Truck Driver's Guidebook

Introduction

The U.S. Congress passed the Motor Carrier Safety Act in 1984. The Act directed the Secretary of Transportation to determine the safety fitness of all motor carriers, subject to federal regulations, operating in Michigan interstate commerce. In 1990, Michigan adopted these regulations for motor carriers operating in intrastate commerce. As a result of these actions, Michigan businesses which also operate trucks may be subject to all or some of these rules. Additional requirements are also contained in the *Michigan Vehicle Code* and, in some instances, the "Federal Hazardous Materials Regulations."

The rules and regulations governing the operation of trucks establish minimum safety and record keeping requirements that carriers and drivers must meet. These requirements include, but are not limited to, qualification of drivers; proper licensing of vehicles and drivers; insurance; driver drug and alcohol testing programs; accident recording; driver's hours of service; hazardous material handling and training; vehicle maintenance and inspection; and vehicle loading and weight requirements. Failure to meet these minimum requirements subjects both carriers and drivers to civil and criminal penalties.

Michigan Center for Truck Safety Locations

Lower Peninsula

1131 Centennial Way, Suite 2 Lansing, MI 48917 800-682-4682 517-321-1955

fax: 517-321-0864

e-mail: info@truckingsafety.org

Upper Peninsula

The Plaza Central 415 S. Stephenson Ave Iron Mountain, MI 49801-3400 800-469-7364

e-mail: upinfo@truckingsafety.org

www.truckingsafety.org



Revised November, 2010

1935 PA59; 20,000 copies @ \$.5885 per copy, total \$11,771.08

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Telephone Numbers

State Agencies & Departments

Attorney General

Consumer Protection 517-373-1140

Michigan Public Service Commission (MPSC)

Interstate & Intrastate Authority 517-241-6042 Intrastate DOT Numbers 888-464-8736

Department of Treasury

Fuel Tax Permits (IFTA) 517-636-4580

Secretary of State

Department of State Information Center 517-322-1460 888-767-6424

IRP

517-322-1097

CDL Help Line 517-322-5555

Michigan Department of State Police

Traffic Safety Division 517-241-0501

Labor

MIOSHA Enforcement 800-866-4674

Michigan Department of Transportation

Oversize Permits 517-373-2121

State Frost Law Information 800-787-8960

Michigan Department of Environmental Quality

Hazardous Waste 517-335-2690

DEQ 800-662-9278

Federal Agencies Internal Revenue Service

Highway Users Tax 800-829-4833

U.S. Department of Transportation/FMCSA

Michigan Division Interstate Safety 517-853-5990 Hazardous Materials Regulations Cindy Hedman 616-450-1993

Hazmat Endorsement Threat

Assessment Program (fingerprint-based background check) 877-429-7746

Education and Training

Michigan Center for Truck Safety 800-682-4682

Michigan Center for Decision Driving

800-325-6733

Michigan Counties

County Road Association of Michigan

517-482-1189

Trade Associations

Michigan Trucking Association

Membership, insurance, books, forms and Federal & State Safety Regulations Manuals 517-321-1951

American Trucking Associations 703-838-1700

Bridge & Border Crossing Information

Ambassador Bridge

586-467-0117 313-363-2872 313-363-2872

Detroit & Windsor Tunnel

313-567-4422

International Bridge

906-635-5255

Blue Water Bridge

810-984-3131

Mackinac Bridge 906-643-7600

Canadian Information

Ontario Ministry of Transportation

Driver Vehicle Licensing 416-235-2999

Canadian Council of Motor Transport Administrators

613-736-1003

Driver Record Subscription Service

Provides companies with driving records of employees on an annual basis or more frequently if there are violations posted to the record.

To order driver motor vehicle reports:

Michigan Department of State 7604 Crowner Drive Lansing, MI 48918-0002 517-322-6281 or 517-322-1544

email: commercialservices@michigan.gov

Useful Web Sites

Safety Organizations

- AAA Foundation for Traffic Safety www.aaafoundation.org
- American Trucking Associations www.truckline.com
- Commercial Vehicle Safety Alliance www.cvsa.org
- County Road Association of Michigan www.micountyroads.org
- Michigan Center for Truck Safety www.truckingsafety.org
- Michigan Trucking Association www.mitrucking.org

State Government

- Michigan Department of State Police www.michigan.gov/msp
- Michigan State Police Traffic Safety Division www.michigan.gov/motorcarrier
- Michigan Department of State (Secretary of State) www.michigan.gov/sos
- Michigan Department of Transportation www.michigan.gov/mdot
- Michigan Department of Treasury www.michigan.gov/treasury
- Michigan Department of Labor & Economic Growth

www.michigan.gov/dleg

- Michigan Department of Environmental Quality (Hazardous waste information and permitting)
 www.michigan.gov/deq
- Michigan Public Service Commission www.michigan.gov/mpsc
- Office of Highway Safety Planning www.michigan.gov/ohsp

Federal Government

- USDOT Number Registration/Updates
 http://www.fmcsa.dot.gov/registration-licensing/online-registration/onlineregdescription.htm
- Federal Motor Carrier Safety Administration www.fmcsa.dot.gov
- FMCSA's Safety and Fitness Electronic Record (SAFER) System
 www.safer.fmcsa.dot.gov
- FMCSA CSA 2010 http://CSA2010.fmcsa.dot.gov
- Free and Secure Trade Program (FAST)
 http://www.cbsa-asfc.gc.ca/prog/fast-expres/menu-eng.html
- Transportation Worker Identification Credential (TWIC) http://www.tsa.gov/what_we_do/layers/twic/in-dex.shtm
- National Highway Traffic Safety
 Administration
 www.nhtsa.dot.gov
- Office of Drug and Alcohol Policy and Compliance
 www.dot.gov/ost/dapc
- U. S. Department of Transportation (U.S. DOT) www.dot.gov
- U.S. DOT's Pipeline & Security (hazmat) http://www.phmsa.dot.gov/hazmat
- U.S. Government Printing Office www.access.gpo.gov
- Hazardous Materials Background Check Fingerprinting locations www.hazprints.com

Canadian Offices

- Canadian Council of Motor Transport Administrators (CCMTA)
 - www.ccmta.ca
- Ontario Ministry of Transportation www.mto.gov.on.ca

General Information

Abbreviations

FMCSR -- Federal Motor Carrier Safety Regulations MVC - Michigan Vehicle Code

Following distance

MVC 257.643(2)

Outside the corporate limits of a city or village, a person shall not operate a motor vehicle with a gross weight, loaded or unloaded, **in excess of 5,000 pounds** within 500 feet of a similar vehicle traveling in the same direction, except to pass.

Emergency equipment

FMCSR 393.95

Each truck, truck tractor and bus must be equipped with the following:

- A securely mounted and accessible fire extinguisher of proper type and rating
- Warning devices *(three bi-directional reflective triangles, or 6 fusees, or 3 liquid burning flares)
- Spare fuses (if fuses are required to operate any required parts or accessories).
- * Flares or other flame producing devices are prohibited for some vehicles.

FMCSR 392.8.

Every driver must make sure the proper emergency equipment is in place and ready for use before driving a CMV and if stopped on the traveled portion or shoulder of a highway, the driver must place the required warning devices as specified in FMCSR 392.22.

Operating authority

To operate as a for-hire motor carrier of property or passengers, a carrier must obtain authority. Application for intrastate authority must be made through the Michigan Public Service Commission. Application for interstate authority must be made through the Federal Motor Carrier Safety Administration.

Third-lane use

MVC 257.634(3)

On **freeways** having three or more lanes for travel in the same direction, trucks with a **gross weight of more than 10,000 lbs.**, a truck-tractor or a combination of a vehicle and trailer or semitrailer must operate in the **two right-hand lanes only**.

Truck speed limit

MVC 257.627(6)

A truck, truck-tractor with trailer, or a combination of these vehicles, with a **gross weight of 10,000 pounds or more**, shall not exceed a speed of 55 mph on freeways, and may not exceed 60 mph when the maximum speed limit is 70 mph.

Vehicle identification

MVC 257.723

All commercial vehicles registered in Michigan with a single or combination gross weight rating or total gross weight of more than 5,000 lbs., and all towing or platform bed wreckers, must have the name, city and state or registered logo or emblem of the registered owner of the vehicle, and lessee of the vehicle if it is being operated under lease, painted or permanently attached on each side of the vehicle, with letters not less than three inches in height and not lower than the bottom edge of the door.

Except for towing or platform bed wrecker road service vehicles, the identification requirements of the subsection may be met through the use of removable devices.

This does not apply to a truck eligible for and registered under a farm or manufacturer license plate that has a **gross vehicle weight** of less than 10,000 lbs.

NOTE: Vehicles displaying a USDOT number need only comply with the identification requirements contained in the FMCSR 390.21.

Weigh stations

MVC 257.724(5)

A driver or owner of a commercial vehicle with other vehicles or trailers in combination, a truck or truck-tractor, a truck or truck-tractor with other vehicles in combination, or any special mobile equipment, who fails to stop at or bypasses any scales or weighing station is guilty of a misdemeanor.

Definitions

Some of the following definitions may be incomplete or rephrased. Please refer to the actual rules for complete definitions.

Agricultural operation

FMCSR 395.3

For information on agricultural operations, contact the Traffic Safety Division at 517-241-0501.

Bus

FMCSR 390.5

Any motor vehicle designed, constructed and/or used for the transportation of passengers, including taxicabs.

MVC 257.4b

A motor vehicle designed for carrying 16 or more passengers, including the driver. "Bus" does not include a school bus.

Chauffeur

MVC 257.6

- A Michigan resident who is employed for the principal purpose of operating a motor vehicle with a gross vehicle weight rating (GVWR) of 10,000 pounds or more; or
- A person who operates a pupil transportation vehicle used for the regularly scheduled transportation of pupils between school and home, or a person who operates a bus or school bus; or
- A person who operates a taxi or limousine.

NOTE: Michigan law considers someone to be employed for the "principal purpose" of operating a motor vehicle "when the person's employment customarily involves the necessary use of a motor vehicle for hire, for transporting passengers for hire or when transporting any merchandise for display, sale or delivery."

Commercial vehicle

MVC 257.7

"Commercial vehicle" includes all motor vehicles used for the transportation of passengers for hire, or constructed or used for transportation of goods, wares or merchandise, and/or all motor vehicles designed and used for drawing other vehicles and not so constructed as to carry any load thereon either independently or any part of the weight of a vehicle or load so drawn.

