

Week 22 Performance

CN and CP supplied a combined 52% of hopper cars ordered in grain week 22, a significant decline from last week's 64%, reflecting a decline in performance for each of CN and CP. In supplying 46% of hopper cars ordered on time in week 22, CN's order fulfillment performance declined from the prior week and fell to the lowest level seen thus far this year. CN performance this week once again fell short of the 90% threshold having now not reached that threshold in nine of the last ten weeks and thirteen times in the last sixteen weeks. CP order fulfillment performance declined once again this week with the railway supplying 60% of cars ordered as compared to 64% the prior week. This marks the 17th consecutive week that CP has fallen short of the 90% performance threshold.

In week 22, CN corridor performance improved or remained the same in only 2 of 6 corridors relative to last week's performance with declines seen in all corridors other than the Thunder Bay and US corridors. While CN supplied 90% and 92% of cars for these two corridors respectively in week 22, demand for these two corridors totaled only 102 cars and as such had little impact on top line performance. Steep performance declines were seen in all other corridors for CN this week including the Vancouver Bulk and Prince Rupert corridors, CN's two most important by volume, which in week 22 accounted for 82% of total CN demand. For the Vancouver Bulk corridor CN performance declined for the second straight week with the railway supplying only 41% of cars ordered on time, down from 51% in week 21. The poor performance in this corridor reflects the fact that CN cancelled more than 900 shipper orders this week - 45% of total demand. The Prince Rupert corridor saw marginally better performance with the railway supplying 65% of shipper orders on time, down from 74% in week 21 and having now declined for three straight weeks from the high of 92% seen in week 19.

CP performance improved or remained the same in 3 of 4 corridors relative to last week's performance although given the relative weighting of demand across corridors this was not sufficient to lift total performance above the level seen in week 21. The one corridor that saw worse week over week performance this week is the Vancouver Bulk corridor where CP supplied only 57% of cars ordered, down from the 67% order fulfillment performance seen a week ago. At more than 2,200 cars ordered in week 22 the Vancouver Bulk corridor accounted for 92% of total CP demand and was the key driver of overall performance. Performance in this corridor has now declined for two consecutive weeks from the high of 86% seen two weeks ago.

An important indicator of performance and at this particular time the resiliency of the railways as they attempt to recover from recent performance, which resulted in more than 2,500 outstanding orders coming out of week 21, is their overall empty car spotting capacity. Week 22 saw both railways each spot fewer than 2,500 railway supplied hopper cars. In total CN and CP spotted only 4,800 empty cars in week 22 of which 1,900+ (40%) were directed at fulfilling previously outstanding orders. This marks the lowest one week total empty car spotting performance seen since week 4 in late August. The fact that so much capacity was dedicated to backlogged orders in combination with the generally poor level of car spotting, has once again led to significant outstanding orders coming out of week 22. To put this performance in perspective we would remind readers that CN and CP, according to their respective grain plans, committed to spotting approximately 4,300 cars per week each during the months of Dec - March. Had the railways honored this commitment this week or last week they would be current with no outstanding orders and would have delivered materially better on time order fulfillment performance in each of those weeks.

CN and CP combined will enter week 23 with 1,796 outstanding cars representing a net 30% (- 759) decline from the 2,555 cars outstanding at the end of last week. The change in the outstanding car count represents a decrease in the number of outstanding hopper cars for both railways - CN by (- 548) and CP by (- 211). All outstanding orders, other than one week 18, two week 20, and 7 week 21 orders - remain current - i.e. unfulfilled week 22 orders. Outstanding orders for weeks prior to week 22 represent a total of 490 cars or 27% of all outstanding cars for the two railways combined.

CN

- CN supplied 46% of hopper cars ordered for week 22, representing a significant decline from last week's 63% order fulfillment performance. CN supplied 1,532 of 3,299 cars ordered, failing to supply 1,767 cars ordered.
- During week 22, CN supplied a total of 2,353 hopper cars including 879 for previously outstanding orders. (see table page 3). CN has now failed to spot at least 3,000 cars in each of the last two weeks and has not spotted 5,000 cars in any week since week 12.
- CN's performance across individual shippers was consistently poor this week with the railway supplying 52% or less of cars ordered for 80% of shippers.
- At 3,300 cars in week 22, shipper demand declined 12% from the prior week, falling to the lowest level since week 5 in late August.
- Preliminary data indicate that demand will rise slightly in the coming weeks - 3,500 cars in week 23 and 3,800 cars in week 24. We would remind readers that preliminary demand estimates do not reflect any rationing of shipper orders that may be undertaken by the railway.

- Heading into week 23 CN has 474 outstanding orders reflecting a 54% reduction from the 1,022 outstanding orders entering week 22.

CP

- CP fulfilled 60% of hopper car orders for week 22, marginally lower than the 64% seen last week.
- For week 22, CP supplied 1,396 of 2,317 cars ordered, failing to supply 921 cars ordered.
- During week 22, CP supplied a total of 2,451 hoppers including 1,036 for previously outstanding orders. (see table page 3). CP has now failed to spot more than 3,200 cars for two consecutive weeks with week 22 being the lowest level of car spotting seen since week 3 in August.
- At slightly more than 2,300 cars ordered in week 22 shipper demand declined 44% from the prior week falling to the lowest level since week 2 at the start of the grain year.
- Preliminary data indicate that demand will more than double in week 23 at 5,900 cars and then subsequently decline once again to 4,300 cars in week 24. Readers are cautioned that forward looking estimates of CP demand can change significantly due to the planning of Dedicated Trains by individual shippers.
- CP's performance was once again very inconsistent across individual shippers this week with the railway supplying 62% of shippers with 90% or more of cars ordered while all other shippers saw order fulfillment rates of less than 50%.
- Heading into week 23, CP has 1,322 outstanding orders representing a modest improvement (- 211) from the 1,533 outstanding orders entering week 22. Outstanding order counts for CP have now been north of 1,300 cars in three of the last four weeks and five times in the last seven weeks.

Railway Hopper Car Rationing/Cancellations

CN

- CN cancelled 1,332 hopper car orders in week 22 representing 40% of all orders placed by shippers this week. Cancellations were heavily concentrated in the Vancouver Bulk corridor which saw more than 900 orders cancelled.
- Preliminary indications do not at this time indicate that further rationing is occurring in weeks 23 and 24.
- Through the first 22 weeks of the current grain year, CN has rationed 4,597 hopper car orders as compared to 2,167 for the same period last year.
- YTD 2022/2023 orders have been rationed across all corridors as shown below:
 - Vancouver (3,200)
 - Prince Rupert (212)
 - Thunder Bay (858)
 - Eastern Canada (252)
 - US (25)
 - Western Canada (50)

CP

- CP cancelled no hopper car orders in week 22.
- Preliminary indications do not at this time suggest a return to order rationing in weeks 23 and 24.
- Through the first 22 weeks of the current grain year, CP has rationed 2,324 hopper car orders for ATC shippers as compared to none for the same period last year.
- YTD 2022/2023 orders have been rationed across all corridors as shown below:
 - Vancouver (1,595)
 - Thunder Bay (614)
 - USA (100)
 - Eastern Canada (15)

