

# IDENTIFYING DISPARITY IN DEFINITIONS OF HEAVY TRUCKS

FHWA/MT-17-004/8117-052

*Final Report*

*prepared for*

THE STATE OF MONTANA  
DEPARTMENT OF TRANSPORTATION

*in cooperation with*

THE U.S. DEPARTMENT OF TRANSPORTATION  
FEDERAL HIGHWAY ADMINISTRATION

*January 2017*

*prepared by*

Yiyi Wang, Ph.D.  
Karalyn Clouser  
Fahmid Hossain

Western Transportation Institute  
Montana State University  
Bozeman, MT



RESEARCH PROGRAMS



*You are free to copy, distribute, display, and perform the work; make derivative works; make commercial use of the work under the condition that you give the original author and sponsor credit. For any reuse or distribution, you must make clear to others the license terms of this work. Any of these conditions can be waived if you get permission from the sponsor. Your fair use and other rights are in no way affected by the above.*

# **Identifying Disparity in Definitions of Heavy Trucks**

Prepared by:

Dr. Yiyi Wang

Assistant Professor

Karalyn Clouser

Research Scientist

Western Transportation Institute – Montana State University

Prepared for:

Montana Department of Transportation

2701 Prospect Avenue

P.O. Box 201001

Helena, MT 59620-1001

February 2017

## TECHNICAL REPORT DOCUMENTATION PAGE

<b>1. Report No. FHWA/MT-017-004/8117-052</b>		<b>2. Government Accession No.</b>	<b>3. Recipient's Catalog No.</b>
<b>4. Title and Subtitle</b> <b>Identifying Disparity in Definitions of Heavy Trucks</b>		<b>5. Report Date February 2017</b>	
		<b>6. Performing Organization Code</b>	
<b>7. Author(s)</b> <b>Dr. Yiyi Wang, Karalyn Clouser</b>		<b>8. Performing Organization Report No.</b>	
<b>9. Performing Organization Name and Address</b> <b>Western Transportation Institute</b> <b>Montana State University</b> <b>Bozeman,</b> <b>Montana 59717</b>		<b>10. Work Unit No.</b>	
		<b>11. Contract or Grant No.</b> <b>8117-052</b>	
<b>12. Sponsoring Agency Name and Address</b> <b>Research Programs</b> <b>Montana Department of Transportation (SPR)</b> <a href="http://dx.doi.org/10.13039/100009209">http://dx.doi.org/10.13039/100009209</a> <b>2701 Prospect Avenue</b> <b>PO Box 201001</b> <b>Helena MT 59620-1001</b>		<b>13. Type of Report and Period Covered</b> <b>Final Report, August 2015 – February 2017</b>	
		<b>14. Sponsoring Agency Code 5401</b>	
<b>15. Supplementary Notes</b> Research performed in cooperation with the Montana Department of Transportation and the US Department of Transportation, Federal Highway Administration. This report can be found at <a href="http://www.mdt.mt.gov/research/projects/mcs/heavy-trucks.shtml">http://www.mdt.mt.gov/research/projects/mcs/heavy-trucks.shtml</a> .			
<b>16. Abstract</b> <p>This project aimed to identify ambiguities and disparities that exist in the regulations pertinent to heavy trucks and buses, and offers recommendations on how to improve clarity and cohesion of these regulations in the State of Montana. The goal is achieved by a logical set of two tasks. Task 1 involved the conduct of a trucker's survey, in addition to a review of federal and state laws, to more effectively identify issues/questions pertaining to heavy truck/bus regulations. Various aspects of heavy truck/bus regulations were explored, namely, speed limit, roadside safety inspection, weigh station, commercial driver's license, hours of service regulation, hazardous materials regulation, and vehicle maintenance standards. Task 2 resulted in a thorough review of the questions revealed in Task 1, the identification of the ambiguities and discrepancies that may exist in the regulations, and the development of recommendations on how to address them. These two tasks are summarized in Chapters 1 and 2 of this final report.</p> <p>This final report synthesizes the research process and presents the research results. The results (Chapter 3) are organized into three parts. The first part summarizes the changes that may be needed in the state's administrative resources such as the Montana Trucker's Handbook, Getting Started Guidebook, and Montana Commercial Driver's License Manual. These changes address discrepancies that exist in these administrative resources and update outdated information to make it consistent with state laws. The second part summarizes the questions that may need to be discussed in future legislations. These questions reveal more complicated issues that would require adding new passages or modifying existing clauses in state laws (i.e., Montana Code Annotated [MCA] and Administrative Rules of Montana [ARM]). The third part consists of items that can be included in the educational booklet for drivers and motor carriers.</p>			
<b>17. Key Words</b> <b>Heavy Duty Trucks, Buses, Disparities, Regulations, Commercial Vehicle Operations, Commercial Vehicles, Definitions, Law Uniformity, Laws, Legislation, Policy</b>		<b>18. Distribution Statement</b> <b>Unrestricted. This document is available through the National Technical Information Service, Springfield, VA 21161.</b>	
<b>19. Security Classif. (of this report)</b> <b>Unclassified</b>	<b>20. Security Classif. (of this page)</b> <b>Unclassified</b>	<b>21. No. of Pages</b> <b>124</b>	<b>22. Price</b>

## **Disclaimer**

This document is disseminated under the sponsorship of the Montana Department of Transportation (MDT) and the United States Department of Transportation (USDOT) in the interest of information exchange. The State of Montana and the United States assume no liability for the use or misuse of its contents.

The contents of this document reflect the views of the authors, who are solely responsible for the facts and accuracy of the data presented herein. The contents do not necessarily reflect the views or official policies of MDT or the USDOT.

The State of Montana and the United States do not endorse products of manufacturers.

This document does not constitute a standard, specification, policy or regulation.

## **Alternative Format Statement**

MDT attempts to provide accommodations for any known disability that may interfere with a person participating in any service, program, or activity of the Department. Alternative accessible formats of this information will be provided upon request. For further information, call 406/444.7693, TTY 800/335.7592, or Montana Relay at 711.

## Table of Contents

<b>COMMON TERMS</b> .....	<b>vii</b>
<b>EXECUTIVE SUMMARY</b> .....	<b>xii</b>
<b>1 INTRODUCTION</b> .....	<b>1</b>
<b>2 TASK 1: REVIEW &amp; SURVEY</b> .....	<b>2</b>
<b>3 TASK 2: IDENTIFICATION OF GAPS &amp; RECOMMENDATIONS</b> .....	<b>4</b>
<b>4 RESULTS &amp; RECOMMENDATIONS</b> .....	<b>10</b>
4.1 Changes that May Be Needed in Montana Administrative Documents.....	10
4.1.1 Speed Limit.....	10
4.1.2 Roadside Safety inspection.....	10
4.1.3 Weigh Station .....	11
4.1.4 Commercial Driver’s License.....	11
4.1.5 Hours of Service (HOS) .....	14
4.1.6 Hazardous Materials Regulations .....	15
4.1.7 Vehicle Maintenance Standards .....	19
4.2 Issues that May Need to Be Addressed in Future Legislative Sessions.....	19
4.2.1 Speed Limit.....	19
4.2.2 Roadside Safety Inspection .....	20
4.2.3 Weigh Station .....	21
4.3 Items to be Considered for the Educational Booklet.....	21
4.3.1 Speed Limits .....	21
4.3.2 Roadside Safety Inspections .....	22
4.3.3 Weigh Station Rules .....	22
4.3.4 Commercial Driver’s Licenses .....	23
4.3.5 Hours of Service (HOS) .....	26
4.3.6 Hazardous Materials Regulations .....	28
4.3.7 Vehicle Maintenance Standards .....	32
<b>5 CONCLUSION</b> .....	<b>34</b>
<b>APPENDIX A – SURVEY INSTRUMENT (TASK 1)</b> .....	<b>A-1</b>
<b>APPENDIX B – SURVEY RESPONSES (TASK 1)</b> .....	<b>B-1</b>
B.1 Speed Limits .....	B-1
B.2. Roadside Safety Inspection.....	B-3

B.3. Weigh Station Use ..... B-6

B.4. Commercial Driver’s License (CDL) ..... B-7

B.5. Hours of Service ..... B-10

B.6. Hazardous Material Regulations..... B-11

B.7. Vehicle Maintenance Standards..... B-13

**APPENDIX C – GAPS AND RECOMMENDATIONS (TASK 2) ..... C-1**

C.1. Speed Limit..... C-1

C.2. Roadside Safety Inspection..... C-6

C.3. Weigh Station..... C-9

C.4. Commercial Driver’s License ..... C-14

C.5. Hours of Service (HOS)..... C-25

C.6. Hazardous Materials Regulations ..... C-33

C.7. Vehicle Maintenance Standards..... C-42

**REFERENCES.....References 1**

### List of Tables

Table 1. Vehicle Classification .....	6
Table 2. CDL Exemptions .....	9
Table 3. Shipping Paper Information.....	17
Table 4. Test Requirements for Hazmat Cargo Tank .....	18
Table 5. Vehicle Maintenance Records & Retention Period .....	19
Table 6. Speed Limit for Special Vehicle Types .....	21
Table 7. Vehicles required to follow safety standards.....	22
Table 8. Definition of Commercial Motor Vehicle .....	24
Table 9. CDL Classification .....	25
Table 10. Hours of Service Limitation .....	27
Table 11. Placarding Requirements for HAZMAT Carrier .....	29
Table 12. Vehicle Maintenance Record.....	33
Table C.1.1. Montana Speed Limit Laws .....	C-5
Table C.2.1. Vehicles that Must Comply with the Safety (Inspection) Standards .....	C-7
Table C.3.1. Vehicles Exempted from the Weigh Station Regulations.....	C-10
Table C.4.1. Commercial Motor Vehicle Definitions.....	C-15
Table C.5.1. Hours of Service Limits .....	C-31
Table C.6.1. Shipping Paper Information .....	C-36
Table C.6.2. Inspection Requirements for Cargo Tanks.....	C-41
Table C.7.1. Maintenance Records .....	C-44

### List of Figures

Figure 2.1. Affiliation of Survey Respondents .....	2
Figure C.1.1. Makes and Models of Vehicles that Exceed the One-Ton Rated Capacity .....	C-3
Figure C.3.1. Vehicles Exempted from the Weigh Station Regulations .....	C-11
Figure C.4.1. Critical Violations Reported in the Motor Carrier Reviews in Montana (2015) .....	C-20
Figure C.4.2. Violations Reported in the Roadside Safety Inspections in Montana (2015).....	C-23
Figure C.5.1. Logbook Grid.....	C-28
Figure C.6.1. Example Shipping Paper.....	C-37



## COMMON TERMS

**Commercial Motor Vehicles** ([ARM 18.8.101](#), [MCA 61-1-101](#), [MCA 61-10-154](#), [49 CFR 383.5](#), [49 CFR 390.5](#)):

For the purpose of safety regulations ([49 CFR 390.5](#)), “a commercial motor vehicle (CMV) means any self-propelled or towed motor vehicle used on a highway in interstate commerce to transport passengers or property when the vehicle—

- (1) Has a gross vehicle weight rating or gross combination weight rating, or gross vehicle weight or gross combination weight, of 4,536 kg (10,001 pounds) or more, whichever is greater; or
- (2) Is designed or used to transport more than 8 passengers (including the driver) for compensation; or
- (3) Is designed or used to transport more than 15 passengers, including the driver, and is not used to transport passengers for compensation; or
- (4) Is used in transporting material found by the Secretary of Transportation to be hazardous under 49 U.S.C. 5103 and transported in a quantity requiring placarding under regulations prescribed by the Secretary under 49 CFR, Subtitle B, Chapter I, Subchapter C.”

For the purpose of Commercial Driver’s License (CDL, [49 CFR 383.5](#)), a CMV is “a motor vehicle or combination of motor vehicles used in commerce to transport passengers or property if the motor vehicle—

- (1) Has a gross combination weight rating or gross combination weight of 11,794 kilograms or more (26,001 pounds or more), whichever is greater, inclusive of a towed unit(s) with a gross vehicle weight rating or gross vehicle weight of more than 4,536 kilograms (10,000 pounds), whichever is greater; or
- (2) Has a gross vehicle weight rating or gross vehicle weight of 11,794 or more kilograms (26,001 pounds or more), whichever is greater; or
- (3) Is designed to transport 16 or more passengers, including the driver; or
- (4) Is of any size and is used in the transportation of hazardous materials as defined in this section.”

The [MCA 61-1-101](#) provision is identical to the [49 CFR 383.5](#) definition, except that the MCA provision also lists a school bus as a CMV. The definition provided by [ARM 18.8.101](#) is identical to the [49 CFR 390.5](#).

The [MCA 61-10-154](#) describes the commercial motor vehicles for which the department of transportation can adopt safety standards. According to this provision, “The department of transportation shall adopt, by rule, standards for safety of operations of:

- (1) any for-hire motor carrier or any private motor carrier;
- (2) any motor vehicle or vehicle combination used in interstate commerce that has a gross vehicle weight rating, gross combination weight rating, gross vehicle weight, or gross combination weight, whichever is greater, of 10,001 pounds or more;
- (3) any motor vehicle or vehicle combination used in intrastate commerce that has a gross vehicle weight rating, gross combination weight rating, gross vehicle weight, or gross combination weight, whichever is greater, of 26,001 pounds or more and that is not a farm vehicle operating solely in Montana;
- (4) any motor vehicle that is designed or used to transport at least 16 passengers, including the driver, and that is not used to transport passengers for compensation;
- (5) any motor vehicle that is designed or used to transport at least nine passengers, including the driver, for compensation; or
- (6) any motor vehicle that is used to transport hazardous materials of a type or quantity that requires the vehicle to be marked or placarded in accordance with federal hazardous materials regulations in 49 CFR 172.”

**Critical Violation** ([49 CFR 385 Appendix B](#)):

A critical violation is a violation of a critical regulation. A critical regulation is a regulation within the Federal Motor Carrier Safety Regulations (FMCSR) and Hazardous Materials Regulations (HMR) where noncompliance would indicate a breakdown in the motor carrier’s management and/or operational controls. For example, requiring a property-carrying CMV operator to drive more than 11 hours is a critical violation of FMCSR.

**Declared Weight** ([ARM 23.3.801](#) and [MCA 61-1-101](#)):

Declared weight means the total unladen weight of a bus, heavy truck, truck tractor, or trailer plus the weight of the maximum load to be carried on the vehicle as provided by the applicant in an original or prior registration application submitted to the department. Notes: “department” refers to the Montana Department of Justice or its designated agencies.

**Driving Time** ([49 CFR 395.2](#)):

Driving time includes all of the time that a driver spends at the driving controls of a CMV in operation.

**Gross Combination Weight Rating:**

The Gross Combination Weight Rating (GCWR) is the maximum allowable weight for a truck and trailer combination including the tare weight of the truck; any cargo being carried on the truck; the weight of the trailer, the driver, passengers, and fuel (basically everything that moves with the vehicle). According to [ARM 18.8.431](#) the maximum allowable weight can be found from the federal bridge formula as described in [MCA 61-10-107](#).

**Gross Vehicle Weight** ([MCA 61-1-101](#)):

Gross vehicle weight means the weight of a vehicle without load plus the weight of any load on the vehicle.

**Gross Vehicle Weight Rating** ([MCA 61-1-101](#)):

Gross vehicle weight rating means the value specified by the manufacturer as the loaded weight of a single vehicle.

**Hazardous Material (HAZMAT)** ([49 CFR 171.8](#)):

A hazardous material or HAZMAT is a substance or material that the U.S. Secretary of Transportation has determined is capable of posing an unreasonable risk to the health, safety, and property when transported in commerce.

**Heavy Trucks** ([ARM 23.3.801](#)):

Heavy truck means a truck that has a manufacturer's rated capacity of more than 1 ton. The term also includes a van or sport utility vehicle that has a manufacturer's rated capacity of more than 1 ton.

**Light Vehicle** ([ARM 23.3.801](#) and [MCA 61-1-101](#)):

Light vehicle means a motor vehicle commonly referred to as an automobile, van, sport utility vehicle, or truck having a manufacturer's rated capacity of 1 ton or less.

**Manufacturer's Rated Capacity** ([ARM 23.3.801](#)):

Rated capacity means the manufacturer's rated gross vehicle weight for a bus or heavy truck or the manufacturer's rated gross combination weight for a truck tractor.

**Manufacturer's Rated Gross Combination Weight** ([ARM 23.3.801](#) and [MCA 61-1-101](#)):

Manufacturer's rated gross combination weight means the manufacturer's published weight of the allowable load for a truck tractor and trailer combined and includes the weight of the truck tractor and the trailer.

**Manufacturer's Rated Gross Vehicle Weight** ([ARM 23.3.801](#) and [MCA 61-1-101](#)):

Manufacturer's rated gross vehicle weight means the manufacturer's published weight of the allowable load for a truck and includes the weight of the truck.

**On-duty Time** ([49 CFR 395.2](#)):

On-duty time includes all of the time from when a driver begins work until the time that the driver is relieved from work and all responsibilities of performing work.

**Review** ([49 CFR 385.3](#)):

A review is an on-site investigation of a motor carrier's operations, such as maintenance and inspection, driver qualifications, hazardous materials, drivers' hours of service, CDL requirements, and other safety and transportation records to determine if a motor carrier meets the

safety fitness standard. A review may be conducted in response to potential violations or complaints or in response to a motor carrier requesting to change its safety rating.

**Roadside Inspection ([FMCSA](#)):**

A roadside inspection is an examination of a CMV and/or the CMV operator by a Motor Carrier Safety Assistance Program (MCSAP) inspector. A roadside inspection is conducted to ensure that both the CMV and the operator are in compliance with the Federal Motor Carrier Safety Regulations and Hazardous Materials Regulations (if applicable). If a serious violation is found during a roadside inspection, the driver will be issued a driver or vehicle out-of-service order. The violation must be corrected before the driver or vehicle can return to service.

**Shipping Paper ([49 CFR 171.8](#)):**

A shipping paper is the shipping order, bill of lading, shipping manifest, or other shipping document serving a similar purpose. The shipping paper must contain information required by [49 CFR 172.202](#), [49 CFR 172.203](#), and [49 CFR 172.204](#).

**Trucks ([ARM 23.3.801](#) and [MCA 61-1-101](#)):**

A truck is defined as a motor vehicle designed to carry an entire load. The truck may consist of a chassis and body or a chassis-cab and body or it may be of unitized construction so that the body and cab appear to be a single unit.

**Truck Tractor ([ARM 23.3.801](#)):**

A truck tractor means a motor vehicle designed and used primarily for drawing other vehicles and not constructed to carry a load other than a part of the weight of the vehicle and load drawn.

## EXECUTIVE SUMMARY

This project aimed to identify disparities that exist in the regulations pertinent to heavy trucks and buses, and developed an educational booklet to help the public better understand these regulations. This research was conducted by the Montana State University - Western Transportation Institute (WTI) on behalf of the Montana Department of Transportation (MDT).

Task 1 of this project involved the conduct of a thorough review of Federal and Montana codes (Code of Federal Regulations [CFR], Administrative Rules of Montana [ARM], and Montana Code Annotated [MCA]) to identify issues that may exist in heavy truck/bus regulations. This review focused on four regulatory topics: vehicle registration and tax, vehicle size, vehicle weight, and vehicle safety. In addition, a survey has been conducted among truckers, transit service providers, and practitioners from federal and state agencies (e.g., MDT Motor Carrier Services, the Montana Highway Patrol [MHP], and the United States Federal Highway Administration [FHWA]) in order to better understand which elements of the regulations are unclear to the public and why. This survey focused on seven regulatory topics: speed limit, roadside safety inspection, weigh station, commercial driver's license, hours of service, hazardous materials regulation, and vehicle maintenance standards.

Based on the outputs of Task 1, Task 2 of this project identified ambiguities and disparities that may exist in the regulations pertinent to heavy trucks and buses and offered recommendations on how to improve clarity and cohesion among the regulatory sources for the State of Montana. Task 2 has found that the confusions and disparities generally arose for two reasons: variation of rules between two or more state or federal sources (e.g., inconsistencies across administrative sources relative to commercial vehicle classifications) and omissions of certain rules in the legal provisions (e.g., missing clauses in weigh station regulations for buses).

This final report summarizes the research process (Chapters 2 and 3) and synthesizes the research findings (Chapter 4), that is, what needs to be done to clear up any confusion and help the public (e.g., truckers and bus operators) to better understand pertinent regulations. The findings are organized into three parts in Chapter 4.

Part I (Section 4.1) recommends the changes that are needed in the state’s administrative documents such as the [Montana Trucker’s Handbook](#), [Getting Started Guidebook](#) (MDT, 2013), and [Montana Commercial Driver’s License Manual](#) (DOJ, 2015). These changes can correct discrepancies that exist in these administrative resources and update information to make it consistent with state laws. For example, “pickup trucks under 14,000 lbs. gross vehicle weight (GVW)” needs to be removed from the [Montana Trucker’s Handbook](#) because the 2013 legislation session eliminated it from the exemption list of weigh station rules.

Part II (Section 4.2) summarizes the questions that may need to be discussed during future legislative sessions. These questions reveal more complex issues that would require adding new passages or modifying existing clauses in state laws (MCA and ARM). For example, law makers may need to revisit the one-ton manufacturer’s rated capacity that is used to define which trucks must comply with the truck speed limit, because this weight threshold has clearly become out of sync with growing vehicle mass in this country.

Part III (Section 4.3) describes the items that can be included in an educational booklet. This booklet provides information about the elements of heavy truck/bus regulations that are often misconstrued by the public, website links, and contact persons to answer questions in the seven regulatory topic areas (speed limits, roadside safety inspections, weigh stations, commercial driver’s licenses, hours of service, hazardous materials regulations, and vehicle maintenance standards). This booklet is geared towards motor carriers and truck/bus drivers in order to clarify the areas of confusion that were revealed in the survey and review of legal codes. In the next phase, the team will work with the MDT Research Panel to finalize the list of items to be included in the booklet.

