

## **Over-Weight Moves**

### **Purpose**

The roadway system is designed to accommodate vehicles of certain standard sizes for dimensions and weights. The dimensions and weights of vehicles authorized to operate on public highways are provided in the applicable Acts and Regulations. Provisions are made for Special Move Permits solely for the purpose of accommodating the necessary transportation of single, indivisible loads or self-contained units which are in excess of the maximum legal weights and only where the integrity of provincial highway system, including roadway surface, bridge structures and/or traffic safety, would not be compromised. Permits for over-weight typically involve over-dimensions and as such, must consider both when applying conditions for moving.

### **Procedure(s)**

Special move permits (over-weight) are issued for indivisible loads only. Loads are considered indivisible if the load is not composed of more than one article, and all reasonable measures have been taken to minimize the extent to which the vehicle or load exceeds the legal weight limits.

#### **1     General**

TIR has authority to approve the issuance of permits for travel over all public highways. Approval for issuance of permits to travel over highways or bridges not under Provincial jurisdiction may be required from the authorities responsible for those roadways and structures.

Permits are issued with the understanding that all legal requirements including operational and safety equipment imposed by Nova Scotia Department of Service Nova Scotia and Municipal Relations (SNS&MR) and any other authorized public agency are complied with.

Reasonable precautions shall be taken to prevent damage to any structure or to the roadway surface, and where such damage does occur the permit holder shall be held responsible for any injury or damage to persons or property due to or resulting from the operation of the vehicle.

## 2 Weight

The maximum legal weights for any vehicle complete with their respective load which may travel on a highway without a permit for over-weight shall be in accordance with Weights and Dimensions of Vehicles Regulations made pursuant to Section 191 of the Motor Vehicle Act, in effect at the time the vehicle (or axle) is in use.

## 3 Move Conditions

Permits to exceed legal weight limits for axle groups and gross vehicle weights (by category) can be granted, within acceptable limits, provided conditions are adhered to during travel. Move conditions are placed on special move permits and are to be adhered to by the permit holder in the interest of safety and preventing damage to the infrastructure.

Move conditions are applied dependent upon axle group weights, gross vehicle weight (GVW) and routes to be travelled. Also to be considered is over-dimensions of the vehicle and thus move conditions applicable in accordance with TIR's Over-Dimensional Moves Procedure #PR5033.

Move conditions based solely on weight and route, without consideration of vehicle over-dimensions, are as shown in the following Summary Table - Move Conditions for Over-Weight.

**Summary Table: Move Conditions for Over-Weight:**

	HIGHWAY CLASSIFICATION	WEIGHT LIMITATIONS	APPLICABLE CONDITIONS	TYPE OF PERMIT
1a	100 Series Divided, Hwy. 101 & 107	GVW ≤ 69,800kg	1, 2, 3, 4, 5, 6, 22, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 316, 317, 319	Single Trip
1b	100 Series Divided, Hwy. 101 & 107	GVW > 69,800kg GVW ≤ 78,000kg	1, 2, 3, 4, 5, 6, 22, 30, 31, 32, 112, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 316, 317, 319	Single Trip
2a	100 Series Non-Divided, except Hwy. 101 & 107	GVW ≤ 63,000kg & Axle Group ≤ 29,500kg	1, 2, 3, 4, 5, 6, 22, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 316, 317, 319	Single Trip
2b	100 Series Non-Divided, except Hwy. 101 & 107	GVW > 63,000kg GVW ≤ 69,800kg or Axle Group > 29,500kg	1, 2, 3, 4, 5, 6, 22, 30, 31, 32, 33, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 316, 317, 319	Single Trip
3a	All other roads	GVW ≤ 53,400kg & Axle Group < 29,500kg	1, 2, 3, 4, 5, 6, 22, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 316, 317, 319	Single Trip
3b	All other roads	GVW > 53,400kg GVW ≤ 60,200kg or Axle Group ≥ 29,500kg	1, 2, 3, 4, 5, 6, 22, 30, 31, 32, 33, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 312, 316, 317, 319	Single Trip
3c	All other roads	GVW > 60,200kg GVW ≤ 69,800kg	1, 2, 3, 4, 5, 6, 22, 30, 31, 32, 112, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 316, 317, 319	Single Trip

**Note: Axle Group is any combination of axle(s) within a distance of 6.0 metres**

**4 General Conditions - Special Move Permits (Conditions listed refer to those noted in Summary Table.)**

The following general conditions are taken from procedure #PR5033 Over-dimensional Moves:

