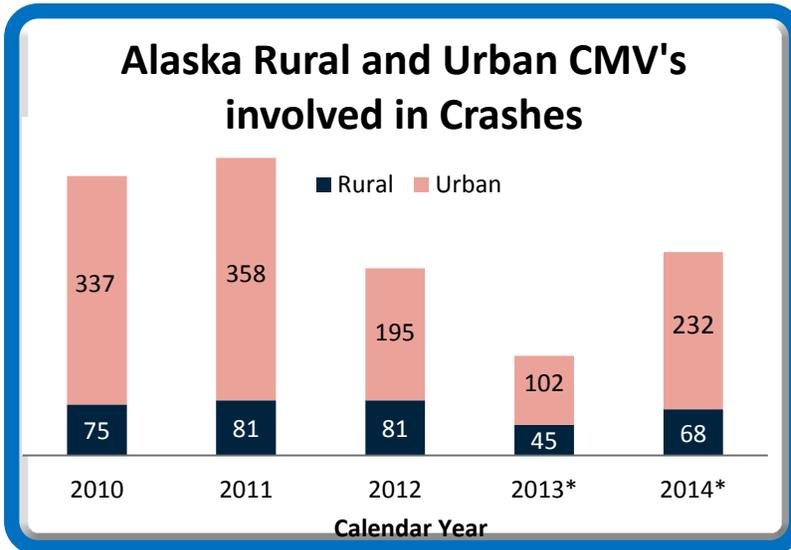
MSCVE and our law enforcement partners are progressing towards acquiring all crash reports through a newly created Crash Data Repository. Full implementation of CDR electronic crash-data sharing and mapping is expected in FY2015.

*Preliminary data

Rural Road Crash Reduction Initiative

MSCVEs FY2014 CVSPs objective was to reduce CMV crashes and Out-of-Service (OOS) rates (precursor to crashes) on rural roads by 1-3% annually after an established baseline year (FY2010). Preliminary crash data shows 36 rural CMV crashes in CY2014.

The Mobile Inspection Station (MIS) was deployed seven times during FY2014, which is more than the six scheduled deployments specified in the CVSP. Safe roadside locations in the eastern and



northern region suitable for MIS deployment were utilized. The MIS allows extended deployment of enforcement personnel to communities not served by fixed weigh station facilities. Additional MIS deployments are being scheduled for FY2015.

As seen on the following figure, the driver OOS rate (3.4%) is below the target for FY2014 (4.5%). A driver OOS rate below the baseline indicates

CMV drivers have become more compliant than CMV drivers in FY2010. The vehicle OOS rate continues to increase above the FY2010 baseline and the FY2014 vehicle OOS rate of 18.1%. This is an indication that enforcement efforts are targeting unsafe CMVs, and continued efforts have led to lower rates in FY2014 than those in FY2013.

	<u>Driver OOS Rate</u> <u>Target</u>	<u>Vehicle OOS Rate</u> <u>Target</u>
FY2010 -baseline	6.5%	15.2%
FY2011	6.0% (0.0% actual)	15.0% (15.6%)
FY2012	5.5% (3.8%)	14.5% (20.0%)
FY2013	5.0% (4.2%)	14.0% (35.5%)
FY2014	4.5% (3.4%)	13.5% (18.1%)

The overall rate of crashes that occur in a rural area has decreased from 26.5% in FY2010 to 21.0% in FY2014. As seen in the below table this is also the case for crashes that happened in a rural area and resulted in an injury. Three fatalities did occur in FY2014 in rural areas to include: Cantwell, Homer, and Talkeetna.