In summary, the project identifies gaps that may exist in heavy truck/bus regulations and makes recommendations on what needs to be done to bridge those gaps and help the public better understand the laws. The results can be implemented by MDT in three ways. First, the changes recommended to the state’s administrative documents (e.g., [Montana Trucker’s Handbook](#) and [Montana CDL Manual](#) [DOJ, 2015]) (Part I of Chapter 4) can help state agencies make quick and easy fixes in their guidebooks for truckers. Second, the issues that are identified in Part II of Chapter 4 can facilitate conversations with the Montana State Legislature and pinpoint the gaps in

the regulations that would require changes to the laws. Last but not the least, the educational booklet will be posted onto the MDT website and/or shared with transit providers and stakeholders in the trucking industry. The booklet will serve as an easy-to-read guide to help dispel confusion for the public.



## 1 INTRODUCTION

Over the years, the Montana State Legislature has written and re-written (commercial) motor vehicle laws. However, ambiguous language remains relative to heavy truck/bus regulations. The objective of this project was to identify the variations and ambiguity in the definitions of heavy trucks/buses and to design an educational booklet to help the public (e.g., truckers and bus operators) understand pertinent regulations. This objective is achieved by a logical set of two tasks.

Task 1 focused on reviewing state and federal regulations (MCA, ARM, and CFR) and the state's administrative documents, such as the [Getting Started Guidebook](#) (MDT, 2013) and the [Montana Trucker's Handbook](#).

Task 1 involved the conduct of a survey to reveal which elements of the regulations are confusing to the public and seek input on how to dispel those confusions. The review and survey focused on seven regulatory topics: speed limits, roadside safety inspections, weigh stations, commercial driver's licenses, hours of service, hazardous materials regulations, and vehicle maintenance standards.

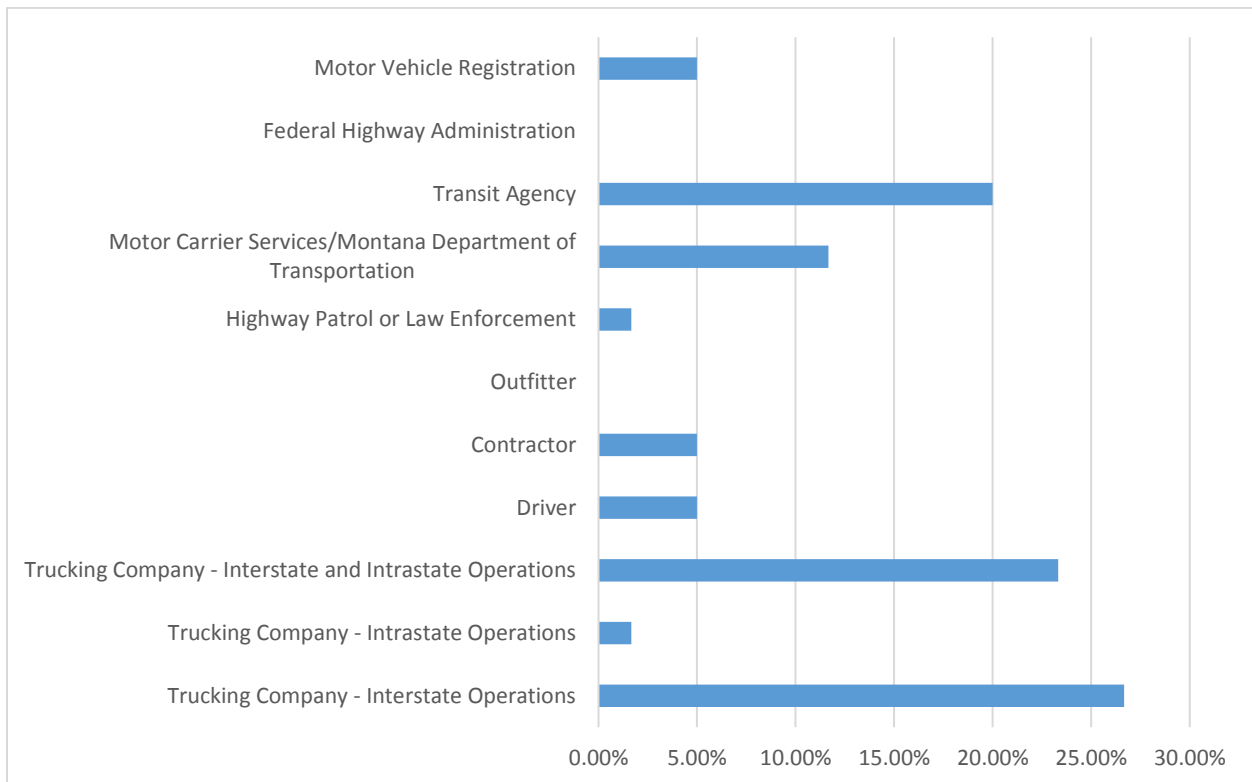
In Task 2, the team delved into the issues that were found in Task 1 and identified gaps that may exist in the regulations. This task also recommended what needs to be done in order to clarify the ambiguities and topics of confusion.

The rest of the report is structured as follows. Chapters 2 and 3 summarize the research methodologies for these two tasks. Chapter 4 presents the research findings. Chapter 5 concludes by discussing different ways that MDT can implement the research results and limitations.

## 2 TASK 1: REVIEW & SURVEY

Task 1 involved a thorough review of federal and Montana codes (i.e., Code of Federal Regulation [CFR], Administrative Rules of Montana [ARM], and Montana Code Annotated [MCA]) to identify issues that may exist in heavy truck/bus regulations. This review focused on four regulatory topics: vehicle registration and tax, vehicle size, vehicle weight, and vehicle safety in order to understand the current regulations.

A survey was also conducted among truckers, transit service providers, and practitioners from MDT Motor Carrier Service, the Montana Highway Patrol (MHP), and the United States Federal Highway Administration (FHWA) in order to better understand what rules and regulations have caused confusion, why these issues of confusion emerged, and what needs to be done to reduce ambiguity or inconsistency and help the public understand the federal and state regulations. Figure 2.1. shows the affiliation of the survey respondents.



**Figure 2.1. Affiliation of Survey Respondents**

The survey was circulated via SurveyMonkey. Appendix A presents the survey instrument. A total of 73 respondents provided their input on rules and regulations in ten areas: speed limits, roadside safety inspections, weigh station use, commercial driver's licenses, hours of service, hazardous Materials (HAZMAT) regulations, vehicle maintenance standards, tax regulations, insurance or financial responsibility, and state chain laws. The majority of comments and complaints focused on the top seven areas, where a number of gaps were found. Some of these gaps were associated with ambiguous provisions, while others were caused primarily by the public's lack of knowledge.

The Task 1 report of the project analyzed the survey responses under each of the seven focus areas aforementioned. The survey enabled the team to quickly identify which elements of the regulations caused confusion and to gather public input on how to improve clarity of the laws. Survey responses were provided in Appendix B of this final report.

### 3 TASK 2: IDENTIFICATION OF GAPS & RECOMMENDATIONS

Task 2 of this project aimed to identify ambiguities and disparities that may exist in the regulations pertinent to heavy trucks and buses and offer recommendations on how to improve clarity and cohesion among the regulatory sources for the State of Montana. Appendix C of this final report summarizes the main findings on each of the seven topic areas.

These confusions and disparities generally emerged for two reasons.

First, there are variations between two or more regulatory sources. For example, a discrepancy between the [MCA 61-10-141](#) provision and the [Montana Trucker's Handbook](#) was found regarding which vehicles are exempted from weigh station use. In addition, vehicle classification (Class A, Class B, and Class C) is an important factor to determine whether an operator needs a Commercial Driving License (CDL). However, the definitions of vehicle classes vary across [ARM 23.3.502](#), [Montana Department of Justice \(DOJ\), Commercial Driver License Manual](#) (2015), and MDT [Getting Started Guidebook](#) (MDT, 2013).

Second, there are omissions or ambiguities in the legal provisions, the majority of which do not clearly specify the regulations for rental trucks and buses. For example, the truck speed limit as mentioned in [MCA 61-8-312](#) does not clarify whether the truck speed rules apply to buses and other heavy vehicles. Similarly, it is not clearly written in the rules pertinent to weigh station use ([MCA 61-10-141](#)) and safety inspection ([MCA 61-10-154](#)) whether those rules apply to buses and rental trucks. Other examples include missing Montana statutes on the speed limit rules for vehicles towing trailers or other vehicles, and missing Montana resources on the exceptions to the rules regarding carrying hours of service.

The disparities from these two sources are relatively easy to detect upon a thorough review of the regulatory sources and feedback from the trucker's survey that was conducted in Task 1 of this project. Nevertheless, some gaps may exist in the regulations and rules that reveal deeper-rooted issues. One example relates to the one-ton manufacturer's rated capacity that is used to define which trucks must comply with the truck speed limit. Many vehicles that are regularly used by American households (e.g., pickup trucks and sports-utility-vehicles [SUVs]) exceed the one-ton limit, suggesting that the speed limit laws may have become out of sync with growing vehicle

mass in this country. Confusion may also exist in the rules on registration fees of these vehicles (SUVs, vans, and pickups). They are considered “light vehicles” in terms of registration fees ([MCA 61-3-321](#)) and taxes ([MCA 61-3-503](#)). However, their rated capacity can well exceed the one-ton threshold used by the provisions to separate light vehicles from heavy vehicles.

In the process of searching for disparities in heavy truck/bus definitions among various regulations, it becomes clear that vehicle definitions are not consistent among different regulatory domains including weigh station use, commercial driver’s license (CDL), safety inspection, and registration. While understandably one regulatory domain may need to define vehicles differently from another domain (e.g., a cargo-carrying truck with 10,001 lbs. GVW should comply with weigh station laws but does not need a CDL to operate), it can be confusing to the public and may cause challenges for state agencies in coordinating and enforcing the laws. To clear up potential confusion, this task resulted in a table summarizing the vehicle definitions across the four regulatory domains -- weigh station use, CDL, safety inspection, and registration-- shown in Table 1.

Regulations that are clear of discrepancies and gaps will encourage conformance, but do not guarantee conformance. Therefore, the team searched for all violations reported in motor carrier reviews and roadside safety inspections in Montana in 2015 using web resources provided by the Federal Motor Carrier Safety Administration (FMCSA). An array of critical violations emerged ranging from driver’s logbook (grid), to number of hours one can drive, and to hazardous material (HAZMAT) shipping papers, with details provided in Appendix C.

Based on the survey and analyses, the research team made recommendations on what needs to be done to improve clarity of heavy truck/bus regulations. These recommendations are organized into three parts in the next Chapter (Chapter 4) of this report: changes that are recommended in the state’s administrative documents (e.g., [Montana Trucker’s Handbook](#)); issues that may need to be discussed in future legislative sessions; and items to be considered for the educational booklet.

**Table 1. Vehicle Classification (Sources: [MCA 61-10-141](#), [MCA 61-10-154](#), [49 CFR 383.5](#), [MCA 61-3-321](#))**

Vehicle Types	Weigh Station (Actual weights [GVW or GCW]) <sup>a</sup>	Commercial Driver’s License (CDL) <sup>b</sup> (GVWR or GCWR) <sup>a</sup>	Safety Inspection (Actual weights or GVWR or GCWR, whichever is greater) <sup>a</sup>	Registration (Declared weights, age, and trailer length) <sup>a</sup>
<b>Trucks and CMVs less than 2,000 lbs. <sup>c</sup></b>	Do not have to stop at permanent or portable weigh stations	CDL is not required unless the vehicle is used for transporting 16 or more passengers or HAZMAT that requires placarding (Class C).	Do not have to stop for safety inspection unless the vehicle is transporting 16 or more passengers (for compensation) or 9 or more passengers (not for compensation) or HAZMAT	Fees range from \$28 to \$217, depending on age of motor vehicles <sup>d</sup>
<b>Trucks and CMVs from 2,000 lbs. <sup>c</sup> to 10,000 lbs. (GVW, GCW, GVWR or GCWR)</b>	Do not have to stop at permanent or portable weigh stations	CDL is not required unless the vehicle is used for transporting 16 or more passengers or HAZMAT that requires placarding (Class C).	Do not have to stop for safety inspection unless the vehicle is transporting 16 or more passengers (for compensation) or 9 or more passengers (not for compensation) or HAZMAT	Annual Fees \$22.75
<b>Trucks and CMVs from 10,001 lbs. to 26,000 lbs. GVW, GCW, GVWR, or GCWR</b>	The vehicle may be required to stop at portable scales.	CDL is not required unless the vehicle is used for transporting 16 or more passengers or HAZMAT that requires placarding (Class C).	Must comply with the safety inspection rule if the vehicle is used for interstate commerce.	
<b>Trucks and CMVs that weigh 26,001 lbs. or more GVW, GCW, GVWR, or GCWR</b>	The vehicle must stop at all weigh stations that are open	Class A: If the vehicle is towing another vehicle with GVWR over 10,000 lbs.	Must comply with the safety inspection rule.	
		Class B: If the vehicle is a straight vehicle, or if the vehicle is towing another vehicle with GVWR not in excess of 10,000 lbs.		

**Table 1. Vehicle Classification (Continued)** (Sources: [MCA 61-10-141](#), [MCA 61-10-154](#), [49 CFR 383.5](#), [MCA 61-3-321](#))

Vehicle Types	Weigh Station (Actual weights [GVW or GCW]) <sup>a</sup>	Commercial Driver’s License (CDL) <sup>b</sup> (GVWR or GCWR) <sup>a</sup>	Safety Inspection (Actual weights or rated capacity, whichever is greater) <sup>a</sup>	Registration (Declared weights, age, and trailer length) <sup>a</sup>
<b>Buses capable of carrying less than 9 passengers including driver</b>	NA (Weigh station use is entirely determined by the GVW of a straight vehicle or GCW of the vehicle if towing a trailer or another vehicle.)	CDL not required	Do not have to comply with the safety inspection rules <u>unless</u> GVWR, GCWR, GVW, or GCW (whichever is greater) exceeds 10,000 lbs. for interstate commerce, or exceeds 26,000 lbs. for intrastate commerce.	For light buses (those of 2,000 lbs. or less <sup>c</sup> ), fees range from \$28 to \$217, depending on the age of motor vehicles. For heavy buses (those over 2,000 lbs. <sup>c</sup> ), annual fee is \$22.75. <sup>d</sup>
<b>Buses capable of carrying 9 to 15 passengers including driver</b>		CDL not required	Must comply with the safety inspection rule if used for compensation	
<b>Buses capable of carrying 16 or more passengers including driver</b>		Class B: If the GVWR of bus exceeds 26,000 lbs.	Must comply with the safety inspection rule regardless of whether the vehicle is used for compensation or not.	
		Class C: If the GVWR of bus is 26,000 lbs. or less		
<b>Motor vehicles transporting HAZMAT</b>	NA (The weight rules prevail.)	Class C: if the hazardous materials require placarding <sup>e</sup>	Must comply with the safety inspection rule if the hazardous materials require placarding	NA (Registration fees are determined by vehicle weight and age.)

**Table 1. Vehicle Classification (Continued)** (Sources: [MCA 61-10-141](#), [MCA 61-10-154](#), [49 CFR 383.5](#), [MCA 61-3-321](#))

Vehicle Types	Weigh Station (Actual weights [GVW or GCW]) <sup>a</sup>	Commercial Driver’s License (CDL) <sup>b</sup> (GVWR or GCWR) <sup>a</sup>	Safety Inspection (Actual weights or rated capacity, whichever is greater) <sup>a</sup>	Registration (Declared weights, age, and trailer length) <sup>a</sup>
<b>Trailer, Semitrailer, Pole-trailer</b>	NA (Trailers are not mentioned separately as these are part of a motor vehicle, not a separate vehicle.)			Fees range from \$61.25 to \$148.25 based on declared weight <sup>d</sup>
<b>Travel Trailers</b>	Do not have to stop at permanent or portable weigh stations, unless the vehicle is used for commerce and meets the weight requirement.	CDL is not required unless the vehicle is used in either interstate, intrastate or foreign commerce and the vehicle falls under Class A, Class B, or C type.	Do not have to stop for safety inspection, unless the vehicle is used for commerce and meets the weight requirement.	Fees range from \$72 to \$152 based on length of travel trailers
<b>Motor Homes</b>				Fees range from \$97.5 to \$282.5 based on the age of motor homes

Notes:

<sup>a</sup> Factors that are used to determine each area of regulation are provided in the parentheses in the header.

<sup>b</sup> CDL Exemptions are shown in Table 2

<sup>c</sup> It is unclear what weight metric is used for this one-ton criterion – declared weight, actual weight, or manufacturer’s rated capacity. This confusion is described in the Appendix C Section A.3.

<sup>d</sup> Details regarding registration fees are provided in Table A.2 in Appendix C Section A.4.

<sup>e</sup> Details regarding placarding are provided in Table 11 and [49 CFR 172.504](#).



**Table 2. CDL Exemptions (Source: [49 CFR 383.3](#))**

<b>Individual</b>	<b>Restrictions</b>
<b>Farmers (or their employees)</b>	Must operate the vehicle to transport agricultural products, machinery, or supplies to/from a farm; Must operate the vehicle within a 150-mile radius of the farm.
<b>Firefighters and Other Emergency Responders</b>	These vehicles are necessary to preserve life or property and are not subject to normal traffic regulations.
<b>Snow/Ice Removal</b>	Only if the licensed employee who normally operates the CMV is unable to operate the vehicle; or if the State determines that the snow or ice creates an emergency situation where additionally assistance will be required.

## 4 RESULTS & RECOMMENDATIONS

### 4.1 Changes that May Be Needed in Montana Administrative Documents

#### 4.1.1 Speed Limit

##### **4.1.1.1 Is the lower (truck) speed limit applicable for buses?**

According to [MCA 61-8-312](#), trucks or truck tractors that have a rated capacity over one-ton (2,000 lbs.) must follow the truck speed limit (65 mph).

However, this provision does not clarify whether the truck speed limit applies to other heavy vehicles, namely buses. Echoed in the trucker's survey (Task 1), many bus/transit operators were confused regarding whether they need to follow the truck speed limit.

As a remedy, the [Montana Trucker's Handbook](#) might consider clarifying the speed limit requirement on buses.

#### 4.1.2 Roadside Safety inspection

##### **4.1.2.1. Reward for good roadside safety inspection.**

The Trucker's Survey in Task 1 revealed that some inspectors do not give credit for a good inspection, which was echoed by a comment from the Panel. This can be frustrating for CMV carriers and operators, and may indicate a discrepancy with the federal regulations. According to the Federal Motor Carrier Safety Administration, all inspection findings count for the agency's evaluation of motor carriers and drivers. Inspections that find no violations help to improve the safety score of the motor carriers and drivers that are computed by the Safety Measurement System (SMS). In calendar year 2015, there were a total of 39,146 inspections conducted by Montana inspectors. Of the total inspections, 24,387 inspections had no violations, which is 62.3% of total inspections. MDT can consider coordinating with its safety inspectors in reference to this complaint to ensure that a good inspection is credited and reported to the SMS.

### 4.1.3 Weigh Station

#### 4.1.3.1. Which vehicles are exempted from the weigh station regulations?

According to [MCA 61-10-141](#), vehicles or vehicle combinations of 26,000 lbs. GVW or greater must stop at all weigh stations that are open; vehicles or vehicle combinations with GVW less than 26,000 lbs. but over 10,000 lbs. may be weighed by portable scale crews at an engineered site. This MCA provision provides a list of the vehicles that are exempted from weigh station rules. These are:

- Recreational Vehicles,
- Travel Trailers, and
- Motor Homes.

This list differs from that provided in the [Montana Trucker's Handbook](#). Exempted vehicles listed in the [Montana Trucker's Handbook](#) are:

- Recreational Vehicles– new or used-- that are not traveling into or through Montana for delivery to a distributor or dealer,
- Pickup Trucks under 14,000 GVW, and
- Passenger Cars

According to the [MCA 61-10-141](#) provision, all recreational vehicles are exempted, whereas the [Trucker's Handbook](#) mentions qualifying conditions (i.e., not used for delivery to a distributor or dealer). Also, the [Montana Trucker's Handbook](#) needs to remove the “14,000 lbs. pickup trucks” from the list because it was removed during the State of Montana’s 2013 legislative session.

### 4.1.4 Commercial Driver’s License

#### 4.1.4.1. Classes of Commercial Driver’s License (CDL) are defined inconsistently across various regulatory sources.

A commercial driver’s license (CDL) is required to operate any commercial motor vehicle (CMV). Three types of CDL exist: Class A, Class B, and Class C. However, they are defined differently across these regulatory sources: [ARM 23.3.502](#), Montana Department of Justice (DOJ) [website](#),

[Commercial Driver License Manual 2015](#) (DOJ, 2015), and the [MDT Getting Started Guidebook](#) (MDT, 2013). The following presents the vehicle classification from each source, with recommended changes in brackets.

According to [ARM 23.3.502](#),

- "Class A" authorizes driving any combination of two or more vehicles, including articulated buses with a GCVWR exceeding 26,001 lbs. [articulated buses should belong to Class B; “towing a vehicle/trailer in excess of 10,000 lbs.” is missing from the Class A language] and also all vehicles authorized to be driven under class B and C or with a regular driver's license (class D).
- "Class B" authorizes driving any single vehicle in excess of 26,001 lbs. GVWR, or any such vehicle towing a vehicle not in excess of 10,000 lbs. GVWR, or any bus which exceeds 26,001 lbs. GVWR and is capable of carrying more than 15 passengers including the driver, and all vehicles under class C and vehicles authorized to be driven with a regular driver's license (class D).
- "Class C" authorizes driving any single vehicle less than 26,001 lbs. GVWR or any such vehicle towing a vehicle not in excess of 10,000 lbs. GVWR when the vehicle(s) are or must be placarded for hazardous materials under the provisions of [49 C.F.R., Part 172](#), or any bus in this weight class capable of carrying more than 15 passengers including the driver and any vehicle authorized to be driven with a regular driver's license (class D).

