Update on Western Canadian Grain – Crop Year 2024-25 Week 21

Summary:
The operational issues that had continued to affect CN as a result of the cold weather and reduced fluidity in recent weeks were further affected by multiple mainline disruptions in BC towards the end of last week and continued throughout week 21. These network disruptions further reduced fluidity and velocity and ultimately affected hopper car spotting in the country due to reduced empty supply returning into the country. A total of 495,000 metric tonnes of grain and processed grain products moved in grain shipment week 21, a decrease of 14% from last week but remained above the recent three-year average.

CN Maximum Sustainable End-to-End Supply Chain Capacity Guidance
The capacity of Canada's grain supply chain varies through the crop year, and multiple factors place a real limit on the volume of grain that can move through the system at any point in time. The maximum sustainable capacity of the grain supply chain is also a function of the capacity and operational efficiency of the individual pieces of that supply chain, from origin to destination.

It is CN's view that on a sustained basis, the end-to-end grain supply chain can accommodate up to 6,250 cars per week (up to 595,000 metric tonnes per week) of bulk grain and processed grain products during winter, of which approximately 900 cars per week are anticipated to be shipments of processed grain products. These maximum end-to-end grain supply chain capacity levels on CN assume that multiple conditions must be in place to achieve these levels. These conditions include, but are not limited to, the conditions noted in the chart below:

Week 21 - end-to-end grain supply chain dashboard summary

- Sufficient customer demand to reach guidance levels
- Grain supply chain fluidity across all major corridors
- Grain export terminal fluidity - west
- Grain export terminal fluidity - east
- Corridor balance
- Seven-day continuous operations at all major grain export facilities
- Ability to load vessels during inclement weather
- Normal rail operating conditions
- No mainline disruptions or other major supply chain disruptions
- No labour disruptions

Figure 1. Weekly dashboard – conditions required to achieve maximum sustainable capacity guidance

Grain supply chain fluidity across all major corridors:

- CN continued to recover from the cold weather and reduced train lengths from previous weeks in addition to several BC mainline disruptions that affected traffic throughout week 21.

Grain export terminal fluidity - west:

- Out of car time at Vancouver terminals as a result of held back traffic.

Continuous operations at all grain export facilities:

- Prince Rupert Grain terminal does not operate 24/7.

Vessel loading during inclement weather:

- Limited ability to load vessels in rain.

No mailine disruptions or other major supply chain disruptions:

- Several mainline disruptions in BC negatively affected fluidity.

No labour disruptions:

- Reduced terminal operations and labour due December-end black stat days.

Bulk grain movement:

For grain shipment week 21, CN shipped 4,227 bulk hopper cars, representing 79% of the maximum sustainable supply chain capacity guidance of 5,350 bulk hopper cars.

CN continued to recover from the effects of the cold weather in previous weeks that reduced both fluidity and velocity across CN's western Canada network. Additionally, several mainline disruptions in British Columbia further affected supply chain capacity in week 21. As a result, a significant number of empty hoppers have been deferred for placement at elevators for loading. Due to the reduction in capacity, CN is communicating closely with its grain customers prioritizing traffic to maximize movement destination.

As temperatures drop to -25C and lower, train length is reduced to maintain safety across the network, but this requires more resources to move the same amount of volume. CN's winter situation report provides a snapshot of current weather conditions and restrictions across its network.

Bulk grain hopper car demand detail - week 21	
Net demand for CN-supplied/private hopper cars	4,938
Maximum capacity	5,350
Planned movement	4,734
as % of maximum capacity	88.5%
Hopper cars shipped in the want week	4,227
as % of maximum capacity	79.0%

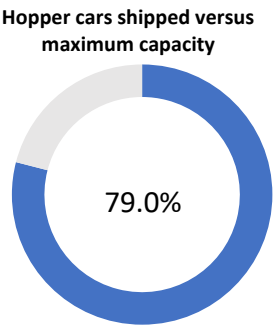


Figure 2. Bulk grain hopper car demand and demand fulfillment

CROP YEAR-TO-DATE SUMMARIES



Figure 3. Crop year-to-date shipments of grain and processed grain products from western Canada

CN moved 13.4 MMT of western Canadian bulk grain through week 21 of Crop Year 2024-25. This tonnage is 22% above the average of the prior three years, and 15% above last year.

