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CN

2018–2019

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# Grain Year-End Recap



# 2018-19 Crop Year in Review

## HIGHLIGHTS

- CN moved a record 27.8 million metric tonnes (MMT) of bulk grain and processed grain products ex western Canada in hopper cars, tanks and boxcars during the 2018-19 crop year
  - 1.5 MMT and +5.8% compared to the previous record set in 2016-17 (26.3 MMT)
  - 2.5 MMT and +9.8% versus the previous crop year (25.3 MMT)
- CN recorded its best ever single month for grain movement in November (2.71 MMT) and subsequently surpassed that record in April 2019 (2.72 MMT). CN also recorded highest shipment volumes in December (2.50 MMT) and January (2.23 MMT).
- CN recorded its second best ever shipment volumes for individual months August (1.94 MMT), September (2.41 MMT), and October (2.59 MMT)
- Six new high throughput elevators were opened exclusively on CN lines, with a seventh being dual-served. The construction of four additional facilities to be served by CN were also announced. Since 2015, of the 30 new high throughput elevators built, announced or currently being built in western Canada, 21 have been located on CN lines of which 17 are loop track facilities
- A number of grain export projects, all served by CN, are progressing and are expected to come into service during the 2019-20 crop year, including G3 Vancouver Terminal, Fraser Grain Terminal, Fibreco Terminal, and InterMobil East Regina Intermodal Terminal



## SHIPPING PERFORMANCE

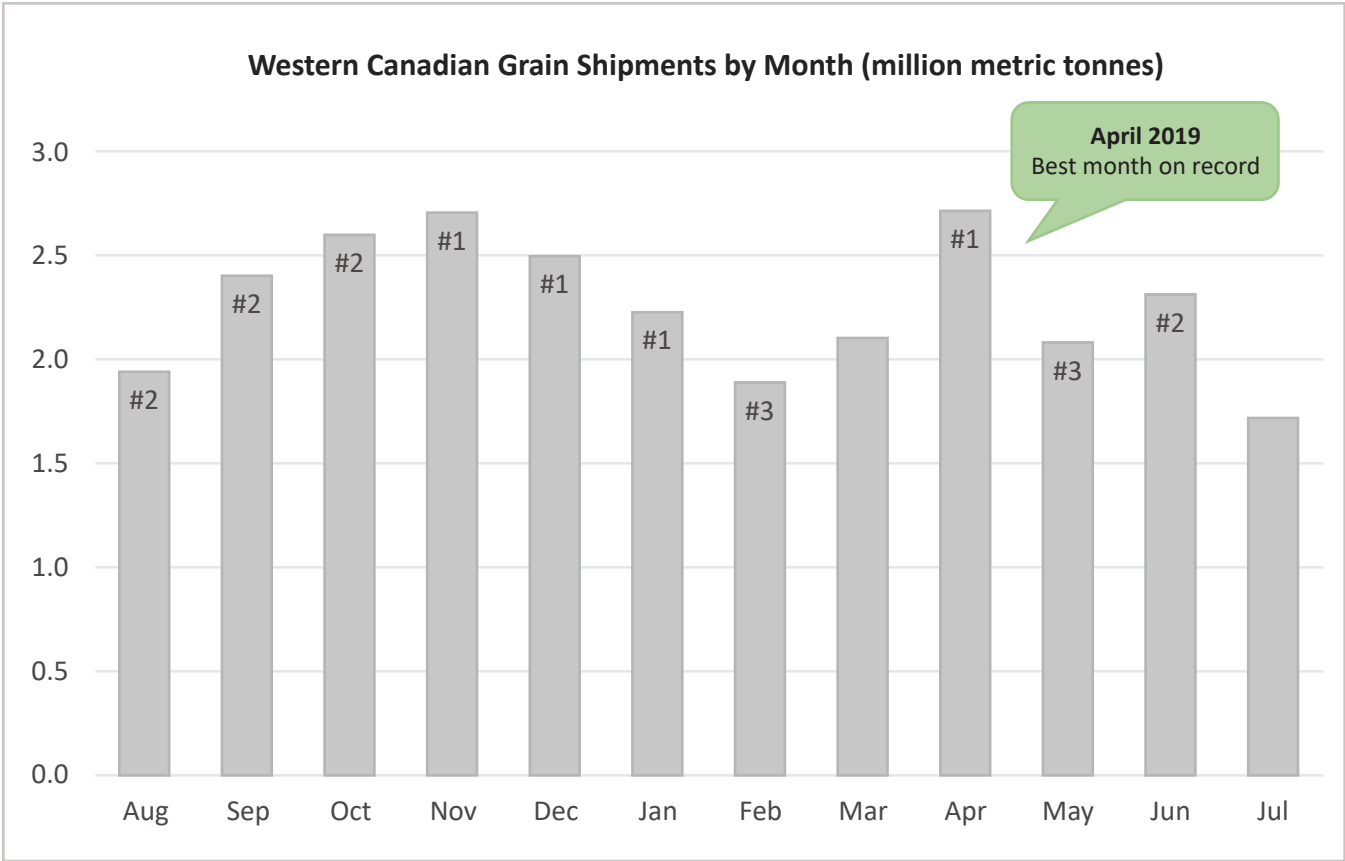
The following statistics represent the tonnage of grain and processed products moved in CN-supplied hoppers, customer-controlled private hopper cars/tank cars, and boxcars. The volume of grain moved from western Canada in containers is in addition to this volume; CN moves in excess of one million tonnes of grain annually in containers from western Canada.