Commercial motor vehicle (CMV)

FMCSR 390.5

Any self-propelled or towed motor vehicle used on a highway in interstate or intrastate commerce to transport passengers or property when the vehicle:

- Has a gross vehicle weight rating or gross combination weight rating, gross vehicle weight or gross combination weight_of 10,001 lbs. (4,536 kg) or more, whichever is greater; or
- Is designed or used to transport more than 8 passengers (including the driver) for compensation; or
- Is designed or used to transport more than 15 passengers, including the driver, and is not used to transport passengers for compensation; or
- Is used in transporting material found by the Secretary of Transportation to be hazardous under 49 USC 5103 and transported in a quantity requiring placarding under regulations prescribed by the secretary under 49 CFR, subtitle B, chapter I, subchapter C.

FATIGUE MANAGEMENT

- How difficult is it to judge how tired you are?
- What can you do to counter the effects of fatigue during a trip?
- Do you know the signs and effects of sleep disorders?
- How can you prevent fatigue?

With this **free program**, you can learn to identify the factors of fatigue, the family's role and what a driver can do to reduce it. This course is available on-line or in a classroom setting. Go to www.truckingsafety.org. Click the "Fatigue Program" button on the home page. Once logged on, participants can sign on and off as many times as needed. Michigan residents who complete the program will receive certificates of participation if requested.

Definitions

Some of the following definitions may be incomplete or rephrased. Please refer to the actual rules for complete definitions.

Commercial motor vehicle driver

FMCSR 390.5

Any person (including the owner of a company) who operates a commercial motor vehicle.

Empty Weight

MVC 257.13b

Empty weight means the shipping weight of a vehicle as furnished by the manufacturer or a scale weight taken from a weight receipt furnished by the weighmaster operating scales approved and sealed by the Michigan Department of Agriculture.

NOTE: For commercial vehicles, empty weight shall also mean fully equipped for the use for which the vehicle is intended.

Farmer

FMCSR 390.5

Any person who operates a farm or is directly involved in the cultivation of land, crops or livestock owned or directly controlled by that person. For a copy of the Farmer's Guidebook, go to www.truckingsafety.org and click the "Guidebooks" button.

Farm vehicle driver

FMCSR 390.5

A person who drives only a motor vehicle that is:

- Controlled and operated by a farmer as a private motor carrier of property, within 150 air miles of the farm, and transporting either agricultural products, farm machinery or farm supplies to or from a farm; and
- Not being used in the operation of a for-hire motor carrier; and
- Not carrying hazardous materials of a type or quantity that requires the vehicle to be placarded.

Gross Combination Weight Rating (GCWR)

FMCSR 390.5

The gross vehicle weight rating (GVWR) of the power unit plus the gross vehicle weight rating (GVWR) of the vehicle(s) or trailer(s) being towed.

Gross Vehicle Weight Rating (GVWR)

FMCSR 390.5

The value specified by the manufacturer to be the safe loaded weight of a single vehicle.

Gross Weight

MVC 257.19

The weight of a vehicle without load plus the weight of any load thereon.

Interstate commerce

FMCSR 390.5

- Trade, traffic or transportation in the United States between a place in the state and a place outside of such state (including outside of the United States); or
- Between two places in a state through another state or a place outside of the United States; or
- Between two places in a state as part of trade, traffic or transportation originating or terminating outside the state or the United States.

Intrastate commerce

FMCSR 390.5

Any trade, traffic or transportation in any state which is not described in the term "interstate commerce".

Medical examiner's certificate (Medical Card)

FMCSR 391.43

A document issued by a medical examiner to a commercial motor vehicle driver certifying the driver is medically qualified under state and/or federal standards to operate a commercial motor vehicle.

NOTE: The certificate or a copy must be carried by the driver when operating a commercial motor vehicle, and the employer is required to keep either the original or a copy in the driver's qualification file.

Definitions

Some of the following definitions may be incomplete or rephrased. Please refer to the actual rules for complete definitions.

Medical waivers

Michigan Motor Carrier Safety Act (Public Act 181 of 1963) Michigan intrastate drivers only

Physical Defect Waiver - Issued to a commercial motor vehicle driver who, because of a medical reason, would otherwise not be qualified to operate a commercial motor vehicle.

To obtain a waiver application: 517-241-0542

Grandfather Rights Waiver *Michigan Public Act 179 of 2005*

Grandfather waivers are no longer issued and previously issued waivers expire on December 31, 2014.

Michigan Motor Carrier Safety Act

Public Act 181 of 1963

An act to promote safety upon the public highways by regulating commercial motor vehicles and the operators of those vehicles, operating in intrastate commerce. This act adopts the Federal Motor Carrier Safety Regulations.

Motor carrier

FMCSR 390.5

Any person or entity that operates commercial motor vehicles to transport cargo or passengers, either for-hire or in private carriage. The term includes a motor carrier's agents, officers and representatives as well as employees responsible for hiring, supervising, training, assigning, or dispatching of drivers and employees concerned with the installation, inspection, and maintenance of motor vehicle equipment and/or accessories. This definition includes the terms employer and exempt motor carrier.

Simply: Anyone operating a vehicle meeting the definition of a 'commercial motor vehicle' to support any type of business activity or service is considered a motor carrier, (e.g. landscapers, plumbers, dealerships, septic tank services, tree services, farmers, etc.)

Private motor carrier of passengers

FMCSR 390.5

Business: A private motor carrier engaged in the transportation of passengers which is provided in the furtherance of a commercial enterprise and is not available to the public at large

Nonbusiness: A private motor carrier involved in the transportation of passengers who does not otherwise meet the definition of a private motor carrier of passengers (business).

Spacing between axles

MVC 257.61

The distance from axle center to axle center.

Special mobile equipment

MVC 257.62

Every vehicle not designed or used primarily for the transportation of persons or property and incidentally operated or moved over the highways, including farm tractors, road construction or maintenance machinery, mobile office trailers, mobile tool sheds, trailers for housing stationary construction equipment, ditch-digging apparatus, well-boring and well-serving apparatus.

Tandem axle

MVC 256.67

Two axles spaced more than 3 feet, 6 inches apart and less than 9 feet apart.

Tandem axle assembly

MVC 257.67a

Refers to two axles spaced more than 3 feet, 6 inches apart and less than 9 feet apart with one axle in front of the other and so attached to the vehicles wherein an attempt is made by connecting the mechanism to distribute the weight equally between the two axles.

Tank vehicle

A tank vehicle means any CMV (as defined in 257.67a) that is designed to transport any liquid or gaseous material within a tank that is permanently or temporarily attached to the vehicle. It does not include a portable tank having a rated capacity less than 1,000 gallons.

Getting and Displaying a DOT Number

A Michigan motor carrier operating commercial motor vehicle/s (see definition page 6) in interstate or intrastate commerce must apply for and obtain a USDOT number. The number is a registration number that identifies the motor carrier to the USDOT. The number must be displayed on both sides of the truck or truck tractor along with the motor carrier's business name; in accordance with FMCSR §390.21. Michigan motor carriers may apply for the USDOT number using the internet or by telephone.

The Michigan Center for Truck Safety website www. truckingsafety.org provides an internet quicklink (Get Your USDOT Number Now) to the FMCSA site. To apply by telephone intrastate carriers can contact the Michigan Public Service Commission at 888-464-8736. Interstate carriers can contact the FMCSA at 517-853-5990.

The Michigan Center for Truck Safety does not take applications or issue USDOT numbers.



CSA 2010 Information

If a carrier is experiencing excessive violations or one of its vehicles is involved in a serious accident, the carrier may be contacted by state or federal investigators to conduct a review of the carrier's DOT safety records and files. During the review, the investigators may also review other information they deem necessary to the nature of the review. Unsafe carriers, based on the finding of a review, would be subject to fines and penalties. In

extreme cases of non-compliance, the carrier could ordered to cease operation.

Currently a program called SafeStat is used to measure carrier compliance. Safestat is based on roadside inspections and scores carriers in four categories: Management practices, Crash Data, Driver and Vehicle. Scoring ranges from 0-100 with 100 being the worst.

SafeStat is being replaced with a new measurement system called Comprehensive Safety Analysis CSA 2010. Once CSA 2010 is fully functional, it will measure roadside violation data in seven

categories: Unsafe driving, Fatigued driving, Driver fitness, Controlled substances and alcohol, Vehicle maintenance, Cargo related and Crash indicator. Carriers are encouraged to log in and review the information available at http://csa2010.fmcsa.dot.gov.

Currently a carrier's safety profile may be viewed online at: www.fmcsa.safersys.org. At the time a

> carrier registers for and obtains a USDOT number, a "pin number" is also provided to the carrier. The pin number allows a carrier to log into FMCSA system to update information and review data and violations. Similarly, carriers will be

able to review CSA 2010 scores, crash data, vehicle and driver violations, as well as, the driver name and vehicle information associated these violations received on the road. This online information is also available to the general public (except for crash data). safety management control information or driver identification.

To find more in-depth information visit: www.fmcsa. dot.gov and click the icon for CSA 2010.

Vehicle Registration & Motor Fuel Tax

Elected Gross Vehicle Weight Plate

This is the required Michigan registration plate for:

- Trucks weighing 8,001 pounds or more
- Trucks weighing 8,000 pounds or less towing a trailer in a profit-making venture (does not include pickups)

Contact your local Secretary of State for further information.

<u>International Fuel Tax Agreement</u> (IFTA)

IFTA requires a fuel tax license for a qualified motor vehicle used for the transportation of persons or property in **interstate** commerce (includes farm plated vehicles). Recreational vehicles are exempt from IFTA.

International Registration Plan (IRP)

IRP is a program for the licensing of commercial vehicles being operated in **interstate** commerce. Motor carriers are issued an "apportioned" registration plate and cab card for each vehicle. The card lists the IRP states the vehicle is licensed to enter and the elected weight for each state.

IFTA and IRP Qualifying Vehicles

IFTA and IRP apply to vehicles operating in interstate commerce only:

- having 2 axles and a gross vehicle weight or registered weight exceeding 26,000 pounds,
- b) having 3 or more axles regardless of weight, or
- c) is used in a combination of vehicles and the gross combination weight or the registered weight exceeds 26,000 pounds.

For complete IFTA and IRP information contact the Michigan Department of Treasury (IFTA) at 517-636-4580 and the Michigan Department of State (IRP) at 517-322-1097.

Log/Farm Plate

Special registration used exclusively in the operation of a farm and a wood harvester operation (to include wood harvesting equipment) **only** and may not be used for-hire or to transport processed lumber. Vehicles displaying this plate may be used for personal transportation.

Unified Carrier Registration (UCR)

Requires individuals and companies operating commercial motor vehicles in interstate or international commerce to register their business with the Michigan Public Service Commission and pay an annual fee based on the size of their fleet.

