

# **MASSACHUSETTS**

## **Commercial Vehicle Safety Plan for the Federal Motor Carrier Safety Administration's Motor Carrier Safety Assistance Program Fiscal Year 2019**

**Date of Approval: Jun 24, 2019**

**Final CVSP**

## Part 1 - MCSAP Overview

### 1 - Introduction

The Motor Carrier Safety Assistance Program (MCSAP) is a Federal grant program that provides financial assistance to States to help reduce the number and severity of accidents and hazardous materials incidents involving commercial motor vehicles (CMV). The goal of the MCSAP is to reduce CMV-involved accidents, fatalities, and injuries through consistent, uniform, and effective CMV safety programs.

A State lead MCSAP agency, as designated by its Governor, is eligible to apply for grant funding by submitting a commercial vehicle safety plan (CVSP), in accordance with the provisions of [49 CFR 350.201](#) and [205](#). The lead agency must submit the State's CVSP to the FMCSA Division Administrator on or before August 1 of each year. For a State to receive funding, the CVSP needs to be complete and include all required documents. Currently, the State must submit a performance-based plan each year to receive MCSAP funds.

The FAST Act required the Federal Motor Carrier Safety Administration (FMCSA) to “prescribe procedures for a State to submit a multiple-year plan and annual updates thereto, under which the State agrees to assume responsibility for improving motor carrier safety by adopting and enforcing State regulations, standards, and orders that are compatible with the regulations, standards, and orders of the Federal Government on commercial motor vehicle safety and hazardous materials transportation safety.”

The online CVSP tool (eCVSP) outlines the State's CMV safety objectives, strategies, activities and performance measures and is organized into the following five parts:

- Part 1: MCSAP Overview
- Part 2: Crash Reduction and National Program Elements
- Part 3: National Emphasis Areas and State Specific Objectives
- Part 4: Financial Information (FY 2019)
- Part 5: Certifications and Documents

You will find that each of the five eCVSP parts listed above contains different subsections. Each subsection category will provide you with detailed explanation and instruction on what to do for completing the necessary tables and narratives.

The MCSAP program includes the eCVSP tool to assist States in developing and monitoring their grant applications. The eCVSP provides ease of use and promotes a uniform, consistent process for all States to complete and submit their plans. States and territories will use the eCVSP to complete the CVSP and to submit either a single year, a 3-year plan, or an Annual Update to a 3-year plan. As used within the eCVSP, the term ‘State’ means all the States, the District of Columbia, the Commonwealth of Puerto Rico, the Commonwealth of the Northern Mariana Islands, American Samoa, Guam, and the Virgin Islands.

#### **NEW FOR FY 2019:**

**Single Year and Multi-Year plans**—For FY 2019, the primary difference in the single year and multi-year CVSP formats is that objectives, projected goals, and activities in the 3-year plan will cover an entire three-year period. The financial information and certifications will be updated each fiscal year.

**Annual Updates for Multi-Year plans**—Those States in Year 2 of a 3-year plan will be providing an Annual Update only. States will be able to review the project plan submitted in Year 1 and indicate whether anything needs to be updated for Year 2 via a Yes/No question provided in each Section of Parts 1-3. **NOTE: Answer carefully as there is one opportunity to check Yes/No and then the input is locked.**

- If Yes is indicated, the information provided for Year 1 will be editable and State users can make any necessary changes to their project plan.
- If No is indicated, the Year 1 information will not be editable and the user can move forward to the next section.
- The financial information and certifications will be updated each fiscal year.

All single year, multi-year, and annual update plans have been pre-populated with data and information from their FY 2018 plans. States must carefully review and update this information to reflect FY 2019 activities prior to submission to FMCSA.

In addition, States are reminded to **not** include any personally identifiable information (PII) in the CVSP. The final

CVSP approved by FMCSA is required to be posted to a public FMCSA website.

## 2 - Mission/Goal Statement

### Instructions:

*Briefly describe the mission or goal of the lead State commercial motor vehicle safety agency responsible for administering this Commercial Vehicle Safety Plan (CVSP) throughout the State.*

**NOTE:** *Please do not include information on any other FMCSA grant activities or expenses in the CVSP.*

The Commonwealth of Massachusetts is committed to reducing the number of traffic crashes and associated injuries/fatalities with coordinated enforcement and educational efforts focused on commercial vehicle operators and other vehicles and roadway users operating in the vicinity of commercial vehicles.

The Massachusetts State Police (MSP) has been the lead MCSAP agency in Massachusetts since the inception of the MCSAP program. The MSP Commercial Vehicle Enforcement Section (CVES) is responsible for implementing the MCSAP Program within Massachusetts. Under state statute, we have the authority to enforce all state laws and the appropriate FMCSA regulations anywhere in the territorial confines of Massachusetts.

The Department of Public Utilities (DPU) is a non-funded participating member. The DPU addresses the safety of equipment and operation of motorcoach companies and transit authority buses. The DPU also regulates commercial common carriers that perform residential household goods moved within the Commonwealth. The CVES and DPU continue to have an outstanding working relationship and as a result, passenger and household goods enforcement activities are jointly pursued. The FMCSA, MSP CVES, and DPU conduct quarterly meetings. In addition, the MSP CVES coordinates various safety programs with the Massachusetts Highway Safety Division, Department of Transportation and Registry of Motor Vehicles.

The University of Massachusetts Traffic Safety Research Program (UMassSafe) continues to provide state specific data to help direct safety activities including crash causation, high crash regions and corridors as well as training development.

**3 - MCSAP Structure Explanation****Instructions:**

*Briefly describe the State's commercial motor vehicle (CMV) enforcement program funded by the MCSAP grant.*

**NOTE:** *Please do not include activities or expenses associated with any other FMCSA grant program.*

The MSP CVES is commanded by a Lieutenant and currently has a total of 35 personnel assigned to the section, 33 sworn personnel, and 2 civilian personnel. There are six teams deployed on a regional basis. One sergeant and three full time officers are assigned to the New Entrant Program.

**4 - MCSAP Structure**

**Instructions:**

Complete the following tables for the MCSAP lead agency, each subrecipient and non-funded agency conducting eligible CMV safety activities.

The tables below show the total number of personnel participating in MCSAP activities, including full time and part time personnel. This is the total number of non-duplicated individuals involved in all MCSAP activities within the CVSP. (The agency and subrecipient names entered in these tables will be used in the National Program Elements —Roadside Inspections area.)

The national program elements sub-categories represent the number of personnel involved in that specific area of enforcement. FMCSA recognizes that some staff may be involved in more than one area of activity.

Lead Agency Information	
Agency Name:	MA STATE POLICE (MSP) COMMERCIAL VEHICLE ENFORCEMENT SECTION (CVES)
Enter total number of personnel participating in MCSAP activities	35
<b>National Program Elements</b>	<b>Enter # personnel below</b>
Driver and Vehicle Inspections	33
Traffic Enforcement Activities	33
Investigations*	4
Public Education and Awareness	33
Data Collection and Reporting	35
* Formerly Compliance Reviews and Includes New Entrant Safety Audits	

Subrecipient Information	
Agency Name:	NONE
Enter total number of personnel participating in MCSAP activities	0
<b>National Program Elements</b>	<b>Enter # personnel below</b>
Driver and Vehicle Inspections	0
Traffic Enforcement Activities	0
Investigations*	0
Public Education and Awareness	0
Data Collection and Reporting	0
* Formerly Compliance Reviews and Includes New Entrant Safety Audits	

Non-funded Agency Information	
Total number of agencies:	1
Total # of MCSAP Participating Personnel:	9

## Part 2 - Crash Reduction and National Program Elements

### 1 - Overview

*Part 2 allows the State to provide past performance trend analysis and specific goals for FY 2019 in the areas of crash reduction, roadside inspections, traffic enforcement, audits and investigations, safety technology and data quality, and public education and outreach.*

*In past years, the program effectiveness summary trend analysis and performance goals were separate areas in the CVSP. Beginning in FY 2017, these areas have been merged and categorized by the National Program Elements as described in [49 CFR 350.109](#). This change is intended to streamline and incorporate this information into one single area of the CVSP based upon activity type.*

**Note:** *For CVSP planning purposes, the State can access detailed counts of its core MCSAP performance measures. Such measures include roadside inspections, traffic enforcement activity, investigation/review activity, and data quality by quarter for the current and past two fiscal years using the State Quarterly Report and CVSP Data Dashboard, and/or the CVSP Toolkit on the A&I Online website. The Data Dashboard is also a resource designed to assist the State with preparing their MCSAP-related quarterly reports and is located at: <http://ai.fmcsa.dot.gov/StatePrograms/Home.aspx>. A user id and password are required to access this system.*

*In addition, States can utilize other data sources available on the A&I Online website as well as internal State data sources. It is important to reference the data source used in developing problem statements, baselines and performance goals/ objectives.*

**2 - CMV Crash Reduction**

The primary mission of the Federal Motor Carrier Safety Administration (FMCSA) is to reduce crashes, injuries and fatalities involving large trucks and buses. MCSAP partners also share the goal of reducing commercial motor vehicle (CMV) related crashes.

**Trend Analysis for 2013 - 2017**

**Instructions for all tables in this section:**

Complete the tables below to document the State’s past performance trend analysis over the past five measurement periods. All columns in the table must be completed.

- Insert the beginning and ending dates of the five most recent State measurement periods used in the Measurement Period column. The measurement period can be calendar year, Federal fiscal year, State fiscal year, or any consistent 12-month period for available data.
- In the Fatalities column, enter the total number of fatalities resulting from crashes involving CMVs in the State during each measurement period.
- The Goal and Outcome columns allow the State to show its CVSP goal and the actual outcome for each measurement period. The goal and outcome must be expressed in the same format and measurement type (e.g., number, percentage, etc.).
  - In the Goal column, enter the goal from the corresponding CVSP for the measurement period.
  - In the Outcome column, enter the actual outcome for the measurement period based upon the goal that was set.
- Include the data source and capture date in the narrative box provided below the tables.
- If challenges were experienced while working toward the goals, provide a brief narrative including details of how the State adjusted the program and if the modifications were successful.

**ALL CMV CRASHES**

Select the State’s method of measuring the crash reduction goal as expressed in the corresponding CVSP by using the drop-down box options: (e.g. large truck fatal crashes per 100M VMT, actual number of fatal crashes, actual number of fatalities, or other). Other can include injury only or property damage crashes.

**Goal measurement as defined by your State:** Large Truck Fatal Crashes per 100M VMT

**If you select 'Other' as the goal measurement, explain the measurement used in the text box provided:**  
Fatal Crashes

Measurement Period (Include 5 Periods)		Fatalities	Goal	Outcome
Begin Date	End Date			
01/01/2017	12/31/2017	24	0.0547	0.0389
01/01/2016	12/31/2016	31	0.0547	0.0547
01/01/2015	12/31/2015	32	0.0497	0.0540
01/01/2014	12/31/2014	36	0.0643	0.0655
01/01/2013	12/31/2013	37	0.0657	0.0657

**MOTORCOACH/PASSENGER CARRIER CRASHES**

Select the State’s method of measuring the crash reduction goal as expressed in the corresponding CVSP by using the drop-down box options: (e.g. large truck fatal crashes per 100M VMT, actual number of fatal crashes, actual number of fatalities, other, or N/A).

**Goal measurement as defined by your State:** N/A

**If you select 'Other' or 'N/A' as the goal measurement, explain the measurement used in the text box provided:**

# fatalities (2-8 per year) too low to measure a goal

Measurement Period (Include 5 Periods)		Fatalities	Goal	Outcome
Begin Date	End Date			
01/31/2017	12/31/2017	2		
01/01/2016	12/31/2016	8		
01/01/2015	12/31/2015	3		
01/01/2014	12/31/2014	2		
01/01/2013	12/31/2013	3		

**Hazardous Materials (HM) CRASH INVOLVING HM RELEASE/SPILL**

Hazardous material is anything that is listed in the hazardous materials table or that meets the definition of any of the hazard classes as specified by Federal law. The Secretary of Transportation has determined that hazardous materials are those materials capable of posing an unreasonable risk to health, safety, and property when transported in commerce. The term hazardous material includes hazardous substances, hazardous wastes, marine pollutants, elevated temperature materials, and all other materials listed in the hazardous materials table.

For the purposes of the table below, HM crashes involve a release/spill of HM that is part of the manifested load. (This does not include fuel spilled from ruptured CMV fuel tanks as a result of the crash).

Select the State's method of measuring the crash reduction goal as expressed in the corresponding CVSP by using the drop-down box options: (e.g., large truck fatal crashes per 100M VMT, actual number of fatal crashes, actual number of fatalities, other, or N/A).

**Goal measurement as defined by your State:** N/A

**If you select 'Other' or 'N/A' as the goal measurement, explain the measurement used in the text box provided:**

There have been no fatalities. However there is a state specific goal regarding inspections.

Measurement Period (Include 5 Periods)		Fatalities	Goal	Outcome
Begin Date	End Date			
01/01/2017	12/31/2017	0		
01/01/2016	12/31/2016	0		
01/01/2015	12/31/2015	0		
01/01/2014	12/31/2014	0		
01/01/2013	12/31/2013	0		

**Enter the data sources and capture dates of the data listed in each of the tables above.**

--Fatal Count Source: FMCSA Motor Carrier Management Information System (MCMIS) data snapshot as of 06/29/2018, including crash records through 02/28/2018 - <https://ai.fmcsa.dot.gov/CrashStatistics/rptSummary.aspx>. VMT Source: FHWA Annual Highway Statistics 2011-2014 Table VM-2 as of 6/29/16; 2015 was projected. --MC: FMCSA Motor Carrier Management Information System (MCMIS) data snapshot as of 06/29/2018, including crash records through 02/28/2018. The data presented are subject to update as new or additional information may be reported to MCMIS following the snapshot date - <https://ai.fmcsa.dot.gov/CrashStatistics/rptSummary.aspx>. --HM: FMCSA Motor Carrier Management Information System (MCMIS) data snapshot as of 06/29/2018, including crash records through 02/28/2018. The data presented are subject to update as new or additional information may be reported to MCMIS following the snapshot date - <http://ai.fmcsa.dot.gov/CrashStatistics/rptHazmat.aspx?rpt=HMPL>.

**Narrative: Describe any difficulties achieving the goal, problems encountered, obstacles overcome, lessons learned, etc.**

Massachusetts consistently has a lower CMV fatality rate per 100 million vehicle miles traveled than most states and the nation as a whole.

The MSP CVES does not have a goal specific to the reduction of motorcoach/passenger fatalities because the number of such fatalities is too low to measure change. Instead, a goal to reduce all CMV crashes exists which includes strategies to reduce motorcoach/passenger fatalities. The MSP CVES does implement motorcoach enforcement and inspection strategies and has a specific passenger transportation safety goal regarding inspections that is outlined in the State Specific Goals section of this CVSP.

Although Massachusetts has not had any HazMat fatalities involving a release/spill during the five years reviewed, MA does have a higher OOS rate associated with HazMat inspections than the nation as a whole (FY17 17.07% vs 4.01% and FY18 thus far 19.73% vs. 3.98% nationally). Due to the risk factors associated with the products in transport, it is necessary to preserve vigilant oversight of HazMat transportation by motor carriers. Therefore, MA truck teams will continue conducting HazMat roadside inspections as well as cargo tank task forces in order to maintain safe operating practices.

Crash reduction report attached in appendix.

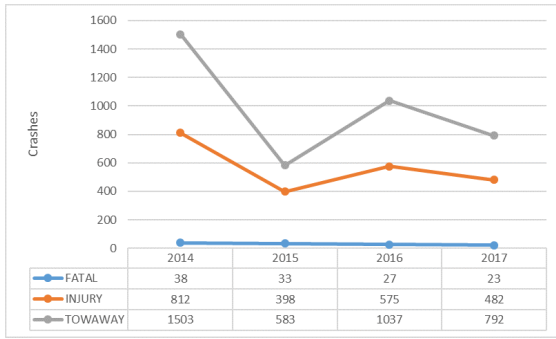
**Narrative Overview for FY 2019****Instructions:**

*The State must include a reasonable crash reduction goal for their State that supports FMCSA's mission to reduce the national number of crashes, injuries and fatalities involving commercial motor vehicles. The State has flexibility in setting its goal and it can be based on raw numbers (e.g., total number of fatalities or CMV crashes), based on a rate (e.g., fatalities per 100 million VMT), etc.*

**Problem Statement Narrative: Describe the identified problem, include baseline data and identify the measurement method.**

In general, over the last several years, there has been a steady decline in the number of commercial motor vehicle (CMV) crashes in Massachusetts from 2,353 in FY2014 to 1,297 in FY2017 and 479 in FY2018 thus far. However, the number of reported injury and property damage only (PDO) crashes did increase from 2015 to 2016 as did all motor vehicle crashes. The chart below demonstrates the changes by fiscal year for fatalities, injuries and towaway crashes.

**Massachusetts CMV Crash Related Fatalities, Injuries and Towaways, Fiscal Year 2014-2017**



To further reduce the number and severity of crashes involving CMVs, UMassSafe conducted an extensive crash data analysis that included a study of crash locations and characteristics. The findings of this analysis are attached to this E-CVSP and will be utilized by the MSP CVES in planning and conducting crash prevention efforts.

**Enter the data source and capture date:**

FMCSA Motor Carrier Management Information System (MCMIS) data snapshot as of 06/29/2018, including crash records through 02/28/2018 (<https://ai.fmcsa.dot.gov/CrashStatistics/rptSummary.aspx>).

**Projected Goal for FY 2019**

**Enter Crash Reduction Goal:**

Reduce the number of injuries and fatalities from crashes involving CMVs in Massachusetts by 5% from the three-year average of 513 (FFY 2015-2017) to 487 by the end of FY 2020.

**Program Activities: States must indicate the activities, and the amount of effort (staff hours, inspections, traffic enforcement stops, etc.) that will be resourced directly for the program activities purpose.**

The MSP CVES will implement the following activities toward reducing CMV crashes and specifically the proportion of injury/fatality resulting CMV crashes.

- Conduct Driver and Vehicle Inspections
- Conduct Traffic Enforcement Activities
- Conduct Public Education and Awareness Activities
- Conduct Effective Data Collection and Reporting
- Target enforcement by analyzing crash causation data for CMVs and passenger cars; including location, driver behavior, day of week, and time of day, as well as violation types and specific unsafe driving behaviors.
- Provide CMV traffic enforcement training and technical assistance to MSP and local police who conduct traffic enforcement in order to ensure traditional traffic enforcement include unsafe CMV driving behaviors.
- Target 30% (at minimum) of roving patrols using crash causation data for CMVs and passenger cars, aiming to mitigate high crash zones, times, and days of week.
- Target 30% (at minimum) of driver/vehicle inspections in high crash zones, during high crash times and days of week.
- Focus 10% of traffic enforcement on unsafe operating behaviors of non-CMV around CMVs.
- Targeted I90 enforcement for following too closely, lane changes and other infractions.
- Participate in NTC Electronic Logging Device (ELD) training for new officers and refresher training as necessary.
- Maintain current ELD software on all laptops and run when available.

***Performance Measurements and Monitoring: The State will monitor the effectiveness of its CMV Crash Reduction Goal quarterly and annually by evaluating the performance measures and reporting results in the required Standard Form - Performance Progress Reports (SF-PPRs).***

***Describe how the State will conduct ongoing monitoring of progress in addition to quarterly reporting.***

UMassSafe will examine quarterly CMV injury and fatality data from both the MassDOT Registry of Motor Vehicles Crash Data System and MCMIS to track progress towards the goal. Furthermore, a quarterly and annual review of inspections, citations, and carrier interventions will be conducted, along with public education and awareness campaigns. In addition, the ASPEN activity report will be reviewed by the MCSAP manager, ensuring that the enforcement is conducted in the crash zones. The number of enforcement and roadside inspections conducted, POV citations issued (citations with TE notation), and hours spent patrolling high crash areas will be counted and reviewed on a quarterly basis, and then measured against baseline data from FY17 and FY18.

