

# AAMS Conference

NGWBST within  
Municipalities

November 16, 2017

**Andrew Barnes**

Director, Compliance and Regulatory  
Affairs - AMTA



Alberta Motor  
Transport Association



# Agenda

- Pavement Concerns, Interaction Road / Tires
- Canadian Update
- Alberta & Municipalities
- Benefits
- Conclusion

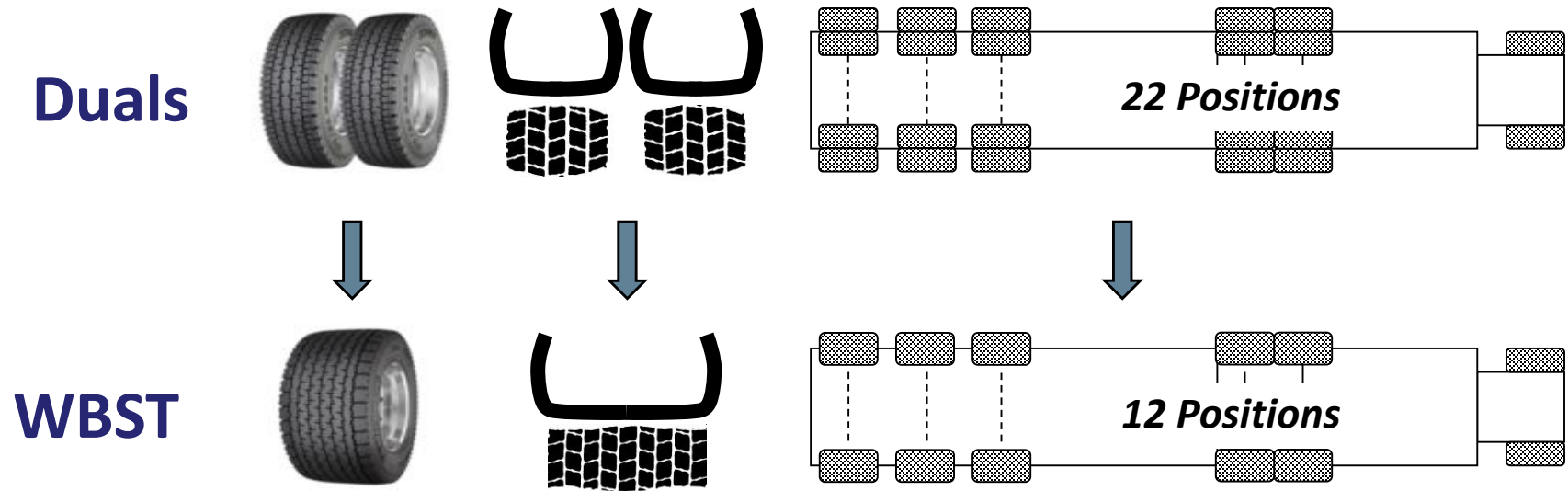


# Tires & Pavement

- What we need to understand and take into consideration:  
NGWBS vs. Dual Assembly