According to the [Montana Department of Justice \(DOJ\)](#),

- Class A License allows the holder to operate any combination of vehicles, including:
  - ✓ A vehicle exceeding 26,000 GVWR that is towing a trailer over 10,000 pounds,
  - ✓ Articulated buses with a GCVWR exceeding 26,000 pounds [This type of bus should in fact fall in Class B], or
  - ✓ any vehicle authorized to be driven under Class B, C, or D.
- Class B License allows the holder to operate:

- ✓ A vehicle exceeding 26,000 GVWR that is towing a trailer at/or under 10,000 pounds GVWR [consider revising to “A straight vehicle exceeding 26,000 lbs. GVWR or any such vehicle towing a trailer/vehicle not in excess of 10,000 lbs. GVWR”];
- ✓ A school bus, or any bus or other vehicle hauling 16 or more passengers, including the driver; or
- ✓ All vehicles under Class C or D.
- Class C License allows the holder to operate:
  - ✓ A single vehicle under 26,000 pounds [missing “and meets any of the following conditions”],
  - ✓ A vehicle that hauls hazardous materials in an amount sufficient to require placarding under [Title 49 Code of Federal Regulations \(CFR\) Part 391](#), or
  - ✓ A school bus, or any vehicle that hauls 16 or more passengers, including the driver.

According to the [Commercial Driver License Manual \(CDL Manual\)](#) (DOJ, 2015),

- Class A (Combination Vehicle) – Any combination of vehicles with a gross combination weight rating (GCWR) of 26,001 lbs. or more [any combination of vehicles for which the towing vehicle exceeds 26,000 lbs. GVWR], provided the gross vehicle weight rating (GVWR) of the vehicle(s) being towed is in excess of 10,000 lbs.;
- Class B (Heavy Straight Vehicle) – Any single vehicle with a GVWR of 26,000 lbs. or more, or any such vehicle towing a vehicle not in excess of 10,000 lbs. GVWR. [missing “Articulated buses with a GCVWR exceeding 26,000 pounds”]; and
- Class C (Small Vehicle) – Any single vehicle, or combination of vehicles, that meets neither the definition of Class A nor Class B, but is designed to transport 16 or more passengers including the driver [some buses may fall in Class B if their GVWRs exceed 26,000 lbs., according to [ARM 23.3.502](#) and [DOJ](#)], or is used in the transportation of materials found to be hazardous which require the motor vehicle to be placarded.

The Montana Department of Transportation [Getting Started Guidebook](#) (MDT, 2013) defines the vehicle classifications in a very similar way to the [Montana CDL Manual](#) (DOJ, 2015):

- Class A – Combination of vehicles with a gross combination weight rating (GCWR) over 26,000 lbs., [any combination of vehicles for which the towing vehicle exceeds 26,000 lbs. GVWR] provided the GVWR of the vehicle(s) being towed is greater than 10,000 lbs. A driver with a Class A license will be able to drive a Class A, B, and C commercial vehicle with proper endorsements when required.
- Class B – Single vehicles with a GVWR over 26,000 lbs., or any such vehicle towing a vehicle under 10,000 lbs. GVWR. A driver with a Class B license will be able to driver Class B and C commercial vehicles with proper endorsements when required. [missing “Articulated buses with a GCVWR exceeding 26,000 pounds”]
- Class C – Vehicles with a GVWR less than 26,001 lbs. Class C’s are strictly for vehicles designed to carry 16 or more people, or that carry hazardous material in quantities large enough to require a placard. A Class C license holder will be able to drive Class C commercial vehicles only.

#### 4.1.5 Hours of Service (HOS)

##### **4.1.5.1. Add information on how often a record of duty status needs to be submitted by the CMV operator to the motor carrier to the MDT Getting Started Guide.**

The current [MDT Getting Started Guide](#) (MDT, 2013) includes information on what needs to be included on the driver’s record of duty status. However, it covers neither information on when this record needs to be submitted by the driver to the employing motor carrier nor how long these records need to be retained.

The record of duty status keeps track of a driver’s time on-duty, off-duty, and driving. These records must be kept current and completed by the driver only. Under [49 CFR 395.8](#), drivers must submit a record of duty status to their employing motor carriers within 13 days following the completion of the form. Furthermore, this record of duty status must be retained by the driver for 7 consecutive days and by the employing motor carrier for 6 months, according to [49 CFR 395.8](#).

**4.1.5.2. Add a link to the Federal Motor Carrier Safety Administration’s Interstate Truck Driver’s Guide to Hours of Service document to the MDT Getting Started Guide.**

The Federal Motor Carrier Safety Administration’s [Interstate Truck Driver’s Guide to Hours of Service](#) is a detailed guide to all HOS regulations. This guide includes descriptions of hours of service regulations, a detailed list of logbook requirements with examples, and a detailed list of hours of service exceptions. Including a link to this document in the [MDT Getting Started Guide](#) (MDT, 2013) would provide the public with an easy to read resource to clear up any confusion about the hours of service regulations.

**4.1.5.3. Include information on where a driver may check for current information on hours of service regulations to the Montana Department of Justice Website and the MDT Getting Started Guide.**

During the Task 1 survey, some respondents mentioned that the hours of service regulations are always in a state of change. Furthermore, during a project meeting with MDT, it was mentioned that some of the hours of service regulations are currently under review by the Federal Motor Carrier Safety Administration (FMCSA) and the U.S. Government Accountability Office (GAO) and may change in the near future. If the regulations change often, it would be worthwhile to include information (phone number, website, etc.) on where a driver can check for current information on hours of service regulations on both the Montana Department of Justice website and in the [MDT Getting Started Guide](#) (MDT, 2013).

**4.1.6 Hazardous Materials Regulations****4.1.6.1. Include information on the HAZMAT registration process in the MDT Getting Started Guide.**

The current [MDT Getting Started Guide](#) (MDT, 2013) states the conditions that require a driver to obtain a HAZMAT registration number, but does not have information on where to go for more information on how and where to register.

According to [49 CFR 107.620](#), a copy of the certificate of registration issued by the Pipeline and Hazardous Materials Safety Administration (PHMSA) or a document with the registration number identified as the US DOT HAZMAT Registration Number must be retained on each truck or truck

tractor used to transport HAZMAT. Additionally, each driver who transports HAZMAT must carry a copy of the registration on board the truck.

Registration can be completed online on PHMSA's [website](#) (PHMSA, 2017) or can be mailed into their office. The application will require the applicant to provide information on the driver and the employing company, the registrant's USDOT number, and information on the mode(s) used to transport HAZMAT; and to pay a registration fee.

**4.1.6.2. Create a descriptive list of HAZMAT shipping paper requirements and include this information in MDT Getting Started Guide.**

The current [MDT Getting Started Guide](#) (MDT, 2013) provides basic information on shipping papers but does not go into detail on what each section of the shipping paper requires. The shipping papers provide vital information about the hazardous materials being transported in a shipment. This information is critical for transporting HAZMAT because these materials can be a danger to the driver, the public, and the environment. Creating a descriptive list of shipping paper requirements would be beneficial for HAZMAT carriers.

A properly prepared shipping paper needs to include the following information listed in Table 3.



**Table 3. Shipping Paper Information**

<b>Item Description</b> <sup>a</sup>	Shipping name <sup>b</sup>
	Hazardous material class and division
	Packing group
	Identification number
	Total quantity and units of measure
<b>Emergency response information</b>	How to safely handle incidents
	Shipping name of HAZMAT
	List risks to health
	List methods for handling spills, fires, or leaks
<b>Emergency contact information</b>	
<b>Shipper certification</b>	

Notes:

<sup>a</sup>. Must include information for all hazardous and non-hazardous items in the shipment

<sup>b</sup>. Shipping name must be properly determined using the Hazardous Materials Table in [49 CFR 172.101](#)

Under [49 CFR 177.817](#), a shipping paper must be retained by the driver as follows: "when the driver is operating a CMV, the shipping paper must be within immediate reach while the driver is restrained by a lap belt; and either readily visible to a person entering the driver's compartment or in a holder which is mounted to the inside of the door on the driver's side of the vehicle." Or, if the driver is not operating the CMV, "in a holder which is mounted to the inside of the door on the driver's side of the vehicle or on the driver's seat in the vehicle."

Furthermore [49 CFR 172.201](#) states that a shipping paper must be retained by the motor carrier for three years after the material is accepted by the initial carrier for hazardous waste (e.g., used motor oil, batteries, etc.), or for two years if transporting any other hazardous materials.

An informative guide titled "[Guide for Preparing Shipping Papers](#)" on shipping papers was created by the Pipeline and Hazardous Materials Safety Administration. This guide can provide an example of the type of information that should be added to the [MDT Getting Started Guide](#) (MDT, 2013).

#### 4.1.6.3. Include information on the inspection requirements for HAZMAT cargo tanks to the MDT Getting Started Guide.

HAZMAT cargo tanks have specific inspection requirements to ensure that the tank is structurally sound. These requirements should be added to either the HAZMAT or Inspection section of the [MDT Getting Started Guide](#) (MDT, 2013). These inspection requirements are listed under [49 CFR 180.407](#) and include the following tests: external visual inspection, an internal visual inspection, lining inspection, leakage test, pressure test, and thickness test. Detailed requirements of these inspection tests are shown in Table 4, but if the cargo tank has any dents or external damage it must be inspected immediately.

**Table 4. Test Requirements for Hazmat Cargo Tank**

Test or Inspection		Interval Period After First Test
External Visual Inspection	All cargo tanks designed to be loaded by vacuum with full opening read heads	6 months
	All other cargo tanks	1 year
Internal Visual Inspection	All insulated cargo tanks, except MC 330, MC 331, MC 338	1 year
	All cargo tanks transporting lading corrosive to the tank	1 year
	All other cargo tanks, except MC 338	5 years
Lining Inspection	All lined cargo tanks transporting lading corrosive to the tank	1 year
Leakage Test	MC 330 and MC 331 cargo tanks in chlorine service	2 years
	All other cargo tanks except MC 338	1 year
Pressure Test	All cargo tanks which are insulated with no manhole or insulated and lined, except MC 338	1 year
	All cargo tanks designed to be loaded by vacuum with full opening rear heads	2 years
	MC 330 and MC 331 cargo tanks in chlorine service	2 years
	All other cargo tanks	5 years
Thickness Test	All unlined cargo tanks transporting material corrosive to the tank, except MC 338	2 years

#### 4.1.7 Vehicle Maintenance Standards

##### **4.1.7.1. Include a list of maintenance records that must be retained by the motor carrier.**

Vehicle inspection, repair, and maintenance standards exist to ensure the safest operation of all commercial motor vehicles. The vehicle maintenance standards require that a driver complete a daily inspection report at the beginning of each working day and a driver inspection report at the end of each working day. Furthermore, each commercial motor vehicle must be thoroughly inspected by a qualified inspector once a year.

The current [MDT Getting Started Guide](#) (MDT, 2013) explains the inspection requirements, but inclusion of a list of maintenance records that must be completed and the retention period for each record would be beneficial for a motor carrier. The list of maintenance records with retention period is shown in Table 5.

**Table 5. Vehicle Maintenance Records & Retention Period**

Record	Record Retention Period
Vehicle Maintenance Record (vehicle maintained by motor carrier)	12 months
Vehicle Maintenance Record (vehicle that has left motor carrier possession)	6 months
Roadside Inspection Report	12 months
Daily Driver Inspection Report	3 months
Periodic Inspection Report	14 months
Record of Inspector's Qualification	12 months after the inspector ceases to perform inspections for motor carrier

#### 4.2 Issues that May Need to Be Addressed in Future Legislative Sessions

##### 4.2.1 Speed Limit

##### **4.2.1.1. The threshold value of “one-ton manufacturer’s rated capacity” may need to be updated.**

The speed limit law ([MCA 61-8-312](#)) employs a threshold value of one-ton (2,000 lbs.) manufacturer’s rated capacity for defining the truck speed limit. This threshold seems to be out of sync with increasing vehicle mass in the United States. Many SUVs, vans, and pickup trucks have

a rated capacity over one ton. This is especially confusing for pickup trucks as most of them exceed the one-ton rated capacity. Based on the law they fall under the vehicle category and therefore need to operate at the truck speed limit, but, in reality, no one drives (or would drive) pickup trucks at this speed limit.

Therefore, this threshold value may need to be raised in the state law ([MCA 61-8-312](#) and [ARM 18.8.517](#)<sup>1</sup>). Alternatively, the law needs to clarify the term “trucks and truck tractors” as it needs to exclude certain truck types (e.g., pickup trucks).

#### **4.2.1.2. The definition of “manufacturer’s rated capacity” needs to be updated.**

The [ARM 23.3.801](#) provision defines manufacturer’s rated capacity as the manufacturer's rated gross *vehicle* weight (i.e., GVWR) for a straight vehicle (bus or heavy truck) or the manufacturer's rated gross *combined* weight (i.e., GCWR) for a truck tractor. This definition needs to be modified because manufacturer’s rated capacity equals the GVWR or GCWR *excluding* the allowable load. In other words, the manufacturer’s rated capacity can be found by subtracting the shipping weight from GVWR or GCWR (according to input from a MDT representative).

### 4.2.2 Roadside Safety Inspection

#### **4.2.2.1. Do rental trucks have to comply with the safety inspection regulations?**

[MCA 61-10-154](#) and [ARM 18.8.1502](#) provide a list of vehicles that are required to comply with the roadside safety inspection standards. Confusion may arise because the laws do not clarify the statutes for rental trucks (e.g., u-hauls). In Montana, rental trucks may have to stop and be inspected if (1) the gross vehicle weight (GVW) is 26,001 lbs. or greater and (2) the vehicle is used for hire (i.e., as a source of income or tax deduction).

---

<sup>1</sup> The [ARM 18.8.517](#) provision originally provided the speed limit of 55 mph for vehicles with special permit. But the Montana Administrative Register Notice 18-157 (<http://www.mtrules.org/gateway/ShowNoticeFile.asp?TID=6877>) has changed it from 55 mph to posted speed limit to be consistent with [MCA 61-8-312](#).

The state laws ([MCA 61-10-154](#) and [ARM 18.8.1502](#)) need to include a discussion of rental trucks with respect to safety inspection standards and rules and whether the rules depend on operation type (interstate and intrastate).

#### 4.2.3 Weigh Station

##### 4.2.3.1. Do buses and rental trucks have to stop at weigh stations?

The [MCA 61-10-141](#) provision determines which vehicles are required to comply with the weigh station rules. However, no legal provisions are found that describe the rules for rental trucks and buses.

Based on input from the MDT Research Panel, if a rental truck is used to move personal belongings, the driver is not required to pull into a weigh station. However, if the truck is used for commerce (i.e., as a source of income), it is considered “commercial.” These vehicles must pull into weigh stations if the GVW or GCW is more than 26,000 lbs., or they may be required to be weighed at portable scales if the GVW or GCW is larger than 10,000 lbs.

The state laws ([MCA 61-10-141](#) and [ARM 18.8.1301](#)) should discuss the rules pertinent to buses and rental trucks and whether the rules vary across different types of buses (charter, scheduled, and school bus).

#### 4.3 Items to be Considered for the Educational Booklet

##### 4.3.1 Speed Limits

###### 4.3.1.1. General Rule.

The speed limits for different truck types and conditions are shown in Table 6.

**Table 6. Speed Limit for Special Vehicle Types**

Vehicle Type and Condition		Speed Limit
Truck or Truck tractor of more than 1 ton “manufacturer’s rated capacity”	On federal-aid Interstate Highway	65 mph
	On other Public Highway	60 mph
Vehicles subject to a term permit or truck-trailer-trailer or truck tractor-semitrailer-trailer-trailer combinations subject to special permit		65 mph

### 4.3.2 Roadside Safety Inspections

#### 4.3.2.1. General Rule.

A vehicle is required to comply with the safety inspection standards if any of the conditions are met as shown in Table 7.

**Table 7. Vehicles required to follow safety standards**

The vehicle must comply with safety standards if it ...	
Has gross vehicle weight rating (GVWR) or gross combination weight rating (GCWR), or gross vehicle weight (GVW) or gross combination weight (GCW), whichever is greater	10,001 lbs. or more (interstate)
	26,001 lbs. or more (intrastate)
Is designed or used to transport (for compensation)	9 people or more (including the driver)
Is designed or used to transport (not for compensation)	16 people or more (including the driver)
Is used to transport hazardous materials and needs to be marked or placarded according to <a href="#">49 CFR 172</a> , <a href="#">49 USC 5103</a>	

#### 4.3.2.2. Safety Inspection Rule for Rental trucks.

- Rental trucks (e.g., u-hauls) must stop for safety inspection if the following conditions are met:
  - ✓ GVWR, GCWR, GVW, or GCW, whichever is greater, is 26,000 lbs. or more and
  - ✓ The vehicle is used for hire (i.e. as a source of income or tax deduction).
- If the rental trucks are used for moving personal belonging and not used for hire, then the safety inspection rules and standards are not applicable to them.

### 4.3.3 Weigh Station Rules

#### 4.3.3.1. General Rule.

- Trucks and CMVs with Gross Vehicle Weight (GVW) of 26,000 lbs. or more must stop at all weigh stations that display an open sign.

- Trucks and CMVs with GVW less than 26,000 lbs. but still over 10,000 lbs. may be required to stop and to be weighed by the portable scale crews at an engineered site.

#### **4.3.3.2. Weigh Station Rule for Rental trucks.**

- If a rental truck (e.g., U-Haul) is used to move personal belongings, the driver is not required to pull into a weigh station.
- If the rental truck is used in commerce or as a source of income, it is considered as a commercial motor vehicle and required to comply with the weigh station rule.

#### **4.3.3.3. Exemptions (Recreational Vehicles).**

Recreational vehicles that are not used for commerce are exempted from the weigh station rule. According to [MCA 61-1-101](#), recreational vehicles include motor homes, travel trailers, or campers. “Used for commerce” means that the vehicle is used for compensation as a source of income or is transported into or through Montana for delivery to a distributor or dealer.

### 4.3.4 Commercial Driver’s Licenses

#### **4.3.4.1. Definition of Commercial Motor Vehicles.**

A commercial driver’s license (CDL) is required to operate a commercial motor vehicle (CMV). However, the definition of CMV varies between the CDL and safety regulations, as shown in Table 8. This difference means that some vehicles that need to comply with the safety regulations do not need a CDL to operate. For example, an 11,000 lbs. commercial vehicle transporting property across states must comply with roadside safety inspection but does not require a CDL to operate.

**Table 8. Definition of Commercial Motor Vehicle**

Provision	Definition	
<a href="#">49 CFR 383.5</a> (CDL)	A motor vehicle or combination of motor vehicles used in commerce to transport passengers or property, if the motor vehicle -	a) Has a GCWR or GCW <sup>a</sup> of 26,001 lbs. or more, inclusive of towed unit(s) with a GVWR or GVW <sup>a</sup> of more than 10,000 lbs.; or
		b) Has a GVWR or GVW <sup>a</sup> of 26,001 lbs. or more; or
		c) Is designed to transport 16 or more passengers including the driver; or
		d) Is of any size and used in transportation of hazardous materials as defined.
<a href="#">49 CFR 390.5</a> (Safety)	any self-propelled or towed motor vehicle used on a highway in <i>interstate</i> commerce to transport passengers or property, if the vehicle -	a) Has a GVWR, GCWR, GVW, or GCW <sup>a</sup> of 10,001 lbs. or more; or
		b) Is designed or used to transport more than 8 passengers (including the driver) for compensation; or
		c) Is designed or used to transport more than 15 passengers (including the driver) and is not used to transport passengers for compensation; or
		d) Is used in transporting hazardous materials according to 49 U.S.C. 5103 and transported in a quantity requiring placarding according to 49 CFR, Subtitle B, Chapter I, Subchapter C.

Notes:

<sup>a</sup>. Whichever is greater.

**4.3.4.2. Classification of CDL.**

Three types of commercial driver’s license can be obtained based on the types of vehicles. The classification scheme of CDL is shown in Table 9.



**Table 9. CDL Classification**

<b>Class A: It allows the holder to operate any combination of vehicle including:</b>	A vehicle exceeding 26,000 lbs. GVWR that is towing a trailer over 10,000 lbs.
	Any vehicle authorized to be driven under Class B, C, or D
<b>Class B: It allows the holder to operate:</b>	A straight vehicle exceeding 26,000 GVWR or any such vehicle that is towing a trailer/vehicle <i>not</i> in excess of 10,000 pounds GVWR
	All vehicles under Class C or D
<b>Class C: It allows the holder to operate:</b>	A single vehicle under 26,000 lbs. GVWR that is towing another vehicle not in excess of 10,000 lbs. GVWR and meets any of the following condition:
	a) A vehicle that hauls hazardous materials in an amount sufficient to require placarding under Title 49 Code of Federal Regulations (CFR) Part 391
	b) A school bus, or any vehicle that hauls 16 or more passengers, including the driver

**4.3.4.3. Driver Qualification Record.**

The following documents are required in a driver qualification file that must be maintained by the motor carrier:

- Driver’s application for employment;
- Information on previous employers for last 3 years, which must be obtained within 30 days of the employment starting date;
- Driver’s driving record for last 3 years;
- Certificate of driver’s road test or copy of the license or certificate that carriers accepted as equivalent to driver’s road test;
- Driver’s medical examiner’s certificate (MEC);
- Annual review of driving record. [A motor carrier must review the driving record of each driver once every 12 months]; and
- Annual driver’s certificate of violations [At least once in a year, a motor carrier must require each driver to prepare and submit a list of all violations of motor vehicle traffic laws and ordinances during last 12 months].

#### 4.3.4.4. Medical Requirements.

All commercial motor vehicle drivers must meet the medical requirements for operating a CMV. Most of the drivers are required to have a valid medical certificate; very few exceptions exist. Details about the medical requirements for operating a CMV may be found on the [DOJ website](#). More details are available in the [Montana Commercial Driver License Manual](#) (DOJ, 2015). It is advisable for the booklet to provide contact persons for drivers should they have questions regarding medical requirements.

#### 4.3.5 Hours of Service (HOS)

##### 4.3.5.1. General Rule.

- For property-carrier: A carrier must abide by the maximum HOS regulation if
  - ✓ it employs a vehicle/ vehicle combination with a GVWR or GCWR over 10,000 lbs. (interstate) or 26,000 lbs. (intrastate); or
  - ✓ it transports Hazardous materials that require a placard.
- For passenger-carrier: A carrier must abide by the maximum HOS regulation if
  - ✓ it uses a vehicle/ vehicle combination with a GVWR over 10,000 lbs. (interstate) or 26,000 lbs. (intrastate); or
  - ✓ it employs a vehicle that is able to transport 9 or more passengers (including the driver), for compensation; or
  - ✓ it uses a vehicle that is able to transport 16 or more passengers (including the driver), not for compensation.