	<u>Rural Crash</u> <u>Target</u>	<u>Rural Injuries</u> <u>Target</u>	<u>Fatalities</u> <u>Target</u>
FY2010 - baseline	32.7% (actual)	47.6%	3
FY2011	30.0% (26.5%)	45.0% (39.1%)	3 (2)
FY2012	28.0% (30.4%)	43.0% (65.9%)	2 (2)
FY2013	26.0% (41.5%)	41.0% (47.5%)	2 (2)
FY2014	24.0% (21.0%)	39.0% (35.4%)	1 (3)

*Preliminary data

An additional tool used by MSCVE to reduce the risk of CMV crashes is the Infrared Inspection System (IRIS) vehicle. The IRIS vehicle is a tool CVEOs use to thermally scan a CMV to detect bad brakes. The IRIS vehicle is deployed to areas where braking capacity is crucial, for example residential areas, areas of high crash rates, and steep downgrades.



Brakes that have limited or no friction (bad brakes), do not produce heat and do not “glow”. Bad brakes can be easily detected by the IRIS vehicle

Commercial Vehicle Enforcement – Customer Service Center

The Commercial Vehicle Customer Service Center's (CVCSC) objective is to protect Alaska's Highway infrastructure by regulating the transport of oversize and overweight loads. Without a permit detailing specific routes a commercial motor vehicle could strike the underside of a bridge. The image to the right shows an example of such an event occurring and the major structural damage that can result. The professional staff of the CVCSC can interpret road and bridge restrictions and issue permits to allow movement of an oversize or overweight load in Alaska. This helps prevent infrastructure damage to both roads and bridges by detailing specific acceptable routes. A permit for travel on public roads is required for commercial and **non-commercial** vehicles if at least one of the following conditions is met:



- **Width** at the widest point is over 8 feet 6 inches
- **Height** at the highest point is over 15 feet
- **Total length** is over 75 feet
- **Trailer length** is over 53 feet
- **Front overhang** is over 3 feet
- **Rear overhang** is over 4 feet



To avoid costly fines, all non-commercial boat owners should call CVCSC before transporting vessels on public roads.

(800) 478-7636 or (907) 365-1200

Roads in Alaska are subject to extreme conditions, to include: repeated freeze and thaw cycles, heavy loads due to the mining and oil industry, and seasonal use of studded tires. During the spring and summer months, typically March through June, roadway weight restrictions are used in an effort to slow down the deterioration of the road system. This is accomplished by reducing the allowable axle weight with the exception of steer axle weights. Active weight restrictions can be found on MSCVE's Web site at:

<http://dot.alaska.gov/mscve/index.cfm?go=mscve.weightrestrictions>

In FY2014, the CVCSC issued 19,454 oversize and/or overweight permits. Permits were obtained at the MSCVE office and on-line. An additional 9,107 temporary truck/trailer registration (TRT) permits were processed. TRT permits were obtained at Tok Port of Entry, Tok DMV, and online at my.alaska.gov. Online permits are available for limited over dimensional and overweight loads up to

125%. A permit manual is available to assist in the process. Staff can assist commercial vehicle owners:

- Obtain information for a FREE transponder (electronic by-passing of weigh stations)
- Obtain a FREE US DOT number
(at the time of this printing, this service is available at no charge)
- Update the Federal MCS-150 form for vehicle PRISM registration
(at the time of this printing, this service is available at no charge)
- Process annual Unified Carrier Registration (UCR) payments
(at the time of this printing, this service is available at no charge)

Commercial Vehicle Enforcement – Information and Contacts

The Commercial Vehicle Enforcement website is designed to be a “One Stop” portal to most questions and concerns. On the website anyone can review the Commercial Vehicle Safety Plan, 49 CFR, or obtain an oversize and overweight permit.

