

TRUCK SIZE AND WEIGHT HARMONIZATION STUDY- BACKGROUND MEMORANDUM

Section 10 of House Bill No. 1012 ([Appendix A](#)) directs the Legislative Management to study the truck size and weight provisions under Chapter 39-12 relating to size, width, and height restrictions, in order to ensure the state of North Dakota may harmonize its truck size and weight regulations with the regulations of the states in the Western States Transportation Alliance. The Legislative Management is to use the findings of the study in collaboration with an Upper Great Plains Transportation Institute and Department of Transportation study of the impacts to the state of harmonizing truck size and weight regulations with states in the Western States Transportation Alliance regarding standard commercial truck envelope limits of 129,000 pounds gross vehicle combination weight or 100 foot cargo carrying length and potential implications, for the 2015-17 biennium. Section 9 of House Bill No. 1012 ([Appendix A](#)) appropriates \$60,000 from the general fund to the Department of Transportation for a collaborative study with the Upper Great Plains Transportation Institute of the impacts of harmonizing truck size and weight regulations with states in the Western States Transportation Alliance regarding standard commercial truck envelope limits of 129,000 pounds gross vehicle combination weight or 100 foot cargo carrying length.

WESTERN STATES TRANSPORTATION ALLIANCE

The Western States Transportation Alliance was formed to foster cooperation on a variety of highway-related issues including truck size and weight, highway safety, cooperative state highway administration and improved commercial vehicle safety inspections. The Western States Transportation Alliance is comprised of the following 10 states: Colorado, New Mexico, Utah, Arizona, Oregon, North Dakota, Wyoming, Idaho, Nevada, and Montana. The members of the Western States Transportation Alliance entered into an alliance, known as the Multi-State Highway Transportation Agreement, which recommends changes in law or policy with emphasis on compatibility and uniformity of administrative rules or regulations. Multi-State Highway Transportation Agreement's goal is to promote effective governmental action and coordination for the safe and efficient movement of people and goods. One of the Multi-State Highway Transportation Agreement's objectives is the implementation of uniform vehicle size and weights.

STATE STATUTES

The Legislative Assembly has enacted North Dakota Century Code Section 39-12-04, relating to width, height, and length limitations on vehicles and Section 39-12-05.3 relating to weight limitations for vehicles on highways other than the interstate system. The purpose of these sections is to restrict the size and weight of vehicles on state highway and roads network for the safety of the public, to preserve the state's infrastructure, and facilitate commerce.

Section 39-12-04(1) limits a vehicle and its load operated on a highway in this state to a width of eight feet six inches with the following exceptions:

1. Construction and building contractors' equipment and vehicles used to move such equipment which does not exceed ten feet [3.05 meters] in width when being moved by contractors or resident carriers.
2. Implements of husbandry being moved by resident farmers, ranchers, governmental entities, dealers, or manufacturers between sunrise and sunset. Furthermore, the limitation does not apply to implements of husbandry being moved between sunset and sunrise by resident farmers, ranchers, governmental entities, dealers, or manufacturers on public state, county, or township highway systems other than interstate highway systems.
3. Hay in the stack or bale being moved along the extreme right edge of a roadway between sunrise and sunset by someone other than a commercial mover.
4. Commercial movement of haystacks or hay bales with vehicles designed specifically for hauling hay, commercial movement of self-propelled fertilizer spreaders and self-propelled agricultural chemical applicators, whether operating under their own power or being transported by another vehicle, commercial movement of portable grain cleaners, commercial movement of forage harvesters, and the commercial movement of hay grinders, which may be moved on the highway after obtaining a seasonal permit issued by the Highway Patrol. The Highway Patrol shall issue seasonal permits that are valid during daylight hours on any day of the week, or that are valid at all times for the movement of self-propelled fertilizer spreaders and self-propelled agricultural chemical applicators, to any commercial entity otherwise qualified under this subdivision. Self-propelled fertilizer spreaders and self-propelled agricultural chemical applicators operating under their own power between sunset and sunrise must display vehicle hazard warning signal lamps as described in Section 39-21-19.1(3). The seasonal permit is in lieu of registration

requirements for the permit period. No seasonal permit may be issued, unless proof of financial responsibility in a minimum of \$300,000 is filed and the appropriate permit fee is paid. The seasonal permit may also be issued for hauling hay bales with vehicles or vehicle combinations other than those designed specifically for hauling haystacks. This seasonal permit, however, will not be in lieu of registration requirements. All permit fees must be deposited in the state highway distribution fund.

5. Safety devices that the Highway Patrol determines are necessary for the safe and efficient operation of motor vehicles may not be included in the calculation of width.
6. Any nonload-carrying safety appurtenance as determined by the Highway Patrol which extends no more than three inches [7.62 centimeters] from each side of a trailer is excluded from the measurement of trailer width. The width of a trailer is measured across the sidemost load-carrying structures, support members, and structural fasteners.
7. The Highway Patrol may adopt reasonable rules for those vehicles exempted from the width limitations as provided for in this subsection.