Performance Dashboard

Hopper Car Demand

Week 22			This Year		Last Year		This Year versus Last Year	
This Year	Last Year	This Year vs. Last Year	YTD	Weekly Average	YTD	Weekly Average	YTD	Weekly Average
CN	3,299	1,883	1,416	88,536	4,024	65,001	2,954	23,535
CP	2,317	1,408	909	106,836	4,856	72,113	3,277	34,723
	5,616	3,291	2,325	195,372	8,880	137,114	6,231	58,258
								2,647

Cars Shipped

Railway	Corridor	Week 22	YTD
CN	N.A. Domestic	304	5,768
	Prince Rupert	729	20,792
	Thunder Bay	287	14,111
	Vancouver	1,472	41,243
Total		2,792	81,914
CP	N.A. Domestic	656	8,126
	Thunder Bay	223	23,151
	Vancouver	1,650	69,942
Total		2,529	101,219

Empty Hopper Cars Supplied - Week 22 (All Want Weeks)

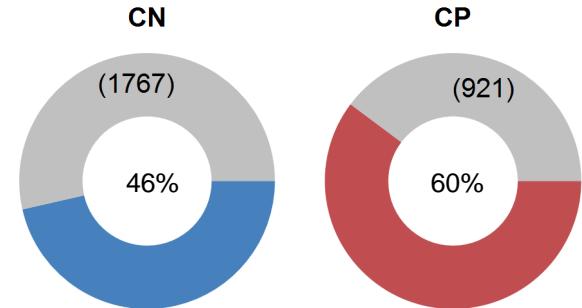
	Current Week Orders		Prior Week Orders		Future Week Orders		Total Cars Supplied	
	This Year	Last Year	This Year	Last Year	This Year	Last Year	This Year	Last Year
CN	1,449	687	879	301	25		2,353	988
CP	1,390	723	1,036	1,634	25	10	2,451	2,367
	2,839	1,410	1,915	1,935	50	10	4,804	3,355

Supplied by Block Size

Block Size	Week 22			Year to Date		
	CN	CP	Total	CN	CP	Total
1	2%	8%	5%	3%	3%	3%
25	4%		2%	3%	1%	2%
50	10%		5%	5%	2%	4%
100	84%	92%	88%	88%	93%	91%

Current Week Order Fulfillment

		CN	CP	Total
Current Week Hopper Car Demand		3,299	2,317	5,616
Current Week Order Fulfillment				
Supplied in Current Week	1,449	1,390	2,839	
Supplied Early	83	6	89	
Total Cars Supplied for Want Week	1,532	1,396	2,928	
Current Week Unfulfilled Demand	(1,767)	(921)	(2,688)	
% Current Week Orders Supplied	46%	60%	52%	



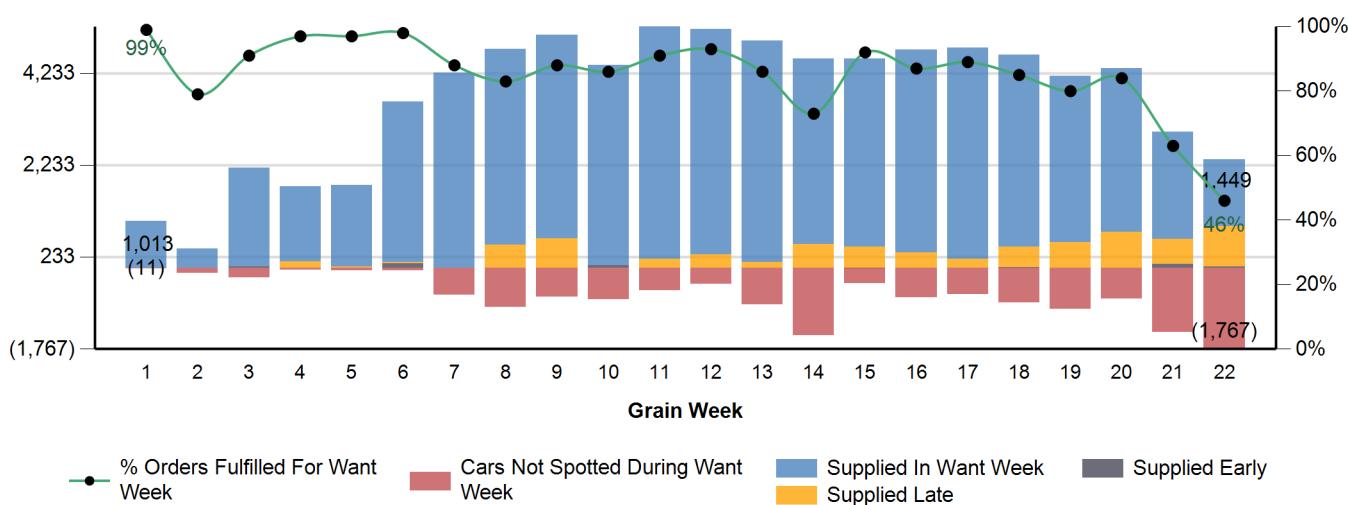
Loaded Dwell Time (Hours) at Origin (All Traffic)

Week 22		Year to Date	
This Year	Last Year	This Year	Last Year
CN	24	330	25
CP	25	126	33

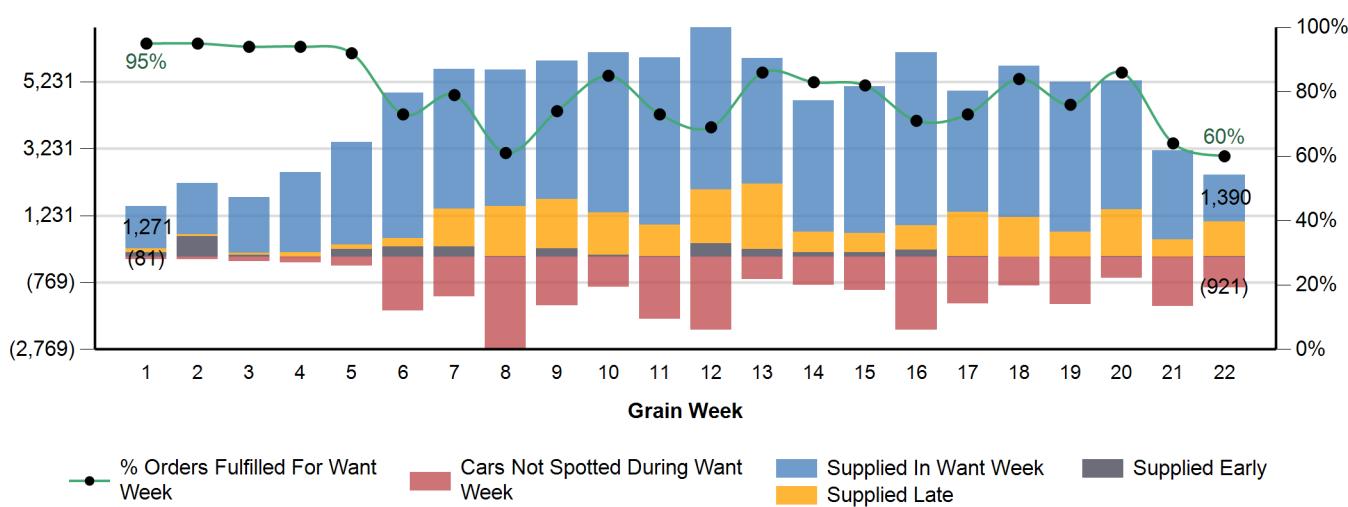
Dwell Time (Hours) at Destination (All Traffic)