**3 - Roadside Inspections**

*In this section, provide a trend analysis, an overview of the State’s roadside inspection program, and projected goals for FY 2019.*

**Note:** *In completing this section, do NOT include border enforcement inspections. Border Enforcement activities will be captured in a separate section if applicable.*

**Trend Analysis for 2013 - 2017**

Inspection Types	2013	2014	2015	2016	2017
Level 1: Full	3621	2486	2554	2244	2135
Level 2: Walk-Around	7657	7409	7396	10278	14132
Level 3: Driver-Only	8333	3758	3165	4692	5812
Level 4: Special Inspections	1	126	12	16	6
Level 5: Vehicle-Only	1	1061	830	946	853
Level 6: Radioactive Materials	3	2	2	3	0
<b>Total</b>	<b>19616</b>	<b>14842</b>	<b>13959</b>	<b>18179</b>	<b>22938</b>

**Narrative Overview for FY 2019**

**Overview:**

*Describe components of the State’s general Roadside and Fixed-Facility Inspection Program. Include the day-to-day routine for inspections and explain resource allocation decisions (i.e., number of FTE, where inspectors are working and why).*

**Enter a narrative of the State’s overall inspection program, including a description of how the State will monitor its program to ensure effectiveness and consistency.**

The CVES operates a mixture of fixed weight station and mobile patrols in crash zones and local community “hot spots”. The MSP requires officers to use daily and monthly activity tally sheets. Program monitoring is performed with AI SSDQ measures as well Crystal reports productivity worksheet. The MSP CVES implemented an electronic record management system to track attendance by computer and radio log in. DQ’s are processed quickly, reviewed by a supervisor and thoroughly investigated to insure conformity with FMCSA regulations, enforcement guidance and CVSA policies.

**Projected Goals for FY 2019**

**Instructions for Projected Goals:**

*Complete the following tables in this section indicating the number of inspections that the State anticipates conducting during Fiscal Year 2019. For FY 2019, there are separate tabs for the Lead Agency, Subrecipient Agencies, and Non-Funded Agencies—enter inspection goals by agency type. Enter the requested information on the first three tabs (as applicable). The Summary table totals are calculated by the eCVSP system.*

*To modify the names of the Lead or Subrecipient agencies, or the number of Subrecipient or Non-Funded Agencies, visit [Part 1, MCSAP Structure](#).*

**Note:** *Per the [MCSAP Comprehensive Policy](#), States are strongly encouraged to conduct at least 25 percent Level 1 inspections and 33 percent Level 3 inspections of the total inspections conducted. If the State opts to do less than these minimums, provide an explanation in space provided on the Summary tab.*

**MCSAP Lead Agency**

**Lead Agency is:** MA STATE POLICE (MSP) COMMERCIAL VEHICLE ENFORCEMENT SECTION (CVES)

**Enter the total number of certified personnel in the Lead agency:** 33

Projected Goals for FY 2019 - Roadside Inspections					
Inspection Level	Non-Hazmat	Hazmat	Passenger	Total	Percentage by Level
Level 1: Full	3300	1255	200	4755	25.77%
Level 2: Walk-Around	6000	500	1200	7700	41.72%
Level 3: Driver-Only	5200	200	600	6000	32.51%
Level 4: Special Inspections	0	0	0	0	0.00%
Level 5: Vehicle-Only	0	0	0	0	0.00%
Level 6: Radioactive Materials	0	0	0	0	0.00%
<b>Sub-Total Lead Agency</b>	<b>14500</b>	<b>1955</b>	<b>2000</b>	<b>18455</b>	

**MCSAP subrecipient agency**

**Complete the following information for each MCSAP subrecipient agency. A separate table must be created for each subrecipient.**

**Subrecipient is:** NONE

**Enter the total number of certified personnel in this funded agency:** 0

Projected Goals for FY 2019 - Subrecipients					
Inspection Level	Non-Hazmat	Hazmat	Passenger	Total	Percentage by Level
Level 1: Full				0	%
Level 2: Walk-Around				0	%
Level 3: Driver-Only				0	%
Level 4: Special Inspections				0	%
Level 5: Vehicle-Only				0	%
Level 6: Radioactive Materials				0	%
<b>Sub-Total Funded Agencies</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	

**Non-Funded Agencies**

Total number of agencies:	1
Enter the total number of non-funded certified officers:	9
Enter the total number of inspections projected for FY 2019:	550

**Summary**

Projected Goals for FY 2019 - Roadside Inspections Summary

Projected Goals for FY 2019 Summary for All Agencies					
<b>MCSAP Lead Agency: MA STATE POLICE (MSP) COMMERCIAL VEHICLE ENFORCEMENT SECTION (CVES)</b>					
<b># certified personnel: 33</b>					
<b>Subrecipient Agencies: NONE</b>					
<b># certified personnel: 0</b>					
<b>Number of Non-Funded Agencies: 1</b>					
<b># certified personnel: 9</b>					
<b># projected inspections: 550</b>					
Inspection Level	Non-Hazmat	Hazmat	Passenger	Total	Percentage by Level
Level 1: Full	3300	1255	200	4755	25.77%
Level 2: Walk-Around	6000	500	1200	7700	41.72%
Level 3: Driver-Only	5200	200	600	6000	32.51%
Level 4: Special Inspections	0	0	0	0	0.00%
Level 5: Vehicle-Only	0	0	0	0	0.00%
Level 6: Radioactive Materials	0	0	0	0	0.00%
<b>Total ALL Agencies</b>	<b>14500</b>	<b>1955</b>	<b>2000</b>	<b>18455</b>	

**Note:** If the minimum numbers for Level 1 and Level 3 inspections are less than described in the [MCSAP Comprehensive Policy](#), briefly explain why the minimum(s) will not be met.

**4 - Investigations**

*Describe the State’s implementation of FMCSA’s interventions model for interstate carriers. Also describe any remaining or transitioning compliance review program activities for intrastate motor carriers. Include the number of personnel assigned to this effort. Data provided in this section should reflect interstate and intrastate investigation activities for each year.*

**The State does not conduct investigations. If this box is checked, the tables and narrative are not required to be completed and won’t be displayed.**

**Trend Analysis for 2013 - 2017**

<b>Investigative Types - Interstate</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>
Compliance Investigations	0	0	0	0	0
Cargo Tank Facility Reviews	0	0	0	0	0
Non-Rated Reviews (Excludes CSA & SCR)	1	2	2	0	0
CSA Off-Site	1	0	0	0	0
CSA On-Site Focused/Focused CR	5	10	4	2	0
CSA On-Site Comprehensive	6	6	17	18	18
<b>Total Investigations</b>	<b>13</b>	<b>18</b>	<b>23</b>	<b>20</b>	<b>18</b>
Total Security Contact Reviews	0	2	4	0	0
Total Terminal Investigations	0	0	0	4	27

<b>Investigative Types - Intrastate</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>
Compliance Investigations	0	0	0	0	0
Cargo Tank Facility Reviews	0	0	0	0	0
Non-Rated Reviews (Excludes CSA & SCR)	0	0	0	0	0
CSA Off-Site	0	0	0	0	0
CSA On-Site Focused/Focused CR	0	0	0	0	0
CSA On-Site Comprehensive	0	0	0	0	0
<b>Total Investigations</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Total Security Contact Reviews	0	0	0	0	0
Total Terminal Investigations	0	0	0	0	0

**Narrative Overview for FY 2019**

**Instructions:**

Describe the State’s implementation of FMCSA’s interventions model to the maximum extent possible for interstate carriers and any remaining or transitioning compliance review program activities for intrastate motor carriers. Include the number of personnel assigned to this effort.

**Projected Goals for FY 2019**

Complete the table below indicating the number of investigations that the State anticipates conducting during FY 2019.

Projected Goals for FY 2019 - Investigations		
Investigative Type	Interstate Goals	Intrastate Goals
Compliance Investigations	0	0
Cargo Tank Facility Reviews	0	0
Non-Rated Reviews (Excludes CSA & SCR)	0	0
CSA Off-Site	0	0
CSA On-Site Focused/Focused CR	4	0
CSA On-Site Comprehensive	4	0
<b>Total Investigations</b>	<b>8</b>	<b>0</b>
Total Security Contact Reviews	0	0
Total Terminal Investigations	0	0

Add additional information as necessary to describe the carrier investigation estimates.

NA

**Program Activities:** Describe components of the State’s carrier investigation activities. Include the number of personnel participating in this activity.

One investigator will conduct an estimated 8 carrier interventions in FY19.

**Performance Measurements and Monitoring:** Describe all measures the State will use to monitor progress toward the annual goals. Further, describe how the State measures qualitative components of its carrier investigation program, as well as outputs.

The State will review the number of carrier interventions quarterly.

**5 - Traffic Enforcement**

Traffic enforcement means documented enforcement activities of State or local officials. This includes the stopping of vehicles operating on highways, streets, or roads for moving violations of State or local motor vehicle or traffic laws (e.g., speeding, following too closely, reckless driving, and improper lane changes).

**Trend Analysis for 2013 - 2017**

**Instructions:**

Please refer to the [MCSAP Comprehensive Policy](#) for an explanation of FMCSA's traffic enforcement guidance. Complete the tables below to document the State's safety performance goals and outcomes over the past five measurement periods.

1. Insert the beginning and end dates of the measurement period being used, (e.g., calendar year, Federal fiscal year, State fiscal year or any consistent 12-month period for which data is available).
2. Insert the total number CMV traffic enforcement stops with an inspection, CMV traffic enforcement stops without an inspection, and non-CMV stops in the tables below.
3. Insert the total number of written warnings and citations issued during the measurement period. The number of warnings and citations are combined in the last column.

State/Territory Defined Measurement Period (Include 5 Periods)		Number of Documented CMV Traffic Enforcement Stops with an Inspection	Number of Citations and Warnings Issued
Begin Date	End Date		
01/01/2017	12/31/2017	10654	14913
01/01/2016	12/31/2016	8246	12076
01/01/2015	12/31/2015	5156	7264
01/01/2014	12/31/2014	6098	8329
01/01/2013	12/31/2013	6900	9268

The State does not conduct CMV traffic enforcement stops without an inspection. If this box is checked, the "CMV Traffic Enforcement Stops without an Inspection" table is not required to be completed and won't be displayed.

State/Territory Defined Measurement Period (Include 5 Periods)		Number of Documented CMV Traffic Enforcement Stops without Inspection	Number of Citations and Warnings Issued
Begin Date	End Date		
01/01/2017	12/31/2017	0	0
01/01/2016	12/31/2016	0	0
01/01/2015	12/31/2015	0	0
01/01/2014	12/31/2014	0	0
01/01/2013	12/31/2013	0	0

The State does not conduct documented non-CMV traffic enforcement stops and was not reimbursed by the MCSAP grant (or used for State Share or MOE). If this box is checked, the "Non-CMV Traffic Enforcement Stops" table is not required to be completed and won't be displayed.

State/Territory Defined Measurement Period (Include 5 Periods)		Number of Documented Non-CMV Traffic Enforcement Stops	Number of Citations and Warnings Issued
Begin Date	End Date		
01/01/2017	12/31/2017	201	201
01/01/2016	12/31/2016	524	524
01/01/2015	12/31/2015	1244	417
01/01/2014	12/31/2014	417	417
01/01/2013	12/31/2013	454	454

**Enter the source and capture date of the data listed in the tables above.**

Number of CMV Traffic Stops with an Inspection and Number of Citations/Warnings Issued: FMCSA's Motor Carrier Management Information System (MCMIS) Traffic Enforcement Activity Summary, data snapshot as of 6/29/18 - <https://ai.fmcsa.dot.gov/SafetyProgram/spRptRoadside.aspx?rpt=TEAS>. Number of Non-CMV Traffic Enforcement Stops & Number of Citations Issued: MSP Internal Records, June, 2018.

**Narrative Overview for FY 2019**

**Instructions:**

Describe the State's proposed level of effort (number of personnel) to implement a statewide CMV (in conjunction with and without an inspection) and/or non-CMV traffic enforcement program. If the State conducts CMV and/or non-CMV traffic enforcement activities only in support of the overall crash reduction goal, describe how the State allocates traffic enforcement resources. Please include number of officers, times of day and days of the week, specific corridors or general activity zones, etc. Traffic enforcement activities should include officers who are not assigned to a dedicated commercial vehicle enforcement unit, but who conduct eligible commercial vehicle/driver enforcement activities. If the State conducts non-CMV traffic enforcement activities, the State must conduct these activities in accordance with the [MCSAP Comprehensive Policy](#).

The Statewide CMV traffic enforcement program is a comprehensive program targeting unsafe driver behaviors associated with Massachusetts specific crash causation factors in high crash regions during high crash times of day and days of week as determined by UMassSafe conducted crash data analysis. 33 sworn personnel and 2 civilian personnel will be used for the implementation of the program. Targeting both CMV and non-CMV involvement in crashes, the CVES conducts highly visible enforcement. The goal is to maintain the MSP CVES annual level of effort in traffic enforcement associated with and without inspections. If the federal system is down or the computer network is not functioning Troopers will Conduct CMV moving violation enforcement using Massachusetts Uniform Traffic Citations (Troopers will mark citations with a TE notation for data collection purposes. )

**Projected Goals for FY 2019**

Using the radio buttons in the table below, indicate the traffic enforcement activities the State intends to conduct in FY 2019. The projected goals are based on the number of traffic stops, not tickets or warnings issued. These goals are NOT intended to set a quota.

			Enter Projected Goals (Number of Stops only)
Yes	No	Traffic Enforcement Activities	FY 2019
<input checked="" type="radio"/>	<input type="radio"/>	CMV with Inspection	8000
<input checked="" type="radio"/>	<input type="radio"/>	CMV without Inspection	100
<input checked="" type="radio"/>	<input type="radio"/>	Non-CMV	200
<input checked="" type="radio"/>	<input type="radio"/>	Comprehensive and high visibility in high risk locations and corridors (special enforcement details)	2000

In order to be eligible to utilize Federal funding for Non-CMV traffic enforcement, the [FAST Act](#) requires that the State must maintain an average number of safety activities which include the number of roadside inspections, carrier investigations, and new entrant safety audits conducted in the State for Fiscal Years 2004 and 2005.

The table below displays the information you input into this plan from the roadside inspections, investigations, and new entrant safety audit sections. Your planned activities must at least equal the average of your 2004/2005 activities.

FY 2019 Planned Safety Activities				
Inspections	Investigations	New Entrant Safety Audits	Sum of FY 2019 Activities	Average 2004/05 Activities
19005	8	550	19563	19496

***Describe how the State will monitor its traffic enforcement efforts to ensure effectiveness, consistency, and correlation to FMCSA's national traffic enforcement priority.***

The State will monitor and evaluate the effectiveness of its traffic enforcement activities through a monthly and annual review of the enforcement and inspection data.

**6 - Safety Technology**

The FAST Act made Performance and Registration Information Systems Management (PRISM) a condition for MCSAP eligibility in [49 CFR 350.201 \(aa\)](#). States must achieve full participation by October 1, 2020. FMCSA defines “fully participating” in PRISM, for the purpose of determining eligibility for MCSAP funding, as when a State’s or Territory’s International Registration Plan (IRP) or CMV registration agency suspends or revokes and denies registration if the motor carrier responsible for safety of the vehicle is under any Federal OOS order and denies registration if the motor carrier possess an inactive or de-active USDOT number for motor carriers operating CMVs in commerce that have a Gross Vehicle Weight (GVW) of 26,001 pounds or more. Further information regarding full participation in PRISM can be found in the MCP Section 4.3.1.

Under certain conditions, the FAST Act allows MCSAP lead agencies to use MCSAP funds for Operations and Maintenance (O&M) costs associated with Innovative Technology Deployment (ITD) and the PRISM ([49 CFR 350.201\(aa\) \(cc\)](#)). For PRISM, O&M costs are eligible expenses subject to FMCSA approval. For ITD, if the State agrees to comply with ITD program requirements and has complied with all MCSAP requirements, including achievement of full participation in PRISM, O&M costs are eligible expenses. O&M expenses must be included and described in the Spending Plan section per the method these costs are handled in the State’s accounting system (e.g., contractual costs, other costs, etc.).

**Safety Technology Compliance Status**

Please verify the current level of compliance for your State in the table below using the drop-down menu. If the State plans to include O&M costs in this year’s CVSP, please indicate that in the table below. Additionally, details must be in this section and in your Spending Plan.

Technology Program	Current Compliance Level	Include O & M Costs?
ITD	Core CVISN Compliant	Yes
PRISM	Exceeds Full Participation	Yes

Available data sources:

- [FMCSA website ITD information](#)
- [FMCSA website PRISM information](#)

**Enter the agency name responsible for ITD in the State, if other than the Lead MCSAP Agency:** MassDOT Registry of Motor Vehicles

**Enter the agency name responsible for PRISM in the State, if other than the Lead MCSAP Agency:** MassDOT Registry of Motor Vehicles

**Narrative Overview for FY 2019**

**Problem Statement Narrative and Projected Goal:**

**If the State’s PRISM compliance is less than full participation, describe activities your State plans to implement to achieve full participation in PRISM.**

The Massachusetts Registry of Motor Vehicles leads the PRISM and CVISN projects. Massachusetts is at PRISM Step 8. The Massachusetts RMV needs funding for OM costs related to the CVIEW and MassIRP components necessary to support and maintain PRISM Level 8 certification. The annual cost is \$225,000. (Vendors are Explore Information Services LLC and ITERIS.) The performance measures are maintenance of PRISM Level 8 and the number of carrier registrations revoked.

**Program Activities: Describe any actions that will be taken to implement full participation in PRISM.**

The MassDOT Registry of Motor Vehicles is responsible for PRISM and ITD implementation. The MSP CVES supports their efforts through MCSAP funding.

***Performance Measurements and Monitoring: Describe all performance measures that will be used and include how the State will conduct ongoing monitoring of progress in addition to quarterly SF-PPR reporting.***

The MSP CVES reviews quarterly updates from the RMV to determine they are continuing to meet compliance standards.

**7 - Public Education and Outreach**

A public education and outreach program is designed to provide information on a variety of traffic safety issues related to CMVs and non-CMV's that operate around large trucks and buses.

**Trend Analysis for 2013 - 2017**

In the table below, provide the number of public education and outreach activities conducted in the past 5 years.

Public Education and Outreach Activities	2013	2014	2015	2016	2017
Carrier Safety Talks	10	10	10	9	4
CMV Safety Belt Education and Outreach	0	0	0	0	0
State Trucking Association Meetings	2	2	0	2	1
State-Sponsored Outreach Events	0	0	0	1	0
Local Educational Safety Events	0	0	0	0	0
Teen Safety Events	20	20	20	15	0

**Narrative Overview for FY 2019**

**Performance Objective:** To increase the safety awareness of the motoring public, motor carriers and drivers through public education and outreach activities such as safety talks, safety demonstrations, etc.

Describe the type of activities the State plans to conduct, including but not limited to passenger transportation, hazardous materials transportation, and share the road safely initiatives. Include the number of personnel that will be participating in this effort.

The MSP CVES will conduct 11 public education and awareness activities on passenger transportation, safety belts, hazardous materials, general crash reduction and best safety practices.

**Projected Goals for FY 2019**

In the table below, indicate if the State intends to conduct the listed program activities, and the estimated number, based on the descriptions in the narrative above.