CN moved a record 27.8 MMT of bulk grain and processed grain products ex western Canada – 1.5 MMT and +5.8% versus the previous record set in 2016-17 and 2.5 MMT and +9.8% more than the previous crop year.

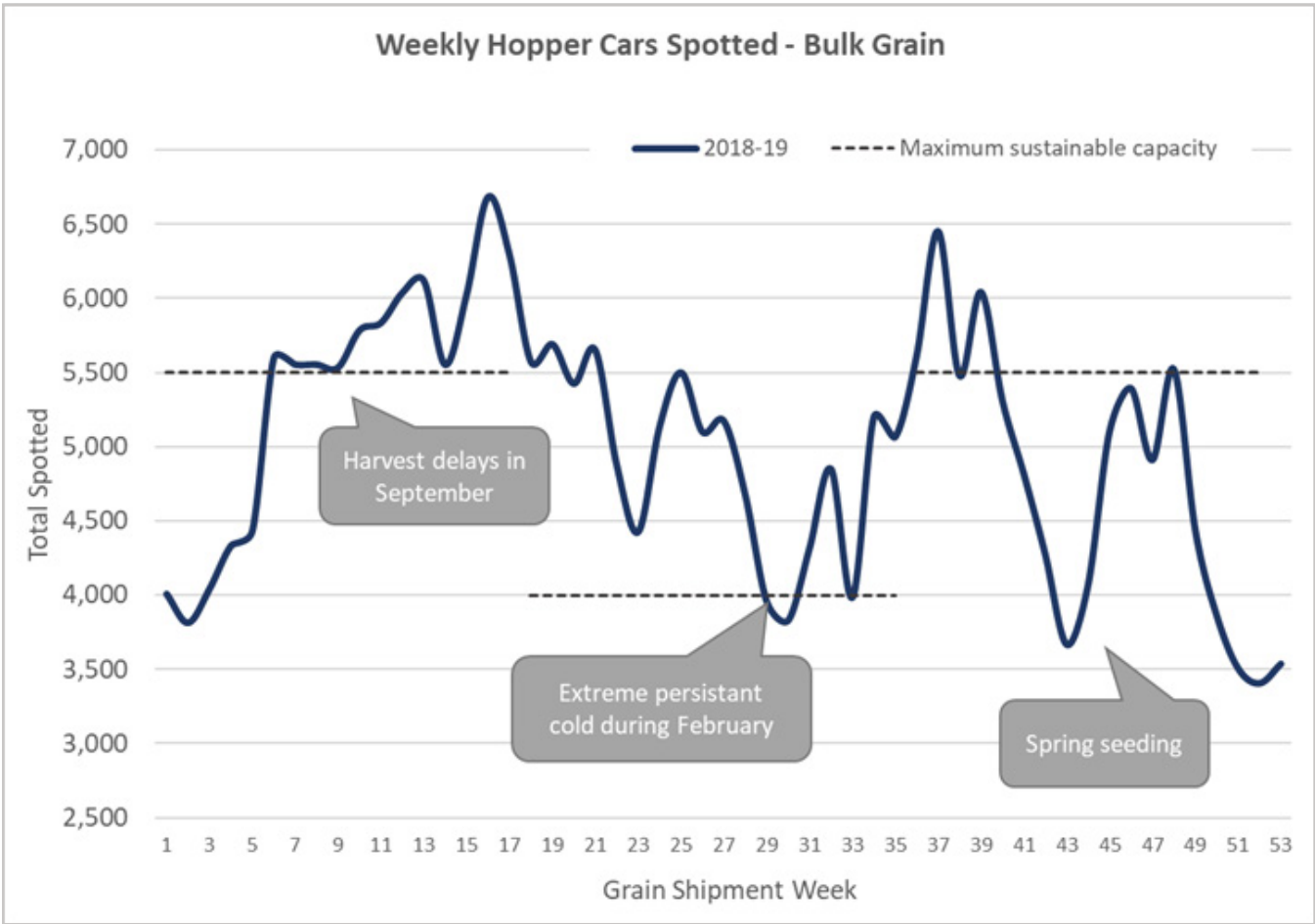
Demand for grain transportation is generally greater from mid-September to mid-April when grain supplies are highest and grain company trading/handling margins are typically strongest. CN recorded highest grain movement in the months of November, December, January, and April. November 2018 represented a record individual month for grain shipments on CN (2.71 MMT), and that record was subsequently broken in April 2019 (2.72 MMT).