A "Commercial Motor Vehicle" requiring UCR registration is defined as a self-propelled or towed vehicle used on the highways in commerce principally to transport passengers or cargo, if the vehicle:

- a) has a gross vechicle weight of 10,001 pounds or more:
- b) is designed to transport 11 or more passengers (including the driver);
- c) is used in transporting hazardous materials in a quantity requiring placarding.

Commercial Vehicle Operator Registration (CVOR)

Motor carriers operating trucks having a registered gross weight/actual weight of more than 9900 pounds or buses designed to carry ten or more passengers, within Ontario, are required to register as Commercial Vehicle Operators. For more information contact the Ontario Ministry of Transportation at 416-246-7166 or their web site at www.mto.gov.on.ca/.

Driver Qualification and Investigation FMCSR Part 391

State and federal safety regulations require drivers of commercial motor vehicles (see definitions) to meet certain minimum standards. Motor carriers (employers) must document and maintain each driver's qualifications in a driver qualification file, and maintain a driver investigation history file for each driver. A motor carrier shall not require or permit a person to drive a commercial motor vehicle unless that person is qualified. A motor carrier (employer) who also operates a commercial motor vehicle is a driver and must comply with both the rules that apply to motor carriers and to drivers.

A qualified driver must:

- Be at least 21-years-old to operate in interstate commerce
- Be at least 18-years-old to operate in intrastate commerce
- Be at least 21-years-old to transport hazardous material if the vehicle requires placarding
- Read, speak and understand the English language well enough to communicate with the general public and regulatory officials, and to respond to inquiries and make entries on reports and records
- Be able to operate the commercial motor vehicle safely
- Have the ability and training to safely load and secure cargo
- Possess a valid driver's license for the type of vehicle he/she is to operate.

Driver qualification file

A driver qualification file must contain:

- A driver's application for employment
- A copy of the driver's motor vehicle report (annual)
- The driver's report of violations (annual)
- Employer's review of driving record (annual)
- A valid Medical Examiner's Certificate and/or waiver
- Proof of a road test or equivalent.

Disqualifying offense for drivers

A driver who is disqualified shall not drive a commercial motor vehicle and a motor carrier shall not require or permit a disqualified driver to drive a commercial motor vehicle. Disqualifying offenses are contained in FMCSR 391, 392 and 383.

Driver investigation history file

A motor carrier must make inquiries to, and obtain responses from a driver applicant's previous employers during the previous three years, when the driver operated a commercial motor vehicle. The inquiries and responses must be maintained in a confidential driver investigative history file.

These inquires must include:

- · Work history
- · Accident history
- Drug and alcohol testing information (if applicable)

NOTE: For further information, contact the Center at 800-682-4682.

Driver rights

An employer must inform a driver applicant of his/her rights concerning information obtained from a previous employer. They include the right to:

- Review the information obtained
- Ask a previous employer to change or correct information and
- Submit a rebuttal statement to a previous eployer which must accompany any information the previous sends out.

These requirements are contained in FMCSR 391.23.

NOTE: Commercial Vehicle Safety Alliance (CVSA) Out-of-Service Criteria allows enforcement officers to place truck drivers out of service if they were unable to communicate sufficiently in the country in which they are operating.

Driver's Hours of Service

(Cargo Carrying Drivers) FMCSR Part 395

MV drivers are limited in the number of hours they can work and drive. Once a driver has worked a prescribed number of hours, he/she is no longer eligible to drive until he/she has met the off-duty requirements. Employers must ensure driver compliance and maintain accurate time records (for each driver).

Applicability

The hours of service rules apply to any person who operates a commercial motor vehicle as defined in FMCSR 390 (see page 5).

Exemptions

- Interstate farm vehicle drivers operating within a 100 air-mile radius of the farm
- Michigan intrastate farm vehicle drivers operating within a 150 air-mile radius of the farm
- Government employees driving CMVs operated by a unit of government
- Utility service vehicle drivers
- Michigan drivers engaged in seasonal construction activities (solely within the state) are permitted to use 70/80 hours during any 7/8 consecutive days and may drive 12 hours during a 16 hour tour of duty.

NOTE: Although these drivers have been granted additional hours they must still comply with the 10 consecutive hours off-duty rule. (Act 181 of 1963 sec 480.15)

Duty status

Driving

All time spent at the operational controls of a commercial motor vehicle in operation.

On-duty

All time from the driver begins work until the driver is relieved of all responsibilities for performing work. On-duty includes:

- Driving
- Performing all other duties required by the carrier
- All time spent providing breath and alcohol specimens for drug and alcohol testing; required by federal regulations
- Any other compensated work (part-time jobs)

Off-duty

When a carrier relieves a driver from all responsibility for performing work and the driver is not performing any other compensated work.

Maximum driving & duty rules

- A driver:
- May drive 11 hours following 10 consecutive hours off-duty
- May not drive beyond the 14th hour after coming on duty
 - The 14 hour calculation begins when a driver comes on duty and includes all off-duty time, driving time, on-duty not driving timer and all sleeper berth time; less than 8 hours.
- May not drive after 60/70 hours on-duty in any 7/8 consecutive days however, may begin a new 7/8 day period anytime he/she takes 34 consecutive hours off-duty.

10 consecutive hours off-duty

The 10 consecutive hours off duty may be achieved by taking:

- a) 10 consecutive hours off-duty
- b) 10 consecutive hours in a sleeper berth
- c) Combining off-duty and sleeper berth time, totaling 10 consecutive hours (unbroken)

NOTE: When combining off-duty and sleeper berth time, there is no minimum amount of time a driver must spend in the sleeper berth.

Sleeper berth provision

A driver may achieve the *equivalent* of 10 consecutive hours off-duty by combining a sleeper berth period of 8 or more hours (but less than 10) with a separate period of at least 2 consecutive hours off-duty, or in the sleeper berth, or any combination of off-duty and sleeper berth time.

Note: The *equivalent* of 10 consecutive hours off-duty is not the same as 10 consecutive hours off-duty. A driver using the sleeper berth provision will not begin a new 14 hour tour of duty or 11 hours of driving following the two qualifying periods.

Driver's Hours of Service

(Cargo Carrying Drivers) FMCSR Part 395

Logbook requirements

- The daily log is an accurate and complete record of a driver's activities for each 24-hour period
- Unless exempt (see short haul operations this page), all drivers must record their duty status using the daily logbook
- All entries in the logbook shall be accurate, legible and in the driver's own handwriting
- Employers must retain and review the daily logs at their principal place of business (previous six months)
- Employers must retain and review supporting documents to verify the logs are true and accurate.

Short-Haul Operations CDL Vehicles

A CDL driver operating a property carrying vehicle which requires a CDL to operate, does not have to complete the daily log if he/she:

- following 10 consecutive hours off duty, does not drive more than 11 hours, and
- operates within a 100 air-mile radius of the normal work reporting location, and
- returns to the work reporting location and is released from duty within 12 hours after coming on duty.

Non CDL Vehicles

A driver operating a property carrying vehicle which does not require a CDL to operate does not have to complete the daily log is he/she:

- following 10 consecutive hours off duty, does not drive more than 11 hours, and
- operates withn a 150 air-mile radius of the normal work reporting location, and
- returns to the normal work reporting location within 14 hours of coming on duty.

NOTE: Although exempted from the logbook requirement, motor carriers must still keep a daily record of each driver's hours of service, e.g., time card, time sheet.

16 Hour Work Shift

A driver operating a vehicle which requires a CDL to operate and who returns to the work reporting location each day is permitted one 16 hour work shift in any 7 day period, or following 34 consecutive hours off-duty. During the 16 hour shift, the driver must complete a daily log sheet, and may drive during the 15th and 16th hour provided he/she does not exceed 11 hours of driving for the work shift.

A driver operating a vehicle which does not require a CDL to operate and who returns to the work reporting location each day is permitted two 16 hour work shifts in any 7 day period, or following 34 consecutive hours off-duty. During the 16 hour days, the driver may drive during the 15th and 16th hour, provided he/she does not exceed 11 hours of driving for the work shift.

NOTE: During a 16 hour work shift, a driver is not limited to the number of miles he/she may travel from the work reporting location.

Passenger Transportation

Motor carriers of passengers operate under different rules. Those requirements are also contained in FMCSR Part 395. For additional information, contact the Michigan Center for Truck Safety at 800-682-4682.

Inspection, Repair & Maintenance

Required driver inspections

Drivers are required to perform the following daily inspections of vehicles, equipment and cargo each day a vehicle is used:

- Pre-trip inspection: FMCSR 392.7, 392.8, and 396.13
- Cargo inspection (enroute): FMCSR 392.9
- Post-trip inspection (written); FMCSR 396.11

NOTE: The post-trip inspection is the only driver inspection which is required to be documented. Additionally, there are no requirements for a driver inspection report to be carried on the vehicle.

Periodic inspection (annual)

FMCSR 396.17

Every CMV shall:

- Be inspected at least once every 12 months by a qualified inspector and;
- At a minimum, pass the inspection criteria of FMCSR Appendix G; and
- Must have a copy of the inspection report or other form of documentation on the vehicle; and
- For at least 14 months following the inspection, a motor carrier must retain the original or a copy of the annual inspection report for each vehicle under its control and make them available for review.

Periodic (annual) inspector qualifications

FMCSR 396.19

Persons performing the periodic inspection must be "qualified," meaning they:

- Understand the inspection criteria of Part 393 and understand the inspection criteria of Appendix G, and
- Are knowledgeable of inspection procedures, tools used, and
- Are capable of performing an inspection by.... [see FMCSR 396.19(a)(3)].

Motor carriers are responsible to ensure that persons performing the periodic (annual) inspection are qualified and must maintain evidence of each person's qualifications for:

- The period during which the individual is performing inspections, and
- One year thereafter.

Roadside inspection

FMCSR 396.9

The driver shall deliver a roadside inspection report upon arriving at the next terminal or facility, and:

- The report is to be reviewed
- Defects noted shall be repaired (prior to vehicle being re-dispatched)
- Return the completed inspection report to issuing agency within 15 days
- Maintain a copy of the report for 12 months from the date of inspection.

Maintenance schedule

A motor carrier must have a written maintenance schedule for each vehicle operated (including trailers) outlining routine vehicle maintenance and the due dates for the type of maintenance.

Vehicle maintenance records

FMCSR 396.3

Motor carriers must maintain a vehicle maintenance file for each vehicle (including trailers) under the carrier's control for 30 consecutive days or more. At a minimum, these records must:

- Identify the vehicle.
- Indentify the nature and due dates for inspections and maintenance.
- Indicate dates maintenance and repairs performed.
- Be maintained for one year and for 6 months after the vehicle leaves the carrier's control.

Intermodal equipment providers must maintain or cause to be maintained, the same records (listed above) for each unit of intermodal equipment they tender or intend to tender to a motor carrier.