			Performance Goals
Yes	No	Activity Type	FY 2019
<input checked="" type="radio"/>	<input type="radio"/>	Carrier Safety Talks	5
<input checked="" type="radio"/>	<input type="radio"/>	CMV Safety Belt Education and Outreach	1
<input checked="" type="radio"/>	<input type="radio"/>	State Trucking Association Meetings	1
<input checked="" type="radio"/>	<input type="radio"/>	State-Sponsored Outreach Events	1
<input checked="" type="radio"/>	<input type="radio"/>	Local Educational Safety Events	1
<input checked="" type="radio"/>	<input type="radio"/>	Teen Safety Events	2

**Performance Measurements and Monitoring:** Describe all performance measures and how the State will conduct monitoring of progress. States must report the quantity, duration and number of attendees in their quarterly SF-PPR reports.

Every month, the MSP CVES Commander will review the number of presentations as well as the content and subject matter to ensure compliance with goals and objectives. In addition, the Commander will review feedback and comments from motor carriers and driving schools, and make appropriate adjustments to class content. The MSP CVES will report the quantity, duration and number of attendees in its quarterly Performance Progress Report.

**8 - State Safety Data Quality (SSDQ)**

The FAST Act allows MCSAP lead agencies to use MCSAP funds for Operations and Maintenance (O&M) costs associated with Safety Data Systems (SSDQ) if the State meets accuracy, completeness and timeliness measures regarding motor carrier safety data and participates in the national data correction system (DataQs).

**SSDQ Compliance Status**

Please verify the current level of compliance for your State in the table below using the drop-down menu. If the State plans to include O&M costs in this year's CVSP, select Yes. These expenses must be included in the Spending Plan section per the method these costs are handled in the State's accounting system (e.g., contractual costs, other costs, etc.).

Technology Program	Current Compliance Level	Include O & M Costs?
SSDQ	Good	No

Available data sources:

- [FMCSA website SSDQ information](#)

In the table below, use the drop-down menus to indicate the State's current rating within each of the State Safety Data Quality categories, and the State's goal for FY 2019.

SSDQ Category	Current SSDQ Rating	Goal for FY 2019
Crash Record Completeness	Good	Good
Fatal Crash Completeness	Good	Good
Crash Timeliness	Good	Good
Crash Accuracy	Good	Good
Crash Consistency	No Flag	No Flag
Inspection Record Completeness	Good	Good
Inspection VIN Accuracy	Good	Good
Inspection Timeliness	Good	Good
Inspection Accuracy	Fair	Good

**Enter the date of the A & I Online data snapshot used for the "Current SSDQ Rating" column.**

Data current as of June 29, 2018

**Narrative Overview for FY 2019**

**Problem Statement Narrative: Describe any issues encountered for any SSDQ category not rated as "Good" in the Current SSDQ Rating category column above (i.e., problems encountered, obstacles overcome, lessons learned, etc.). If the State is "Good" in all categories, no further narrative or explanation is necessary.**

Massachusetts currently has a 'good' SSDQ ranking in all categories except Inspection Accuracy which is 'fair'. However there has been an increase in the percent accurate from 84% (red/poor) in May of 2017 to a current 89% (yellow/fair).

**Program Activities for FY 2019 - 2021: Describe any actions that will be taken to achieve a "Good" rating in any category not currently rated as "Good," including measurable milestones.**

The MSP CVES will continue to monitor each SSDQ category rating on a quarterly basis and make any adjustments if needed. An analyst will be hired to assist with data entry and analysis. Training and internal software improvements will continue to be implemented to improve inspection accuracy.

**Performance Measurements and Monitoring: Describe all performance measures that will be used and include how the State will conduct ongoing monitoring of progress in addition to quarterly SF-PPR reporting.**

The quarterly FMCSA SSDQ ratings will be monitored and compared to FY18 baseline data on a quarterly basis.

**9 - New Entrant Safety Audits**

The FAST Act states that conducting interstate New Entrant safety audits is now a requirement to participate in the MCSAP (49 CFR 350.201.) The Act allows a State to conduct intrastate New Entrant safety audits at the State’s discretion. States that choose to conduct intrastate safety audits must not negatively impact their interstate new entrant program.

Note: The FAST Act also says that a State or a third party may conduct New Entrant safety audits. If a State authorizes a third party to conduct safety audits on its behalf, the State must verify the quality of the work conducted and remains solely responsible for the management and oversight of the New Entrant activities.

Yes	No	Question
<input checked="" type="radio"/>	<input type="radio"/>	Does your State conduct Offsite safety audits in the New Entrant Web System (NEWS)? NEWS is the online system that carriers selected for an Offsite Safety Audit use to submit requested documents to FMCSA. Safety Auditors use this same system to review documents and communicate with the carrier about the Offsite Safety Audit.
<input checked="" type="radio"/>	<input type="radio"/>	Does your State conduct Group safety audits at non principal place of business locations?
<input type="radio"/>	<input checked="" type="radio"/>	Does your State intend to conduct intrastate safety audits and claim the expenses for reimbursement, state match, and/or Maintenance of Effort on the MCSAP Grant?

**Trend Analysis for 2013 - 2017**

In the table below, provide the number of New Entrant safety audits conducted in the past 5 years.

New Entrant Safety Audits	2013	2014	2015	2016	2017
Interstate	501	417	242	536	580
Intrastate	0	0	0	0	0
<b>Total Audits</b>	<b>501</b>	<b>417</b>	<b>242</b>	<b>536</b>	<b>580</b>

Note: Intrastate safety audits will not be reflected in any FMCSA data systems—totals must be derived from State data sources.

**Narrative Overview for FY 2019**

**Enter the agency name conducting New Entrant activities, if other than the Lead MCSAP Agency:**  
 Massachusetts State Police

**Program Goal:** Reduce the number and severity of crashes, injuries, and fatalities involving commercial motor vehicles by reviewing interstate new entrant carriers. At the State’s discretion, intrastate motor carriers are reviewed to ensure they have effective safety management programs.

**Program Objective:** Statutory time limits for processing and completing interstate safety audits are:

- If entry date into the New Entrant program (as shown in FMCSA data systems) September 30, 2013 or earlier —safety audit must be completed within 18 months.
- If entry date into the New Entrant program (as shown in FMCSA data systems) October 1, 2013 or later—safety audit must be completed within 12 months for all motor carriers and 120 days for motor carriers of passengers.

**Projected Goals for FY 2019**

For the purpose of completing the table below:

- **Onsite safety audits** are conducted at the carrier's principal place of business.
- **Offsite safety audit** is a desktop review of a single New Entrant motor carrier's basic safety management controls and can be conducted from any location other than a motor carrier's place of business. Offsite audits are conducted by States that have completed the FMCSA New Entrant training for offsite audits.
- **Group audits** are neither an onsite nor offsite audit. Group audits are conducted on multiple carriers at an alternative location (i.e., hotel, border inspection station, State office, etc.).

Projected Goals for FY 2019 - New Entrant Safety Audits		
Number of Safety Audits/Non-Audit Resolutions	FY 2019	
	Interstate	Intrastate
# of Safety Audits (Onsite)	200	0
# of Safety Audits (Offsite)	350	0
# Group Audits	0	0
<b>TOTAL Safety Audits</b>	<b>550</b>	<b>0</b>
# of Non-Audit Resolutions	300	0

**Strategies: Describe the strategies that will be utilized to meet the program objective above. Provide any challenges or impediments foreseen that may prevent successful completion of the objective.**

The CVES employs four full time officers to conduct New Entrant Investigations. Three investigators are deployed regionally and one officer is the program administrator.

New Entrant training will be offered to any officer who is interested in performing audits.

The program administrator vets the applicant to ensure a review is needed, assigns investigations, and monitors the queue to ensure the audits are completed in a timely manner.

It should be noted the CVSP measures audits completed. However the actual number of NE applicants who must be vetted by SP personnel is 40% greater than the audits completed.

**Activity Plan: Include a description of the activities proposed to help achieve the objectives. If group audits are planned, include an estimate of the number of group audits.**

The CVES utilizes a combination of off-site and on-site audits. Approximately 60 percent of audits are conducted off-site and 40 percent on-site. If we see an opportunity to improve efficiency by using group audits we may implement this technique.

**Performance Measurement Plan: Describe how you will measure progress toward meeting the objective, such as quantifiable and measurable outputs (staffing, work hours, carrier contacts, inspections, etc.). The measure must include specific benchmarks to be reported on in the quarterly progress report, or as annual outputs.**

The program administrator monitors the queue, makes assignments, check audits for completeness and accuracy, assembles monthly activity/performance reports, and provides a monthly and quarterly performance report. Our goal is 100 % on time performance.

**Part 3 - National Emphasis Areas and State Specific Objectives**

*FMCSA establishes annual national priorities (emphasis areas) based on emerging or continuing issues, and will evaluate CVSPs in consideration of these national priorities. Part 3 allows States to address the national emphasis areas/priorities outlined in the Notice of Funding Opportunity (NOFO) and any State-specific objectives as necessary.*

**1 - Enforcement of Federal OOS Orders during Roadside Activities****Instructions:**

*FMCSA has established an Out-of-Service (OOS) catch rate of 85 percent for carriers operating while under an OOS order. In this part, States will indicate their catch rate is at least 85 percent by using the check box or completing the problem statement portion below.*

**Check this box if:**

**As evidenced by the data provided by FMCSA, the State identifies at least 85 percent of carriers operating under a Federal OOS order during roadside enforcement activities and will not establish a specific reduction goal. However, the State will maintain effective enforcement of Federal OOS orders during roadside inspections and traffic enforcement activities.**

**2 - Passenger Carrier Enforcement**

**Instructions:**

*FMCSA requests that States conduct enhanced investigations for motor carriers of passengers and other high risk carriers. Additionally, States are asked to allocate resources to participate in the enhanced investigations training being offered by FMCSA. Finally, States are asked to continue partnering with FMCSA in conducting enhanced investigations and inspections at carrier locations.*

**Check this box if:**

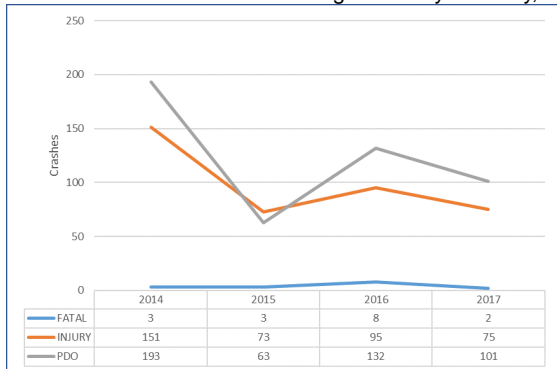
**As evidenced by the trend analysis data, the State has not identified a significant passenger transportation safety problem. Therefore, the State will not establish a specific passenger transportation goal in the current fiscal year. However, the State will continue to enforce the Federal Motor Carrier Safety Regulations (FMCSRs) pertaining to passenger transportation by CMVs in a manner consistent with the [MCSAP Comprehensive Policy](#) as described either below or in the roadside inspection section.**

**Narrative Overview for FY 2019**

**Problem Statement Narrative: Describe the problem as identified by performance data and include the baseline data.**

The number of Massachusetts crashes involving passenger carriers (buses – all types) has been declining since 2014 with the exception of an increase in 2016 similar to the increase in all motor vehicle crashes. As shown in the chart below, all crash types – fatal, injury and property damage only- declined between FY16 and FY17. In FY18 to date, there have been no fatal crashes, 84 injury crashes and 77 property damage only (PDO) crashes. (See attached Problem Statement in Appendix.)

Massachusetts Crashes Involving Buses by Severity, Fiscal Year 2014-2017



To further reduce the number of crashes involving passenger carriers, UMassSafe conducted a extensive crash data analysis that included a study of crash locations and characteristics. The findings of this analysis are attached to this E-CVSP and will be utilized by the MSP CVES in planning and conducting all passenger carrier crash prevention efforts.

**Projected Goals for FY 2019: Enter performance goals.**

To maintain the number of passenger carrier inspections at the FY18 projection of 2,000.

Data Source: FMCSA Motor Carrier Management Information System (MCMIS) - [https://ai.fmcsa.dot.gov/ProgramReport/pcReport.aspx?rpt=reg\\_ROI](https://ai.fmcsa.dot.gov/ProgramReport/pcReport.aspx?rpt=reg_ROI).

**Program Activities: Provide additional information regarding how these activities will be implemented.**

In addition to conducting the inspections, enforcement activities, CSAs, public education/awareness and effective data collection, Massachusetts will participate in national and regional strike force and task force activities.

***Performance Measurements and Monitoring: Describe all performance measures and how the State will conduct ongoing monitoring of progress in addition to quarterly SF-PPR reporting.***

Passenger transportation safety activities will be monitored and evaluated by the State during a monthly and annual evaluation of activities, inspections, enforcement efforts, CSA SMS scores, and presentations. The performance measures and milestones described in this document will be used to measure progress. Passenger Carrier Enforcement goals will be monitored quarterly and annually through evaluation of both the number and percent of passenger carrier inspections.

### 3 - State Specific Objectives – Past

#### Instructions:

*Describe any State-specific CMV problems that were addressed with FY2017 MCSAP funding. Some examples may include hazardous materials objectives, Electronic Logging Device (ELD) implementation, and crash reduction for a specific segment of industry, etc. Report below on year-to-date progress on each State-specific objective identified in the FY 2018 CVSP.*

#### **Progress Report on State Specific Objectives(s) from the FY 2018 CVSP**

*Please enter information to describe the year-to-date progress on any State-specific objective(s) identified in the State's FY 2018 CVSP. Click on "Add New Activity" to enter progress information on each State-specific objective.*

#### Activity #1

#### **Activity: Describe State-specific activity conducted from previous year's CVSP.**

In FY18, the following activities were implemented to address the safety of workers on roadways: enforcement of Move Over Law in Work Zones, driver and vehicle inspections, and extensive traffic enforcement utilizing CMV crash causation analysis to target enforcement.

#### **Goal: Insert goal from previous year CVSP (#, %, etc., as appropriate).**

To conduct 3,500 truck inspections in work zones in FY18.

#### **Actual: Insert year to date progress (#, %, etc., as appropriate).**

Although a large number of the total truck inspections were conducted in work zones, unfortunately the data collection system does not enable the MSP CVES to determine how many were specifically conducted in work zones. The MSP CVES implemented an extensive program to address work zone crashes leading to a reduction from 4.5% in 2015 to 3% of crashes in work zones in 2016. The percent of CMV crashes in work zones involving an injury or fatality was reduced from 40% in 2015 to 32% in 2016. Note that the 2016 crash data from the Massachusetts Registry of Motor Vehicles is not closed and therefore may not be complete. The data source for number of truck inspections is the MSP CVES, Snapshot - June 2017 and that for crashes is the UMassSafe Traffic Safety Data Warehouse (using Registry of Motor Vehicles Crash data), Snapshot- June 2017.

#### **Narrative: Describe any difficulties achieving the goal, problems encountered, obstacles overcome, lessons learned, etc.**

Although a large number of the total truck inspections were conducted in work zones, unfortunately the data collection system does not enable the MSP CVES to determine how many were specifically conducted in work zones.

#### 4 - State Specific Objectives – Future

##### Instructions:

*The State may include additional objectives from the national priorities or emphasis areas identified in the NOFO as applicable. In addition, the State may include any State-specific CMV problems identified in the State that will be addressed with MCSAP funding. Some examples may include hazardous materials objectives, Electronic Logging Device (ELD) implementation, and crash reduction for a specific segment of industry, etc.*

*Describe any State-specific objective(s) identified for FY 2019. Click on "Add New Activity" to enter information on each State-specific objective. This is an optional section and only required if a State has identified a specific State problem planned to be addressed with grant funding.*

##### State Objective #1

**Enter the title of your State-Identified Objective.**

Target OOS Carriers at Roadside as well as Reinspection

##### **Narrative Overview for FY 2019**

***Problem Statement Narrative: Describe problem identified by performance data including baseline data.***

Massachusetts OOS rates from driver, vehicle and HazMat inspections are significantly higher than that for the Nation. In FY17, the MA driver OOS rate was 10.45% compared to the national rate of 8.58%, the vehicle OOS rate was 34.79% compared to 25.94% nationally and the HazMat OOS rate was 23.48% compared to the national rate of 10.20%. OOS rates in FY18 thus far were also higher than the national rates.

***Projected Goals for FY 2019:***

***Enter performance goal.***

Conduct 1,000 inspections/reinspections

***Program Activities: Describe the activities that will be implemented including level of effort.***

In order to address the high OOS rates, the MSP CVES will conduct enforcement of OOS at roadwise as well as target high OOS carriers for reinspections.

***Performance Measurements and Monitoring: Describe all performance measures and how the State will conduct ongoing monitoring of progress in addition to quarterly SF-PPR reporting.***

The State will monitor and evaluate the effectiveness of its focus on OOS at roadways and of carriers for reinspection through a monthly and annual review of the inspection data as well as enforcement in high crash corridors. Furthermore, to monitor and evaluate the effectiveness of the OOS safety objective, Massachusetts will measure the number and locations of OOS rates and enforcement/inspections on a monthly basis against the FY18 baseline data as well as examine our overall progress on a quarterly and annual basis.

## Part 4 - Financial Information

### 1 - Overview

The Spending Plan is an explanation of each budget component, and should support the cost estimates for the proposed work. The Spending Plan should focus on how each item will achieve the proposed project goals and objectives, and explain how costs are calculated. The Spending Plan must be clear, specific, detailed, and mathematically correct. Sources for assistance in developing the Spending Plan include [2 CFR part 200](#), [2 CFR part 1201](#), [49 CFR part 350](#) and the [MCSAP Comprehensive Policy](#).

Before any cost is billed to or recovered from a Federal award, it must be allowable ([2 CFR §200.403](#), [2 CFR §200 Subpart E – Cost Principles](#)), reasonable and necessary ([2 CFR §200.403](#) and [2 CFR §200.404](#)), and allocable ([2 CFR §200.405](#)).

- **Allowable** costs are permissible under the OMB Uniform Guidance, DOT and FMCSA regulations and directives, MCSAP policy, and all other relevant legal and regulatory authority.
- **Reasonable and Necessary** costs are those which a prudent person would deem to be judicious under the circumstances.
- **Allocable** costs are those that are charged to a funding source (e.g., a Federal award) based upon the benefit received by the funding source. Benefit received must be tangible and measurable.
  - For example, a Federal project that uses 5,000 square feet of a rented 20,000 square foot facility may charge 25 percent of the total rental cost.

#### What's New for FY 2019

The Spending Plan budget activity tables have been restructured to permit Maintenance of Effort (MOE) expenditures to be added on each line item of the budget activity tables. In the FY 2018 eCVSP, States indicated MOE costs as a single cost in each budget activity area. Please review the FY 2019 changes and instructions below prior to completing your Spending Plan.

- A new column (% of Time on MCSAP Grant) has been added in each of the budget activity tables to capture the percentage of time each item entered is dedicated to the MCSAP grant.
- A new column (MOE) has been added in each of the budget activity tables to capture MOE amounts. This allows users the ability to add MOE expenditures by each line item. MOE expenditures must not be included in the calculation of Total Project Costs, Federal share, or State share.

#### Instructions

The Spending Plan should include costs for FY 2019 only. This applies to States completing a single-year CVSP, multi-year CVSP, or an Annual Update to their multi-year CVSP.

The Spending Plan data tables are displayed by budget category (Personnel, Fringe Benefits, Travel, Equipment, Supplies, Contractual and Subaward, and Other Costs). You may add additional lines to each table, as necessary. Please include clear, concise explanations in the narrative boxes regarding the reason for each cost, how costs are calculated, why they are necessary, and specific information on how prorated costs were determined.

The following definitions describe Spending Plan terminology.