CN also recorded its second-best ever grain volumes in each of August, September, and October. Volumes would have been considerably higher in September and October if not for an unprecedented level of customer self-canceled orders for CN hoppers (7,800 alone during the first three months of the crop year) due to the impact of unprecedented poor harvest weather across large areas of the Prairies. The impacts were most severe in Alberta, where bulk grain movement on CN during September and October (represented by grain shipment weeks 6 to 14) was just 1.05 MMT (11,500 carloads), compared to the range of 1.25 to 1.5 MMT (14,000 to 16,000 carloads) seen in the three previous crop years. The poor harvest conditions were a reminder of just how significant the impacts of weather can be on the grain supply chain. The following chart illustrates monthly grain volumes moved over the course of the 2018-19 crop year:



In its 2018-19 Grain Plan, and well in advance of harvest, CN’s guidance to shippers was that it expected delivering a spotting program for bulk grain of 5,500 CN hoppers per week plus private cars, and 4,000 hoppers per week plus private cars during winter (assuming supply fluidity across corridors, no significant mainline disruptions, normal weather, etc). CN also made clear that if it could deliver more, it would.

With the exception of an unprecedented outbreak of extreme, persistent cold weather from the end of January through the end of February (Saskatchewan recorded the coldest February in over 80 years), CN delivered a consistent and strong grain spotting program. CN was able to sustain a program exceeding 5,000 CN hoppers per week right into the middle of January against winter guidance of 4,000 CN hoppers per week. In fact, in January CN achieved an average of just under 4,800 hoppers per week moving bulk grain between CN-supplied hoppers and private hoppers. The chart below illustrates the pattern of bulk grain movement on CN versus CN’s maximum sustainable supply chain capacity guidance for CN-supplied equipment.