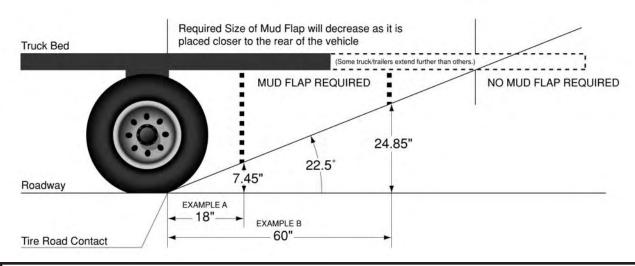
Mud Flaps

Michigan Motor Carrier Safety Act Michigan Public Act 181 of 1963

A truck, truck tractor, trailer, semitrailer, or any combination of these, when used on a highway, shall be so constructed or equipped as to prevent water or other road surface substances from being thrown from the rear wheels of the vehicle or combination at tangents exceeding 22.5 degrees measured from the road surface. If a flap type device

is used, it shall not have attached any type of lamp, breakable reflective material or reflecting buttons; nor may the device extend beyond the maximum width of the vehicle or combination.

Measurements are to be made while vehicles are unloaded.



The above diagram can be used as a guide in determining whether your vehicle is required to have mud guards or flaps. Compliance may be determined by whether the rear wheels of a commercial vehicle throw road surface substances back and up at an angle greater than 22.5 degrees.

- (1) In inches, measure from the point of rear-most tire contact to the point on the road surface below where the mud flap is or will be installed.
- (2) Take the measurement and multiply by .4142.
- (3) Measure up by the amount arrived at after the multiplication factor. That point is where the mud flap must be at or below.

Examples: A. 18 inches x .4142 = 7.45 (or fewer) inches off the ground B. 60 inches x .4142 = 24.85 (or fewer) inches off the ground

Quick Check: Measure 5 inches of vertical for every 12 inches of horizontal.

Brakes FMCSR Part 393

General requirements

- All commercial motor vehicles (including trailers) must be equipped with brakes acting on all wheels
- All brakes with which a motor vehicle is equipped (including trailers) must be capable of operating at all times.

Exceptions

- A truck or truck-tractor which has 3 or more axles and was manufactured before July 25, 1980 does not have to have brakes on the front axle, provided all brake components—except the spider and drum have been removed
- Any full trailer, any semitrailer or any pole trailer having a gross vehicle weight (GVW) of 3,000 pounds or less is not required to have brakes if the weight of the towed vehicle resting on the towing vehicle does not exceed 40 percent of the towing vehicle's GVW
- · Disabled vehicles being towed.

Use of surge brakes

Interstate:

- GVWR of 12,000 pounds or less, when the GVWR does not exceed 1.75 times the GVWR of the towing vehicle; and
- GVWR greater than 12,000 pounds but less than 20,001 pounds, when the GVWR does not exceed 1.25 times the GVWR of the towing vehicle

Intrastate:

Trailers with a gross weight of 15,000 pounds or less may be equipped with surge brakes (MVC257.705(1) (c).

Note: Surge brakes are hydraulic trailer braking systems that rely on the braking action of the towing unit to stop the towed vehicle. FMCSR 393.5.

Breakaway and emergency braking

Every trailer (except trailers having three or more axles) required to be equipped with brakes, shall be equipped with brakes so that, upon breakaway from a towing vehicle, all trailer brakes shall automatically and immediately engage and remain engaged for at least 15 minutes.

Warning devices and gauges

In general, a bus, truck or truck-tractor must be equipped with a signal that provides a warning to the driver when a failure occurs in the vehicle's braking system. The type of warning device that is required on the vehicle depends on the brake system.

More information can be found in the FMCSR or by calling MCTS.

Automatic brake adjusters

- Every CMV equipped with a hydraulic brake system and manufactured on or after October 20, 1993 must be equipped with automatic brake adjusters.
- Every CMV equipped with an air brake system and manufactured on or after October 20, 1994 must be equipped with automatic brake adjusters.
- Automatic adjusters must meet Federal Motor Vehicle Safety Standards.

Automatic adjustment indicators

Every CMV equipped with an air brake system which contains an external automatic adjuster or exposed push rod and was manufactured on or after October 20, 1994, must be equipped with automatic brake adjustment indicators (push rod indicators). Replacement parts must meet this requirement.

Refer to FMCSR Part 393 for complete details concerning brakes and all other required equipment on commercial motor vehicles.

Safety Devices FMCSR Part 393

Full trailers and dolly converters

- Must be equipped with a safety device that prevents accidental separation
- Must be equipped with a safety device that prevents the towed vehicle from breaking loose in the event the tow-bar fails or becomes disconnected and must.
 - Not be attached to the pintle hook or any other device on the towing vehicle to which the towbar is attached
 - Not have more slack than necessary to permit the vehicles to turn properly (never twist or knot a chain)
 - Have the <u>ultimate strength</u> of not less than the gross weight of the vehicle or vehicles being towed
 - Be connected to the towed and towing vehicle in a manner to prevent the tow-bar from dropping to the ground in the event it fails or disconnects.
 - Have the towed vehicle be equipped with two safety chains or cables or a bridle arrangement of one if safety chains or cables are used.

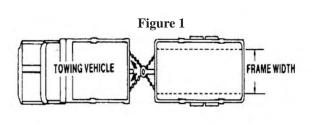
Driveaway-towaway operations

- Tow-bars shall be plainly marked by the manufacturer
- Must be equipped with a safety device that prevents the towed vehicle from breaking loose in the event the tow-bar fails or becomes disconnected. The safety devices:
 - Shall be equipped with at least two safety chains or cables, if used
 - o Shall be crossed if chains or cables are used
 - Must not have more slack than necessary to permit the vehicles to turn properly (never twist or knot a chain).

More information about coupling devices and towing methods can be found in Part 393 of the FMCSR.

Non-driveaway-towaway operations

Should the coupling device become detached during travel—although not required by law—crossed safety devices (Figure 1) will minimize the lateral movement of the towed vehicle as illustrated in Figure 2 where the safety devices are not crossed.



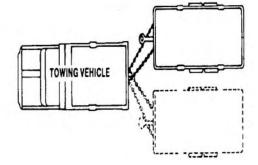


Figure 2

NOTE: Refer to the FMCSR for complete details concerning the proper use of safety devices.

Cargo Securement

FMCSR Part 393

General intrastate and interstate operations

- Each CMV transporting cargo must be loaded and equipped to prevent the cargo from leaking, spilling, blowing off or falling from the motor vehicle.
- Cargo must be contained, immobilized or secured to prevent shifting upon the vehicle to the extent that the vehicle's stability or maneuverability is not adversely affected.

Intrastate and interstate operations: general tiedown devices

- All devices and systems used must meet the performance criteria of FMCSR, 393.102.
- All vehicle structures, systems, parts and components used to secure cargo must be in proper working order when used to perform that function with no damaged or weakened components that will adversely affect their performance.
- Repairs must comply with applicable standards of FMCSR 393.104 or the manufacturer's standard.
- Tiedowns must be attached and secured in a manner to prevent them from unfastening, opening, releasing or becoming loose.
- Vehicle structures and anchor points must meet the performance criteria of FMCSR, Part 393.102.
- Materials used as dunnage or dunnage bags, chocks, cradles or shoring bars must not have damage or defects which would compromise the effectiveness of the securement system
- The aggregate working load limit (WLL) of the securement system must meet or exceed half the weight of the article or group of articles (See FMCSR 393.106(d) for complete explanation).
- Tiedowns not marked by the manufacturer with a WLL will be given the WLL found in FMCSR 393.108.

Intrastate and interstate operations: general length

- When the article is blocked or braced to prevent forward movement, it must be secured by at least one tiedown for each 10 feet of article length or fraction thereof.
- When an article is <u>not</u> blocked or positioned to prevent forward movement, additional tiedown devices must be used. Refer to FMCSR Part 393.
- Some cargo securement rules do not apply to "special purpose vehicles." *See the FMCSR for complete information*.
- Tiedown devices must be adjustable can tighten them.
- Front-end structures, *if used*, must meet the criteria found in FMCSR 393.114.

Specific securement requirements by commodity type

Complete information on specific securement requirements by commodity type can be found in the FMCSR 393.116 – 393.136 for the following:

- Logs
- Dressed lumber or similar building products
- Metal coils
- Paper rolls
- Concrete pipe
- Intermodal containers
- Automobiles, light trucks and vans
- Heavy vehicles, equipment and machinery
- Flattened or crushed vehicles
- Roll-on/roll-off or hook-lift containers
- Large boulders

Michigan Commercial Driver License (CDL) Michigan Vehicle Code

Who needs a CDL in Michigan?

If you are going to operate ANY of the vehicles below either within the state or across state/foreign borders, you need a CDL.

What type of CDL do I need?

A Michigan resident needs a valid operator or chauffeur license with the appropriate group designation to operate the following vehicles.

Group A To operate a vehicle which is:

• A combination of vehicles with a gross combination weight rating of 26,001 pounds or more, and tows a vehicle with a gross vehicle weight rating of more than 10,000 pounds

Group B To operate:

• A single vehicle having a gross vehicle weight rating of 26,001 pounds or more

Group C To operate small vehicles:

- Designed to carry 16 or more people including the driver; or
- Not meeting the requirements for group A or B which carry hazardous materials in amounts requiring placarding (refer to CDL Manual)

What endorsements do I need on my CDL in Michigan?

In addition to the appropriate CDL group designation, endorsements are required for the following:

- T DOUBLE or TRIPLE TRAILERS (Triple-trailer combinations are not permitted in Michigan)
- **P** PASSENGER: For vehicles which are designed to carry more than 15 people (including the driver)
- **N TANK VEHICLES:** For vehicles designed to haul liquids or liquefied gases in permanently mounted tanks of any size or portable tanks rated at 1,000 gallons or more
- **H HAZARDOUS MATERIALS:** To carry hazardous materials in amounts requiring placarding (includes small trucks, pickup trucks and passenger vehicles)
- X An "X" endorsement will appear on the license instead of the H and N codes when an applicant receives both the tanker and hazardous materials' endorsements

CDL Exceptions

Michigan offers exceptions to the CDL requirements, which include:

- Active military duty operating military vehicles
- Police and firefighters operating authorized emergency vehicles
- Farmers operating within a 150-mile radius of a farm (an "F" endorsement may be required)
- Individuals operating motor homes or vehicles used exclusively to transport personal possessions or family members for nonbusiness purposes

NOTE: A vehicle with airbrakes that does not meet the group A, B or C definitions listed above, does not require a CDL to operate.

