



## Overview

- Use of Pilot Cars in Oversize/Overweight Permitting
- Three-Phased Approach
- Analysis-Based Method
- Current Draft Changes
- Extension of Input Window
- Discussion

## Use of Pilot Cars in Oversize/Overweight Permitting



- Police escorts for commercial loads are very rare in BC.
- There is a long-standing requirement from WorksafeBC that anyone doing traffic control in a high risk environment must have at least basic flagger training.
- Historically, we and many other jurisdictions have had a lack of other information or standards for pilot car operation and traffic control specific to the movement of large loads. Our requirements for numbers of pilot cars were just developed over time.

### Three- Phased Approach

For the past several years, the ministry has been working on three phases of changes to our requirements for pilot cars:

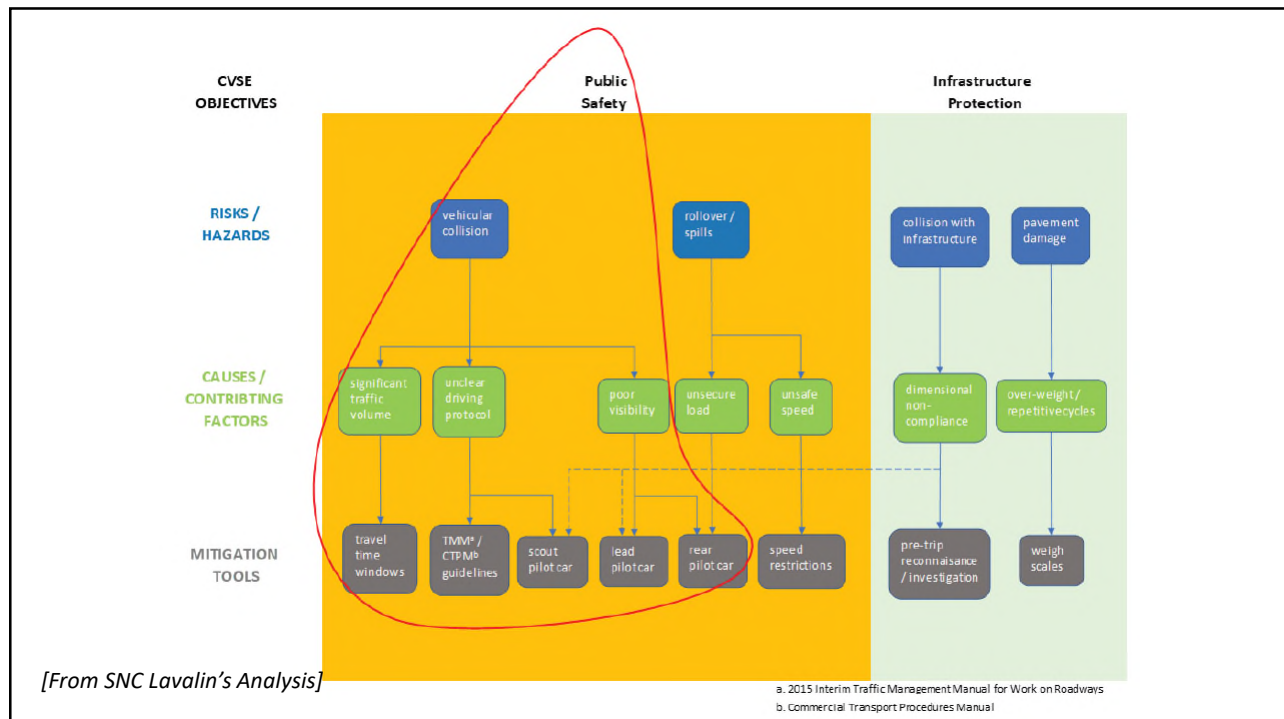
Phase 1: In response to concerns about road safety, we developed the **BC Pilot Car Load Movement Guidelines**. Completed Fall 2016 & now adopted in other provinces.