- 1 A valid permit, obtained from Service Nova Scotia and Municipal Relations must be in the possession of the driver of the vehicle and is subject to revocation at any time.
- 2 For roads that are not owned by the Department of Transportation and Infrastructure Renewal, the mover must contact the Municipality who owns the road.
- 3 The vehicle is not permitted on any highway during adverse road

- and weather conditions, or when visibility is reduced as to create a hazard.
- 4 A distance between over dimensional vehicles must be no less than 500 metres while operating on a highway.
- 5 The vehicle must observe traffic and must, when traffic begins to accumulate behind the movement, pull off the road and allow traffic to pass.
- 6 The mover will be held responsible for all damages caused as a result of the moving of the special move permitted vehicle.
- 22 The vehicle must display a revolving or flashing amber warning light on the top of the towing vehicle, and must:
- a be visible for a distance of 300 metres in all directions (if the light is blocked, it may be necessary to use more than one revolving light).
  - b flash 60 - 90 times per minute.
  - c be mounted a minimum of 1.5 m from the ground.
- 30 Vehicles used to provide escort services during the movement of overdimensional loads must:
- a have a Gross Vehicle Weight Rating no greater than 8000 kg
  - b have no more than 2 axles
  - c have a wheelbase of at least 2.5 m
  - d not carry cargo or tow a trailer. Only equipment and passengers related to the movement of the oversize/overweight load can be carried in the escort vehicle.
  - e have clear rearward visibility from all mirrors.
  - f have a two-way radio which allows communication with the overdimensional vehicle, and other escort vehicles involved with the movement, at all times (cellular telephones are not to be used for this communication purpose).
  - g have a cellular telephone for communication with police and other emergency services. If two escort vehicles are required for movement of an overdimensional vehicle or load, one cellular telephone is acceptable.
  - h have a "D" sign on the front and rear of the vehicle or lighted signbox on the vehicle.

- 31 D-signs for escort vehicles must meet the following requirements:
  - a 180 cm wide, 30 cm high, 20 cm high Letter Series E font.
  - b White level II reflectance and stop sign red (#712 3M or equivalent).
  - c The sign panel must be fabricated of retro reflective material.
  - d The "D" sign must not be used when not operating under special move conditions.
- 32 A lighted sign box, if used, must meet the following specifications:
  - a the sign must be upright when in use, and clearly visible from the front and rear of the vehicle. The sign must be folded flat when not in use or not required, or must be removed from the vehicle.
  - b the box must be 180 centimetres x 35 centimetres x 10 centimetres and must shelter all wire connectors, switches, flashers, etc.
  - c A sufficient number of lamps must be mounted in the box and spaced to give even lighting of the sign background across its full width.
  - d the sign panel must be constructed of white plexi-glass with red bars painted with transparent red paint. The letter "D" must be white in color and must be 20 centimetres high, Series E.
  - e must consist of two 175-millimetre (minimum) amber lights with reflectors, rated at 12.5 volts, 3 amps and 0.50 candela with a rated life of 300 hours.
  - f must consist of 2 standard 203-millimetre revolving or flashing amber lights, with 2 sealed beam units per lamp.
  - g The sign box must be deactivated, removed, or covered when not operating under special move conditions.
- 33 An escort vehicle is required at the rear of the vehicle.
- 112 Escort vehicles, displaying D-signs front and rear and an amber warning light on top of the escort vehicle visible for a distance of 150 metres, are required to precede and follow the move.

- 5 Over-Weight Move Conditions (Conditions listed refer to those noted in Summary Table.)
- 301 Steering axle not to exceed 6,500 kg., but can be as high as 8,000 kg., provided the combined weight with other tractor axles does not exceed 36,000 kg.
- 302 Single axle (non steering) not to exceed 11,340 kg.
- 303 Two axle group, or any two adjacent axles in a group, not to exceed 22,700 kg.
- 304 Tractor drive three axle group (overall axle spread of 2.4 m or greater) not to exceed 29,500 kg.
- 305 Trailer three axle group not to exceed:
- |                              |            |
|------------------------------|------------|
| Axle spread 2.4 m to <3.0 m  | 29,500 kg. |
| Axle spread 3.0 m to <3.6m   | 32,000 kg. |
| Axle spread 3.6 m or greater | 34,000 kg. |
- 306 Trailer four axle group not to exceed:
- |   |            |
|---|------------|
| Axle spacing equal to or greater than 4.88 m* | 36,000 kg. |
|---|------------|
- \*(for equipment built prior to 1999, axle spacing equal to or greater than 4.3 m applies)
- 307 Permit is not valid on steel truss bridges except those on 100 Series highways.
- 308 Permit is not valid if the vehicle is not registered to maximum weight as outlined in Nova Scotia's *Weights and Dimensions of Vehicles Regulations*.
- 309 Permit is not valid if any of the following are exceeded:
- i. manufacturer's tire weight rating,
  - ii. manufacturer's axle weight rating,
  - iii. manufacturer's gross vehicle weight rating.
- 310 All axles to have four tires per axle except steering axle(s).
- 311 Vehicle to reduce speed to 45 km/hr at bridges.
- 312 Reduce speed to 10 km/hr at bridges.
- 313 Only vehicle on bridge.
- 314 Vehicle must travel along centerline of bridge.
- 315 Vehicle to avoid crossing of bridges where interchange ramps allow such alternative routing.
- 316 Jeep dolly single in combination with drive axles, not to exceed 29,500 kg.
- 317 Jeep dolly double in combination with drive axles, not to exceed:

