

# Task Force on Vehicle Weights and Dimensions Policy

## Ontario Ministry of Transportation Regulatory Update



Joe Lynch, P.Eng.

Carrier Safety and Enforcement Branch

November 2019

---

# Overview

- Review of O.Reg 413/05, Vehicle Weights and Dimensions (VWD) for Safe, Productive, and Infrastructure-Friendly (SPIF) vehicles.
- Regulatory Update
  - Overview of Safe, Productive, and Infrastructure-Friendly (SPIF) Vehicles regulation
- Ontario Long Combination Vehicle (LCV) Program amendments

---

# SPIF Review

- The main objective of the SPIF Review is to determine how the introduction of the SPIF regulation impacted the goods movement sector in Ontario compared to other trucking sectors operating in the province.
- The study is determining the impacts on:
  - Road safety comparing the initial expectations on improvement in dynamic performance, and reviewing enforcement statistics related to safety and compliance with weight laws, and of collision statistics of heavy trucks.
  - Infrastructure including the evaluation on damage to pavement structures and estimated reduced/increased life of bridges coming from the differential use of vehicle configurations before and after the modified regime.
  - The economic and productivity performance of the carriers and the industry as a whole, including modification of operational practices, difficulties coping with the new technology and weight compliance, as well as the additional costs involved with the new technology.

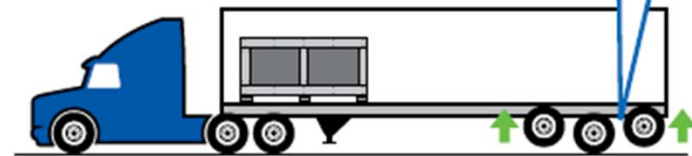
---

# Regulatory Amendments Since Implementation

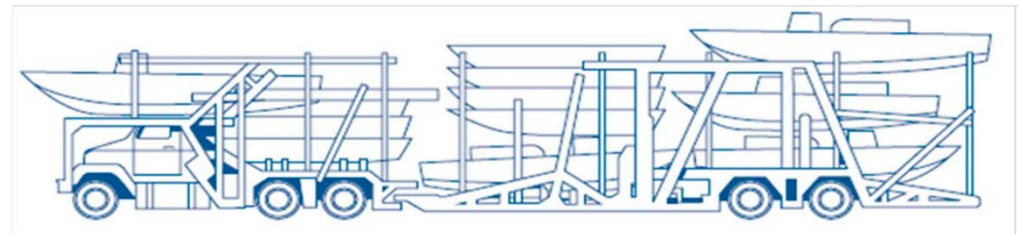
- **Since July 2011, there have been 3 regulatory amendments to the SPIF regulation:**
  - **July 2012 – Long Wheelbase Tractors on SPIF 1**
    - SPIF Schedule 1 (Tractor Fixed-Axle Semi-Trailer) amendment to accommodate technologies required to meet air quality and Greenhouse Gas (GHG) emissions mandates and allow the adoption of alternative fuel platforms, in addition to correcting redundancies.
  - **January 2014 – Extended Phase 3 Grandfathering**
    - SPIF Grandfathering Regime, extending existing grandfathering privileges for Phase 3 vehicles by an additional 5 years so to compensate for the economic downturn of 2008-09, which forced operators to reduce equipment use (therefore extending their usable life expectancy).
  - **January 2016 – Long Wheelbase Tractors on SPIF 12 and Boat Tails**
    - SPIF Schedule 12 (B-Train Double Trailer) amended to accommodate technologies required to meet air quality and GHG emissions mandates and allow the adoption of alternative fuel platforms.
    - Rear mounted aerodynamic devices (boat tails) to reduce fuel consumption by up to 5% (even further when coupled with other aerodynamic devices mounted on semi-trailers).

# Recent Amendments

- As of July 1<sup>st</sup>, 2019, Regulation 413/05 has been amended to include:
  - Single tires at par weights to the dual tires on single axes
  - 27.5 metre 3-Vehicle Saddle mounts
  - Smart Lift Axles (SLAs) on tandem, tridem and quadruple axes on designated tractor semi- and double-trailers
  - Boats on Stinger-Steer Configurations

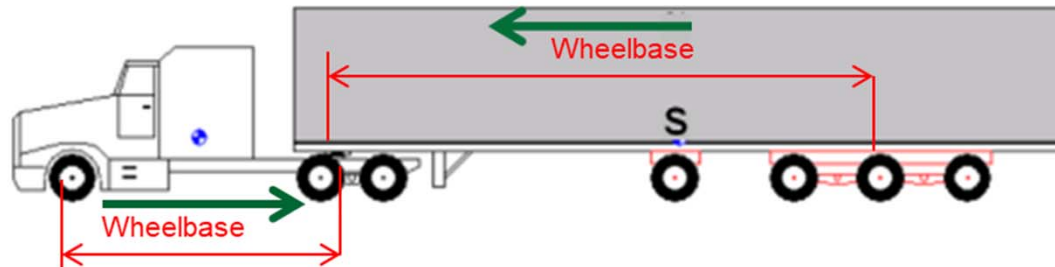


As the trailer load is reduced, the Meritor WABCO Trailer Lift Axle Control System will automatically raise the lift axle to reduce unnecessary tire wear and rolling resistance, thereby improving fuel economy and reducing costs.