Week 22		Year to Date	
This Year	Last Year	This Year	Last Year
Vancouver	CN	9	27
	CP	12	48
Thunder Bay	CN	73	141
	CP	52	89

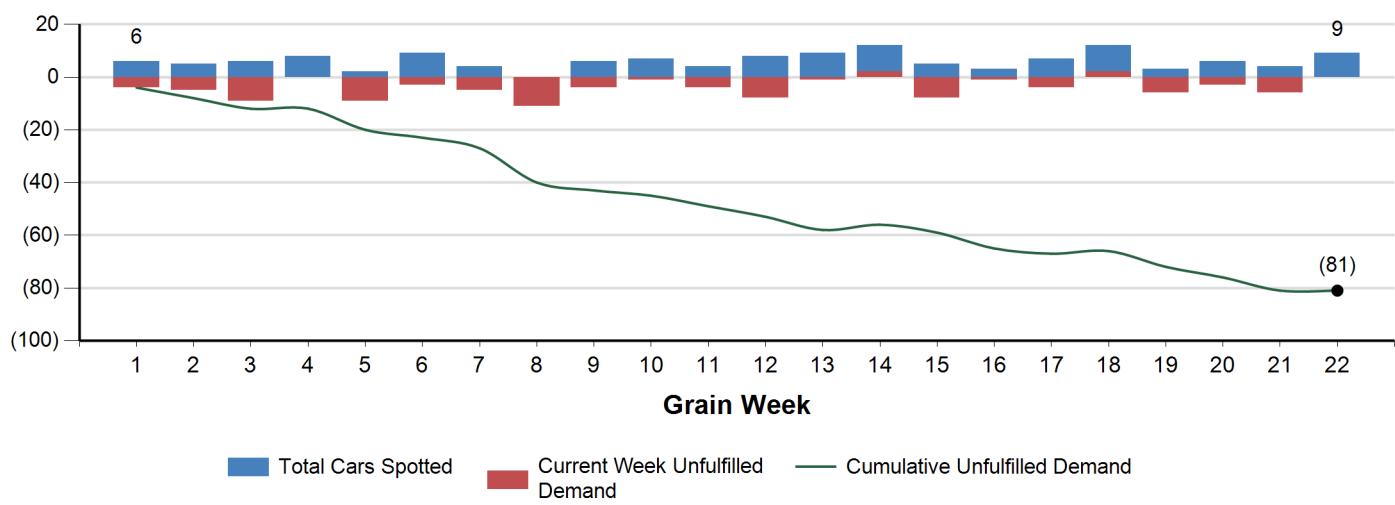
CN Weekly Hopper Car Supply



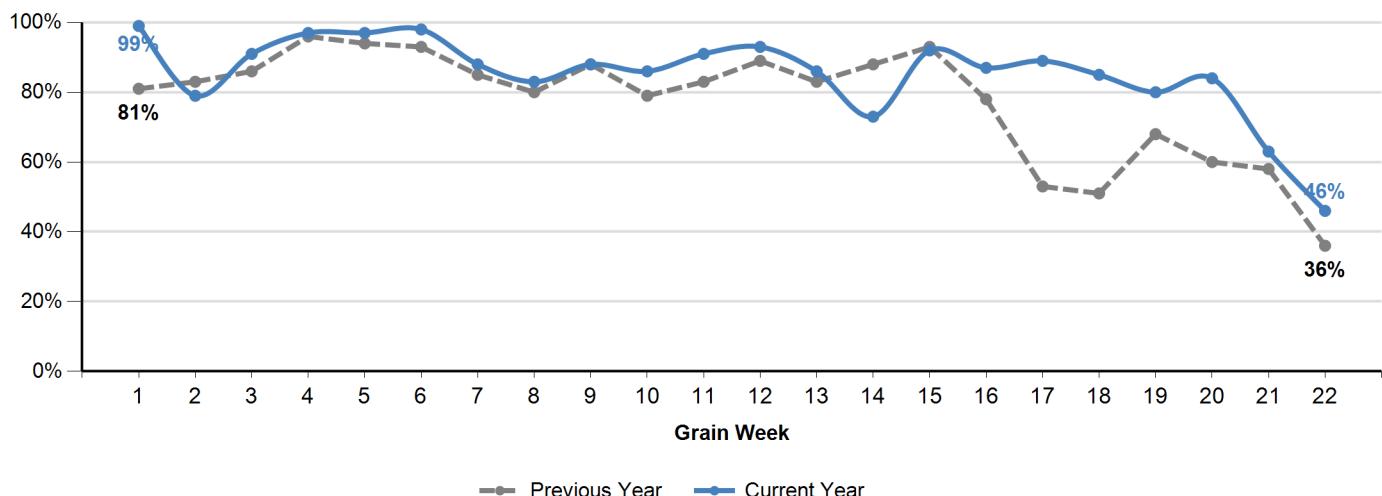
CP Weekly Hopper Car Supply



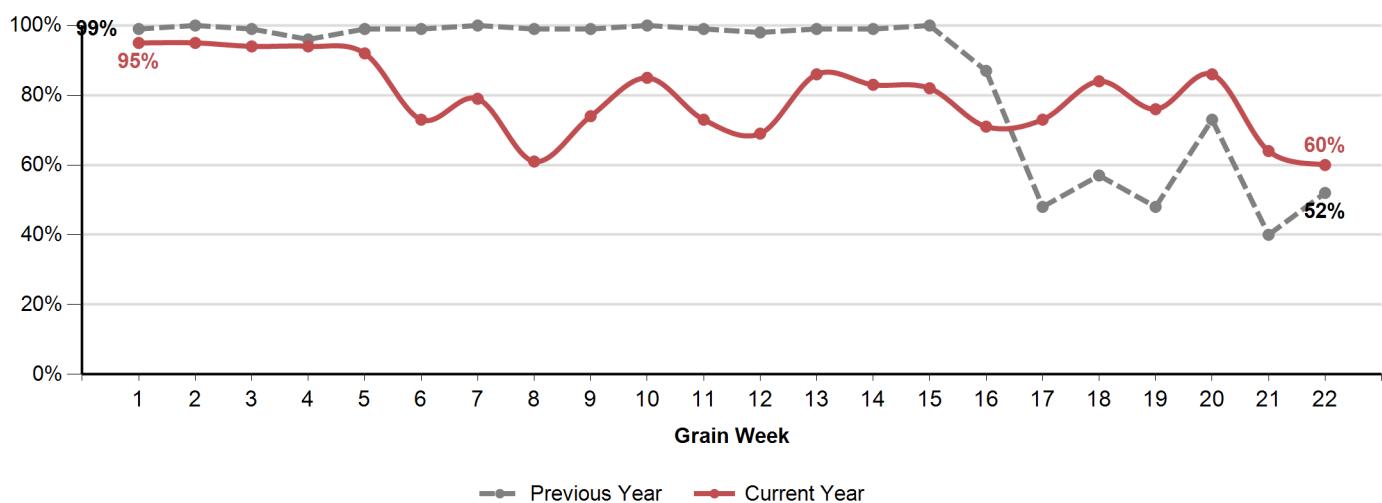
Total Boxcar Supply - Grain Year 2022 - 2023