- **Federal Share** means the portion of the total project costs paid by Federal funds. Federal share is 85 percent of the total project costs for this FMCSA grant program.
- **State Share** means the portion of the total project costs paid by State funds. State share is 15 percent of the total project costs for this FMCSA grant program. A State is only required to contribute up to 15 percent of the total project costs of all budget categories combined as State share. A State is NOT required to include a 15 percent State share for each line item in a budget category. The State has the flexibility to select the budget categories and line items where State match will be shown.
- **Total Project Costs** means total allowable costs incurred under a Federal award and all required cost sharing (sum of the Federal share plus State share), including third party contributions.
- **Maintenance of Effort (MOE)** means the level of effort Lead State Agencies are required to maintain each fiscal year in accordance with [49 CFR § 350.301](#). The State has the flexibility to select the budget categories and line items where MOE will be shown. Additional information regarding MOE can be found in the MCSAP

*Comprehensive Policy (MCP) in section 3.6.*

### **Expansion of On Screen Messages**

*The system performs a number of edit checks on Spending Plan data inputs to ensure calculations are correct, and values are as expected. When anomalies are detected, alerts will be displayed on screen.*

- **Calculation of Federal and State Shares**

*Total Project Costs are determined for each line based upon user-entered data and a specific budget category formula. Federal and State shares are then calculated by the system based upon the Total Project Costs and are added to each line item.*

*The system calculates an 85 percent Federal share and 15 percent State share automatically and populates these values in each line. Federal share is the product of Total Project Costs x .85. State share equals Total Project Costs minus Federal share. If Total Project Costs are updated based upon user edits to the input values, the 85 and 15 percent values will not be recalculated by the system and should be reviewed and updated by users as necessary.*

*States may edit the system-calculated Federal and State share values at any time to reflect actual allocation for any line item. For example, States may allocate a different percentage to Federal and State shares. States must ensure that the sum of the Federal and State shares equals the Total Project Costs for each line before proceeding to the next budget category.*

*An error is shown on line items where Total Project Costs does not equal the sum of the Federal and State shares. Errors must be resolved before the system will allow users to 'save' or 'add' new line items.*

*Territories must insure that Total Project Costs equal Federal share for each line in order to proceed.*

- **MOE Expenditures**

*States may enter MOE on individual line items in the Spending Plan tables. The Personnel, Fringe Benefits, Equipment, Supplies, and Other Costs budget activity areas include edit checks on each line item preventing MOE costs from exceeding allowable amounts.*

- *If "Percentage of Time on MCSAP grant" equals 100%, then MOE must equal \$0.00.*
- *If "Percentage of Time on MCSAP grant" equals 0%, then MOE may equal up to Total Project Costs as expected at 100%.*
- *If "Percentage of Time on MCSAP grant" > 0% AND < 100%, then the MOE maximum value cannot exceed "100% Total Project Costs" minus "system-calculated Total Project Costs".*

*An error is shown on line items where MOE expenditures are too high. Errors must be resolved before the system will allow users to 'save' or 'add' new line items.*

*The Travel and Contractual budget activity areas do not include edit checks for MOE costs on each line item. States should review all entries to ensure costs reflect estimated expenditures.*

- **Financial Summary**

*The Financial Summary is a summary of all budget categories. The system provides warnings to the States on this page if the projected State Spending Plan totals are outside FMCSA's estimated funding amounts. States should review any warning messages that appear on this page and address them prior to submitting the eCVSP for FMCSA review.*

*The system will confirm that:*

- *Overtime value does not exceed the FMCSA limit.*
- *Planned MOE Costs equal or exceed FMCSA limit.*
- *States' proposed Federal and State share totals are each within \$5 of FMCSA's Federal and State share estimated amounts.*
- *Territories' proposed Total Project Costs are within \$5 of \$350,000.*

<b>ESTIMATED Fiscal Year Funding Amounts for MCSAP</b>			
	85% Federal Share	15% State Share	Total Estimated Funding
Total	\$4,442,548.00	\$783,364.00	\$5,225,912.00

<b>Summary of MCSAP Funding Limitations</b>	
Allowable amount for Overtime without written justification (15% of MCSAP Award Amount ):	\$783,364.00
MOE Baseline:	\$335,450.37

**2 - Personnel**

Personnel costs are salaries for employees working directly on a project.

**Note: Do not include any personally identifiable information (PII) in the CVSP. The final CVSP approved by FMCSA is required to be posted to a public FMCSA website.**

List grant-funded staff who will complete the tasks discussed in the narrative descriptive sections of the CVSP. Positions may be listed by title or function. It is not necessary to list all individual personnel separately by line. The State may use average or actual salary and wages by personnel category (e.g., Trooper, Civilian Inspector, Admin Support, etc.). Additional lines may be added as necessary to capture all your personnel costs.

The percent of each person’s time must be allocated to this project based on the amount of time/effort applied to the project. For budgeting purposes, historical data is an acceptable basis.

**Note:** Reimbursement requests must be based upon documented time and effort reports. Those same time and effort reports may be used to estimate salary expenses for a future period. For example, a MCSAP officer’s time and effort reports for the previous year show that he/she spent 35 percent of his/her time on approved grant activities. Consequently, it is reasonable to budget 35 percent of the officer’s salary to this project. For more information on this item see [2 CFR §200.430](#).

In the salary column, enter the salary for each position.

Total Project Costs equal the Number of Staff x Percentage of Time on MCSAP grant x Salary for both Personnel and Overtime (OT).

If OT will be charged to the grant, only OT amounts for the Lead MCSAP Agency should be included in the table below. If the OT amount requested is greater than the 15 percent limitation in the MCSAP Comprehensive Policy (MCP), then justification must be provided in the CVSP for review and approval by FMCSA headquarters.

Activities conducted on OT by subrecipients under subawards from the Lead MCSAP Agency must comply with the 15 percent limitation as provided in the MCP. Any deviation from the 15 percent limitation must be approved by the Lead MCSAP Agency for the subrecipients.

<b>Summary of MCSAP Funding Limitations</b>	
Allowable amount for Lead MCSAP Agency Overtime without written justification (15% of MCSAP Award Amount):	\$783,364.00

Personnel: Salary and Overtime Project Costs							
Salary Project Costs							
Position(s)	# of Staff	% of Time on MCSAP Grant	Salary	Total Project Costs (Federal + State)	Federal Share	State Share	MOE
Administrative	1	100.0000	\$71,376.83	\$71,376.83	\$60,670.31	\$10,706.52	\$0.00
clerical	1	50.0000	\$110,000.00	\$55,000.00	\$46,750.00	\$8,250.00	\$0.00
lieutenant	1	35.0000	\$207,000.00	\$72,450.00	\$61,582.50	\$10,867.50	\$0.00
Troopers	3	85.0000	\$205,400.00	\$523,770.00	\$445,204.50	\$78,565.50	\$0.00
sergeant	6	85.0000	\$206,500.00	\$1,053,150.00	\$895,177.50	\$157,972.50	\$0.00
Trooper	8	35.0000	\$205,400.00	\$575,120.00	\$488,852.00	\$86,268.00	\$0.00
Trooper	15	0.0000	\$205,400.00	\$0.00	\$0.00	\$0.00	\$335,450.00
<b>Subtotal: Salary</b>				<b>\$2,350,866.83</b>	<b>\$1,998,236.81</b>	<b>\$352,630.02</b>	<b>\$335,450.00</b>
Overtime Project Costs							
ADMINISTRATIVE	2	100.0000	\$15,533.00	\$31,066.00	\$26,406.10	\$4,659.90	\$0.00
LT	1	100.0000	\$15,487.71	\$15,487.71	\$13,164.55	\$2,323.16	\$0.00
Trooper	26	100.0000	\$16,500.00	\$429,000.00	\$364,650.00	\$64,350.00	\$0.00
Sgt	6	100.0000	\$17,000.00	\$102,000.00	\$86,700.00	\$15,300.00	\$0.00
<b>Subtotal: Overtime</b>				<b>\$577,553.71</b>	<b>\$490,920.65</b>	<b>\$86,633.06</b>	<b>\$0.00</b>
<b>TOTAL: Personnel</b>				<b>\$2,928,420.54</b>	<b>\$2,489,157.46</b>	<b>\$439,263.08</b>	<b>\$335,450.00</b>
<b>Accounting Method:</b>	<b>Cash</b>						

**Enter a detailed explanation of how the personnel costs were derived and allocated to the MCSAP project.**

Costs are based upon FMCSA policies and guidance, the FMCSA grants manuals, and OMB circulars. MCSAP activities delineated in this eCVSP are funded by MCSAP funds. Without MCSAP funding, these activities would not be conducted. The State Police has adequate policies and monitoring to ensure compliance with federal grant rules. There are 2 civilian and 33 sworn personnel assigned to the Commercial Vehicle Enforcement Section. MCSAP funds only support MCSAP activities.

Funding for staffing is provided in the following manner:

1 Full-time civilian administrative personnel assigned to MCSAP and funded by MCSAP grant 85 % / 15% state match.

1 Full-time civilian administrative personnel assigned to MCSAP part-time and funded by MCSAP 50% / 50% state match.

1 Lieutenant, 8 Troopers are assigned to MCSAP duties. MCSAP funds are utilized to fund 29.75% of these positions. Their daily activities are 1/3 MCSAP eligible activities. The MCSAP hours are verified by daily activity sheets.

6 Sergeants and 3 Troopers are assigned to MCSAP duties. All sworn personnel (33) perform off-hour MCSAP inspections as part of the MCSAP program. This time is tracked by a separate activity sheet and operational activity reports are maintained and verified by administrative staff. Since the overtime rate is equal to the regular hourly rate plus one-half of regular hourly rate, only 1/3 of the overtime rate is assessed against the Overtime line in the budget. The other 2/3 of the overtime pay (regular hourly rate) is assessed against the Regular Salary line in the budget. So, the regular salary amount above represents 1/3 regular time plus 2/3 of the overtime. The calculation fields above make this difficult to represent.

\*Please see attached excel spreadsheet with detailed breakdown of salary calculation.

### 3 - Fringe Benefits

Fringe costs are benefits paid to employees, including the cost of employer's share of FICA, health insurance, worker's compensation, and paid leave. Only non-Federal grantees that use the **accrual basis** of accounting may have a separate line item for leave, and is entered as the projected leave expected to be accrued by the personnel listed within Part 4.2 – Personnel. Reference [2 CFR §200.431\(b\)](#).

Show the fringe benefit costs associated with the staff listed in the Personnel section. Fringe costs may be estimates, or based on a fringe benefit rate approved by the applicant's Federal cognizant agency for indirect costs. If using an approved rate, a copy of the indirect cost rate agreement must be provided through grants.gov. For more information on this item see [2 CFR §200.431](#).

Show how the fringe benefit amount is calculated (i.e., actual fringe benefits, rate approved by HHS Statewide Cost Allocation or cognizant agency). Include a description of the specific benefits that are charged to a project and the benefit percentage or total benefit cost.

The cost of fringe benefits are allowable if:

- Costs are provided under established written policies.
- Costs are equitably allocated to all related activities, including Federal awards.
- Accounting basis (cash or accrual) selected for each type of leave is consistently followed by the non-Federal entity or specified grouping of employees.

Depending on the State, there are fixed employer taxes that are paid as a percentage of the salary, such as Social Security, Medicare, State Unemployment Tax, etc.

- For each of these standard employer taxes, under Position you may list "All Positions," the benefits would be the respective standard employer taxes, followed by the respective rate with a base being the total salaries for Personnel in Part 4.2.
- The base multiplied by the respective rate would give the total for each standard employer tax. Workers' Compensation is rated by risk area. It is permissible to enter this as an average, usually between sworn and unsworn—any grouping that is reasonable and clearly explained in the narrative is allowable.
- Health Insurance and Pensions can vary greatly and can be averaged; and like Workers' Compensation, can sometimes be broken into sworn and unsworn.

In the Position column include a brief position description that is associated with the fringe benefits.

The **Fringe Benefit Rate** is:

- The rate that has been approved by the State's cognizant agency for indirect costs; or a rate that has been calculated based on the aggregate rates and/or costs of the individual items that your agency classifies as fringe benefits.
- For example, your agency pays 7.65 percent for FICA, 42.05 percent for health/life/dental insurance, and 15.1 percent for retirement. The aggregate rate of 64.8 percent (sum of the three rates) may be applied to the salaries/wages of personnel listed in the table.

The **Base Amount** is:

- The salary/wage costs within the proposed budget to which the fringe benefit rate will be applied.
- For example, if the total wages for all grant-funded staff is \$150,000 and the percentage of time on the grant is 50 percent, then that is the amount the fringe rate of 64.8 (from the example above) will be applied. The calculation is:  $\$150,000 \times 64.8 \times 50\% / 100 = \$48,600$  Total Project Costs.

Total Project Costs equal the Fringe Benefit Rate x Percentage of Time on MCSAP grant x Base Amount divided by 100.

Fringe Benefits Project Costs							
Position(s)	Fringe Benefit Rate	% of Time on MCSAP Grant	Base Amount	Total Project Costs (Federal + State)	Federal Share	State Share	MOE
Administrative, Troopers, Sergeants, Lieutenant	42.8700	100.0000	\$1,265,684.23	\$542,598.82	\$461,209.00	\$81,389.82	\$0.00
<b>TOTAL: Fringe Benefits</b>				<b>\$542,598.82</b>	<b>\$461,209.00</b>	<b>\$81,389.82</b>	<b>\$0.00</b>

**Enter a detailed explanation of how the fringe benefit costs were derived and allocated to the MCSAP project.**

These rates are established by the Commonwealth of Massachusetts and the cognizant federal agency – The US Department of Justice.

The Fringe rate effective 7/1/2018 is 41.14 %. Fringe benefit is only assessed against regular salary.

The Payroll Tax rate effective 7/1/2018 is 1.73%. Payroll tax is assessed against both regular salary and overtime.

\*Please see attached excel spreadsheet with detailed breakdown of fringe and payroll tax calculation.

The agreement is pending negotiation with DOJ.

**4 - Travel**

Itemize the positions/functions of the people who will travel. Show the estimated cost of items including but not limited to, lodging, meals, transportation, registration, etc. Explain in detail how the MCSAP program will directly benefit from the travel.

Travel costs are funds for field work or for travel to professional meetings.

List the purpose, number of persons traveling, number of days, percentage of time on MCSAP Grant, and total project costs for each trip. If details of each trip are not known at the time of application submission, provide the basis for estimating the amount requested. For more information on this item see [2 CFR §200.474](#).

Total Project Costs should be determined by State users, and manually input in the table below. There is no system calculation for this budget category.

Travel Project Costs							
Purpose	# of Staff	# of Days	% of Time on MCSAP Grant	Total Project Costs (Federal + State)	Federal Share	State Share	MOE
Training Travel	6	6	100.0000	\$21,500.00	\$18,275.00	\$3,225.00	\$0.00
Routine MCSAP Travel	3	3	100.0000	\$7,500.00	\$6,375.00	\$1,125.00	\$0.00
Conference Travel	3	3	100.0000	\$2,500.00	\$2,125.00	\$375.00	\$0.00
<b>TOTAL: Travel</b>				<b>\$31,500.00</b>	<b>\$26,775.00</b>	<b>\$4,725.00</b>	<b>\$0.00</b>

**Enter a detailed explanation of how the travel costs were derived and allocated to the MCSAP project.**

Training travel is for NTC approved and required courses for Troopers who are NTC Instructors. Travel includes CVSA conferences, Level 6 recertification, and the FMCSA Annual Grants conference. MCSAP funds are only used for FMCSA approved travel and MCSAP eligible travel.

**5 - Equipment**

Equipment is tangible or intangible personal property. It includes information technology systems having a useful life of more than one year, and a per-unit acquisition cost that equals or exceeds the lesser of the capitalization level established by the non-Federal entity (i.e., the State) for financial statement purposes, or \$5,000.

- If your State's equipment capitalization threshold is below \$5,000, check the box below and provide the threshold amount. See [§200.12](#) Capital assets, [§200.20](#) Computing devices, [§200.48](#) General purpose equipment, [§200.58](#) Information technology systems, [§200.89](#) Special purpose equipment, and [§200.94](#) Supplies.

Show the total cost of equipment and the percentage of time dedicated for MCSAP related activities that the equipment will be billed to MCSAP. For example, you intend to purchase a server for \$5,000 to be shared equally among five programs, including MCSAP. The MCSAP portion of the total cost is \$1,000. If the equipment you are purchasing will be capitalized (depreciated), you may only show the depreciable amount, and not the total cost ([2 CFR §200.436](#) and [2 CFR §200.439](#)). If vehicles or large IT purchases are listed here, the applicant must disclose their agency's capitalization policy.

Provide a description of the equipment requested. Include the quantity, the full cost of each item, and the percentage of time this item will be dedicated to MCSAP grant.

Total Project Costs equal the Number of Items x Full Cost per Item x Percentage of Time on MCSAP grant.

Equipment Project Costs							
Item Name	# of Items	Full Cost per Item	% of Time on MCSAP Grant	Total Project Costs (Federal + State)	Federal Share	State Share	MOE
Four Tahoes	4	\$48,000.00	100	\$192,000.00	\$163,200.00	\$28,800.00	\$0.00
laptops with docking station	10	\$5,000.00	100	\$50,000.00	\$42,500.00	\$7,500.00	\$0.00
Generator	2	\$10,000.00	100	\$20,000.00	\$17,000.00	\$3,000.00	\$0.00
<b>TOTAL: Equipment</b>				<b>\$262,000.00</b>	<b>\$222,700.00</b>	<b>\$39,300.00</b>	<b>\$0.00</b>
<b>Equipment threshold is \$1,000</b>							

**Enter a detailed explanation of how the equipment costs were derived and allocated to the MCSAP project.**

The computer expense is for replacement of 10 older laptops. The users are MCSAP funded personnel. The vehicles are for MCSAP personnel and are procured by competitive bid. The computer are replaced per the dept policy on useful life. The computer expense is necessary as the MCSAP computer network is configured differently than the regular State Police Network. This avoids Troopers from having two separate computers and reduces wireless access charges by limiting the number of electronic devices on data plans. Vehicles are replaced per agency policy and are pro rated. Generator is required as the Light towers are for conducting nighttime truck insepction operations in areas with no lights

**6 - Supplies**

Supplies means all tangible property other than that described in §200.33 Equipment. A computing device is a supply if the acquisition cost is less than the lesser of the capitalization level established by the non-Federal entity for financial statement purposes or \$5,000, regardless of the length of its useful life. See also §200.20 Computing devices and §200.33 Equipment.

Estimates for supply costs may be based on the same allocation as personnel. For example, if 35 percent of officers' salaries are allocated to this project, you may allocate 35 percent of your total supply costs to this project. A different allocation basis is acceptable, so long as it is reasonable, repeatable and logical, and a description is provided in the narrative.

Provide a description of each unit/item requested, including the quantity of each unit/item, the unit of measurement for the unit/item, the cost of each unit/item, and the percentage of time on MCSAP grant.

Total Project Costs equal the Number of Units x Cost per Unit x Percentage of Time on MCSAP grant.

Supplies Project Costs							
Item Name	# of Units/ Unit of Measurement	Cost per Unit	% of Time on MCSAP Grant	Total Project Costs (Federal + State)	Federal Share	State Share	MOE
Office Supplies	1 ea	\$4,068.35	100.0000	\$4,068.35	\$3,458.10	\$610.25	\$0.00
Uniforms	43 each	\$1,000.00	98.5700	\$42,385.10	\$36,550.00	\$5,835.10	\$0.00
<b>TOTAL: Supplies</b>				<b>\$46,453.45</b>	<b>\$40,008.10</b>	<b>\$6,445.35</b>	<b>\$0.00</b>

**Enter a detailed explanation of how the supply costs were derived and allocated to the MCSAP project.**

Uniform expense is for replacement uniform parts for inspectors to include patrol coats, boots, gloves, etc. Office supplies are for general office supplies, paper, toner, etc. Individuals assigned to this unit are 100% dedicated to CMV activities. However only 35-53% of their time is paid for with federal funding, which explains the difference between the personnel dollars and fact that the equipment is 100% allocated to the program.