Section 39-12-04(2) limits a vehicle and its load operated on a highway in this state to a height of 14 feet but does not apply to vehicles that are at most 15 feet 6 inches high when the following apply:

1. The vehicle is an implement of husbandry and is being moved by a resident farmer, rancher, dealer, or manufacturer.
2. The trip is at most 60 miles [96.56 kilometers].
3. The trip is between sunrise and sunset.
4. None of the trip is on an interstate highway.

Section 39-12-04(3) limits a vehicle operated on a highway in this state to a length not to exceed the following limitations:

1. A single unit vehicle with two or more axles including the load thereon may not exceed a length of 50 feet [15.24 meters].
2. A combination of two units including the load thereon may not exceed a length of 75 feet [22.86 meters].
3. A combination of three or four units including the load thereon may not exceed a length of 75 feet [22.86 meters], subject to any rules adopted by the Director that are consistent with public highway safety. The rules do not apply to a three-unit combination consisting of a truck tractor and semitrailer drawing a trailer or semitrailer.
4. A combination of two, three, or four units, including the load thereon, may be operated on all four-lane divided highways and those highways in the state designated by the Director and local authorities as to the highways under their respective jurisdictions and may not exceed a length of 110 ten feet [33.53 meters], subject to any rules adopted by the Director that are consistent with public highway safety.
5. The length of a trailer or semitrailer, including the load thereon, may not exceed 53 feet [16.5 meters] except that trailers and semitrailers titled and registered in North Dakota before July 1, 1987, and towed vehicles may not exceed a length of 60 feet [18.29 meters].

Section 39-12-05.3(2) limits a vehicle and its load operated on state highways to a gross weight of 105,500 pounds unless otherwise posted and on all other highways the gross weight may not exceed 85,000 pounds unless designated by local authorities for highways under their jurisdiction for gross weights not to exceed 105,500 pounds. The following subsections of Section 39-15-05.3 provide exemptions to Section 39-12-05.3(2):

1. Subsection 3 provides that the gross weight limitations in subsections 1 and 2 do not apply to equipment the Director and the state Highway Patrol approve for exemption. The exemption may not exceed 105,500 pounds [47,854.00 kilograms]. For every vehicle approved for exemption the Highway Patrol shall issue a nontransferable permit valid for one year. The Highway Patrol may charge an administrative fee for the permit.
2. Subsection 4 provides that the Director, and local authorities, as to the highways under their respective jurisdictions, may issue permits authorizing a specific motor vehicle to exceed the weight limitations stated in subsections 1 and 2 by 10 percent. The permits may not provide for a gross weight in excess of 105,500 pounds [47,854.00 kilograms]. The permits must provide only for the movement of agricultural products from the field of harvest to the point of initial storage site, and for the collection and transport of solid wastes, during the period from July 15 to December 1, and for the general movement of products

during the period from December 1 to March 7. The appropriate jurisdictional authority shall establish an appropriate fee for the permits and direct how they shall be issued. The Highway Patrol shall issue the permits authorized by the Director.

3. Subsection 5 provides that the Director, and local authorities, as to highways under their respective jurisdictions, may issue permits authorizing all vehicles carrying potatoes or sugar beets to exceed weight limitations stated in subsections 1 and 2 by 10 percent during the period from July 15 to December 1. The permits may not provide for a gross weight in excess of 105,500 pounds [47,854.00 kilograms]. The appropriate jurisdictional authority shall establish an appropriate fee for the permits and direct how they shall be issued. The Highway Patrol shall issue the permits authorized by the Director.
4. Subsection 6 provides that the gross weight limitations in subsections 1 and 2 do not apply to movement of a self-propelled fertilizer spreader if the weight of a single axle does not exceed 22,000 pounds [9,973.03 kilograms] and does not exceed 550 pounds [249.48 kilograms] for each inch [2.54 centimeters] of tire width. The gross weight limitations in subsections 1 and 2 do not apply to movement of a self-propelled agricultural chemical applicator if the weight of a single axle does not exceed 22,000 pounds [9,973.03 kilograms] and does not exceed 550 pounds [249.48 kilograms] for each inch [2.54 centimeters] of tire width. The Highway Patrol shall issue a seasonal permit for the commercial movement of vehicles exempted by this subsection. The seasonal permit issued under this subsection or under Section 39-12-04(1)(d) entitles an individual with the permit to operate a vehicle as allowed by either of these provisions. A seasonal permit issued under this subsection is subject to the requirements of Section 39-12-04(1)(d).
5. Subsection 7 provides that the weight limitations in subsections 1 and 2 do not apply to equipment the Director and the state Highway Patrol approve for exemption but the weight limitations in Section 39-12-05 do apply to that equipment. For every vehicle approved for exemption, the Highway Patrol shall issue a nontransferable bridge length permit valid for a single trip or a calendar year.
6. Subsection 8 provides that the axle weight limitations in subsection 1 do not apply to movements of implements of husbandry or equipment with pneumatic tires used for construction which is used by an agricultural producer while using the equipment for the producer's agricultural, horticultural, or livestock operations if the maximum wheel load does not exceed 550 pounds [249.48 kilograms] for each inch [2.54 centimeters] of tire width and if the gross weight limitation in this section is not exceeded.