# Recent Amendments

- As of July 1st, 2019, Regulation 413/05 has been amended to include:
  - Long Wheelbase Tractors (SPIF 2-7) up to 6.8 metre
  - Modify the conditions to allow the use of an Emergency Lift Axle Override, so to lift the self-steering axle in emergency situations improving the general safety operation of the truck.



Tractor	Feature	Dimensional Limit
Semi-Trailer	Wheelbase	Max 6.8m
	Wheelbase	
	If tractor wheelbase is:	
	i. 6.2m or less	6.25m to 12.50m
	ii. >6.2m to 6.3m	6.25m to 12.47m
	iii. >6.3m to 6.4m	6.25m to 12.40m
	iv. >6.4m to 6.5m	6.25m to 12.33m
	v. >6.5m to 6.6m	6.25m to 12.27m
	vi. >6.6m to 6.7m	6.25m to 12.20m
	vii. >6.7m to 6.8m	6.25m to 12.13m

# Amendments to LCV Program Conditions

- **Subsection 5 (2) of the Regulation** has been amended to reflect the requirement, if requested by the customer, for an **Emergency Lift Axle Override control within the cab of the truck**:
  - If the truck or tractor was built on or after January 1, 2020, the control is an emergency lift axle override control that meets all of the following conditions:
    - It allows the driver from the cab of the truck or tractor to lift, alter or deploy the weight on a self-steering axle of the truck or of any drawn trailer.
    - It is separate and independent from the 4-way flasher control.
    - The words “Emergency Lift Axle Override” appear adjacent to the control.
    - It activates the emergency 4-way flashers.
    - It only lifts, alters or deploys,
      - in the case of a tractor-trailer combination, the most forward self-steering axle of the semi-trailer, or
      - in the case of a truck, the self-steering axle or forced-steer auxiliary pusher axle.
    - It begins the lifting or altering of weight immediately upon activation.
    - It does not allow the axle to be lifted or its weight altered when the truck or vehicle combination is travelling at a speed over 60 kilometres per hour.
    - It fully deploys the self-steering axle,
      - immediately upon the vehicle stopping,
      - immediately upon the tractor power being turned off, and
      - within three minutes after the lifting or altering of weight.

# Amendments to LCV Program Conditions

- The Ministry of Transportation is making specific changes to Ontario's Long Combination Vehicle Program special vehicle configuration permit regime. These changes focus on three separate policy changes/program amendments:
  1. Easing the LCV Program Conditions around peak travel restrictions within the Greater Toronto Area (GTA).
  2. Easing the LCV Program Conditions around Cargo Restrictions.
  3. Allowing the Parry Sound lay-by to be utilized as an Origin/Destination location where carriers can assemble/disassemble LCVs.
  
- **Change 1** – Remove Greater Toronto Area peak travel Time Restrictions in the GTA
  - What are the changes to the GTA time restrictions?
    - Remove the existing GTA time restrictions between 7:30am and 9:00am and 4:30pm to 6:00pm.
  - What advantages will be achieved by removing the time restrictions?
    - This allows those carriers passing through the currently restricted area to continue operations rather than having to park and wait out the time restrictions before traveling through the GTA. In other cases, due to the time restrictions, carriers are forced to split the LCV into 2 tractor semitrailers so to complete while restrictions are in-place.



---

# Amendments to LCV Program Conditions

- **Change 2** – Relaxing Cargo Restrictions on LCVs
  - LCVs operating within the Ontario Long Combination Vehicle (LCV) Program will be allowed to carry small amounts of non-volatile dangerous goods. However, dangerous goods requiring an Emergency Response Assistance Plans (ERAP) will continue to be disallowed from LCVs. This change is in relation to small amounts of consumer goods rather than bulk; tankers of any kind are disallowed from the Program.
  
- **Change 3** - Parry Sound area lay-bys for the assembly and disassembly of LCVs:
  - Are carriers allowed to use any layby to assemble and disassemble LCV?
    - No. LCVs may only assemble or disassemble in approved locations that include warehouse yards, truck marshalling yards or truck stops. Laybys have not been approved locations for this purpose.
  - What benefits to carriers allowed to use the Parry Sound laybys?
    - Carriers will benefit from the access to freight coming/going from Northern Ontario.

---

# Thank you



*Joe Lynch, P.Eng.*  
Senior Vehicle Standards Engineer  
Ministry of Transportation  
125 Sir William Hearst Ave, 3<sup>rd</sup> Floor,  
Toronto, ON  
M3M 0B5

Telephone: 416-389-8308  
Email: [joe.lynch@ontario.ca](mailto:joe.lynch@ontario.ca)