##### 4.3.5.2. Hours of Service Limitations.

The carrying hours of service regulations create limitations on the amount of time a commercial vehicle driver can operate a commercial motor vehicle per day and per week. These regulations exist to limit the number of fatigued drivers and accidents caused by fatigued drivers.

These limitations are listed in Table 10 below.

**Table 10. Hours of Service Limitation**

		Property-Carrying	Passenger-Carrying
Daily	On-Duty <sup>a</sup>	Maximum 14 consecutive hours on-duty following 10 consecutive hours off-duty	Maximum 15 hours on-duty following 8 consecutive hours off-duty
	Driving Time	Maximum 11 hours of driving during the 14 hour on-duty period	Maximum 10 hours of driving following 8 consecutive hours off-duty
	Rest Break <sup>b</sup>	At least 30 minutes rest break before the 8 <sup>th</sup> hour driving	
Weekly	If the motor carrier does not operate every day of the week	Maximum 60 hours on-duty in any period of 7 consecutive days <sup>c d</sup>	Maximum 60 hours on-duty <sup>e</sup> in any period of 7 consecutive days.
	If the motor carrier operates every day of the week	Maximum 70 hours on-duty in any period of 8 consecutive days <sup>c d</sup>	Maximum 70 hours on-duty <sup>e</sup> in any period of 8 consecutive days

Notes:

<sup>a</sup> Any time spent by a driver in a compensated, non-motor carrier position is considered on-duty and must be counted when applying the 14-hour and 60/70 hour rule.

<sup>b</sup> The 30-minute rule applies to drivers operating a CMV outside of the 100-air mile (CDL) or 150 air miles (non-CDL). One air mile = 1.1508 miles.

<sup>c</sup> Any 7 or 8 consecutive day period may restart after 34 hours or more of off-duty time. The 34 or more consecutive hours must include two periods from 1:00 am to 5:00 am. Drivers can only use the 34-hour rule once a week (or once every 168 hours).

<sup>d</sup> These regulations are currently under review by the Federal Motor Carrier Safety Administration (FMCSA) and the U.S. Government Accountability Office (GAO) and may change in the near future.

<sup>e</sup> The 15-hour and 60/70 hour rules count on-duty time spent on compensated, non-motor carrier positions (e.g., a part time position in a retail store).

As mentioned in Section 4.1 of this report, if these regulations change often, it would be worthwhile to include information (phone number, website, etc.) on where a driver can check for current information on the hours of service regulations in the educational booklet.

The [MT Getting Started Guide](#) (MDT, 2013) explains who needs to have a HAZMAT registration number, but not much information on how to register and where to go for more information. The Pipeline and Hazardous Materials Safety Administration (PHMSA) offers a

[brochure](#) about the registration process (PHMSA, 2013). It would be beneficial to provide the link to this brochure in the educational booklet or add the PHMSA brochure to the MDT website.

#### 4.3.6 Hazardous Materials Regulations

##### 4.3.6.1. General Rule.

For carrying the following types and quantities of hazardous materials, separate registration is required:

- Any highway route controlled quantity of a Class 7 (radioactive) material;
- More than 55 lbs. of a Division 1.1, 1.2, or 1.3 (explosive) material in a motor vehicle, rail car or freight container;
- More than 1 liter per package of a material extremely poisonous by inhalation;
- A hazardous material in bulk packaging having a capacity of 3,500 gallons for liquids or gases, or more than 468 cubic feet for solids;
- A shipment in other than bulk packaging of 5,000 pounds gross weight or more than one class of hazardous material for which the transport vehicles require placarding; and
- Any quantity of materials requiring placarding.

##### 4.3.6.2. Registration.







The registration can be completed online on the [PHMSA website](#) (PHMSA, 2017). For registration, the applicant must provide information on the driver and the employing company, the registrant's USDOT number, and information on the mode(s) used to transport HAZMAT, and must pay a registration fee. Further information regarding hazardous materials endorsement are available at the DOJ website for "[commercial vehicle endorsement](#)" (DOJ, 2017).

##### 4.3.6.3. Placarding Requirements.








Placards are used to identify the class or division of a hazardous material in transport. A placard must be easy to read and visible from all sides of the vehicle that is transporting HAZMAT. These placards communicate which HAZMAT are being transported and what emergency response measures should be taken if there is an incident. A placard table, as shown in Table 11, should be included in the educational booklet. Furthermore, it would be beneficial to include information

about contact persons that commercial vehicle operators or motor carriers can call to double-check that they are using the correct placards.








**Table 11. Placarding Requirements for HAZMAT Carrier**

Class	Subdivision	When to Placard	Placard Name	Example Placard <sup>a</sup>
<b>Class 1- Explosives</b>	Division 1.1	Any quantity	EXPLOSIVES 1.1	
	Division 1.2	Any quantity	EXPLOSIVES 1.2	
	Division 1.3	Any quantity	EXPLOSIVES 1.3	
	Division 1.4	Quantity 1,001 lbs. or more	EXPLOSIVES 1.4	
	Division 1.5	Quantity 1,001 lbs. or more	EXPLOSIVES 1.5	
	Division 1.6	Quantity 1,001 lbs. or more	EXPLOSIVES 1.6	

**Table 11. Placarding Requirements for Hazmat Carrier (cont.)**

Class	Subdivision	When to Placard	Placard Name	Example Placard
<b>Class 2- Gas</b>	Division 2.1	Quantity 1,001 lbs. or more	FLAMMABLE GAS	
	Division 2.2	Quantity 1,001 lbs. or more	NON-FLAMMABLE GAS	
	Division 2.3	Any quantity	POISON GAS	
<b>Class 3- Flammable Liquids</b>	N/A	Quantity 1,001 lbs. or more	FLAMMABLE	
<b>Class 4- Other Flammable Substances</b>	Division 4.1	Quantity 1,001 lbs. or more	FLAMMABLE SOLID	
	Division 4.2	Quantity 1,001 lbs. or more	SPONTANEOUSLY COMBUSTIBLE	
	Division 4.3	Any quantity	DANGEROUS WHEN WET	

**Table 11. Placarding Requirements for Hazmat Carrier (cont.)**

Class	Subdivision	When to Placard	Placard Name	Example Placard
<b>Class 5- Oxidizing Substances &amp; Organic Peroxides</b>	Division 5.1	Quantity 1,001 lbs. or more	OXIDIZER	
	Division 5.2	Any quantity	ORGANIC PEROXIDE	
<b>Class 6- Toxic &amp; Infectious Substances</b>	Division 6.1	Any quantity	POISON	
	Division 6.2	Quantity 1,001 lbs. or more	(NONE)	
<b>Class 7- Radioactive</b>	N/A	Any quantity	RADIOACTIVE 1	
<b>Class 8- Corrosives</b>	N/A	Quantity 1,001 lbs. or more	CORROSIVE	
<b>Class 9- Miscellaneous Dangerous Goods</b>	N/A	Quantity 1,001 lbs. or more	CLASS 9	
		Quantity 1,001 lbs. or more	(NONE)	
		Quantity 1,001 lbs. or more	COMBUSTIBLE	

<sup>a</sup>. Source of Images: [Labelmaster](#)

#### 4.3.7 Vehicle Maintenance Standards

##### **4.3.7.1. General Standard.**

A motor carrier must meet general maintenance standards for each of its commercial motor vehicles. General maintenance standards for commercial motor vehicles are:

- All parts and accessories of CMV must be in safe and proper operating condition.
- Push out windows, emergency doors, emergency door markings, and lights in buses must be inspected every 90 days.
- Keep proper maintenance records for each CMV.
- Vehicle parts should be properly lubricated and free of oil.
- CMV should not be operated in a condition which will cause an accident or breakdown.

##### **4.3.7.2. Inspection Report.**

- Every motor carrier must require its drivers to prepare an inspection report at the end of each day's work on the vehicle operated. This report must identify any deficiency discovered by the driver.
- If the driver were to discover a deficiency, then the motor carrier must certify on the report that the defect has been repaired.
- A periodic inspection of each commercial motor vehicle is required, which must be completed by a qualified inspector every 12 months. The periodic inspection report should contain the following details:
  - ✓ Contact information on the inspector,
  - ✓ Information on the motor carrier,
  - ✓ Date of the inspection,
  - ✓ Vehicle inspected,
  - ✓ Vehicle components inspected and description of the results of the inspection, and
  - ✓ Certification of the accuracy and completeness of the inspection.



**4.3.7.3. Maintenance Records.**

Every motor carrier must retain the records of vehicle maintenance and inspection. Records as shown in Table 12 must be retained by the carrier.

**Table 12. Vehicle Maintenance Record**

<b>Record</b>	<b>Record Retention Period</b>
Vehicle Maintenance Record (vehicle maintained by motor carrier)	12 months
Vehicle Maintenance Record (vehicle that has left motor carrier possession)	6 months
Roadside Inspection Report	12 months
Daily Driver Inspection Report	3 months
Periodic Inspection Report	14 months
Record of Inspector's Qualification	12 months after the inspector ceases to perform inspections for motor carrier

## 5 CONCLUSION

This project identified gaps that may exist in heavy truck/bus regulations and made recommendations on what needs to be done to bridge those gaps and help the public better understand current laws. The results can be implemented by MDT in three ways.

First, the changes recommended to the state's administrative documents (e.g., [Montana Trucker's Handbook](#) and [Montana CDL Manual](#) [DOJ, 2015]) (Section 4.1) can help state agencies make quick and easy fixes in their guidebooks for truckers.

Second, the issues that are identified in Section 4.2 can facilitate conversations with the Montana State Legislature and pinpoint the gaps that may exist in the regulations that would require changes to the laws. The first step towards any improvement to the laws is to identify what the issues are, and the findings in this section forged this first step.

Last, but not the least, the educational booklet will be posted to the MDT website and/or shared with transit providers and stakeholders in the trucking industry. The booklet will serve as an easy-to-read guide to clarify requirements for the public. In the next phase, the team will work with the MDT Research Panel to finalize the list of items to be included in the booklet, create an initial design, and revise the booklet per the panel's input.

## APPENDIX A – SURVEY INSTRUMENT (TASK 1)

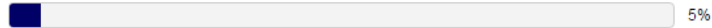


### MDT Commercial Motor Vehicle Survey

Montana Department of Transportation (MDT) is sponsoring a project to investigate disparities in the rules/regulations of **heavy trucks and buses** to help the private sector understand pertinent **regulations** and to assist with future **legislature** to clarify these definitions and language. For that purpose, the Western Transportation Institute (WTI) at Montana State University is conducting this **survey**. Participation in the survey is **voluntary**, and you can choose to stop at any time as you wish.

If you have any questions or comments, please contact Dr. Yiyi Wang at (406) 994-6051 or [yiyi.wang@ce.montana.edu](mailto:yiyi.wang@ce.montana.edu).

Thank you so much for your time!



Next

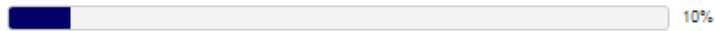


## MDT Commercial Motor Vehicle Survey

### 1. What's your affiliation?

- Trucking Company - Interstate Operations
- Trucking Company - Intrastate Operations
- Trucking Company - Interstate and Intrastate Operations
- Driver
- Contractor
- Outfitter
- Highway Patrol or Law Enforcement
- Motor Carrier Services/Montana Department of Transportation
- Transit Agency
- Federal Highway Administration
- Motor Vehicle Registration

Other (please specify)



Prev

Next

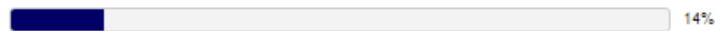


**MDT Commercial Motor Vehicle Survey**

**2. What heavy truck(s)/buses do you typically operate?**

- Truck + Trailer/Semi-Trailer
- Truck + Trailer/Semi-Trailer + Trailer
- Automobile/Boat Transporter
- Pickup Truck with Trailer
- Minivans/Conversion Vans (Capable of hauling 0-8 people)
- Extended Van/Cutaways/Heavy Duty Buses (capable of hauling 9 or more people)
- N/A

Other (please specify)



Prev Next



**MDT Commercial Motor Vehicle Survey**

**3. Have you or anyone you know been confused about regulations pertaining to heavy trucks or buses in the following areas? Please describe each situation and if/how you resolved it.**

a) Speed Limit



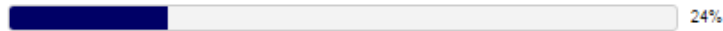
Prev Next



## MDT Commercial Motor Vehicle Survey

**3. Have you or anyone you know been confused about regulations pertaining to heavy trucks or buses in the following areas? Please describe each situation and if/how you resolved it.**

b) Roadside Safety Inspection:



Prev

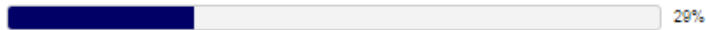
Next



**MDT Commercial Motor Vehicle Survey**

**3. Have you or anyone you know been confused about regulations pertaining to heavy trucks or buses in the following areas? Please describe each situation and if/how you resolved it.**

c) Weigh Station Use:



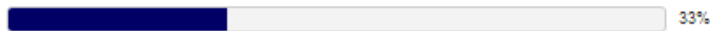
Prev Next



**MDT Commercial Motor Vehicle Survey**

**3. Have you or anyone you know been confused about regulations pertaining to heavy trucks or buses in the following areas? Please describe each situation and if/how you resolved it.**

d) Commercial Driver License (CDL):



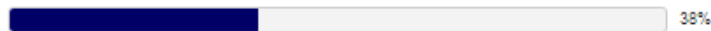
Prev Next



**MDT Commercial Motor Vehicle Survey**

**3. Have you or anyone you know been confused about regulations pertaining to heavy trucks or buses in the following areas? Please describe each situation and if/how you resolved it.**

e) Tax Regulation:



Prev Next



**MDT Commercial Motor Vehicle Survey**

**3. Have you or anyone you know been confused about regulations pertaining to heavy trucks or buses in the following areas? Please describe each situation and if/how you resolved it.**

f) State Chain Laws:



Prev Next

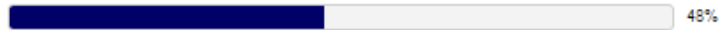




**MDT Commercial Motor Vehicle Survey**

**3. Have you or anyone you know been confused about regulations pertaining to heavy trucks or buses in the following areas? Please describe each situation and if/how you resolved it.**

g) Insurance or Financial Responsibility:



Prev Next



**MDT Commercial Motor Vehicle Survey**

**3. Have you or anyone you know been confused about regulations pertaining to heavy trucks or buses in the following areas? Please describe each situation and if/how you resolved it.**

h) Number of Hours You Can Drive:



Prev Next



**MDT Commercial Motor Vehicle Survey**

**3. Have you or anyone you know been confused about regulations pertaining to heavy trucks or buses in the following areas? Please describe each situation and if/how you resolved it.**

i) Hazardous Material Regulations:



Prev Next



**MDT Commercial Motor Vehicle Survey**

**3. Have you or anyone you know been confused about regulations pertaining to heavy trucks or buses in the following areas? Please describe each situation and if/how you resolved it.**

j) Vehicle Maintenance Standards (e.g., safety management controls, safety rating, etc.):



Prev Next



**MDT Commercial Motor Vehicle Survey**

**3. Have you or anyone you know been confused about regulations pertaining to heavy trucks or buses in the following areas? Please describe each situation and if/how you resolved it.**

k) Others, please specify:



Prev Next



**MDT Commercial Motor Vehicle Survey**

**4. Do you have any suggestions on how to make heavy truck/bus regulations more consistent and easier to understand?**



Prev Next



**MDT Commercial Motor Vehicle Survey**

5. Do you have any other comments pertaining to commercial vehicle regulations?



Prev Next



**MDT Commercial Motor Vehicle Survey**

6. How useful do you think is the Montana Department of Transportation Motor Carrier Safety Assistance Program guide [Getting Started](#)?

- Never read it
- Read it, not useful at all
- Read it, of some value but does not explain some situations I encountered
- Read it, of great value and explains (all) my questions regarding the safety aspects of CMV/s

Other (please specify)



Prev Next



**MDT Commercial Motor Vehicle Survey**

7. Do you believe the "Getting Started" guide is missing important heavy truck/bus information relative to safety?

- Yes, the guide is missing important information
- No, the guide does not miss important information



Prev Next



**MDT Commercial Motor Vehicle Survey**

8. What information would you find most helpful to include in the "Getting Started" guide?



Prev Next



**MDT Commercial Motor Vehicle Survey**

9. If applicable, please specify the resources that you find more useful to clarify heavy truck/bus regulations.



Prev Next



**MDT Commercial Motor Vehicle Survey**

10. Do you have any comments about the survey (e.g., wording, missed questions/options, confusing questions/options, etc.)?



Prev Done

## APPENDIX B – SURVEY RESPONSES (TASK 1)

### B.1 Speed Limits

All motor vehicles must follow speed limits posted on the road for safe operation. Heavy vehicles require longer braking distance; therefore, they should travel at a slower speed and comply with lower speed limits, which are often marked as the truck speed limits. Survey results suggest that respondents generally have four basic types of questions or concerns regarding speed limits for trucks and heavy vehicles:

1. When is the truck speed limit applicable?
2. Do buses, vans, or pickups have to follow the truck speed limit?
3. Why is the truck speed limit different than the passenger car speed limit?
4. Are speed limits effectively enforced?

The following sections provide details on individual comments from the respondents, grouped into the above four categories.

#### *1.1 When is the truck speed limit applicable?*

*Comments:*

- 1) *The question has always been what "trucks" must follow the truck speed limits. Statute refers to "manufacturers 1 ton rated capacity" manufacturers have not rated vehicle in this manner for many years.*
- 2) *Understanding what trucks must obey highway truck speed limits.*
- 3) *What determines what a "truck" is with regard to having to comply with the posted truck speed limit?*
- 4) *When does "Truck" speed apply?*
- 5) *Montana law for truck speed limits indicate that any vehicle over one-ton manufacturer's GVWR are restricted to the truck speed limits where posted. I can't tell you how many times I see these F350's and 3500's or bigger are running 75-85 mph on the interstate and sometimes towing a trailer with snowmobiles, 4-wheelers, etc. loaded. People assume the truck speeds are only for tractor/trailer combos.*

### 1.2 *Do buses, vans or pickups have to follow the truck speed limit?*

*Comments:*

- 1) *Why are buses which are obviously rated for more than 1 ton considered passenger vehicles as far as the speed limit is concerned?*
- 2) *Our bus drivers are instructed not to exceed 70 mph.*
- 3) *Unsure if transit buses are considered trucks or not.*
- 4) *As all of our vehicles (minivans and vans) are smaller, we follow the speed limit for cars.*
- 5) *A truck is a truck. A pickup is a pickup.*
- 6) *Buses not needing to comply with the truck speed limit. Inform the driver.*

### 1.3 *Why is the truck speed limit different than the passenger car speed limit?*

*Comments:*

- 1) *The different speed limits for trucks and cars is dangerous, especially in eastern and central Montana. I can see it, maybe, in western Montana.*
- 2) *A person did not understand why trucks were going slower than cars when the weather was good. I told them that trucks have a different speed limit.*
- 3) *Only confusion here would be the reasoning someone used to set 2 separate speed limits on the same 2 lane roads. One for trucks and one for cars. This only causes conflicts between the two different sized vehicles. Very unsafe from what we have observed. This needs changed.*
- 4) *Yes, slow trucks impede the traffic and people pass them in dangerous situations. The speed limit should be the same for every vehicle on the road.*
- 5) *No however the new gap in 15mph on the interstate is too much- very unsafe for our trucks.*
- 6) *Why do they have a different speed limit?*

### 1.4 *Speed Violations of Heavy Trucks/Vehicles*

*Comments:*

- 1) *It appears that most heavy vehicles including buses totally disregard posted speed limits and travel at whatever speed they want, day or night. Our trucks (truck + trailer/semitrailer + trailer) are limited at 65 mph.*
- 2) *Not myself or the Driver's I work with. We haul Heavy Occasionally and adhere to speed limits as required by our permits. I do see it a lot where heavy haulers drive faster than they are supposed to.*
- 3) *Seems to me that truckers in general disregard their posted speed limit. I never see a truck pulled over for speeding. I travel a lot on all of Montana's roads and see trucks speeding often.*



### 1.5 Other Comments

*Comments:*

- 1) *No. Mountain Line (a transit line in Missoula) operates in the urban area, on roads that have a single speed limit for all vehicles.*
- 2) *No confusion as we operate (vans and heavy-duty buses) in the urban area of Missoula.*
- 3) *The laws as published are not ambiguous as the enforcement of those (speed limit) laws.*

### B.2. Roadside Safety Inspection

Roadside safety inspection serves as a safety check-up of commercial motor vehicles. The safety inspection is conducted by trained personnel (e.g., peace officer, highway patrol officer, and MDT employees) and can happen at many locations, such as permanent facilities (e.g., weigh stations) or portable sites at rest areas, truck stops, or rural locations.

Montana does not require a statewide periodical safety inspection<sup>2</sup>, and inspectors may stop a vehicle at any time upon reasonable doubt of unsafe conditions of the vehicle. There are six levels of inspections. Level III is the most common type of inspection in Montana; and Level I is the most comprehensive inspection among the six levels. The inspection standards and procedures were developed by the Commercial Vehicle Safety Alliance (CVSA), an organization of federal/provincial, state, and local officials and industry stakeholders from the United States, Canada, and Mexico. Five basic types of questions or ambiguities emerged from the survey responses:

1. Violation of safety inspection report
2. Violation of logbook requirement
3. Inspectors' qualifications and inspection standards
4. Differences in the inspection requirements between Interstate and Intrastate operation
5. Do buses or U-Hauls have to be inspected?

---

<sup>2</sup> To promote compliance with the Federal Motor Carrier Safety Administration's (FMCSA's) regulations, the Commercial Vehicle Safety Alliance (CVSA) provided a manual entitled "Compliance, Safety and Accountability (CSA) for Commercial Motor Vehicle Fleets". The manual provides details on the criteria, procedures, and trainings involved in roadside safety inspections (e.g., safety evaluations, interventions, and self-audits).