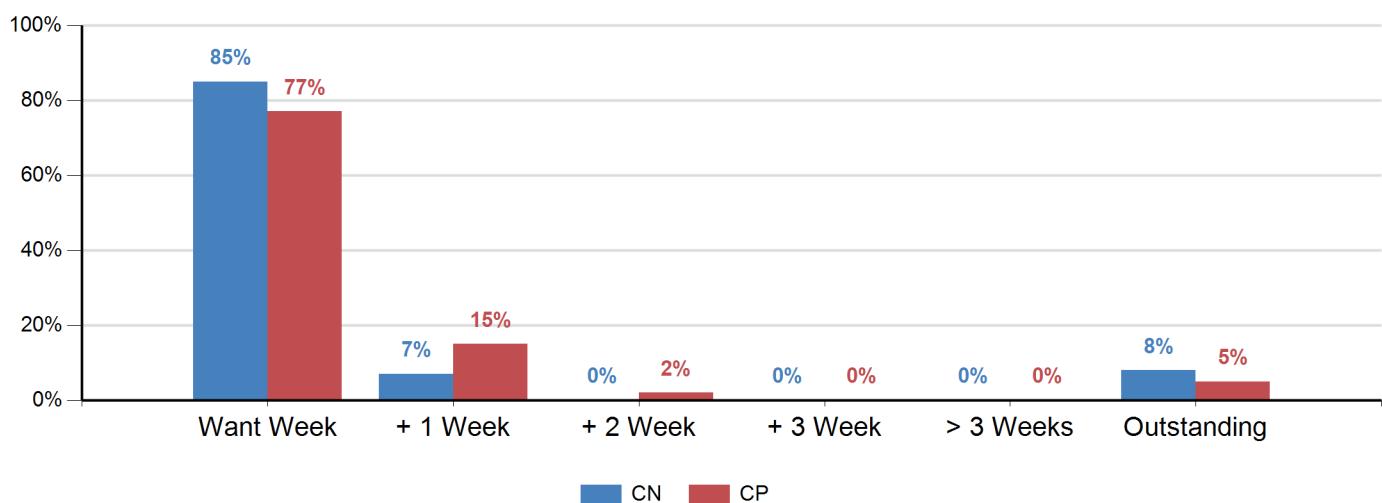
Weekly On Time Hopper Car Order Fulfillment - CN

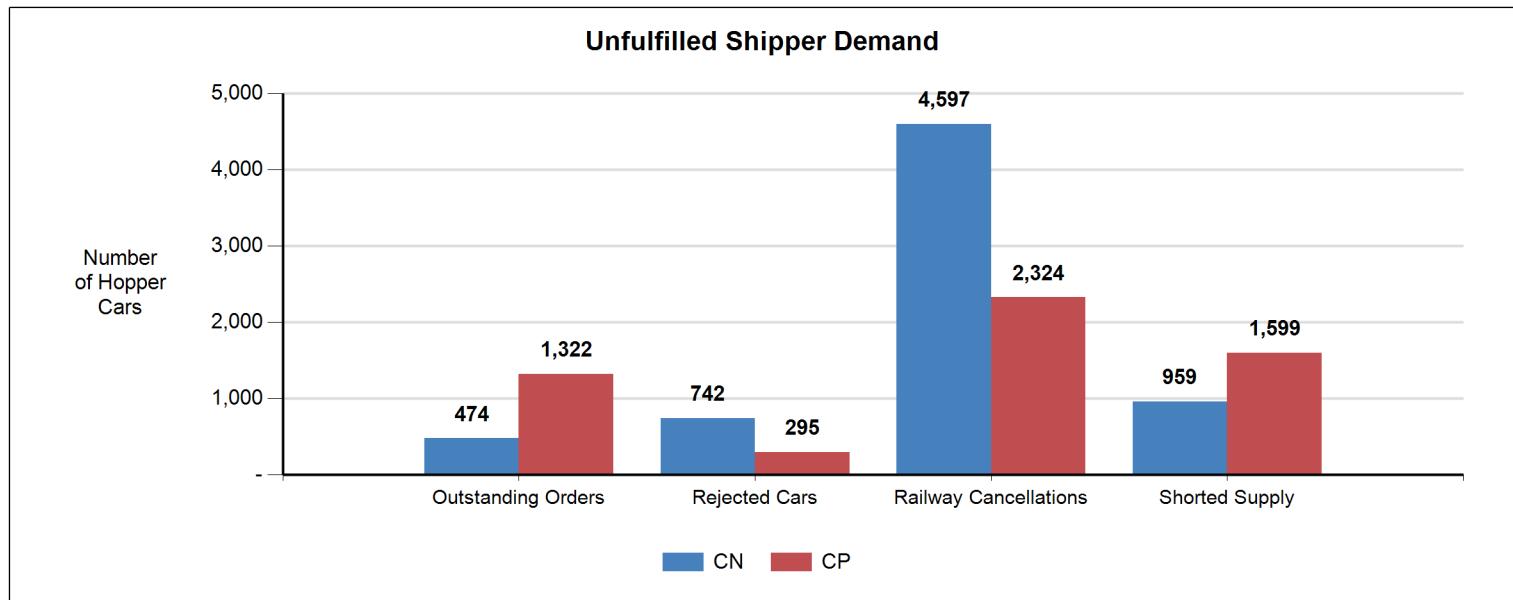


Weekly On Time Hopper Car Order Fulfillment - CP



Timeliness Of Hopper Car Order Fulfillment





Corridor Performance

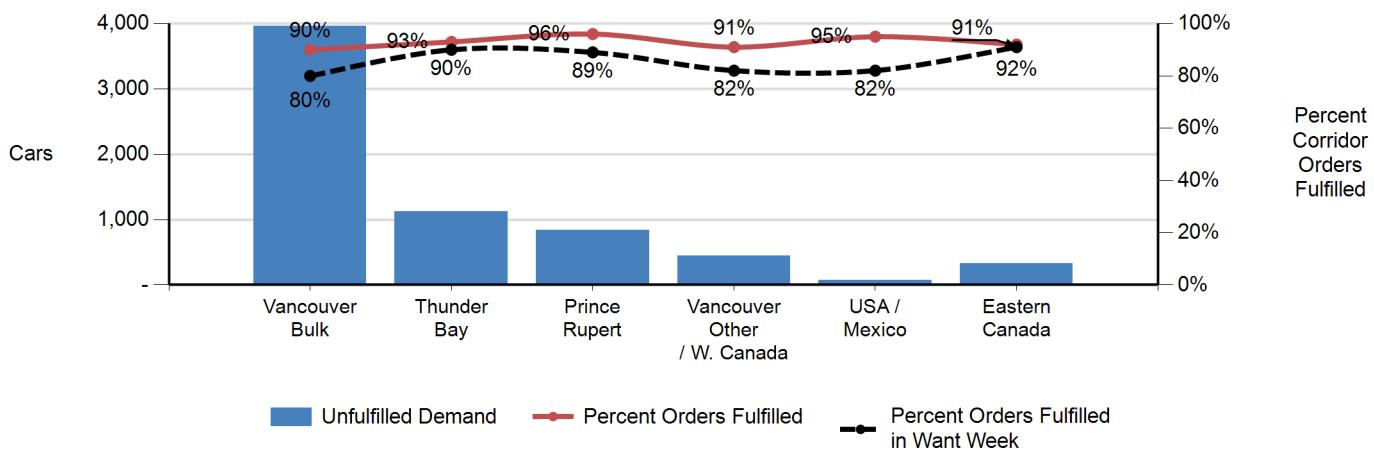
Total Hopper Car Supply by Corridor for Current Year Orders - To Week 22