OTHER STATE AND PROVINCE LAWS

The schedule below provides a comparison of height, width, length, and weight limitations on vehicles for the states of North Dakota, Idaho, Minnesota, South Dakota, Montana, and Canadian provinces of Saskatchewan and Manitoba.

| State/Province ¹ | Height | Width | Length | State Highway Gross Weight | Interstate Gross Weight |
|-----------------------------|------------|-----------|------------|-----------------------------------|-------------------------|
| Idaho | 14 ft | 8 ft 6 in | 97 ft | 129,000 lbs ² | 105,500 lbs |
| Minnesota | 13 ft 6 in | 8 ft 6 in | 75 ft | 80,000 lbs | 80,000 lbs |
| Montana | 14 ft | 8 ft 6 in | 100 ft | 131,600 lbs ³ | 131,600 lbs |
| North Dakota | 14 ft | 8 ft 6 in | 110 ft | 105,500 lbs | 105,500 lbs |
| South Dakota | 14 ft | 8 ft 6 in | 100 ft | State bridge formula ⁴ | 129,000 lbs |
| Manitoba | 13 ft 8 in | 8 ft 6 in | 65 ft 8 in | 137,800 lbs | 137,800 lbs |
| Saskatchewan | 13 ft 8 in | 8 ft 6 in | 65 ft 8 in | 140,000 lbs | 140,000 lbs |

¹All states or providences listed provide special permits for height, width, length, and weight loads that exceed the restrictions listed and allow other exceptions.

²Idaho interstate highways are grandfathered up to 105,500 pounds and 129,000 pounds on all state highways, see Idaho section below for further detail.

³Montana allows 131,600 pounds provided that any vehicle carrying a divisible load over 80,000 pounds must comply with the federal bridge formula. Select roads allow 137,800 pounds under the Montana/Alberta Memorandum of Understanding subject to federal regulations.

⁴South Dakota allows 80,000 pounds on interstate highways with the exception of grandfathered routes which allow 129,000 pounds and utilizes the state bridge formula for non-interstate highways.

IDAHO 129,000 POUND PILOT PROJECT

Between 1998 and 2013, the Idaho Transportation Department studied the effect of increasing the legal truck weights on Idaho state highways for trucks configured to increase gross vehicle weight (GVW) from 105,500 pounds to 129,000 pounds over a combined period of 13 years. The Idaho Transportation Department reported

they did not observe any significant effect of the 129,000 Pound Pilot Project trucks on pavements, bridges, or roadway safety. Project participants have reported economic benefits associated with this pilot project. Amalgamated Sugar Company estimated that it saved over \$2.5 million during the pilot project, and US Ecology, Inc. estimated it had a 6 percent reduction in the number of trips per year amounting to an estimated total of 7,800 loads since 2004 using pilot project trucks. The estimated savings from trip reductions was \$70,000 to \$180,000 per year. Pages three through seven of the Idaho Transportation Department's report to the Idaho legislature is attached as ([Appendix B](#)). The full report can be viewed at <https://itd.idaho.gov/newsandinfo/Docs/129000%20Pound%20Pilot%20Project%20Report.pdf>. In 2013 the Idaho Legislative Assembly passed legislation to increase GVW from 105,500 pounds to 129,000 pounds.

PROPOSED STUDY PLAN

The following is a proposed study plan for the committee's consideration:

1. Receive information from the Department of Transportation regarding plans for a collaborative study with the Upper Great Plains Transportation Institute of the impacts in this state of harmonizing truck size and weight regulations with states in the Western States Transportation Alliance regarding standard commercial truck envelope limits of 129,000 pounds gross vehicle combination weight or 100 foot cargo carrying length and potential implications.
2. Review the study conducted by the Idaho Transportation Department regarding the effect of increasing the legal truck weights on Idaho state highways for trucks configured to increase GVW from 105,500 pounds to 129,000 pounds, which was conducted over a combined period of 13 years.
3. Receive a report from the Department of Transportation regarding the results of its study of truck size and weight harmonization and review the department's recommendations.
4. Receive information from the North Dakota Highway Patrol regarding truck size and weight regulation in North Dakota and what potential impacts may result from changes to current truck size and weight regulations.
5. Receive input from users of North Dakota highways, including the North Dakota Petroleum Council, North Dakota Motor Carriers Association, North Dakota Association of Oil and Gas Producing Counties, and agriculture-related organizations.
6. Develop recommendations and prepare any necessary legislation.
7. Prepare a final report.

ATTACH:2