	Axle group spread 3.6 m to <4.8 m	34,000 kg.
	Axle group spread 4.8 m to <6.6 m	36,000 kg.
	Axle group spread 6.6 m or greater	38,000 kg.
318	Permit is not valid during Spring Weight Restrictions.	
319	Permit is valid for transporting indivisible loads only. The load is considered indivisible if the load is not composed of more than one article, and all reasonable measures have been taken to minimize the extent to which the vehicle or load exceeds the legal weight limits.	

## 6 Exceptional Moves

Moves which exceed the limits of GVW shown for each class of road in the Summary Table are considered Exceptional Moves. Such moves shall be subject to review by TIR (Structural Engineering). The review will determine the level of assessment to bridges that will apply and whether TIR or the applicant is required to undertake the assessment. If the applicant is required to undertake the assessment, a professional engineer licensed to practice in Nova Scotia and acceptable to TIR, would be engaged at the cost of the applicant.

## 7 Spring Weight Restrictions

Roads are subject to Spring Weight Restrictions each year, requiring a reduction in axle weights to protect weakened pavement structure during spring thaw. Also, during Spring Weight Restrictions, the transporting of over-weight commodities is restricted. Special move permits are available under the following limits:

- 1 the move can be completed on 100 Series highways (Hwy 101, TCH 104, etc.)
- 2 maximum GVW of 62,500 kg. includes tolerances
- 3 legal axle weights apply, and shall include:
  - i. three axle drive group 21,000 kg.
  - ii. four axle trailer group 27,500 kg.
  - iii. single axle dolly in combination with tandem drive axle group - 21,000 kg.
  - iv. tandem jeep dolly in combination with tandem drive axle group:

- a Axle group spread 4.8 m to <5.4 m 26,000 kg.
- b Axle group spread 5.4 m to <6.0 m 32,000 kg.
- c Axle group spread 6.0 m or greater 36,000 kg.

Requests that exceed the above limits or for travel on highways other than 100 Series highways will be considered based on the circumstances of the situation.

## 8 Annual Permits

Special move permits (over-weight) may be issued on an annual basis, but are not valid during Spring Weight Restrictions with the exception of fire trucks responding to emergency situations. Annual permits may be issued for the following:

- a fire trucks
- b self-contained, indivisible vehicles (well drillers, mobile cranes, etc.) which do not exceed GVW of 45,400 kg.
- c mobile cranes which travel regularly between their base and a given location, and vice versa
- d self-contained, indivisible units that are towed as a semi-trailer which do not exceed GVW of 59,500 kg. (chippers, crushers, asphalt plant, etc.).

To be eligible for an annual permit for a self-contained unit, the applicant must provide accurate weights for axle groups and GVW which will be stated on the permit. Move conditions will be stated on the permit, which are to be adhered to during travel.

### **Accountability**

Service Nova Scotia and Municipal Relations is responsible for the administration of over-weight moves, ie. enforcement and the issuing of Special Move Permits. Structural Engineering is responsible for the review and approval of all exceptional moves.

### **Monitoring**

This procedure is to be monitored by the Director of Driver and Vehicle Safety, Service Nova Scotia and Municipal Relations, in conjunction with the Highway Operations and the Structural Engineering Sections of TIR.



*Division: Highway Programs*  
*Section: Maintenance & Operations*  
*Function: Operations Admin. (HP 2.30.59.1)*  
*Procedure number: PR5049*

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**References**

Transportation and Infrastructure Renewal Policies and Procedures Manual 23,  
Procedure #PR5033, Over-Dimensional Moves.  
Weights and Dimensions of Vehicles Regulations - Motor Vehicle Act.

**Schedules**

None

**Enquiries**

Structural Engineering - Over-Weight/Contractors Permits, or  
Highway Operations (Spring Weight Restrictions)

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