<http://dot.alaska.gov/mscve/index.cfm?go=mscve.phones>

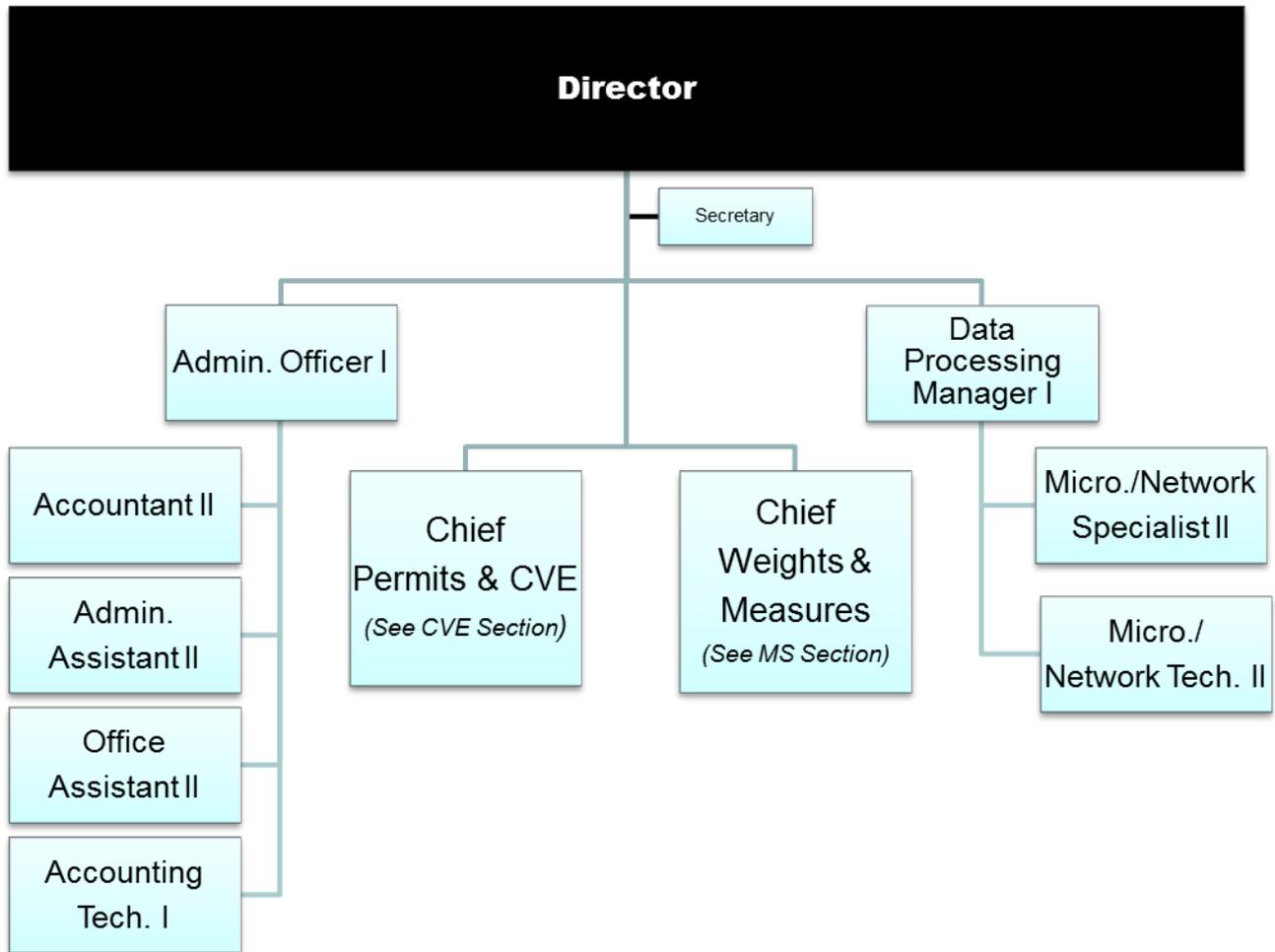
Commercial Vehicle Enforcement

<i>City</i>	<i>Name</i>	<i>Title</i>	<i>Phone</i>	<i>Fax</i>	<i>Email</i>
<i>Anchorage</i>	Dan Byrd	Chief, Permits & CVE	907-365-1210	907-365-1220	daniel.byrd@alaska.gov
<i>Anchorage</i>	Heidi Anderson	Measurement Standards Supervisor	907-365-1213	907-365-1220	heidi.anderson@alaska.gov
<i>Anchorage</i>	Customer Service Center		907-365-1200 800-478-7636	907-365-1221 866-345-2641	Dot.dms.permitsfax@alaska.gov

