

WIDTH, HEIGHT, LENGTH, AND WEIGHT RESTRICTIONS ON MOTOR VEHICLES - NORTH DAKOTA LAW

Under North Dakota Century Code (NDCC) Chapter 39-12, motor vehicles are limited as to width, height, length, and weight but are allowed special permits under certain circumstances and are exempt if of a certain type. This memorandum reviews state law and the recent legislative history relating to width, height, length, and weight restrictions.

STATE LAW

Width Limitations

North Dakota Century Code Section 39-12-04 provides for width, height, and length limitations and exceptions to those limitations. The width limitation is 8 feet 6 inches. However, the limitation does not apply to:

1. Construction equipment up to 10 feet.
2. Implements of husbandry by resident farmers but not at night on interstate highways.
3. Daytime, noncommercial movement of haystacks or bales.
4. Commercial movement of haystacks or bales, self-propelled fertilizer spreaders or chemical applicators, portable grain cleaners, forage harvesters, and hay grinders. However, these vehicles need a seasonal permit valid for daytime. The permits are valid anytime for fertilizer spreaders and chemical applicators. The permits require proof of financial responsibility. By rule, the permits for haystacks and bales allow for up to 12 feet if not designed for hay, and 12 feet 10 inches if bail handler trailers.
5. Safety devices required by the Highway Patrol.
6. Nonload-carrying safety appurtenances.

North Dakota Century Code Section 39-12-06 prohibits a motor vehicle from having a load beyond 12 inches from the fenders.

Height Limitation

The height limitation is 14 feet; however, the limitation does not apply to vehicles up to 15 feet 6 inches which are implements of husbandry not used on the interstate highway for short daytime trips.

Length Limitations

The length limitation is 50 feet for a single unit vehicle with two or more axles, 75 feet for a combination of 2, 3, or 4 units, 110 feet for a combination of 2, 3, or 4 units operated on four-lane divided highways and designated highways, 53 feet for a trailer or semitrailer, and 60 feet for towed vehicles. The length limitations do not apply to:

1. Building equipment.
2. Tow trucks.

3. Armed forces and National Guard vehicles.
4. Telephone company materials.
5. Truck-mounted haystack moving equipment under 56 feet.
6. A truck tractor and semitrailer or truck tractors, semitrailer, and the trailer on the interstate highway system or parts of the federal-aid primary system when designated.
7. Safety and energy conservation devices.
8. Recreational campers may exceed the width limitation by no more than six inches on either side of the vehicle if attributable to an appurtenance that extends beyond the body of the vehicle.

Weight Limitations

North Dakota Century Code Section 39-12-05 provides for weight limitations on the interstate highway system. These limitations are contained in the following table:

Wheel load limitation	10,000 pounds or one-half of axle load
Tire load limitation	550 pounds per inch of width
Single axle limitation	20,000 pounds
Multiple axles over 40 inches and under 8 feet apart	17,000 pounds per axle

The gross weight limitation is 80,000 pounds. The limitations may be less for a particular vehicle based on the distance between the extremes of any group of consecutive axles and axle numbers. A vehicle with two consecutive sets of tandem axles may carry a gross load of 34,000 pounds if there is 36 feet between the axles. North Dakota Century Code Section 39-12-05.2 allows a person to operate a vehicle on the interstate highway system at the highest weight allowed by congressional action, regardless of state law. Under federal law, 49 C.F.R. 658 and a result of congressional passage of the Surface Transportation Assistance Act of 1982 and the Intermodal Surface Transportation Efficiency Act of 1991, there are limits on the size and weight of vehicles on the interstate system and other qualifying federal-aid primary system highways. For instance, the length and weight limitations grandfathered in North Dakota for longer combination vehicles are 103 feet and 105,500 pounds. The grandfathered semitrailer length is 53 feet.

Under NDCC Section 39-12-01, the governmental entity with control over a highway may classify the highway and limit the weight and loads of vehicles on the highway.

In addition, under NDCC Section 39-12-03 the proper authority with jurisdiction over a highway may limit the weight of vehicles on a highway due to

climatic conditions. The governmental entity must direct signs with the road restrictions.

North Dakota Century Code Section 39-12-05.3 provides for general weight limitations on highways other than the interstate system. The weight limitations are by tire, wheel, and axle loads. These limitations are contained in the following table:

Wheel load limitation	10,000 pounds or one-half of axle load
Tire load limitation	550 pounds per inch of width
Single axle limitation	20,000 pounds
Tandem axles over 40 inches and under 8 feet apart	34,000 pounds
Triple or more axles over 40 inches and under 8 feet apart	48,000 pounds

In addition, there are gross weight limitations of 105,500 pounds on the state highways and 80,000 pounds on all other highways unless otherwise designated. These limitations may be less for a particular vehicle based on distance between the two farthest axles and axle numbers.

The gross weight limitations do not apply to equipment approved by the director of the Department of Transportation and the Highway Patrol up to a limit of 105,500 pounds to which a one-year nontransferable permit is issued. The governmental entity with authority over a highway may issue harvest permits that allow a motor vehicle to exceed weight limitations by 10 percent up to 105,500 pounds. These permits are for agricultural products moving from the field of harvest to the point of initial storage or for the collection and transport of solid waste during the period of July 15 to December 1. A wintertime permit is allowed for the general movement of products from December 1 to March 7. The same may issue a permit for vehicles carrying potatoes or sugar beets from July 15 to December 1 to exceed the weight limitations by 10 percent not to exceed 105,500 pounds. The gross weight limitations do not apply to self-propelled fertilizer spreaders and agricultural chemical applicators with a single axle limitation of 22,000 pounds and a tire load limitation of 550 pounds per inch of width. However, these vehicles need a seasonal permit issued by the Highway Patrol.

The weight limitations do not apply to equipment approved by the director of the Department of Transportation and Highway Patrol for exemption, except the weight limitations for an interstate apply to these vehicles. The Highway Patrol must issue a nontransferable bridge length permit valid for a single trip or a calendar year for the movement of these vehicles.

The remainder of the chapter--NDCC Sections 39-12-07 through 39-12-22--provides for enforcement and fees for violating the chapter.

North Dakota Century Code Section 39-12-02(1) allows the Highway Patrol and, when appropriate, local authorities to charge for and issue special written

permits to operate a vehicle exceeding the size or weight maximums specified in NDCC Chapter 39-12. The permit may designate the route and name any other restriction or condition imposed by the issuer. Under this section, the Highway Patrol has adopted rules under North Dakota Administrative Code (NDAC) Chapter 38-06-02. The rules allow for single trip permits and require flags, signs, mirrors, escorts, routes, insurance, and travel restrictions. In addition, the Highway Patrol has adopted under NDAC Section 38-06-03-01 permit fees and under NDAC Section 38-06-04-01 has determined the liability of the permittee.