Railway	Corridor	Ordered	Supplied	Unfulfilled Demand	%Supplied
CN	Vancouver Bulk	40,848	36,891	(3,957)	90%
	Thunder Bay	15,236	14,108	(1,128)	93%
	Prince Rupert	21,627	20,792	(835)	96%
	Vancouver Other / W. Canada	5,070	4,622	(448)	91%
	USA / Mexico	1,634	1,558	(76)	95%
	Eastern Canada	4,121	3,793	(328)	92%
Total		88,536	81,764	(6,772)	92%
CP	Vancouver Bulk	71,589	67,778	(3,811)	95%
	Thunder Bay	24,221	23,150	(1,071)	96%
	Vancouver Other / W. Canada	3,851	3,539	(312)	92%
	USA / Mexico	6,377	6,057	(320)	95%
	Eastern Canada	798	772	(26)	97%
Total		106,836	101,296	(5,540)	95%

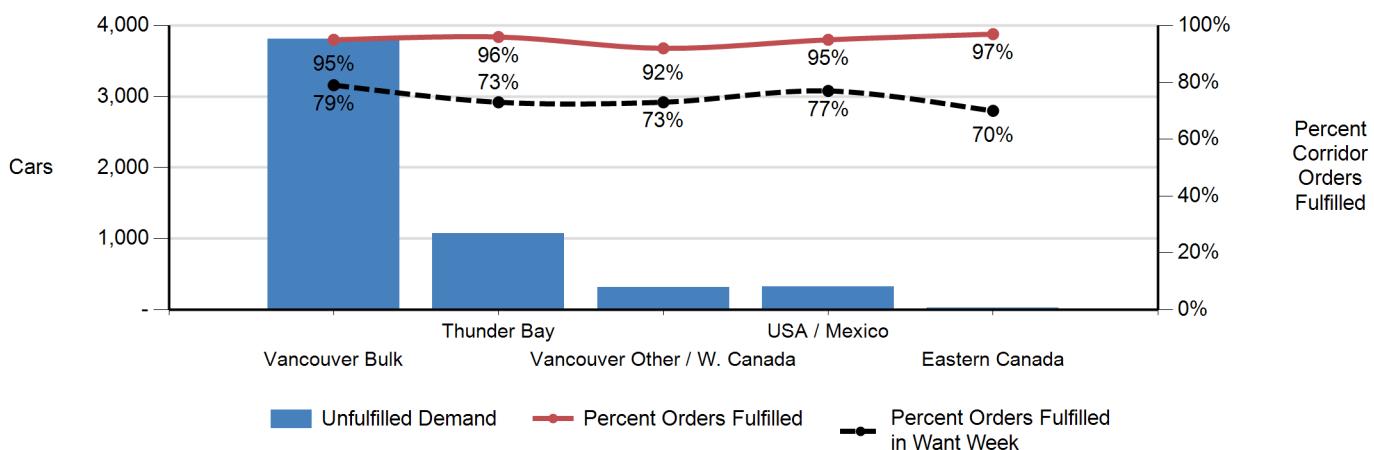
Hopper Cars Supplied in the Want Week by Corridor - To Week 22

Railway	Corridor	Week 22			Year to Date		
		Ordered	Supplied	%Supplied	Ordered	Supplied	%Supplied
CN	Vancouver Bulk	2,082	851	41%	40,848	32,773	80%
	Thunder Bay	52	47	90%	15,236	13,752	90%
	Prince Rupert	625	406	65%	21,627	19,341	89%
	Vancouver Other / W. Canada	104		0%	5,070	4,175	82%
	USA / Mexico	50	46	92%	1,634	1,334	82%
	Eastern Canada	386	182	47%	4,121	3,743	91%
CN Total		3,299	1,532	46%	88,536	75,118	85%
CP	Vancouver Bulk	2,127	1,208	57%	71,589	56,618	79%
	Thunder Bay				24,221	17,783	73%
	Vancouver Other / W. Canada	1	1	100%	3,851	2,795	73%
	USA / Mexico	177	175	99%	6,377	4,892	77%
	Eastern Canada	12	12	100%	798	562	70%
CP Total		2,317	1,396	60%	106,836	82,650	77%