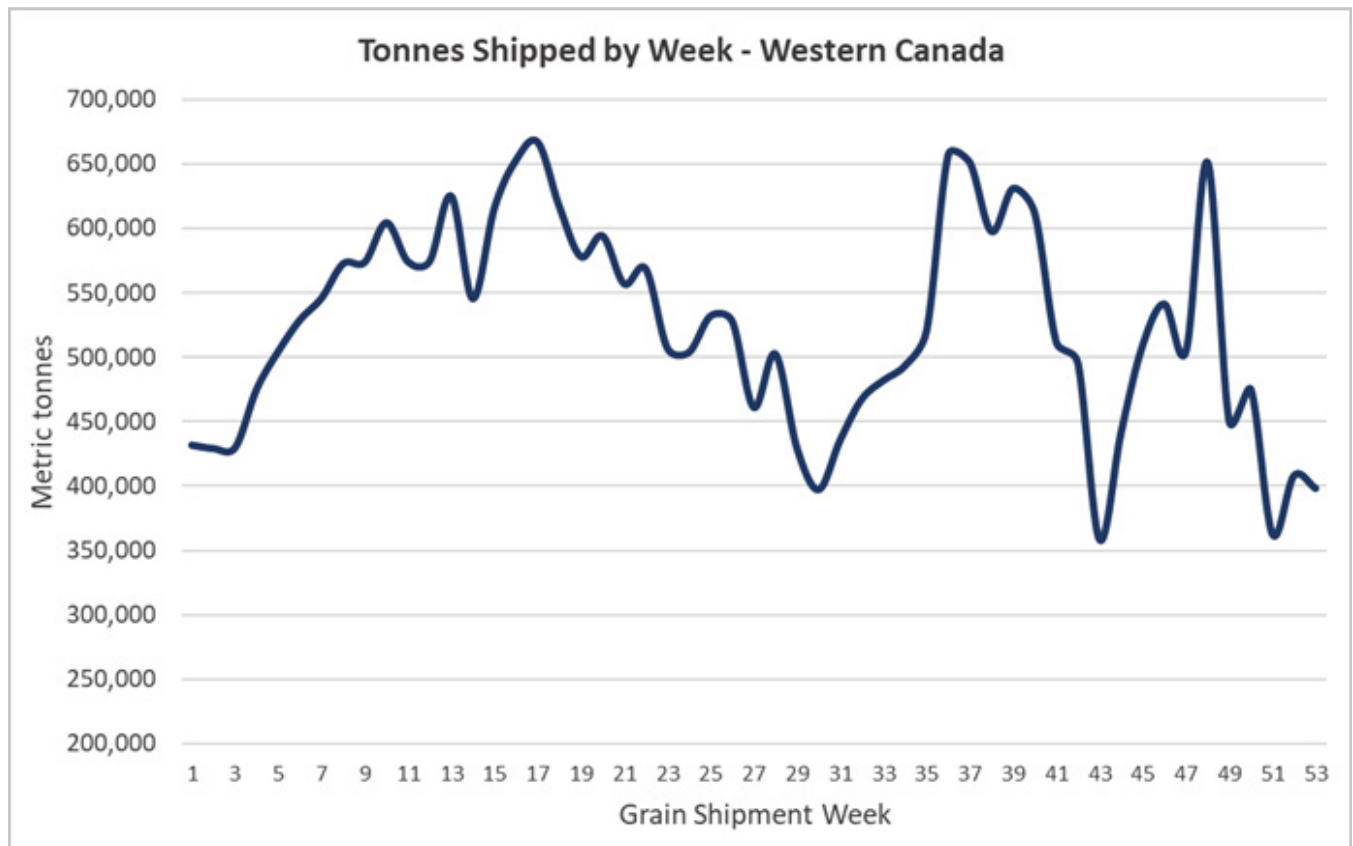


The ability to achieve these strong shipment levels even during cold temperatures in the range of -25 to -30 degrees Celsius was due in large part to:

- CN's advanced winter preparation activities;
- Record capital investments in network capacity-enhancing projects (double tracking, addition and lengthening of sidings, and yard capacity expansions);
- An increase of 26% in crewing levels in western Canada compared to the previous year;
- The tripling in the number of air repeater cars deployed along the mainline to maintain train length;
- A 10% larger fleet of high horsepower locomotives than the previous winter, and;
- A larger hopper car fleet relative to the 2017-18 crop year

All of these actions resulted in increased network resiliency and fluidity. Even during the coldest period in February, when temperatures below -40 degrees Celsius forced CN not to run trains on part of its network for safety reasons, CN was still able to record an average of just under 4,400 hoppers per week.