*Tire Dynamics / Load / Inflation Pressure*

# New Generation Wide Base Single (NGWBS)



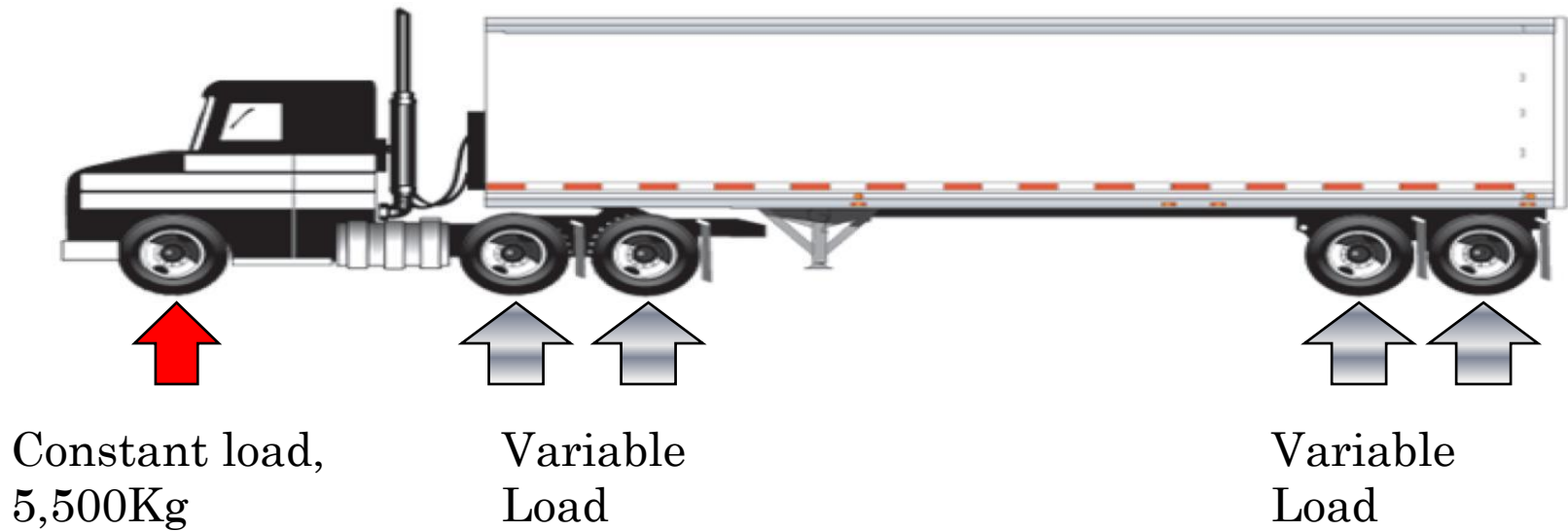
Equivalent Sizes

**11R22.5 → 455/55R22.5 Canadian Market**

275/80R22.5 → 445/50R22.5 US Market

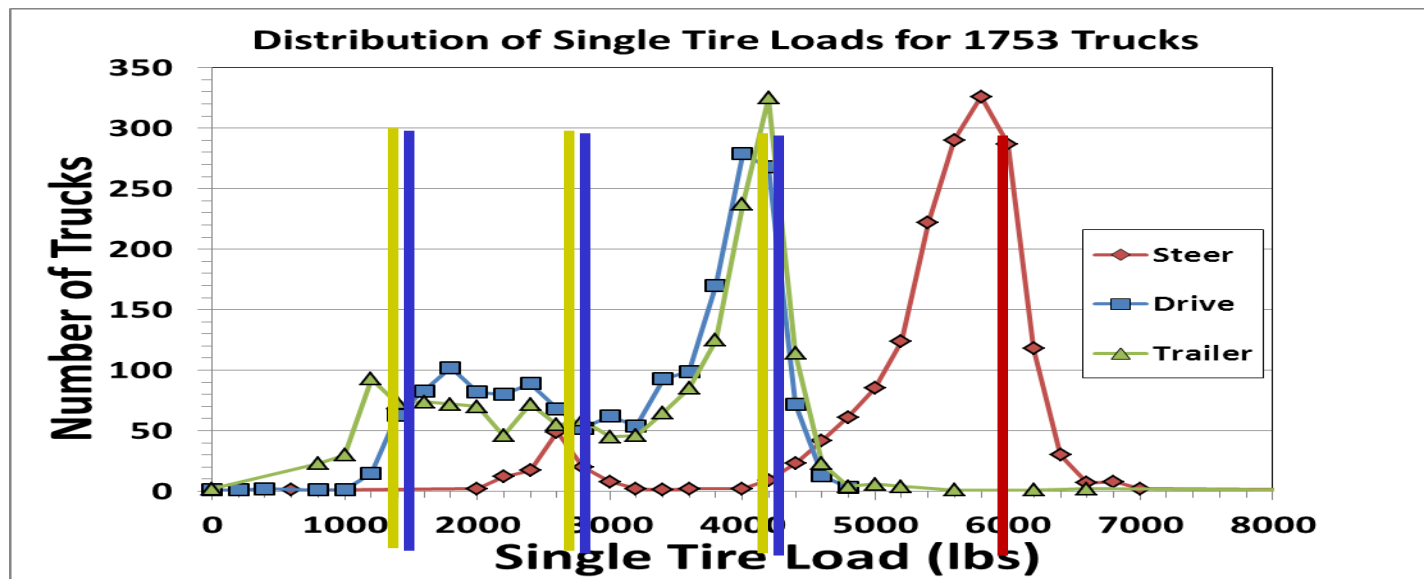


# Tires & Pavement (Steer Tires)





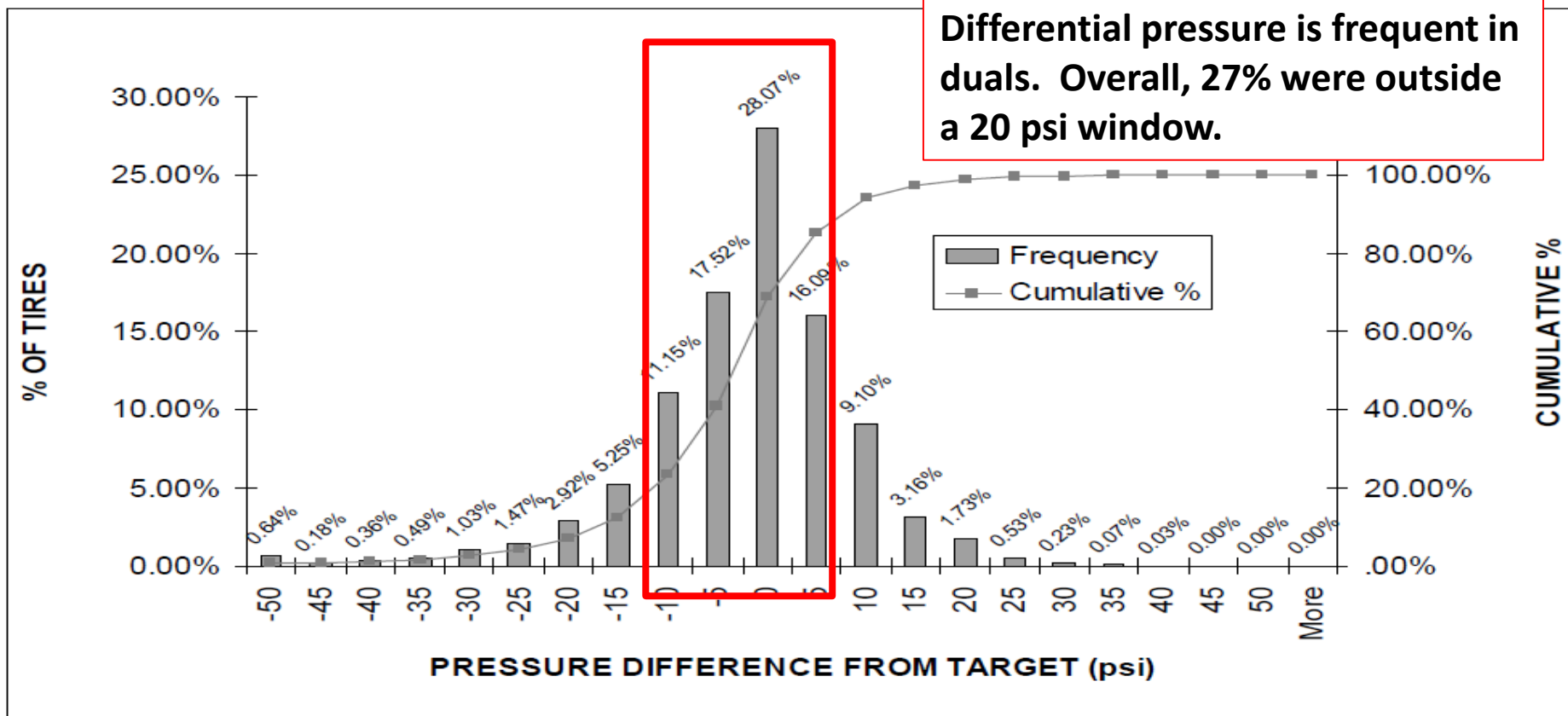
# Actual Usage Loads



- Steer axle load is very constant
- Drive and trailer axles often not at full load
- For actual usage, impact of NGWBST is overestimated

# Dual Unequal Inflation Impact

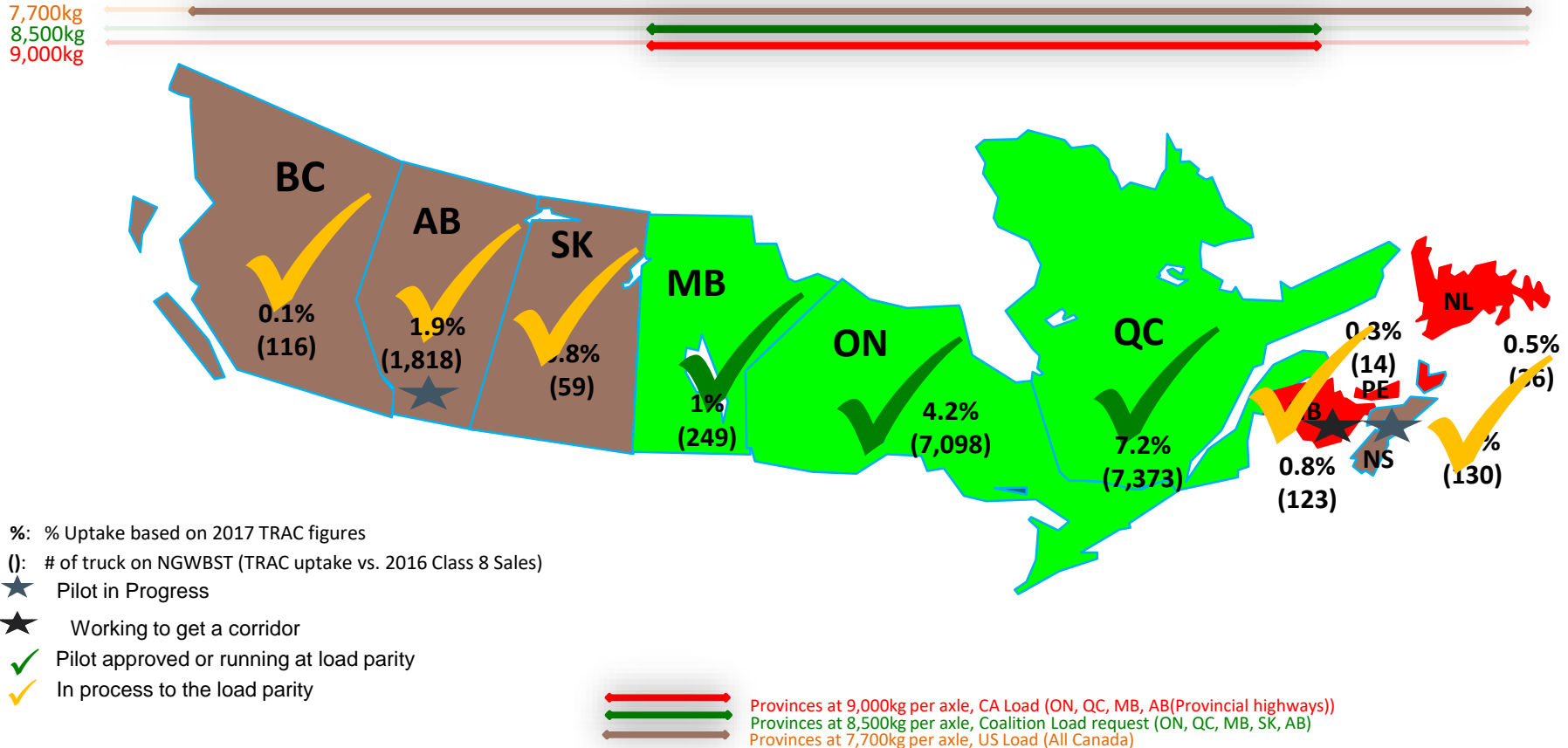
Exhibit 4.3 Distribution of All Tires Surveyed



Reference: Boonze, Allen, Hamilton Inc. Final Report November, 2003 for US Federal Motor Carrier Safety Administration, Contract # DTFH61-99-C-00025



# NGWBST Provincial Status in 2016

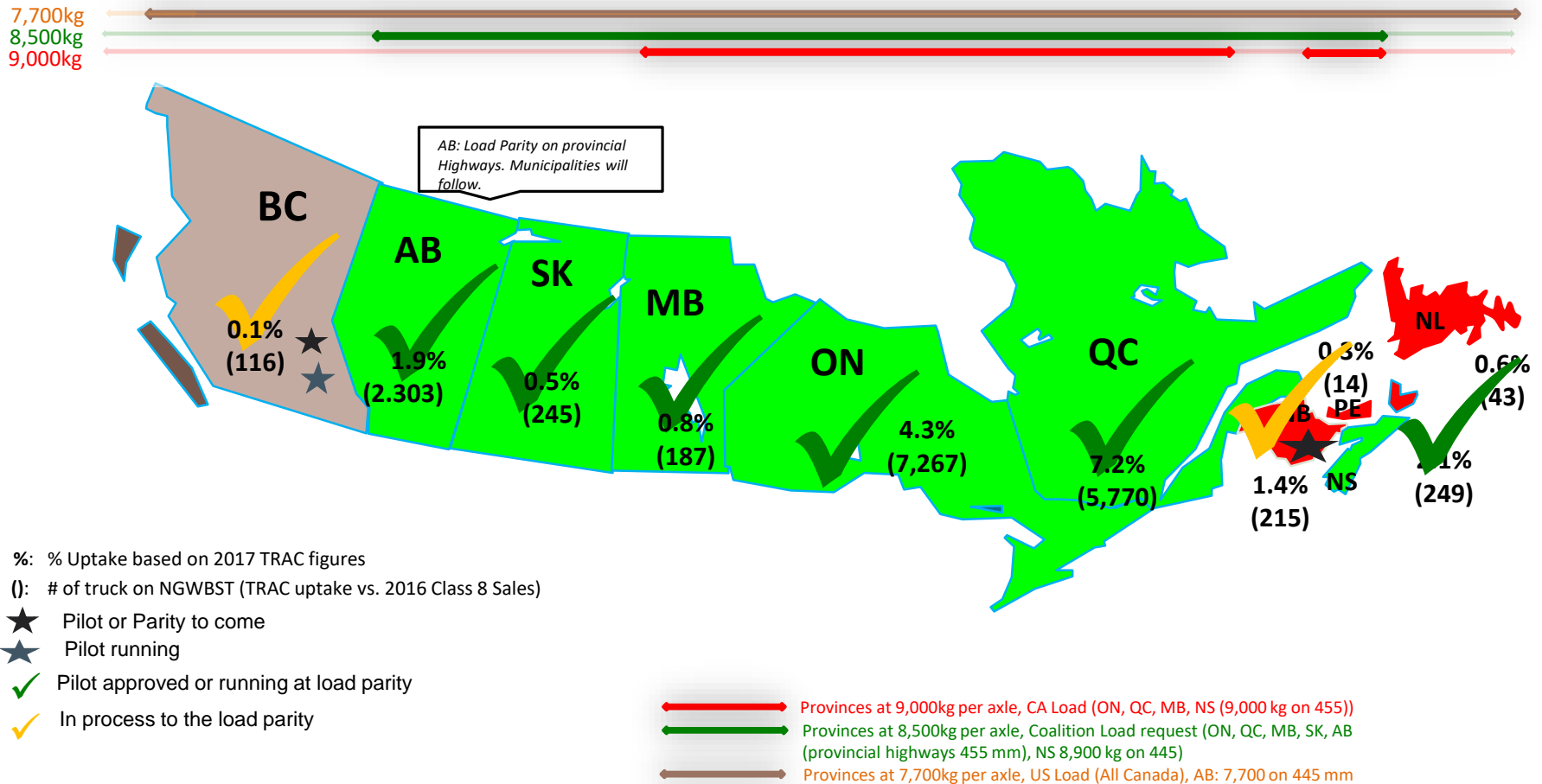


- %: % Uptake based on 2017 TRAC figures  
( ): # of truck on NGWBST (TRAC uptake vs. 2016 Class 8 Sales)  
★ Pilot in Progress  
★ Working to get a corridor  
✓ Pilot approved or running at load parity  
✓ In process to the load parity





# NGWBST Provincial Status – Sept 2017





# ***Simple Math for the “ASK”***

**Alberta Registered Vehicles : 112,000**

**Uptake Expected: 10%**

**Alberta vehicles Loaded above 7,700 Kg: 15.5%**

$$(112000 \times 10\% = 11200) \times 15.5\% = 1736$$

The AMTA requesting the AT to allow **1736** vehicles to run mostly on major corridors within the Province

## **What it represents**

**Now ( 1.5% ) = 260 Vehicles**

**In 10 years ( 10% ) = 1736 Vehicles**

**In 20 Years ( 25% ) = 4330 Vehicles**



# Safety & Handling Benefits

- NGWBS tires are significantly safer for drivers and the public due to;
  - Increased track width (less rollovers)
  - Improved tire footprints for traction.
  - Improved ease of maintenance (less  $\neq$  psi vs dual)



# Environmental Benefits



**4.7 metric tons  
of CO<sub>2</sub> per passenger cars  
per year**  
(Source EPA)



**8%\* Fuel Saving  
3.1 Million Tonnes  
reduction in CO<sub>2</sub> emissions**



**659,574 cars removed  
In 20 years  
32,978 cars / year**

# **Alberta Climate Change Policy and the Transportation Sector**

*“Our proposed policies will have impacts on businesses which depend on their energy intensity”*

*“Businesses will be affected by the increase in transportation fuel costs. We have no clear solution to this...we encourage the government to examine as part of its evaluation of priorities, mechanisms which can reduce impacts on businesses”*

**- Alberta's Climate Leadership - Report to the Minister, November, 2015**



June 28, 2017

AR 69481

Ms. Lorraine Card  
President  
Alberta Motor Transport Association  
#1 285005 Wrangler Way  
Rocky View, AB T1X 0K3

Dear Ms. Card:

Alberta Transportation has allowed the use of increased axle weights with New Generation Wide Base Single Tires (NGWBST) as part of a pilot project since July 2016. The results of the pilot show a significant improvement in fuel efficiency (close to 10 per cent) when compared to trucks with dual-tire configurations.

I believe allowing these tire configurations will result in significant environmental benefits that outweigh the potential impacts to infrastructure. This is an important component of the Government of Alberta's Climate Leadership Plan.

As of July 1, 2017, Alberta Transportation will allow 455 millimetres NGWBST to operate under permit with no per-kilometre fee on the highway system at loads equivalent to those allowed on dual-tire configurations. I have encouraged our select municipal pilot partners to join us in this move to demonstrate climate leadership.

I appreciate the excellent working relationship between Alberta Transportation and the Alberta Motor Transport Association and look forward to continued work on mutually beneficial initiatives.

Sincerely,



Brian Mason  
Minister

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# Conclusion

- Most studies on 445 not 455
- Expected all Provinces on board by 2018
- NGWBS tires economic studies positive +
- NGWBS tires environmental studies +
- NGWBS tires safety studies +





# Questions

**Andrew Barnes**

Director – Compliance and Regulatory Affairs, AMTA