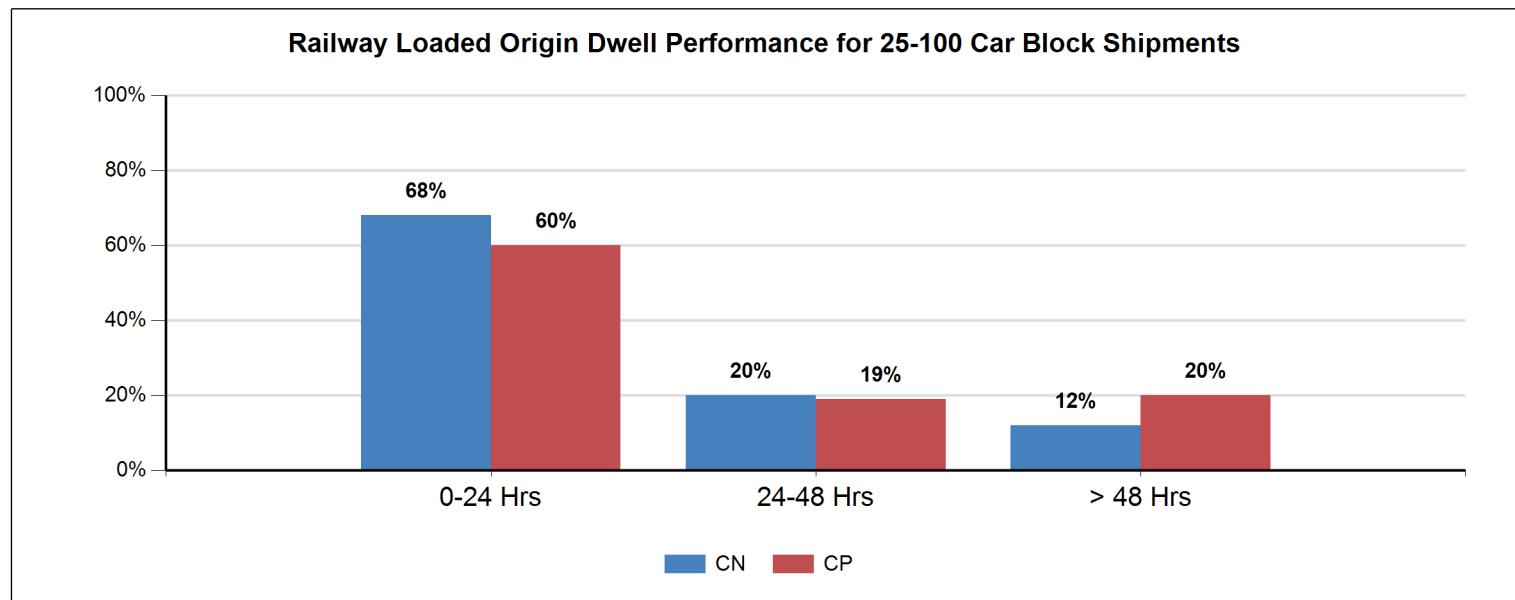
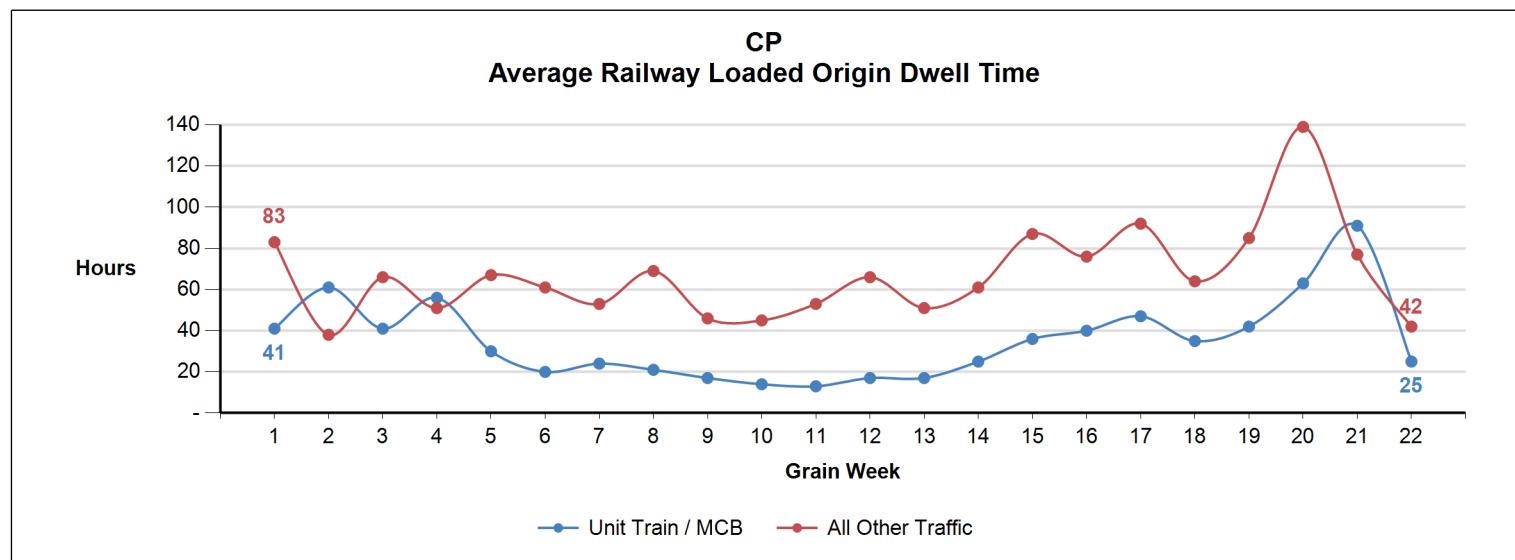
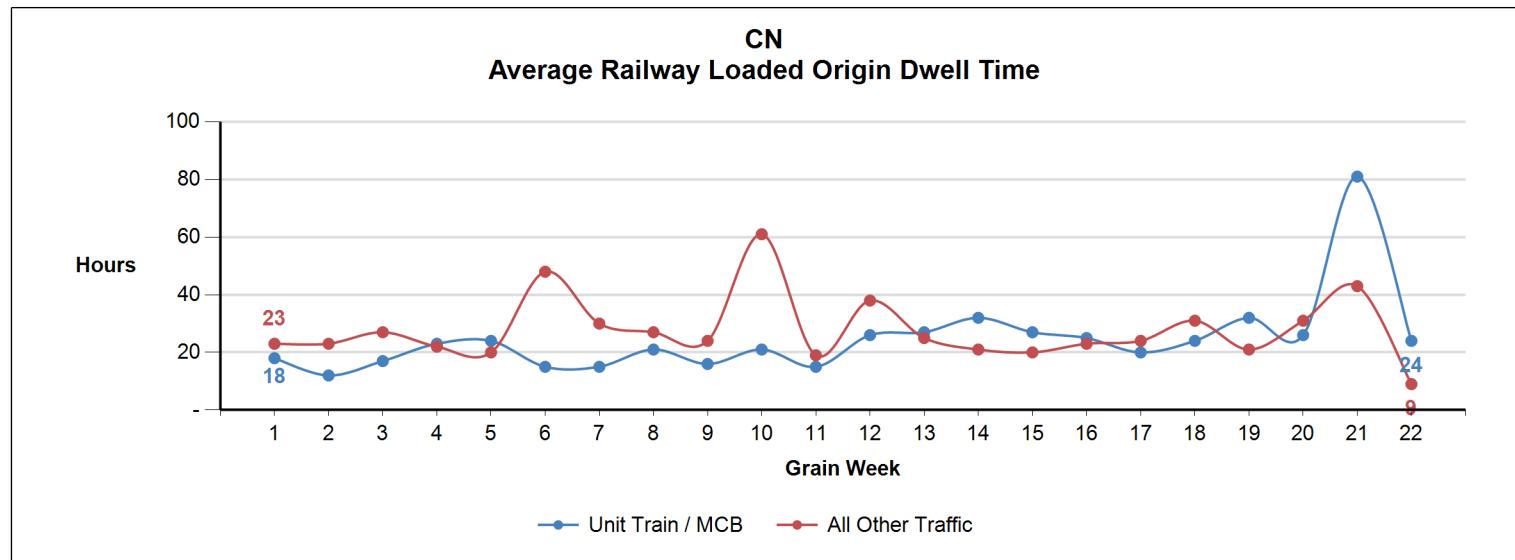
YTD Hopper Car Order Fulfillment By Corridor - CN