Weigh Stations - Statewide

<i>City</i>	<i>Name</i>	<i>Title</i>	<i>Phone</i>	<i>Fax</i>	<i>Email</i>
<i>Anchorage</i>	Jesse Seward	Anchorage Area Supervisor	907-428-0023	907-428-2199	jess.seward@alaska.gov
<i>Fairbanks</i>	Dan Daigle	Fairbanks Area Supervisor	907-451-5443	907-451-5487	dan.daigle@alaska.gov
<i>Tok</i>	William Walden	Tok Area Supervisor	907-883-3729	907-883-4318	bill.walden@alaska.gov
<i>Glenn O/B Weigh Station</i>			907-428-1333	907-428-2199	
<i>Glenn I/B Weigh Station</i>			907-428-2064	907-428-0769	
<i>Potter Marsh Weigh Station</i>			907-345-1184	907-345-8252	
<i>Sterling Weigh Station</i>			907-262-5400	907-262-4903	
<i>Ester Weigh Station</i>			907-479-5087	907-474-4248	
<i>Fox Weigh Station</i>			907-457-8505	907-457-5610	
<i>Tok Weigh Station</i>			907-883-4591	907-883-4318	

Appendix A – Top Level Organizational Chart



As of November 20, 2014

Statutory and Regulatory Authority

AS 45.75 Weights and Measures Act

AS 19.10.060 Size, Weight, and Load Provisions; Restriction On Use of Highways; Commercial Vehicle Inspection Program

AS 19.10.300 Financial Responsibility (Commercial Motor Vehicle)

AS 19.10.310 Commercial Motor Vehicle Safety Inspections

17 AAC 25 Truck Size, Weight and Safety Regulations

17 AAC 28 Buses

17 AAC 90 Specifications, Tolerances, and Regulations for Weighing and Measuring Devices



Appendix B – Summary of Major Accomplishments in 2014

Measurement Standards (SFY2014)

Packages	
Number Inspected	3,793 representing 41,000 packages
% placed off-sale	5%
Inspections	
Device Inspections	13,478 inspections

- The section facilities underwent a major building remodel which displaced many employees for most of the year. All staff members continued to perform at a high level of production despite the disruption. The results of the remodel, has met our goals to provide an upgraded metrology laboratory that will serve the needs of the state for decades to come, all at a reasonable cost.
- The State Metrology Laboratory has been granted a two-year recognition from NIST for the 2015-16 calendar years.

Commercial Vehicle Enforcement (FY2014)

Safety Inspections	
Number Inspected	4,919 inspections
Motor coach (Bus) Inspected	259 inspections
HazMat Inspected	195 inspections
Unsafe Vehicles Removed	441 vehicles
Unsafe Drivers Removed	159 drivers
Safety Violations	
Total Safety Violations	5,964 safety violations
Vehicle-related	4,270 safety violations
Driver-related	1,659 safety violations
HazMat-related	35 safety violations
Size & Weight	
% of weight compliance	98.6% (SFY2014)
Weigh Station Counts	38,310 vehicles
Weigh-in-Motion Counts	2,259,810 vehicles
Portable Scales	494 vehicles

- The Mobile Inspection Station (MIS) was deployed seven times in FY2014.

Commercial Vehicle Customer Service Center (SFY2014)

Permits	
Total Permits	19,655 permits
TRT	9,094 permits

MSCVE Contact Information

Daniel V. Smith, Director

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Department of Transportation and Public Facilities,
Division of Measurement Standards and Commercial Vehicle Enforcement
11900 Industry Way
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Anchorage, AK 99515**

Phone: (907) 365-1210

Fax: (907) 365-1220

Website: www.dot.alaska.gov/mscve



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