**7 - Contractual and Subaward**

This section includes contractual costs and subawards to subrecipients. Use the table below to capture the information needed for both contractual agreements and subawards. The definitions of these terms are provided so the instrument type can be entered into the table below.

**Contractual** – A contract is a legal instrument by which a non-Federal entity purchases property or services needed to carry out the project or program under a Federal award ([2 CFR §200.22](#)). All contracts issued under a Federal award must comply with the standards described in [2 CFR §200 Procurement Standards](#).

**Note:** Contracts are separate and distinct from subawards; see [2 CFR §200.330](#) for details.

**Subaward** – A subaward is an award provided by a pass-through entity to a subrecipient for the subrecipient to carry out part of a Federal award received by the pass-through entity. It does not include payments to a contractor or payments to an individual that is a beneficiary of a Federal program. A subaward may be provided through any form of legal agreement, including an agreement that the pass-through entity considers a contract ([2 CFR §200.92](#) and [2 CFR §200.330](#)).

**Subrecipient** - Subrecipient means a non-Federal entity that receives a subaward from a pass-through entity to carry out part of a Federal program, but does not include an individual who is a beneficiary of such program. A subrecipient may also be a recipient of other Federal awards directly from a Federal awarding agency ([2 CFR §200.93](#)).

Enter the legal name of the vendor or subrecipient if known. If unknown at this time, please indicate 'unknown' in the legal name field. Include a description of services for each contract or subaward listed in the table. Entering a statement such as "contractual services" with no description will not be considered meeting the requirement for completing this section.

Enter the DUNS or EIN number of each entity. There is a drop-down option to choose either DUNS or EIN, and then the State must enter the corresponding identification number.

Select the Instrument Type by choosing either Contract or Subaward for each entity.

Total Project Costs should be determined by State users and input in the table below. The tool does not automatically calculate the total project costs for this budget category.

**Operations and Maintenance**-If the State plans to include O&M costs that meet the definition of a contractual or subaward cost, details must be provided in the table and narrative below.

Please describe the activities these costs will be using to support (i.e., ITD, PRISM, SSDQ or other services.)

Contractual and Subaward Project Costs							
Legal Name	DUNS/EIN Number	Instrument Type	% of Time on MCSAP Grant	Total Project Costs (Federal + State)	Federal Share	State Share	MOE
UMASS	DUNS 153926712	Contract	100.0000	\$75,000.00	\$63,750.00	\$11,250.00	\$0.00
Description of Services: Data Analysis							
RMV	DUNS 877222257	Subrecipient	100.0000	\$250,000.00	\$212,500.00	\$37,500.00	\$0.00
Description of Services: prism OM							
intelligent imaging systems	DUNS 240387154	Contract	100.0000	\$22,500.00	\$19,125.00	\$3,375.00	\$0.00
Description of Services: alpr trailer support and Maintenance							
shi	DUNS 611429481	Contract	100.0000	\$35,236.00	\$29,950.60	\$5,285.40	\$0.00
Description of Services: ITERIS INSPECT CLOUD APPLICATION							
<b>TOTAL: Contractual and Subaward</b>				<b>\$382,736.00</b>	<b>\$325,325.60</b>	<b>\$57,410.40</b>	<b>\$0.00</b>

***Enter a detailed explanation of how the contractual and subaward costs were derived and allocated to the MCSAP project.***

The Massachusetts RMV funding is to maintain the IRP and CVIEW databases administered by the Registry of Motor Vehicles at the current PRISM Level 8, which are eligible under the current MCSAP Comprehensive Policy under the current FAST Act MCSAP structure.

UMassSafe develops a data based CVSP, crash data analysis and enforcement planning as well as developing quarterly performance metrics and monitoring the data stream for possible issues that might affect the SSDQ rating. UMassSafe was selected following a statewide RFP solicitation.

An annual subscription to "INSPECT" will be purchased so that real-time inspection data is available road-side to the inspectors. This software is necessary to insure we are able to maintain our 100% Out of Service Match rate. This purchase is approved by FMCSA policy.

Intelligent imaging systems will provide support and maintenance to ALPR trailers through the state approved vendor IT vendor SHI. The ALPR trailer was purchased with PRISM funding and is used to find out of service or high ISS score carriers roadside. Our use of INSPECT has been approved by FMCSA IT and the Division.

**8 - Other Costs**

Other Costs are those not classified elsewhere and are allocable to the Federal award. These costs must be specifically itemized and described. The total costs and allocation bases must be explained in the narrative. Examples of Other Costs may include utilities and/or leased equipment, employee training tuition, meeting registration costs, etc. The quantity, unit of measurement (e.g., monthly, annually, each, etc.), unit cost, and percentage of time on MCSAP grant must be included.

**Operations and Maintenance**-If the State plans to include O&M costs that do not meet the definition of a contractual or subaward cost, details must be provided in the table and narrative below. Please identify these costs as ITD O&M, PRISM O&M, or SSDQ O&M. Sufficient detail must be provided in the narrative that explains what components of the specific program are being addressed by the O&M costs.

Enter a description of each requested Other Cost.

Enter the number of items/units, the unit of measurement, the cost per unit/item, and the percentage of time dedicated to the MCSAP grant for each Other Cost listed. Show the cost of the Other Costs and the portion of the total cost that will be billed to MCSAP. For example, you intend to purchase air cards for \$2,000 to be shared equally among five programs, including MCSAP. The MCSAP portion of the total cost is \$400.

Total Project Costs equal the Number of Units x Cost per Item x Percentage of Time on MCSAP grant.

**Indirect Costs**

Information on Indirect Costs ([2 CFR §200.56](#)) is captured in this section. This cost is allowable only when an approved indirect cost rate agreement has been provided. Applicants may charge up to the total amount of the approved indirect cost rate multiplied by the eligible cost base. Applicants with a cost basis of salaries/wages and fringe benefits may only apply the indirect rate to those expenses. Applicants with an expense base of modified total direct costs (MTDC) may only apply the rate to those costs that are included in the MTDC base ([2 CFR §200.68](#)).

- **Cost Basis** — is the accumulated direct costs (normally either total direct salaries and wages or total direct costs exclusive of any extraordinary or distorting expenditures) used to distribute indirect costs to individual Federal awards. The direct cost base selected should result in each Federal award bearing a fair share of the indirect costs in reasonable relation to the benefits received from the costs.
- **Approved Rate** — is the rate in the approved Indirect Cost Rate Agreement.
- **Eligible Indirect Expenses** — means after direct costs have been determined and assigned directly to Federal awards and other activities as appropriate. Indirect costs are those remaining to be allocated to benefitted cost objectives. A cost may not be allocated to a Federal award as an indirect cost if any other cost incurred for the same purpose, in like circumstances, has been assigned to a Federal award as a direct cost.
- **Total Indirect Costs** equal Approved Rate x Eligible Indirect Expenses divided by 100.

**Your State will claim reimbursement for Indirect Costs.**

Indirect Costs					
Cost Basis	Approved Rate	Eligible Indirect Expenses	Total Indirect Costs	Federal Share	State Share
Salaries and Wages (SW)	30.70	\$2,956,682.39	\$907,701.49	\$771,546.27	\$136,155.22
<b>TOTAL: Indirect Costs</b>			<b>\$907,701.49</b>	<b>\$771,546.27</b>	<b>\$136,155.22</b>

Other Costs Project Costs							
Item Name	# of Units/ Unit of Measurement	Cost per Unit	% of Time on MCSAP Grant	Total Project Costs (Federal + State)	Federal Share	State Share	MOE
Mail Machine Postage	10 Each	\$350.00	100.0000	\$3,500.00	\$2,975.00	\$525.00	\$0.00
CVSA DUES	1 EACH	\$11,000.00	100.0000	\$11,000.00	\$9,350.00	\$1,650.00	\$0.00
CVES air cards and phones	15 months	\$1,000.00	100.0000	\$15,000.00	\$12,750.00	\$2,250.00	\$0.00
Training Fees Crash Investigations	1 annual	\$14,000.00	100.0000	\$14,000.00	\$11,900.00	\$2,100.00	\$0.00
Conference Costs	1 each	\$5,000.00	100.0000	\$5,000.00	\$4,250.00	\$750.00	\$0.00
CVSA Decals	10000 each	\$0.25	100.0000	\$2,500.00	\$2,125.00	\$375.00	\$0.00
Equipment - Other Vehicle	70 each	\$100.00	100.0000	\$7,000.00	\$5,950.00	\$1,050.00	\$0.00
Equipment Non Vehicle	12 each	\$3,000.00	100.0000	\$36,000.00	\$30,600.00	\$5,400.00	\$0.00
Training Costs CMVE Crtash Reconstruction	1 0	\$25,500.00	100.0000	\$25,500.00	\$21,675.00	\$3,825.00	\$0.00
Training Costs - Hazwoper	1 each	\$5,000.00	100.0000	\$5,000.00	\$4,250.00	\$750.00	\$0.00
<b>TOTAL: Other Costs</b>				<b>\$124,500.00</b>	<b>\$105,825.00</b>	<b>\$18,675.00</b>	<b>\$0.00</b>

**Enter a detailed explanation of how the 'other' costs were derived and allocated to the MCSAP project.**

CVES air cards, phones, data plans are for communications necessary to upload to FMCSA systems. This covers the cost of air cards and data plans for cell phones and iPads as well as the internet services for the CVES unit in Concord.

Equipment - Non-Vehicle is for replacement of PBTs, LIDARS, Radars, etc.

Equipment - Other Vehicle Equipment expense is to provide flood/spot lights, push bumpers, bumper covers, police lights, tools, and CB radios for CVES vehicles.

Training Fees - Crash Investigation: For fees associated with commercial motor vehicle crash investigation training for CVES personnel. The fee is the class instructor cost to provide the class at the Massachusetts State Police Academy.

Training Fees - Hazwoper: HazMat training provided for troopers in order to stay in compliance with state worker safety laws.

Training Fees - CMVE Reconstruction: For fees associated with commercial motor vehicle crash reconstruction training for MCSAP personnel as allowed by the FMCSA grant manual and FMCSA policy.

**9 - Comprehensive Spending Plan**

The Comprehensive Spending Plan is auto-populated from all line items in the tables and is in read-only format. Changes to the Comprehensive Spending Plan will only be reflected by updating the individual budget category table(s).

<b>ESTIMATED Fiscal Year Funding Amounts for MCSAP</b>			
	85% Federal Share	15% State Share	Total Estimated Funding
Total	\$4,442,548.00	\$783,364.00	\$5,225,912.00

<b>Summary of MCSAP Funding Limitations</b>	
Allowable amount for Overtime without written justification (15% of Basic Award Amount):	\$783,364.00
MOE Baseline:	\$335,450.37

<b>Estimated Expenditures</b>				
<b>Personnel</b>				
	Federal Share	State Share	Total Project Costs (Federal + Share)	MOE
Administrative	\$60,670.31	\$10,706.52	\$71,376.83	\$0.00
clerical	\$46,750.00	\$8,250.00	\$55,000.00	\$0.00
lieutenant	\$61,582.50	\$10,867.50	\$72,450.00	\$0.00
Troopers	\$445,204.50	\$78,565.50	\$523,770.00	\$0.00
sergeant	\$895,177.50	\$157,972.50	\$1,053,150.00	\$0.00
Trooper	\$488,852.00	\$86,268.00	\$575,120.00	\$0.00
Trooper	\$0.00	\$0.00	\$0.00	\$335,450.00
<b>Salary Subtotal</b>	<b>\$1,998,236.81</b>	<b>\$352,630.02</b>	<b>\$2,350,866.83</b>	<b>\$335,450.00</b>
ADMINISTRATIVE	\$26,406.10	\$4,659.90	\$31,066.00	\$0.00
LT	\$13,164.55	\$2,323.16	\$15,487.71	\$0.00
Trooper	\$364,650.00	\$64,350.00	\$429,000.00	\$0.00
Sgt	\$86,700.00	\$15,300.00	\$102,000.00	\$0.00
<b>Overtime subtotal</b>	<b>\$490,920.65</b>	<b>\$86,633.06</b>	<b>\$577,553.71</b>	<b>\$0.00</b>
<b>Personnel total</b>	<b>\$2,489,157.46</b>	<b>\$439,263.08</b>	<b>\$2,928,420.54</b>	<b>\$335,450.00</b>

<b>Fringe Benefits</b>				
	Federal Share	State Share	Total Project Costs (Federal + State)	MOE
Administrative, Troopers, Sergeants, Lieutenant	\$461,209.00	\$81,389.82	\$542,598.82	\$0.00
<b>Fringe Benefits total</b>	<b>\$461,209.00</b>	<b>\$81,389.82</b>	<b>\$542,598.82</b>	<b>\$0.00</b>

Travel				
	Federal Share	State Share	Total Project Costs (Federal + State)	MOE
Training Travel	\$18,275.00	\$3,225.00	\$21,500.00	\$0.00
Routine MCSAP Travel	\$6,375.00	\$1,125.00	\$7,500.00	\$0.00
Conference Travel	\$2,125.00	\$375.00	\$2,500.00	\$0.00
<b>Travel total</b>	<b>\$26,775.00</b>	<b>\$4,725.00</b>	<b>\$31,500.00</b>	<b>\$0.00</b>

Equipment				
	Federal Share	State Share	Total Project Costs (Federal + State)	MOE
Four Tahoes	\$163,200.00	\$28,800.00	\$192,000.00	\$0.00
laptops with docking station	\$42,500.00	\$7,500.00	\$50,000.00	\$0.00
Generator	\$17,000.00	\$3,000.00	\$20,000.00	\$0.00
<b>Equipment total</b>	<b>\$222,700.00</b>	<b>\$39,300.00</b>	<b>\$262,000.00</b>	<b>\$0.00</b>

Supplies				
	Federal Share	State Share	Total Project Costs (Federal + State)	MOE
Office Supplies	\$3,458.10	\$610.25	\$4,068.35	\$0.00
Uniforms	\$36,550.00	\$5,835.10	\$42,385.10	\$0.00
<b>Supplies total</b>	<b>\$40,008.10</b>	<b>\$6,445.35</b>	<b>\$46,453.45</b>	<b>\$0.00</b>

Contractual and Subaward				
	Federal Share	State Share	Total Project Costs (Federal + State)	MOE
UMASS	\$63,750.00	\$11,250.00	\$75,000.00	\$0.00
RMV	\$212,500.00	\$37,500.00	\$250,000.00	\$0.00
intelligent imaging systems	\$19,125.00	\$3,375.00	\$22,500.00	\$0.00
shi	\$29,950.60	\$5,285.40	\$35,236.00	\$0.00
<b>Contractual and Subaward total</b>	<b>\$325,325.60</b>	<b>\$57,410.40</b>	<b>\$382,736.00</b>	<b>\$0.00</b>

Other Costs				
	Federal Share	State Share	Total Project Costs (Federal + State)	MOE
Mail Machine Postage	\$2,975.00	\$525.00	\$3,500.00	\$0.00
CVSA DUES	\$9,350.00	\$1,650.00	\$11,000.00	\$0.00
CVES air cards and phones	\$12,750.00	\$2,250.00	\$15,000.00	\$0.00
Training Fees Crash Investigations	\$11,900.00	\$2,100.00	\$14,000.00	\$0.00
Conference Costs	\$4,250.00	\$750.00	\$5,000.00	\$0.00
CVSA Decals	\$2,125.00	\$375.00	\$2,500.00	\$0.00
Equipment - Other Vehicle	\$5,950.00	\$1,050.00	\$7,000.00	\$0.00
Equipment Non Vehicle	\$30,600.00	\$5,400.00	\$36,000.00	\$0.00
Training Costs CMVE Crash Reconstruction	\$21,675.00	\$3,825.00	\$25,500.00	\$0.00
Training Costs - Hazwoper	\$4,250.00	\$750.00	\$5,000.00	\$0.00
<b>Other Costs total</b>	<b>\$105,825.00</b>	<b>\$18,675.00</b>	<b>\$124,500.00</b>	<b>\$0.00</b>

Total Costs				
	Federal Share	State Share	Total Project Costs (Federal + State)	MOE
<b>Subtotal for Direct Costs</b>	<b>\$3,671,000.16</b>	<b>\$647,208.65</b>	<b>\$4,318,208.81</b>	<b>\$335,450.00</b>
Indirect Costs	\$771,546.27	\$136,155.22	\$907,701.49	NA
<b>Total Costs Budgeted</b>	<b>\$4,442,546.43</b>	<b>\$783,363.87</b>	<b>\$5,225,910.30</b>	<b>\$335,450.00</b>

**10 - Financial Summary**

The Financial Summary is auto-populated by the system by budget category. It is a read-only document and can be used to complete the SF-424A in Grants.gov. Changes to the Financial Summary will only be reflected by updating the individual budget category table(s).

- The system will confirm that percentages for Federal and State shares are correct for Total Project Costs. The edit check is performed on the **“Total Costs Budgeted”** line only.
- The system will confirm that Planned MOE Costs equal or exceed FMCSA funding limitation. The edit check is performed on the **“Total Costs Budgeted”** line only.
- The system will confirm that the Overtime value does not exceed the FMCSA funding limitation. The edit check is performed on the **“Overtime subtotal”** line.

ESTIMATED Fiscal Year Funding Amounts for MCSAP			
	85% Federal Share	15% State Share	Total Estimated Funding
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Summary of MCSAP Funding Limitations	
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Salary Subtotal	\$1,998,236.81	\$352,630.02	\$2,350,866.83	\$335,450.00
Overtime Subtotal	\$490,920.65	\$86,633.06	\$577,553.71	\$0.00
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Fringe Benefits Total	\$461,209.00	\$81,389.82	\$542,598.82	\$0.00
Travel Total	\$26,775.00	\$4,725.00	\$31,500.00	\$0.00
Equipment Total	\$222,700.00	\$39,300.00	\$262,000.00	\$0.00
Supplies Total	\$40,008.10	\$6,445.35	\$46,453.45	\$0.00
Contractual and Subaward Total	\$325,325.60	\$57,410.40	\$382,736.00	\$0.00
Other Costs Total	\$105,825.00	\$18,675.00	\$124,500.00	\$0.00
	85% Federal Share	15% State Share	Total Project Costs (Federal + State)	Planned MOE Costs
Subtotal for Direct Costs	\$3,671,000.16	\$647,208.65	\$4,318,208.81	\$335,450.00
Indirect Costs	\$771,546.27	\$136,155.22	\$907,701.49	NA
<b>Total Costs Budgeted</b>	<b>\$4,442,546.43</b>	<b>\$783,363.87</b>	<b>\$5,225,910.30</b>	<b>\$335,450.00</b>

## Part 5 - Certifications and Documents

*Part 5 includes electronic versions of specific requirements, certifications and documents that a State must agree to as a condition of participation in MCSAP. The submission of the CVSP serves as official notice and certification of compliance with these requirements. State or States means all of the States, the District of Columbia, the Commonwealth of Puerto Rico, the Commonwealth of the Northern Mariana Islands, American Samoa, Guam, and the Virgin Islands.*

*If the person submitting the CVSP does not have authority to certify these documents electronically, then the State must continue to upload the signed/certified form(s) through the "My Documents" area on the State's Dashboard page.*

### 1 - State Certification

*The State Certification will not be considered complete until the four questions and certification declaration are answered. Selecting 'no' in the declaration may impact your State's eligibility for MCSAP funding.*

1. What is the name of the person certifying the declaration for your State? Colonel Kerry Gilpin
2. What is this person's title? Colonel / Superintendent
3. Who is your Governor's highway safety representative? Mr. Jeffrey Larason
4. What is this person's title? Director Highway Safety

**The State affirmatively accepts the State certification declaration written below by selecting 'yes'.**

- Yes  
 Yes, uploaded certification document  
 No

#### State Certification declaration:

I, Colonel Kerry Gilpin, Colonel / Superintendent, on behalf of the Commonwealth of MASSACHUSETTS, as requested by the Administrator as a condition of approval of a grant under the authority of [49 U.S.C. § 31102](#), as amended, certify that the Commonwealth satisfies all the conditions required for MCSAP funding, as specifically detailed in [49 C.F.R. § 350.211](#).