Under NDCC Section 39-12-02(2), there are special provisions for the movement of a new manufactured building or modular unit from outside this state to be located inside this state. In addition, Section 39-12-02(3) provides for the following minimum fees:

1. Ten percent weight exemption for harvest and wintertime - \$50 per month or \$250 per year.
2. Non-self-issuing interstate permits - \$10 per trip or \$300 per year.
3. Special mobile equipment - \$25 per trip (\$50 or \$75 for workover rig).
4. Engineering - \$25 per trip.
5. Faxing - \$5.
6. Single trip permit - \$20 per trip.
7. Bridge length permit - \$30 per trip or \$150 per year.
8. Longer combination vehicle permit - \$100 per month.
9. Overwidth vehicle - \$20 per trip or \$500 per year.
10. Noncommercial fish house - \$20 per year.

Under NDAC Section 38-06-03-01 permit fees are designated in the following amounts:

1. Identification supplement - \$10 each.
2. Excess weight on interstate - \$5 for each self-issued "interstate only" single trip or \$10 on an official receipt/permit (non-self-issuing permit).
3. Seasonal permit for certain overwidth agricultural motor vehicles - \$50.
4. Overweight single trip movements exceeding 150,000 pounds - Graduated schedule from \$30.
5. Escort fee - 30 cents per mile and \$30 per hour.

The previously listed limitations and exceptions are published by the Highway Patrol in the *Trucker's Handbook*. The portion of the *Trucker's Handbook* relating to these limitations and exceptions is attached as an [appendix](#).

RECENT LEGISLATIVE HISTORY

In the past 10 years there have been several bills relating to NDCC Chapter 39-12. The following lists those bills by bill number and year.

2007 Legislative Session

Two bills were enacted into law:

- Senate Bill No. 2406 provided for a yearly overwidth vehicle permit for a load that is 14 feet 6 inches or less for \$500 and a yearly fee of \$20 for the movement of a noncommercial fish house trailer.
- House Bill No. 1295 created a yearly permit fee of \$300 for non-self-issuing interstate permits.

2005 Legislative Session

Two bills were enacted into law:

- Senate Bill No. 2274 provided for a fee of \$100 for violating a seasonal permit. The bill provided for a bridge length permit for a fee of \$30 per trip or \$150 per calendar year. The bill provided a penalty for operating without a proper permit of \$100, instead of \$20. The bill provided that violating the conditions of any permit automatically voids the permit. The bill required the lock or pressure valve regulator, or both, to be positioned outside the cab and inaccessible to the driver's compartment if there is more than one variable load suspension axle or retractable axle, or a combination of each, on a motor vehicle manufactured after July 31, 2005. The bill prohibited a single unit vehicle or any vehicle in combination to be equipped with more than four axles unless the additional axles are steerable, castering, or pivoting axles.
- House Bill No. 1357 provided for a longer combination vehicle permit for a fee of \$100 per month for fees paid on a monthly basis.

2003 Legislative Session

Five bills were enacted into law:

- Senate Bill No. 2407 changed the gross weight limitations on self-propelled fertilizer spreaders and self-propelled agricultural chemical applicators on highways other than in the interstate system to exclude spreaders and applicators from weight limitations if the weight of a single axle does not exceed 22,000 pounds and does not exceed 550 pounds for each inch of tire width.
- House Bill No. 1062 excluded governmental entities from width limitations if operating implements of husbandry.
- House Bill No. 1261 exempted commercial movement of forage harvesters from width limitations after obtaining a seasonal permit issued by the Highway Patrol.
- House Bill No. 1112 provided that moving a vehicle, mobile home, or modular unit of excessive size or weight without a special permit is a moving violation with a fee of \$100. The bill exempted publicly owned vehicles that provide services beyond the agency's jurisdiction and emergency vehicles from

charges for special permits. The bill allowed the fees for a 10 percent weight exemption for harvest and wintertime to be paid on a monthly and yearly basis and the unused fees paid on a monthly basis are refundable. The bill changed from 17,000 to 19,000 pounds, the axle load that may not be exceeded for axle space over 40 inches and under 18 feet apart, and created a maximum of 34,000 pounds gross weight on a tandem axle. The bill changed the charges for the extraordinary use of highways in violation of weight limitations to a scale based upon weight in thousand-pound increments ranging from 1 to 30,000 pounds and \$20 to \$6,000 with an additional charge of \$200 for every 1,000 pounds over 30,000 pounds.

- Senate Bill No. 2313 allowed recreational campers to exceed width limitations by six inches if attributable to an appurtenance, including a shade awning and support hardware.

2001 Legislative Session

Two bills were enacted into law:

- Senate Bill No. 2054 created special weight limitations for self-propelled fertilizer spreaders and self-propelled agricultural chemical applicators operating on highways not part of the interstate system. The bill provided a self-propelled fertilizer spreader may operate on these highways if the spreader does not exceed 80,000 pounds and does not travel over 30 miles per hour when loaded over half capacity. In addition, the bill provided a self-propelled agricultural chemical applicator may travel on these highways if the gross weight does not exceed 45,000 pounds and the vehicle does not travel at speeds in excess of 30 miles per hour when loaded over half capacity. The bill required the Highway Patrol to issue seasonal permits for self-propelled fertilizer spreaders and self-propelled agricultural chemical applicators exempted from gross weight limitations under the bill.
- Senate Bill No. 2089 created a \$5 fee for faxing a permit for vehicles of excessive size or weight.

1999 Legislative Session

Four bills were enacted into law:

- House Bill No. 1065 exempted commercial movement of portable grain cleaners from width limitations.
- House Bill No. 1229 allowed the director and local authorities to issue permits that allow haulers of potatoes or sugar beets to exceed weight limitations by 10 percent during the period from July 15 to December 1.
- House Bill No. 1405 deemed an application for a permit to move a new manufactured building

or modular unit from outside this state to inside this state to be a certification by the manufacturer that the building or unit needs applicable building codes and requires the manufacturer of the building or unit to make any changes so that the building or unit may be energized.

- Senate Bill No. 2015 created a continuing appropriation of the proceeds from the sale of an overweight vehicle.

