

Management's Discussion and Analysis

This Management's Discussion and Analysis (MD&A) dated July 21, 2020, relates to the consolidated financial position and results of operations of Canadian National Railway Company, together with its wholly-owned subsidiaries, collectively "CN" or the "Company," and should be read in conjunction with the Company's 2020 unaudited Interim Consolidated Financial Statements and Notes thereto. It should also be read in conjunction with the Company's 2019 audited Annual Consolidated Financial Statements and Notes thereto, and the 2019 Annual MD&A. All financial information reflected herein is expressed in Canadian dollars and prepared in accordance with United States generally accepted accounting principles (GAAP), unless otherwise noted.

CN's common shares are listed on the Toronto and New York stock exchanges. Additional information about CN filed with Canadian securities regulatory authorities and the United States Securities and Exchange Commission (SEC), including the Company's 2019 Annual Information Form and Form 40-F, may be found online on SEDAR at www.sedar.com, on the SEC's website at www.sec.gov through EDGAR, and on the Company's website at www.cn.ca in the Investors section. Printed copies of such documents may be obtained by contacting CN's Corporate Secretary's Office.

Business profile

CN is engaged in the rail and related transportation business. CN's network, of approximately 20,000 route miles of track spans Canada and mid-America, uniquely connecting three coasts: the Atlantic, the Pacific and the Gulf of Mexico. CN's extensive network and efficient connections to all Class I railroads provide CN customers access to Canada, the United States (U.S.) and Mexico. A true backbone of the economy, CN handles over \$250 billion worth of goods annually and carries over 300 million tons of cargo, serving exporters, importers, retailers, farmers and manufacturers.

CN's freight revenues are derived from seven commodity groups representing a diversified and balanced portfolio of goods transported between a wide range of origins and destinations. This product and geographic diversity better positions the Company to face economic fluctuations and enhances its potential for growth opportunities. For the year ended December 31, 2019, CN's largest commodity group accounted for 25% of total revenues. From a geographic standpoint, 16% of revenues relate to U.S. domestic traffic, 34% transborder traffic, 17% Canadian domestic traffic and 33% overseas traffic. The Company is the originating carrier for over 85%, and the originating and terminating carrier for over 65%, of traffic moving along its network, which allows it both to capitalize on service advantages and build on opportunities to efficiently use assets.

Strategy overview

A description of the Company's strategy is provided in the section entitled *Strategy overview* of the Company's 2019 Annual MD&A.

Second quarter 2020 compared to second quarter 2019

- While second quarter results were adversely impacted by the pandemic, CN being designated an essential service provider continued to deliver for its customers, demonstrating its key role in the integrated global supply chain.
- CN also recorded a charge of \$486 million, or \$363 million after-tax (\$0.51 per diluted share), resulting from the decision to market for sale for on-going rail operations, certain non-core lines in Wisconsin, Michigan, and Ontario.
- Net income decreased by \$817 million, or 60%, to \$545 million and diluted earnings per share (EPS) decreased by 59% to \$0.77.
- Adjusted net income decreased by \$342 million, or 27%, to \$908 million and adjusted diluted EPS decreased by 26% to \$1.28. ⁽¹⁾
- Operating income was \$785 million, a decrease of \$897 million or 53%, and adjusted operating income was \$1,271 million, a decrease of \$411 million or 24%. ⁽¹⁾
- Operating ratio was 75.5%, an increase of 18.0-points and adjusted operating ratio was 60.4%, an increase of 2.9-points. ⁽¹⁾
- CN reported an all-time quarterly record fuel efficiency of 0.88 US gallons of locomotive fuel consumed per 1,000 gross ton miles, and continues to deliver responsibly for a sustainable future.
- Revenues were \$3,209 million a decrease of \$750 million or 19%, primarily due to the COVID-19 pandemic.
- CN achieved a record in the quarter by moving 8.15 million metric tonnes of Canadian grain, an increase of 10%.
- Operating expenses increased by \$147 million, or 6%, to \$2,424 million, which includes a \$486 million loss on assets held for sale.
- Free cash flow was \$1,008 million, an increase of \$495 million, due to reduced capital expenditures and improved working capital. ⁽²⁾
- CN issued US\$600 million Notes due 2050 at a favorable 2.45% interest rate.
- CN paid a quarterly dividend of \$0.5750 per share, representing an increase of 7%, amounting to \$408 million.

(1) See the section of this MD&A entitled *Adjusted performance measures for an explanation of these non-GAAP measures*.

(2) See the section of this MD&A entitled *Liquidity and capital resources – Free cash flow for an explanation of this non-GAAP measure*.

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COVID-19 Pandemic

The global economy continues to face unprecedented uncertainty arising from the COVID-19 pandemic, which has necessitated governments, institutions and communities to take extraordinary actions. Businesses are facing highly volatile financial and operational environments, as the severity and duration of the pandemic remain uncertain. The Company has been designated an essential service provider and continues to execute its business continuity plans to deliver for its customers, the economy and the communities in which it operates, demonstrating its key role in the integrated global supply chain.

In response to the COVID-19 pandemic, CN deployed its multi-phase Pandemic Plan in March and instituted various measures to protect its employees, customers, and the communities in which CN operates:

- CN's medical team and occupational health department, who are members of the Association of American Railroads Health Committee, played a pivotal role in CN's pandemic planning, taking direction from the World Health Organization, as well as provincial, state and federal authorities, as required, and offering best practices shared amongst North American railroads.
- With safety as its core value, CN implemented preventative measures to ensure the safety of its employees and by extension of its customers and communities. These measures included a work from home policy for employees not required on site, restriction of employee travel, increasing social distancing measures at CN locations, and amplifying cleaning regimens on trains, in terminals, in bunkhouses and in offices.
- Understanding the importance of timely and reliable information, CN has increased the communication to its employees, including a summary of reliable COVID-19 resources and a summary of frequently asked questions are available on CN's website. The Company provides frequent updates on the state of its operations, as well as an employee support tool for any questions or concerns.
- Throughout the pandemic, CN demonstrated an understanding of how critical maintaining safe and efficient operations is to support the North American economy. As an essential service, CN took the important step of segregating its rail traffic control functions and spreading these mission-critical employees over six highly secure sites to better protect them from contamination.
- With relationships spanning eight provinces, 16 states and over 2,000 communities across the Company's network, CN plays an important role in strengthening the greater society. In these trying times, CN donated over \$1 million to charities directly or indirectly affected by the economic impacts of the pandemic, such as food banks, homeless shelters, domestic violence shelters, healthcare centers, and anti-poverty organizations, in the communities where CN operates.
- The Company encourages its employees to give back to their community by safely and responsibly lending a hand, with practices including good hygiene, minimizing exposure by practicing social distancing, and leveraging the various electronic means of communication with stakeholders, officials, contractors, and suppliers.

Assets held for sale

In the second quarter of 2020, the Company committed to a plan and is actively marketing for sale for on-going rail operations, certain non-core lines in Wisconsin, Michigan and Ontario representing approximately 850 miles and has met the criteria for classification of the related assets as assets held for sale. Accordingly, a \$486 million loss (\$363 million after-tax) was recorded to adjust the carrying amount of these track and roadway assets to their estimated selling price. The carrying amount of assets held for sale of \$90 million is included in Other current assets in the Consolidated Balance Sheet at June 30, 2020. The estimated selling price is based primarily on discounted cash flow projections. These projections are based on Level 3 inputs of the fair value hierarchy and reflect the Company's best estimate of market participants' pricing of the assets as well as the general condition of the assets. The significant assumptions in the valuation model include projected cash flows, discount rate and growth rate. Actual results could differ from the Company's estimates, but such differences are not expected to have a material impact on the fair value assessment.

See the section of this MD&A entitled *Recent accounting pronouncements and policies* for additional information.

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Acquisitions

On April 6, 2020, the Surface Transportation Board (STB) issued its decision conditionally approving the acquisition of the Massena rail line from CSX Corporation ("CSX"), which the Company announced its agreement to purchase on August 29, 2019. On June 6, 2020, CN and CSX sought reconsideration asking the STB to remove its condition which requires the parties to propose a change to the line sale agreement for the STB's review. The petitions for reconsideration remain pending for the STB's decision. The acquisition represents more than 220 miles of track between Valleyfield, Quebec, and Woodard, New York, and will allow CN to continue to expand its network and foster additional supply chain solutions.

In the first quarter of 2020, the Company completed the purchase price allocation of the Manitoba based TransX Group of Companies ("TransX") which was acquired on March 20, 2019. The fair value of net assets acquired was adjusted to reflect the settlement of working capital and other adjustments in the fourth quarter of 2019, and the changes to current and deferred income tax balances. The acquisition positions CN to strengthen its intermodal business, and allows the Company to expand capacity and foster additional supply chain solutions.

On December 2, 2019, the Company acquired the intermodal temperature-controlled transportation division of the Alberta-based H&R Transport Limited ("H&R"). The acquisition positions CN to expand its presence in moving customer goods by offering more end to end rail supply chain solutions to a wider range of customers.

2020 Business outlook and assumptions - Prudent financial management in unprecedented economic uncertainty

The rapid development and fluidity of the COVID-19 pandemic has significantly increased uncertainty in CN's operating environment. Starting in late March 2020, the continued spread of the COVID-19 pandemic has resulted in significantly weaker demand for freight transportation services, which the Company expects to persist for the foreseeable future.

Widespread layoffs by its customers, government mandated self-quarantines and closures for non-essential businesses have significantly curbed customer demand. Negative effects on demand have occurred across many commodities that CN transports, including: automotive due to temporary closures of automotive plants, refined petroleum products (gasoline, diesel and jet fuel) due to travel restrictions, forest products due to lower economic activity, industrial products due to a slowdown in North American manufacturing, and intermodal due to lower global production and consumption as a result of temporary closure of plants, reduced household incomes and consumer confidence.

The Company is part of an integrated global supply chain and the impact of the COVID-19 pandemic on aspects of the supply chain, including ocean carriers, ports, terminals, trucking firms, and other railroads, is having a consequent impact on CN's operations.

In response to the rapidly emerging economic backdrop, CN has undertaken actions to reduce costs and protect the Company's liquidity:

- CN adjusted its resources and costs to reflect the rapid and significant reduction in demand for rail transportation services, including temporarily storing locomotives and railcars, as well as reducing headcount, crew starts, train starts, local yards, mechanical shops, and last mile trucking operations to match the decline in volumes;
- In light of anticipated lower volumes for the year, the 2020 capital expenditure program was reduced in the first quarter of 2020 by a net amount of \$0.1 billion from \$3.0 billion to \$2.9 billion;
- CN paused its share repurchases at the end of March 2020 due to the current economic circumstances and will reassess on an ongoing basis; and
- CN issued a US\$600 million 30-year 2.45% Notes in the U.S. debt capital markets, raised \$390 million of one year supplementary revolving credit facilities and closed a second tranche of a variable rate, 20-year term loan for US\$310 million.