### 2.1 Violation of safety inspection report

*Comments:*

- 1) *There has been some confusion on how the violations on the [Roadside Safety Inspection] report effect the driver and carrier independently. The difference was explained using the SMS [Safety Measurement System] system and explaining violations to convictions.*

### 2.2 Violation of logbook requirement and hours of service

*Comments:*

- 1) *Most roadside inspections in Montana are pretty "straight forward". We do appreciate the card given by inspector at end of inspection giving us opportunity to respond or comment. Last year one of our trucks was inspected by Tribal Police and fined for log book violation = \$ 250.00. Our legal counsel advised we could easily win, however time lost and expenses would far exceed \$250.00. So, we just paid fine. We are still confused about log books. Operating in the Intermountain area, where weather changes quickly, long distances between towns, need to stop and assist in accidents, we cannot comply at all times. However, Montana DOT are as a rule very understanding. Not so in other states or Providences.*

### 2.3 Inspectors' qualifications and inspection standards

*Comments:*

- 1) *Each officer views the regulations differently and most seem uneducated to the law they are trying to enforce. Remedy is to educate if possible or get someone who can understand the law.*
- 2) *Roadside inspections need to be more consistent and quantifiable. Too much is too subjective and open to interpretation or personal bias.*
- 3) *The worst problem of all! The DOT will write citations on the slightest violation, however, they are not mandated to give our drivers (our company) good roadside inspections if they cannot find anything out of compliance. So, what will happen is the officer will hold up our trucks roadside for over 15 minutes (which is what we have been told on many occasions is mandatory for the DOT officer to produce some kind of inspection report.) Then if they cannot find any violations, they just let the driver go with no paperwork. There are level I, II, and III roadside inspections and they are the only thing that will help your SAFER score. We own and operate 14 trucks and it had been at least 5 years since a DOT officer had issued us a good level I inspection. Until we had a mandatory safety audit this August. That officer performed 10 level I inspections at our facility and we received quarterly inspections stickers for our trucks. This has proven to us that the roadside inspection process is a stacked deck. The DOT officers are not giving out level I and rarely level II inspections. If you look at the number of level I roadside inspections given statewide last year, the DOT issued less than 5% level I roadside inspections. No trucking company can get a good score in SAFER due to low good roadside inspections. This triggers DOT audits to the trucking company. This creates more bureaucracy and more government control because the entire agency is based on what is happening roadside. But when they are not producing good roadside inspection reports like they should be, they are creating a false image of what trucking companies are doing. The DOT considers all trucks and drivers an imminent danger to the travelling public. We are not criminals, we are tax paying, job creating companies.*

### 2.4 Differences in inspection requirements between Interstate and Intrastate operation

*Comments:*

- 1) *Personally no [not confused about inspection requirements]. It is very confusing to public and industry. Different rules apply to CDL requirements and vehicle inspect ability requirements then throw in the difference between inter and intrastate rules and it is a real quagmire.*

*2.5 Do buses or U-Hauls have to stop for inspection or comply with safety inspection regulations?*

*Comments*

- 1) When a scale house is open, is a U-Haul required to stop? Is a school bus or other passenger type bus?*
- 2) With exempt plates, how often is the MDOT coming by to inspect buses.*
- 3) Assume we don't have to abide by these. [this is from a transit provider]*

**B.3. Weigh Station Use**

Trucks and commercial motor vehicles (CMVs) may need to stop at weigh stations for the purpose of weighing and inspection. Weight can be inspected by peace officers, highway patrol officers, or employees assigned by the Montana Department of Transportation ([MCA 61-10-141](#)). Three questions or issues emerged from the survey responses:

1. What vehicles are required to stop at a weigh station? Do buses need to abide by the rules?
2. Do CMVs with Pre-Pass have to stop or pull in at weigh stations?
3. The public (truckers) appeared to be unaware of some weigh station regulations and questioned the qualifications of weigh-station officers.

### 3.1 What vehicles are required to stop at a weigh station?

*Comments:*

- 1) *There has been some confusion as to when the carrier is required to pull into the station. They were directed to MDT MCA 61-10-141 mentioned department of transportation have the authority of weigh station*
- 2) *Does a scheduled bus service have to stop?*
- 3) *Is it 14,000 or 26,000 that you don't have to stop? When sticker on door posts added together go over 26000 do you stop even though you are under? Permit use and how to get one when picking unit up on highway and next stop is a scale to weigh you. Different scale operators treat you differently.*
- 4) *Assume we don't have to abide by these. [this is from a transit provider]*
- 5) *We do not stop at weigh stations. [this is from a transit provider]*
- 6) *Not Applicable to us. [this is from a transit provider]*
- 7) *When is a vehicle required to pull into a station?*
- 8) *Motor Carrier Services need to work with the Transit Section to clarify oversight of safety regulations. Scheduled buses should not have to stop at a weigh station.*
- 9) *Yes, when to stop?*
- 10) *When driving a U-Haul or school bus/passenger bus are you required to stop?*
- 11) *As noted in the previous answer, we are told we have to go through the weigh station, but we know of no other transit system that is required to go through a weigh station.*

### 3.2 Do CMVs with Pre-Pass have to stop or pull in at weigh stations?

*Comments:*

- 1) *YES. Pre-pass with a truck why some have to stop and others can go through. Should be a system if you have been checked by someone you should not have to stop at every station. This kills your driving time and productivity. Especially in the same day.*

### 3.3 Driver/inspector education related to weigh station regulations and qualifications of weigh-station officers

*Comments:*

- 1) *Once again on uneducated individuals at a weigh station who do not know how to interpret the law and the remedy would be educated individual or replace them with somebody who can understand the regulations and laws.*
- 2) *MDT doesn't do a very good job of educating folks on this.*

### B.4. Commercial Driver's License (CDL)

A commercial driver's license (CDL) is required to operate any vehicle that meets the definition of a Class A, Class B, or Class C vehicle. Driving a commercial motor vehicle (CMV) requires a

higher level of skills and knowledge compared to driving a non-commercial vehicle. In order to obtain a CDL, a driver must pass a skills test and a knowledge test. Drivers of CMVs must obtain a special license or commercial driver's license. They are also held to a higher standard while operating their vehicles, and any serious offense or traffic violations can affect their ability to maintain their CDL.

The responses to the survey show confusion or ambiguity in the following areas:

1. What types of CDL exist?
2. Who needs to apply for a CDL and who is exempt?
3. Who can apply for a CDL?
4. How do you obtain a CDL?
5. What medical requirements are needed to obtain/maintain a CDL?

#### *4.1 What types of CDL exist?*

*Comments:*

- 1) *Clarification on what trucks/buses are required to have a CDL and which ones do not.*
- 2) *I have had multiple questions regarding requirements for CDLs when the vehicle is a pickup truck/trailer combination. The regulations were explained discussing the weight restrictions with GVWR of the truck, the trailer, the combination, and loaded weight.*
- 3) *Yes, in relationship to GVW.*
- 4) *Yes, they are confused about types of CDL licenses there are.*

#### *4.2 Who needs a CDL and who is exempt?*

*Comments:*

- 1) *Yes, why can you drive a truck if you are a farmer? But you need a CDL for anyone to drive anything anywhere else. Other than maybe out of state.*
- 2) *It seems ridiculous to require a CDL for a one ton pickup pulling a trailer with GVW less than 26,000.*
- 3) *These pickups towing the goose-neck trailers that have a GVWR of 10,000 lbs. but you see them loaded with equipment that even a lay person can identify as weighing more than that and the person driving most likely doesn't realize they actually need a Class A most likely.*

#### 4.3 Who can apply for a CDL?

*Comments:*

- 1) *CDL applicability rules differ from vehicle inspection rules which causes confusion. A large portion of the public in business don't understand "Operating in Commerce" and believe if they aren't hauling for hire the rules don't apply to them.*
- 2) *Not always clear when a CDL is required.*
- 3) *I ask what they want to drive and inform of the rules.*

#### 4.4 How do you obtain a CDL?

*Comments:*

- 1) *People don't understand about the training that goes into getting a CDL.*
- 2) *I think the Motor Vehicle Department has helped clarify the licensing process with its manuals and online access to licensing information.*
- 3) *We answer questions everyday about obtaining a CDL and what is required.*
- 4) *I work for the State of Montana Motor Vehicle Division as the CDL Compliance Auditor. Often when I am auditing driver examiner's I see commercial learner's permit holders who drive to testing without a commercial licensed driver. Many of these drivers leave the testing areas without a licensed driver and are not properly licensed as well.*

#### 4.5 What medical requirements are needed to obtain/maintain a CDL?

*Comments:*

- 1) *Which commercial vehicles are required to be medically qualified under FMCSA 391.41?*
- 2) *When does the CDL come into play physicals for drivers and making sure the right people are notified?*
- 3) *We have been told when a driver goes and gets his medical card the doctor will make sure it is attached to the CDL. It does not work that way. All the doctor does is report it to FMSCA the driver has to make sure it gets attached to his CDL and not at the driver's license bureau it has to be done through Helena still.*

#### 4.6 Other Comments

*Comments:*

- 1) *I have worked under FMCSA, MCA of MT, Administrative Rules of MT, and MVD Bureau policies since 1996 (shortly after the birth of the commercial driver's license) since then constant changing of federal regulations and the resulting changes in Legislative mandates and the subsequent changes in state administration seem to have led to what appears to have caused this survey. Example: FMCSA defines a Class A as a CMV but MDT tickets based on weight. This confuses the drivers and creates conflict between bureaus. Which commercial vehicles are required to be medically qualified under FMCSA 391.41?*

#### B.5. Hours of Service

In order for a driver to stay alert and operate a commercial motor vehicle safely, he or she must get enough rest. The Federal Motor Carrier Safety Administration (FMCSA) has implemented regulations on the number of hours a commercial motor vehicle operator can remain behind the wheel. The survey responses reveal two basic questions about the hours of service regulations:

1. What are the carrying hours of service regulations?
2. What exceptions and exemptions exist for the carrying hours of service regulations?

The following sections will provide details on the comments regarding hours of service regulations.

#### 5.1 What are the carrying hours of service regulations?

*Comments:*

- 1) *What does carrying hours of service mean? Hours of service rules are very confusing, just like the question. The HOS rules are continually being meddled with making compliance as well as enforcement extremely difficult. Add to this the ever-growing list of carriers being granted exemptions from certain parts of the rules.*
- 2) *With the current state of affairs nobody understands these regulations.*
- 3) *Don't think this applies to buses.*
- 4) *Yes, for FTA have not found a definite time frame.*
- 5) *Being prior law enforcement, most drivers are aware of their hours of service restrictions.*
- 6) *This subject is the subject of ridicule even in popular music. Once again, regulations are based on need and are required to be applied to all in a lawful manner and although confusing to some, should be known to those who they affect.*
- 7) *No, but team driver rules are vague and ignorant the way the regulations are now.*



### 5.2 What exceptions and exemptions exist for the hours of service regulations?

*Comments:*

- 1) *My understanding is that public transit systems are exempt from FMCSA regulations, but I'm not sure everyone is clear about this.*
- 2) *Yes, every driver has limitations on how tired they are or how long they can drive. That is an individual thing. In the oil field, we could write off certain hours parked. Logging we cannot write off time we are setting waiting for loader, etc. The slick roads are also a problem and we can't write all those hours off either. We are regulated so much you can't make a living. Safety should be first but not break the company by cutting out hours that should not be held against driver hours. Most of us sleep better at home you should be allowed to get there.*
- 3) *There needs to be a log hauling exemption like oil field trucks get. Due to the quickly changing conditions of logging roads, it is not always possible to fit your hours into the DOT regulations when working in remote areas on dirt roads. The single owner operators who are running logging trucks are able to fudge their hours if they get into a bind while in the woods loading and cannot get out and to the sawmill within the hours the DOT says. Logging companies with multiple logging trucks have been targeted with HOS violations. They are easy targets as the DOT knows the driver gets into situations in the mountains off road that are beyond their control sometimes. Log haulers need an occasional exemption for weather and road condition problems.*

### 5.3 Other Comments

*Comments*

- 1) *Yes. It's in a constant state of change and regulated by bureaucrats with no concept of real world conditions. It tends to be more of a political issue than a practical or safe one.*
- 2) *How about we change it again, then change part of it back to the old way? Who makes this stuff up? Find one safe set of rules for hours of service then stick with it. Our confusion here would be the US government and their inability to productively address this issue.*
- 3) *This have never come up as we are only open 8 hours.*
- 4) *Our Collective Bargaining Agreement provides limits on operator driving hours that coincide with the FTA hours of service regulation.*
- 5) *Yes, we try to comply the best we can depending on weather conditions, etc.*
- 6) *Maybe on different situations.*
- 7) *We have this area covered in our manual, so, we don't see a lot of questions.*

### B.6. Hazardous Material Regulations

The transportation of hazardous materials (HAZMAT) can be a great risk not only to the driver but to the surrounding environment. Transportation regulations for hazardous materials exist to ensure the safety of the driver and the environment during the loading, transportation, and

unloading of all hazardous materials. The comments from the survey have revealed these three basic questions about hazardous materials regulations.

1. What are the hazardous material regulations?
2. What hazardous materials require placarding?
3. How do you obtain a hazardous material endorsement?

The following sections describe details on the comments regarding hazardous materials.

### *6.1 What are the hazardous material regulations?*

*Comments:*

- 1) Numerous questions have been received on hazardous materials. All the requirements. The majority of the questions have been referred to a hazardous materials specialist.*
- 2) My experience indicates that most drivers are aware of HAZMAT restrictions and licensing requirements.*
- 3) Now things get more confusing due to the very critical need for strict compliance and the complications relating to hazardous materials in general.*

### *6.2 What hazardous materials require placarding?*

*Comments:*

- 1) Placarding on small amounts of fuels (100 to 200 gals), oxygen and acetylene bottles and water (1000 gals plus) on rig tenders (service trucks). MDT educators at local and national convention classes have for the most part said we do not on the small amounts we carry but that has been questioned by some including roving MDT inspectors. Depends on who you get.*

### 6.3 How do you obtain a hazardous material endorsement?

*Comments:*

- 1) *Information on the process for a commercial driver to obtain/retain their hazardous material endorsement.*
- 2) *Details about the Security Threat Assessment to obtain a hazardous material endorsement on a CDL.*
- 3) *Give person a driver license manual and tell them to look in the hazardous material section. I stay out of the HAZMAT stuff.*
- 4) *We are always referring drivers to TSA for fingerprinting and explaining the testing rules and where to find the information to take their hazardous tests.*
- 5) *We have had individuals bring trucks which were not professionally “purged” for CDL field testing. We do not permit testing with any vehicle towing of previously carrying hazardous materials.*

### B.7. Vehicle Maintenance Standards

Vehicle inspection, repair, and maintenance standards exist to ensure the safest operation of all commercial motor vehicles. These standards help to reduce any injuries or accidents involving a commercial motor vehicle. The survey has revealed two areas of confusion or ambiguity.

1. What are the general vehicle maintenance standards regulations?
2. Who is subject to vehicle maintenance standards?

#### 7.1 What are the general vehicle maintenance standards regulations?

*Comments:*

- 1) *Always confusing to the industry and public particularly the applicability standards.*
- 2) *The Federal Transit Administration provides clear guidance on vehicle maintenance standards. No confusion.*
- 3) *Confused, some areas make no sense. We work with our insurance carriers and comply with their requests.*
- 4) *For the most no but often wonder if we are doing everything we are supposed to be doing.*
- 5) *Inform them to call DOT or a qualified mechanic that does DOT inspections.*
- 6) *Most drivers/owners are up to speed on safety requirements for their vehicles from my experience.*

*7.2 Who is subject to vehicle maintenance standards?*

*Comments:*

- 1) No, although there is some confusion at the state level as far as who has oversight of safety as related to transit systems, the Transit Section or MCS.*

*Other Comments*

*Comments:*

- 1) No, you should be able to see, be seen, and most important be able to stop.*
- 2) No. We have to stay on top of this or you will go out of business.*
- 3) No. Not affected by this subject until a substandard vehicle is coming at me on the public way.*
- 4) We don't have questions in this area.*
- 5) No, although there is some confusion at the state level as far as who has oversight of safety as related to transit systems, the Transit Section, or MCS.*

## APPENDIX C – GAPS AND RECOMMENDATIONS (TASK 2)

### C.1. Speed Limit

No.	Question/Confusion	Relevant Sources	Gaps	Recommendations
C.1.1	Is the lower (truck) speed limit applicable for buses and other heavy vehicles?	<a href="#">MCA 61-8-312</a> <a href="#">ARM 18.8.517<sup>a</sup></a>	The statutes have not clarified whether buses and other heavy vehicles must follow the truck speed limit or not. The manufacturer’s rated capacity of these vehicles exceed the one-ton criterion but these are not “trucks or truck tractors”.	Clarify whether buses must abide by the rules; revise “trucks or truck tractors” in MCA or ARM; provide a list of vehicles, if any, excepted from the truck speed limit law.
C.1.2	Does the threshold value “one-ton manufacturer’s rated capacity” need to be updated to reflect increasing vehicle mass?	<a href="#">MCA 61-8-312</a>	The one ton (2000 lbs.) manufacturer’s rated capacity seems to be out of sync with increasing vehicle mass. Many private vehicles (e.g., pickups, minivans, and SUVs) exceed the one-ton threshold.	Consider raising the one-ton vehicle weight; indicate exceptions (e.g., pickup trucks, minivans, and SUVs) to the speed limit laws
C.1.3	Which speed limit is applicable for a vehicle towing another vehicle or a trailer?	<a href="#">MCA 61-8-312</a>	The provision has not clarified the speed limit for vehicles that pull other vehicles or trailers.	Revise the state law; clarify the statutes in the educational booklet
C.1.4	The ambiguity associated with “truck speed limit” can be explained by adding new passages in the ARM.	<a href="#">MCA 61-8-312</a>	<a href="#">MCA 61-8-312</a> is the only State provision focused on the speed limit laws. Much detail may be missing. However, they are not explained in the ARM provisions, which are supposed to explain things that are not made clear in the MCA provisions.	Consider adding passages in the ARM to clarify the aforementioned ambiguity regarding truck speed limit rules.

NOTE:

<sup>a</sup> The ARM 18.8.517 provision originally provided the speed limit of 55 mph for vehicles with special permit. But the Montana Administrative Register Notice 18-157 (<http://www.mtrules.org/gateway/ShowNoticeFile.asp?TID=6877>) has changed it from 55 mph to posted speed limit to be consistent with [MCA 61-8-312](#).

*C.1.1 Is the truck speed limit applicable for buses and other heavy vehicles?*

The speed limit rules for trucks are discussed in [MCA 61-8-312](#): trucks or truck tractors that exceed the one-ton (2,000 lbs.) manufacturer’s rated capacity are subject to the “truck” speed limit. Ambiguity arose as a result of the provision not clarifying whether buses and other heavy vehicles must follow the truck speed limit or not. According to the current MCA provision, a vehicle must comply with the truck speed limit if (1) it is a “truck or truck tractor” and (2) its manufacturer’s rated capacity is over one-ton (2,000 lbs.).

Recommendations:

- It is advisable to write buses into the speed laws given their heavy weight and associated safety impacts (e.g., slower braking and higher gravity center and rollover risk). In other words, buses (school bus, charter bus, and scheduled bus) must comply with the truck speed limits as long as their manufacturer’s rated capacity is greater than one ton.
- Consider replacing “trucks or truck tractors” in [MCA 61-8-312](#) with language such as “trucks, truck-tractor combinations, and buses.”
- Provide a list of vehicles that are excepted from the speed limit laws (e.g., minivans, SUVs, and certain makes and models of pickup trucks)

*C.1.2 Does the threshold value “one-ton manufacturer’s rated capacity” need to be updated to reflect increasing vehicle mass?*

The one-ton (2,000 lbs.) manufacturer’s rated capacity, as employed in the [MCA 61-8-312](#) provision, seems to be out of sync with increasing vehicle mass in the United States. Many vehicles that are regularly used by households in this country have rated capacity that is more than 2,000 lbs. Figure C.1.1. shows examples of such vehicles.

Appendix C – Gaps & Recommendations  
(Task 2)



2014 RAM 1500, GVWR 6,010 ~ 6,900 lbs. & rated capacity 4,101~4,991 lbs.



2016 Ford F-150, GVWR 6,100 ~ 7,050 lbs. & rated capacity 3,897 ~ 4,847 lbs.



2014 GMC Sierra 1500, GVWR 6,700 ~ 7,200 lbs. & rated capacity 4,567~5,067 lbs.



2015 Chevy Silverado 2500, GVWR 9,300 ~ 9,900 lbs. & rated capacity 3,012 ~ 3,612 lbs.



2015 RAM 2500, GVWR 8,510 ~ 9,000 lbs. & rated capacity 5,476~5,996 lbs.



2016 Honda Odyssey, GVWR 6,019 lbs. & rated capacity 4,613 ~ 4,396 lbs.

**Figure C.1.1. Makes and Models of Vehicles that Exceed the One-Ton Rated Capacity**

Recommendations:

- The MDT research panel should discuss whether the laws might need to raise the one-ton threshold to reflect increasing vehicle mass.
- Provide examples of vehicles that must comply with the speed laws in the education booklet, and/or indicate exceptions (e.g., certain vehicle types like pickup trucks, minivans, and SUVs) that are not required to adopt the truck speed limit even though their rated capacity meets the weight requirement.

*C.1.3 Which speed limit is applicable for a vehicle towing another vehicle or a trailer?*

It is unclear how the state laws define speed limit for vehicles that pull trailers or other vehicles. An informal source from a commercial towing [website](#) suggested that in Montana when a vehicle is used to tow a trailer or another vehicle, the maximum speed is 65 mph according to the state tow laws. Nevertheless, we were unable to locate the legal provision that supports this citation.

Recommendations:

- State laws ([MCA 61-8-312](#) or its ARM counterparts like [ARM 18.8.517](#)) should clarify which speed limits apply to vehicles towing other vehicles or trailers.
- The educational booklet may provide examples on when the truck speed limits apply for vehicles that pull other vehicles or trailers.

*C.1.4 The ambiguity associated with “truck speed limit” can be explained by adding new passages in the ARM.*

Truck speed limits are stated in the [MCA 61-8-312](#) provision and explained in [ARM 18.8.517](#) (relative to special vehicle combinations like a truck-trailer-trailer or truck tractor-semitrailer-trailer-trailer). Table C.1.1. summarizes the current truck speed laws in [MCA 61-8-312](#).