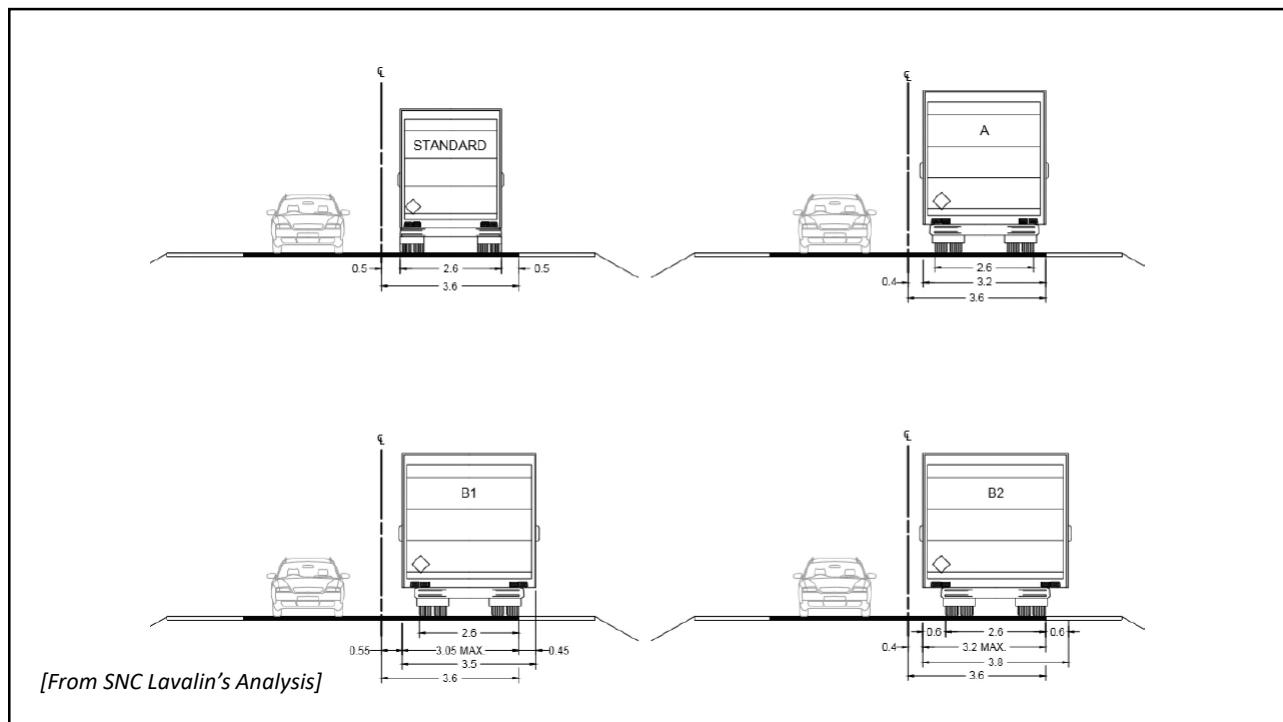
Phase 2: **Modernization of the Requirements for Pilot Car Lights and Signs**, in Division 8 of the Commercial Transport Regulations. Industry feedback and resulting amendments are complete; the proposed changes are now with legislative drafters.

Phase 3: **Review of Pilot Car Requirements and Travel Time Windows**. Analysis, drafting of proposed changes, and feedback from ministry district staff is complete; the proposed changes are now with industry for feedback.

## Analysis-Based Approach

- Terms of Reference developed by MOTI's CVSE and Traffic Engineering branches
- Engineering firm was contracted to do the work
- Overall safety risk is the product of three components:
  - › exposure / frequency
  - › severity
  - › probability
- Used a "buffer risk analysis" method





## Current draft changes

- Move from “day vs dark” to “2-lane vs multi-lane”
- Analysis indicated that length could be treated less conservatively than in the past.
- Feedback received to date indicates that industry has a strong preference to maintain the option of flashing lights or a pilot car for 3.2 to 3.5 m wide loads during the day.
- The stakeholder input window is being extended because we have become aware of some additional consultation we need to do.