The long-term impacts of the COVID-19 pandemic, including the extent of the impact on the business, financial position, results of operations or liquidity, remain unknown. With the continued global spread of the COVID-19 pandemic and the consequent unprecedented economic uncertainty, the Company withdrew its 2020 guidance, provided in its 2019 year-end earnings press release on January 28, 2020. Investors should no longer rely on this guidance.

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Forward-looking statements

Certain statements included in this MD&A are "forward-looking statements" within the meaning of the *United States Private Securities Litigation Reform Act of 1995* and under Canadian securities laws. By their nature, forward-looking statements involve risks, uncertainties and assumptions. The Company cautions that its assumptions may not materialize and that current economic conditions render such assumptions, although reasonable at the time they were made, subject to greater uncertainty. Forward-looking statements by their nature address matters that are, to different degrees, uncertain, such as statements about the impacts of the COVID-19 pandemic on the business operations, financial results and financial position and on the global supply chain. Forward-looking statements may be identified by the use of terminology such as "believes," "expects," "anticipates," "assumes," "outlook," "plans," "targets" or other similar words.

Forward-looking statements include, but are not limited to, those set forth in the table below, which also presents key assumptions used in determining the forward-looking statements. See also the section of this MD&A entitled *Strategy overview - 2020 Business outlook and assumptions - Prudent financial management in unprecedented economic uncertainty*.

Forward-looking statements	Key assumptions
Statements relating to the Company's ability to meet debt repayments and future obligations in the foreseeable future, including income tax payments, and capital spending	<ul style="list-style-type: none">• Adequate credit ratios• Investment-grade credit ratings• Access to capital markets• Adequate cash generated from operations and other sources of financing
Statements relating to pension contributions	<ul style="list-style-type: none">• Adequate cash generated from operations and other sources of financing• Adequate long-term return on investment on pension plan assets• Level of funding as determined by actuarial valuations, particularly influenced by discount rates for funding purposes

Forward-looking statements are not guarantees of future performance and involve risks, uncertainties and other factors which may cause the actual results or performance of the Company to be materially different from the outlook or any future results or performance implied by such statements. Accordingly, readers are advised not to place undue reliance on forward-looking statements. Important risk factors that could affect the forward-looking statements include, but are not limited to, the duration and effects of the COVID-19 pandemic; general economic and business conditions, particularly in the context of the COVID-19 pandemic; industry competition; inflation, currency and interest rate fluctuations; changes in fuel prices; legislative and/or regulatory developments; compliance with environmental laws and regulations; actions by regulators; increases in maintenance and operating costs; security threats; reliance on technology and related cybersecurity risk; trade restrictions or other changes to international trade arrangements; transportation of hazardous materials; various events which could disrupt operations, including illegal blockades of rail networks and natural events such as severe weather, droughts, fires, floods and earthquakes; climate change; labor negotiations and disruptions; environmental claims; uncertainties of investigations, proceedings or other types of claims and litigation; risks and liabilities arising from derailments; timing and completion of capital programs; and other risks detailed from time to time in reports filed by CN with securities regulators in Canada and the U.S., including its Annual Information Form and Form 40-F. See the section entitled *Business risks* of this MD&A and the Company's 2019 Annual MD&A for a description of major risk factors.

Forward-looking statements reflect information as of the date on which they are made. CN assumes no obligation to update or revise forward-looking statements to reflect future events, changes in circumstances, or changes in beliefs, unless required by applicable securities laws. In the event CN does update any forward-looking statement, no inference should be made that CN will make additional updates with respect to that statement, related matters, or any other forward-looking statement.

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Financial and operating highlights

In millions, except percentage and per share data	Three months ended June 30			Six months ended June 30		
	2020	2019	% Change	2020	2019	% Change
Revenues	\$ 3,209	\$ 3,959	(19)%	\$ 6,754	\$ 7,503	(10)%
Operating income	\$ 785	\$ 1,682	(53)%	\$ 2,000	\$ 2,762	(28)%
Adjusted operating income ⁽¹⁾	\$ 1,271	\$ 1,682	(24)%	\$ 2,486	\$ 2,846	(13)%
Net income	\$ 545	\$ 1,362	(60)%	\$ 1,556	\$ 2,148	(28)%
Adjusted net income ⁽¹⁾	\$ 908	\$ 1,250	(27)%	\$ 1,778	\$ 2,098	(15)%
Basic earnings per share	\$ 0.77	\$ 1.89	(59)%	\$ 2.19	\$ 2.97	(26)%
Adjusted basic earnings per share ⁽¹⁾	\$ 1.28	\$ 1.73	(26)%	\$ 2.50	\$ 2.90	(14)%
Diluted earnings per share	\$ 0.77	\$ 1.88	(59)%	\$ 2.18	\$ 2.96	(26)%
Adjusted diluted earnings per share ⁽¹⁾	\$ 1.28	\$ 1.73	(26)%	\$ 2.49	\$ 2.90	(14)%
Dividends declared per share	\$ 0.5750	\$ 0.5375	7 %	\$ 1.1500	\$ 1.0750	7 %
Total assets	\$ 45,199	\$ 43,002	5 %	\$ 45,199	\$ 43,002	5 %
Total long-term liabilities	\$ 23,069	\$ 20,893	10 %	\$ 23,069	\$ 20,893	10 %
Operating ratio ⁽²⁾	75.5%	57.5%	(18.0)-pts	70.4%	63.2%	(7.2)-pts
Adjusted operating ratio ⁽¹⁾	60.4%	57.5%	(2.9)-pts	63.2%	62.1%	(1.1)-pts
Free cash flow ⁽³⁾	\$ 1,008	\$ 513	96 %	\$ 1,581	\$ 799	98 %

(1) See the section of this MD&A entitled Adjusted performance measures for an explanation of these non-GAAP measures.

(2) Operating ratio is defined as operating expenses as a percentage of revenues.

(3) See the section of this MD&A entitled Liquidity and capital resources – Free cash flow for an explanation of this non-GAAP measure.

The following table lists key measures of the Company's operating performance, for the purpose of measuring the efficiency and effectiveness of train operations:

	Three months ended June 30			Six months ended June 30		
	2020	2019	% Change Fav (Unfav)	2020	2019	% Change Fav (Unfav)
Gross ton miles (GTMs) (millions) ⁽¹⁾	102,386	127,606	(20)%	216,365	243,465	(11)%
Train weight (tons) ⁽²⁾	9,922	9,311	7 %	9,491	9,002	5 %
Through network train speed (miles per hour) ⁽³⁾	19.9	19.0	5 %	18.9	18.0	5 %
Fuel efficiency (US gallons of locomotive fuel consumed per 1,000 GTMs) ⁽⁴⁾	0.88	0.90	2 %	0.92	0.95	3 %
Through dwell (entire railroad, hours) ⁽⁵⁾	8.4	7.2	(17)%	8.4	7.9	(6)%
Car velocity (car miles per day) ⁽⁶⁾	201	214	(6)%	190	192	(1)%

(1) GTMs: The workload performed by system trains in hauling freight or equipment. GTMs are calculated by multiplying the trailing weight by the distance the train moved. A larger number is an indicator of more traffic (and thus more revenue) being moved.

(2) Train weight: An efficiency measurement on how much tonnage each mainline train handles on average as it crosses the network. Calculated as the total of GTMs and divided by total train miles, this measure provides insight on how well each train was maximized in terms of its capacity to move traffic. This operating measure was formerly named Train productivity.

(3) Through network train speed: A measure of the line-haul movement from origin to destination, including time at terminals. The average speed is calculated by dividing train miles by total hours operated, excluding yard and local trains, passenger trains, maintenance of way trains, and foreign trains. This measure represents the fluidity of trains on the network, with a higher value also indicating a more fluid network.

(4) Fuel efficiency: This measure represents how efficient the Company is in the generation and utilization of locomotive horsepower in freight train operations, with a lower number indicating improved performance. Fuel efficiency is defined as US gallons of locomotive fuel consumed per 1,000 GTMs. With approximately 85% of CN's direct Greenhouse Gas (GHG) emissions generated from rail operations, CN believes the best way to reduce its carbon footprint is by continuously improving fuel efficiency. Over the years, this focus has resulted in significant progress in decoupling volume growth from carbon emissions. CN is making a positive contribution in the fight against climate change by offering a carbon efficient and environmentally friendly way to move goods.

(5) Through dwell: The average time a car resides within terminal boundaries expressed in hours. The measurement begins with a customer release, received interchange, or train arrival event and ends with a customer placement (actual or constructive), delivered or offered in interchange, or train departure event. This excludes stored, bad ordered, maintenance of way cars, or cars with dwell greater than 10 days. This measure represents the efficiency of handling cars within the terminal, with a lower value indicating higher performance.

(6) Car velocity: The average miles per day traveled by loaded and empty cars (active system, foreign and private cars) on company lines. This measure represents the fluidity of cars on the network, calculated by the sum of miles each car traveled divided by the sum of all of the cars' active time, with a higher value indicating a smoother and more fluid operation.

GTMs were negatively impacted by the COVID-19 pandemic and in the first quarter by the illegal blockades. In response to the reduction in volumes, the Company adjusted its operations in an effort to maximize productivity, which resulted in record Train weight during the second quarter. These actions led to traffic dwelling longer to make connections at terminals, increased Through dwell and reduced Car velocity. The Company's productivity efforts were demonstrated in improvements to Through network train speed and in an all-time record in Fuel efficiency.

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Financial results

Second quarter and first half of 2020 compared to corresponding period in 2019

Net income for the second quarter of 2020 was \$545 million, a decrease of \$817 million, or 60%, and diluted earnings per share decreased by 59% to \$0.77, when compared to the same period in 2019. Net income for the six months ended June 30, 2020 was \$1,556 million, a decrease of \$592 million, or 28%, and diluted earnings per share decreased by 26% to \$2.18, when compared to the same period in 2019.

Operating income for the quarter ended June 30, 2020 decreased by \$897 million, or 53%, to \$785 million when compared to the same period in 2019. Operating income for the six months ended June 30, 2020 decreased by \$762 million, or 28%, to \$2,000 million when compared to the same period in 2019.

The operating ratio, defined as operating expenses as a percentage of revenues, was 75.5% in the second quarter of 2020, compared to 57.5% in the second quarter of 2019, an 18.0-point increase. The six-month operating ratio was 70.4% in 2020 compared to 63.2% in 2019, a 7.2-point increase.