However, there are a number of gaps that may exist in the speed limit regulations (see, Sections 1.1 through 1.3). The ARM is supposed to explain the MCA provisions relative to how the state agencies implement those laws written in MCA. Therefore, it would be beneficial to create passages in the associated ARM sections to clarify and explain those gaps identified.



**Table C.1.1. Montana Speed Limit Laws (Source: [MCA 61-8-312](#))**

Vehicle Type and Condition		Speed Limit
Truck or Truck tractor of more than 1 ton “manufacturer’s rated capacity” <sup>a</sup>	On federal-aid interstate highway	65 mph
	On other public highway	60 mph
Vehicles subject to a term permit or truck-trailer-trailer or truck tractor-semitrailer-trailer-trailer combinations subject to special permit		65 mph
Motor driven cycle not equipped with a headlamp or lamps that are adequate to reveal an object at a distance of 300 ft. ahead <sup>b</sup>		35 mph

Notes:

<sup>a</sup>. Except different speed limits that are provided according to [MCA 61-8-303](#) (speed restriction), [MCA 61-8-309](#) (establishment of special speed zone) and [MCA 61-8-310](#) (school zone) by local authorities.

<sup>b</sup>. At any time from one-half hour after sunset to one-half hour before sunrise and at any other time when due to insufficient light or unfavorable atmospheric conditions persons and vehicles on the highway are not clearly discernible at a distance of 500 feet ahead.

**Recommendation:**

Create ARM provisions to supplement the [MCA 61-8-312](#) (speed limit laws) and address the gaps that may exist, such as those identified in this project.

C.2. Roadside Safety Inspection

No.	Question/Confusion	Relevant Sources	Gaps	Recommendations
C.2.1	Do rental trucks have to comply with the safety inspection regulations?	<a href="#">MCA 61-10-154</a> <a href="#">ARM 18.8.1502</a>	According to MDT, in Montana, rental trucks like U-Hauls may be required to stop and to be inspected if the GVW exceeds 26,000 lbs. and the vehicle is used for hire. However, no state laws were found in that regard.	Legal provisions (MCA or ARM) need to be updated to clarify statutes for rental trucks.
C.2.2	Truckers' complaints about good inspections being dismissed by the safety inspectors	Frequently Asked Questions on the Safety Measurement System (SMS)	There seems to be a discrepancy between the federal rules and how the rules are executed at the state level.	Safety inspectors should be held responsible and give credit to the CMV carrier or operator for a good inspection.

*C.2.1 Do rental trucks have to comply with the safety inspection regulations?*

The provision ([MCA 61-10-154](#)) on which heavy vehicles must comply with roadside safety inspection standards are generally clear, with the vehicle types summarized in Table C.2.1.

Ambiguity can arise on whether rental trucks (e.g., u-hauls) fall into these types.

Based on the Panel’s comments, in Montana, rental trucks like u-hauls may have to stop and be inspected if (1) the gross vehicle weight (GVW) is 26,001 lbs. or greater and (2) the vehicle is used for hire (i.e., as a source of income or tax deduction). However, no state laws in the ARM or MCA were found regarding the applicability of safety inspection rules on rental trucks. In addition, it is unclear if the rules for rental trucks differ between interstate and intrastate operations.

**Table C.2.1. Vehicles that Must Comply with the Safety (Inspection) Standards (Source: [MCA 61-10-154](#))**

The vehicle must comply with safety standards if it ...	
Has gross vehicle weight rating or gross combination weight rating, or gross vehicle weight or gross combination weight, whichever is greater	10,001 lbs. or more (interstate)
	26,001 lbs. or more (intrastate) <sup>a</sup>
Is designed or used to transport (for compensation)	9 people or more (including the driver)
Is designed or used to transport (not for compensation)	16 people or more (including the driver)
Is used to transport hazardous materials and needs to be marked or placarded according to <a href="#">49 CFR 172</a> , <a href="#">49 USC 5103</a>	

Notes:

<sup>a</sup>. Excludes farm vehicles operating solely in Montana.

**Recommendation:**

The state laws (MCA and ARM) should be updated to include a discussion of rental trucks with respect to the safety inspection rules and if the rules depend on operation type (interstate and intrastate).

*C.2.2 Truckers' complaints about good inspections being dismissed by the safety inspectors.*

The Trucker's Survey in Task 1 revealed that some inspectors do not give credit for a good inspection. This was echoed by a comment from the Panel. This can be frustrating for a CMV carrier and operator and may indicate a discrepancy with the federal regulations. According to the Federal Motor Carrier Safety Administration, all inspection findings count for the agency's evaluation of motor carriers and drivers. Inspections that find no violations help to improve the safety score of the motor carriers and drivers that are computed by the Safety Measurement System (SMS).

Recommendation:

Safety inspectors should be held responsible and give credit to the CMV carrier or operator for a good inspection. The MDT can consider coordinating with their safety inspectors in reference to this complaint to ensure that good inspections are credited and reported to the SMS.

C.3. Weigh Station

No.	Question/Confusion	Relevant Sources	Gaps	Recommendations
C.3.1	Which vehicles are exempted from the weigh station regulations?	<a href="#">MCA 61-10-141</a> <a href="#">ARM 18.8.1301</a> <a href="#">Montana Trucker's Handbook</a>	Inconsistency exists between MCA 61-10-141 and the <a href="#">Trucker's Handbook</a> .	The <a href="#">Montana Trucker's Handbook</a> needs to be updated to be consistent with the MCA and ARM provisions.
C.3.2	Do buses and rental trucks have to stop at weigh stations?	<a href="#">MCA 61-10-141</a> <a href="#">ARM 18.8.1301</a> <a href="#">Montana Trucker's Handbook</a>	No legal provisions were found that describe the weigh station rules with respect to vehicle types	State laws (MCA and ARM) need to incorporate weigh station rules for buses and rental trucks.

*C.3.1 Which vehicles are exempted from the weigh station regulations?*

The weigh station rule ([MCA 61-10-141](#)) states that vehicle or vehicle combination over 26,000 lbs. GVW must stop at weigh station; whereas vehicle or vehicles combinations with GVW less than 26,000 lbs. but over 10,000 lbs. can be weighed by portable scale crews at an engineered site; except recreational vehicles, travel trailer, and motor homes.

There exists some inconsistency between the [MCA 61-10-141](#) provision and the [Montana Trucker’s Handbook](#) in reference to the list of vehicles that are exempted from the weigh station regulations, as summarized in Table C.3.1. Figure C.3.1 illustrates the three vehicle types that are exempted according to [MCA 61-10-141](#).

**Table C.3.1. Vehicles Exempted from the Weigh Station Regulations (Source: [MCA 61-10-141](#) and [Montana Trucker’s Handbook](#))**

Vehicles exempted according to <a href="#">MCA 61-10-141</a>	Vehicles exempted according to Montana Trucker’s Handbook
Recreational Vehicles	Recreational Vehicles– new or used-- that are not traveling into or through Montana for delivery to a distributor or dealer
Travel Trailers	<del>Pickup Trucks under 14,000 GVW</del> <sup>a</sup>
Motor Homes	Passenger Cars

Notes:

<sup>a</sup>. This exception of pickup trucks is no longer valid, but still mentioed in the Montana Trucker’s Hanbook.



Recreational Vehicles



Travel Trailers



Motor Homes

**Figure C.3.1. Vehicles Exempted from the Weigh Station Regulations**

Recommendations:

The [Montana Trucker’s Handbook](#) needs to be updated to remove the “14,000 lbs. pickup trucks” from the exception vehicle types. The 14,000 lbs. pickup truck was removed during the State of Montana’s 2013 legislation session.

It may improve clarity if the [MCA 61-10-141](#) provision expands on the definition of “recreational vehicles”, that is, recreational vehicles that are not traveling into or through Montana for delivery to a distributor or dealer as suggested in the [Montana Trucker’s Handbook](#).

Based on [MCA 61-1-101](#), recreational vehicles represent a general vehicle class, which includes motor homes, travel trailers, and campers. Therefore, in the interest of cohesion, the exception list provided in [MCA 61-10-141](#) may need to be modified into recreational vehicles (e.g., motor homes and trailers/campers).

*C.3.2 Do buses and rental trucks have to stop at weigh stations?*

Based on the Panel’s comments, if a rental truck is used to move personal belongings, the driver is not required to pull into a weigh station. However, if the truck is used for commerce (i.e., as a source of income), it is considered “commercial”. These vehicles must pull into weigh stations if the GVW or GCW is more than 26,000 lbs. or they may be required to be weighed at portable scales if the GVW or GCW is larger than 10,000 lbs. However, no legal provisions were found to support this requirement.

The state regulations ([ARM 18.8.1301](#) and [MCA 61-10-141](#)) may need to formally state the laws regarding rental trucks and buses. A formal declaration in these legal regulations is critical to dispel doubts the public may have, especially when informal sources (e.g., commercial webpages) can provide misleading accounts of the “laws”.

Recommendations:

The state laws (MCA or ARM) should provide specific information for buses and rental trucks regarding weigh station use.

The [Montana Trucker’s Handbook](#) and the educational booklet may also clarify the statutes on when the weigh station rules apply to rental trucks and buses.



Future legislation might also consider clarifying whether the weigh station regulations vary across different types of buses (charter, scheduled, and school bus).

C.4. Commercial Driver’s License

No.	Question/Confusion	Relevant Sources	Gaps	Recommendations
C.4.1	Why does the definition of a CMV differ between the CDL and the Safety Regulations?	<a href="#">49 CFR 383.5</a> <a href="#">49 CFR 390.5</a>	The definition of a CMV differs between the CDL regulations ( <a href="#">49 CFR 383.5</a> ) and the safety regulations ( <a href="#">49 CFR 390.5</a> ).	Provide examples of vehicles that do not need a CDL but do have to meet the safety regulations.
C.4.2	Which types of vehicles require a commercial driver license (CDL) to operate?	<a href="#">ARM 23.3.502</a> <a href="#">Montana Department of Justice Commercial Driver License Manual (DOJ, 2015 MDT Getting Started Guidebook (MDT, 2013)</a>	A CDL is required to operate any Class A, B, or C vehicle. However, the vehicle classification definitions vary amongst <a href="#">ARM 23.3.502</a> , the <a href="#">MT DOJ website</a> , the <a href="#">MDT CDL Manual</a> (DOJ, 2015), and the <a href="#">MDT Getting Started Guidebook</a> (MDT, 2013).	The vehicle classification should be made consistent across various regulatory sources.
C.4.3	How long does a motor carrier need to keep a driver qualification record on file?	<a href="#">49 CFR 391.51</a>	Violations involving driver qualification record accounted for 17 percent of the critical violations reported during motor carrier reviews in Montana in 2015.	There is a Driver Qualification File Checklist in the <a href="#">MDT Getting Started Guide</a> (MDT, 2013). It may be worthwhile to revisit this checklist and make the public aware of this resource.
C.4.4	Who needs to be medically examined to operate a CMV?	<a href="#">49 CFR 391.45</a>	A large number of violations reported during roadside safety inspection in Montana in 2015 related to drivers not possessing a valid medical certificate.	It is advisable to provide online links and contact information for the public, so they can ask questions and find up-to-date information.

*C.4.1 Why does the definition of a commercial motor vehicle (CMV) differ between the CDL and safety regulations?*

[49 CFR 383.5](#) defines a commercial motor vehicle (CMV) as it relates to commercial driver license regulations. [49 CFR 390.5](#) defines a CMV as it relates to safety regulations. Table C.4.1. summarizes the differences in CMV definitions between these two regulations.

**Table C.4.1. Commercial Motor Vehicle Definitions (Sources: [49 CFR 383.5](#) and [49 CFR 390.5](#))**

Provision	Definition	
<a href="#">49 CFR 383.5</a> (CDL)	A motor vehicle or combination of motor vehicles used in commerce to transport passengers or property, if the motor vehicle -	a) Has a GCWR or GCW <sup>a</sup> of 26,001 lbs. or more, inclusive of towed unit(s) with a GVWR or GVW <sup>a</sup> of more than 10,000 lbs.; or
		b) Has a GVWR or GVW <sup>a</sup> of 26,001 lbs. or more; or
		c) Is designed to transport 16 or more passengers including the driver; or
		d) Is of any size and used in transportation of hazardous materials as defined.
<a href="#">49 CFR 390.5</a> (Safety)	any self-propelled or towed motor vehicle used on a highway in interstate commerce to transport passengers or property, if the vehicle -	a) Has a GVWR, GCWR, GVW, or GCW <sup>a</sup> of 10,001 lbs. or more; or
		b) Is designed or used to transport more than 8 passengers (including the driver) for compensation; or
		c) Is designed or used to transport more than 15 passengers (including the driver) and is not used to transport passengers for compensation; or
		d) Is used in transporting hazardous materials according to 49 U.S.C. 5103 and transported in a quantity requiring placarding according to 49 CFR, Subtitle B, Chapter I, Subchapter C.

Notes:

<sup>a</sup>. Choose the largest value amongst the weights listed.

The largest difference between the two definitions is the weight limits. Some vehicles may need to meet the safety regulations but not need a CDL to operate. For example, an 11,000 lbs. commercial vehicle transporting property must meet the federal safety regulations but does not necessarily require a CDL to operate. The public may not be aware of the difference between the two versions of CMV definitions, and that might be a source of confusion.

Recommendations:

It would be helpful if the educational booklet can clarify that the [49 CFR 390.5](#) provision defines a CMV as it relates to safety standard/inspection: interstate trucks that are 10,001 lbs. or more are subject to safety inspection, compared with intrastate trucks over 26,001 lbs. being required to be inspected. By comparison, the [49 CFR 383.5](#) provision defines a CMV as it pertains to CDL, and the weight limit (26,001 lbs.) relates to the weights used in vehicle classification.

The booklet could also include clarification on why these definitions are different and examples of a vehicles that do not require a CDL but do have to meet the safety regulations.

*C.4.2 Which types of vehicles require a commercial driver license (CDL) to operate?*

In the State of Montana, vehicles that meet the definition of a Class A, Class B, or Class C vehicle require the operator to have a CDL. Ambiguity arises because the vehicle classifications differ among various sources in Montana.

According to [ARM 23.3.502](#),

- "Class A" authorizes driving any combination of two or more vehicles, including articulated buses with a GCVWR exceeding 26,001 lbs. [articulated buses should belong to Class B; missing "towing a vehicle/trailer in excess of 10,000 lbs." ] and also all vehicles authorized to be driven under Class B and C or with a regular driver's license (Class D).
- "Class B" authorizes driving any single vehicle in excess of 26,001 lbs. GVWR, or any such vehicle towing a vehicle not in excess of 10,000 lbs. GVWR, or any bus which exceeds 26,001 lbs. GVWR and is capable of carrying more than 15 passengers including the driver, and all vehicles under class C, and vehicles authorized to be driven with a regular driver's license (Class D).
- "Class C" authorizes driving any single vehicle less than 26,001 lbs. GVWR or any such vehicle towing a vehicle not in excess of 10,000 lbs. GVWR when the vehicle(s) are or must be placarded for hazardous materials under the provisions of 49 C.F.R., Part 172, or any bus in this weight class capable of carrying more than 15 passengers including the driver and any vehicle authorized to be driven with a regular driver's license (Class D).

According to the [Montana Department of Justice \(DOJ\)](#),

- Class A License allows the holder to operate any combination of vehicles, including:
  - ✓ A vehicle exceeding 26,000 GVWR that is towing a trailer over 10,000 pounds,
  - ✓ Articulated buses with a GCVWR exceeding 26,000 pounds [This type of bus should in fact fall in Class B], or
  - ✓ any vehicle authorized to be driven under Class B, C, or D.
- Class B License allows the holder to operate:
  - ✓ A vehicle exceeding 26,000 GVWR that is towing a trailer at/or under 10,000 pounds GVWR [consider revising to “A straight vehicle exceeding 26,000 lbs. GVWR or any such vehicle towing a trailer/vehicle not in excess of 10,000 lbs. GVWR”];
  - ✓ A school bus, or any bus or other vehicle hauling 16 or more passengers, including the driver; or
  - ✓ All vehicles under Class C or D.
- Class C License allows the holder to operate:
  - ✓ A single vehicle under 26,000 pounds; [missing “and meets any of the following conditions”],
  - ✓ A vehicle that hauls hazardous materials in an amount sufficient to require placarding under [Title 49 Code of Federal Regulations \(CFR\) Part 391](#), or
  - ✓ A school bus, or any vehicle that hauls 16 or more passengers, including the driver.

According to the [Commercial Driver License Manual \(CDL Manual\)](#) (DOJ, 2015),

- Class A (Combination Vehicle)—Any combination of vehicles with a gross combination weight rating (GCWR) of 26,001 lbs. or more [Any combination of vehicles for which the towing vehicle exceeds 26,000 lbs. GVWR], provided the gross vehicle weight rating (GVWR) of the vehicle(s) being towed is in excess of 10,000 lbs.;

- Class B (Heavy Straight Vehicle) – Any single vehicle with a GVWR of 26,001 lbs. or more, or any such vehicle towing a vehicle not in excess of 10,000 lbs. GVWR. [missing Articulated buses with a GCVWR exceeding 26,000 pounds]; and
- Class C (Small Vehicle)—Any single vehicle, or combination of vehicles, that meets neither the definition of Class A nor Class B, but is designed to transport 16 or more passengers including the driver [Some buses may fall in Class B if their GVWRs exceed 26,000 lbs., according to [ARM 23.3.502](#) and [DOJ](#)], or is used in the transportation of materials found to be hazardous which require the motor vehicle to be placarded.

The Montana Department of Transportation [Getting Started Guidebook](#) (MDT, 2013) defines the vehicle classifications in a very similar way to the [Montana CDL Manual](#) (DOJ, 2015):

- Class A – Combination of vehicles with a gross combination weight rating (GCWR) over 26,000 lbs., [Any combination of vehicles for which the towing vehicle exceeds 26,000 lbs. GVWR] provided the GVWR of the vehicle(s) being towed is greater than 10,000 lbs. A driver with a Class A license will be able to drive a Class A, B, and C commercial vehicle with proper endorsements when required.
- Class B – single vehicles with a GVWR over 26,000 lbs., or any such vehicle towing a vehicle under 10,000 lbs. GVWR. A driver with a Class B license will be able to driver Class B and C commercial vehicles with proper endorsements when required. [missing Articulated buses with a GCVWR exceeding 26,000 pounds]
- Class C – vehicles with a GVWR less than 26,001 lbs. Class C’s are strictly for vehicles designed to carry 16 or more people, or that carry hazardous material in quantities large enough to require a placard. A class C license holder will be able to driver Class C commercial vehicles only.

These differences in the definitions of a Class A, Class B, and Class C vehicle may cause confusion as to which trucks and buses are required to have a CDL for operation.

#### Recommendations:

Unifying the vehicle classifications across all Montana sources would help clarify the confusion surrounding which trucks and buses are required to have a CDL. Through a project meeting with MDT, it appears that the MT DOJ website has the most current vehicle classifications. It is

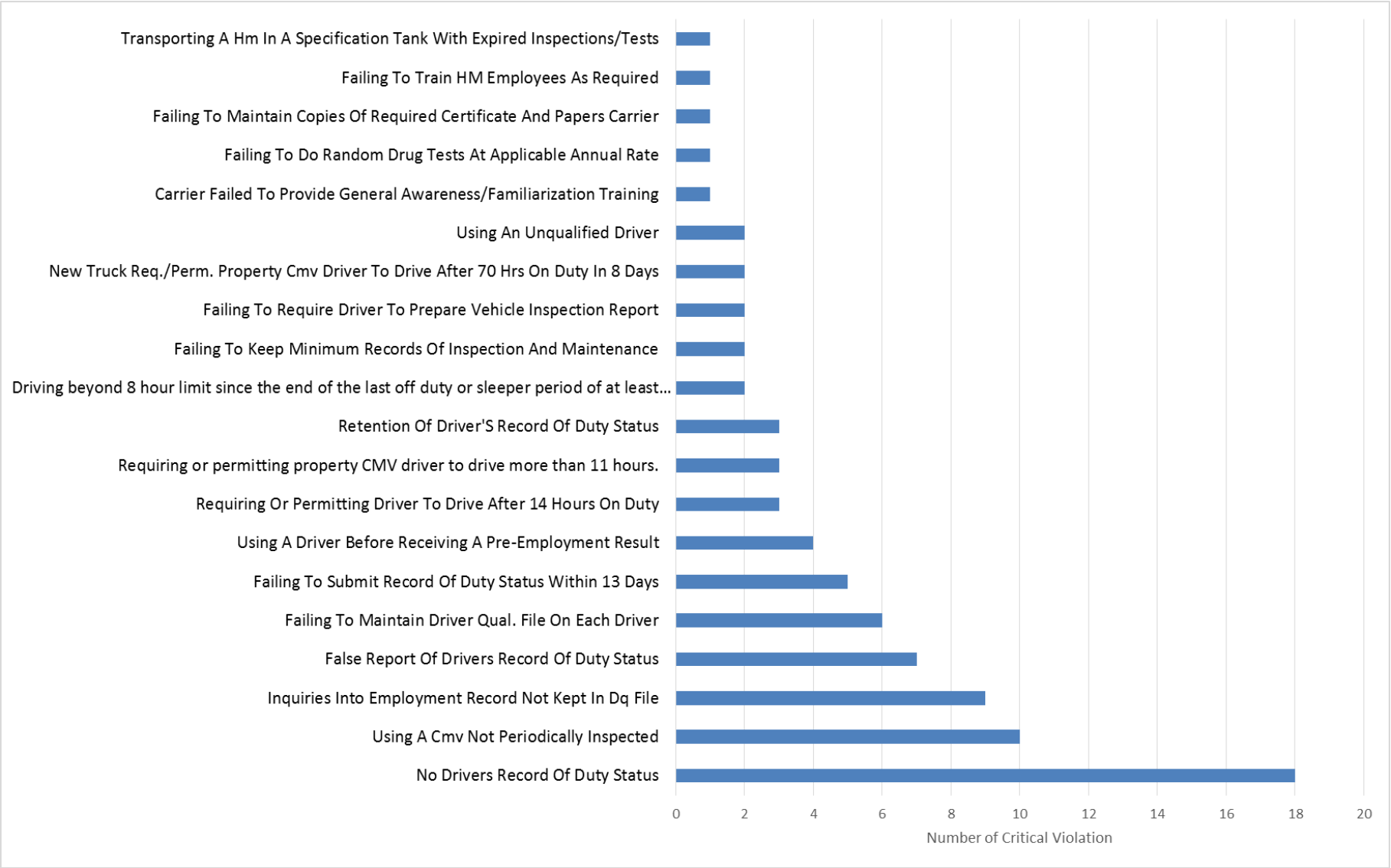
advisable to revisit the [MT Getting Started Guide](#) (MDT, 2013), the [MT CDL Manual](#) (DOJ, 2015), and the [ARM 23.3.502](#) to address the definitions so that the vehicle classifications are unified.