If there are any exceptions that should be noted to the above certification, include an explanation in the text box below.

**2 - Annual Review of Laws, Regulations, Policies and Compatibility Certification**

*You must answer all three questions and indicate your acceptance of the certification declaration. Selecting 'no' in the declaration may impact your State's eligibility for MCSAP funding.*

1. What is the name of your certifying State official? Colonel Kerry Gilpin
2. What is the title of your certifying State official? Colonel / Superintendent
3. What are the phone # and email address of your State official? (508) 820-2300

**The State affirmatively accepts the compatibility certification declaration written below by selecting 'yes'.**

- Yes
- Yes, uploaded certification document
- No

I, Colonel Kerry Gilpin, certify that the Commonwealth has conducted the annual review of its laws and regulations for compatibility regarding commercial motor vehicle safety and that the Commonwealth's safety laws remain compatible with the Federal Motor Carrier Safety Regulations (49 CFR parts 390-397) and the Hazardous Materials Regulations (49 CFR parts 107 (subparts F and G only), 171-173, 177, 178, and 180) and standards and orders of the Federal government, except as may be determined by the Administrator to be inapplicable to a State enforcement program. For the purpose of this certification, Compatible means Commonwealth laws or regulations pertaining to interstate commerce that are identical to the FMCSRs and HMRs or have the same effect as the FMCSRs and identical to the HMRs and for intrastate commerce rules identical to or within the tolerance guidelines for the FMCSRs and identical to the HMRs.

If there are any exceptions that should be noted to the above certification, include an explanation in the text box below.

**3 - New Laws/Legislation/Policy Impacting CMV Safety**

**Has the State adopted/enacted any new or updated laws (i.e., statutes) impacting CMV safety since the last CVSP or annual update was submitted?**

Yes  No

**Has the State adopted/enacted any new administrative actions or policies impacting CMV safety since the last CVSP?**

Yes  No

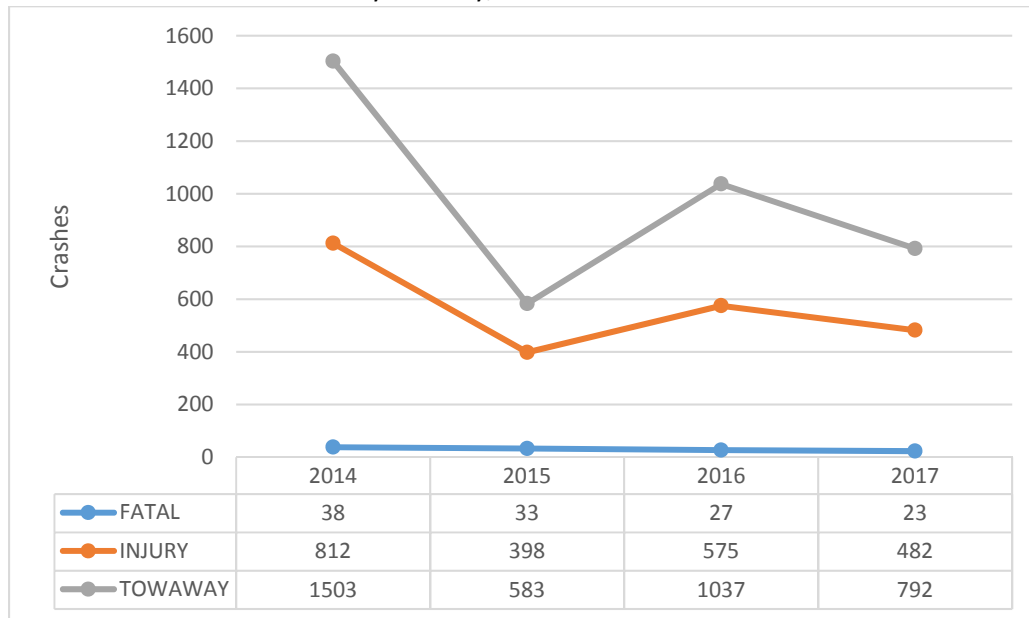
In the table below, provide the section changed and the effective date of the administrative change or policy adoption. Include a brief description of the policy or action. Please include a hyperlink or URL, in the summary if available.

Administrative and Policy Adoption		
Section Changed	Effective Date	Summary of Changes
Mass. Adoption of FMCSRs Updated	03/19/2018	<a href="https://www.mass.gov/files/documents/2018/03/14/540cmr14.pdf">https://www.mass.gov/files/documents/2018/03/14/540cmr14.pdf</a>

## MA FY19 CVSP CMV Crash Reduction Problem Statement

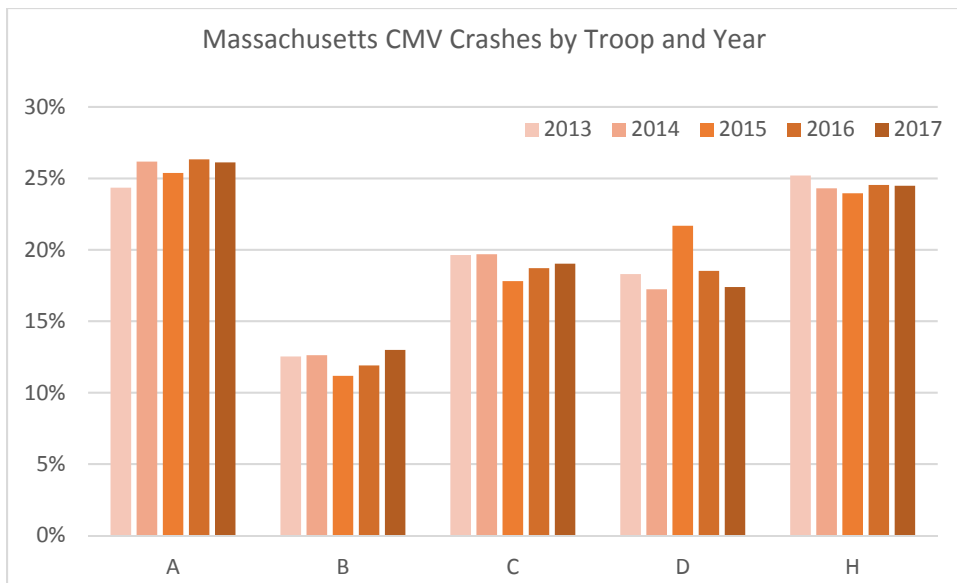
There has been an overall decline in the number of commercial motor vehicle (CMV) crashes over the past 10 years. However, in 2016 there was an increase in CMV injury and tow-away crashes similar to that for passenger vehicle crashes. In 2017, all crash types (fatal, injury and tow-away) declined. The chart below demonstrates the changes by year for fatal crashes, injury crashes and PDO crashes for the last four years.

Massachusetts CMV Crashes by Severity, Calendar Year 2014-2017



Data Source: FMCSA Motor Carrier Management Information System (MCMIS) data snapshot as of 06/29/2018, including crash records through 02/28/2018 - <https://ai.fmcsa.dot.gov/CrashStatistics/rptSummary.aspx>The data presented are subject to update as new or additional information may be reported to MCMIS following the snapshot date.

In an effort to identify trends that are occurring at the troop and barracks level, analysis was conducted with data from 2014 to 2017. Troops A and H have the largest number of CMV crashes while Troop B has the fewest.



Data Source: UMassSafe Highway Safety Data Warehouse using linked data from the Registry of Motor Vehicles Crash Data System and SafetyNet, Snapshot-June 2018.

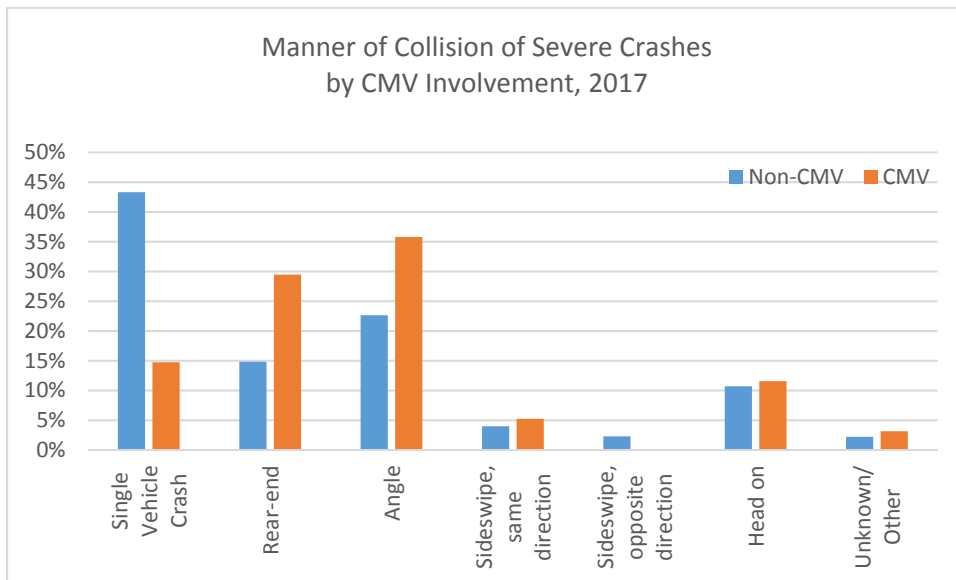
In Massachusetts CMV Crashes, moving violations and associated citations that were issued to the driver were examined to find the following with highest occurrence.

Massachusetts CMV Moving Violations in Crashes, 2016-2017

Rank	Description of Offense
1	LANE VIOLATION
2	ST HWAY TRAFFIC VIOL
3	DRIVING TO ENDANGER/NEGL OPERATION
4	MINOR TRAFFIC
5	SPEEDING
6	OPERATOR UNLICENSED
7	LEFT LANE EXCLUSION
8	LOAD NO COVER/ESCAPE
9	FAILURE TO STOP
10	FOLLOW TOO CLOSELY

## Crash Attribute Examination

With a statewide safety focus on reducing the number of fatal and incapacitating injury crashes, a specialized focus on large truck crashes is not much different. Knowing that crashes involving large trucks or buses increases the potential for injury exponentially, a collaborative approach from both state and commercial motor vehicle specialists is needed. Below, comparing serious injury or fatality crashes of both CMV and Non-CMV (passenger car) highlights some of the differences in manner of collision along with other crash attributes.



Large truck or bus crashes, as defined by SafetyNet, are over-represented in both rear-end and angle crashes. The significantly smaller portion of single vehicle crashes speaks to the fact that although professional CDL drivers are less likely to have contributing circumstances, when they are involved, they are more catastrophic involving other vehicles and increasing severity. Specifically examining the effects of lane departure crashes, CMV involved crashes result in much higher Incapacitating and Non-incapacitating rates, as opposed to Non-CMV (passenger vehicles) which have more lane departure crashes with no or possible injuries.

### Lane Departure Crash Severity by CMV Involvement, 2017

Injury Severity	CMV Crashes	Non-CMV Crashes
Fatal injury	1%	1%
Non-fatal injury - Incapacitating	8%	3%
Non-fatal injury - Non-incapacitating	20%	14%
Non-fatal injury - Possible	10%	13%
No injury	54%	64%
Unknown	7%	5%

It is interesting to note the significantly higher rate of crashes with a prior action of ‘changing lanes’ for both the passenger car and the CMV in a CMV crash. Additionally, the higher CMV rate of ‘traveling straight ahead’ indicates that often these crashes occur without prior maneuvers.

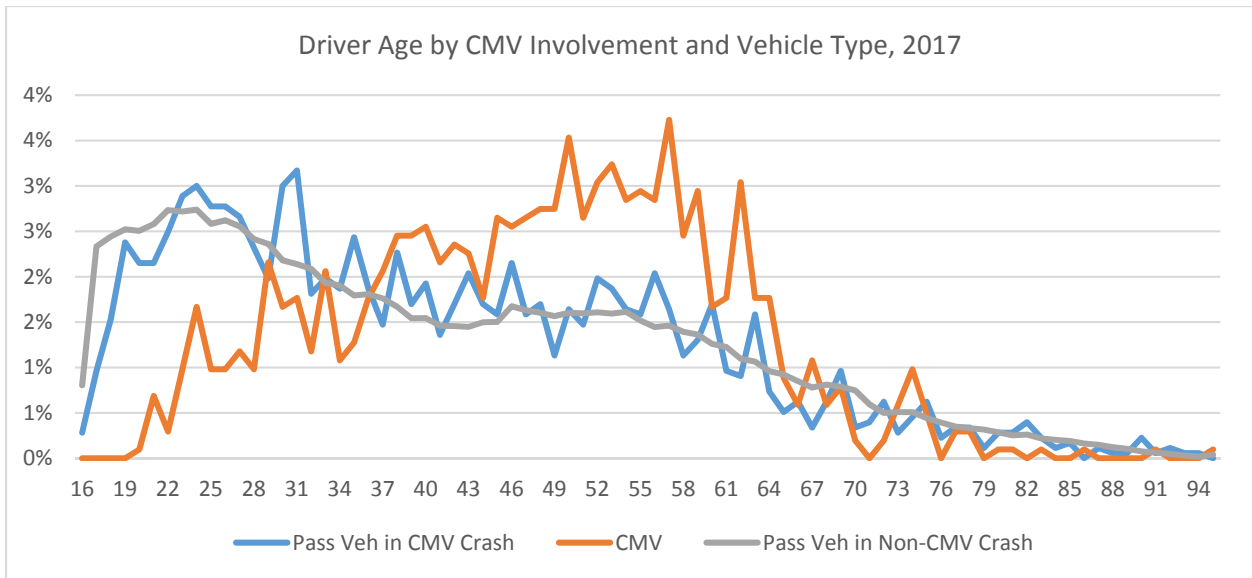
**Action Prior to Crash by CMV Crash Involvement and Vehicle Type, 2017**

Vehicle Action Prior to Crash	CMV Crash		Non-CMV Crash
	CMV	Pass Car	Pass Car
Traveling straight ahead	65%	51%	53%
Slowing or stopped	15%	27%	25%
Changing lanes	7%	10%	4%
Turning left	3%	1%	6%
Entering traffic lane	2%	3%	3%
Turning right	3%	2%	2%
Parked	2%	2%	3%
Overtaking/passing	0%	2%	1%
Leaving traffic lane	0%	1%	1%
Backing	1%	0%	1%
Other	0%	1%	1%
Unknown/Empty	1%	1%	1%

**Vehicle’s Most Harmful Event by CMV Involvement and Vehicle Type, 2017**

Most Harmful Collision With	CMV Crash		Non-CMV Crash
	Pass Veh	CMV	Pass Veh
Motor Vehicle in Transport	88.5%	81.0%	77.5%
Parked Motor Vehicle	2.3%	2.0%	6.3%
Guardrail	1.1%	2.3%	1.4%
Utility Pole	0.4%	0.9%	1.9%
Tree	0.4%	0.9%	1.6%
Other Movable Object	1.0%	1.0%	0.8%
Pedestrian	0.3%	1.1%	1.0%
Other	0.7%	0.7%	0.7%
Median barrier	0.7%	0.4%	0.5%
Other fixed object	0.2%	0.3%	1.0%
Deer	0.0%	0.0%	1.1%
Bridge overhead structure	0.2%	0.8%	0.0%
Cyclist	0.2%	0.4%	0.5%
Light Pole/Other Post/Support	0.3%	0.1%	0.6%
Other/Unknown	3.7%	8.1%	5.2%

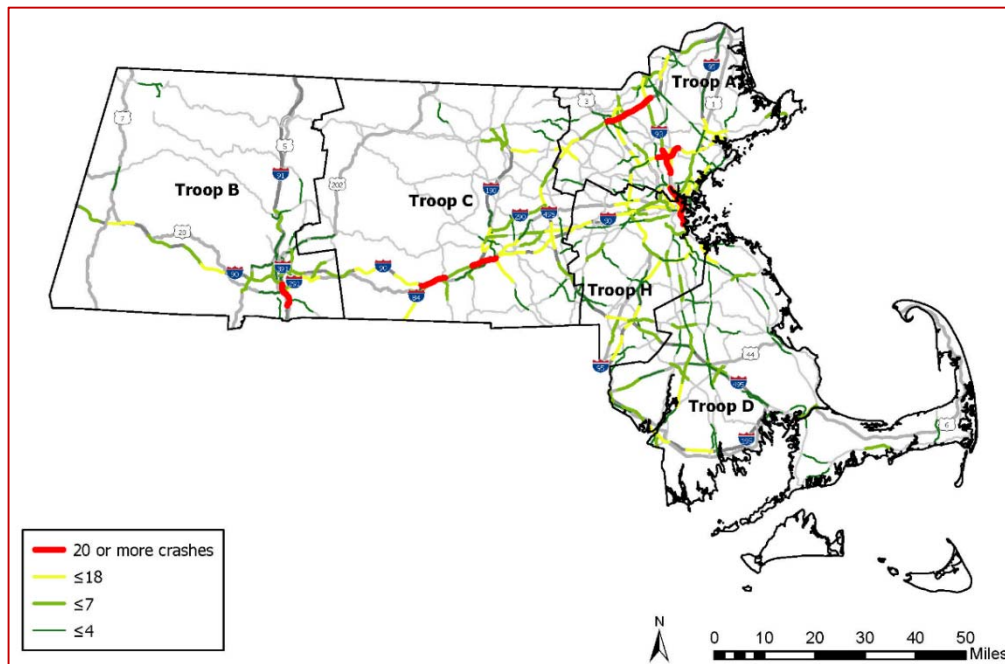
Correlating with known crash trends, the identified action to be most harmful in CMV crashes was ‘collision with motor vehicle in transport’. Most significantly, Non-CMV crashes had nearly three times as many crashes involving a ‘collision with parked motor vehicle’ than CMV crashes. Confirming the disparity in age of drivers in crashes, CMV drivers are more likely to be in the age range of 36-64. Interestingly, drivers of passenger vehicles involved in CMV crashes do not appear to be over represented at any specific age range, and generally follow the trend of Non-CMV crashes.



### Crash Locations

UMassSafe studied high crash corridors in order to identify locations to target specialized enforcement efforts. Analysis was only conducted on major roadways including interstates, U.S. highways and numbered state routes. A custom tool was developed to identify the most significant crash corridors at varying levels of comparison. Included within this report are identified crash corridors at both the Troop and State level. Tables accompany each map to give an enforcement target list that identifies the corridors by both mile marker and nearest exit along with the number of crashes that occurred in the most recent two-year time-period.