## The proposed changes

- See the [CVSE1000](#) for current requirements

		Current (dark hours)			
		Multi-lane			
		OAW			
		up to 2.6	up to 3.2	up to 3.8	up to 4.4
Length	up to 27.5	0	0	0	1
	up to 31	0	0	0	2
	up to 36	0	1	1	2
	up to 40	0	1	1	2
	up to 46	1	1	1	3

		Current (dark hours)			
		Multi-lane			
		OAW			
		up to 2.6	up to 3.2	up to 3.8	up to 4.4
Length	up to 27.5	0	0	-1	-1
	up to 31	-1	-1	-1	0
	up to 36	-2	-1	-1	0
	up to 40	-2	-1	-1	0
	up to 46	undef.	undef.	undef.	undef.

		Current (dark hours)			
		2-Lane			
		OAW			
		up to 2.6	up to 3.2	up to 3.8	up to 4.4
Length	up to 27.5	0	0	1	2
	up to 31	0	1	1	2
	up to 36	1	1	2	2
	up to 40	1	1	2	2
	up to 46	1	1	2	3

		Current (dark hours)			
		2-Lane			
		OAW			
		up to 2.6	up to 3.2	up to 3.8	up to 4.4
Length	up to 27.5	0	0	0	0
	up to 31	-1	0	0	0
	up to 36	-1	-1	0	0
	up to 40	-1	-1	0	0
	up to 46	undef.	undef.	undef.	undef.

- See the Summary of Changes handout for complete current draft

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Stakeholder input window extended due to new information

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Thank you!





CVSE Permits are valid in British Columbia on highways under the jurisdiction of the Ministry of Transportation and Infrastructure only. If routing is specified on your permit, you must follow that routing. In addition to the terms and conditions that are stated on the permit, the policies described in the Commercial Transport Procedures Manual (CTPM), available at [www.cvse.ca](http://www.cvse.ca), are incorporated into and form part of the conditions of this permit.

**A. For Term or Single Trip Permits with Maximum Overall Width 3.2 m,  
Maximum Overall Height 4.3 m (Term)\* and 4.88 m (Single Trip)\*, and/or  
Maximum Overall (Loaded) Length 25 m for Combinations and 16.0 m for Single Vehicles**

\* 5.33 m Overall Height (Term or Single Trip) in the Peace River Region

**Basic Travel Time Window: Travel at any time on any day**

**CATEGORY 'A' RESTRICTIONS**

<b>Time</b>	<b>N/A</b>
<b>Location</b>	<ol style="list-style-type: none"> <li>In the Lower Mainland: <ul style="list-style-type: none"> <li>No travel on the First Narrows (Lions Gate) Bridge</li> <li>No travel on the Pattullo Bridge</li> <li>No height in excess of 4.15 m through the George Massey Tunnel on Hwy 99</li> <li>No height in excess of 4.3 m on Hwy 1 west of Abbotsford</li> </ul> </li> <li>In the Kootenays: <ul style="list-style-type: none"> <li>No height in excess of 4.13 m eastbound through the Warfield Underpass on Hwy 3B/22 (4.56 m westbound)</li> <li>No height in excess of 4.3 m on Hwy 1 between Revelstoke National Park and Glacier National Park</li> <li>No width in excess of 2.6 m on the Waneta Bridge on Hwy 22A, just north of the US Border</li> </ul> </li> </ol>
<b>Other</b>	Poor Visibility – No travel is permitted when, because of unfavourable atmospheric conditions, persons or vehicles on the highway are not clearly discernible at a distance of 100 m.

**B. For Term or Single Trip Permits with Maximum Overall Width 3.8 m, and/or  
Maximum Overall (Loaded) Length 31.0 m for Combinations (31.5 m for Structures)**

**Basic Travel Time Window: Any time and day except not on Fridays from 15:30 to 04:00 the following day,  
and not on Saturdays from 21:00 to 04:00 the following day**