Drug and Alcohol Testing

Federal Motor Carrier Safety Regulations Parts 40 and 382 Summary

A comprehensive set of federal regulations requires persons holding a Commercial Driver License (CDL) and who operate a commercial motor vehicle (as defined in the Federal Motor Carrier Safety Regulations, Part 382) to be tested for controlled substances and alcohol. These rules preempt any state testing requirements and apply to both interstate and intrastate drivers.

Companies that employ these persons must establish a drug and alcohol testing program (as prescribed in Part 382) and conduct:

- Pre-employment testing
- Random testing
- Reasonable cause testing
- Post-accident testing
- Return-to-duty testing
- Follow-up drug and alcohol testing.

A person who fails a required test or refuses to test is considered medically unqualified to operate any commercial motor vehicle, as defined in FMCSA 390.5 (see page 5).

Essential to an employer's drug and alcohol testing program are the requirements for:

- A written drug and alcohol testing policy
- Driver and supervisor education
- A scientifically conducted random selection process.

Additionally, an employer will need to contract with:

- Qualified drug and alcohol collection facilities
- Certified laboratories
- · Medical review officers
- Substance abuse professionals.

Maintaining accurate records is critical to ensuring compliance with these rules.

Most companies subject to these rules use the services of a third party administrator.

Owner-operators or a company with only one driver must contract with a third-party administrator.

Consortium/Third party administrator (C/TPA) is a service agent that provides, administers or coordinates one or more drug and/or alcohol testing services to employers, subject to FMCSA drug and alcohol testing regulations.

The complete text of the drug and alcohol testing regulations and the procedure can be found in the Federal Motor Carrier Safety Regulations, Parts 382 and 40 respectively.

ESTABLISHING A DRUG AND ALCOHOL TESTING PROGRAM

Are your drivers required to be drug tested under federal law? What do you do if a driver fails a random test? The Center has trained professionals who can answer your drug and alcohol testing questions.

Michigan Center for Truck Safety 800-682-4682 Upper Peninsula 800-469-7364

Michigan Alcohol Laws

(For CDL Drivers)

Violations of Michigan's drunk driving laws affect a driver's CDL.

Under Michigan law, a person who has an alcohol content of .04 grams or more may not operate a commercial motor vehicle. With respect to these laws, a commercial motor vehicle is one which meets Michigan's requirements for a CDL.

A CMV driver will be placed out of service for 24 hours if he/she:

- Refuses a preliminary breath test (PBT)
- Consumes alcohol within 4 hours prior to operating a CMV
- Consumes alcohol while operating a CMV
- Has an alcohol content of .02 while operating a CMV.

In addition to being placed out of service, if a driver is convicted of a violation of Michigan's drunk driving laws or those of another jurisdiction, the driver's CDL will be revoked.

The CDL will also be revoked if the driver refuses a request by a peace officer, of this state or another jurisdiction, for a chemical test for the presence of drugs or alcohol. For a first violation, the period of revocation will be one year (3 years if transporting hazardous material). A second violation, regardless of the time between violations, will result in revocation for life, with the possibility of reinstatement after 10 years.

These revocations also apply to a CDL driver while operating a non-commercial motor vehicle. A non-commercial motor vehicle does not include a recreational vehicle used off-road

When operating a non-commercial motor vehicle, the alcohol content of .08 BAC would be used to determine a drunk driving violation.

These laws are contained in Act 300 of the Michigan Vehicle Code, Sections 257.319b and 257.625.

Other violations which would result in revocation include:

- Leaving the scene of an accident
- Using a vehicle to commit a felony
- Refusing a request for a chemical test.

NEED A SPEAKER FOR YOUR MEETING?

Companies, business groups or organizations who would like to schedule a seminar, workshop or onsite training contact

Michigan Center for Truck Safety 800-682-4682 Upper Peninsula 800-469-7364

Hazardous Materials

General Information

This material is provided as a general reference. Michigan has adopted the Federal Hazardous Materials Regulations (FHMR) into state law. The FHMR should be reviewed prior to shipping or transporting hazardous materials. The FHMR is found in Title 49, Code of Federal Regulations, Parts 100-180. Compliance is mandatory for intrastate and interstate transportation.

Hazardous Materials Security Plan

Part 172, Subpart I

Requires many shippers and transporters of hazardous materials to develop and adhere to a security plan.



Training

Part 172, Subpart I

Requires employers to train, test and certify all employees involved in the transportation of hazardous material. Training shall include:

- General awareness/familiarization training
- Function-specific training
- Safety training
- Security awareness training.

As of December 22, 2003, employers required to have a security plan must also provide employees with indepth security training concerning the security plan and its implementation.

Shipping Papers

Shipping papers (sometimes called manifests or bills of lading) are required for almost all hazardous material shipments, even if it is for your own use. There is no required form (except for hazardous waste, see below), but there is a required format. Example below:

PROPER SHIPPING	HAZARD CLASS	IDENTIFICATION	PACKING GROUP	TOTAL QUANTITY
NAME	3	NUMBER	II	5 gallons
Gasoline		UN1203		

Shipping papers must also contain the following

- *Total Quantity* (i.e., 1,000 lbs., 2,000 gallons, 10 cylinders, or 1 cargo tank)
- Shipper Certification (see exceptions in 172.204b)
- Emergency Telephone Number (Must be someone familiar with the product carried and can provide response information. Pagers, voice mailboxes and callbacks are illegal.)
- *Emergency Response Information* (The U.S. DOT NA Emergency Response Guidebook is

- preferred or an MSDS that contains the required information.)
- Additional Requirements (Some products have additional descriptions that must be included; see Section 172.201, 172.202, and 172.203.)
- *Uniform Hazardous Waste Manifest* (A form required by the EPA, it *may* meet the shipping paper requirement if all of the required information is present.)

Hazardous Materials

General information

Materials of Trade

Certain hazardous materials transported in small quantities are subject to limited regulation under section 173.6 of the Hazardous Materials Regulations. Materials of Trade (MOTs) are hazardous materials that are carried on motor vehicles for at least one of the following purposes:

- To protect the health and safety of the motor vehicle operator or passengers (examples include insect repellent, self-contained breathing apparatus and fire extinguishers)
- To support the operation or maintenance of a motor vehicle or auxiliary equipment (examples include engine starting fluid, spare battery and gasoline) or
- When carried by a private motor carrier to directly support a principal business that is not transportation (examples include lawn care, pest control, plumbing, welding, painting, door-to-door sales).

MOTs are limited to the hazardous materials in the following classes and divisions*:

- Flammable or combustible liquids (Class 3), such as paint, paint thinner or gasoline
- Corrosive materials (Class 8), such as muriatic acid, battery fluid or drain cleaner
- Miscellaneous hazardous materials (Class 9), such as asbestos or self-inflating lifeboats
- Flammable gases (Division 2.1), such as acetylene or propane
- Nonflammable compressed gases (Division 2.2), such as oxygen or nitrogen
- Flammable solids (Division 4.1), such as charcoal
- Spontaneously combustible materials (Division 4.3), such as test kits
- Oxidizers (Division 5.1), such as bleaching compounds
- Organic peroxides (Division 5.2), such as benzoyl peroxide
- Poisons (Division 6.1), such as certain pesticides or
- Consumer commodities (ORM-D), such as hair spray or spray paint.

Note: The MOTs exemptions does not exempt motor carriers from the insurance requirements in FMCSR Part 387.

HM Permits/Registration

- For any placardable amount of hazardous materials, intrastate or interstate, the shipper or transporter must register with the U.S. DOT/RSPA. Registration information can be obtained by calling 202-366-4109.
- The transportation of hazardous waste in the State of Michigan requires a permit from the Department of Environmental Quality at
 - 734-432-1256. For environmental information, call 517-335-2690.
- The transportation of explosives and fireworks in the State of Michigan requires a permit from the MSP/ Fire Marshal Division, 248-380-1102.
- The storage of regulated medical waste in the State of Michigan requires a permit from the Department of Environmental Quality, 517-241-1320.
- The transportation of division 1.1, 1.2 and 1.3 explosives, materials that are poisonous by inhalation, highway route controlled quantities of radioactive materials, compressed or refrigerated liquid methane in concentration of 85% or greater, in a bulk tank with a capacity or 3,500 gallons or greater requires a Hazardous Materials Safety Permit issued through USDOT/FMCSA.

Hazardous Materials

General information

Railroad Crossings

Michigan law (Section 257.669) requires any vehicle that is marked OR placarded to stop prior to crossing a railroad grade. This includes farm vehicles, such as anhydrous ammonia tanks. Markings include identification numbers, shipping names, the "HOT" symbol, the "Marine Pollutant" symbol or any other U.S. DOT hazardous material marking that is required to be on the outside of the vehicle. Placarding includes any U.S. DOT hazardous material placard that is required to be on the outside of the vehicle.

Routing

The following state routes are prohibited to shipments of flammable liquids or explosive materials:

- M-10 (Lodge Freeway), Detroit, from 8 Mile Road to Wyoming Road (approx. 4.5 miles) and from Howard Street to Woodward Avenue (under Cobo Hall, approx. 1 mile)
- **I-696**, Detroit, from Telegraph Road east to I-75 (approx. 10 miles)
- **M-59**, Detroit, 1.1 mile from the Mound Road exit in either direction.

All of Michigan's major bridges and tunnels have prohibitions or restrictions on the shipment of hazardous materials. Contact the appropriate authority to obtain specific information.

Michigan Bridge/Tunnel Restrictions

Ambassador Bridge Detroit 313-496-1111	PROHIBITED Corrosives, explosives, radioactive materials, flammables
Windsor Tunnel Detroit 313-567-4422	PROHIBITED Corrosives, explosives, radioactive materials, flammables
Mackinac Bridge St. Ignace 906-643-7600	PLACARDED LOADS Escort vehicle required
International Bridge Sault Ste. Marie 906-635-5255	ESCORTED LOADS Explosives, flammables and radioactive materials
Blue Water Bridge Port Huron 810-984-3131	RESTRICTIONS Explosives, radioactive materials, organic peroxides
	PROHIBITED Pyrophoric liquids

For questions concerning compliance requirements under the Hazardous Material Regulations, contact:

Sgt. Susan Fries
HAZARDOUS MATERIALS AND INVESTIGATIONS UNIT
Traffic Safety Division - Michigan State Police
517-241-0583

Vehicle and Load Size

Michigan Vehicle Code

It is vital that carriers and drivers understand the size requirements (height, width, length and weight) for commercial motor vehicles operating on Michigan highways. The next several pages of the *Truck Driver's Guidebook* will highlight some of these requirements.