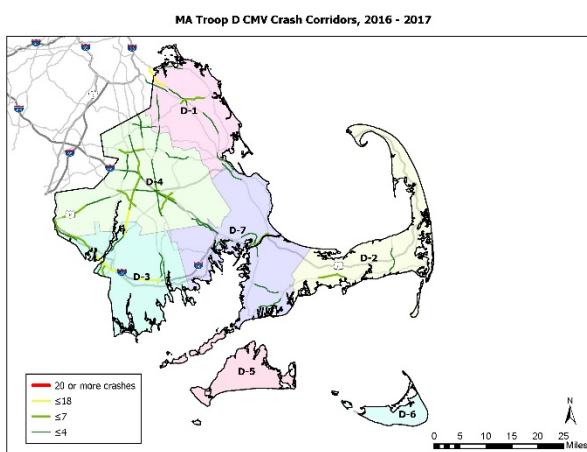
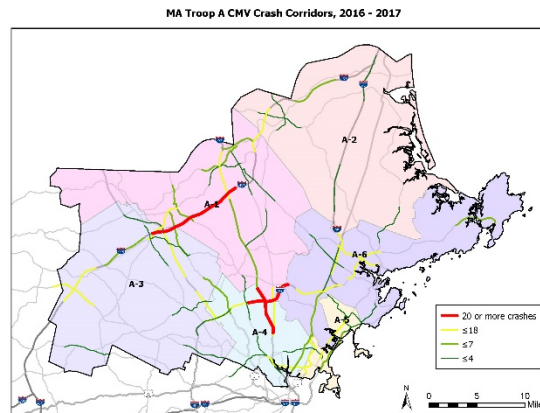
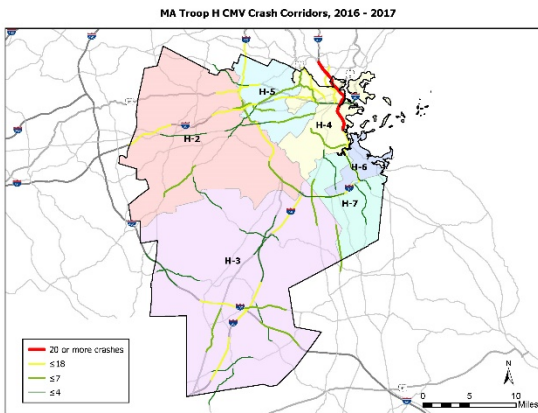
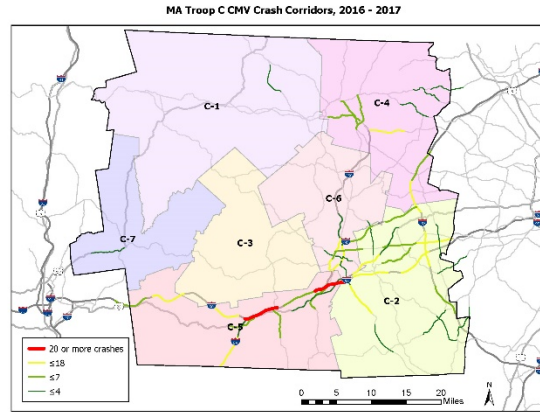
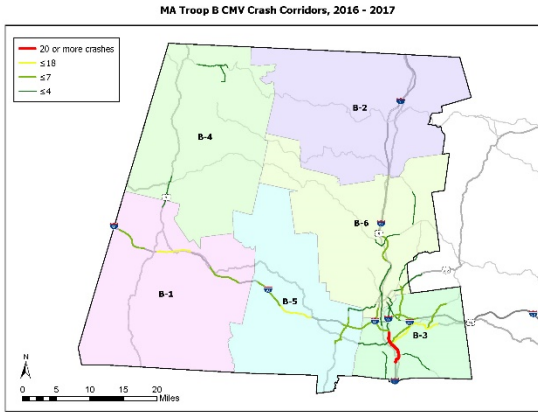
### Massachusetts CMV 5-Mile Crash Corridors, 2016-2017



<b>Massachusetts CMV 5-Mile Crash Corridors, 2016-2017</b>					
<b>Rank</b>	<b>Troop</b>	<b>Roadway</b>	<b>Exits</b>	<b>Mile Marker</b>	<b>Crash Count</b>
1	C	I-90	10, 10A	89 - 94	28
2	A	I-495	34, 35, 37, 38	88 - 93	27
3	C	I-90	9	78 - 83	27
4	B	I-91	1, 2, 3, 4, 5, 6,7, 8, 9, 10, 11	3 - 8	26
5	H	I-93	23, 24, 26, 27, 28, 29, 30	17 - 22	24
6	A	I-495	39	93 - 98	22
7	A	I-93	34, 35, 36, 37C	25 - 30	21
8	A	SR-128	36, 37, 38, 39, 40	27 - 32	20
9	H	US-1	15, 16, 18, 20, 23, 24, 26	42 - 47	20
10	A	I-495	29, 30, 31	76 - 81	18
11	H	SR-128	24, 25, 26	10 - 15	18
12	C	I-90	11A	102 - 107	17
13	A	I-93	44, 45, 46	40 -45	16
14	C	I-90	8	63 - 68	16
15	H	I-90	17, 18, 19, 20	127 -132	16

## Troop/Barrack Examination

In addition to examining the top statewide crash corridors, the MSP Troops were each analyzed by count of CMV crashes. The top five crash corridors were determined within each troop in order to be able to target each region effectively. Additionally, lower ranking problem areas are easily identified by utilizing the corridor tool to cluster along roadways and develop patrol routes.



These maps and identified corridors are based on data from Massachusetts State Police Commercial Vehicle Enforcement Sections SafetyNet database and the Registry of Motor Vehicles (RMV) Crash Data System (CDS). The data shown in the figure are representative of crashes reported by State and local police in SafetyNet as of April 1, 2018. It should be noted that crash data for 2017 is not yet closed and therefore preliminary. The location of crashes is collected from the location section of the Commonwealth of Massachusetts Motor Vehicle Crash Police Report. Only those crashes that were able to be located by the Massachusetts

Department of Transportation (MassDOT) are presented on this map.

Caution should be used when reviewing crash location data as many crash locations (especially ones located at or near an exit, highway interchange, rotary, etc.) are only approximate, depending on the quality of the source crash location data.

*Large Truck & Bus Crash Corridors by Troop*

Troop B Rank	Roadway	Exits	Mile Marker	Crash Count
1	I-91	1, 2, 3, 4, 5, 6,7, 8, 9, 10, 11	3 - 8	26
2	US-20	-	67 - 72	11
3	I-291	2, 3, 4, 5	0 - 5	9
4	I-90	-	30 - 35	9
5	I-90	2	8 - 13	8

Troop C Rank	Roadway	Exits	Mile Marker	Crash Count
1	I-90	10, 10A	89 - 94	28
2	I-90	9	78 - 83	27
3	I-90	11A	102 - 107	17
4	I-90	8	63 - 68	16
5	I-290	10, 11, 12, 13, 14, 15, 16, 17, 18, 19	3 - 8	15

Troop H Rank	Roadway	Exits	Mile Marker	Crash Count
1	I-93	23, 24, 26, 27, 28, 29, 30	17 - 22	24
2	US-1	15, 16, 18, 20, 23, 24, 26	42 - 47	20
3	SR-128	24, 25, 26	10 - 15	18
4	I-90	17, 18, 19, 20	127 -132	16
5	US-1	8, 9, 10, 11, 12	36 - 41	16

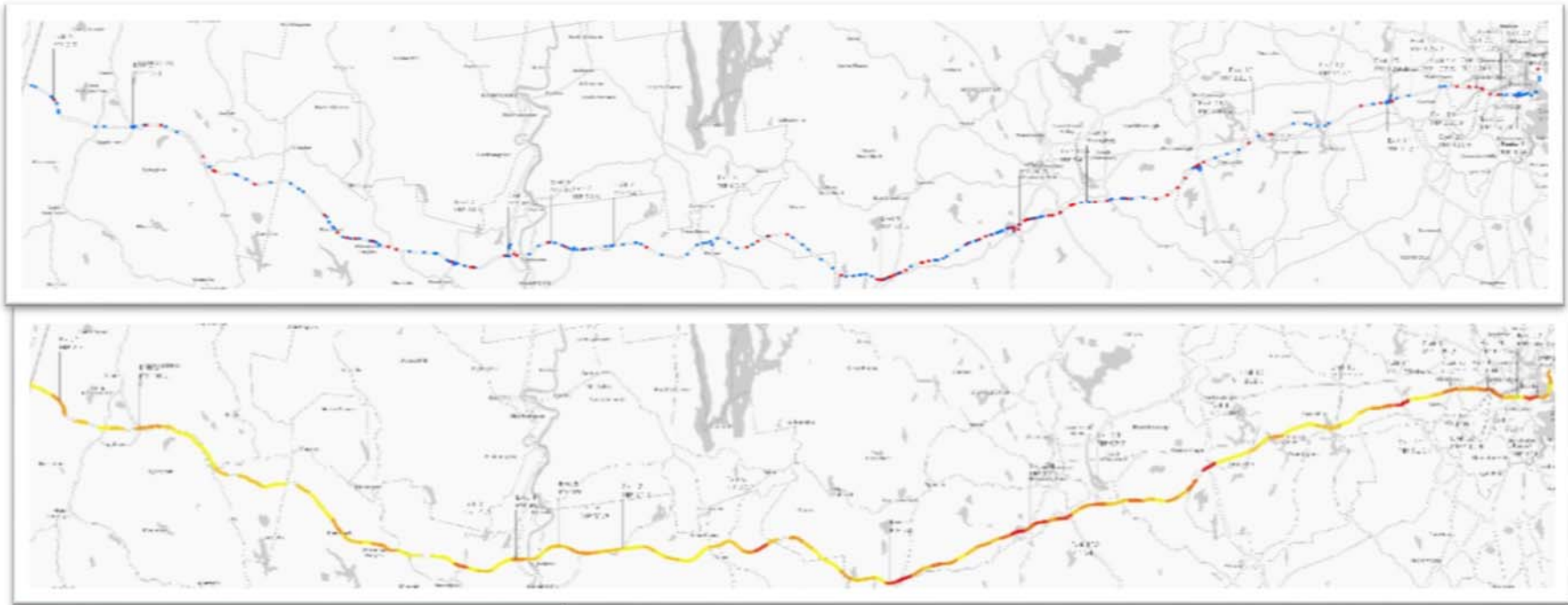
Troop A Rank	Roadway	Exits	Mile Marker	Crash Count
1	I-495	34, 35, 37, 38	88 - 93	27
2	I-495	39	93 - 98	22
3	I-93	34, 35, 36, 37C	25 - 30	21
4	SR-128	36, 37, 38, 39, 40	27 - 32	20
5	I-495	29, 30, 31	76 - 81	18

Troop D Rank	Roadway	Exits	Mile Marker	Crash Count
1	I-195	5, 6, 7 ,8A, 8B	10 - 15	10
2	I-195	11, 12, 13	19 - 24	10
3	SR-24	9, 10, 11	11 - 16	9
4	SR-53	-	17 - 22	8
5	SR-24	12, 13	16 - 21	7

Data

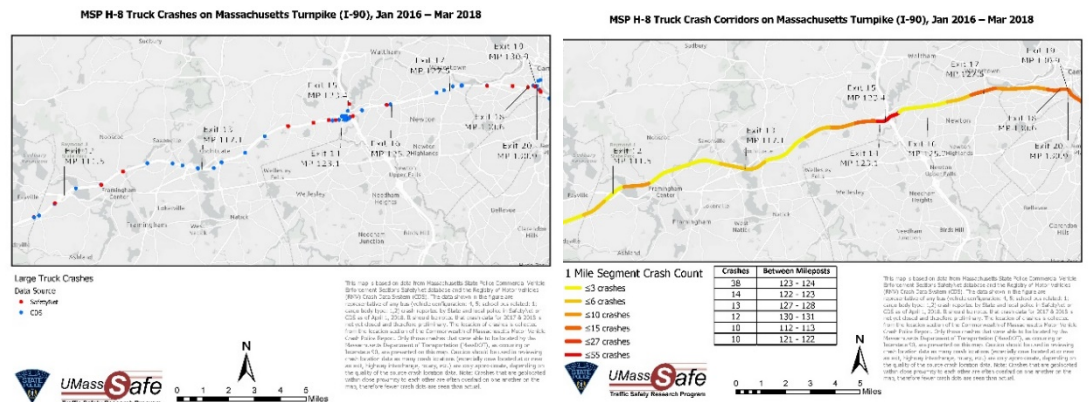
Source: UMassSafe Traffic Safety Data Warehouse, Snapshot – April 2018

# Massachusetts Turnpike Examination



Rank	Closest Exit	Mile Marker	Crash Count
1	11A	106	55
2	10	89	40
3	14	123	38
4	9	79	34
5	9	78	27
6	10	91	24
7	24	134	21
8	10A	93	20
9	8	66	20
10	11A	104	15

A reexamination of crashes by one-mile increments on the Massachusetts Turnpike was conducted to identify crash patterns and frequency to help patrol efforts and delegation. Below is a sampling of two style maps that were provided to both planning and patrol representatives, divided by the newly implemented barrack boundaries.

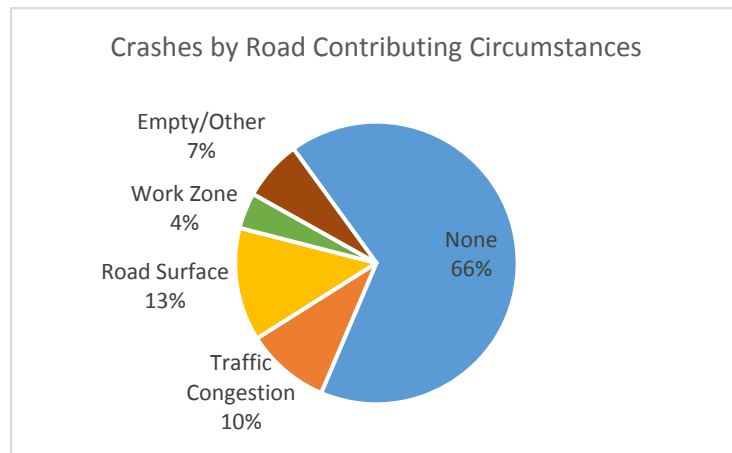
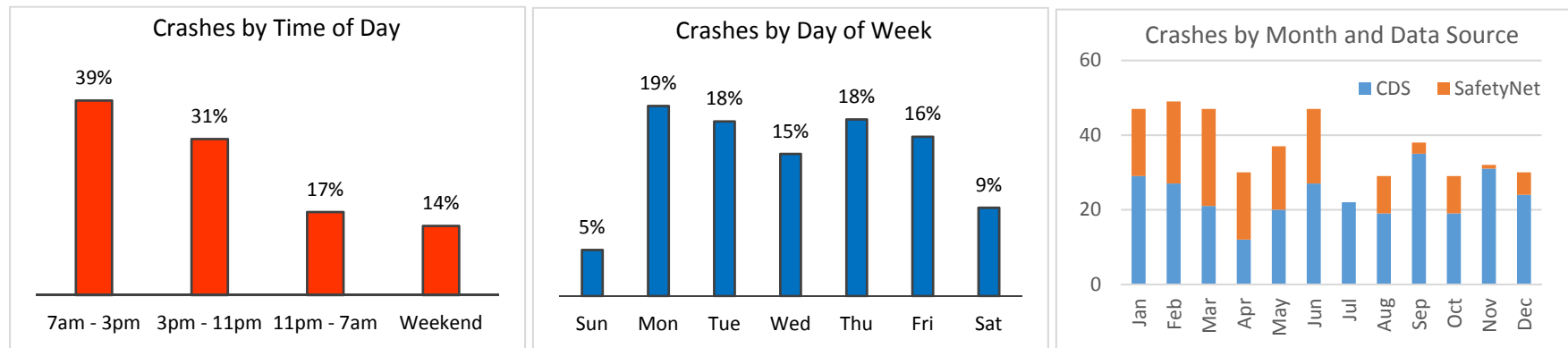


These maps and accompanying data are based on data from Massachusetts State Police Commercial Vehicle Enforcement Sections SafetyNet database and the Registry of Motor Vehicles (RMV) Crash Data System (CDS). The data shown in the figure are representative of large truck (vehicle configuration: 4, 5, 7, 8, 9, 10, 11, 12, 13) crashes reported by State and local police in SafetyNet or CDS as of April 1, 2018. It should be noted that crash data for 2017 & 2018 is not yet closed and therefore preliminary. The location of crashes is collected from the location section of the Commonwealth of Massachusetts Motor Vehicle Crash Police Report. Only those crashes that were able to be located by the Massachusetts Department of Transportation (MassDOT) as occurring on Interstate 90, are presented on this map.

Caution should be used in reviewing crash location data as many crash locations (especially ones located at or near an exit, highway interchange, rotary, etc.) are only approximate, depending on the quality of the source crash location data.

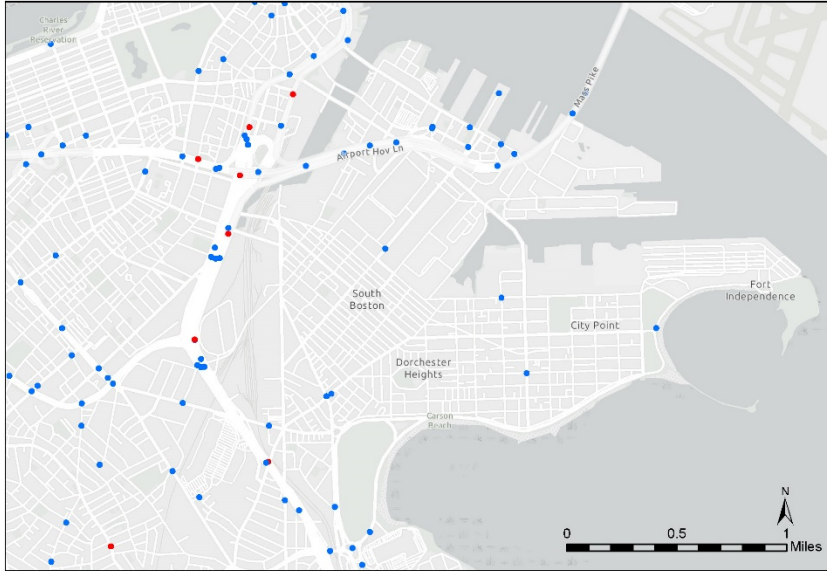
Note: Crashes that are geolocated within close proximity to each other are often overlaid on one another on the map, therefore fewer crash dots are seen than actual.

### Turnpike Crash Specifics



Knowing the specific circumstances surrounding crashes which happen on the same roadway is helpful for tailoring enforcement efforts. As seen in the charts presented, peak daytime hours seem to represent the greatest number of crashes involving large trucks & buses. Additionally, Monday, Tuesday, and Thursday are heavily represented. Examining these Turnpike crashes by month indicates an interesting pattern of increased crashes in January through March, possibly indicating the effects of winter weather, which is also noted by 13% of crashes having a road contributing circumstance of Road Surface condition (wet, icy, snow, slush, etc.).