1997 Legislative Session

Two bills were enacted into law:

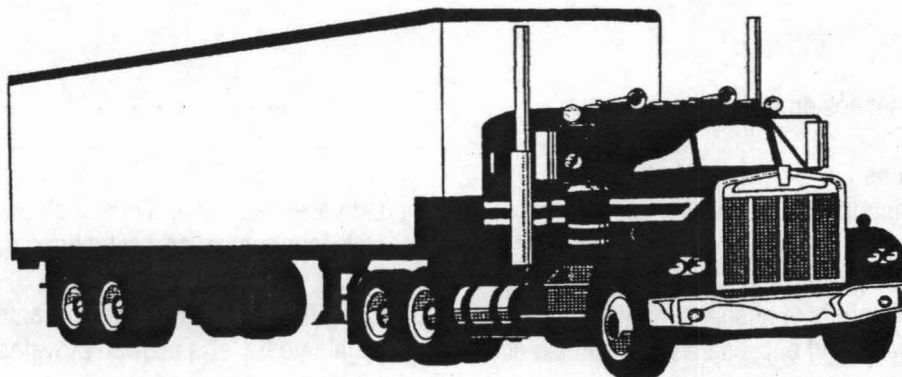
- House Bill No. 1186 provided for a permit that is valid at all times for the movement of otherwise overwidth self-propelled fertilizer spreaders and agricultural chemical applicators and requires hazard warning signal lamps for nighttime movement.
- Senate Bill No. 2012 set minimum fees for special permits for oversized and overwidth vehicles.

ATTACH:1



Trucker's Handbook

North Dakota Highway Patrol



Office of the Superintendent
600 E Boulevard Ave. Dept. 504
Bismarck, ND 58505-0240

II – Vehicle Size and Weight

Vehicles and load movements in North Dakota shall comply with the following dimensions: Non-reducible loads and/or vehicles that exceed the limits listed below shall obtain a special permit. The permit must be carried in the vehicle at the time of load movement (see Permits for Oversize and/or Overweight Vehicles, page 34).

A. Legal Width

8 feet 6 inches on all highways.

Exceptions:

1. Construction and building contractors' equipment and vehicles used to move such equipment, which does not exceed ten feet in width when being moved by contractors or resident carriers. Nighttime travel is allowed provided moving equipment is properly lighted.
2. Implements of husbandry being moved by **resident** farmers, ranchers, dealers, manufacturers, or government entities between sunrise and sunset. Nighttime travel is allowed provided the implements are properly lighted and not being moved on the interstate highway system.
3. Hay in the stack being moved along the extreme right edge of a roadway between sunrise and sunset by someone other than a commercial mover. Commercial hay movers, overwidth self-propelled fertilizer spreaders, overwidth self-propelled agricultural chemical applicators, hay grinders, forage harvesters, and grain cleaners if the owners have seasonal permits.
4. All vehicles exempt from width limitations are subject to safety rules adopted by the Highway Patrol.

B. Legal Height

14 feet whether loaded or unloaded, except that such height limitation shall not affect any present structure such as bridges and underpasses that are not 14 feet in height.

Exception:

Implements of husbandry may not exceed 15 feet 6 inches in height when being moved by **resident** farmers, ranchers, dealers, or manufacturers between sunrise and sunset. The distance traveled cannot exceed 60 miles and travel on the interstate system is not allowed.

Vertical Clearances 14 Feet or Less

Disclaimer

The vertical dimensions listed are the maximum distances under ideal conditions. **THERE IS NO ALLOWANCE IN THESE DIMENSIONS FOR SNOW AND ICE ACCUMULATIONS, ETC.**

At all structure underpass locations having depressed grades, the clearance given is based on a trailer length overall of 40 feet.

The dimensions are furnished on an information basis only. **THE DEPARTMENT OF TRANSPORTATION IS NOT RESPONSIBLE FOR CHANGES IN CONDITIONS.**

Clearances on State Highways					
Milepoint	Exit No.	Highway # -- Structure	Direction	Clearance	
				FT	IN
157.458		ND #8 – BNRR Underpass – Stanley	Underpass	14	00
002.021		US10 – BNRR Underpass – Casselton	Underpass	13	09
115.006		ND #14 – BNRR Underpass – Towner	Underpass	13	07
070.826		ND #22 – BNRR Underpass – Dickinson	Underpass	13	10
060.457		Interstate 94 – State Ave. Separation	Underclearance	14	00

Clearances on City Streets					
Milepoint		City Street -- Structure	Direction	Clearance	
				FT	IN
City		Minot – 3 rd St. NE/Viaduct	Underclearance	13	03
900.729		Bismarck – Bus. US 83/9 th St. – BNRR UP	Northbound	13	11
903.335		Bismarck – Bus. US 83/7 th St. – BNRR UP	Southbound	13	09
911.409		Grand Forks – Bus. 2/Demers Ave. Bridge	Overclearance	13	02
City		Jamestown – 4 th Ave. NE/BNRR UP	Underpass	12	11
926.783		Fargo – Bus. US 81/Main Ave. & BNRR UP	Northbound	13	09
927.215		Fargo – Bus. US 81/10 th St. BNRR UP	Northbound	14	00
927.254		Fargo – Bus. US 81/10 th St. – BNRR UP	Northbound	14	00
931.984		Fargo – Bus. US 81/University Dr. – BNRR UP	Southbound	13	07

C. Legal Length

1. A single unit vehicle with two or more axles including the load thereon shall not exceed a length of 50 feet.
2. The length of a trailer or semitrailer including the load thereon **may not exceed 53 feet** except that trailers and semitrailers titled and registered in North Dakota prior to July 1, 1987, and towed vehicles may not exceed 60 feet.
3. A combination of two, three, and four units including the load thereon **shall not exceed an overall length of 75 feet** on non-designated highways.
 - a. Three and four unit combinations are subject to safety rules adopted by the DOT Director.
4. A combination of two, three, or four units including the load thereon may exceed 75 feet in overall length but **shall not exceed 95 feet or 110 feet** when traveling on four-lane divided highways and state highways designated by the DOT director and local authorities as to highways under their respective jurisdictions.
 - a. All combinations are subject to safety rules adopted by the DOT director.
 - b. Authorized vehicle combinations exceeding 75 feet in overall length shall operate on designated highways as shown on the Designated Highway Map (page 24).
 - c. Authorized combinations include the following:
 - 1) Any combination of two units
 - 2) Truck-tractor/semitrailer/trailer
 - 3) Truck-tractor/semitrailer/semitrailer
 - 4) Truck/trailer/trailer

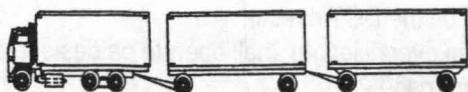
- a) Truck must be properly registered and designed to legally carry a gross weight of more than 24,000 pounds.
 - b) Both trailers and semitrailers must be designed to carry gross weights of more than 24,000 pounds.
- 5) Truck-tractor/semitrailer/trailer/trailer



