

DEPARTMENT OF PUBLIC SAFETY POLICIES & PROCEDURES



ORIGINAL

SUBJECT: SIZE AND WEIGHT-VEHICLE APPROACH CHECKS

1.0 PURPOSE

It is the purpose of this policy to establish guidelines and procedures that are to be adhered to in the regulation, inspection, and enforcement of the size and weight laws of all motor vehicles operating in excess of the size and weight standards set forth in the State of New Mexico.

2.0 POLICY

It is the policy of the New Mexico State Police Commercial Vehicle Enforcement (CVE) Bureau to regulate, inspect, and enforce size and weight laws as they pertain to all motor vehicles operating on public roadways within New Mexico.

3.0 APPLICABILITY

This policy applies to all CVE personnel who regulate, inspect, and enforce size and weight laws in regards to motor vehicles operating in excess of the size and weight standards set forth in New Mexico state law.

4.0 REFERENCES

ATTENTION: All reference materials listed herein are subject to change and supersede this policy when changes have been made – employees shall ensure their reference to these documents are made regularly to obtain current and correct information.

- A. NMAC Title 18, Chapter 19, Part 8 of the New Mexico Administrative Code (NMAC), Transportation and Highways, Motor Vehicle Procedures, Licenses, Permits, Height and Weight of Vehicles and Loads (Herein referred to as Title 18).
- B. Title 23 US CFR Part 658 Truck Size and Weight, Route Designation Length and Width Limitations (Herein referred to as US Title 23)
- C. NEW MEXICO STATUTES ANNOTATED (NMSA 1978) Chapter 66, Article 7, Paragraphs 401 through 416 (Herein referred to as Statutes)

5.0 **DEFINITIONS**

- **A. CVE –** Commercial Vehicle Enforcement.
- **B. Employee** An employee of the Commercial Vehicle Enforcement Bureau of the New Mexico State Police that has the authority to conduct inspections, issue permits, and/or otherwise enforce any law or regulation regarding vehicle size and weight.
- **C. Supervisor** An employee of the Commercial Vehicle Enforcement Bureau of the New Mexico State Police that has the authority to conduct inspections, issue permits, and/or otherwise enforce any law or regulation regarding vehicle size and weight

and to direct and control the daily operations of facilities and work assignments of employees of the Bureau.

6.0 PROCEDURE

<u>ATTENTION</u>

Movement of oversized loads within the state without an oversize/overweight permit is illegal. However, a carrier entering the state is permitted to obtain an oversize permit at the nearest Port of Entry from where the vehicle entered the state without committing a movement violation. If the nearest Port of Entry is closed at the time of entry, the carrier shall wait at that location to obtain the required permits prior to continuing the trip or the carrier may contact the oversize/overweight permit offices in another manner to obtain the required permits prior to continuing the operation. If a carrier is operating within the state without the proper oversize/overweight permit, then the movement must be halted until a permit is obtained.

A. Vehicle Approach Checks

- 1. **Height.** If the height of the trailer or the load appears to exceed fourteen (14) feet, a measurement may be needed in order to determine if an oversize permit is required.
- 2. Length. Vehicles operating on designated highways may have two (2) twentyeight and one half (28-1/2) foot trailers (double) or one (1) fifty-seven and one half (57-1/2) foot trailer. If the overall length of the tractor, trailer, or combination appears to exceed sixty-five (65) feet and it is on a non-designated highway, a measurement may be needed in order to determine if an oversize permit is required.
- 3. Width. If the trailer or the load extends beyond the maximum eight (8) feet six (6) inch legal limit, an oversize permit is required if the load is non-reducible.

B. Scale Checks

Scale checks involve determining size and weight of commercial motor vehicles. This begins when the vehicle has come to a complete stop with the front tires of the truck/tractor on the scale in a position where the actual measuring and weighing can begin. At this point in the process, you should have already examined the vehicle and its load during the approach in order to identify any obvious violations. The scale check is completed when each set of axles has been properly weighed, the weights have been recorded, and those weights have been reviewed in statute for compliance with existing requirements.