Highway types

State roadways have use restrictions placed on them by the Michigan Department of Transportation (MDOT) for commercial motor vehicles. Restrictions are based on vehicle size and the time of year, and are depicted in the MDOT Truck Operators' Map. The map depicts state roadways (designated or nondesignated routes) in various colors and explains their particular use:

- Green Routes Special Designated Highway (increases size and weight provisions; all weather/all seasonal)
- Gold Routes Same as the green; also designated as National Truck Network routes
- Black Routes Open to legal axle loads and normal length/width limitations year round (same as green for weight)
- **Red Routes** Seasonal routes (same as black for length/width). Subject to weight limitations during the spring as noted below:
 - Solid red line Subject to 25% weight reduction on each axle
 - Broken red line Subject to 35% weight reduction on each axle.

The Truck Operators' Map may be obtained by contacting the Michigan Department of Transportation (MDOT) at 517-373-2121.

Vehicle length

See MVC 257.719 for complete definition

The total distance from the front of a vehicle, or combination of vehicles, to the rear of the vehicle or combination of vehicles, including the distance of any load being transported on the vehicle.

Load projections

See MVC 257.719

- A load may not project more than 3 feet beyond the front of the vehicle provided the length of the vehicle and load do not exceed the allowable vehicle length.
- Any amount of overhang from the rear of the vehicle is permitted, provided the length of the vehicle and load do not exceed the allowable vehicle length.

FMCSR 393.11 (Footnotes 9 and 10) and 393.87 require a load that extends more than 4 feet from the rear of a vehicle and/or 4 inches from the side shall be marked with additional clearance lamps (when headlamps are required to be used) and 18-inch square red/orange fluorescent flags.

Length shall not include safety and energy conservation devices. Such a device shall be excluded from a determination of length as long as it is not designed or used for the carrying of cargo.

A rear overhang of 6 feet is permissible for trailers with a length of 50 feet or less if the trailer is designed and used to transport saw logs, pulpwood or tree-length wooden poles.

Special permits

Vehicles or loads which exceed legal dimensions or weight require a special permit when operating on Michigan roads. For permit information, contact the Michigan Department of Transportation, county road commissions or local jurisdictions.

Vehicle and Load Size

Michigan Vehicle Code

Vehicle Length

MVC 257,719

Single vehicle

With or without load (excluding impact absorbing bumpers) 40 feet - all routes.

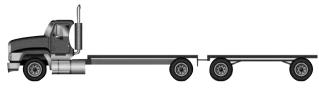
Tractor, semitrailer

Tractor, semitrailer combinations have no overall length restrictions, provided the trailer length does not exceed **50 feet**.

On **designated routes** only, tractor and semitrailer combinations have no overall length restrictions, provided the trailer does not exceed **53 feet** in length and has no more than three axles.

Semitrailers longer than 50 feet shall have a wheel base of not less than 37 feet and not more than 41 feet, measured from the kingpin coupling to the center of the rear axle or the center of the rear axle assembly.

Truck and trailer



- 59 feet overall length on nondesignated routes
- 65 feet overall length on designated routes
- **70 feet** (including the load) on **designated routes** if the vehicles are designed and used to transport saw logs, pulpwood or tree length wooden poles.

<u>Tractors, semitrailer and trailer or two semitrailers</u>

- Nondesignated routes 59 feet overall length
- **Designated routes** no overall length if:
 - The length of each trailer or semitrailer does not exceed 28.5 feet in length or
 - The overall length of the trailers in combination does not exceed 58 feet, measured from the front of the first trailer to the rear of the second trailer.

Specialty equipment



A stinger steer combination designed and used exclusively to transport assembled motor vehicles or bodies, recreational vehicles or boats **shall not exceed 75 feet.**



For tractor/trailer combinations where the **TRACTOR** is not designed to transport assembled vehicles:

• On designated highways (gold and green) . . . no overall length; trailer (including overhang) not to exceed 53 feet in length;

NOTE: ALL tractor/trailer combinations (with or without a tractor designed to transport assembled vehicles or bodies) are limited to 65 feet on non-designated highways. (Does not include stinger steer combinations)

Vehicle height

MVC 257.719 & MVC 257.719a

- A vehicle unloaded or with a load (except mobile homes) shall not exceed a height of 13 feet, 6 inches without special permit.
- Mobile homes may not exceed a height of 12 feet,
 6 inches without special permit.

Vehicle width

MVC 257.717

- The total width of a trailer, semi-trailer, bus or motor home shall not exceed 102 inches.
- The total outside width of all other vehicles shall not exceed 96 inches, except on designated highways where 102 inches is allowed.
- The total outside width of the load of a vehicle hauling concrete pipe, agricultural products or unprocessed logs, pulpwood or wood bolts shall not exceed 108 inches.

Inderstanding the axle and weight load limits can be very confusing. To better help you, the following is a simple guide for maximum axle load limits that is not intended for legal purposes. You are responsible for familiarity with the complete weight laws found in the Michigan Vehicle Code, Section 257.722. Should you have questions about weight limits, please call our hotline at (800) 682-4682.

NOTE: No motor vehicle shall be operated with tires that carry a weight greater than that marked on the side-wall of the tire. FMCSR 393.75

General Information

Maximum load limits may depend on the following:

- What type of highway you are operating on (See page 24 for highway types)
- The number of axles and the distance (spacing)
 between the axles or axle assemblies on which
 the vehicle or combination of vehicles is
 operated (spacing is the distance between axles,
 measured from the center of one axle to the
 center of another axle)
- The gross vehicle weight of the vehicle or combination of vehicles
- Tire width (as published by the manufacturer). Depending on the conditions above, your vehicle may be subject to the maximums found under the bridge formula or the normal loading standards.

Bridge gross weight formula general information

The bridge formula applies to vehicles operating on interstate highways and specially designated highways which:

- Do not exceed 80,000 pounds gross weight
- Do not exceed the maximum allowed under the formula.

See page 32.

Normal loading maximum general information

MVC 257.722

Maximum loads shall not exceed the number of pounds in the following provisions:

- 18,000 pounds on an axle with at least 9 feet of spacing from any other axle
 NOTE: Weight cannot exceed 700 pounds per inch of the width of the tire ("width" means as published by the manufacturer)
- 13,000 pounds per axle when axle spacing is less than 9 feet between two axles but more than 3.5 feet
- Axles less than 3.5 feet apart shall not exceed 9,000 lbs. per axle.

It is your responsibility to be aware of frost law restrictions along with county and city weight limits.

Frost law restrictions

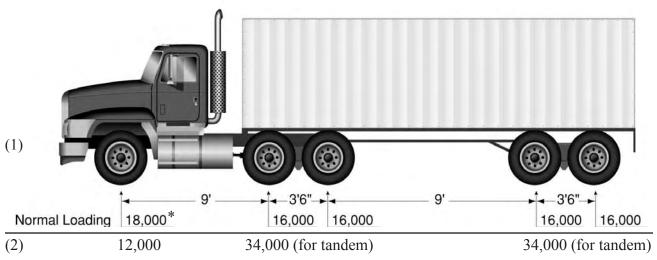
When spring weight restrictions are in effect on frost-restricted routes, axle loadings are reduced by 25 percent on rigid-based roads and 35 percent on flexible-based roads. **Most restricted state highways and county roads reduce axle loading by 35 percent**. Speed limits on frost restricted routes are reduced to 35 mph for every vehicle with a gross weight of 10,000 pounds or more.

State frost law information, 800-787-8960 www.micountyroads.org

County and city weight limits

Allowable axle weights on local roadways must be consistent with state law, but final weight determinations are the responsibility of the local jurisdictions. The limitation of 700 lbs. per inch of tire width still applies. "Access" to/from state or federal highways on local roadways cannot be assumed. Local jurisdictions also apply width and length limitations to their roadways and retain the authority to issue or deny special permits. You should contact the appropriate jurisdiction for specific information prior to movements upon local roadways.

Although these are legal weights, it is an equipment violation to exceed the manufacturer's displayed load rating on any tire.



Example (1) On a combination of truck-tractor and semitrailer having not more than 5 axles, 2 consecutive tandem axle assemblies shall be permitted on the designated highways at a gross permissible weight of 16,000 pounds per axle, if there is no other axle within 9 feet of any axle of the assembly. (This configuration is allowable on interstates and designated highways in Michigan.) If an additional axle were to be added between the two tandems, only one of the tandems (drives or trailer) would be allowed 16,000 pounds per axle. The other tandem would be limited to 13,000 pounds per axle.

*Steering axle weights can be a maximum of 18,000 lbs. (11,700 frost restriction) if equipped with high pressure pneumatic or balloon tires.

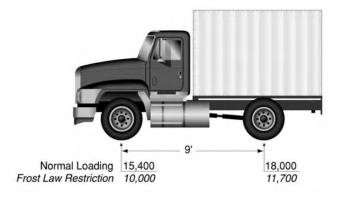
Example (2) is the bridge formula for interstate highways when the gross vehicle weight is 80,000 pounds or less and the distance between the center of the two tandem assemblies is 36 feet or more. State and local authorities may allow these weights on highways or sections of highways under their jurisdictions.

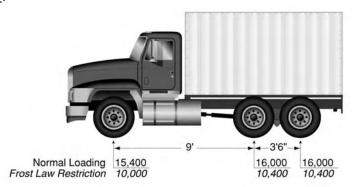
When determining your allowable axle weight shown on pages 27-31, under Michigan law you must also be in compliance with federal regulations which prohibit you from exceeding your tire ratings. Although Michigan law allows for these weights, your tire rating may restrict you to a lower weight.

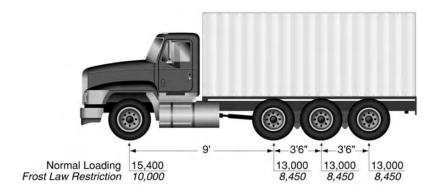
Examples of normal load maximums; frost law restrictions shown are at the 35 percent reduction.

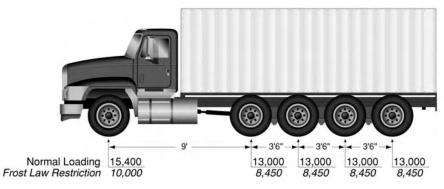
Steering axle weights shown here are based on 11:00 series tires.

Steering axle weights can be a maximum of 18,000 lbs. (11,700 frost restriction) if equipped with high pressure pneumatic or balloon tires.