**CATEGORY 'B' RESTRICTIONS** All Category 'A' Restrictions apply, and in addition the following:

<b>Time</b>	<ol style="list-style-type: none"> <li>No travel on General Holidays as defined in Chapter 3 of the CTPM, except as shown in 2 and 3.</li> <li>In the Lower Mainland, west of Abbotsford (Hwy 11) and south of Squamish: <ul style="list-style-type: none"> <li>No travel on weekdays from 07:00 to 09:00 or from 15:30 to 18:00 except between Abbotsford and 104 Avenue/160 Street on Highway 1</li> <li>Travel is permitted on General Holidays from 04:00 to 07:00 and from 09:00 to 14:00</li> </ul> </li> <li>In the Peace River Region, travel is permitted at any time on any day.</li> </ol>
<b>Location</b>	<ol style="list-style-type: none"> <li>In the Lower Mainland: no width in excess of 3.2m or length in excess of 27.5m through the George Massey Tunnel on Hwy 99</li> <li>In the Cariboo Region, no travel on Hwy 20 from Anahim Lake to Hagensborg, except under conditions described in section 3.8.8 of the Commercial Transport Procedures Manual</li> <li>In the Southern Interior Region, maximum 29 m OAL on: <ul style="list-style-type: none"> <li>Hwy 3 from the junction of 3/5 to Princeton</li> <li>Hwy 1 from Hope to Cache Creek</li> <li>Hwy 99 through the Fountain Railway underpass, 15 km NE of Lillooet</li> </ul> </li> </ol>
<b>Other</b>	Convoying – There shall be no convoying of oversize vehicles/loads except as required by the permit. Convoying means any two oversize vehicles/loads from the same company which are in transit less than 1 kilometre apart on a section of highway.



**C. For Single Trip Permits with Maximum Overall Width 4.4 m,  
and/or Maximum Overall (Loaded) Length 40.0 m for Combinations**  
**Basic Travel Time Window: Any time and day except not on Fridays and Saturdays**  
**from 15:30 to 04:00 the following day and Sundays from 15:30 to 24:00**  
**(Or in the Peace: any time and day except in darkness from Friday to 00:01 Monday)**

**CATEGORY 'C' RESTRICTIONS** All Category 'A' and 'B' Restrictions apply, and in addition the following:

- Time**
1. In the Southern Interior, on Highway 1 between Hope and Cache Creek, no travel during the hours of darkness
  2. In the Kootenays:
    - No travel on Highway 93 east of Radium from the last Friday in June to September 15, except between 03:00 and 06:00
    - No travel on No. 1 Mine Road (off of Hwy 43) from Elkford to Fording River Operations between 06:00 and 08:00 and between 18:00 and 20:00
- Location**
1. On Vancouver Island, no travel on Highway 14 west of Jordan River
  2. In the Lower Mainland, no travel on the Queensborough Bridge (applies to widths over 3.8 m)
  3. In the Okanagan, no travel on Highway 97A between Sicamous and Grindrod
  4. In the Kootenays, no travel on Highway 31 between Meadow Creek and Trout Lake
  5. In the Peace River Region:
    - Maximum 36 m OAL on Hwy 97 north of the junction of 77/97
- Other**
- Overtaking –The oversize vehicle shall pull off the travelled surface of the highway wherever possible to allow following vehicles to pass. There shall be no overtaking of an over-dimensional vehicle/load on any highway by another over-dimensional vehicle/load.

#### Pilot Cars:

Pilot cars must be operated in accordance with the Pilot Car Load Movement Guidelines, which is [Appendix G, 2015 Interim Traffic Management Manual for Work on Roadways](#). This includes two-way communication with the driver of the oversize load.

	Up to 3.2 m		3.21 to 3.5 m		3.51 to 3.8 m		3.81 to 4.4 m	
	Day	Dark	Day	Dark	Day	Dark	Day	Dark
<b>Length</b>								
<b>Up to 27.5 m</b>	0	0	1*	1	1	1	1***	2
<b>27.5 to 31 m</b>	1	1	1	1	1	1	2	2
<b>31.1 to 36 m</b>	1	2	1	2	1	2	2	2
<b>36 to 40 m</b>	2**	2	2**	2	2	2	2	2

\* Or the towing vehicle must be equipped with and operate one or two amber flashing lights

\*\* Up to 3.5 m wide, only one pilot car is required for travel over four (4) lane highways

\*\*\* Two pilot cars for travel on Highway 97 from the junction of 77/97 to the Yukon Border

Additional Pilot Car Requirements for Front or Rear Projection:

- If you are using an allowance for front projection beyond 3 m of the kingpin or beyond 6.5 m measured forward of the turn center of the front steering axle group, a minimum of one pilot car is required (unless otherwise provided for by commodity or vehicle policy).
- If you are using an allowance for rear projection beyond 6.5 m from the turn center of the rear-most axle group, a minimum of one pilot car is required (unless otherwise provided for by commodity or vehicle policy).
- A minimum of two pilot cars will be required if the load exceeds 3.8 m in width and the front projection is in excess of 3 m and/or the rear projection is in excess of 6.5 m.