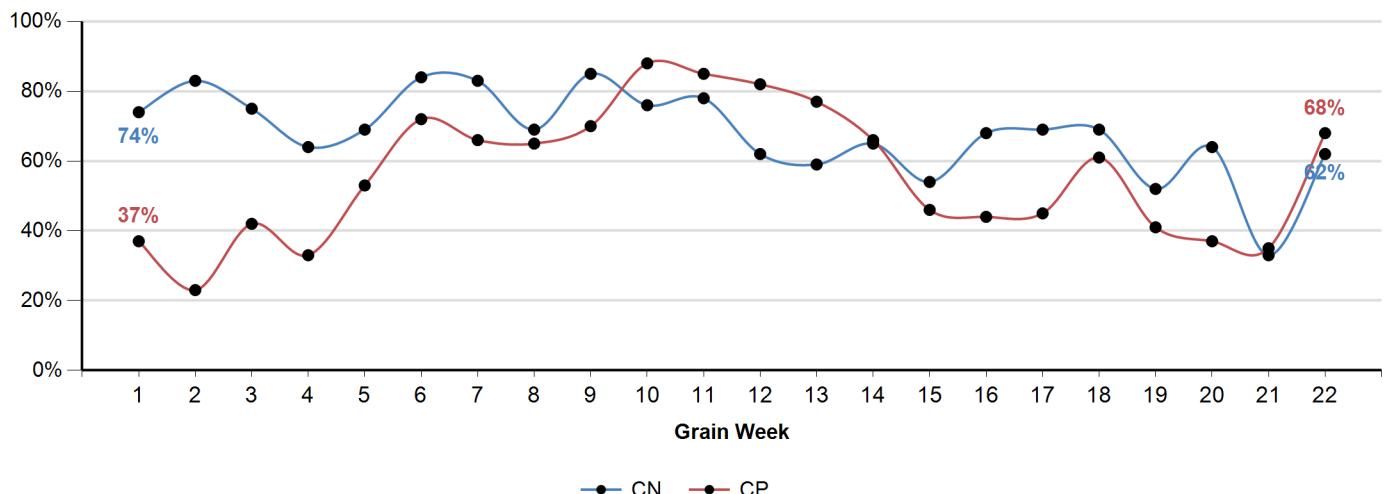
YTD Hopper Car Order Fulfillment By Corridor - CP



Origin Dwell Performance

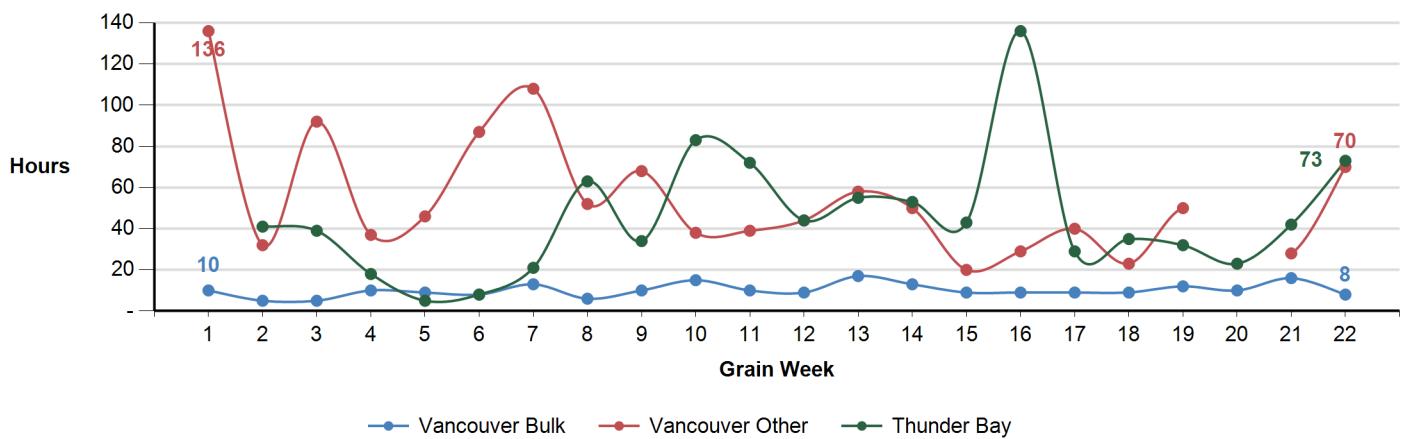


Percent of 25 - 100 Car Block Shipments with Loaded Railway Origin Dwell 24 Hours or Less