Furthermore, a clear list of vehicle classifications with examples and photos of vehicle types that meet the classification would be beneficial and may be considered in the educational booklet.

*C.4.3 How long does a motor carrier need to retain a driver qualification record and what documents should be included in that record?*

According to [49 CFR 391.51](#), motor carriers must maintain a driver qualification file for each driver that they employ. This qualification file contains the driver’s CDL test, medical examination, and records of violations. Confusion may exist regarding how long a motor carrier needs to retain a driver qualification record and what documents need to be included in the qualification file.

The motor carrier reviews are conducted by the FMCSA every year in the United States, Mexico, and Canada to uncover potential safety violations or respond to a motor carrier’s request to re-evaluate safety performance and change a safety rating (FMCSA, 2015a). The 2015 reviews in Montana identified a total of 85 critical violations. Figure C.4.1 groups these violations into 20 general areas. These 85 violations include nine cases of “inquiries into employment record not kept in the driver qualification file” and an additional six cases of “failing to maintain a driver qualification file on each driver”. While these violations relative to driver qualification records account for only about 17 percent of the total critical violations reported in Montana, these violations reveal that some motor carriers may not be informed on the driver qualification file requirements.



**Figure C.4.1. Critical Violations Reported in the Motor Carrier Reviews in Montana (2015) (Source: FMCSA, 2015a)**



The driver qualification file requirements are discussed in [49 CFR 391.51](#). This regulation states that each motor carrier must maintain a driver qualification file for each driver employed by the motor carrier. This driver qualification file must include the following:

1. The driver’s employment application;
2. Information on previous employers for the last 3 years;
3. Driver’s driving record for the last 3 years;
4. Certificate of driver’s road test or copy of the license or certificate that carriers accepted as equivalent to driver’s road test;
5. Valid medical examiner’s certificate;
6. Annual review of driving record by the motor carrier; and
7. Annual driver’s certificate of violations including all violations of motor vehicle traffic laws and ordinances, other than violations involving only parking, of which the driver has been convicted ([49 CFR 391.27](#)).

This driver qualification file must be maintained while the driver is employed by the motor carrier. The motor carrier must retain the driver qualification file for 3 years after an employee leaves their service.

Recommendations:

The Montana Department of Transportation provides a very useful resource entitled “[Driver Qualification File Checklist](#)” that explains what must be maintained in the driver qualification file and the relevant regulations. This checklist is extremely helpful but some motor carriers may not know that this exists.

The educational booklet may also provide a checklist with explanations on which documents needs to be filed and for how long the records must be kept.

*C.4.4 Who needs to be medically examined to operate a commercial motor vehicle?*

The Montana roadside inspections in 2015 revealed an array of mistakes commonly made by truckers with respect to medical certificate, shown in Figure C.4.2. (FMCSA, 2015d). Among the 7,395 driver violations reported, 326 cases involved property-carrying CMV operators not having or possessing a valid medical certificate, 79 cases involved an expired medical certificate,

and another 62 involved a driver not possessing a medical certification (FMCSA, 2015d). During reviews of motor carriers in Montana in 2015, one of the 85 critical violations involved a motor carrier using a driver who was not medically examined and certified and one of the 85 critical violations involved a motor carrier using a driver who was not medically re-examined every 24 months.

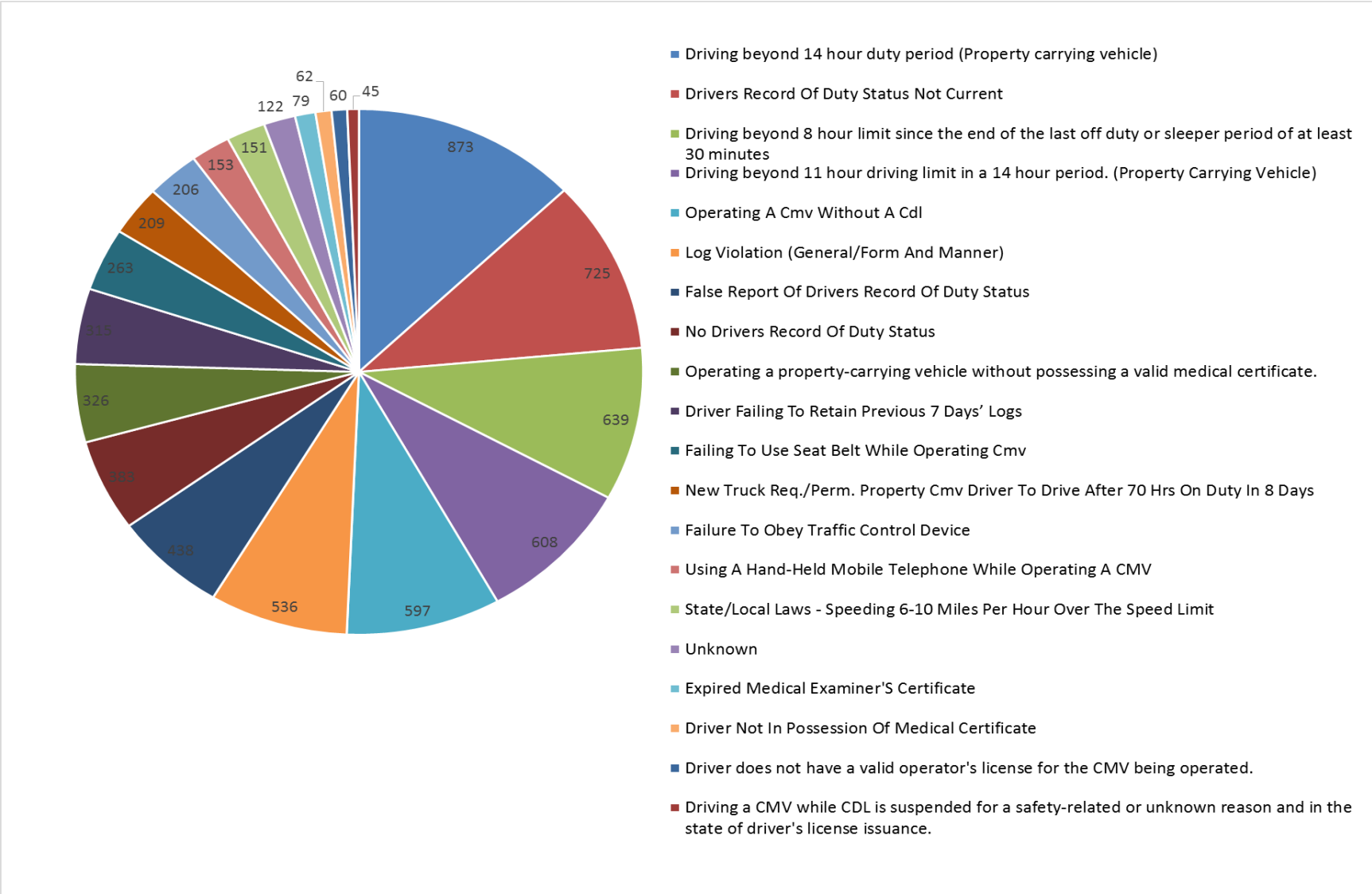


Figure C.4.2. Violations Reported in the Roadside Safety Inspections in Montana (2015) (Source: FMCSA, 2015d)

These statistics imply that the public may be confused about the medical examination requirements. The medical examination regulations exist in order to ensure that a CMV operator is physically and mentally healthy enough to safely operate a commercial motor vehicle. This medical examination must be completed by a certified medical examiner. These certified medical examiners must pass a training course and certification exam in order to be listed on the National Registry of Certified Medical Examiners. The medical examiner must keep detailed records on the driver's general physical fitness, vision, and any other factors that will affect the driver's ability to operate a commercial motor vehicle safely.

This physical exam is valid for a maximum of 24 months, but the medical examiner may issue a certificate for shorter time periods if the examiner believes that the driver has a condition that must be closely monitored, for example high blood pressure.

If the medical examiner believes that the driver is physically capable of safely operating a CMV, the examiner will provide one copy of the examination report to the driver and provide a copy of a completed medical certificate to the current or prospective employer. This medical record must be electronically uploaded to the Federal Motor Carrier Safety Administration (FMCSA). The medical examiner must retain records of these examinations for three years from the date of examination. These records and information must be available to authorized FMCSA, federal, state, or local law enforcement representatives within 48 hours after a request is made.

The legal provision under [49 CFR 391.45](#) dictates the types of individuals who must undergo medical examination to determine if they are physically and mentally capable of operating a CMV. Most commercial vehicle operators need to obtain a valid medical certificate; very few exceptions exist and medical requirements can sometimes be revised on a case by case basis.

Recommendation:

During a project meeting with MDT on February 19, 2016 it was decided that the medical requirements are an area that we will not research further for this project. It is advisable to include information in the educational booklet (Task 4 of this project) on where people can go online to review at this information or to find contact persons.

C.5. Hours of Service (HOS)

No.	Question/ Confusion	Relevant Sources	Gaps	Recommendations
C.5.1	What is the driver's record of duty status?	<a href="#">49 CFR 395.8</a>	Violations involving driver's record of duty status (grid or logbook) amounted to 29 percent of all critical violations revealed in motor carrier reviews and 22 percent of violations reported during roadside safety inspection in Montana in 2015.	These logbook requirements were discussed in the <a href="#">MDT Getting Started Guide</a> (MDT, 2013), but it would be worthwhile to make the FMCSA Hours of Service Logbook Examples document readily available to drivers.
C.5.2	How often does a driver need to submit his or her record of duty status?	<a href="#">49 CFR 395.8</a>	The record of duty status must be submitted to the employing motor carrier within 13 days following completion of the form. The driver needs to retain the previous 7 consecutive days' records.	It appeared that the <a href="#">MDT Getting Started Guide</a> (MDT, 2013) did not provide information on how often an operator needs to submit a record of duty status to the motor carrier listed. It might be worthwhile to add this.
C.5.3	How long does a driver's record of duty status need to be retained?	<a href="#">49 CFR 395.8</a>	The driver needs to retain his or her record of duty status for the previous 7 consecutive days. The motor carrier must retain these records for six months.	It would be beneficial to create lists of documents that a driver must retain and documents that a motor carrier must retain with the length of time for retention and a link to the related regulations.

No.	Question/ Confusion	Relevant Sources	Gaps	Recommendations
C.5.4	What are the hours of duty limitations?	<a href="#">49 CFR 395.3</a>	Violations involving hours of duty represented 10 percent of the critical violations reported by motor carrier reviews and 28 percent of violations reported during roadside safety inspection in Montana in 2015.	It would be worthwhile to include a table of these hours of service limitations for both property and passenger carrying drivers in easy to read language in the <a href="#">MT Getting Started Guide</a> (MDT, 2013).
C.5.5	What exceptions exist for carrying hours of service regulations?	<a href="#">49 CFR 395.1</a>	A table of exceptions was available in FMCSA’s report entitled “Interstate Truck Driver’s Guide to Hours of Service” (2016). These exceptions were not found in any of the MT resources for truckers.	FMCSA provides an extensive list of HOS exceptions. It may be beneficial to add this to the <a href="#">Getting Started Guide</a> (MDT, 2013).
C.5.6	If Hours of Service regulations are constantly changing, where can a CMV operator check for updates?	<a href="#">49 CFR 395.3</a>	Both survey comments and MDT feedback suggested that some of the Hours of Service regulations are constantly changing.	It would be worthwhile to include information (phone number and website) on where a driver can check for the most up-to-date information on hours of service regulations.

### *C.5.1 What is the driver's record of duty status?*

Seven cases of the 85 critical violations reported in the Montana motor carrier reviews in 2015 involved "false reporting of driver's record of duty status"; and another 18 cases involved "no driver's record of duty status" (FMCSA, 2015c). These account for approximately 29 percent of the critical violations in Montana in 2015.

Furthermore, 23 percent of the 7,395 cases of driver violations reported in roadside inspections in Montana in 2015 related to driver's record of duty status (i.e., grid). These include 725 cases regarding "driver's record of duty status not current," 535 cases of "log violation – general form/manner," and 438 cases of "false report of driver's record of duty status" (FMCSA, 2015d). These high numbers of violations revealed potential confusion by drivers and motor carriers regarding the requirements for a driver's record of duty status.

[49 CFR 395.8](#) discusses the regulations for a driver's record of duty status. This record of duty status keeps track of a driver's hours of on-duty, off-duty, and driving time. While the regulations do not specifically say what the log form should look like, the log must include a 24-hour graph grid that shows time on-duty, off-duty, and driving (Figure C.5.1) and the following information:

- Date,
- Total driving miles for the day,
- Truck or tractor and trailer number,
- Name of motor carrier,
- Main office address,
- Signature of driver,
- Name of any co-drivers,
- Time zone used,
- Remarks,
- Total hours, and
- Shipping document numbers.

The entries on this record must be kept current to the last change of duty status and only completed by the driver. These entries must be completed on a specific grid or on an automatic on-board recorder. If a driver is found to have a false entry on his or her log book, that driver will be considered out of service (OOS) and cannot be required or permitted to drive until the driver has been off-duty for an appropriate amount of time.

<b>1: OFF DUTY</b>	
<b>2: SLEEPER BERTH</b>	
<b>3: DRIVING</b>	
<b>4: ON DUTY (NOT DRIVING)</b>	
<b>REMARKS</b>	

**Figure C.5.1. Logbook Grid (Source: FMCSA, 2015b)**

Recommendation:

These logbook requirements are discussed in the [MDT Getting Started Guide](#) (MDT, 2013). The Federal Motor Carrier Safety Administration (FMCSA) also provides an excellent document that explains the log book requirements with examples. It would be worthwhile to make the [FMCSA Hours of Service Logbook Examples](#) document readily available to drivers on the MDT website or to add logbook examples to the MDT [Getting Started Guidebook](#) (MDT, 2013).

*C.5.2 How often does a driver need to submit his or her record of duty status?*

During reviews of motor carriers in Montana in 2015 there were 5 of 85 critical violations of "failing to submit a record of duty status within 13 days" (FMCSA, 2015c).

Under [49 CFR 395.8](#), drivers must submit a record of duty status to their employing motor carriers within 13 days following the completion of the form.



Recommendation:

The requirement to submit a record of duty status to the motor carrier is not listed in the [MDT Getting Started Guide](#) (MDT, 2013). It might be worthwhile to add the submission requirements to that document.

*C.5.3 How long does a driver's record of duty status need to be retained?*

During reviews of motor carriers in Montana in 2015, there were 3 of 85 critical violations for "retention of driver's record of duty status" (FMCSA, 2015c). Furthermore, during roadside inspections in Montana in 2015, there were 315 of 7,395 driver violations of "driver failing to retain previous 7 days' logs" (FMCSA, 2015d).

The record of duty status keeps track of a driver's time on-duty, off-duty, and driving. These records must be kept current and completed by the driver only. According to [49 CFR 395.8](#), a driver must retain the record of duty status for the previous 7 consecutive days and have these records available for inspection while on duty. Furthermore, the record of duty statuses and time cards must be retained by the employing motor carrier for 6 months.

Recommendation:

It would be beneficial to create lists of documents that a driver must retain (e.g., record of duty, shipping papers, HAZMAT registration number, etc.) and a list of documents that the employing motor carrier must retain (e.g., driver qualification file, maintenance records, etc.), the time period for which those documents need to be retained, and webpages or links to the related regulations.

*C.5.4 What are the hours of duty limitations?*

Among the 85 critical violations reported in the 2015 reviews of motor carriers in Montana, there were 2 violations of "driving beyond the 8 hour limit since the end of the last off-duty or sleeper period of at least 30 minutes," 2 incidences of "requiring a property-carrying driver to drive after 70 hours on-duty in 8 days," 3 incidences of "requiring or permitting a driver to drive after 14 hours on-duty," and 3 violations of "requiring or permitting a property carrying driver to drive more than 11 hours" (FMCSA, 2015c). These account for 10 percent of all critical violations in Montana in 2015.

Additionally, the roadside inspections in Montana in 2015 reported a total of 7,395 driver violations, including 873 cases of "driving beyond the 14-hour duty period," 608 cases of "driving beyond the 11-hour driving limit in a 14-hour period for property carrying drivers," and 639 cases of "driving beyond the 8-hour limit since the end of the last off duty or sleeper period of at least 30 minutes" (FMCSA, 2015d). These violations account for 28% of roadside driver violations in Montana in 2015.

These statistics suggest that there may be some confusion on the regulations of hours of duty (the number of hours one can drive). [49 CFR 395.3](#) discusses the limitations for hours of service for property carrying drivers, while [49 CFR 395.5](#) discusses the limitations for hours of service for passenger carrying drivers. These regulations exist to limit the number of working hours of a commercial motor vehicle operator in order to reduce driver fatigue and accidents caused by driver fatigue. These limitations are listed in Table C.5.1.

**Table C.5.1. Hours of Service Limits (Source: [49 CFR 395.3](#) and [49 CFR 395.5](#))**

		Property-Carrying	Passenger-Carrying
<b>Daily</b>	On-Duty <sup>a</sup>	Maximum 14 consecutive hours on-duty following 10 consecutive hours off-duty	Maximum 15 hours on-duty following 8 consecutive hours off-duty
	Driving Time	Maximum 11 hours of driving during the 14 hour on-duty period	Maximum 10 hours of driving following 8 consecutive hours off-duty
	Rest Break <sup>b</sup>	At least 30 minutes rest break before the 8 <sup>th</sup> hour driving	
<b>Weekly</b>	If the motor carrier does not operate every day of the week	Maximum 60 hours on-duty in any period of 7 consecutive days <sup>c d</sup>	Maximum 60 hours on-duty <sup>e</sup> in any period of 7 consecutive days.
	If the motor carrier operates every day of the week	Maximum 70 hours on-duty in any period of 8 consecutive days <sup>c d</sup>	Maximum 70 hours on-duty <sup>e</sup> in any period of 8 consecutive days

Notes:

<sup>a</sup> Any time spent by a driver in a compensated, non-motor carrier position is considered on-duty and must be counted when applying the 14-hour and 60/70 hour rule.

<sup>b</sup> The 30-minute rule applies to drivers operating a CMV outside of the 100-air mile (CDL) or 150 air miles (non-CDL). One air mile = 1.1508 miles.

<sup>c</sup> Any 7 or 8 consecutive day period may restart after 34 hours or more of off-duty time. The 34 or more consecutive hours must include two periods from 1:00 am to 5:00 am. Drivers can only use the 34-hour rule once a week (or once every 168 hours).

<sup>d</sup> These regulations are currently under review by the Federal Motor Carrier Safety Administration (FMCSA) and the U.S. Government Accountability Office (GAO) and may change in the near future.

<sup>e</sup> The 15-hour and 60/70 hour rules count on-duty time spent on compensated, non-motor carrier positions (e.g., a part time position in a retail store).

**Recommendations:**

These high numbers of violations show that there may be confusion surrounding the hours of duty limitations. It would be worthwhile to include a table of these hours of service limitations for both property and passenger carrying drivers in easy to read language in the [MT Getting Started Guide](#) (MDT, 2013).

Furthermore, the Federal Motor Carrier Safety Administration (FMCSA) offers a useful resource, “[Interstate Truck Driver’s Guide to Hours of Service](#)”, which explains the hours of service limits in plain language. It would be beneficial to make this document available on the MDT website.

*C.5.5 What exceptions exist for the carrying hours of service regulations?*

The list of hours of service (HOS) exceptions is extensive and varies depending on the operation type, from emergency services to agricultural.

Recommendation:

The HOS exceptions list is extensive, and the current resources for Montana do not have information on these exceptions. The FMCSA’s guidebook entitled “[Interstate Truck Driver’s Guide to Hours of Service](#)” includes information on the hours of service limits and a table that describes all of the exceptions and related regulations. This table may need to be added to the [Getting Started Guidebook](#) (MDT, 2013) or referenced on the MDT website.

*C.5.6 If the hours of service regulations are constantly changing, where can a commercial motor vehicle operator check for updates?*

During the Task 1 survey, some comments mentioned that the hours of service regulations are always in a state of change. Furthermore, during a project meeting with MDT it was mentioned that some of the hours of service regulations are currently under review by the Federal Motor Carrier Safety Administration (FMCSA) and the U.S. Government Accountability Office (GAO) and may change in the near future. If it is true that these regulations change often, how does a driver keep up with the changes?

Recommendation:

It would be worthwhile to include information (phone number, website, etc.) in the booklet on where a driver can check for the most up-to-date information on hours of service regulations.

C.6. Hazardous Materials Regulations

No.	Question/ Confusion	Relevant Sources	Gaps	Recommendations
C.6.1	Who needs to obtain a USDOT HAZMAT Registration Number?	<a href="#">49 CFR 107.620</a>	A number of violations revealed during roadside safety inspections related to "no copy of a USDOT HAZMAT Registration Number" in Montana in 2015. Drivers that are transporting HAZMAT need to register with the Pipeline and Hazardous Materials Safety Administration (PHMSA). This registration process can be completed online or through the mail. PHMSA also offers a <a href="#">brochure</a> about the registration process (PHMSA, 2013).	The MT Getting Started Guide (MDT, 2013) explains who needs to have a HAZMAT registration number, but not much information on how to register and where to go for more information. It would be beneficial to add them to the MDT website.
C.6.2	What needs to be included on the HAZMAT shipping paper?	<a href="#">49 CFR 172.202</a>	During roadside inspections in Montana during 2015, there were 21 HAZMAT violations related to failing to prepare a proper shipping paper. The <a href="#">MDT Getting Started Guide</a> (MDT, 2013) provides basic information on what must be included in a shipping paper, but more detail may be necessary.	PHMSA offers a useful shipping paper guidance document with a checklist that would be worthwhile to make readily available on MDT's website
C.6.3	What needs to be included in the HAZMAT emergency response information?	<a href="#">49 CFR 177.800</a> <a href="#">49 CFR 172.602</a>	During 2015 Montana roadside inspections, there were 22 HAZMAT violations related to not having emergency response information readily available.	It would be worthwhile to add a checklist of items that must be included in the shipping paper for transporting HAZMAT.
C.6.4	Who needs to retain HAZMAT shipping papers?	<a href="#">49 CFR 172.200</a> <a href="#">40 CFR 177.817</a>	During roadside inspections in Montana during 2015, there were 33 HAZMAT violations related to no shipping papers being available.	The PHMSA offers a useful guide on shipping paper with a checklist. It would be worthwhile to make it readily available on MDT's website.