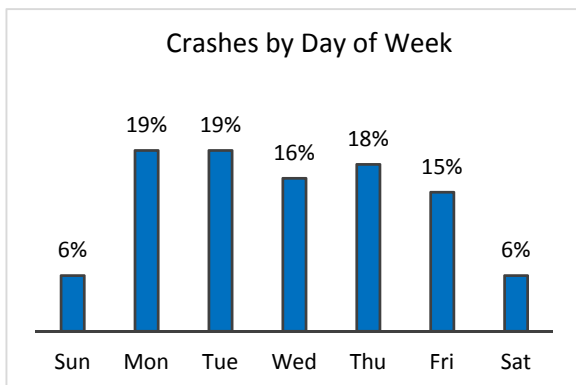
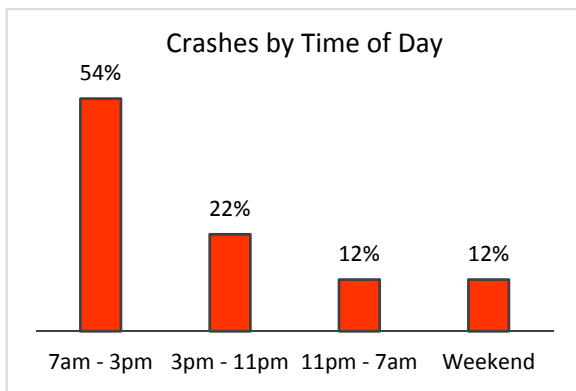
## Boston Seaport Crash Analysis



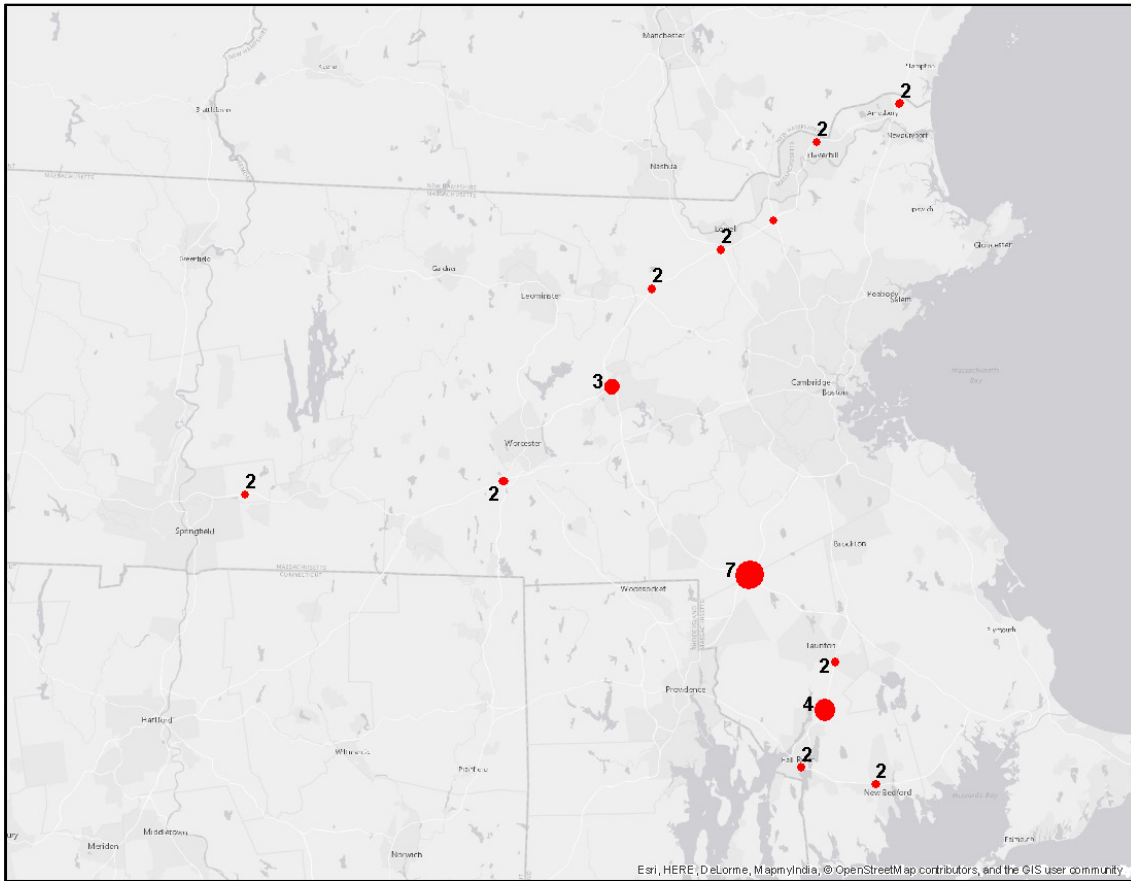
A special analysis looking at crashes involving large trucks or buses in the urban area of the 'Boston Seaport' was conducted due to some specific concerns regarding the potential of high-visibility crashes and their possible effect on a densely populated area. This was simultaneously conducted for passenger carrier efforts and can be seen in the accompanying document.

It is interesting to note that more than half of these crashes occurred between 7:00am and 2:59pm, this is over-represented when compared to typical crash times of large trucks and buses

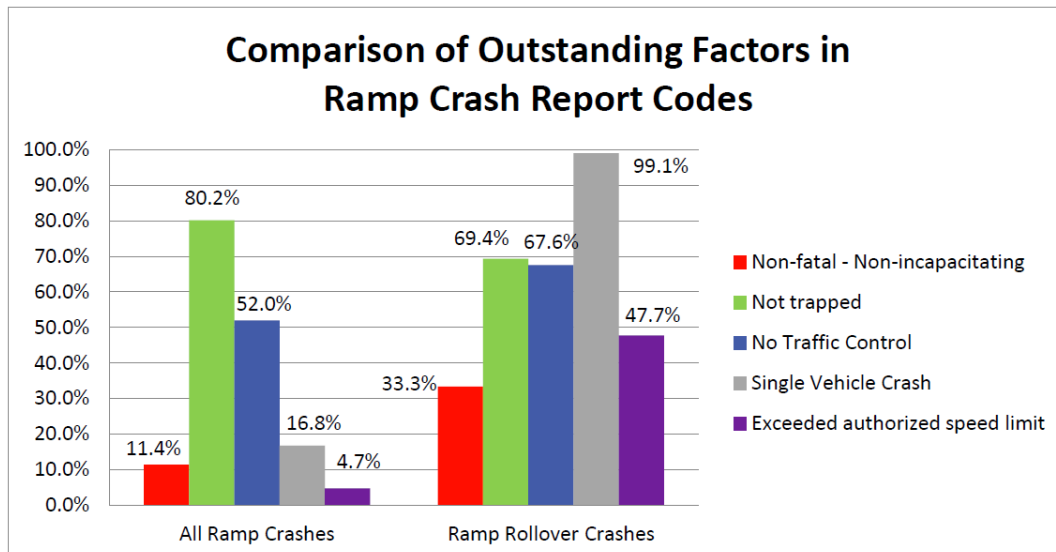
statewide. Meanwhile, when examining these crashes by day of week, the trend mirrors statewide patterns very closely, with higher rates on Monday, Tuesday, and Thursday.



## Statewide Large Truck Rollover Examination



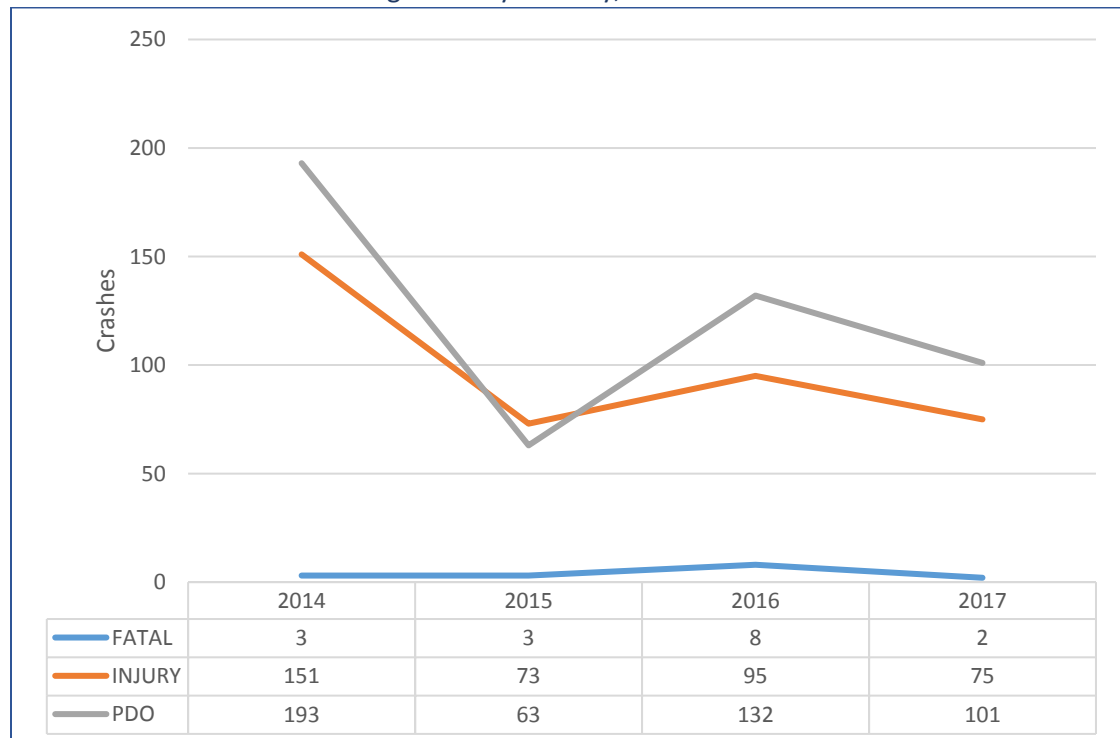
High visibility crashes in Massachusetts tend to be large truck rollovers, where they are often single vehicle but amount to an exponentially high delay and restoration time. Examining state crash patterns for instances where multiple rollover crashes happened within 1000 feet of each other resulted in the map pictured above. A full analysis aimed at providing an improved understanding of how ramp configurations and driver characteristics impact the likelihood of a rollover crash was conducted. Summarized below are the crash report variable differences between all ramp crashes and rollover ramp crashes – with ‘exceeded authorized speed limit’ being the most easily identified difference.



## MA FY19 CVSP- Passenger Carrier Problem Statement

The number of Massachusetts crashes involving passenger carriers (buses – all types) has been declining since 2014, with the exception of an increase in 2016 similar to the increase in all motor vehicle crashes. As shown in the chart below, all crash types – fatal, injury and property damage only- declined between FY16 and FY17. In FY18 to date, there have been no fatal crashes, 84 injury crashes and 77 property damage only (PDO) crashes.

Massachusetts Crashes Involving Buses by Severity, Fiscal Year 2014-2017



Data Source: FMCSA Motor Carrier Management Information System (MCMIS) data snapshot as of 06/29/2018, including crash records through 02/28/2018. The data presented are subject to update as new or additional information may be reported to MCMIS following the snapshot date.

To further reduce the number of crashes involving passenger carriers, UMassSafe examined those crashes by MSP Troop. As outlined below, in 2017\* Troops D and A had the largest number of crashes involving buses, followed by Troop H.

Percent of Massachusetts Crashes Involving a Bus, by Troop & Calendar Year 2013-2017\*

MSP Troop	2013	2014	2015	2016	2017
A	27%	28%	22%	28%	24%
B	14%	14%	11%	16%	17%
C	16%	15%	11%	15%	14%
D	17%	19%	23%	18%	26%
H	26%	24%	33%	23%	19%

Data Source: UMassSafe Highway Safety Data Warehouse using data linked data from Registry of Motor Vehicles Crash Data System and SafetyNet, Snapshot – June 2018.

The driver contributing code (DCC) noted by police completing crash reports for drivers involved in bus crashes was also examined, for both the bus and passenger vehicle driver. As shown in the table below, in almost one-half of the crashes, no DCC was noted for the bus driver while this was the case for less than one-third of the passenger vehicle drivers. In the instances where a DCC was noted for the bus driver, inattention and failure to yield right of way were each noted 3% of the time, while distraction was noted in 2% of the crashes. However, for passenger car drivers, inattention was noted in 9% of the cases and failure to yield right of way in 5% of the cases, followed by distracted and following too closely, each with 4%.

Contributing Code of Drivers Involved in Bus Crashes by Vehicle Type, 2017

Driver Contributing Code	Bus Driver	Pass Veh Driver
<b>No Improper Driving</b>	47%	31%
<b>Inattention</b>	3%	9%
<b>Failed to yield right of way</b>	3%	5%
<b>Distracted</b>	2%	4%
<b>Followed too closely</b>	1%	4%
<b>Failure to keep in proper lane or running off road</b>	1%	2%
<b>Driving too fast for conditions</b>	0%	2%
<b>Disregarded traffic signs, signals, road markings</b>	1%	2%
<b>Operating vehicle in erratic, reckless, careless, negligent or aggressive manner</b>	0%	2%
<b>Made an improper turn</b>	0%	2%
<b>Other</b>	1%	1%
<b>Wrong side or wrong way</b>	0%	1%
<b>Visibility Obstructed</b>	0%	1%
<b>Swerving or avoiding due to wind, slippery surface, vehicle, object, non-motorist in roadway, etc.</b>	0%	1%
<b>Illness</b>	0%	1%
<b>Glare</b>	0%	0%
<b>Over-correcting/over-steering</b>	1%	0%
<b>Unknown/empty</b>	40%	31%

Data Source: UMassSafe Highway Safety Data Warehouse using data linked data from Registry of Motor Vehicles Crash Data System and SafetyNet, Snapshot – June 2018.

Passenger carrier enforcement and associated inspections were also examined. As documented below, the number of traffic enforcement inspections has been increasing each year and is projected to do so in FY2018, with 42 moving violations and 113 non-specified state law/miscellaneous violations for those inspections in FY2018 to date. In addition, there were 169 traffic enforcement violations, including 42 moving violations and 127 non-specified state law/miscellaneous violations in FY2018 to date.

Massachusetts Passenger Carrier Enforcement by Activity Type, Fiscal Years FY2016-2018

Activity Summary	FY 2016	FY 2017	FY 2017 (to date)
<b>Number of Traffic Enf. Inspections</b>	205	238	145
With Moving Violations	75	100	42
With Drug & Alcohol Violations	0	0	0
With Railroad Crossing Violations	0	0	0
With Non-specified State Law/Miscellaneous Violations	138	157	113
<b>Number of Traffic Enf. Violations</b>	244	285	169
Moving Violations	77	101	42
Drug & Alcohol Violations	0	0	0
Railroad Crossing Violations	0	0	0
Non-specified State Law/Miscellaneous Violations	167	184	127

Data Source: FMCSA Motor Carrier Management Information System (MCMIS) 6/29/2018 data snapshot - <https://ai.fmcsa.dot.gov/SafetyProgram/spRptRoadside.aspx?rpt=TEAS>

### Crash Locations

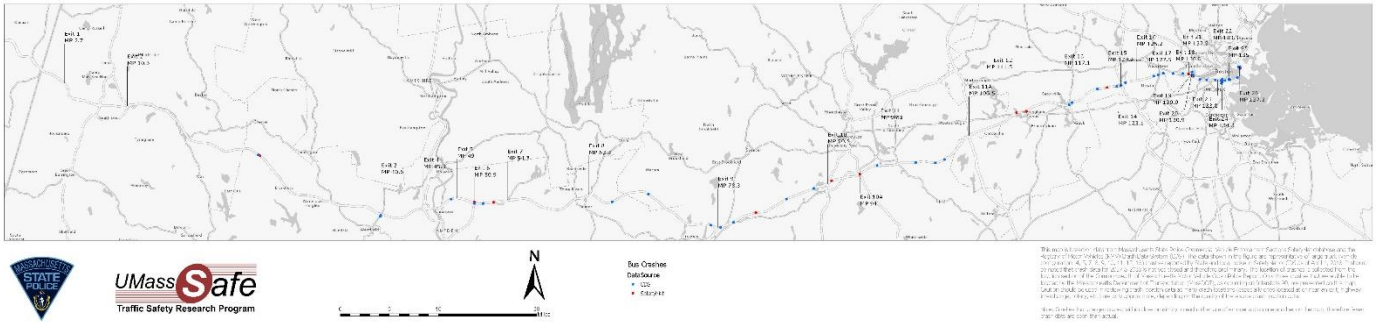
To further reduce the number of crashes involving buses, Massachusetts has identified several high crash areas by Massachusetts State Police Troop as well as those on the Massachusetts Turnpike/I90. The location of crashes is collected from the location section of the Commonwealth of Massachusetts Motor Vehicle Crash Police Report. Only those crashes that were able to be geo-located by MassDOT are presented on these maps. They are based on data from the Massachusetts State Police Commercial Vehicle Enforcement Section's SafetyNet database and the Massachusetts Department of Transportation (MassDOT) Registry of Motor Vehicles (RMV) Division Crash Data System (CDS) and are representative of CMV crashes reported by both State and local police in SafetyNet and CDS as of June

\*2017 data is preliminary as the MassDOT RMV has not closed this dataset 2017 data is for partial year.

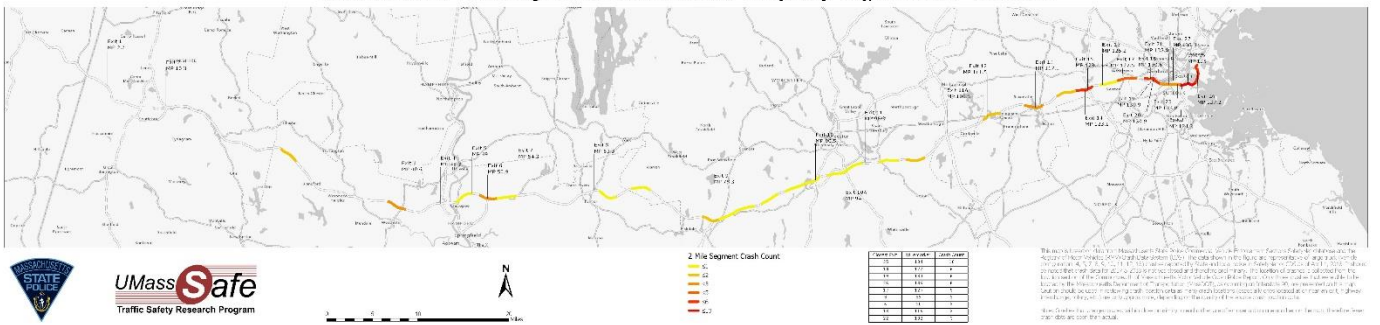


# Massachusetts Turnpike Passenger Carrier Crash Analysis

## Bus Crashes on Massachusetts Turnpike (I-90), Jan 2015 – Mar 2018



## Bus Crashes Per 2 Mile Segment on Massachusetts Turnpike (I-90), Jan 2015 – Mar 2018



# Approved

COMMONWEALTH OF MASSACHUSETTS  
OFFICE OF THE COMPTROLLER

## APPROVED FY2019 FRINGE BENEFIT RATE BASED ON FY2017 ACTUAL COSTS FOR ROLL FORWARD

### Fringe Benefit and Payroll Tax Rate Summary

	General Employee	Uniformed Employee	Salaries Subject to Assessment
Group Insurance.....	21.57%	21.57%	A01, A07, A09, AA1
Retirement.....	12.06%	18.31%	A01, A07, A09, AA1
Terminal Leave.....	1.26%	1.26%	A01, A07, A09, AA1
<b>Total Fringe Benefit Rate.....</b>	<b>34.89%</b>	<b>41.14%</b>	Applicable to Regular and Uniformed Employees
Unemployment Insurance.....	0.27%	0.27%	AA & CC*
Universal Health Insurance.....	0.11%	0.11%	AA & CC*
Medicare Tax.....	1.35%	1.35%	AA & CC*
<b>Total Payroll Tax Rate.....</b>	<b>1.73%</b>	<b>1.73%</b>	Applicable to Regular, Uniformed, and Contract Employees *Exceptions noted below

Rates represent both the "6B" rate mandated by M.G.L. C.29, s.6B and applicable to federal grants, federally funded contracts, and claims for federal reimbursements; and the "5D" rate mandated by M.G.L. C.29, s.5D and applicable to non-budgetary accounts and budgetary funds. See Executive Office of Administration and Finance Administrative Bulletin A&F5, dated May 1, 2008, entitled, *Fringe Benefits, Payroll Taxes and Indirect Costs*.

Group Insurance, Retirement and Terminal Leave rates apply only to regular employees and are assessed against object codes A01, A07, A09 and AA1 to determine these fringe benefit costs.

Unemployment Insurance, Universal Health Insurance and Medicare Tax rates apply to regular and contract employees and are assessed to all AA and CC object codes with the exception of A75, A90, CC5, C33, C75, C90, and C98. These rates will be used to assess costs on all account types.

The General Employee rates are applicable to all contract employees and regular employees other than uniformed employees.

The Uniformed Employee rates are applicable only to judges, the uniformed employees of Sheriffs Departments, POL, DOC, ENV, prosecutors in the District Attorneys Offices, state firefighters (DCR), parole officers (PAR), investigators of ABCC and DOR, and other employees under Retirement Groups 3 and 4.