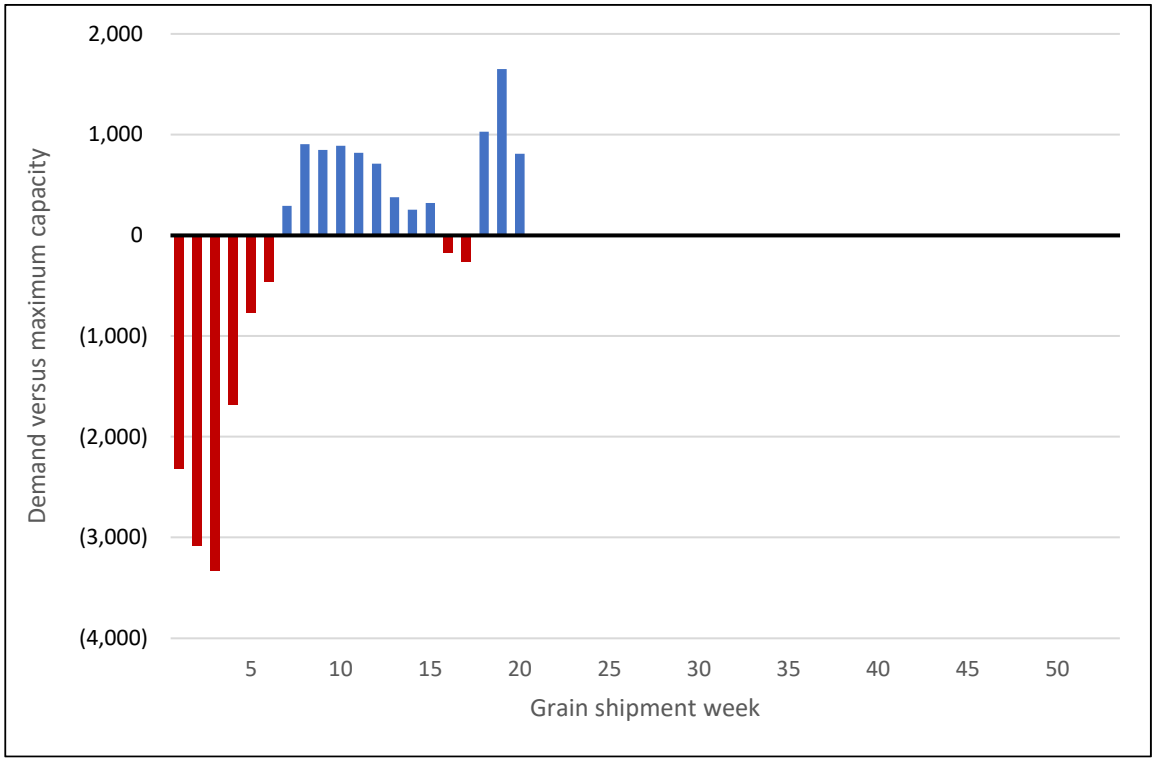


Figure 4. Customer demand for bulk grain movement via hopper car in relation to maximum end-to-end sustainable supply chain capacity on CN for bulk grain movement

Approximately 3,200 hopper cars worth of available grain supply capacity on CN went unutilized through 21 weeks of the crop year, representing approximately 0.3 million metric tonnes.