For overall widths over 3.2 m, a minimum of one pilot car is required:

On Vancouver Island:

- Highway #4 from the Taylor River Bridge (40 km west of Port Alberni) to Tofino
- Highway 30 from Highway 19 to Port Alice

On the Sunshine Coast: Highway 101 from Langdale to Earl's Cove

In the Lower Mainland/Southern Interior: Highway 99 from Pemberton to Lillooet

In the Kootenays:

- Hwy 3A and 31 (Balfour-Kaslo-Galena Bay Highway)
- Hwy 33, southbound only, to approach and cross the Westbridge Bridge

In the Peace River Region: Highway 97 from Junction 77/97 to the Yukon border





**Traffic Control:**

Unless otherwise specified in the permit: Where traffic control is needed for the load to proceed safely, it must be performed by a certified traffic control person in accordance with the [Pilot Car Load Movement Guidelines](#), or by a Peace Officer. Out of Province pilot car operators who engage in traffic control as part of their escort duties must either be certified in BC or be able to show proof of government approved flagging training, as described in [Circular 10/16](#).

**Flags:**

For widths over 2.6 m, red or orange flags are required on all four corners of each load/trailer.

For travel in daylight, a red or orange flag is required on front projection over 1 m and/or rear projection over 1.2 m.

**Lamps:**

Overall Width

Over 2.6 m      Lights on extremities, amber lamps facing forward, red lamps facing the rear, for night travel

3.21 to 3.5 m      One or two amber flashing or rotating beacon(s) mounted on the truck for daylight travel  
                         or minimum one pilot vehicle

For travel in darkness, a white light is required on front projection over 1 m and a red light is required on rear projection over 1.2 m.

Amber lamps or beacons on the towing unit or at the rear of the vehicle or load may be used for additional safety.

**Signs:**

Wide load, D sign, or oversize load signs are required front and rear for vehicles/loads with overall width over 3.2 m wide.

Long load, D sign or oversize load signs are required front and rear for vehicles/loads (other than B-Trains) over 25 m long.

**In addition to the terms and conditions that are stated on the permit, the policies described in the Commercial Transport Procedures Manual (CTPM), available at [www.cvse.ca](http://www.cvse.ca), are incorporated into and form part of the conditions of this permit.**

For travel conditions including weather and road construction, please visit DriveBC: <http://drivebc.ca/>

For Seasonal Load Restrictions, please visit: <http://www.th.gov.bc.ca/BCHighways/loadrestrictions/loadrestrictions.htm>

<http://onlinepermitsbc.ca>      **Provincial Permit Centre: 800 559-9688**



Traffic Engineering and CVSE have undertaken a review of pilot car requirements and travel time windows. Highway classification, design guidelines, traffic volumes, vehicle configurations, and safety were factors the engineering consultant considered in developing a process/analysis for the review. Policy revisions cover dimensions. Bridge crossing conditions may result in additional restrictions.

### Summary of Changes:

On the CVSE 1000 :

- an increase to 27.5 m overall length for Category A (from 25 m);
- an increase to 36 m overall length for Category B (from 32 m);
- an increase to 46 m overall length for Category C (from 40 m).

There is additional travel time on weekends for Category B and C in CVSE 1000 as well as an expanded general window for Extraordinary Loads. Travel time window changes are:

