# NORTH DAKOTA WEIGHT LIMITATIONS CHART NORTH DAKOTA HIGHWAY PATROL

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.

V = 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.

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

Distance in feet between the extremes of any groups of 2 or			Maximum Load in	Pounds Carried on a	ny Group of 2 or More	Consecutive Axles		
more consecutive axles	2 Axles	3 Axles	4 Axles	5 Axles	6 Axles	7 Axles	8 Axles	9 Axles
4 5	34,000 34,000							
6	34,000							
7	34,000	34,000						
8 9	38,000 39,000	42,000 43,000						
10	40,000*	43,500						
11		44,500						
12		45,000 46,000	50,000					
13 14		46,500	50,500 51,500	57,000				
15		47,500	52,000	57,500				
16		48,000	52,500	58,000				
17 18		49,000 49,500	53,500 54,000	58,500 59,500				
19		50,500	54,500	60,000				
20		51,000	55,500	60,500	66,000			
21 22		52,000 52,500	56,000 56,500	61,000 62,000	66,500 67,000			
23		53,500	57,500	62,500	68,000			
24		54,000	58,000	63,000	68,500	74,000		
25 26		55,000 55,500	58,500 59,500	63,500 64,500	69,000 69,500	74,500 75,000		
26 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 30		58,000 58,500	61,500 62,000	66,000 67,000	71,500 72,000	77,000 77,500	82,500 83,000	
30 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 35			64,500 65,500	69,500 70,000	74,500 75,000	80,000 80,500	85,500 86,000	91,000 91,500
36	Two consecutive sets of tand	em axles may carry a	66,000	70,500	75,500	81,000	86,500	92,500
37	gross load of 34,000 pounds		66,500	71,000	76,000	81,500	87,000	93,000
38 39	overall distance between the such consecutive sets of tand		67,500 <u></u>	72,000 72,500	77,000 77,500	82,000 83,000	87,500 88,500	93,500 94,000
40	more.	iciti dales is so lect of	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 43			70,000 70,500	74,500 75,000	79,000 80,000	84,500 85,000	90,000 90,500	95,500 96,000
43			71,500	75,500 75,500	80,500	85,500	91,000	97,000
45			72,000	76,000	81,000	86,500	91,500	97,500
46			72,500	77,000	81,500	87,000	92,500	98,000
47 48			73,500 74,000	77,500 78,000	82,000 83,000	87,500 88,000	93,000 93,500	98,500 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 52			76,000 76,500	80,000 80,500	84,500 85,000	90,000 90,500	95,000 95,500	100,500 101,500
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 56	Gross weight limit on intersta	te Gross weight limit	78,500 79,500	82,500 83,000	87,000 87,500	92,000 92,500	97,500 98,000	103,000 103,500
57	on county and other local hig		80,000*	83,500	88,000	93,500	98,500	104,000
58	designated for more.	· ·		84,500	89,000	94,000	99,000	104,500
59 60				85,000 85,500	89,500 90,000	94,500 95,000	99,500 100,500	105,000 105,500*
61				86,000	90,500	95,500	101,000	100,000
62				87,000	91,000	96,000	101,500	
63 64				87,500 88,000	92,000 92,500	97,000 97,500	102,000 102,500	
65				88,000 88,500	92,500 93,000	97,500 98,000	102,500	
66				89,500	93,500	98,500	103,500	
67 68				90,000 90,500	94,000 95,000	99,000	104,500 105,000	
69				90,500	95,000 95,500	99,500 100,500	105,000	
70				92,000	96,000	101,000	,	
71			·	92,500	96,500	101,500		
72 73				93,000 93,500	97,000 98,000	102,000 102,500		
74				94,500	98,500	103,000		
75				95,000	99,000	104,000		
76 77				95,500 96,000	99,500 100,000	104,500 105,000		
78				97,000	101,000	105,500*		
79				97,500	101,500			
80 81				98,000 98,500	102,000 102,500			
81 82				98,500 99,500	103 000			
83				100,000*	104,000 104,500			
84 85					104,500 105,000	*Maximum Gr	oss Weight	
86					105,500*			
					•			

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.

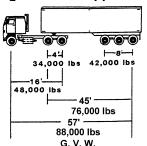
The weight per inch width of tire shall not exceed 550 pounds. Metric tire sizes are converted to inches by dividing millimeters by 25.4. The width of tire for solid tires shall be the rim width. For pneumatic tires the width of tire shall be the manufacturer's width. The weight in pounds on any one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

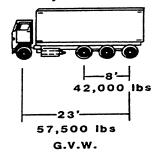
The weight on the steering axle shall be determined by the manufacturer's axle rating and shall not exceed 20,000 pounds when travel is on the interstate system or on Defense Highways. When travel is on Defense Highways, the load shall be for the US Department of Defense.

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	
7:50	8,250	16,500	16,500	33,000	24,750	_
8:00	8,800	17,600	17,600	34,000	26,400	<u>n</u>
8:25	9,075	18,150	18,150	34,000	27,225	Formula
9:00	9,900	19,800	19,800	34,000	29,700	Ϋ́
10:00	11,000	20,000	22,000	34,000	33,000	Weight
11:00	12,100	20,000	24,200	34,000		Ne Ne
12:00	13,200	20,000	26,400	34,000	<u>a</u> <	by \
13:00	14,300	20,000	28,600	34,000	d b mu	<del>-</del>
14:00	15,400	20,000	30,800	34,000	ine -or	Ë
15:00	16,500	20,000	33,000	34,000	ri ht I	ern
16:50	18,150	20,000	34,000	34,000	Determined by Weight Formula	Determined
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.

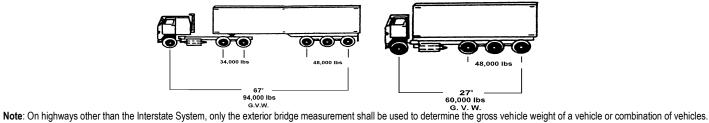
### **Examples of Bridge Formula Application on the Interstate System**





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.

## **Examples of Metric Tire Conversion**

Metric Tire Size	Tire Width in Inches	Metric Tire Size	Tire Width in Inches
245/75R22.5 255/70R22.5	9.6 inches 10.0 inches	315/75R22.5 385/65R22.5	12.4 inches 15.2 inches
265/75R22.5	10.4 inches	425/65R22.5	16.7 inches
275/80R22.5	10.8 inches	445/65R22.5	17.5 inches
285/75R24.5	11.2 inches	455/65R22.5	17.9 inches
295/75R22.5	11.6 inches	465/65R22.5	18.3 inches

#### **Tire Size and Dimensional Definitions** 13 / 80 R 20 13 = Tire width (inches) 80 = Percent of tire width in comparison to height (not used as part of tire width) R = Radial 20 = Rim diameter (inches) 13.8 R 20 138= Tire width (inches) R= Radial 20 = Rim diameter (inches)