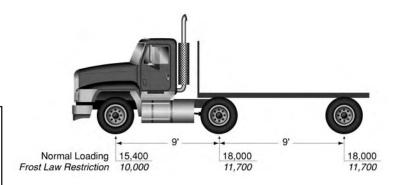


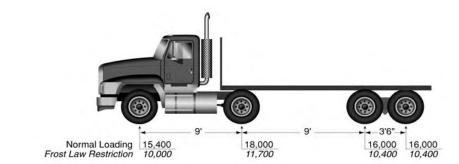
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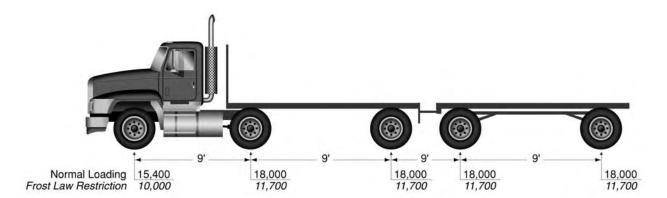
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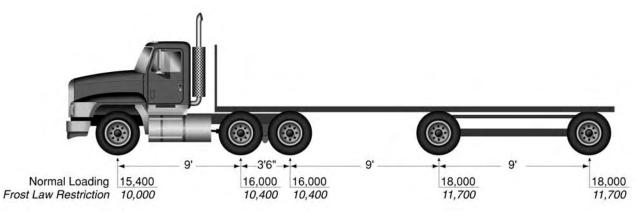
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Steering axle weights can be a maximum of 18,000 lbs. (11,700 frost restriction) if equipped with high pressure pneumatic or balloon tires.



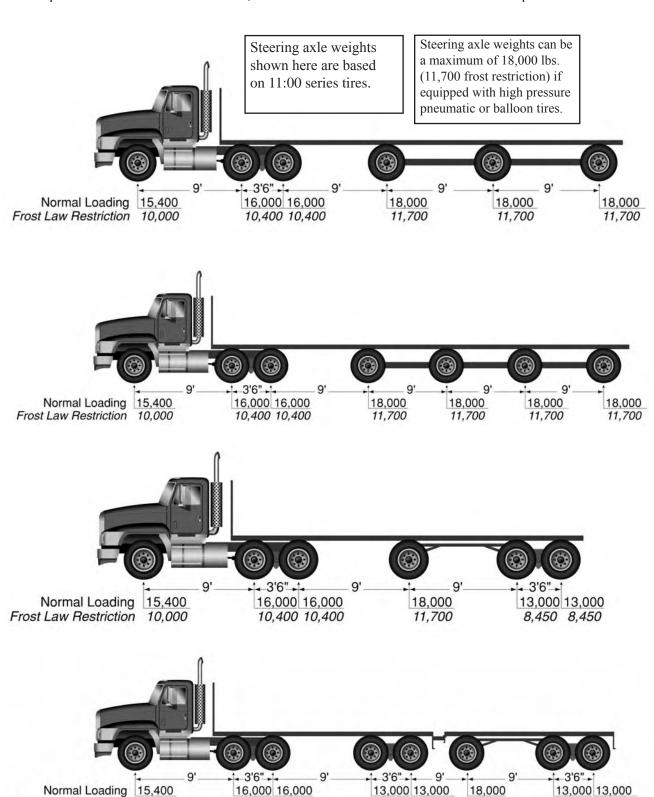






Although these are legal weights, it is an equipment violation to exceed the manufacturer's displayed load rating on any tire.

Examples of normal load maximums; frost law restrictions shown are at the 35 percent reduction.



Although these are legal weights, it is an equipment violation to exceed the manufacturer's displayed load rating on any tire.

8,450 8,450

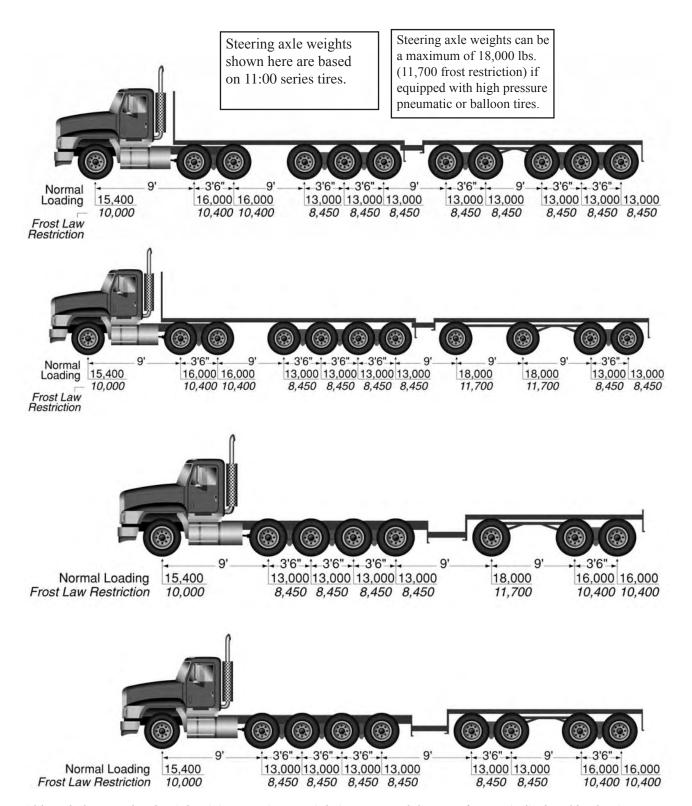
11,700

10,400 10,400

Frost Law Restriction

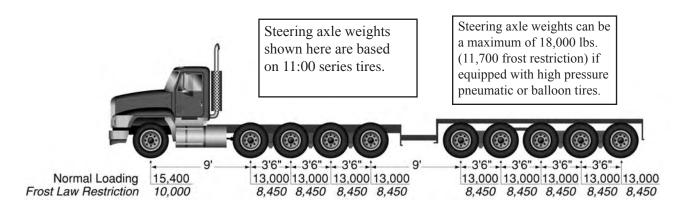
8,450 8,450

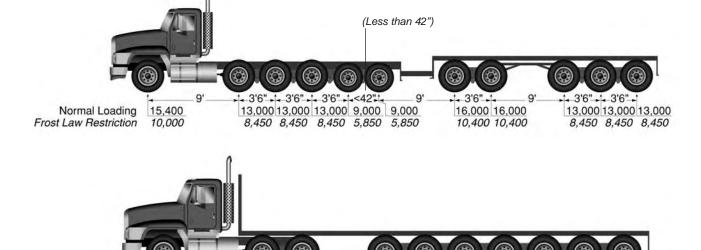
Examples of normal load maximums; frost law restrictions shown are at the 35 percent reduction.



Although these are legal weights, it is an equipment violation to exceed the manufacturer's displayed load rating on any tire.

Examples of normal load maximums; frost law restrictions shown are at the 35 percent reduction.





14 3'6" +14 3'6" +14 3'6" +14 3'6" +14 3'6" +14 3'6" +

13,000 13,000 13,000 13,000 13,000 13,000

8,450 8,450 8,450 8,450 8,450 8,450

3'6"

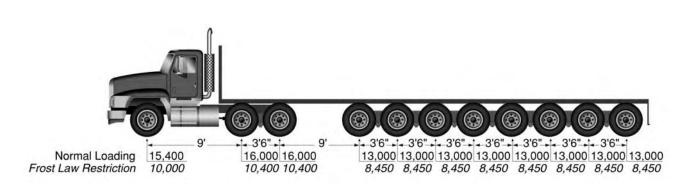
Normal Loading

10,000

Frost Law Restriction

16,000 16,000

10,400 10,400



Although these are legal weights, it is an equipment violation to exceed the manufacturer's displayed load rating on any tire.

Bridge Gross Weight Formula

The Bridge Gross Weight Formula was developed to prevent stress to highway bridges caused by heavy trucks. The formula provides a standard to control the spacing of truck axles and weight on those axles. Vehicles with a gross weight of 80,000 pounds or less may be eligible for increased weights using the Bridge Gross Weight Formula. Vehicles exceeding a gross weight of 80,000 pounds or the gross weight calculated using the Bridge Weight Formula are not eligible for bridge weights.

The Bridge Gross Weight Formula allows:

- 20,000 pounds for a single axle
- 34,000 pounds for a tandem axle group

The weight of other axle groups would be determined using the **Bridge Gross Weight Formula**.

W = The maximum weight in pounds that can be carried on a group of two or more axles to the nearest 500 pounds

L = The spacing in feet between the outer axles of any two or more consecutive axles

N =The number of axles being considered

A Bridge Gross Weight Formula chart is provided on page 36 of the *Truck Driver's Guidebook*. The chart is an easy means of determining permissible gross loads for vehicles in regular operation.

When using the formula chart:

Measure the axle spacing from first to last axle in the combination.



Use the bridge gross weight formula chart to determine the gross vehicle weight.

This is the maximum allowable gross vehicle weight.



Measure the axle group spacing.

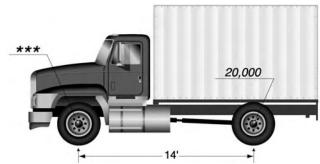


Use the bridge gross weight formula to determine axle group weights.

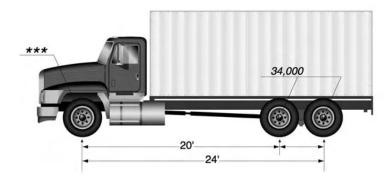
This is the maximum allowable gross vehicle weight for the group.

All groups must be legal.

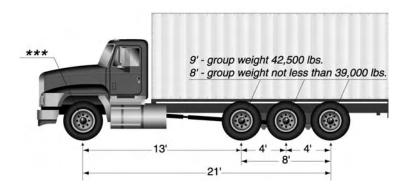
Bridge Gross Weight Formula



This vehicle has a bridge of 14'. Using the B/F chart, check the distance of 14' for two axles, finding a gross weight of 40,000 lbs. If this vehicle exceeds the formula weight of 40,000 lbs., the vehicle does not qualify for the bridge formula so only designated weights would apply.



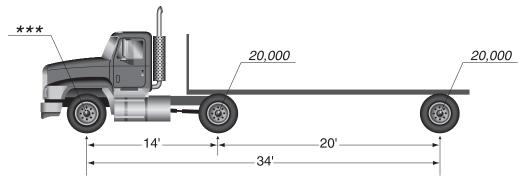
This vehicle has a bridge of 24' between axles 1 and 3. Using the B/F chart, this vehicle would be allowed a gross weight of 54,000 lbs. If this vehicle exceeds the B/F gross weight of 54,000 lbs., the vehicle does not qualify for the bridge formula so only designated weights would apply.