Revenues for the second quarter of 2020 were \$3,209 million compared to \$3,959 million in the same period in 2019, a decrease of \$750 million, or 19%. Revenues for the first half of 2020 were \$6,754 million, a decrease of \$749 million, or 10%, when compared to the same period in 2019. The decreases in both periods were mainly due to lower volumes across most commodity groups caused by the COVID-19 pandemic and lower applicable fuel surcharge rates, which were partly offset by increased shipments of Canadian grain, higher Canadian coal exports via west coast ports as well as freight rate increases.

Operating expenses for the second quarter of 2020 were \$2,424 million compared to \$2,277 million for the same period in 2019, an increase of \$147 million, or 6%. Operating expenses for the first half of 2020 were \$4,754 million compared to \$4,741 million for the same period in 2019, an increase of \$13 million. The increases were mainly driven by a loss on assets held for sale resulting from the Company's decision to market for sale for on-going rail operations, certain non-core lines, partly offset by lower fuel and labor costs.

Non-GAAP measures

This MD&A makes reference to non-GAAP measures, including adjusted performance measures, constant currency, free cash flow and adjusted debt-to-adjusted earnings before interest, income taxes, depreciation and amortization (EBITDA) multiple, that do not have any standardized meaning prescribed by GAAP and therefore, may not be comparable to similar measures presented by other companies. From management's perspective, these non-GAAP measures are useful measures of performance and provide investors with supplementary information to assess the Company's results of operations and liquidity. These non-GAAP measures should not be considered in isolation or as a substitute for financial measures prepared in accordance with GAAP.

For further details of these non-GAAP measures, including a reconciliation to the most directly comparable GAAP financial measures, refer to the sections entitled *Adjusted performance measures*, *Constant currency* and *Liquidity and capital resources*.

Adjusted performance measures

Management believes that adjusted net income, adjusted earnings per share, adjusted operating income and adjusted operating ratio are useful measures of performance that can facilitate period-to-period comparisons, as they exclude items that do not necessarily arise as part of CN's normal day-to-day operations and could distort the analysis of trends in business performance. Management uses adjusted performance measures, which exclude certain income and expense items in its results that management believes are not reflective of CN's underlying business operations, to set performance goals and as a means to measure CN's performance. The exclusion of such income and expense items in these measures does not, however, imply that these items are necessarily non-recurring. These measures do not have any standardized meaning prescribed by GAAP and therefore, may not be comparable to similar measures presented by other companies.

For the three and six months ended June 30, 2020, the Company's adjusted net income was \$908 million, or \$1.28 per diluted share, and \$1,778 million, or \$2.49 per diluted share, respectively. The adjusted figures for the three and six months ended June 30, 2020 exclude a loss of \$486 million, or \$363 million after-tax (\$0.51 per diluted share) resulting from the Company's decision to market for sale for on-going rail operations, certain non-core lines in Wisconsin, Michigan and Ontario. The adjusted figures for the six months ended June 30, 2020 also exclude a current income tax recovery of \$141 million (\$0.20 per diluted share) in the first quarter resulting from the enactment of the *Coronavirus Aid, Relief, and Economic Security (CARES) Act*, a U.S. tax-and-spending package aimed at providing additional stimulus to address the economic impact of the COVID-19 pandemic.

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For the three and six months ended June 30, 2019, the Company's adjusted net income was \$1,250 million, or \$1.73 per diluted share, and \$2,098 million, or \$2.90 per diluted share, respectively. The adjusted figures for the three and six months ended June 30, 2019 exclude a deferred income tax recovery of \$112 million (\$0.15 per diluted share), resulting from the enactment of a lower provincial corporate income tax rate. The adjusted figures for the six months ended June 30, 2019 also exclude a depreciation and amortization expense of \$84 million, or \$62 million after-tax (\$0.09 per diluted share) in the first quarter, related to costs previously capitalized for a Positive Train Control (PTC) back office system following the deployment of a replacement system.

The following table provides a reconciliation of net income and earnings per share, as reported for the three and six months ended June 30, 2020 and 2019, to the adjusted performance measures presented herein:

<i>In millions, except per share data</i>	Three months ended June 30		Six months ended June 30	
	2020	2019	2020	2019
Net income	\$ 545	\$ 1,362	\$ 1,556	\$ 2,148
<i>Adjustments:</i>				
Depreciation expense	—	—	—	84
Loss on assets held for sale	486	—	486	—
Income tax recovery ⁽¹⁾	(123)	(112)	(264)	(134)
Adjusted net income	\$ 908	\$ 1,250	\$ 1,778	\$ 2,098
Basic earnings per share	\$ 0.77	\$ 1.89	\$ 2.19	\$ 2.97
<i>Impact of adjustments, per share</i>	0.51	(0.16)	0.31	(0.07)
Adjusted basic earnings per share	\$ 1.28	\$ 1.73	\$ 2.50	\$ 2.90
Diluted earnings per share	\$ 0.77	\$ 1.88	\$ 2.18	\$ 2.96
<i>Impact of adjustments, per share</i>	0.51	(0.15)	0.31	(0.06)
Adjusted diluted earnings per share	\$ 1.28	\$ 1.73	\$ 2.49	\$ 2.90

(1) Includes the tax impact of: (i) adjustments based on the nature of the item for tax purposes and related tax rates in the applicable jurisdiction; or (ii) tax law changes and rate enactments.

The following table provides a reconciliation of operating income and operating ratio, as reported for the three and six months ended June 30, 2020 and 2019, to the adjusted performance measures presented herein:

<i>In millions, except percentage</i>	Three months ended June 30		Six months ended June 30	
	2020	2019	2020	2019
Operating income	\$ 785	\$ 1,682	\$ 2,000	\$ 2,762
<i>Adjustments:</i>				
Depreciation expense	—	—	—	84
Loss on assets held for sale	486	—	486	—
Adjusted operating income	\$ 1,271	\$ 1,682	\$ 2,486	\$ 2,846
Operating ratio	75.5%	57.5%	70.4%	63.2%
<i>Impact of adjustment</i>	(15.1)-pts	—	(7.2)-pts	(1.1)-pts
Adjusted operating ratio	60.4%	57.5%	63.2%	62.1%

Constant currency

Financial results at constant currency allow results to be viewed without the impact of fluctuations in foreign currency exchange rates, thereby facilitating period-to-period comparisons in the analysis of trends in business performance. Measures at constant currency are considered non-GAAP measures and do not have any standardized meaning prescribed by GAAP and therefore, may not be comparable to similar measures presented by other companies. Financial results at constant currency are obtained by translating the current period results denominated in US dollars at the foreign exchange rates of the comparable period in the prior year. The average foreign exchange rates were \$1.39 and \$1.37 per US\$1.00 for the three and six months ended June 30, 2020, respectively, and \$1.34 and \$1.33 per US\$1.00 for the three and six months ended June 30, 2019, respectively.

On a constant currency basis, the Company's net income for the three and six months ended June 30, 2020 would have been lower by \$13 million (\$0.02 per diluted share).

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Revenues

<i>In millions, unless otherwise indicated</i>	Three months ended June 30				Six months ended June 30			
	2020	2019	% Change	% Change at constant currency	2020	2019	% Change	% Change at constant currency
Freight revenues	\$ 3,038	\$ 3,759	(19%)	(21%)	\$ 6,462	\$ 7,172	(10%)	(11%)
Other revenues	171	200	(15%)	(17%)	292	331	(12%)	(13%)
Total revenues	\$ 3,209	\$ 3,959	(19%)	(20%)	\$ 6,754	\$ 7,503	(10%)	(11%)
Freight revenues								
Petroleum and chemicals	\$ 585	\$ 775	(25%)	(26%)	\$ 1,376	\$ 1,510	(9%)	(10%)
Metals and minerals	308	440	(30%)	(32%)	713	861	(17%)	(18%)
Forest products	413	487	(15%)	(17%)	846	943	(10%)	(12%)
Coal	140	177	(21%)	(22%)	283	340	(17%)	(17%)
Grain and fertilizers	649	641	1%	—%	1,259	1,218	3%	2%
Intermodal	874	992	(12%)	(13%)	1,723	1,842	(6%)	(7%)
Automotive	69	247	(72%)	(72%)	262	458	(43%)	(43%)
Total freight revenues	\$ 3,038	\$ 3,759	(19%)	(21%)	\$ 6,462	\$ 7,172	(10%)	(11%)
Revenue ton miles (RTMs) (<i>millions</i>)	52,517	64,329	(18%)	(18%)	110,887	123,396	(10%)	(10%)
Freight revenue/RTM (<i>cents</i>)	5.78	5.84	(1%)	(3%)	5.83	5.81	—%	(1%)
Carloads (<i>thousands</i>)	1,294	1,538	(16%)	(16%)	2,629	2,956	(11%)	(11%)
Freight revenue/carload (\$)	2,348	2,444	(4%)	(6%)	2,458	2,426	1%	—%

Revenues for the quarter ended June 30, 2020 were \$3,209 million compared to \$3,959 million in the same period in 2019, a decrease of \$750 million, or 19%. Revenues for the first half of 2020 were \$6,754 million, a decrease of \$749 million, or 10%, when compared to the same period in 2019. The decreases in both periods were mainly due to lower volumes across most commodity groups caused by the COVID-19 pandemic and lower applicable fuel surcharge rates, which were partly offset by increased shipments of Canadian grain, higher Canadian coal exports via west coast ports as well as freight rate increases.

Fuel surcharge revenues decreased by \$93 million in the second quarter and \$115 million in the first half of 2020 when compared to the same periods in 2019, as a result of lower applicable fuel surcharge rates and lower volumes.

RTMs, measuring the relative weight and distance of freight transported by the Company, declined by 18% in the second quarter and 10% in the first half of 2020 when compared to the same periods in 2019. Freight revenue per RTM decreased by 1% in the second quarter and remained flat in the first half of 2020 when compared to the same periods in 2019, mainly due to lower applicable fuel surcharge rates, partly offset by freight rate increases.

Petroleum and chemicals

	Three months ended June 30				Six months ended June 30			
	2020	2019	% Change	% Change at constant currency	2020	2019	% Change	% Change at constant currency
Revenues (<i>millions</i>)	\$ 585	\$ 775	(25%)	(26%)	\$ 1,376	\$ 1,510	(9%)	(10%)
RTMs (<i>millions</i>)	8,832	14,357	(38%)	(38%)	22,520	27,106	(17%)	(17%)
Revenue/RTM (<i>cents</i>)	6.62	5.40	23%	20%	6.11	5.57	10%	8%
Carloads (<i>thousands</i>)	131	174	(25%)	(25%)	304	342	(11%)	(11%)

Revenues for this commodity group decreased by \$190 million, or 25%, in the second quarter and \$134 million, or 9%, in the first half of 2020 when compared to the same periods in 2019. The decreases in both periods were mainly due to the collapse in global oil prices and reduced demand due to the COVID-19 pandemic, which resulted in lower volumes of petroleum crude, chemicals and plastic products, refined petroleum products and natural gas liquids. The decreases were partly offset by liquidated damages relating to volume commitments under customer contracts and freight rate increases.

