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2023 QUARTERLY REVIEW SECOND QUARTER

PRESS RELEASE

North America's Railroad

CN Announces Second Quarter Results

Scheduled Operation Delivering Solid Customer Service Despite Challenging External Factors

MONTREAL, July 25, 2023 — CN (TSX: CNR) (NYSE: CNI) today reported its financial and operating results for the second quarter ended June 30, 2023. The Company's focus on scheduled railroading has resulted in year-over-year improvements in car velocity, train speed and through dwell.

"CN's disciplined approach to scheduled railroading continues to deliver for our customers. As volumes evolve, we will continue to refine our plan to optimize efficiency and drive further improvements to customer service. Our goal to accelerate sustainable, profitable growth through 2026 and beyond remains on track."

— Tracy Robinson, President and Chief Executive Officer, CN

Second quarter 2023 compared to second quarter 2022

Financial results highlights

- Revenues of C$4,057 million, a decrease of C$287 million, or 7%.
- Operating income of C$1,600 million, a decrease of C$169 million, or 10%.
- Operating ratio, defined as operating expenses as a percentage of revenues, of 60.6%, an increase of 1.3-points, or an increase of 1.6-points on an adjusted basis. (1)
- Diluted EPS of C$1.76, a decrease of 8%, or a decrease of 9% compared to second quarter 2022 adjusted EPS. (1)
- Free cash flow for the second quarter of 2023 was C$1,100 million, an increase of C$103 million, or 10%. (1)
- Free cash flow for the first half of 2023 was C$1,693 million, an increase of C$125 million, or 8%. (1)

Operating performance

- Injury frequency rate of 1.00 (per 200,000 person hours), an improvement of 17% and accident rate of 1.91 (per million train miles), a deterioration of 5%. (3)
- Through dwell of 6.8 (entire railroad, hours), an improvement of 6%.
- Car velocity of 216 (car miles per day), an improvement of 3%.
- Through network train speed of 19.9 (mph), an improvement of 3%.
- Fuel efficiency of 0.888 (US gallons of locomotive fuel consumed per 1,000 gross ton miles (GTMs)), 6% less efficient.
- Train length of 7,934 (feet), a decrease of 6%.
- Revenue ton miles (RTMs) of 55,877 (million), a decrease of 8%.

Updated 2023 financial outlook (2)

In light of CN's second quarter results and revised expectation of weaker than anticipated volumes in the second half of 2023, CN is updating its full-year outlook and now expects flat to slightly negative year-over-year growth in adjusted diluted EPS in 2023 (compared to the April 24, 2023 expectation of growth in the mid-single digits). CN reiterates its longer-term financial perspective and continues to target compounded annual diluted EPS growth in the range of 10%-15% over the 2024-2026 period driven by growing volumes more than the economy, pricing above rail inflation and incrementally improving efficiency, all of which assumes a supportive economy.(2)

Second quarter 2023 revenues, traffic volumes and expenses

Revenues for the second quarter of 2023 were C$4,057 million compared to C$4,344 million for the same period in 2022. The decrease of C$287 million, or 7%, was mainly due to lower volumes of intermodal, crude oil, U.S. grain exports and forest products, primarily as a result of lower demand for freight services to move consumer goods and customer outages caused by Canadian wildfires, lower ancillary services including container storage and lower fuel surcharge revenues as a result of lower fuel prices; partly offset by freight rate increases, the positive translation impact of a weaker Canadian dollar and higher export volumes of Canadian grain.

Operating expenses for the second quarter of 2023 were C$2,457 million compared to C$2,575 million for the same period in 2022. The decrease of C$118 million, or 5%, was mainly due to lower fuel prices; partly offset by higher labor and fringe benefits expense mainly driven by higher average headcount and general wage increases and the negative translation impact of a weaker Canadian dollar.

(1) Non-GAAP Measures
CN reports its financial results in accordance with United States generally accepted accounting principles (GAAP). CN uses non-GAAP measures in this news release that do not have any standardized meaning prescribed by GAAP, including adjusted net income, adjusted earnings per share (EPS), adjusted operating income and adjusted operating ratio (referred to as adjusted performance measures) and free cash flow. These non-GAAP measures may not be comparable to similar measures presented by other companies. For further details of these non-GAAP measures, including a reconciliation to the most directly comparable GAAP financial measures, refer to the attached supplementary schedule, Non-GAAP Measures.

CN's full-year adjusted diluted EPS outlook (2) excludes certain adjustments, which are expected to be comparable to adjustments made in prior years. However, management cannot individually quantify on a forward-looking basis the impact of these adjustments on its adjusted diluted EPS because these items, which could be significant, are difficult to predict and may be highly variable. As a result, CN does not provide a corresponding GAAP measure for, or reconciliation to, its adjusted diluted EPS outlook.