TRUCK-TRACTOR, SEMI TRAILER AND TRAILER



TRUCK-TRACTOR, SEMI TRAILER AND SEMI TRAILER



TRUCK AND TWO TRAILERS



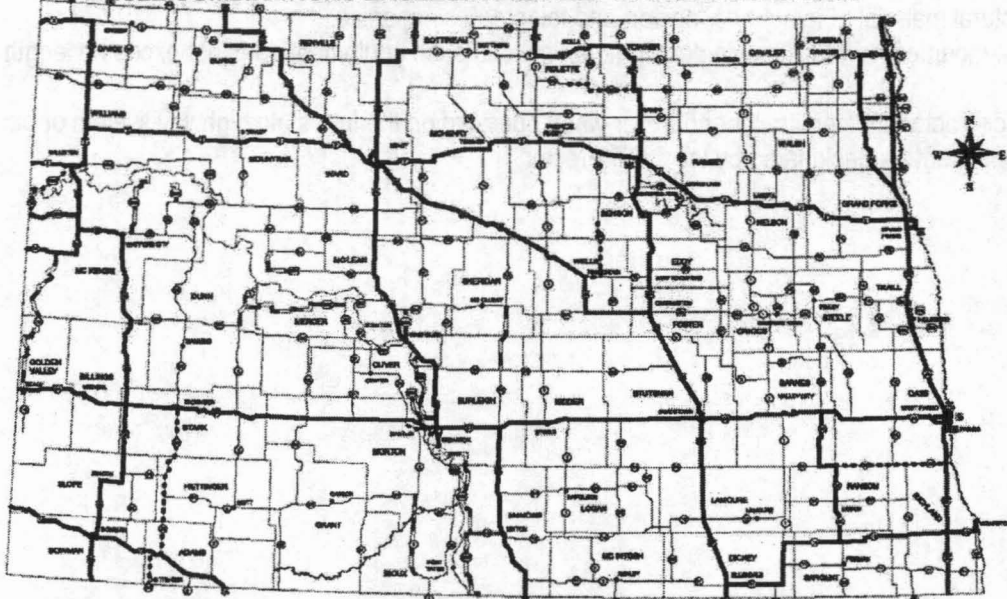
TRUCK-TRACTOR, SEMI TRAILER AND TWO TRAILERS OR TWO SEMI TRAILERS
(TRIPLE BOTTOM) CONVERTED TO TRAILERS WITH CONVERTER DOLLIES

Exceptions:

- 1. Building moving equipment.
- 2. Emergency tow trucks towing disabled lawful combinations of vehicles to a nearby repair facility.

3. Vehicles and equipment owned and operated by the armed forces of the United States or the National Guard of this state.
4. Structural material of telephone, power, and telegraph companies.
5. Truck-mounted haystack moving equipment provided such equipment does not exceed a length of 56 feet.
6. A truck-tractor and semitrailer and trailer when operated on the interstate highway system or parts of the national network designated by the DOT director.

DESIGNATED NORTH DAKOTA STATE HIGHWAYS FOR
VEHICLE COMBINATIONS EXCEEDING 75 FEET IN OVERALL LENGTH



----- Indicates highways posted where vehicle combinations may not exceed 75 ft. in overall length.

----- Indicates designated highways where vehicle combinations as provided for in Chapter 37-08-04, NDAC, may exceed 75 ft. but not exceed 90 ft. in overall length.

----- of ----- Indicates designated highways where vehicle combinations as provided for in Chapter 37-08-04, NDAC, may exceed 75 ft. but not exceed 110 ft. in overall length.

----- Indicates the "national network" where the cargo carrying length shall not exceed 100 feet on a semi-trailer and trailer, or semi-trailer converted to a trailer by the use of a converter dolly and fifth wheel when the power unit is a truck-tractor.

Vehicle combinations authorized to exceed 75 ft. in overall length may travel a distance of 10 miles on state highways off the designated routes.

APPROVED:

Francis A. Taylor
NDDOT DIRECTOR

09/18/07
DATE

D. Legal Weight

North Dakota Weight Limitations Chart

Computed to nearest foot by the weight formula in Section 39-12-05 and Section 39-12-05.3 of the North Dakota Century Code.

$$W = 500 \left(\frac{LN}{N-1} + 12N + 36 \right)$$

W = Maximum weight in pounds on any group of two or more axles

L = Distance in feet between extremes of any group of two or more consecutive axles

N = Number of axles in group under consideration

Distance in feet between the extremes of any groups of 2 or more consecutive axles	Maximum Load in Pounds Carried on any Group of 2 or More Consecutive Axles							
	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	41,500						
8	38,000	42,000						
9	39,000	43,000						
10	40,000*	43,500						
11		44,500						
12		45,000	50,000					
13		46,000	50,500					
14		46,500	51,500	57,000				
15		47,500	52,000	57,500				
16		48,000	52,500	58,000				
17		49,000	53,500	58,500				
18		49,500	54,000	59,500				
19		50,500	54,500	60,000				
20		51,000	55,500	60,500	66,000			
21		52,000	56,000	61,000	66,500			
22		52,500	56,500	62,000	67,000			
23		53,500	57,500	62,500	68,000			
24		54,000	58,000	63,000	68,500	74,000		
25		55,000	58,500	63,500	69,000	74,500		
26		55,500	59,500	64,500	69,500	75,000		
27		56,500	60,000	65,000	70,000	76,000		
28		57,000	60,500	65,500	71,000	76,500	82,000	
29		58,000	61,500	66,000	71,500	77,000	82,500	
30		58,500	62,000	67,000	72,000	77,500	83,000	
31		59,500	62,500	67,500	72,500	78,000	84,000	
32		60,000*	63,500	68,000	73,000	78,500	84,500	90,000
33			64,000	68,500	74,000	79,500	85,000	90,500
34			64,500	69,500	74,500	80,000	85,500	91,000
35			65,500	70,000	75,000	80,500	86,000	91,500
36	Two consecutive sets of tandem axles may carry a gross load of 34,000 pounds each provided the overall distance between the first and last axles of such consecutive sets of tandem axles is 36 feet or more.		66,000	70,500	75,500	81,000	86,500	92,500
37			66,500	71,000	76,000	81,500	87,000	93,000
38			67,500	72,000	77,000	82,000	87,500	93,500
39			68,000	72,500	77,500	83,000	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	74,500	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	97,000
45			72,000	76,000	81,000	86,500	91,500	97,500