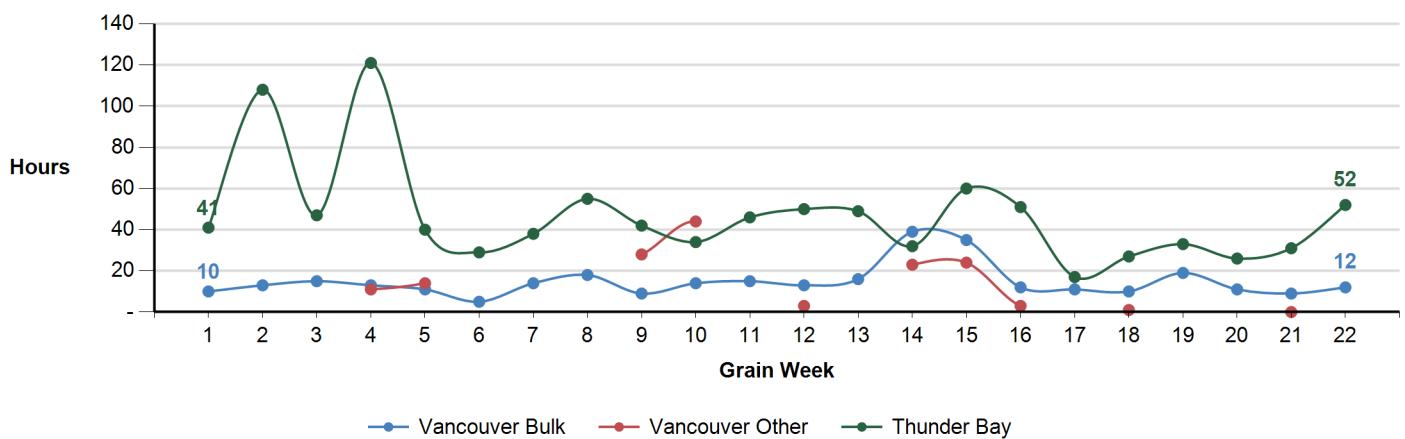


Destination Dwell Performance

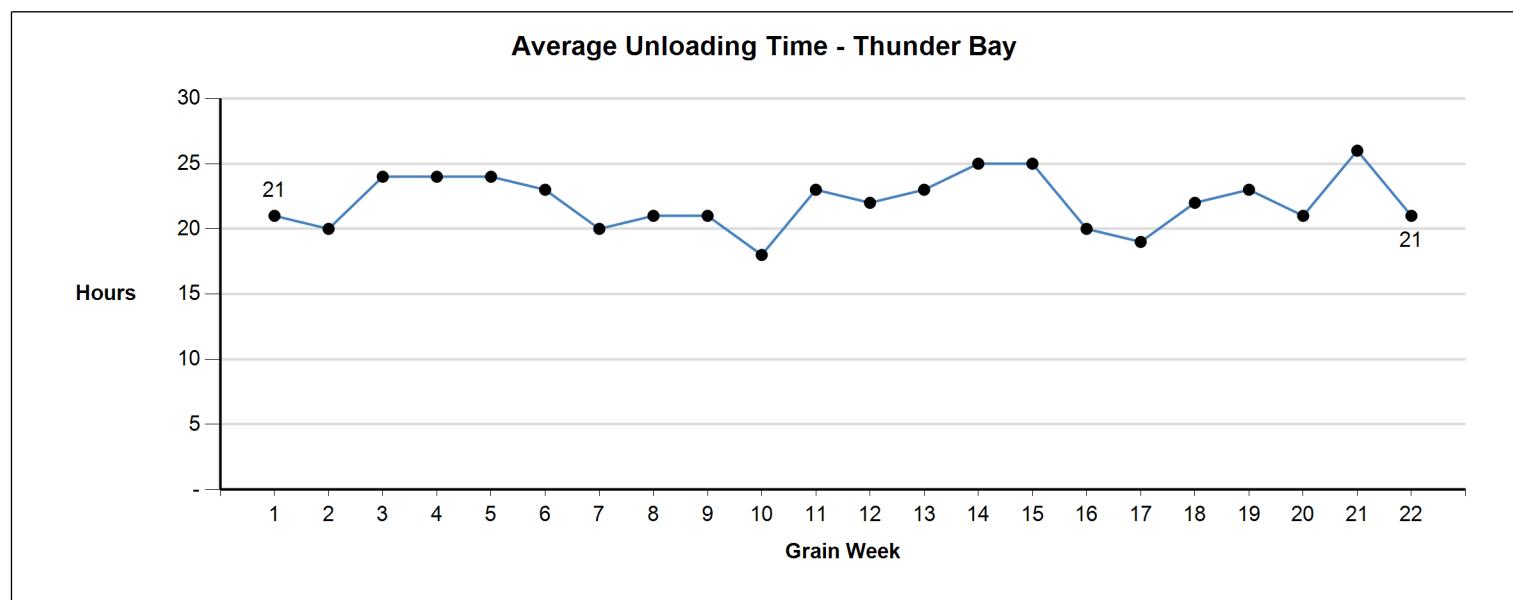
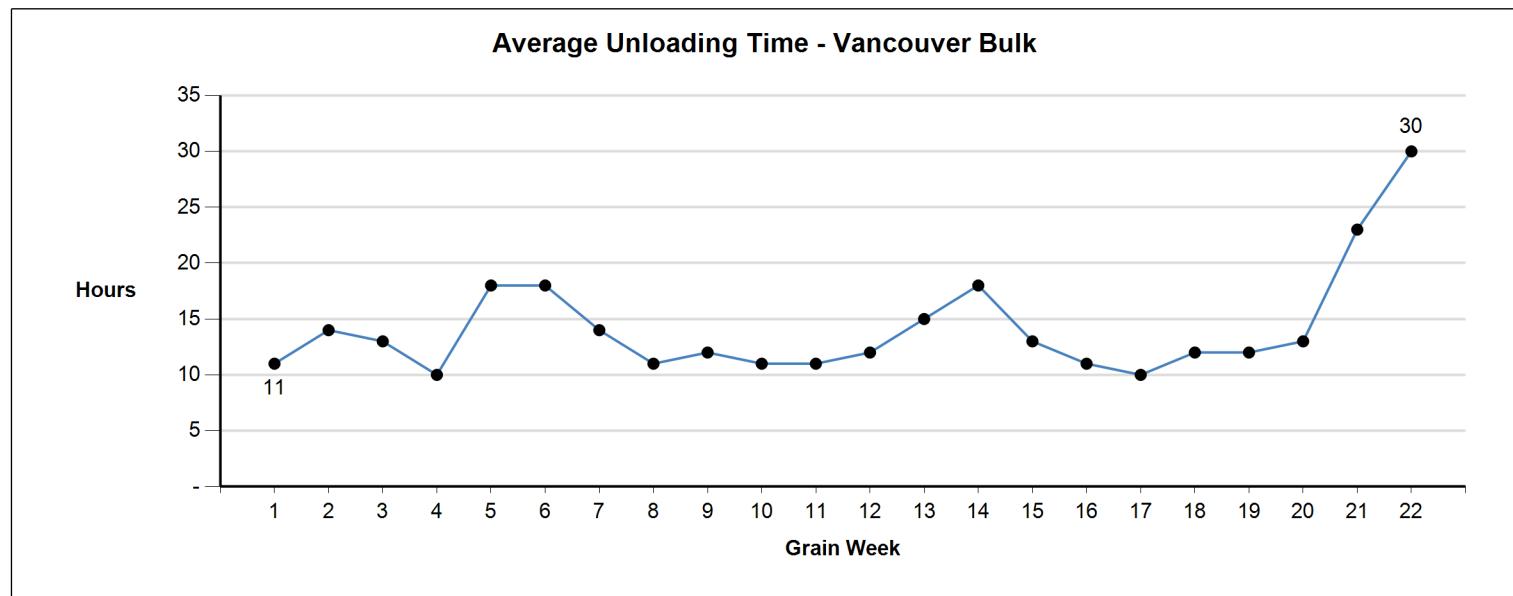
CN
Average Railway Loaded Destination Dwell Time



CP
Average Railway Loaded Destination Dwell Time



Port Terminal - Unloading Time



Glossary of Terms

Hopper Car Demand	The total number of hopper cars ordered for a given want week for each of CN and CP. Demand data is presented for the current week report and for the grain year to date. Comparisons are provided for the current grain versus the prior grain year.
Empty Hopper Cars Supplied	A count of all empty hopper cars supplied for the grain service week being reported on. Supply is categorized based on whether it is for the current want week, for prior week orders or for future week orders (supplied early).
Supplied by Block Size	Percentage distribution of total hopper car supply for the current report week and year to date (YTD) based on the block size ordered by shippers and as reported by shippers.
Hopper Cars Supplied in Want Week	A count of all empty hopper cars supplied for a want week in that want week including cars supplied early which are considered on time.
Want Week	Order week as defined by the railways
Cars Supplied Early	Cars supplied for orders in a given want week supplied in advance of that week – these cars are considered on time for performance measurement purposes.
Cars Supplied Late	Cars supplied during a grain service week that are for a prior week's orders.
Hopper Car Orders Supplied Within the Want Week	The number of hopper cars supplied by the railways during or in advance of the want week expressed as a percentage of total orders for the week.
Future Week Orders	Orders supplied in a given grain service week that are for orders in weeks after the week for which performance is being reported. – Reference Page 1 – Empty Hopper Cars Supplied
Prior Week Orders	Orders supplied in a given grain service week that are for orders in weeks prior to the week for which performance is being reported. – Reference Page 1 – Empty Hopper Cars Supplied
Outstanding Orders	Orders that shippers expect to have fulfilled by the railways that remain unfulfilled as of the report date. This excludes bad order cars, shorted cars, denied orders and railway cancellations.
Unfulfilled Demand	The calculation of total unfulfilled demand for hopper cars represents the accumulated difference across all grain weeks in the year between the number of cars ordered by shippers and the number of cars supplied by the railway for those orders. This total unfulfilled demand includes orders not filled as a result of bad order and shorted cars and as such represents the volume of missed and deferred shipper orders.
Origin Dwell	The elapsed time from the release of loaded cars by shippers to the time the railways physically pull the cars from a shipper's siding for movement to destination.
Destination Dwell	The elapsed time from the time a railcar arrives at the destination railway yard to the time it is placed at the receiver's facility for unloading.
Unloading Time	The average time elapsed between the placement of a loaded car at the receiver's facility and the release of the empty car back to the railway.
Port Terminal Unloading Time	The average elapsed time between the placement of a loaded car for unloading to the release of the empty car. This measure is based on railway reported placement and empty release events.