1. Vehicle Width

- a. The total outside width of any vehicle, including any load, with the exception of mirrors and safety devices, shall not exceed eight (8) feet six (6) inches. If the vehicle has safety devices such as flags, warning lights, etc. three (3) additional inches are allowed.
- b. If the load is not reducible, the operator of any vehicle exceeding the width criteria must apply for, and obtain, an oversize permit before movement is allowed on state highways.
- c. Most conventional trailers do not exceed the eight (8) foot six (6) inch width

limitation. Loads on such trailers may not exceed the width requirement without an oversize permit. When reviewing for width compliance, proceed as follows:

- i. As the vehicle approaches, perform a visual inspection to ascertain the width of the vehicle, trailer, or combination, and load. If necessary, use a tape measure to determine the exact width.
- ii. If the vehicle, trailer, or combination, and load exceed the width requirements request to see the oversize permit. If no permit is presented, instruct the driver to park the vehicle.
- iii. If the vehicle, trailer, or combination, or load exceeds the width requirement the driver must purchase an oversize permit with all applicable restrictions in order to resume the trip.
- iv. If the load exceeds the width requirements and the load is reducible, detain the vehicle until the load is made legal. If you have any questions regarding the reduction or dismantling of a load, contact your supervisor. It is the responsibility of the driver and company to make the load legal.

IMPORTANT: No load is to be off loaded onto state property. The carrier is to make immediate arrangements to remove any excess load onto another vehicle. Follow Bureau guidelines on overloads of perishable items and livestock.

2. Vehicle Height

- a. No vehicle, including any load on the vehicle, shall exceed a maximum height of fourteen (14) feet without an oversize permit.
- b. Vehicles with non-reducible loads, which exceed the maximum height, may operate with an oversize permit.
- c. Procedure to determine height compliance:
 - i. As the vehicle approaches, perform a visual inspection to ascertain the height of the vehicle, trailer, or combination, and load. Use a measurement rod if necessary to determine the exact height.
 - ii. If the vehicle, trailer, or combination, and any load thereon exceed the height requirement, request to see their oversize permit.
 - iii. If the vehicle, trailer, or combination exceeds the height limit, the driver must acquire an oversize permit with all applicable restrictions in order to resume the trip.
 - iv. If the load exceeds the height limitations and the load is reducible, detain the vehicle until the load is made legal. An oversize permit is not issued for a load that can be reduced or dismantled. If the load cannot be reduced or dismantled, an oversize permit is required before the driver is allowed to resume the trip.

3. Vehicle Length

The maximum length of vehicles and/or loads permitted to operate in New Mexico is dependent on several criteria:

a. Title 23 US CFR Part 658 – Truck Size and Weight, Route Designation – Length and Width Limitations provides direction and specific highways and locations on highways where longer vehicle lengths and combinations are permitted to operate on such highways. Employees shall refer to the most recent publications of the "Federally Designated Roadways" in determining compliance of longer motor vehicles operating on all highways within the state. (A list is not provided herein as changes to the list, although not frequent, are made by agencies other than ours and current data is essential to the safe operation of longer vehicles within New Mexico. Supervisors are required to post in a conspicuous place and/or provide to the employees the most current listings of these roadways and locations).

Note that designated highways also include all access routes within twenty (20) miles for food, fuel terminals, etc.