No.	Question/ Confusion	Relevant Sources	Gaps	Recommendations
C.6.5	What are the HAZMAT placard requirements?	<a href="#">49 CFR 172.504</a>	Violation involving placarding accounted for 20 percent of the Hazmat violations reported during roadside inspections in Montana in 2015. The PHMSA provides a useful document on the general requirements of placarding. However, determining the correct placards is a complex process that can only be determined using the regulation placard tables.	It would be beneficial to provide contact information in the educational booklet so that motor carriers can double-check that they have the correct placards.
C.6.6	How often does a HAZMAT cargo tank need to be inspected?	<a href="#">49 CFR 180.415</a>	There were 29 HAZMAT violations related to a cargo tank not being inspected in 2015. A cargo tank must be inspected to insure that a HAZMAT is being transported as safely as possible. Depending on the type of cargo tank, the tank must be inspected at different intervals. A table of testing requirements is available in <a href="#">49 CFR 180.407</a> .	A table of these inspection requirements can be found in <a href="#">website</a> . This table should be added to the inspection or the HAZMAT section of the <a href="#">MT Getting Started Guide</a> (MDT, 2013).

*C.6.1 Who needs to obtain a USDOT HAZMAT Registration Number?*

The 2015 Montana roadside inspections found a total of 347 incidents relative to HAZMAT, including 36 cases of "no copy of USDOT Hazardous Materials registration number" (FMCSA, 2015e). According to [49 CFR 107.620](#), a copy of the certificate of registration issued by the Pipeline and Hazardous Materials Safety Administration (PHMSA) or a document with the registration number identified as the US DOT HAZMAT Registration Number must be retained on each truck or truck tractor used to transport HAZMAT.

Additionally, each driver who transports HAZMAT must carry a copy of the registration on board the truck.

[49 CFR 107.601](#) lists the operators who must obtain a HAZMAT registration number through PHMSA. Any person who offers for transportation or transports the following hazardous materials must register with PHMSA:

1. A highway route-controlled quantity of a Class 7 (radioactive) material;
2. More than 55 pounds of a Division 1.1, 1.2, or 1.3 (explosive) material in a motor vehicle, rail car or freight container;
3. More than one L (1.06 quarts) per package of a material extremely toxic by inhalation (*i.e.*, "material poisonous by inhalation," that meets the criteria for "hazard zone A");
4. A shipment of a quantity of hazardous materials in a bulk packaging having a capacity equal to or greater than 13,248 L (3,500 gallons) for liquids or gases or more than 13.24 cubic meters (468 cubic feet) for solids;
5. A shipment in other than a bulk packaging of 5,000 pounds gross weight or more of one class of hazardous materials for which placarding of a vehicle, rail car, or freight container is required for that class; or
6. A quantity of hazardous material that requires placarding, under provisions of [Subpart F of Part 172 of this chapter](#).

Registration can be completed online on PHMSA's [website](#) (PHMSA, 2017) or can be mailed into their office. The application will require the applicant to provide information on the driver and the employing company, the registrants USDOT number, and information on the mode(s) used to transport HAZMAT and pay a registration fee.

Recommendation:

The [MT Getting Started Guide](#) (MDT, 2013) explains the conditions that require a HAZMAT registration number. It would be worthwhile to add information about how to register and where to go for more information. The PHMSA also offers a [brochure](#) (PHMSA, 2013) on the registration process; it would be beneficial to add this information to the MDT website.

*C.6.2 What needs to be included on the HAZMAT shipping paper?*

During roadside inspections in Montana in 2015, there were 21 of 347 HAZMAT violations regarding "failing to enter basic descriptions of hazardous materials in proper sequence" (FMCSA, 2015e). The [MDT Getting Started Guide](#) (MDT, 2013) provides basic information on shipping papers but does not go into detail on what each section of the shipping paper requires.

A properly prepared shipping paper needs to include the following information listed in Table C.6.1.

**Table C.6.1. Shipping Paper Information (Source: USDOT PHMSA, 2006)**

<b>Item Description</b> <sup>a</sup>	Shipping name <sup>b</sup>
	Hazardous material class and division
	Packing group
	Identification number
	Total quantity and units of measure
<b>Emergency response information</b>	How to safely handle incidents
	Shipping name of HAZMAT
	List risks to health
	List methods for handling spills, fires, or leaks
<b>Emergency contact information</b>	
<b>Shipper certification</b>	

Notes:

<sup>a</sup>. Must include information for all hazardous and non-hazardous items in the shipment

<sup>b</sup>. Shipping name must be properly determined using the Hazardous Materials Table in [49 CFR 172.101](#)

The Montana Department of Transportation [Getting Started Guidebook](#) (MDT, 2013) provides an example of a shipping paper (see Figure C.6.1.).



SHIPPING PAPER			
TO: ABC Corporation 88 Valley Street Anywhere, VA		FROM: DEF Corporation 55 Mountain Street Nowhere, CO	
		Page 1 of 1	
Quantity	HM	Description	Weight
1 cylinder	RQ  ("RQ" means that this is a reportable quantity.)	Phosgene, 2.3, UN1076 Poison, Inhalation Hazard, Zone A  (Phosgene is the proper shipping name from Column 2 of the Hazardous Materials Table.) (2.3 is the Hazard Class from Column 3 of the Hazardous Materials Table.) (Un1076 is the Identification Number from Column 4 of the Hazardous materials Table.)	25 lbs
This is to certify that the above named materials are properly classified, described, packaged marked and labeled, and are in proper condition for transportation according to the applicable regulations of the United States Department of Transportation.			
Shipper:	DEF Corporation	Carrier:	Safety First
Per:	Smith	Per:	
Date:	October 15, 2003	Date:	
<b>Special Instructions:</b> 24 hour Emergency Contact, John Smith 1-800-555-5555			

Figure C.6.1. Example Shipping Paper (Source: MDT Getting Started, 2013)

Recommendation:

The PHMSA’s guidebook entitled “[Guide for Preparing Shipping Papers](#)” describes what must be included on the shipping paper and information on how long shipping papers need to be retained by both the driver and the motor carrier. It would be beneficial to include this information on MDT’s website or in the [Getting Started Guidebook](#) (MDT, 2013).

### *C.6.3 What needs to be included in the HAZMAT emergency response information?*

During 2015 roadside inspections in Montana, there were 7 of 374 HAZMAT violations of "emergency response information missing" and 15 of 374 HAZMAT violations of "emergency response information not available" (FMCSA, 2015e). [49 CFR 172.602](#) lists the required information to be included for emergency response information on the shipping paper. This information is critical for transporting HAZMAT because these materials can be a danger to the driver, the public, and the environment. The emergency response information should include the following:

- A description and technical name of the HAZMAT being transported,
- Immediate hazards to health,
- Risks of fire/explosion,
- Immediate precautions to be taken in the event of an accident,
- Immediate methods for handling fires,
- Initial methods for handling spills, and
- Preliminary first aid measures.

All of this information should be readily available on the shipping paper. The shipping paper should be easily accessible to the driver while in transit.

#### Recommendation:

It would be worthwhile to add a checklist of items that must be included in the shipping paper for transporting HAZMAT and an example in the [MT Getting Started Guide](#) (MDT, 2013).

### *C.6.4 Who needs to retain HAZMAT shipping papers?*

During roadside inspections in Montana in 2015, there were 22 of 347 HAZMAT violations of "offering a hazardous material without preparing a shipping paper" and 13 of 347 HAZMAT violations of "no shipping papers (carrier)" (FMCSA, 2015e).

Shipping papers provide vital information about the hazardous materials being transported in a shipment. Under [49 CFR 177.817](#), a shipping paper must be stored as follows: "when the driver is operating a CMV, the shipping paper must be within immediate reach while the driver is

restrained by a lap belt; and either readily visible to a person entering the driver's compartment or in a holder which is mounted to the inside of the door on the driver's side of the vehicle." Or if the driver is not operating the CMV, "in a holder which is mounted to the inside of the door on the driver's side of the vehicle or on the driver's seat in the vehicle".

According to [49 CFR 172.201](#), a shipping paper must be retained by the motor carrier and be accessible at the principal place of business to authorized officials of a federal, state, or local government agency. These shipping papers must be retained for three years after the material is accepted by the initial carrier for hazardous waste (e.g., used motor oil, batteries, etc.), or for two years if transporting any other hazardous materials.

Recommendation:

The PHMSA's guidebook, "[Guide for Preparing Shipping Papers](#)", describes what must be included on the shipping paper and timelines for retention. The [MDT Getting Started Guide](#) (MDT, 2013) currently does not include a checklist of items for the shipping paper or information about how long a shipping paper needs to be retained; it would be beneficial to add this information to the Guide.

*C.6.5 What are the HAZMAT placarding requirements?*

There were 72 cases of placard violations reported in roadside inspections in Montana in 2015. These include 33 cases of "vehicle not placarded as required", 24 cases of "placard damaged, deteriorated, or obscured", and 15 cases of "failing to provide carrier required placards" (FMCSA, 2015e). These placard-related violations amount to approximately 20 percent of all HAZMAT violations (number of observations = 347) found during roadside inspections in Montana in 2015.

It is a joint responsibility of the shipper and the carrier to ensure that the correct placards are used for shipment of hazardous materials. [49 CFR 172.516](#) states that placards must "be maintained by the carrier in a condition so that the format, legibility, color, and visibility of the placard will not be substantially reduced due to damage, deterioration, or obscurement by dirt or other matter." These placards must be easy to read and visible from all sides of the vehicle because they are a way of communicating which hazardous materials are being transported and

what response measures should be taken if there is an incident. Determining the correct placards can be a complex process and must be determined using the regulation placard regulations found in [49 CFR 172 Subpart F](#).

Recommendations:

The PHMSA offers a useful document, “[Hazardous Materials Marking, Labeling and Placarding Guide](#)”, which describes the general requirements of placarding. However, determining the required placards can be a complex process that can only be determined using the regulation placard tables.

Furthermore, if there is a contact that a driver or motor carrier can call to double-check that they are using the correct placards it would be beneficial to include this information in the educational booklet (Task 4 of this project).

*C.6.6 How often does a HAZMAT cargo tank need to be inspected?*

During 2015 Montana roadside inspections, there were 29 of 347 HAZMAT violations regarding "cargo tank test or inspection marking - hazardous materials". During a review of motor carriers in Montana there was one critical violation of "transporting a hazardous material in a specification tank with expired inspections/tests". (FMCSA, 2015c)

Under [49 CFR 180.407](#), a cargo tank must be tested periodically to ensure that the tank is structurally sound. These tests include an external visual inspection, an internal visual inspection, lining inspection, leakage test, pressure test, and thickness test. See Table C.6.2 for a list of these inspection requirements. Furthermore, if a tank has any dents or external damage it must be inspected.

**Table C.6.2. Inspection Requirements for Cargo Tanks (Source: [49 CFR 180.407](#))**

Test or Inspection		Interval Period After First Test
External Visual Inspection	All cargo tanks designed to be loaded by vacuum with full opening read heads	6 months
	All other cargo tanks	1 year
Internal Visual Inspection	All insulated cargo tanks, except MC 330, MC 331, MC 338	1 year
	All cargo tanks transporting lading corrosive to the tank	1 year
	All other cargo tanks, except MC 338	5 years
Lining Inspection	All lined cargo tanks transporting lading corrosive to the tank	1 year
Leakage Test	MC 330 and MC 331 cargo tanks in chlorine service	2 years
	All other cargo tanks except MC 338	1 year
Pressure Test	All cargo tanks which are insulated with no manhole or insulated and lined, except MC 338	1 year
	All cargo tanks designed to be loaded by vacuum with full opening rear heads	2 years
	MC 330 and MC 331 cargo tanks in chlorine service	2 years
	All other cargo tanks	5 years
Thickness Test	All unlined cargo tanks transporting material corrosive to the tank, except MC 338	2 years

Recommendation:

It is advisable to add the table of inspection requirements to either the HAZMAT or Inspection section of the MDT [Getting Started Guidebook](#) (MDT, 2013). The Federal Motor Carrier Safety Administration (FMCSA) provides a document, “[Guidelines for the Operation, Assembly, Repair, Testing and Inspection of Hazardous Material Cargo Tanks](#)” which describes the inspection requirements in detail in Chapter 5.

C.7. Vehicle Maintenance Standards

No.	Question/ Confusion	Relevant Sources	Gaps	Recommendations
C.7.1	How often does a commercial motor vehicle (CMV) need to be inspected?	<a href="#">49 CFR 396.17</a>	Ten violations reported during the motor carrier reviews and 2,269 violations revealed in roadside inspections involved "using a vehicle not periodically inspected" in Montana in 2015. <a href="#">49 CFR 396.11</a> requires that a daily inspection must be completed by the driver of a CMV, and <a href="#">49 CFR 396.17</a> requires a periodic inspection with a qualified inspector once every 12 months.	The inspection requirements are described in the MT <a href="#">Getting Started Guidebook</a> (MDT, 2013) with an example of a daily inspection report and an annual inspection report.
C.7.2	What inspection records are required?	<a href="#">49 CFR 396.11</a>	The motor carrier reviews found two critical violations involving "failing to require driver to prepare vehicle inspection reports" in Montana in 2015. These requirements were discussed in the Appendix B, Section C.7.2. The driver inspection report must be completed at the end of each working day and must cover all parts of the commercial vehicle. The full requirements of this report are listed in <a href="#">49 CFR 396.11</a> .	The MDT <a href="#">Getting Started Guidebook</a> (MDT, 2013) provides a checklist for the daily driver inspection report and examples of the daily driver inspection report form. It may be beneficial to highlight this resource to truckers.
C.7.3	What records of maintenance need to be kept?	<a href="#">49 CFR 396.3</a>	The motor carrier reviews revealed one critical violation of "failing to keep minimum records of inspection and maintenance". Requirements on record retention were discussed in the Appendix C, Table C.7.1.	It is advisable to create a list of required records and retention periods for these records for both the driver and the motor carrier.

*C.7.1 How often does a commercial motor vehicle need to be inspected?*

During reviews in Montana in 2015, there were 10 of 85 critical violations of "using a vehicle not periodically inspected." (FMCSA, 2015c) Additionally there were 2,269 of 23,831 vehicle violations of "operating a commercial motor vehicle without a periodic inspection" during roadside inspections in Montana in 2015 (FMCSA, 2015f).

[49 CFR 396.3](#) lists the general maintenance standards that each motor carrier must meet for each commercial motor vehicle. These maintenance standards exist to decrease the number of commercial vehicles on a public roadway that might break down or cause an accident. [49 CFR 396.11](#), discusses the daily driver inspection reports. These reports must be completed after each working day and identify any and all defects or deficiencies found on the commercial vehicle. [49 CFR 396.17](#) describes the periodic inspection requirements that must be completed by a qualified inspector once every 12 months.

Recommendation:

The inspection requirements are described in the MT [Getting Started Guidebook](#) (MDT, 2013) with an example of a daily inspection report and an annual inspection report. No additional changes are recommended.

*C.7.2 What inspection records are required?*

In 2015 reviews of motor carriers in Montana, there were 2 of 85 critical violations of "failing to require driver to prepare vehicle inspection reports" (FMCSA, 2015c).

According to [49 CFR 396.11](#), every motor carrier must require its drivers to prepare an inspection report at the end of each day's work on the vehicle operated. This report should cover: parking brakes, steering mechanism, service brakes including trailer brake connections, lighting devices and reflectors, tires, horn, windshield wipers, rear vision mirrors, coupling devices, wheels and rims, and emergency equipment. This report must identify any deficiency discovered by the driver. If the driver were to discover a deficiency, then the motor carrier must certify on the report that the defect has been repaired. The motor carrier must maintain the original driver vehicle inspection report and certification of repairs for three months.

[49 CFR 396.17](#) lists the requirements of the periodic inspection that must be completed by a qualified inspector. This periodic inspection must be completed every 12 months. The periodic inspection report must detail the following as listed in [49 CFR 396.21](#):

- Contact information on the inspector,
- Information on the motor carrier,
- Date of the inspection,
- Vehicle inspected,
- Vehicle components inspected and description of the results of the inspection, and
- Certification of the accuracy and completeness of the inspection.

Recommendation:

The MDT [Getting Started Guidebook](#) (MDT, 2013) provides a list of everything that must be included in the daily driver inspection report and examples of the daily driver inspection report form. No additional changes are recommended.

*C.7.3 What records of maintenance need to be kept?*

During reviews of motor carriers in Montana in 2015 there was 1 of 85 critical violations of "failing to keep minimum records of inspection and maintenance" (FMCSA, 2015c). According to the [MT Getting Started Guide](#) (MDT, 2013), the records of vehicle inspection/maintenance listed in Table C.7.1. must be retained.

**Table C.7.1. Maintenance Records (Source: Montana Department of Transportation, 2013)**

Record	Record Retention Period
Vehicle Maintenance Record (vehicle maintained by motor carrier)	12 months
Vehicle Maintenance Record (vehicle that has left motor carrier possession)	6 months
Roadside Inspection Report	12 months
Daily Driver Inspection Report	3 months
Periodic Inspection Report	14 months
Record of Inspector's Qualification	12 months after the inspector ceases to perform inspections for motor carrier



Recommendation:

Creating a list of required records and retention periods for these records would be useful for both the driver and the motor carrier.

## REFERENCES

- Federal Motor Carrier Safety Administration, “Hours of Service Logbook Examples.” Washington, DC, January 2015a. Available: [https://www.fmcsa.dot.gov/sites/fmcsa.dot.gov/files/docs/HOS\\_Logbook\\_Examples\\_2015MAY\\_508.PDF](https://www.fmcsa.dot.gov/sites/fmcsa.dot.gov/files/docs/HOS_Logbook_Examples_2015MAY_508.PDF). [Accessed May 2016].
- Federal Motor Carrier Safety Administration, “Interstate Truck Driver’s Guide to Hours of Service.” 2015b. Available: [https://www.fmcsa.dot.gov/sites/fmcsa.dot.gov/files/docs/Drivers%20Guide%20to%20HOS%202015\\_508.pdf](https://www.fmcsa.dot.gov/sites/fmcsa.dot.gov/files/docs/Drivers%20Guide%20to%20HOS%202015_508.pdf). [Accessed May 2016].
- Federal Motor Carrier Safety Administration (FMCSA), "Montana Reviews, Critical Violations (2015 - Calendar)," 2015c. Available: <http://ai.fmcsa.dot.gov/SafetyProgram/spViolation.aspx?rpt=CViol>. [Accessed January 2016].
- Federal Motor Carrier Safety Administration (FMCSA), "Montana Roadside Inspections, Driver Violations (2015 - Calendar)," 2015d. Available: <http://ai.fmcsa.dot.gov/SafetyProgram/spViolation.aspx?rpt=RDDV>. [Accessed January 2016].
- Federal Motor Carrier Safety Administration (FMCSA), "Montana Roadside Inspections, HazMat Violations (2015 - Calendar)," 2015e. Available: <http://ai.fmcsa.dot.gov/SafetyProgram/spViolation.aspx?rpt=RDHV>. [Accessed January 2016].
- Federal Motor Carrier Safety Administration (FMCSA), "Montana Roadside Inspections, Vehicle Violations (2015 - Calendar)," 2015f. Available: <http://ai.fmcsa.dot.gov/SafetyProgram/spViolation.aspx?rpt=RDVV>. [Accessed January 2016].
- Labelmaster, “Labelmaster Hazmat Labels Website.” Available: <http://www.labelmaster.com/shop/labels/hazmat-labels/>. [Accessed July 2016].
- Montana Department of Justice (DOJ), Motor Vehicle Division, Driver License Bureau, “Montana Commercial Driver’s License Manual – Revised.” Helena, MT, 2015. Available: <https://media.dojmt.gov/wp-content/uploads/Montana-CDL-Manual-Dec-2015.pdf>. [Accessed May 2016]
- Montana Department of Justice (DOJ), Motor Vehicle Division, “Commercial License Endorsements.” 2017. Available: <https://dojmt.gov/driving/commercial-driver-licensing/#licenseendorsements> [Accessed February 2017]
- Montana Department of Transportation (MDT), Motor Carrier Safety Assistance Program, “Getting Started.” Helena, MT, November 2013. Available: [https://www.mdt.mt.gov/publications/docs/manuals/mcs\\_getting\\_started.pdf](https://www.mdt.mt.gov/publications/docs/manuals/mcs_getting_started.pdf). [Accessed May 2016].
- USDOT Pipeline and Hazardous Materials Safety Administration (PHMSA), “Guide for Preparing Shipping Papers.” 2006. Available: [https://hazmatonline.phmsa.dot.gov/services/publication\\_documents/Guide%20for%20Preparing%20Shipping%20Papers.pdf](https://hazmatonline.phmsa.dot.gov/services/publication_documents/Guide%20for%20Preparing%20Shipping%20Papers.pdf). [Accessed July 2016].

USDOT Pipeline and Hazardous Materials Safety Administration (PHMSA), “Hazardous Materials Registration Program Brochure.” 2013. Available: [Accessed February 2017]

USDOT Pipeline and Hazardous Materials Safety Administration (PHMSA), “PHMSA Registration Website.” 2017. Available: <http://www.phmsa.dot.gov/hazmat/registration>. [Accessed February 2017].

This public document was published in electronic format at no cost for printing and distribution.