Revenue per RTM increased by 23% in the second quarter and 10% in the first half of 2020 when compared to the same periods in 2019, mainly due to a significant decrease in the average length of haul, liquidated damages relating to volume commitments under customer contracts and freight rate increases.

Management's Discussion and Analysis

Metals and minerals

	Three months ended June 30				Six months ended June 30			
	2020	2019	% Change	% Change at constant currency	2020	2019	% Change	% Change at constant currency
Revenues (<i>millions</i>)	\$ 308	\$ 440	(30%)	(32%)	\$ 713	\$ 861	(17%)	(18%)
RTMs (<i>millions</i>)	3,881	6,832	(43%)	(43%)	10,357	13,402	(23%)	(23%)
Revenue/RTM (<i>cents</i>)	7.94	6.44	23%	20%	6.88	6.42	7%	6%
Carloads (<i>thousands</i>)	217	269	(19%)	(19%)	458	504	(9%)	(9%)

Revenues for this commodity group decreased by \$132 million, or 30%, in the second quarter and \$148 million, or 17%, in the first half of 2020 when compared to the same periods in 2019. The decreases in both periods were mainly due to reduced shipments of frac sand and lower volumes of semi-finished steel products.

Revenue per RTM increased by 23% in the second quarter and 7% in the first half of 2020 when compared to the same periods in 2019, mainly due to a significant decrease in the average length of haul.

Forest products

	Three months ended June 30				Six months ended June 30			
	2020	2019	% Change	% Change at constant currency	2020	2019	% Change	% Change at constant currency
Revenues (<i>millions</i>)	\$ 413	\$ 487	(15%)	(17%)	\$ 846	\$ 943	(10%)	(12%)
RTMs (<i>millions</i>)	6,029	7,271	(17%)	(17%)	12,351	14,089	(12%)	(12%)
Revenue/RTM (<i>cents</i>)	6.85	6.70	2%	—%	6.85	6.69	2%	1%
Carloads (<i>thousands</i>)	83	100	(17%)	(17%)	171	196	(13%)	(13%)

Revenues for this commodity group decreased by \$74 million, or 15%, in the second quarter and \$97 million, or 10%, in the first half of 2020 when compared to the same periods in 2019. The decreases in both periods were mainly due to lower volumes across a broad range of forest products, partly offset by freight rate increases.

Revenue per RTM increased by 2% in both the second quarter and first half of 2020 when compared to the same periods in 2019, mainly due to freight rate increases.

Coal

	Three months ended June 30				Six months ended June 30			
	2020	2019	% Change	% Change at constant currency	2020	2019	% Change	% Change at constant currency
Revenues (<i>millions</i>)	\$ 140	\$ 177	(21%)	(22%)	\$ 283	\$ 340	(17%)	(17%)
RTMs (<i>millions</i>)	4,242	4,699	(10%)	(10%)	8,320	8,993	(7%)	(7%)
Revenue/RTM (<i>cents</i>)	3.30	3.77	(12%)	(14%)	3.40	3.78	(10%)	(11%)
Carloads (<i>thousands</i>)	71	90	(21%)	(21%)	148	170	(13%)	(13%)

Revenues for this commodity group decreased by \$37 million, or 21%, in the second quarter and \$57 million, or 17%, in the first half of 2020 when compared to the same periods in 2019. The decreases in both periods were mainly due to lower U.S. thermal coal exports via the Gulf Coast due to competitive market pricing and reduced domestic shipments to U.S. utilities; partly offset by higher Canadian coal exports via west coast ports.

Revenue per RTM decreased by 12% in the second quarter and 10% in the first half of 2020 when compared to the same periods in 2019, mainly due to a significant increase in the average length of haul.

Management's Discussion and Analysis

Grain and fertilizers

	Three months ended June 30				Six months ended June 30			
	2020	2019	% Change	% Change at constant currency	2020	2019	% Change	% Change at constant currency
Revenues (<i>millions</i>)	\$ 649	\$ 641	1%	—%	\$ 1,259	\$ 1,218	3%	2%
RTMs (<i>millions</i>)	15,062	15,045	—%	—%	29,261	28,912	1%	1%
Revenue/RTM (<i>cents</i>)	4.31	4.26	1%	—%	4.30	4.21	2%	1%
Carloads (<i>thousands</i>)	162	167	(3%)	(3%)	312	316	(1%)	(1%)

Revenues for this commodity group increased by \$8 million, or 1%, in the second quarter and \$41 million, or 3%, in the first half of 2020 when compared to the same periods in 2019. The increases in both periods were mainly due to higher Canadian grain volumes and freight rate increases, partly offset by lower export volumes of U.S. soybeans and corn.

Revenue per RTM increased by 1% in the second quarter and 2% in the first half of 2020 when compared to the same periods in 2019, mainly due to freight rate increases, partly offset by an increase in average length of haul.

Intermodal

	Three months ended June 30				Six months ended June 30			
	2020	2019	% Change	% Change at constant currency	2020	2019	% Change	% Change at constant currency
Revenues (<i>millions</i>)	\$ 874	\$ 992	(12%)	(13%)	\$ 1,723	\$ 1,842	(6%)	(7%)
RTMs (<i>millions</i>)	14,157	15,034	(6%)	(6%)	26,919	28,882	(7%)	(7%)
Revenue/RTM (<i>cents</i>)	6.17	6.60	(7%)	(8%)	6.40	6.38	—%	—%
Carloads (<i>thousands</i>)	609	663	(8%)	(8%)	1,157	1,287	(10%)	(10%)

Revenues for this commodity group decreased by \$118 million, or 12%, in the second quarter and \$119 million, or 6%, in the first half of 2020 when compared to the same periods in 2019. The decreases in both periods were mainly due to lower volumes across both the international and domestic intermodal traffic resulting from the impact of the COVID-19 pandemic, as well as lower applicable fuel surcharge rates.

Revenue per RTM decreased by 7% in the second quarter and remained flat in the first half of 2020 when compared to the same periods in 2019. The decrease in the second quarter was mainly due to lower applicable fuel surcharge rates and unfavorable changes in traffic mix.

Automotive

	Three months ended June 30				Six months ended June 30			
	2020	2019	% Change	% Change at constant currency	2020	2019	% Change	% Change at constant currency
Revenues (<i>millions</i>)	\$ 69	\$ 247	(72%)	(72%)	\$ 262	\$ 458	(43%)	(43%)
RTMs (<i>millions</i>)	314	1,091	(71%)	(71%)	1,159	2,012	(42%)	(42%)
Revenue/RTM (<i>cents</i>)	21.97	22.64	(3%)	(4%)	22.61	22.76	(1%)	(1%)
Carloads (<i>thousands</i>)	21	75	(72%)	(72%)	79	141	(44%)	(44%)

Revenues for this commodity group decreased by \$178 million, or 72%, in the second quarter and decreased by \$196 million, or 43%, in the first half of 2020 when compared to the same periods in 2019. The decreases in both periods were mainly due to lower volumes of domestic finished vehicles and vehicle parts resulting from the temporary shutdown of assembly plants and production facilities due to the COVID-19 pandemic.

Revenue per RTM decreased by 3% in the second quarter and 1% in the first half of 2020 when compared to the same periods in 2019, mainly due to an increase in average length of haul.

Management's Discussion and Analysis

Other revenues

	Three months ended June 30				Six months ended June 30			
	2020	2019	% Change	% Change at constant currency	2020	2019	% Change	% Change at constant currency
Revenues (millions)	\$ 171	\$ 200	(15%)	(17%)	\$ 292	\$ 331	(12%)	(13%)

Other revenues decreased by \$29 million, or 15%, in the second quarter and \$39 million, or 12%, in the first half of 2020 when compared to the same periods in 2019. The decreases in both periods were mainly due to lower revenues from automotive logistics and vessels; partly offset by higher freight forwarding revenues.

Operating expenses

Operating expenses for the second quarter of 2020 were \$2,424 million compared to \$2,277 million in the same period of 2019. Operating expenses for the first half of 2020 were \$4,754 million compared to \$4,741 million in the same period of 2019. The increases of \$147 million, or 6%, in the second quarter and \$13 million in the first half of 2020 were mainly driven by a loss on assets held for sale resulting from the Company's decision to market for sale for on-going rail operations, certain non-core lines, partly offset by lower fuel and labor costs.

In millions	Three months ended June 30				Six months ended June 30			
	2020	2019	% Change	% Change at constant currency	2020	2019	% Change	% Change at constant currency
Labor and fringe benefits	\$ 563	\$ 681	17%	18%	\$ 1,306	\$ 1,479	12%	12%
Purchased services and material	518	571	9%	11%	1,096	1,129	3%	4%
Fuel	227	442	49%	50%	587	840	30%	31%
Depreciation and amortization	404	363	(11%)	(10%)	796	803	1%	2%
Equipment rents	107	104	(3%)	—%	212	218	3%	5%
Casualty and other	119	116	(3%)	—%	271	272	—%	2%
Loss on assets held for sale	486	—	N/A	N/A	486	—	N/A	N/A
Total operating expenses	\$ 2,424	\$ 2,277	(6%)	(5%)	\$ 4,754	\$ 4,741	—%	1%

Labor and fringe benefits

Labor and fringe benefits expense decreased by \$118 million, or 17%, in the second quarter and \$173 million, or 12%, in the first half of 2020 when compared to the same periods in 2019. The decreases were primarily driven by lower average headcount, incentive compensation and overtime costs.

Purchased services and material

Purchased services and material expense decreased by \$53 million, or 9%, in the second quarter and \$33 million, or 3%, in the first half of 2020 when compared to the same periods in 2019. The decrease in the second quarter was mainly due to lower costs for services purchased from outside contractors and lower material costs, driven by lower volumes. The decrease in the first half was mainly due to lower material costs and lower costs for services purchased from outside contractors, driven by lower volumes; partly offset by the inclusion of TransX.

Fuel

Fuel expense decreased by \$215 million, or 49%, in the second quarter and \$253 million, or 30%, in the first half of 2020 when compared to the same periods in 2019. The decreases were mainly due to lower fuel prices and volumes, as well as efficiency gains.