Weekly grain shipments exceeded 600,000 metric tonnes in eleven individual weeks, and weekly grain shipment volumes consistently exceeded 500,000 metric tonnes from grain shipment week 5 (week of September 1) through week 26 (week of January 20).





## NEW HIGH THROUGHPUT COUNTRY ELEVATORS

CN is proud of the fact that since 2015, of the 30 new high throughput elevators built, announced, or in construction, 21 have been situated on CN lines, of which 17 of these facilities are loop track facilities. Leading up to and during the 2018-19 crop year, six new facilities served exclusively by CN had their grand openings, with a seventh dual-served facility directly accessible by CN opening as well, namely:

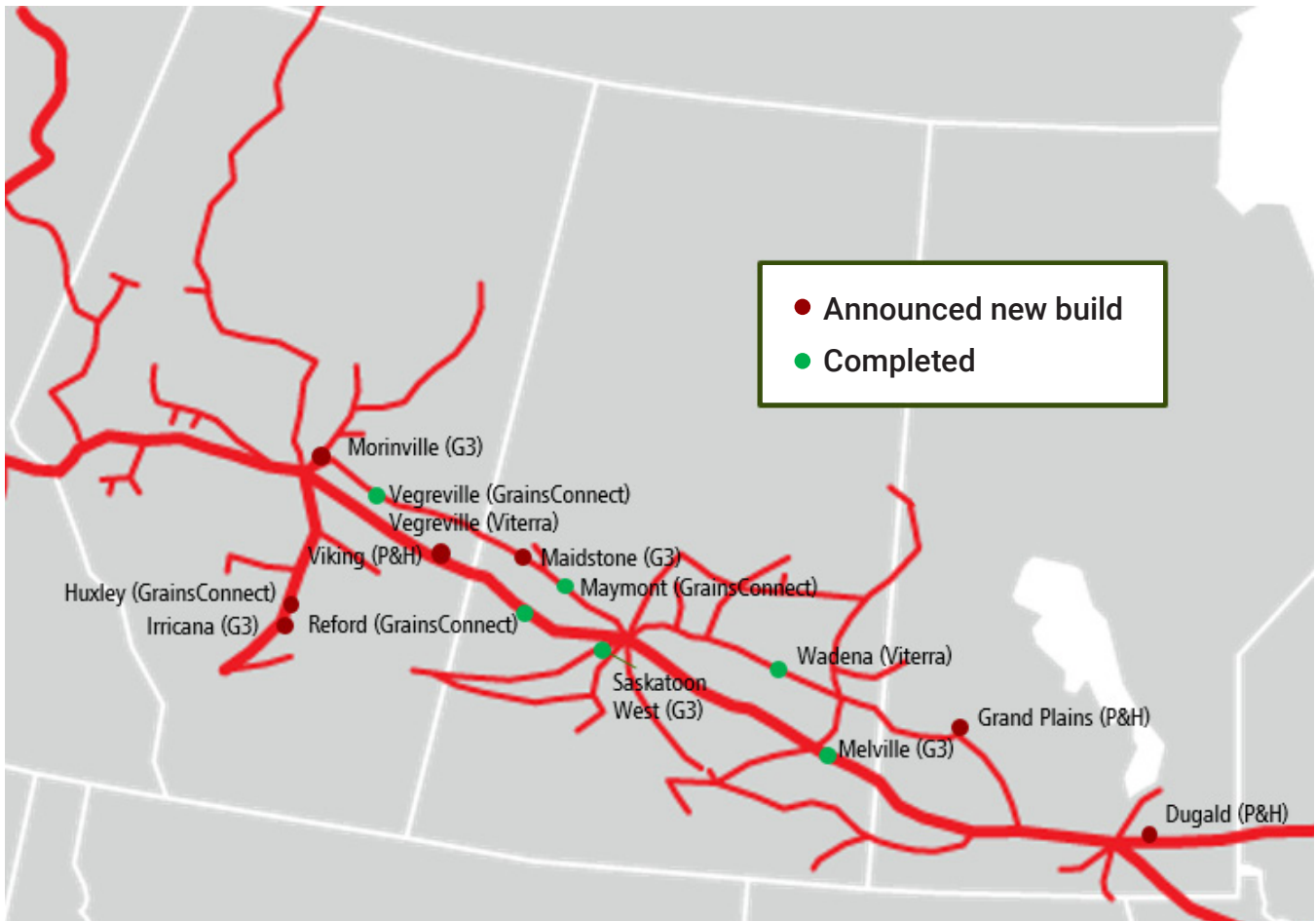
- GrainsConnect Canada – Reford, SK (June 2018)
- GrainsConnect Canada – Maymont, SK (June 2018)
- G3 Canada Limited – Brewer (Melville), SK (August 2018)
- G3 Canada Limited – Westover (Saskatoon West), SK (August 2018)
- Viterra – Wadena, SK (October 2018)
- Viterra – Vegreville, AB (March 2019)
- GrainsConnect Canada – Vegreville, AB (July 2019)