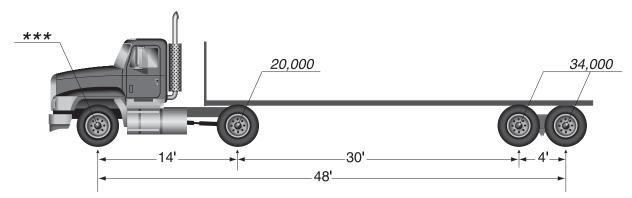
This vehicle has a bridge of 21' between axles 1 and 4. Using the B/F chart, this vehicle would be allowed a gross weight of 56,000 lbs. If this vehicle exceeds the B/F gross weight of 56,000 lbs., the vehicle does not qualify for the bridge formula so only designated weights would apply. The group bridge between axles 2 and 4 is 8'. Using the B/F chart, 8' would give this group 34,000 lbs. when designated loading is 13,000 lbs. per axle or 39,000 lbs. for the group — AXLE WEIGHTS WILL NOT BE LOWERED ANY LESS THAN DESIGNATED WEIGHTS. If the bridge between axles 2 and 4 was 9', the group weight would be 42,500 lbs.

*** The bridge formula allows up to 20,000 lbs. per single axle, if the vehicle is equipped with large enough tires. Steering axle weights will vary depending on the gross weight of the vehicle.

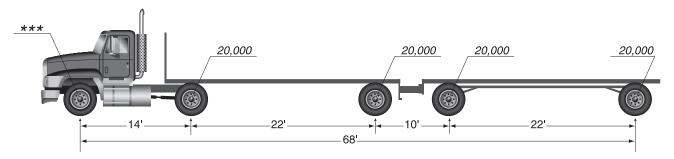
Bridge Gross Weight Formula



This combination has a bridge of 34' between axles 1 and 3. Using the B/F chart, this combination would be allowed a gross weight of 60,000 lbs. If this combination exceeds the B/F gross of 60,000 lbs., the combination would not qualify for bridge formula weights so only designated weights would apply (up to 18,000 lbs. on a single axle with proper tire size).



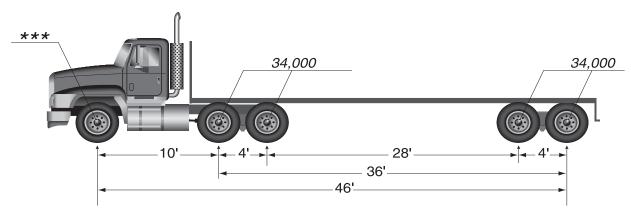
This combination has a bridge of 48' between axles 1 and 4. Using the B/F chart, this combination would be allowed a gross weight of 74,000 lbs. If the combination exceeds the B/F gross of 74,000 lbs., it would not qualify for bridge formula weights so only designated weights would apply (up to 18,000 lbs. on a single axle/16,000 lbs. for each axle on the tandem, with proper tire sizes).



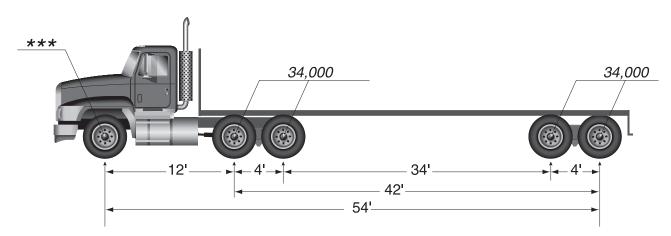
This combination has a bridge of 68' between axles 1 and 5. Using the B/F chart, this combination would be allowed a gross weight of 80,000 lbs. because the B/F only allows vehicles up to 80,000 lbs. If this combination does not exceed 80,000 lbs., single axles will be allowed 20,000 lbs. each. It should be noted that designated loading for this combination would exceed the B/F weights with up to 18,000 lbs. per single axle (with proper tire sizes) for a possible gross weight of 86,000 lbs. (14,000 lbs. on the steering axle).

*** The bridge formula allows up to 20,000 lbs. per single axle, if the vehicle is equipped with large enough tires. Steering axle weights will vary depending on the gross weight of the vehicle.

Bridge Gross Weight Formula



This 5 axle tandem tandem has an outer bridge of 46' (distance between axles 1 and 5). Using the B/F, this tandem tandem would be allowed a gross weight of 76,500 lbs. If this combination exceeds the gross weight of 76,500 lbs., it would be in violation. Also, the inner bridge on this vehicle is 36' (distance between axles 2 and 5). Using the B/F, this group of axles would be allowed a group weight of 66,000 lbs. If this group exceeds the weight of 66,000 lbs., the group would be in violation.



This 5 axle tandem tandem has an outer bridge of 54' (distance between axles 1 and 5). Using the B/F, this tandem tandem would be allowed 81,500 lbs. But, the B/F only allows vehicles up to a gross weight of 80,000 lbs. If this 5 axle tandem tandem exceeds 80,000 lbs. gross weight, it would be in violation. The inner bridge on this tandem tandem is 42' (distance between axles 2 and 5). Using the B/F, this group of axles would be allowed a group weight of 70,000 lbs. However, if the group weight exceeds 68,000 lbs., it would be in violation because each tandem is only allowed 34,000 lbs.

^{***} The bridge formula allows up to 20,000 lbs. per single axle, if the vehicle is equipped with large enough tires. Steering axle weights will vary depending on the gross weight of the vehicle.

PERMISSIBLE GROSS LOADS FOR VEHICLES IN REGULAR OPERATION¹

Distance in feet (L) between the extremes of any group of 2 or more consecutive axles

Maximum load in pounds carried on any group of 2 or more consecutive axles

	more consecutive axles N =	2 AXLES	3 AXLES	4 AXLES	5 AXLES	6 AXLES	7 AXLES	8 AXLES	9 AXLES
4		34,000							
5		34,000							
6		34,000							
7		34,000							
8	& less	34,000	34,000						
more	e than 8	38,000	42,000						
9		39,000	42,500						
10		40,000	43,500						
11			44,000						
12			45,000	50,000					
13			45,500	50,500					
14			46,500	51,500					
15			47,000	52,000					
16			48,000	52,500	58,000				
17			48,500	53,500	58,500				
18			49,500	54,000	59,000				
19			50,000	54,500	60,000				
20			51,000	55,500	60,500	66,000			
21			51,500	56,000	61,000	66,500			
22			52,500	56,500	61,500	67,000			
23			53,000	57,500	62,500	68,000			
24			54,000	58,000	63,000	68,500	74,000		
25			54,500	58,500	63,500	69,000	74,500		
26			55,500	59,500	64,000	69,500	75,000		
27			56,000	60,000	65,000	70,000	75,500		
28			57,000	60,500	65,500	71,000	76,500	82,000	
29			57,500	61,500	66,000	71,500	77,000	82,500	
30			58,500	62,000	66,500	72,000	77,500	83,000	
31			59,000	62,500	67,500	72,500	78,000	83,500	
32			60,000	63,500	68,000	73,000	78,500	84,500	90,000
33				64,000	68,500	74,000	79,000	85,000	90,500
34				64,500	69,000	74,500	80,000	85,500	91,000
35				65,500	70,000	75,000	80,500	86,000	91,500
36				66,000	70,500	75,500	81,000	86,500	92,000
37				66,500	71,000	76,000	81,500	87,000	93,000
38				67,500	71,500	77,000	82,000	87,500	93,500
39				68,000	72,500	77,500	82,500	88,500	94,000
40				68,500	73,000	78,000	83,500	89,000	94,500
41				69,500	73,500	78,500	84,000	89,500	95,000
42				70,000	74,000	79,000	84,500	90,000	95,500
43				70,500	75,000	80,000	85,000	90,500	96,000
44				71,500	75,500	80,500	85,500	91,000	96,500
45				72,000	76,000	81,000	86,000	91,500	97,500
46				72,500	76,500	81,500	87,000	92,500	98,000
47				73,500	77,500	82,000	87,500	93,000	98,500
48				74,000	78,000	83,000	88,000	93,500	99,000
49				74,500	78,500	83,500	88,500	94,000	99,500
50				75,500	79,000	84,000	89,000	94,500	100,000
51				76,000	80,000	84,500	89.500	95,000	100,500
52				76,500	80,500	85,000	90,500	95,500	101,000
53				77,500	81,000	86,000	91,000	96,500	102,000
54				78,000	81,500	86,500	91,500	97,000	102,500
55				78,500	82,500	87,000	92,000	97,500	103,000
56				79,500	83,000	87,500	92,500	98,000	103,500
57		Intersta	te Gross	80,000	83,500	88,000	93,000	98,500	104,000
58		Weight			84,000	89,000	94,000	99,000	104,500
59					85,000	89,500	94,500	99,500	105,000
60					85,500	90,000	95,000	100,500	105,500
					03,300	50,000	33,000	100,000	100,000

¹The permissible loads are computed to the nearest 500 pounds as required by statute.

²The following loaded vehicles must not operate over H15-44 bridges: 3-S2 (5-axle) with wheelbase less than 38 feet; 2-S1-2 (5 axle) with wheelbase less than 45 feet; 3-3 (6 axle) with wheelbase less than 45 feet; and 7-8- and 9-axle vehicles regardless of wheelbase.

Traffic Safety Division - Michigan State Police HEADQUARTERS

333 South Grand Avenue, P.O. Box 30634 Lansing, Michigan, 48913-0635 Phone: 517-241-0506 - FAX: 517-241-0501 Hazardous Materials & Investigations Unit 517-241-0583

District	Address & Telephone	Weigh Stations	Highway	Location	Telephone
1	First District HQ 7119 N. Canal Rd. Lansing , MI 48913 517-322-5572	Cambridge	US-12/M-50	Lenawee	517-467-2278
1		Fowlerville	EB/WB I-96	Livingston	517-521-3479
	317-322-3372	Grass Lake	EB/WB I-94	Jackson	517-522-4440
2	Second District HQ 42145 W. Seven Mile Rd. Northville , MI 48167 248-380-1070	Pontiac	NB/SB I-75	Oakland	248-335-4509
	Monroe State Police Post 300 Jones Ave. Monroe , MI 48161 734-384-5315	Monroe	NB/SB I-75	Monroe	734-848-5715
3	Third District HQ 411-B East Genesee Ave. Saginaw , MI 48607 989-758-1909	None			
	Fifth District HQ	Coldwater	NB I-69	Branch	517-278-4159
5	108 W. Michigan Ave. Paw Paw , MI 49079 269-429-1111	New Buffalo	EB & WB I-94	Berrien	269-469-2910
6	Sixth District HQ 588 Three Mile Rd. Grand Rapids , MI 49544 616-647-0810	Ionia	EB/WB I-96	Ionia	517-647-6512
7 & 8	Seventh District HQ 810 S. Otsego Avenue Suite 101 Gaylord , MI 49735-8321 989-732-7127	None			
	Eighth District HQ	Powers	US-2/US-41	Menominee	906-497-5511
	1504 West Washington St. Suite A Marquette , MI 49855 (Contact Gaylord Office) 989-732-9420	Mackinac Bridge	NB/SB I-75	Mackinac	906-643-7600, ext. 333
		St. Ignace Post			906-643-8383