Depreciation and amortization

Depreciation and amortization expense increased by \$41 million, or 11%, in the second quarter and decreased by \$7 million, or 1%, in the first half of 2020 when compared to the same periods in 2019. The increase in the second quarter was mainly due to a higher depreciable asset base resulting from increased capital expenditures in recent years. The decrease in the first half was mainly due to a 2019 expense of \$84 million related to costs previously capitalized for a PTC back office system following the deployment of a replacement system, partly offset by a higher depreciable asset base resulting from increased capital expenditures in recent years.

Management's Discussion and Analysis

Equipment rents

Equipment rents expense increased by \$3 million, or 3%, in the second quarter and decreased by \$6 million, or 3%, in the first half of 2020 when compared to the same periods in 2019. The increase in the second quarter was mainly due to higher locomotive horsepower-hour expense due to more locomotives that were off line in 2019, partly offset by lower car hire expense due to reduced volumes. The decrease in the first half was mainly due to lower car hire expense.

Casualty and other

Casualty and other expense increased by \$3 million, or 3%, in the second quarter and remained flat in the first half of 2020 when compared to the same periods in 2019. The increase in the second quarter was mainly due to lower passenger train recoveries, partly offset by lower employee travel expenses. In the first half of 2020, the lower passenger train recoveries offset the lower employee travel expenses.

Loss on assets held for sale

In the second quarter of 2020, the Company recorded a loss of \$486 million on assets held for sale, resulting from the Company's decision to market for sale for on-going rail operations, certain non-core lines in Wisconsin, Michigan and Ontario.

Other income and expenses

Interest expense

Interest expense was \$144 million and \$283 million for the three and six months ended June 30, 2020, respectively, compared to \$136 million and \$267 million, respectively, for the same periods in 2019. The increases were mainly due to a higher average level of debt and the negative translation impact of a weaker Canadian dollar; partly offset by a lower average interest rate.

Other components of net periodic benefit income

Other components of net periodic benefit income was \$80 million and \$158 million for the three and six months ended June 30, 2020, respectively, compared to \$83 million and \$163 million, respectively, for the same periods in 2019.

Other income (loss)

For the three and six months ended June 30, 2020, the Company recorded other loss of \$4 million and other income of \$7 million, respectively, compared to other income of \$23 million and \$25 million, respectively, for the same periods in 2019. The decreases were primarily due to minor gains on land sales in 2019.

Income tax expense

Income tax expense was \$172 million and \$326 million for the three and six months ended June 30, 2020, respectively, compared to \$290 million and \$535 million, respectively, for the same periods in 2019. Income tax expense for the six months ended June 30, 2020 included a current income tax recovery of \$141 million in the first quarter resulting from the enactment of the CARES Act. Income tax expense for the three and six months ended June 30, 2019 included a deferred income tax recovery of \$112 million resulting from the enactment of a lower provincial corporate income tax rate.

On March 27, 2020, the U.S. government enacted the CARES Act, which included corporate income tax measures allowing U.S. federal net operating losses (NOLs) arising in tax years 2018, 2019, and 2020 to be fully carried back to each of the five tax years preceding the tax year of the NOL. As a result of the CARES Act, the Company reclassified its existing deferred income tax asset of \$213 million on the NOL that arose in 2019, to a current income tax receivable and recorded a current income tax recovery of \$141 million to reflect an amount recoverable at the higher U.S. federal corporate income tax rate of 35% applicable to pre-2018 tax years.

The effective tax rates for the three and six months ended June 30, 2020 were 24.0% and 17.3%, respectively, compared to 17.6% and 19.9%, respectively, for the same periods in 2019. Excluding the aforementioned income tax recoveries, the effective tax rates for the six months ended June 30, 2020 and the three and six months ended June 30, 2019 were 24.8%, 24.3%, and 24.1% respectively. The increase in the six-month ended June 30, 2020 effective tax rate was mainly attributable to the impact of a lower excess tax benefit resulting from the settlement of equity settled awards under the Company's stock-based compensation plans.

Management's Discussion and Analysis

Summary of quarterly financial data

In millions, except per share data	2020 Quarters			2019 Quarters			2018 Quarters		
	Second	First	Fourth	Third	Second	First	Fourth	Third	
Revenues	\$ 3,209	\$ 3,545	\$ 3,584	\$ 3,830	\$ 3,959	\$ 3,544	\$ 3,808	\$ 3,688	
Operating income ⁽¹⁾	\$ 785	\$ 1,215	\$ 1,218	\$ 1,613	\$ 1,682	\$ 1,080	\$ 1,452	\$ 1,492	
Net income ⁽¹⁾	\$ 545	\$ 1,011	\$ 873	\$ 1,195	\$ 1,362	\$ 786	\$ 1,143	\$ 1,134	
Basic earnings per share ⁽¹⁾	\$ 0.77	\$ 1.42	\$ 1.22	\$ 1.66	\$ 1.89	\$ 1.08	\$ 1.57	\$ 1.55	
Diluted earnings per share ⁽¹⁾	\$ 0.77	\$ 1.42	\$ 1.22	\$ 1.66	\$ 1.88	\$ 1.08	\$ 1.56	\$ 1.54	
Dividends per share	\$ 0.5750	\$ 0.5750	\$ 0.5375	\$ 0.5375	\$ 0.5375	\$ 0.5375	\$ 0.4550	\$ 0.4550	

(1) Certain quarters include items that management believes do not necessarily arise as part of CN's normal day-to-day operations and can distort the analysis of trends in business performance. See the section of this MD&A entitled *Adjusted performance measures* as well as the Company's 2019 Annual MD&A for additional information on these items.

Revenues generated by the Company during the year are influenced by seasonal weather conditions, general economic conditions, cyclical demand for rail transportation, and competitive forces in the transportation marketplace (see the section entitled *Business risks* of the Company's 2019 Annual MD&A). Operating expenses reflect the impact of freight volumes, seasonal weather conditions, labor costs, fuel prices, and the Company's productivity initiatives. Fluctuations in the Canadian dollar relative to the US dollar have also affected the conversion of the Company's US dollar-denominated revenues and expenses and resulted in fluctuations in net income in the rolling eight quarters presented above.

Liquidity and capital resources

An analysis of the Company's liquidity and capital resources is provided in the section entitled *Liquidity and capital resources* of the Company's 2019 Annual MD&A. There were no significant changes during the first half of 2020, except as noted below.

As at June 30, 2020 and December 31, 2019, the Company had Cash and cash equivalents of \$375 million and \$64 million, respectively; Restricted cash and cash equivalents of \$529 million and \$524 million, respectively; and a working capital deficit of \$112 million and \$1,457 million, respectively. There are currently no specific requirements relating to working capital other than in the normal course of business as discussed herein.

The Company expects cash from operations and its various sources of financing to be sufficient to meet its ongoing obligations.

Available financing sources

Shelf prospectus and registration statement

On February 11, 2020, the Company filed a new shelf prospectus with Canadian securities regulators and a registration statement with the United States Securities and Exchange Commission (SEC), pursuant to which CN may issue up to \$6.0 billion of debt securities in the Canadian and U.S. capital markets over the 25 months from the filing date. This shelf prospectus and registration statement replaced CN's previous shelf prospectus and registration statement that expired on March 13, 2020. On May 1, 2020, under its current shelf prospectus and registration statement, the Company issued US\$600 million (\$837 million) 2.45% Notes due 2050 in the U.S. capital markets, which resulted in net proceeds of \$810 million. As at June 30, 2020, the remaining capacity of this shelf prospectus and registration statement was \$5.2 billion. Access to the Canadian and U.S. capital markets under the shelf prospectus and registration statement is dependent on market conditions.

Revolving credit facilities

The Company has a revolving credit facility of \$2.0 billion that consists of a \$1.0 billion tranche maturing on May 5, 2022 and a \$1.0 billion tranche maturing on May 5, 2024. As at June 30, 2020 and December 31, 2019, the Company had no outstanding borrowings under this revolving credit facility.

On March 27, 2020, the Company entered into a \$250 million one year revolving credit facility agreement. The credit facility is available for working capital and general corporate purposes. On May 19, 2020, the Company entered into a supplement to the original agreement to increase the credit facility to \$390 million. As at June 30, 2020, the Company had no outstanding borrowings under this revolving credit facility and there were no draws during the six months ended June 30, 2020.

Management's Discussion and Analysis

Non-revolving credit facility

On July 25, 2019, the Company entered into a US\$300 million, non-revolving term loan credit facility agreement for financing or refinancing the purchase of equipment, which was available to be drawn upon through March 31, 2020. Term loans made under this facility have a tenor of 20 years, bear interest at a variable rate, are repayable in equal quarterly installments, are prepayable at any time without penalty, and are secured by rolling stock. On March 27, 2020, the Company entered into loan supplements to the original agreement for an additional principal amount of US\$310 million, which is available to be drawn through March 31, 2021.

As at June 30, 2020, the Company had outstanding borrowings of US\$296 million (\$402 million), at a weighted-average interest rate of 1.21% and had US\$310 million available under this non-revolving term loan facility. As at December 31, 2019, the Company had no outstanding borrowings and had US\$300 million available under this non-revolving term loan facility.

Commercial paper

The Company's commercial paper programs are backstopped by the Company's revolving credit facility. The maximum aggregate principal amount of commercial paper that could be issued is \$2.0 billion, or the US dollar equivalent, on a combined basis. As at June 30, 2020 and December 31, 2019, the Company had total commercial paper borrowings of US\$510 million (\$692 million) and US\$983 million (\$1,277 million), respectively, at a weighted-average interest rate of 0.77% and 1.77%, respectively, presented in Current portion of long-term debt on the Consolidated Balance Sheets.

Accounts receivable securitization program

The Company has an agreement to sell an undivided co-ownership interest in a revolving pool of accounts receivable to unrelated trusts for maximum cash proceeds of \$450 million. On February 27, 2020, the Company extended the term of its agreement by two years to February 1, 2023. As at June 30, 2020, the Company had no proceeds received under the accounts receivable securitization program. As at December 31, 2019, the Company had accounts receivable securitization borrowings of \$200 million at a weighted-average interest rate of 1.90%, secured by and limited to \$224 million of accounts receivable, presented in Current portion of long-term debt on the Consolidated Balance Sheets.

Bilateral letter of credit facilities

The Company has a series of committed and uncommitted bilateral letter of credit facility agreements. On June 11, 2020, the Company extended the maturity date of certain committed bilateral letter of credit facility agreements to April 28, 2023. As at June 30, 2020, the Company had outstanding letters of credit of \$429 million (\$424 million as at December 31, 2019) under the committed facilities from a total available amount of \$465 million (\$459 million as at December 31, 2019) and \$154 million (\$149 million as at December 31, 2019) under the uncommitted facilities. As at June 30, 2020, included in Restricted cash and cash equivalents was \$432 million (\$429 million as at December 31, 2019) and \$90 million (\$90 million as at December 31, 2019) which were pledged as collateral under the committed and uncommitted bilateral letter of credit facilities, respectively.