In the 2019-20 crop year, another three high throughput loop track facilities are expected to open on CN, namely:

- Parrish & Heimbecker – Torlea (Viking), AB (summer 2019)
- G3 Canada Limited – Maidstone, SK (summer 2019)
- GrainsConnect Canada – Huxley, AB (fall 2019)

The planned construction of four new facilities to be served by CN were announced during the 2018-19 crop year by customers as follows:

- Parrish & Heimbecker – Grand Plains, MB (August 2018)
- G3 Canada Limited – Morinville, AB (December 2018)
- G3 Canada Limited – Irricana, AB (April 2019)
- Parrish & Heimbecker – Dugald, MB (June 2019)







## UPDATE - NEW CN-SERVED EXPORT INFRASTRUCTURE

A number of new export terminals served by CN are set to open in the next few years. **G3 Terminal Vancouver** is set to open its state-of-the-art facility on the North Shore of Vancouver. It will be equipped with three loop tracks, the largest of which capable of accommodating trains of up to 8,793 feet in length. The trains will unload in continuous motion using the same motive power that delivered the train to the facility. This terminal represents 8+ MMT of additional nameplate grain export capacity.

The second is **Fraser Grain Terminal**, which is a partnership between Parrish & Heimbecker and GrainsConnect Canada. Set to be in service in 2020, this state-of-the-art facility will be able to receive up to 120-car trains on a semi-loop. It represents an additional 3.5 MMT of nameplate grain export capacity. This terminal will be located at Fraser Surrey Docks on the Fraser River.

This fall, the opening of the **InterMobil East Regina Intermodal Terminal** will increase the capacity available to move grain by container directly from western Canada to export destinations. **Fibreco Terminal**, which is located on the North Shore of Vancouver, is in the final phases of its terminal enhancement project, and is expected to be completed during the first half of the 2019-20 crop year. This project represents up to 2 MMT of additional nameplate grain export capacity on CN. **Sollio Agriculture** is building an export facility in the Quebec City area in four phases, with the third phase (unit train receiving capability) expected to be completed by fall 2020.

## LOOKING AHEAD - CN'S 2019-20 GRAIN PLAN

CN published its Grain Plan for the 2019-20 crop year August 1, outlining the volumes of grain CN expects to move and the operational capacity in place to move grain in an efficient and timely manner during the crop year. To develop this plan, CN consulted broadly with stakeholders, including many producer organizations, seeking their views and input. CN also established the CN Agricultural Advisory Council, made up primarily of grain producers which provides direct information respecting issues affecting this important sector of the Canadian economy. This approach is part of a broader CN focus on increasing engagement with grain producers. We are thankful that our outreach activities have been well-received.