Distance in feet between the extremes of any groups of 2 or more consecutive axles	Maximum Load in Pounds Carried on any Group of 2 or More Consecutive Axles							
	2 Axles	3 Axles	4 Axles	5 Axles	6 Axles	7 Axles	8 Axles	9 Axles
46			72,500	77,000	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	79,500	84,000	89,000	94,500	100,000
51			78,000	80,000	84,500	90,000	95,000	100,500
52			76,500	80,500	85,000	90,500	95,500	101,500
53			77,500	81,000	86,000	91,000	96,500	102,000
54			78,000	82,000	86,500	91,500	97,000	102,500
55			78,500	82,500	87,000	92,000	97,500	103,000
56	Gross weight limit on interstate. Gross weight limit on county and other local highways unless designated for more.		79,500	83,000	87,500	92,500	98,000	103,500
57			80,000*	83,500	88,000	93,500	98,500	104,000
58				84,500	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*
61				86,000	90,500	95,500	101,000	
62				87,000	91,000	96,000	101,500	
63				87,500	92,000	97,000	102,000	
64				88,000	92,500	97,500	102,500	
65				88,500	93,000	98,000	103,000	
66				89,500	93,500	98,500	103,500	
67				90,000	94,000	99,000	104,500	
68				90,500	95,000	99,500	105,000	
69				91,000	95,500	100,500	105,500*	
70				92,000	96,000	101,000		
71				92,500	96,500	101,500		
72				93,000	97,000	102,000		
73				93,500	98,000	102,500		
74				94,500	98,500	103,000		
75				95,000	99,000	104,000		
76				95,500	99,500	104,500		
77				96,000	100,000	105,000		
78				97,000	101,000	105,500*		
79				97,500	101,500			
80				98,000	102,000			
81				98,500	102,500			
82				99,500	103,000			
83				100,000*	104,000			
84					104,500	*Maximum Gross Weight		
85					105,000			
86					105,500*			

Note: On highways other than the Interstate System, only the exterior bridge measurement shall be used to determine the gross vehicle weight of a vehicle or combination of vehicles.

North Dakota Axle Weight Limitations Chart

No single axle shall carry a gross weight in excess of 20,000 pounds. Axles spaced 40 inches or less apart are considered one axle. Axles spaced eight (8) feet apart or over are considered as individual axles. The gross weight of two individual axles may be restricted by the weight formula except that on highways other than the interstate, two axles spaced eight (8) feet apart or more may have a combined gross weight not to exceed 40,000 pounds. Spacing between axles shall be measured from axle center to axle center.

Axles spaced over 40 inches apart and less than eight (8) feet apart shall not carry a gross weight in excess of 19,000 pounds per axle. The gross weight on a tandem axle shall not exceed 34,000 pounds. The gross weight of three or more axles in a grouping is determined by the measurement between the extreme axle centers except that on highways other than the interstate, groupings of three or more axles may have a gross weight not to exceed 48,000 pounds.

The weight per inch width of tire shall not exceed 550 pounds. Metric tire sizes are converted to inches by dividing millimeters by 25.4. The width of tire for solid tires shall be the rim width. For pneumatic tires the width of tire shall be the manufacturer's width. The weight in pounds on any one wheel shall not exceed one-half the allowable axle weight. Dual tires are considered one (1) wheel.

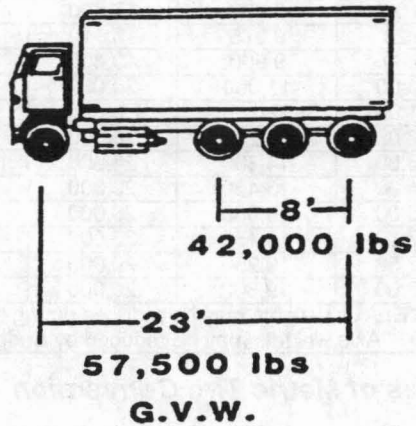
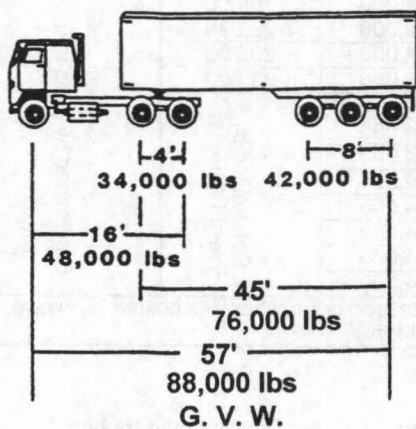
Tire Width	Single Axle (2 Tires)	Single Axle (4 Tires)	Tandem Axle (4 Tires)	Tandem Axle (8 Tires)	Triple Axle (6 Tires)	Triple Axle (12 Tires)
7:00	7,700	15,400	15,400	30,800	23,100	Determined by Weight Formula
7:50	8,250	16,500	16,500	33,000	24,750	
8:00	8,800	17,600	17,600	34,000	26,400	
8:25	9,075	18,150	18,150	34,000	27,225	
9:00	9,900	19,800	19,800	34,000	29,700	
10:00	11,000	20,000	22,000	34,000	33,000	
11:00	12,100	20,000	24,200	34,000	Determined by Weight Formula	
12:00	13,200	20,000	26,400	34,000		
13:00	14,300	20,000	28,600	34,000		
14:00	15,400	20,000	30,800	34,000		
15:00	16,500	20,000	33,000	34,000		
16:50	18,150	20,000	34,000	34,000		
17:50	19,250	20,000	34,000	34,000		
18:00	19,800	20,000	34,000	34,000		

NOTE: Axle weights may be reduced during the spring breakup season or on otherwise posted highways. Axle weights may be reduced by Bridge Load Limitations Map.