Additional information relating to the Company's financing sources is provided in the section entitled *Liquidity and capital resources – Available financing sources* of the Company's 2019 Annual MD&A as well as *Note 10 – Financing activities* to the Company's unaudited Interim Consolidated Financial Statements.

Credit ratings

The Company's long-term debt and commercial paper credit ratings remain unchanged from those described in the section entitled *Liquidity and capital resources – Credit ratings* of the Company's 2019 Annual MD&A.

Management's Discussion and Analysis

Cash flows

<i>In millions</i>	Three months ended June 30			Six months ended June 30		
	2020	2019	Variance	2020	2019	Variance
Net cash provided by operating activities	\$ 1,757	\$ 1,716	\$ 41	\$ 2,937	\$ 2,713	\$ 224
Net cash used in investing activities	(749)	(1,203)	454	(1,356)	(2,081)	725
Net cash used in financing activities	(1,115)	(720)	(395)	(1,266)	(779)	(487)
Effect of foreign exchange fluctuations on cash, cash equivalents, restricted cash, and restricted cash equivalents	(2)	—	(2)	1	—	1
<i>Net increase (decrease) in cash, cash equivalents, restricted cash, and restricted cash equivalents</i>	(109)	(207)	98	316	(147)	463
Cash, cash equivalents, restricted cash, and restricted cash equivalents, beginning of period	1,013	819	194	588	759	(171)
<i>Cash, cash equivalents, restricted cash, and restricted cash equivalents, end of period</i>	\$ 904	\$ 612	\$ 292	\$ 904	\$ 612	\$ 292

Operating activities

Net cash provided by operating activities increased by \$41 million in the second quarter and \$224 million in the first half of 2020 when compared to the same periods in 2019. The increase in the second quarter was mainly due to favorable changes in working capital, partly offset by lower cash earnings. The increase in the first half was mainly due to favorable changes in working capital, partly offset by advance consideration received in 2019 related to a long-term rail freight contract.

Pension contributions

The Company's contributions to its various defined benefit pension plans are made in accordance with the applicable legislation in Canada and the U.S. and such contributions follow minimum and maximum thresholds as determined by actuarial valuations.

Actuarial valuations are generally required on an annual basis for all Canadian defined benefit pension plans, or when deemed appropriate by the Office of the Superintendent of Financial Institutions (OSFI). Actuarial valuations are also required annually for the Company's U.S. qualified defined benefit pension plans. For accounting purposes, the funded status is calculated under GAAP. For funding purposes, the funded status of the Company's Canadian registered defined benefit pension plans is calculated under going concern and solvency scenarios as prescribed under federal pension legislation and is subject to guidance issued by the Canadian Institute of Actuaries and OSFI. The federal pension legislation requires funding deficits to be paid over a number of years. Alternatively, a letter of credit can be subscribed to fulfill solvency deficit payments. The OSFI proposed revisions to its Instruction guide for the Preparation of Actuarial Reports for defined benefit pension plans. If these proposed revisions become final, they would affect the December 31, 2020 actuarial valuations by reducing the solvency status of the Company's defined benefit pension plans, and may negatively impact the Company's pension funding requirements starting in year 2021. The OSFI has temporarily suspended their consultation in light of the COVID-19 pandemic.

The Company's most recently filed actuarial valuations for funding purposes for its Canadian registered defined benefit pension plans conducted as at December 31, 2019 indicated a funding excess on a going concern basis of approximately \$3.5 billion and a funding excess on a solvency basis of approximately \$0.6 billion calculated using the three-year average of the plans' hypothetical wind-up ratio.

Pension contributions for the six months ended June 30, 2020 and 2019 of \$79 million and \$91 million, respectively, primarily represent contributions to the CN Pension Plan, for the current service cost as determined under the Company's applicable actuarial valuations for funding purposes. In 2020, the Company now expects to make total cash contributions of approximately \$120 million for all of its pension plans.

Adverse changes to the assumptions used to calculate the Company's funding status, particularly the discount rate, as well as changes to existing federal pension legislation or regulator guidance could significantly impact the Company's future pension contributions.

Additional information relating to the pension plans is provided in *Note 15 – Pensions and other postretirement benefits* to the Company's 2019 Annual Consolidated Financial Statements.

Management's Discussion and Analysis

Income tax refunds and payments

Net income tax refunds for the six months ended June 30, 2020 were \$11 million compared to net income tax payments of \$491 million for the same period in 2019. The Company does not expect to make any instalment payments in Canada until September 1, 2020 as a result of deferrals of all required current year instalment payments in Canada until September 1, 2020 as permitted under the various COVID-19 pandemic measures announced by the Canadian authorities, and 2019 instalment overpayments applied to the current period. For 2020, the Company's net income tax payments are expected to be approximately \$600 million, and although it reflects the impacts of the CARES Act, it does not include the anticipated refund related to the carryback of U.S. federal net operating losses as it is only expected to be received in early 2021.

Investing activities

Net cash used in investing activities decreased by \$454 million in the second quarter and \$725 million in the first half of 2020 when compared to the same periods in 2019, mainly due to lower property additions. Also contributing to the decrease in the first half of 2020 was the Company's acquisition of TransX in the first quarter of 2019.

Property additions

In millions	Three months ended June 30		Six months ended June 30	
	2020	2019	2020	2019
Track and roadway	\$ 547	\$ 724	\$ 825	\$ 1,007
Rolling stock	62	303	270	761
Buildings	14	13	19	21
Information technology	67	95	136	175
Other	24	47	67	136
Gross property additions	714	1,182	1,317	2,100
Less: Finance leases ⁽¹⁾	—	(1)	—	214
Property additions ⁽²⁾	\$ 714	\$ 1,183	\$ 1,317	\$ 1,886

(1) Includes re-measurement of finance leases.

(2) Includes \$41 million and \$86 million associated with the U.S. federal government legislative PTC implementation in the three and six months ended June 30, 2020 respectively (\$50 million and \$113 million in the three and six months ended June 30, 2019, respectively).

Acquisitions

On December 2, 2019, the Company acquired H&R for a total purchase price of \$105 million, of which \$95 million was paid on the closing date, \$8 million related to funds withheld for the indemnification of claims to be paid within twenty months of the acquisition date, plus \$2 million cash paid since the closing to reflect the settlement of working capital.

The preliminary allocation of the purchase price to the assets acquired and liabilities assumed was performed on the basis of their respective fair values. The Company used a third party to assist in establishing the fair values of the assets acquired and liabilities assumed which resulted in the recognition of identifiable net assets of \$93 million and goodwill of \$12 million. The goodwill acquired through the business combination is mainly attributable to the premium of an established business operation. The Company's purchase price allocation is preliminary and subject to change over the measurement period, which may be up to one year from the acquisition date.

The Company's Consolidated Balance Sheets include the assets and liabilities of H&R as of December 2, 2019, the acquisition date. Since the acquisition date, H&R's results of operations have been included in the Company's results of operations. The Company has not provided pro forma information relating to the pre-acquisition period as it was not material.

On March 20, 2019, the Company acquired TransX. The total purchase price of \$192 million included an initial cash payment of \$170 million, additional consideration of \$25 million paid on August 27, 2019 upon achievement of targets, less an adjustment of \$3 million in the fourth quarter of 2019 to reflect the settlement of working capital.

The allocation of the purchase price to the assets acquired and liabilities assumed was performed on the basis of their respective fair values. The Company used a third party to assist in establishing the fair values of the assets acquired and liabilities assumed which resulted in the recognition of identifiable net assets of \$134 million and goodwill of \$58 million. The goodwill acquired through the business combination is mainly attributable to the premium of an established business operation. The Company's purchase price allocation is now final and no longer subject to change as the measurement period permitted to be up to one year from the acquisition date is closed.

Management's Discussion and Analysis

The Company's Consolidated Balance Sheets include the assets and liabilities of TransX as of March 20, 2019, the acquisition date. Since the acquisition date, TransX's results of operations have been included in the Company's results of operations. The Company has not provided pro forma information relating to the pre-acquisition period as it was not material.

See *Note 3 - Business combinations* to the Company's unaudited Interim Consolidated Financial Statements for additional information.

2020 Capital expenditure program

In light of anticipated lower volumes for the year, the 2020 capital expenditure program was reduced in the first quarter of 2020 by \$0.2 billion, partly offset by approximately \$0.1 billion due to the negative impact of foreign exchange, resulting in a net \$0.1 billion reduction from \$3.0 billion to \$2.9 billion. Additional details of the Company's 2020 capital program are provided in the section entitled *Liquidity and capital resources – Cash flows* of the Company's 2019 Annual MD&A.

Financing activities

Net cash used in financing activities increased by \$395 million in the second quarter and \$487 million in the first half of 2020 when compared to the same periods in 2019. The increase in the second quarter was primarily driven by higher net repayment of commercial paper; partly offset by lower repurchases of common shares and higher net issuance of debt. The increase in the first half was primarily due to higher net repayment of commercial paper and higher net repayment of debt; partly offset by lower repurchases of common shares.

Debt financing activities

Debt financing activities in the first half of 2020 included the following:

- On May 1, 2020, issuance of US\$600 million (\$837 million) 2.45% Notes due 2050 in the U.S. capital markets, which resulted in net proceeds of \$810 million;
- On February 3, 2020, repayment of US\$300 million (\$397 million) 2.40% Notes due 2020 upon maturity;
- On February 3, 2020, issuance of US\$300 million (\$397 million) equipment loan under the non-revolving credit facility;
- Repayment of equipment loan under the non-revolving credit facility of \$5 million in the second quarter;
- Net repayment of commercial paper of \$983 million in the second quarter and \$679 million in the first half;
- Proceeds from the accounts receivable securitization program of \$450 million in the first quarter;
- Repayment of accounts receivable securitization borrowings of \$450 million in the second quarter and \$650 million in the first half;
- Proceeds from borrowings under revolving credit facility agreement of \$100 million in the first quarter;
- Repayment of borrowings under revolving credit facility of \$100 million in the second quarter; and
- Repayment of finance leases of \$19 million in the second quarter and \$28 million in the first half.

Debt financing activities in the first half of 2019 included the following:

- On February 8, 2019, issuance of \$350 million 3.00% Notes due 2029 and \$450 million 3.60% Notes due 2049 in the Canadian capital markets, which resulted in total net proceeds of \$790 million; and
- Net issuance of commercial paper of \$135 million in the second quarter and \$121 million in the first half.