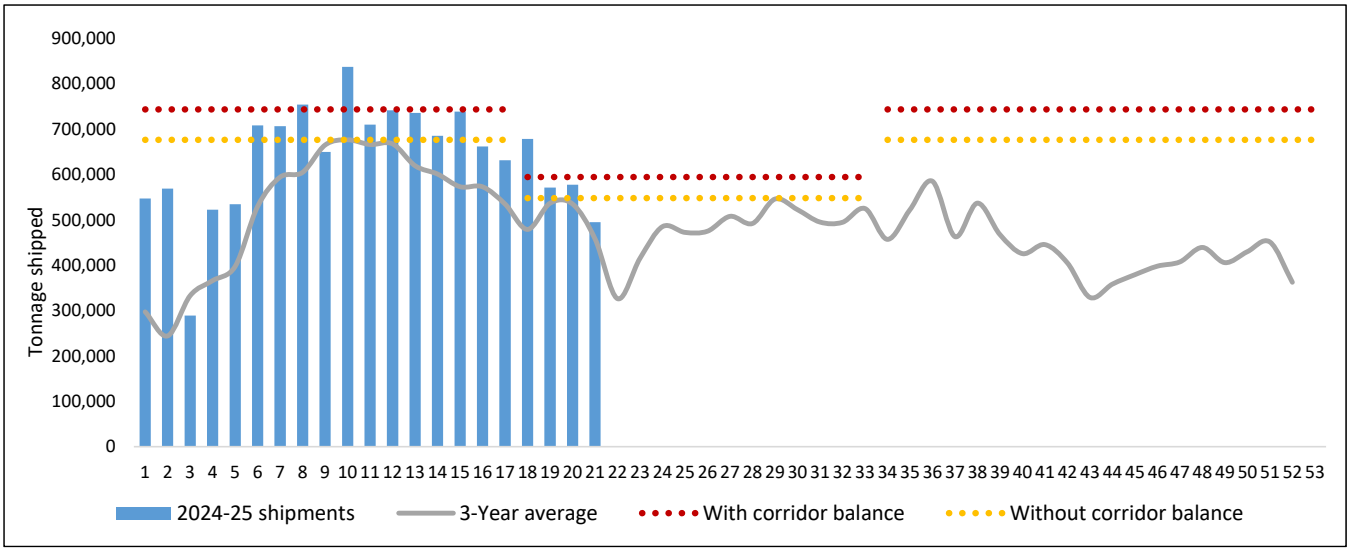


Figure 5. Weekly shipments of grain and processed grain products from western Canada on CN versus maximum end-to-end sustainable supply chain capacity guidance

GRAIN SHIPMENT WEEK 21 – SHIPMENTS OF GRAIN AND PROCESSED GRAIN PRODUCTS

	Vancouver	Prince Rupert	Thunder Bay	Churchill	N. America Domestic	Total	Carloads
Week 21 (metric tonnes)							
All Grain Supply Chains	239,275	82,827	67,687	0	105,392	**495,181**	**5,187**
YTD Shipments *(million metric tonnes)*							
Common Hopper Fleet	5.1	1.9	1.5	0.0	0.7	**9.3**	**96,974**
Customer-supplied equipment [1]	2.7	0.1	0.1	0.0	1.2	**4.1**	**42,658**
Total[2,3]	**7.8**	**2.0**	**1.6**	**0.0**	**1.9**	**13.4**	**139,632**

[1] includes bulk and processed grain moving in hopper cars and vegetable oil moving in tank cars

[2] Totals above exclude bulk or processed grain shipped in intermodal containers

[3] Totals may not add up due to rounding

Figure 6. Shipments of grain and processed products from Western Canada on CN by primary destination and equipment type

COMMON CN-SUPPLIED HOPPER FLEET DETAIL

A. Car Demand and Order Planning

- Week 21 net car orders were 3,736. Changes to grain shipment demand in week 21 included:
    - 204 orders rationed.
    - 25 orders cancelled throughout week 21.

	Common Hopper Fleet	Week 21 Complete (Dec 22 to Dec 28) Vancouver	Prince Rupert	Thunder Bay	Churchill	N. America Domestic	Totals	Week 22 Latest	Week 23 Preliminary
Demand	Total Customer Orders	1,761	1,246	353	0	501	**3,861**	**5,167** (2)	**4,546** (2)
	Invalid Customer Orders	0	(100)	0	0	0	**(100)**		
	Terminal Authorized Orders(1)	1,761	1,146	353	0	501	**3,761** (1)		
	Cancelled Orders	(21)	(1)	(3)	0	0	**(25)**		
	Total Net Orders	1,740	1,145	350	0	501	**3,736**		
	Contracted Orders						**3,420**		
	Spot Orders						**316**		
Planning	Net Planned Orders	1,640	1,041	350	0	501	**3,532**		
	Planned Contracted Orders						**3,420**		
	Planned Spot Orders						**112**		
	% of Net Orders that were Planned						***95%***		

Note:

(1) New customer requests vetted for validity as per grain car ordering rules in CN Tariff 9000

(2) Number of cars requested before order cut-off time for want week - yet to be reviewed for validity

Figure 7. Summary of customer orders for CN-supplied hopper cars

B. Car Spotting Performance

- 3,932 empty cars spotted in week 21.
- 67% spotting performance against the current week's plan.
- 86% of planned orders spotted in the want week or within 24-72 hours of the end of the want week.

Year 2024 Week 21 Spotting Performance	Spot Plan			Cars Spotted			Spotting Performance	Unfilled orders rolled to next week
	Planned	Cancelled	Net Plan	Last Week	Current Week	Total Spotted		
Current Week Plan Authorized New Orders	3,557	(25)	**3,532**	0	2,371	**2,371**	67%	**1,161**
Prior Week's Orders (rolled forward to current week)	1,441	(35)	**1,406**	-	1,402	**1,402**	100%	**4**
"Add-in" Cars Ordered after weekly plan is set	-	-	**-**	-	26	**26**		
Pre-Spots Early spotting of next week's orders	-	-	**-**	-	0	**0**		
Railway shuttles	-	-	**-**	-	133	**133**		
Total	**4,998**	**(60)**	**4,938**	**0**	**3,932**	**3,932**		

Figure 8. CN spotting performance in relation to confirmed and planned orders for CN-supplied hopper cars