Examples of Metric Tire Conversion

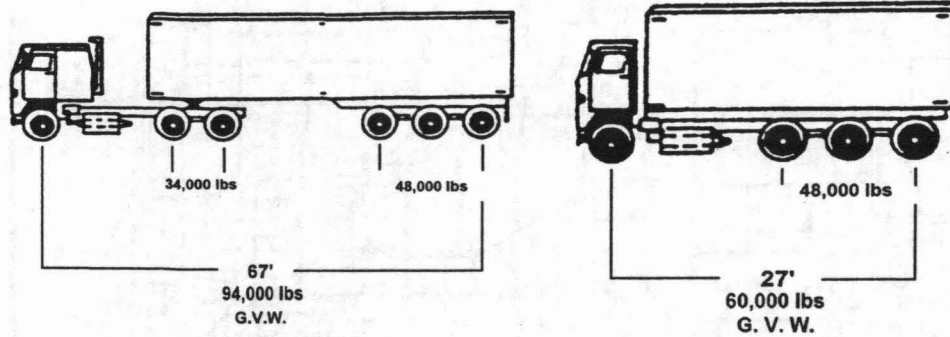
<u>Metric Tire Size</u>	<u>Tire Width in Inches</u>	<u>Metric Tire Size</u>	<u>Tire Width in Inches</u>
245/75R22.5	9.6 inches	295/75R22.5	11.6 inches
255/70R22.5	10.0 inches	315/75R22.5	12.4 inches
265/75R22.5	10.4 inches	385/65R22.5	15.2 inches
275/80R22.5	10.8 inches	425/65R22.5	16.7 inches
285/75R24.5	11.2 inches	445/65R22.5	17.5 inches
		465/65R22.5	18.3 inches

Examples of Bridge Formula Application on the Interstate System



Note: On the Interstate System, the interior and exterior bridge measurement shall be used to determine the gross vehicle weight of a vehicle or combination of vehicles.

Examples of Bridge Formula Application on the State Highway System



Note: On highways other than the Interstate System, only the exterior bridge measurement shall be used to determine the gross vehicle weight of a vehicle or combination of vehicles.

Groupings of three or more axles may have a gross weight not to exceed 48,000 pounds.

See Highway Patrol for additional information on 4-axle straight trucks.



E. Spring Load Restriction Weight Limit Classifications

During the spring, certain highways may be restricted to lower axle weights. Signs will be erected and maintained indicating the restriction in place.

North Dakota Department of Transportation Spring Load Restriction Classifications				
Class	Single Axle	Tandem Axle	3 Axles or More	Gross Vehicle Weight
Restricted by Legal Weights	20,000 lbs.	34,000 lbs. – not to exceed 17,000 lbs. per axle	17,000 lbs./axle. On divisible loads the gross weight of the axle grouping may not exceed 48,000 lbs.	Not to exceed 105,500 lbs.
8-Ton	Not to exceed 16,000 lbs.	Not to exceed 16,000 lbs. per axle	14,000 lbs./axle. On divisible loads the gross weight of the axle grouping may not exceed 42,000 lbs.	Not to exceed 105,500 lbs.
7-Ton	Not to exceed 14,000 lbs.	Not to exceed 14,000 lbs. per axle	12,000 lbs./axle. On divisible loads the gross weight of the axle grouping may not exceed 36,000 lbs.	Not to exceed 105,500 lbs.
6-Ton	Not to exceed 12,000 lbs.	Not to exceed 12,000 lbs. per axle	10,000 lbs./axle. On divisible loads the gross weight of the axle grouping may not exceed 30,000 lbs.	Not to exceed 80,000 lbs.
5-Ton	Not to exceed 10,000 lbs.	Not to exceed 10,000 lbs. per axle	10,000 lbs./axle. On divisible loads the gross weight of the axle grouping may not exceed 30,000 lbs.	Not to exceed 80,000 lbs.

To receive a map indicating the restricted state highways, contact the North Dakota Department of Transportation's Maintenance Division at 701-328-2545 or visit their website at www.dot.nd.gov/travel/travel.htm. Weight limits may vary on local roads and on the interstate system.

III – Permits

A. Oversize and/or Overweight Vehicles or Load Movements

Travel Restrictions and Safety Requirements

All over-dimensional and overweight permits have specific conditions that apply to all types of loads. **All** over-dimensional vehicles and loads shall have minimum 12"x12" red or bright orange flags displayed on the traffic side, front and rear. When the overall length of an over-dimensional movement exceeds 75 feet, there shall be at least an 18"x84" OVERSIZE LOAD sign on the rear. All over-dimensional loads are restricted to traveling during daylight hours (<http://aa.usno.navy.mil/>). There are also weekend and holiday travel restrictions when the overall width of a load or vehicle exceeds 16 feet.

Manufactured housing units may not move when wind velocity exceeds 25 miles per hour. Overall width shall not exceed 18 feet. Oversize Load (18" X 84") signs are required on the front end of the towing vehicle and on the backside of the manufactured housing unit for all movements. Proof of insurance must be on file with the NDHP in order to obtain a permit.

Overweight vehicles or loads shall not move on flexible pavements when atmospheric temperature is 85 degrees F or above. The speed shall not exceed 40 miles per hour if GVW is more than 120,000 pounds or more than 5,000 pounds over legal axle weight limits. Overweight permits will be issued for hauling ONLY single piece loads.

Pilot car(s) are required for all movements exceeding 14 feet 6 inches in width, 18 feet in height, and 120 feet in overall length. In lieu of the pilot car, **overwidth** movements exceeding 14 feet 6 inches but not 16 feet may be equipped with lighted rotating or flashing amber light(s) that are visible from the front and rear at 500 feet. Load movements exceeding 18 feet in overall width are subject to an NDHP escort. Excessive overweight load movements are also subject to pilot cars and an official escort.

Axle Weight Limitations

1. Axle weight limitations for vehicles and vehicle combinations (with permit).
 - a. Vehicles or vehicle combinations hauling non-divisible overweight loads cannot exceed the following maximum permissible axle weights. (Single and tandem axle weights may not exceed 600 pounds per inch width of tire; groupings with three axles or more may not exceed 550 pounds per inch width of tire.) Metric tire sizes are converted to inches by dividing millimeters by 25.4.

Tire Size	Single Axle 2 Tires	Single Axle 4 Tires	Tandem Axle 4 Tires	Tandem Axle 8 Tires	Triple Axle 12 Tires	Four Axles 16 Tires
8:25	9,900 lbs	19,800 lbs	19,800 lbs	39,600 lbs	54,450 lbs	*68,000 lbs
9:00	10,800 lbs	21,600 lbs	21,600 lbs	43,200 lbs	59,400 lbs	*68,000 lbs
10:00	12,000 lbs	*24,000 lbs	24,000 lbs	*45,000 lbs	*60,000 lbs	*68,000 lbs
11:00	13,200 lbs	*24,000 lbs	26,400 lbs	*45,000 lbs	*60,000 lbs	*68,000 lbs
12:00	14,400 lbs	*24,000 lbs	28,800 lbs	*45,000 lbs	*60,000 lbs	*68,000 lbs
13:00	15,600 lbs	*24,000 lbs	31,200 lbs	*45,000 lbs	*60,000 lbs	*68,000 lbs
14:00	16,800 lbs	*24,000 lbs	33,600 lbs	*45,000 lbs	*60,000 lbs	*68,000 lbs
15:00	18,000 lbs	*24,000 lbs	36,000 lbs	*45,000 lbs	*60,000 lbs	*68,000 lbs
16:50	19,800 lbs	*24,000 lbs	39,600 lbs	*45,000 lbs	*60,000 lbs	*68,000 lbs
17.5	21,000 lbs	*24,000 lbs	42,000 lbs	*45,000 lbs	*60,000 lbs	*68,000 lbs
18:00	21,600 lbs	*24,000 lbs	43,200 lbs	*45,000 lbs	*60,000 lbs	*68,000 lbs

*Maximums include all tolerances

2. Axle weight limitations for fixed load equipment mounted on truck-type chassis.

- a. The following are the maximum permissible axle weights for fixed load equipment mounted on truck-type chassis such as truck cranes and workover rigs. (Single and tandem axle weights may not exceed 650 pounds per inch width of tire; groupings with three or more axles may not exceed 550 pounds per inch width of tire.) Metric tire sizes are converted to inches by dividing millimeters by 25.4. "m" denotes tire width in millimeters.

Tire Size	Single Axle 2 Tires	Single Axle 4 Tires	Tandem Axle 4 Tires	Tandem Axle 8 Tires	Triple Axle 6 Tires	Triple Axle 12 Tires	Four Axle 16 Tires
8:25	10,725 lbs	21,450 lbs	21,450 lbs	42,900 lbs	27,225 lbs	54,450 lbs	*68,000 lbs
9:00	11,700 lbs	23,400 lbs	23,400 lbs	46,800 lbs	29,700 lbs	59,400 lbs	*68,000 lbs
10:00	13,000 lbs	26,000 lbs	26,000 lbs	*50,000 lbs	33,000 lbs	*60,000 lbs	*68,000 lbs
11:00	14,300 lbs	28,600 lbs	28,600 lbs	*50,000 lbs	36,300 lbs	*60,000 lbs	*68,000 lbs
11.2 285 m	14,575 lbs	29,125 lbs	29,125 lbs	*50,000 lbs	36,975 lbs	*60,000 lbs	*68,000 lbs
11.6 295 m	15,100 lbs	*30,000 lbs	30,175 lbs	*50,000 lbs	38,300 lbs	*60,000 lbs	*68,000 lbs
12:00	15,600 lbs	*30,000 lbs	31,200 lbs	*50,000 lbs	39,600 lbs	*60,000 lbs	*68,000 lbs
12.4 315 m	16,125 lbs	*30,000 lbs	32,250 lbs	*50,000 lbs	40,925 lbs	*60,000 lbs	*68,000 lbs
13:00	16,900 lbs	*30,000 lbs	33,800 lbs	*50,000 lbs	42,900 lbs	*60,000 lbs	*68,000 lbs
14:00	18,200 lbs	*30,000 lbs	36,400 lbs	*50,000 lbs	46,200 lbs	*60,000 lbs	*68,000 lbs
14.4 365 m	18,725 lbs	*30,000 lbs	37,450 lbs	*50,000 lbs	47,525 lbs	*60,000 lbs	*68,000 lbs

Tire Size	Single Axle 2 Tires	Single Axle 4 Tires	Tandem Axle 4 Tires	Tandem Axle 8 Tires	Triple Axle 6 Tires	Triple Axle 12 Tires	Four Axle 16 Tires
15:00	19,500 lbs	*30,000 lbs	39,000 lbs	*50,000 lbs	49,500 lbs	*60,000 lbs	*68,000 lbs
15.2 385 m	19,775 lbs	*30,000 lbs	39,525 lbs	*50,000 lbs	50,175 lbs	*60,000 lbs	*68,000 lbs
16:50	21,450 lbs	*30,000 lbs	42,900 lbs	*50,000 lbs	54,450 lbs	*60,000 lbs	*68,000 lbs
16.7 425 m	21,725 lbs	*30,000 lbs	43,425 lbs	*50,000 lbs	55,125 lbs	*60,000 lbs	*68,000 lbs
17.5 445 m	22,750 lbs	*30,000 lbs	45,500 lbs	*50,000 lbs	57,750 lbs	*60,000 lbs	*68,000 lbs
18:00	23,400 lbs	*30,000 lbs	*46,800 lbs	*50,000 lbs	59,400 lbs	*60,000 lbs	*68,000 lbs
20.5	26,650 lbs	*30,000 lbs	*46,800 lbs	*50,000 lbs	*60,000 lbs	*60,000 lbs	*68,800 lbs

*Maximums include all tolerances

b. The following are the maximum permittable axle weights for fixed load equipment mounted on truck-type chassis such as cranes and workover rigs that exceed 650 pounds per inch width of tire. **Single and tandem axle weights may exceed 650 pounds per inch width of tire but shall not exceed 670 pounds per inch width of tire.** A grouping of three or more axles may not exceed 550 pounds per inch width of tire or exceed axle weight limitations as authorized in the previous table shown in 2.a.

Tire Size	Single Axle 2 Tires	Single Axle 4 Tires	Tandem Axle 4 Tires	Tandem Axle 8 Tires
11:00	14,750 lbs	29,500 lbs	29,500 lbs	*50,000 lbs
11.20 (285 m)	15,000 lbs	*30,000 lbs	30,000 lbs	*50,000 lbs
11.60 (295 m)	15,550 lbs	*30,000 lbs	31,100 lbs	*50,000 lbs
12:00	16,100 lbs	*30,000 lbs	32,175 lbs	*50,000 lbs
12.40 (315 m)	16,625 lbs	*30,000 lbs	33,250 lbs	*50,000 lbs
13:00	17,425 lbs	*30,000 lbs	34,850 lbs	*50,000 lbs
14:00	18,775 lbs	*30,000 lbs	37,525 lbs	*50,000 lbs
14.40 (365 m)	19,300 lbs	*30,000 lbs	38,600 lbs	*50,000 lbs
15:00	20,100 lbs	*30,000 lbs	40,200 lbs	*50,000 lbs
15.20 (385 m)	20,375 lbs	*30,000 lbs	40,750 lbs	*50,000 lbs
16.50	22,125 lbs	*30,000 lbs	44,225 lbs	*50,000 lbs
16.70 (425 m)	22,400 lbs	*30,000 lbs	44,775 lbs	*50,000 lbs
17.50 (445 m)	23,450 lbs	*30,000 lbs	*46,800 lbs	*50,000 lbs
18.00	24,125 lbs	*30,000 lbs	*46,800 lbs	*50,000 lbs
20.50	27,475 lbs	*30,000 lbs	*46,800 lbs	*50,000 lbs

- c. The rear axles of a truck crane and the dollies **mounted** behind the truck crane are considered one combination. If a boom trailer or boom dolly is towed behind a truck crane, the towed trailer is considered a separate combination **if the axle spacing is 8 feet or more** behind the truck crane. The gross weight of axles or axle groupings on trailers or dollies pulled behind truck cranes or other fixed load vehicles cannot exceed axle weight limitations as authorized for vehicle combinations in section 1.a.
3. Routing is restricted by the Permit Bridge Load Limitations Map (page 42) and the Weight Limitations Map (page 32). The Weight Limitations Map shows those highways posted for 80,000 lbs. G.V.W.
 - a. Road construction may also restrict requested routes of travel. Contact the permit section or visit the NDDOT Road Construction Report website at www.dot.nd.gov/travel/travel.htm.
4. Permits must be in possession prior to starting any oversize/overweight load movement. The permits may be obtained from the Highway Patrol permit section or highway patrol officers. To obtain a permit by fax, contact the permit section at 701-328-2621.
5. You will need to have the following information available to complete the application procedure:
 - a. Company name and address.
 - b. Description of power unit: year, make, serial number, license number and state, registered GVW, tire sizes, and number of axles.

- c. Description of towed unit: type of unit, tire sizes, and number of axles.
- d. Overall dimensions of vehicle and load.
- e. Axle weights and gross weight of vehicles and load if overweight is requested.
- f. Dates of travel, point of origin and destination, and desired route to be traveled.
- g. Axle spacings are required on a vehicle combination when the GVW exceeds 150,000 pounds and on special mobile equipment with a GVW in excess of 114,800 pounds. A bridge analysis shall be completed.

Permit Fees

- 1. \$20 for each single trip permit (SFN 3507, Official Receipt/Permit) except for loads in excess of 150,000 pounds GVW and self-propelled special mobile equipment.
- 2. Graduated fee for each single trip permit (SFN 3507, Official Receipt/Permit) exceeding 150,000 pounds gross vehicle weight:

Gross Vehicle Weight	Permit Fee
150,001-160,000 lbs.	\$30
160,001-170,000 lbs.	\$40
170,001-180,000 lbs.	\$50
180,001-190,000 lbs.	\$60
190,001 and over	\$70
- 3. \$25 for each single trip permit for overweight self-propelled special mobile equipment.
 - a) \$50 for each single trip (SFN 3507 Receipt/Permit) for workover rigs.

- b) \$75 for each single trip (SFN 3507 Receipt/Permit) for special mobile equipment exceeding 650 pounds but not 670 pounds per inch width of tire, except earthmoving equipment.
 4. \$10 for each Identification Supplement, SFN 3317 (SFN 3318 for manufactured housing).
 5. \$20 for each Single Trip Movement form, SFN 3540 (SFN 14242 for manufactured housing).
 6. \$25 for each Special Mobile Equipment Single Trip Movement Approval form (SFN 16320) that must be used to validate the special mobile equipment identification supplements.
 - a) \$50 for each Special Mobile Equipment Single Trip Movement Approval form (SFN 16320) that must be used to validate special mobile equipment identification supplements for workover rig movements. Only those forms with "WOR" stamped in red in the upper right corner may be used.
 - b) \$75 for each Special Mobile Equipment Single Trip Movement Approval form (SFN 16320) that must be used to validate special mobile equipment identification supplements for special mobile equipment exceeding 650 but not 670 pounds per inch width of tire except earthmoving equipment. Only those forms with "SE" stamped in red in the upper right corner may be used.
 7. \$25 engineering fee for those movements that require approval by DOT engineers.
 8. \$.05 per ton per mile is assessed upon the portion of G.V.W. exceeding 200,000 pounds.
 9. Escort services provided by the NDHP are \$30 per hour and \$.30 per mile.
 10. Official or publicly owned vehicles shall not be required to pay charges for permits. (No fee to commercial hauler doing charity hauling.)
- Applications for identification supplements and single trip movement approval forms can be obtained from the NDHP website at www.nd.gov/ndhp or the North Dakota Highway Patrol, Motor Carrier Operations, Capitol Grounds, 600 E Boulevard Avenue Dept. 504, Bismarck, ND 58505-0240. The telephone number is 701-328-2621.

B. Interstate Permit Policy

Single trip permits are required for legal size divisible load vehicles exceeding the federal gross vehicle weight cap of 80,000 pounds for movement on the interstate highway system. All weights are restricted by the North Dakota Weight Limitations Chart and the North Dakota Axle Weight Limitations Chart.

The interstate permit must be in possession prior to traveling on the interstate system in North Dakota. The fee for a receipt issued "Interstate Only" permit is \$10. It can be purchased online at www.nd.gov/ndhp or obtained from the Highway Patrol permit section or highway patrol officers. The fee for a self-issue "Interstate Only" permit is \$5. It can also be purchased online at www.nd.gov/ndhp or obtained from the Highway Patrol permit section.

C. Seasonal Permit Policy

Seasonal permits will be issued in lieu of single trip permits for commercial movement of overwidth haystacks, hay bales, forage harvesters, grain cleaners, hay grinders, fertilizer spreaders and chemical applicators transported by another vehicle, and for commercial movement of overwidth and overweight self-propelled fertilizer spreaders and self-propelled agricultural chemical applicators. The seasonal permits are regulated under authority of section 39-12-04 and 39-12-05.3 of the North Dakota Century Code. The permits can be purchased online at www.nd.gov/ndhp or obtained from the Highway Patrol permit section or highway patrol officers. You will need to have the following information available to complete the application procedure:

1. Applicant's name, address, and telephone number.
 2. Indicate whether application is new or renewal. If it is a renewal and there are no changes from the previous year, the application does not have to be filled out (write the previous year's number on the receipt).
 3. Check the type of power unit.
 4. Description of power unit: type, unit number, year, make, license number and state (when applicable), and serial number (VIN – minimum 8 digits).
 5. Description of towed unit: type, serial number (VIN – minimum 8 digits) when applicable.
 6. Description of load.
 7. Overall dimensions of vehicle or vehicle combination.
 8. Check the total number of axles for the power unit and towed unit (when applicable.)
 9. Indicate the number of tires per axle, tire width, and axle spacings.
 10. The permit fee is \$50 per year.
 11. An insurance certificate showing a minimum \$300,000 liability and property damage insurance **must be submitted** with the application.
- Application forms for seasonal permits can be obtained by visiting the NDHP website at www.nd.gov/ndhp or from the North Dakota Highway Patrol, Motor Carrier Operations, Capitol Grounds, 600 E Boulevard Avenue Dept. 504, Bismarck, ND 58505-0240. The telephone number is 701-328-2621.