Additional information relating to the Company's outstanding debt securities is provided in *Note 13 – Debt* to the Company's 2019 Annual Consolidated Financial Statements.

Repurchase of common shares

The Company may repurchase its common shares pursuant to a Normal Course Issuer Bid (NCIB) at prevailing market prices plus brokerage fees, or such other prices as may be permitted by the Toronto Stock Exchange. Under its current NCIB, the Company may repurchase up to 16.0 million common shares between February 1, 2020 and January 31, 2021. As at June 30, 2020, the Company had repurchased 2.0 million common shares for \$226 million under its current NCIB.

The Company repurchased 14.1 million common shares under its previous NCIB effective between February 1, 2019 and January 31, 2020, which allowed for the repurchase of up to 22.0 million common shares.

As of March 31, 2020, in light of the uncertain and unprecedented environment, the Company has paused share repurchases.

Management's Discussion and Analysis

The following table provides the information related to the share repurchases for the three and six months ended June 30, 2020 and 2019:

<i>In millions, except per share data</i>	Three months ended June 30		Six months ended June 30	
	2020	2019	2020	2019
Number of common shares repurchased	—	3.6	3.3	7.5
Weighted-average price per share	\$ —	\$ 122.86	\$ 116.97	\$ 116.86
Amount of repurchase ⁽¹⁾	\$ —	\$ 445	\$ 379	\$ 877

(1) Includes settlements in subsequent periods.

Share Trusts

The Company's Employee Benefit Plan Trusts ("Share Trusts") purchase CN's common shares on the open market, which are used to deliver common shares under the Share Units Plan and, beginning in 2019, the Employee Share Investment Plan (ESIP). Shares purchased by the Share Trusts are retained until the Company instructs the trustee to transfer shares to participants of the Share Units Plan or the ESIP. Additional information relating to Share Trusts is provided in *Note 16 – Share capital* to the Company's 2019 Annual Consolidated Financial Statements.

Dividends paid

The Company paid quarterly dividends of \$0.5750 per share amounting to \$408 million and \$817 million in the second quarter and first half of 2020, respectively, compared to \$387 million and \$776 million, respectively, at the quarterly rate of \$0.5375 per share for the same periods in 2019.

Contractual obligations

In the normal course of business, the Company incurs contractual obligations. The following table sets forth the Company's contractual obligations for the following items as at June 30, 2020:

<i>In millions</i>	Total	2020	2021	2022	2023	2024	2025 & thereafter
Debt obligations ⁽¹⁾	\$ 14,052	\$ 706	\$ 802	\$ 349	\$ 214	\$ 487	\$ 11,494
Interest on debt obligations	10,595	279	546	527	511	503	8,229
Finance lease obligations ⁽²⁾	112	34	74	1	—	—	3
Operating lease obligations ⁽³⁾	508	70	113	77	53	38	157
Purchase obligations ⁽⁴⁾	1,245	764	186	128	86	41	40
Other long-term liabilities ⁽⁵⁾	729	71	54	44	42	33	485
Total contractual obligations	\$ 27,241	\$ 1,924	\$ 1,775	\$ 1,126	\$ 906	\$ 1,102	\$ 20,408

(1) Presented net of unamortized discounts and debt issuance costs and excludes finance lease obligations.

(2) Includes \$2 million of imputed interest.

(3) Includes \$70 million related to renewal options reasonably certain to be exercised and \$57 million of imputed interest.

(4) Includes fixed and variable commitments for rail, information technology services and licenses, wheels, engineering services, locomotives, railroad ties, rail cars, as well as other equipment and services. Costs of variable commitments were estimated using forecasted prices and volumes.

(5) Includes expected payments for workers' compensation, postretirement benefits other than pensions, net unrecognized tax benefits, environmental liabilities and pension obligations that have been classified as contractual settlement agreements.

Free cash flow

Management believes that free cash flow is a useful measure of liquidity as it demonstrates the Company's ability to generate cash for debt obligations and for discretionary uses such as payment of dividends, share repurchases, and strategic opportunities. The Company defines its free cash flow measure as the difference between net cash provided by operating activities and net cash used in investing activities, adjusted for the impact of business acquisitions, if any. Free cash flow does not have any standardized meaning prescribed by GAAP and therefore, may not be comparable to similar measures presented by other companies.

Management's Discussion and Analysis

The following table provides a reconciliation of net cash provided by operating activities as reported for the three and six months ended June 30, 2020 and 2019, to free cash flow:

<i>In millions</i>	Three months ended June 30		Six months ended June 30	
	2020	2019	2020	2019
Net cash provided by operating activities	\$ 1,757	\$ 1,716	\$ 2,937	\$ 2,713
Net cash used in investing activities	(749)	(1,203)	(1,356)	(2,081)
Net cash provided before financing activities	1,008	513	1,581	632
Adjustment: Acquisition, net of cash acquired ⁽¹⁾	—	—	—	167
Free cash flow	\$ 1,008	\$ 513	\$ 1,581	\$ 799

(1) Relates to the acquisition of TransX. See the section of this MD&A entitled *Liquidity and capital resources - Investing activities* for additional information.

Adjusted debt-to-adjusted EBITDA multiple

Management believes that the adjusted debt-to-adjusted EBITDA multiple is a useful credit measure because it reflects the Company's ability to service its debt and other long-term obligations. The Company calculates the adjusted debt-to-adjusted EBITDA multiple as adjusted debt divided by adjusted EBITDA. These measures do not have any standardized meaning prescribed by GAAP and therefore, may not be comparable to similar measures presented by other companies.

The following table provides a reconciliation of debt and net income to the adjusted measures presented below, which have been used to calculate the adjusted debt-to-adjusted EBITDA multiple:

<i>In millions, unless otherwise indicated</i>	<i>As at and for the twelve months ended June 30,</i>	
	2020	2019
Debt	\$ 14,162	\$ 13,354
Adjustments:		
Operating lease liabilities, including current portion	451	543
Pension plans in deficiency	523	475
Adjusted debt	\$ 15,136	\$ 14,372
Net income	\$ 3,624	\$ 4,425
Interest expense	554	510
Income tax expense	1,004	1,249
Depreciation and amortization	1,555	1,479
Loss on assets held for sale	486	—
EBITDA	7,223	7,663
Adjustments:		
Other income	(35)	(166)
Other components of net periodic benefit income	(316)	(312)
Operating lease cost	156	202
Adjusted EBITDA	\$ 7,028	\$ 7,387
Adjusted debt-to-adjusted EBITDA multiple (<i>times</i>)	2.15	1.95

All forward-looking statements discussed in this section are subject to risks and uncertainties and are based on assumptions about events and developments that may not materialize or that may be offset entirely or partially by other events and developments. See the section of this MD&A entitled *Forward-looking statements* for a discussion of assumptions and risk factors affecting such forward-looking statements.

Off balance sheet arrangements

Guarantees and indemnifications

In the normal course of business, the Company enters into agreements that may involve providing guarantees or indemnifications to third parties and others, which may extend beyond the term of the agreements. These include, but are not limited to, standby letters of credit, surety and other bonds, and indemnifications that are customary for the type of transaction or for the railway business. As at June 30, 2020, the Company has not recorded a liability with respect to guarantees and indemnifications. Additional information relating to guarantees and indemnifications is provided in *Note 14 - Major commitments and contingencies* to the Company's unaudited Interim Consolidated Financial Statements.

Management's Discussion and Analysis

Outstanding share data

As at July 21, 2020, the Company had 709.9 million common shares and 3.9 million stock options outstanding.

Financial instruments

Risk management

In the normal course of business, the Company is exposed to various risks from its use of financial instruments, such as credit risk, liquidity risk, and market risks which include foreign currency risk, interest rate risk and commodity price risk. A description of these risks and how the Company manages them, is provided in the section entitled *Financial instruments* of the Company's 2019 Annual MD&A.

Derivative financial instruments

As at June 30, 2020, the Company had outstanding foreign exchange forward contracts with a notional value of US\$938 million (US\$1,088 million as at December 31, 2019). For the three and six months ended June 30, 2020, the Company recorded a loss of \$60 million and a gain of \$66 million, respectively, related to foreign exchange forward contracts compared to losses of \$26 million and \$70 million, respectively, for the same periods in 2019. These gains and losses were largely offset by the re-measurement of US dollar-denominated monetary assets and liabilities recorded in Other income.

As at June 30, 2020, the fair value of outstanding foreign exchange forward contracts included in Other current assets and Accounts payable and other was \$8 million and \$28 million, respectively (\$nil and \$24 million, respectively, as at December 31, 2019).

Fair value of financial instruments

As at June 30, 2020, the Company's debt, excluding finance leases, had a carrying amount of \$14,052 million (\$13,662 million as at December 31, 2019) and a fair value of \$16,966 million (\$15,667 million as at December 31, 2019).

Additional information relating to financial instruments is provided in *Note 15 – Financial instruments* to the Company's unaudited Interim Consolidated Financial Statements.

Recent accounting pronouncements and policies

The following recent Accounting Standards Update (ASU) issued by the Financial Accounting Standards Board (FASB) was adopted by the Company during the first half of 2020:

ASU 2016-13 Financial instruments - Credit losses (Topic 326): Measurement of credit losses on financial instruments

The ASU requires financial assets measured at amortized cost to be presented at the net amount expected to be collected. The new standard replaces the current incurred loss impairment methodology with one that reflects expected credit losses.

The Company adopted this standard in the first quarter of 2020 with an effective date of January 1, 2020. The adoption of this standard did not have an impact on the Company's Consolidated Financial Statements, other than for the new disclosure requirements.

The following recent ASU issued by FASB came into effect in the first half of 2020 and has not been adopted by the Company:

ASU 2020-04 Reference rate reform (Topic 848): Facilitation of the effects of reference rate reform on financial reporting

London Interbank Offered Rate (LIBOR) is a benchmark interest rate referenced in a variety of agreements that are used by all types of entities. At the end of 2021, banks will no longer be required to report information that is used to determine LIBOR. As a result, LIBOR could be discontinued. Other interest rates used globally could also be discontinued for similar reasons.

The ASU provides optional expedients and exceptions for applying generally accepted accounting principles to transactions affected by reference rate reform if certain criteria are met. These transactions include contract modifications, hedging relationships, and sale or transfer of debt securities classified as held-to-maturity.

Management's Discussion and Analysis

The provisions of the ASU are effective starting on March 12, 2020; however, they will only be available until December 31, 2022, when the reference rate replacement activity is expected to be completed. The Company may apply the provisions of the ASU as of the beginning of a reporting period when the elections are made, or prospectively from the date within an interim period that includes or is subsequent to March 12, 2020. The Company currently has outstanding loans and finance lease obligations referencing LIBOR totaling approximately US\$350 million that would be affected by the provisions of this ASU. The Company is evaluating the effects that the adoption of the ASU will have on its Consolidated Financial Statements and related disclosures, and whether it will elect to apply any of the optional expedients and exceptions provided in the ASU.