- b. Towing combinations (trailers or vehicles). State statutes specify that no combinations of vehicles coupled together shall consist of more than two (2) units except:
 - i. A vehicle will be permitted to pull two (2) units, provided that the middle unit is equipped with brakes and has a weight equal to or greater than the last unit and the total combined gross weight of the towed units does not exceed the manufacturer's stated gross weight of the towing units (see 66-7-404 NMSA 1978).
 - ii. A double or triple saddle-mount or fifth wheel mount of vehicles in transit by drive away/tow away methods will be permitted.
- c. Unless otherwise authorized through an oversize permit to exceed the maximum length limitations, no vehicle or combination will be permitted to operate on non-designated highways. The maximum length for a vehicle shall be measured and compared to the limitations set forth in Statute, US Title 23, and Title 18 for compliance.
- d. When reviewing for length compliance, proceed as follows:
 - i. As the tractor-trailer or combination is being processed, determine the length of the total combination and trailers(s) using a tape measure. If the length of the combination, trailer(s) or load overhangs, are within the length limitation criteria proceed to Check Vehicle Weight.
 - ii. If the length of the tractor-trailer, or combination, or load exceeds the length limitation criteria instruct the driver to park the vehicle.
 - iii. If the length of a single trailer exceeds fifty-seven (57) feet six (6) inches, the driver must purchase a special oversize permit.

- iv. If the overall length of a tractor and trailer combination exceeds sixty-five (65) feet and the vehicle is traveling on a non-federally designated highway, appropriate enforcement action shall be taken and the vehicle directed to a federally designated highway.
- v. If the load exceeds the length requirement and the load can be reduced, require the vehicle to park until the load is reduced to its smallest dimension or made legal. If the load cannot be reduced or dismantled an oversize permit is required before a driver is allowed to resume the trip.

4. Vehicle Weight

- a. The criteria used in determining weight limitations are as follows:
 - i. Wheels (Tires). The type of tires that a vehicle is equipped with has an impact on the amount of weight that a vehicle and/or trailer can transport. No wheel equipped with pneumatic, solid rubber, or cushion tires shall carry a load in excess of six hundred pounds (600 pounds) for each inch of tire width. The width of a pneumatic tire shall be taken from the manufacturer's rating. The width of the solid rubber or cushion shall be measured from the flange of the rim.
 - ii. Axle Load. There are two (2) basic types of axles with which tractors or trailers are equipped. These are single and tandem axles. Each axle is permitted to impose upon the highway a specified amount of weight.

NOTE: No single wheel weight may exceed eleven thousand (11,000) pounds. The gross weight imposed on the highway by the wheels of any one (1) axle of a vehicle shall not exceed twenty-one thousand six hundred (21,600) pounds (66-7-409 NMSA 1978).

- 1. Single Axle. A single axle load is defined as the total load transmitted to the road by all wheels whose centers are included between two (2) parallel transverse vertical planes forty (40) inches or less apart extending across the full width of the vehicle.
 - a. Axles not extending across the full width of the vehicle are not to be considered as load-bearing axles for gross weight or axle weight limit determinations. Add any weight carried by such axles to the weight of the nearest full width axle.
 - b. The maximum gross weight imposed by the wheels on any single axle shall not exceed twenty-one thousand six hundred (21,600) pounds.
 - c. The maximum length for a vehicle shall be measured and compared to the limitations set forth in Statute, US Title 23, and Title 18 for compliance.
- 2. Tandem Axle. A tandem axle load is defined as the total load transmitted to the road by all wheels whose centers are included between two (2) parallel transverse vertical planes more than forty (40) inches apart but less than one hundred twenty (120) inches apart extending across the full width of the vehicle. The allowed load on tandem axles shall not

exceed the gross weight given in Section 66-7-410 NMSA 1978 for the respective distance between axles.

- 3. Multiple Axle Combinations. The total gross weight with load imposed upon the highway by any one (1) group of two (2) or more consecutive axles of a vehicle or combination of vehicles shall not exceed the gross weight given for the respective distance between the first and last axles of the group of axles measured longitudinally, to the nearest foot.
- iii. Weight Distribution. The distribution of the weight of a load must be done in accordance with the established maximum axle load requirements. When a vehicle is transporting a load, the weight of the load must be evenly distributed among the axles. If an axle is overloaded a motor carrier should attempt to shift the weight of the load.
- iv. Bridge Law. The bridge law or bridge gross weight formula provides a standard to control the spacing of truck axles on vehicles that use highway bridges. The bridge law was established to protect bridges and other structures from being overstressed due to overloaded vehicles. During the transportation of heavy loads, axle weights and their spacing on a vehicle are of primary concern. Increased spacing of axles on a vehicle applies less stress on a given area and permits a vehicle to move a greater load. The bridge formula assures that allowable weight on heavy trucks is correlated with the spacing of axles to prevent overstressing of highway structures. However, due to the grandfather clause of the Surface Transportation Assistance Act, the New Mexico formula has been adopted to address weight and axle limitations. The distance and weight table is referred to as the New Mexico Bridge Law. In order to calculate the accurate weight and distance limit, utilize the following formula:
 - 1. Maximum Gross Vehicle Weight = $(d + 40) \times 900$. For example: $(56' + 40) \times 900 = 86,400$ pounds. This formula is valid only when d is equal to or greater than nineteen (19) feet.
 - 2. d = Distance in feet between first and last axles of vehicle or combination of vehicles. Remember to round off to the nearest even foot or nearest whole number.
- b. When performing weight compliance, proceed as follows:
 - i. As the vehicle approaches, guide the vehicle to ensure that wheels are in alignment with the scales.
 - ii. Via hand signals, light signals, or verbal directions instruct the driver to come to a complete stop when the front axle of the vehicle is directly over the center of the scale. Review the weight on the scale readout meter. If using three (3) segment scales, make sure all axle groupings are completely on the scales and that the vehicle has come to a complete stop.
 - iii. Perform the same inspection procedure for each axle or set of axles. Make sure to write down the scale weights as each axle (or axle grouping) is weighed.

- iv. Tabulate the individual axle weights to determine the gross vehicle weight.
 - The axles of the tractor and trailer combination must meet the tire limits, axle, and gross vehicle weight limitation requirements. The actual gross vehicle weight must not exceed the declared gross vehicle weight (DGVW) on the cab card unless the DGVW is eighty-thousand (80,000) pounds and the axle spacing(s) and/or the bridge formula allows the vehicle to exceed the DGVW of eighty thousand (80,000) pounds.
 - 2. If any of the axles are overweight, inform the driver that a particular axle is heavy and that the vehicle is in violation. Allow the driver to shift weight to re-distribute the weight.

Weight shifting can be done by two (2) means:

- a. Axle Shifting. Most conventional van body type trailers are equipped with a slide rail assembly that permits the shifting of axles supporting the trailer. When a driver shifts the axles, the weight of the load is re-distributed on the axles. Many times when a vehicle is overloaded on a particular axle an axle shift is performed to adjust the weight.
- b. Fifth Wheel Shift. Most conventional tractors are equipped with a saddle-mount on a fifth wheel device that can be used to shift a trailer forward or backward. The shifting of the trailer re-distributes the weight on the axles.
- 3. Weigh the entire tractor and trailer combination again. If the weights are legal, proceed to document the action.
- 4. If at this point the vehicle is still overweight, instruct the driver to park the vehicle. You may detain the vehicle until the load is reduced to legal limits (66-7-411 NMSA 1978). Complete all required documentation and issue appropriate citation(s) at the discretion of the officer.
- 5. If the vehicle exceeds the maximum gross vehicle weight of eightysix thousand four hundred (86,400) pounds, regardless of the number of axles or spacing of axles, the vehicle is overweight.
 - a. If the load is reducible or dismantle-able, enforcement action is necessary. If the vehicle has traveled within the state without a permit, or in violation of an existing permit, detain the load until the load is reduced to a legal limit.
 - b. If the load cannot be reduced or dismantled, the driver must acquire an overweight permit in order to resume the trip.
- Only New Mexico based Vehicles, exceeding the DGVW on the registration, are considered to be in violation of the Weight Distance Tax Act (refer 7-15A-1 NMSA 1978). A citation may be issued for the actual weight exceeding the DGVW.

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7.0 ATTACHMENTS

NONE

8.0 APPROVAL

APPROVED BY: S/ Mark R. Shea DATE: 01/06/2020 DPS Cabinet Secretary