- Category B travel restrictions – None except in Lower Mainland
  - Current restrictions are 15:30 Fridays to 04:00 Saturdays, and 21:00 on Saturdays to 04:00 Sundays
- Category C travel restrictions – None except in Lower Mainland
  - Current restrictions are 15:30 Fridays to 04:00 Saturdays, 15:30 Saturdays to 04:00 Sundays, and 15:30 to 24:00 Sundays
- Expanded travel time window of 19:00 to 07:00 for vehicles 4.4 m to 5 m wide in Skeena, Bulkley-Stikine, Fort George and Peace Districts
- General Extraordinary Load Travel Window of 22:00 to 05:00 Sunday to Thursday, 00:00 to 05:00 Friday and Saturday
  - Currently 00:00 to 05:00 with no weekend travel
- Travel time windows for the CVSE1001 match the Extraordinary Load basic window of 22:00 to 05:00 Sunday to Thursday, 0:00 to 05:00 Friday and Saturday, where possible.
- Bridge crossing conditions and other District-specific conditions held in District Conditions Spreadsheet with examples including:
  - Prince George restriction 00:00 to 05:00 within municipal boundaries
  - Summer seasonal adjustment of 00:00 to 05:00 May to September West Kelowna to Vernon
  - Vancouver Island Highway 19 Duke Point Ferry restriction 00:00 to 05:00

The current pilot car requirements in BC differ between night and day. The review/study proposed a multi-lane vs 2-lane approach that was adopted and pilot car requirements are:

Multi-lane		OAW			
Length		up to 2.6	up to 3.2	up to 3.8	up to 4.4
	up to 27.5	0	0	0	1
	up to 31	0	0	0	2
	up to 36	0	1	1	2
	up to 40	0	1	1	2
	up to 46	1	1	1	3

2-Lane		OAW			
Length		up to 2.6	up to 3.2	up to 3.8	up to 4.4
	up to 27.5	0	0	1	2
	up to 31	0	1	1	2
	up to 36	1	1	2	2
	up to 40	1	1	2	2
	up to 46	1	1	2	3

**Some implications of these changes are:**

- The current provision for loads ~~Leads~~ 3.2 to 3.5 m wide ~~no longer to~~ have an option for lights on the power unit instead of a pilot car during the day will be grand-fathered in based on industry input.
- The current width category up to 3.5 m is combined with 3.8 m and there is an additional length category of up to 46 m in the tables. The pilot car requirements in the above tables do not differ between 36 m and 40 m length but the separate categories are kept as this format helps other jurisdictional partners.
- Day travel would be permitted for vehicles up to 46 m OAL and 4.4 m OAW
  - Long vehicles up to 40 m but at legal 2.6 m width would not require pilot cars on multi-lane highways
- Rocky Mountain Doubles up to 31 m may be permitted to travel on approved 2-lane highways without pilot cars, after route review and with District agreement.
- Vehicles over 29 m are not permitted at the following locations as per CVSE 1000, and a pilot car IS REQUIRED for loads between 27.5 m and 29 m:
  - Hwy 3 from the junction of 3/5 to Princeton
  - Hwy 1 from Hope to Cache Creek
  - Hwy 99 through the Fountain Railway underpass, 15 km NE of Lillooet
- A pilot car IS REQUIRED at the following locations for loads between 27.5 m and 31 m:
  - West Kootenay and Rocky Mountain Districts
  - Hwy 6 between Vernon (Aberdeen Rd) and South Slocan (Hwy 3A/Hwy 6 Junction)
  - Hwy 33 between Kelowna (Gallagher Rd) and Rock Creek (Hwy 3/Hwy33 Junction)
  - Hwy 3 between Hope (Hwy 3/Hwy 5 Junction) and BC/AB Border
  - Hwy 97 Prince George between Old Cariboo Highway and Kolling Rd (approximately 3 km south of Stone Creek Forest Service Rd)

**Here is a comparison of changes in relation to current pilot car requirements at night/during dark hours:**

Current (dark hours)					
Multi-lane		OAW			
Length		up to 2.6	up to 3.2	up to 3.8	up to 4.4
	up to 27.5	0	0	-1	-1
	up to 31	-1	-1	-1	0
	up to 36	-2	-1	-1	0
	up to 40	-2	-1	-1	0
	up to 46	undef.	undef.	undef.	undef.

Current (dark hours)					
2-Lane		OAW			
Length		up to 2.6	up to 3.2	up to 3.8	up to 4.4
	up to 27.5	0	0	0	0
	up to 31	-1	0	0	0
	up to 36	-1	-1	0	0
	up to 40	-1	-1	0	0
	up to 46	undef.	undef.	undef.	undef.