Other recently issued ASUs required to be applied for periods beginning on or after June 30, 2020 have been evaluated by the Company and are not expected to have a significant impact on the Company's Consolidated Financial Statements.

In the first quarter of 2020, the following accounting policy was updated as a result of the adoption of ASU 2016-13 Financial instruments - Credit losses (Topic 326): Measurement of credit losses on financial instruments:

Accounting policy for accounts receivable

Accounts receivable are recorded at cost net of billing adjustments and an allowance for credit losses. The allowance for credit losses is based on relevant information about past events, including historical experience, current conditions, and reasonable and supportable forecasts that affect the collectibility of the reported amount. When a receivable is deemed uncollectible, it is written off against the allowance for credit losses. Subsequent recoveries of amounts previously written off are credited to bad debt expense in Casualty and other in the Consolidated Statements of Income.

In the second quarter of 2020, the following accounting policy was implemented as a result of the Company's decision to market for sale for on-going rail operations, certain non-core lines:

Accounting policy for assets held for sale

Assets that are classified as held for sale are measured at the lower of their carrying amount or fair value less expected selling costs ("estimated selling price") with a loss recognized to the extent that the carrying amount exceeds the estimated selling price. The classification is applicable at the date upon which the sale of assets is probable, and the assets are available for immediate sale in their present condition. The transfer of the assets must also be expected to qualify for recognition as a completed sale within the year following the date of classification.

Assets once classified as held for sale, are not subject to depreciation or amortization and both the assets and any liabilities directly associated with the assets held for sale are classified as current in the Company's Consolidated Balance Sheets.

Subsequent changes to the estimated selling price of assets held for sale are recorded as gains or losses to income wherein the recognition of subsequent gains is limited to the cumulative loss previously recognized.

Critical accounting estimates

The preparation of financial statements in accordance with GAAP requires management to make estimates, judgments and assumptions that affect the reported amounts of revenues, expenses, assets and liabilities, and the disclosure of contingent assets and liabilities at the date of the financial statements. On an ongoing basis, management reviews its estimates based upon available information. Actual results could differ from these estimates. The Company's policies for income taxes, capital expenditures, depreciation, pensions and other postretirement benefits, personal injury and other claims, and environmental matters, require management's more significant judgments and estimates in the preparation of the Company's consolidated financial statements and, as such, are considered to be critical. Reference is made to the section entitled *Critical accounting estimates* of the Company's 2019 Annual MD&A for a detailed description of the Company's critical accounting estimates. There have not been any material changes to these estimates in the first half of 2020, except as disclosed in the section of this MD&A entitled *Strategy overview - Assets held of sale*.

Management discusses the development and selection of the Company's critical accounting policies, including the underlying estimates and assumptions, with the Audit Committee of the Company's Board of Directors. The Audit Committee has reviewed the Company's related disclosures.

Management's Discussion and Analysis

Business risks

In the normal course of business, the Company is exposed to various business risks and uncertainties that can have an effect on the Company's results of operations, financial position, or liquidity. While some exposures may be reduced by the Company's risk management strategies, many risks are driven by external factors beyond the Company's control or are of a nature which cannot be eliminated.

Reference is made to the section entitled *Business risks* of the Company's 2019 Annual MD&A for a detailed description of such key areas of business risks and uncertainties with respect to: Competition, Environmental matters, Personal injury and other legal claims, Labor negotiations, Regulation, Economic conditions, Pension funding volatility, Reliance on technology and related cybersecurity risk, Trade restrictions, Terrorism and international conflicts, Customer credit risk, Liquidity, Supplier concentration, Availability of qualified personnel, Fuel costs, Foreign exchange, Interest rates, Transportation network disruptions, Severe weather and Climate change, which is incorporated herein by reference. Additional risks and uncertainties not currently known to management or that may currently not be considered material by management, could nevertheless also have an adverse effect on the Company's business.

The following are material changes to the risks described in the Company's 2019 Annual MD&A, as well as an update on labor workforce and regulatory matters.

Pandemic risk & economic downturn

Severe disruptions in regional economies and the world economy can be caused by the pandemic outbreak of a contagious illness, such as the current COVID-19 pandemic. The transmission of COVID-19 and efforts to contain its spread have recently resulted in international, national and local border closings, travel restrictions, significant disruptions to business operations, supply chains and customer activity and demand, service cancellations, reductions and other changes, significant challenges in healthcare service preparation and delivery, and quarantines, as well as considerable general concern and uncertainty, all of which have negatively affected the economic environment and may in the future have further and larger impacts. It is not possible to predict what additional measures and restrictions will be imposed by governmental authorities and the period in time during which those measures and restrictions will apply. Prolonged border closings and ensuing economic and supply chain disruptions could further materially affect the Company's financial results and operations. The COVID-19 pandemic could also further and significantly impact freight demand and commodity prices in connection with the ensuing economic downturn, supply shortages, trade disruption, temporary staff shortages, temporary closures of facilities in geographic locations more importantly impacted by the outbreak. The scope and severity of such disruptions and their impact on the Company's financial results and operations have been, and are expected to continue to be material.

Trade restrictions

On March 13, 2020, Canada ratified the United States-Mexico-Canada Agreement (USMCA), the new trade agreement replaces the North American Free Trade Agreement (NAFTA). All three countries have ratified the agreement which came into force on July 1, 2020.

There can be no assurance that the potential outcome of other ongoing trade actions taken by governments and agencies globally will not materially adversely affect the volume of rail shipments and/or revenues from commodities carried by the Company, and thus materially and negatively impact earnings and/or cash flow.

Transportation network disruptions

Due to the integrated nature of the North American freight transportation infrastructure, the Company's operations may be negatively affected by service disruptions of its own network, including illegal blockades, as well as of other transportation links such as ports and other railroads which interchange with the Company. A significant prolonged service disruption of CN's network or one or more of these entities could have an adverse effect on the Company's results of operations, financial position or liquidity. Furthermore, deterioration in the cooperative relationships with the Company's connecting carriers could directly affect the Company's operations.

Labor workforce

As at June 30, 2020, CN employed a total of 15,836 employees in Canada, of which 10,919, or 69%, were unionized employees, and 6,276 employees in the U.S., of which 5,180, or 83%, were unionized employees.

Management's Discussion and Analysis

Regulation

In order to facilitate the continued movement of goods during the COVID-19 pandemic, regulatory agencies in the U.S. and Canada have issued waivers or exemptions to railway companies providing relief from the strict application of some regulations. This relief was provided to facilitate social distancing and other constraints associated with the COVID-19 pandemic that would prevent railways from complying with requirements in a manner consistent with existing provisions. The regulatory agencies have made clear that this relief can only be used when the circumstances do not allow railways to comply and impose on railways requirements to document the circumstances when the relief is used.

Economic regulation - U.S.

The *Passenger Rail Investment and Improvement Act of 2008* (PRIIA) required Amtrak and the Federal Railroad Administration (FRA) of joint authority to promulgate the PRIIA performance standards. The prior metrics were vacated and the arbitration provision in the statute was severed by the U.S. Court of Appeals for the District of Columbia. On March 31, 2020, the FRA proposed metrics for measuring performance. The FRA held a public hearing by way of conference call on April 30, 2020. CN, along with other freight railroads and Association of American Railroads (AAR) submitted comments on June 1, 2020. As part of PRIIA, U.S. Congress authorized the STB to investigate any railroad over whose track Amtrak operates that fails to meet the performance standards under PRIIA and the STB is authorized to assess damages against the host railroad.

In 2019, the STB proposed rules and policy statements and received comments related to the reporting of rail service data, the agency's methodology for determining the rail industry's cost of capital, and rate reasonableness standards, in addition to issuing proposals concerning demurrage and accessorial charges.

On April 30, 2020, the STB adopted a final rule and policy statement relating to demurrage and proposed supplemental rules relating to demurrage invoices.

On June 23, 2020, the STB withdrew its proposal to change its existing methodology for determining the rail industry's cost of capital.

Safety regulation - Canada

On February 7, 2020, the Minister issued an order restricting to speed of trains carrying dangerous goods. On February 16, 2020, the Minister revised the order to take into account the substantial investments made to equip main line tracks with automated signaling technology, on which the vast majority of CN's traffic is handled. The revised order enabled the Company to recover more efficiently from the illegal blockades. The Minister has issued a new Ministerial Order taking effect on April 1, 2020 to replace the order issued on February 16, 2020. This new order applies to trains moving crude oil or liquefied petroleum gas by establishing speed restrictions for non-winter and winter months.

Safety regulation - U.S.

On February 18, 2020, the FRA issued a final rule that requires each Class I railroad and certain shortline railroads to develop a Railroad Risk Reduction Program in a written plan that will be reviewed and approved by the FRA and will be subject to audit. Written plans must be submitted by August 2021. On April 10, 2020, the AAR sought reconsideration from the FRA on certain aspects of the final rule. On May 8, 2020, the FRA denied AAR's request for reconsideration of the implementation deadlines and will respond to two other points in AAR's petition in a separate decision.

PTC is a collision avoidance technology designed to override locomotive controls and prevent train-to-train collisions, overspeed derailments, misaligned switch derailments, and unauthorized incursions onto established work zones. In 2018, the Company completed the milestones required for the extension and the FRA approved the extension for the Company to complete full implementation by December 31, 2020. In the second quarter of 2020, CN continued to progress interoperability testing with tenant railroads. On June 29, 2020, CN submitted its Request for Amendment to the PTC Safety Plan, as per the FRA's request for all Class I railroads. Noncompliance with these or other laws and regulations may subject the Company to fines, penalties and/or service interruptions. The implementation of PTC will result in additional capital expenditures and operating costs. In order to implement PTC, the Company has invested in various information technology applications, including back office systems, aimed to enhance the reliability of PTC operations. If the Company identifies in the future, better or more reliable technology, the Company may consider implementing such technology, which may result in additional costs. PTC may result in reduced operational efficiency and service levels.

No assurance can be given that these and any other current or future regulatory or legislative initiatives by the U.S. federal government and agencies will not materially adversely affect the Company's results of operations or its competitive and financial position.

Management's Discussion and Analysis

Controls and procedures

The Company's Chief Executive Officer and its Chief Financial Officer, after evaluating the effectiveness of the Company's disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) as of June 30, 2020, have concluded that the Company's disclosure controls and procedures were effective.

During the second quarter ended June 30, 2020, there was no change in the Company's internal control over financial reporting that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting.