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Testimony Prepared for the
House Transportation Committee, ND Representative Dan Ruby Chairman
Monday March 8th, 2021
By Neil Juhnke, SVP – Physical Operations, Pipeline Foods LLC

RE: Senate Bill 2026

Chairman Ruby and members of the House Transportation Committee, thank you for the opportunity to provide testimony in favor of **Senate Bill 2026** on behalf of Pipeline Foods, LLC.

After the passage of House Bill 1255, in 2017, Pipeline Foods, LLC conducted a strategic site selection process in support of its organic grains supply chain business. In order to best serve the organic small grains production concentration of acres within the prairie provinces of Canada as well as Montana and North Dakota, a facility location in NW North Dakota was selected for the following reasons:

1. Access to the newly created Large Truck (129,900 lb GVW) Network on ND Highway 52 provided efficient access to geographically dispersed organic grain farms especially in Saskatchewan and Alberta.
2. Access to the BNSF mainline rail provided efficient logistics to outbound markets for organic grains all across the Western US.

A site just 3 miles North of Bowbells along Highway 52 on the Large Truck Network was selected for this project. Construction of a \$16 MM organic grain elevator was started in the fall of 2017, the facility was completed in the fall of 2018. The facility employs 5 people and processes over 80,000 tons of organic grains including wheat, durum, oats, barley, providing milling wheat to 8 of the top ten US wheat milling and pasta companies nationally.

Senate Bill 2026 will create a pilot program to prove the safety, efficiency of the Super B truck configuration. Pipeline Foods has calculated this configuration will provide a 25% freight savings for its inbound hauling of organic grains from Canada alone. This amounts to over \$700,000 in annual freight savings, and a reduction of 726 truck trips per year.

For the benefit of farmers, ranchers, and agricultural value added processors in the state of North Dakota, the State needs to consider truck size and weight harmonization with regional states and provinces. I believe Senate Bill 2026 provides an excellent pathway to test out the safety and efficacy of alternative truck configurations including the Canadian Super B. Please consider the following macroeconomic information regarding the impact to the State more broadly.

There are several reasons for harmonizing truck size and weight regulations with the goal of improving transportation efficiency and effectiveness in the northern plains region of North Dakota, South Dakota, Minnesota and Saskatchewan. They mainly center on economic and environmental rational as delineated below but also include safety.



- Agriculture continues to become nationally and globally more economically competitive.
- Transportation and the logistical system is one area of control in which the region can affect competitive outcomes
- Increases in agricultural production in the region have been phenomenal over the last 60 years, putting more pressure on infrastructure.
- Innovative truck configurations could reduce highway impacts while decreasing shipping costs.
- There is a potential to reduce CO₂ emissions.
- There may be positive safety impacts.

Production agriculture has been amazingly prolific in the past 50 years. Advances in all phases of production, agronomic practices including fertilization, timeliness, seed selection and plant population, seedbed preparation, and a host of other factors have resulted in dramatic increases in production as exemplified in Table 1. Wheat production increased 11% in North Dakota in the last 30 years, corn, a dramatic 1,090% and soybeans a significant 394%.⁷ This is just a few of the major crops; many other crops have experienced similar increases.

Table 1. Selected Crop Production Increases Over Time

Crop	Bushels	Bushels	% Change
North Dakota	1982	2012	Δ
Wheat	295,849,566	328,269,437	11.0%
Corn	34,122,728	406,059,209	1090.0%
Soybeans	31,069,124	153,601,859	394.4%

Source: NASS, US Dept. of Agriculture

The end result is a significantly larger volume of commodities traveling from farm field to farm storage and/or elevator. From there they may go to a local processing facility. The upshot of it all is many more truckloads and many more tons will traverse the existing infrastructure. What’s more, some of the infrastructure was not constructed with the increase in production envisioned. This phenomenon is captured in a slide used by the North Dakota Department of Transportation that graphically makes the point (Figure 3).

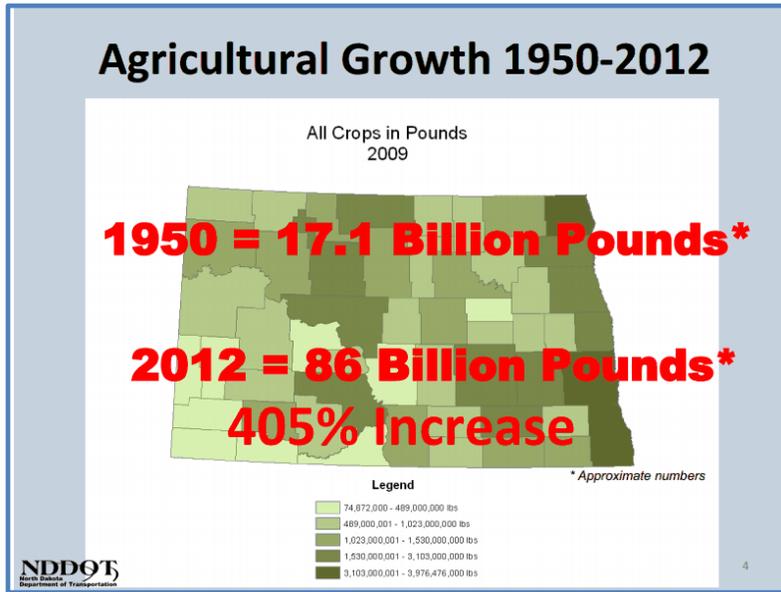


Figure 3. Increase in Agricultural Production over Time in Pounds

This increase in productivity is not expected to level off. In fact, it may well increase with continued advances in genetic engineering and the adoption of precision agricultural technology sometime in the future. This has implications for the road system since the truck is the first and last mile of haul and point of contact for agricultural commodities. This is and will present an ever-increasing challenge for public policy makers in North Dakota and other states.

One way to address this challenge is to increase the productivity of trucks that handle agricultural commodities and other types of freight. In the mid-1970s the Canadian prairie provinces embarked on a broad freight transportation policy change to improve trucking productivity in an effort to reduce trucking costs with the goals of increasing competition between the truck and rail modes and increasing economic competitiveness of the region. These bold policy changes were significant at the time.

One of the vehicle designs that resulted from this policy change was the Canadian 8-Axle B Train with a fifth wheel tridem axle dolly (Figure 4). In Canada, this trailer design allows for 12,100 lbs. on the steering axle, 37,400 lbs. on the tractor tandems axles, 46,200 to 50,600 lbs. on the tridem axle depending on spacing, and 37,400 lbs. on the rear trailer tandem axles. This results in a total maximum GVW of 137,500 lbs. with a payload of 99,900 lbs in Canada.



Figure 4. Canadian 8-Axle B Train with Fifth Wheel Tridem Axle

The reduction in the number of trips to move the 86 billion pounds of commodities produced in North Dakota in 2009 is significant to comparing a traditional 5 axle semi to an 8 axle Canadian B train (Table2). 1,616,541 trips compared to 1,006,837 trips, a reduction of 609,704 trips or 38%. This would be accomplished with less damage to the road system as well since the number of Equivalent Single Axle Loads (ESALs) is less for the Canadian B Train.

The reduction in total number of trips shown in table 2 below are astounding. Adopting a truck configuration like this in the state of North Dakota would dramatically reduce the number of annual truck trips needed to move the annual crop to market, while reducing road damage by 7%. The ramifications of this improvement would be enormous, ranging from increased farm productivity, reduced dependence on skilled truck drivers, reduced traffic resulting in reduced accident exposure. These trucks have been in service in Western Canada for over 3 decades. The fifth wheel tridem axle B train is also safer than the traditional draw bar Longer Combination Vehicle (LCV). They provide a more stable environment for the second trailer resulting in fewer roll overs.

Table 2. Selected Factors for Various Weight Limits and Truck Configurations

US Interstate Load Limits		5-Axle Tractor Semi Trailer
Tare		26,800
Payload		53,200
GVW		80,000
Trips to Move 86 B Lbs.		1,616,541
ESALs/Trip		3.48
Total ESALs		5,625,563
ND Large Truck Network Load Limit		Canadian B Train 8 Axle Double LCV
Tare		37,600
Payload		85,416
GVW		129,000
Trips to Move 86 B Lbs.		1,006,837
ESALs/Trip		5.18
Total ESALs		5,215,415

Considering all the benefits that could accrue to the States, farmers, ranchers, and value-added processors, I believe it is imperative for North Dakota to consider modernizing its truck size and weight regulations to become more competitive and efficient.

Sincerely,



Neil Juhnke
 SVP = Physical Operations
 Pipeline Foods, LLC