(2) Forward-Looking Statements
Certain statements included in this news release constitute "forward-looking statements" within the meaning of the *United States Private Securities Litigation Reform Act of 1995* and under Canadian securities laws, including statements based on management's assessment and assumptions and publicly available information with respect to CN. By their nature, forward-looking statements involve risks, uncertainties and assumptions. CN 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 may be identified by the use of terminology such as "believes," "expects," "anticipates," "assumes," "outlook," "plans," "targets", or other similar words.

2023 key assumptions
CN has made a number of economic and market assumptions in preparing its 2023 outlook. The Company continues to assume negative North American industrial production in 2023. The Company now assumes that the 2023/2024 grain crop in Canada will be below its three-year average (excluding the significantly lower 2021/2022 crop year) and the U.S. grain crop will be above its three-year average (compared to the April 24, 2023 assumption that the 2023/2024 grain crops in Canada and the U.S. will be in line with their respective three-year averages (excluding the significantly lower 2021/2022 crop year in Canada)). CN continues to assume pricing above rail inflation upon contract renewals. CN also continues to assume that in 2023, the value of the Canadian dollar in U.S. currency will be approximately $0.75, and now assumes the average price of crude oil (West Texas Intermediate) will be approximately US$75 per barrel (compared to the April 24, 2023 assumption of being approximately US$80 per barrel). Additionally, CN now also assumes that in 2023 there will be no further significant impact from Canadian wildfires.

2024-2026 key assumptions
CN has made a number of economic and market assumptions in preparing its three-year financial perspective. CN assumes that the North American industrial production will increase by at least two percent CAGR over the next three years. CN assumes continued pricing above rail inflation. CN assumes that the value of the Canadian dollar in U.S. currency will be approximately $0.75 and that the average price of crude oil (West Texas Intermediate) will be approximately US$80 per barrel during this period.

Forward-looking statements are not guarantees of future performance and involve risks, uncertainties and other factors which may cause actual results, performance or achievements of CN to be materially different from the outlook or any future results, performance or achievements 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 in this news release include, but are not limited to, general economic and business conditions, including factors impacting global supply chains such as pandemics and geopolitical conflicts and tensions; 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 United States. Reference should also be made to Management's Discussion and Analysis (MD&A) in CN's annual and interim reports, Annual Information Form and Form 40-F, filed with Canadian and U.S. securities regulators and available on CN's website, for a description of major risk factors relating to CN.

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. Information contained on, or accessible through, our website is not part of this news release.

(3) Based on Federal Railroad Administration (FRA) reporting criteria.

This earnings news release, as well as additional information, including the Financial Statements, Notes thereto and MD&A, is contained in CN's Quarterly Review available on the Company's website at www.cn.ca/financial-results and on SEDAR+ at www.sedarplus.com as well as on the U.S. Securities and Exchange Commission's website at www.sec.gov through EDGAR.

About CN

CN is a world-class transportation leader and trade-enabler. Essential to the economy, to the customers, and to the communities it serves, CN safely transports more than 300 million tons of natural resources, manufactured products, and finished goods throughout North America every year. CN's network connects Canada's Eastern and Western coasts with the U.S. South through a 18,600-mile rail network, CN and its affiliates have been contributing to community prosperity and sustainable trade since 1919. CN is committed to programs supporting social responsibility and environmental stewardship.

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SELECTED RAILROAD STATISTICS – UNAUDITED

	Three months ended June 30		Six months ended June 30	
	2023	2022	**2023**	2022
Financial measures				
Key financial performance indicators (1)				
Total revenues *($ millions)*	**4,057**	4,344	**8,370**	8,052
Freight revenues *($ millions)*	**3,894**	4,195	**8,113**	7,803
Operating income *($ millions)*	**1,600**	1,769	**3,262**	2,996
Adjusted operating income *($ millions)* (2)(3)	**1,600**	1,781	**3,262**	3,018
Net income *($ millions)*	**1,167**	1,325	**2,387**	2,243
Adjusted net income *($ millions)* (2)(3)	**1,167**	1,334	**2,387**	2,259
Diluted earnings per share *($)*	**1.76**	1.92	**3.58**	3.22
Adjusted diluted earnings per share *($)* (2)(3)	**1.76**	1.93	**3.58**	3.25
Free cash flow *($ millions)* (2)(4)	**1,100**	997	**1,693**	1,568
Gross property additions *($ millions)*	**875**	707	**1,336**	1,086
Share repurchases *($ millions)*	**1,043**	1,173	**2,242**	2,466
Dividends per share *($)*	**0.7900**	0.7325	**1.5800**	1.4650
Financial ratio				
Operating ratio *(%)* (5)	**60.6**	59.3	**61.0**	62.8
Adjusted operating ratio *(%)* (2)(3)	**60.6**	59.0	**61.0**	62.5
Operational measures (6)				
Statistical operating data				
Gross ton miles (GTMs) *(millions)*	**109,693**	120,742	**225,135**	231,808
Revenue ton miles (RTMs) *(millions)*	**55,877**	60,551	**115,838**	117,105
Carloads *(thousands)*	**1,369**	1,474	**2,722**	2,820
Route miles *(includes Canada and the U.S.)*	**18,600**	18,600	**18,600**	18,600
Employees *(end of period)*	**25,178**	22,783	**25,178**	22,783
Employees *(average for the period)*	**25,005**	23,137	**24,704**	22,928
Key operating measures				
Freight revenue per RTM *(cents)*	**6.97**	6.93	**7.00**	6.66
Freight revenue per carload *($)*	**2,844**	2,846	**2,981**	2,767
GTMs per average number of employees *(thousands)*	**4,387**	5,219	**9,113**	10,110
Operating expenses per GTM *(cents)*	**2.24**	2.13	**2.27**	2.18
Labor and fringe benefits expense per GTM *(cents)*	**0.68**	0.56	**0.69**	0.62
Diesel fuel consumed *(US gallons in millions)*	**97.4**	101.2	**201.5**	202.3
Average fuel price *($ per US gallon)*	**4.24**	5.82	**4.52**	5.12
Fuel efficiency *(US gallons of locomotive fuel consumed per 1,000 GTMs)*	**0.888**	0.838	**0.895**	0.873
Train weight *(tons)*	**9,062**	9,512	**9,099**	9,478
Train length *(feet)*	**7,934**	8,427	**7,843**	8,320
Car velocity *(car miles per day)*	**216**	209	**213**	185
Through dwell *(entire railroad, hours)*	**6.8**	7.2	**6.9**	8.1
Through network train speed *(miles per hour)*	**19.9**	19.3	**20.0**	18.0
Locomotive utilization *(trailing GTMs per total horsepower)*	**189**	203	**192**	195
Safety indicators (7)				
Injury frequency rate *(per 200,000 person hours)*	**1.00**	1.21	**0.98**	1.22
Accident rate *(per million train miles)*	**1.91**	1.82	**1.69**	2.31

(1) Amounts expressed in Canadian dollars and prepared in accordance with United States generally accepted accounting principles (GAAP), unless otherwise noted.

(2) These non-GAAP measures do not have any standardized meaning prescribed by GAAP and therefore, may not be comparable to similar measures presented by other companies.

(3) See the supplementary schedule entitled *Non-GAAP Measures – Adjusted performance measures* for an explanation of these non-GAAP measures.

(4) See the supplementary schedule entitled *Non-GAAP Measures – Free cash flow* for an explanation of this non-GAAP measure.

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

(6) Statistical operating data, key operating measures and safety indicators are unaudited and based on estimated data available at such time and are subject to change as more complete information becomes available. Definitions of gross ton miles, revenue ton miles, freight revenue per RTM, fuel efficiency, train weight, train length, car velocity, through dwell and through network train speed are included within the Company's Management's Discussion and Analysis. Definitions of all other indicators are provided on CN's website, www.cn.ca/glossary.

(7) Based on Federal Railroad Administration (FRA) reporting criteria.

SUPPLEMENTARY INFORMATION – UNAUDITED

	Three months ended June 30				Six months ended June 30			
	2023	2022	% Change Fav (Unfav)	% Change at constant currency (1) Fav (Unfav)	**2023**	2022	% Change Fav (Unfav)	% Change at constant currency (1) Fav (Unfav)
Revenues *($ millions)* (2)								
Petroleum and chemicals	**748**	829	(10%)	(13%)	**1,576**	1,585	(1%)	(4%)
Metals and minerals	**497**	466	7%	3%	**1,026**	872	18%	12%
Forest products	**480**	513	(6%)	(10%)	**991**	939	6%	1%
Coal	**263**	249	6%	4%	**526**	444	18%	16%
Grain and fertilizers	**688**	604	14%	11%	**1,549**	1,208	28%	24%
Intermodal	**983**	1,326	(26%)	(27%)	**1,995**	2,382	(16%)	(18%)
Automotive	**235**	208	13%	9%	**450**	373	21%	16%
Total freight revenues	**3,894**	4,195	(7%)	(10%)	**8,113**	7,803	4%	1%
Other revenues	**163**	149	9%	5%	**257**	249	3%	—%
Total revenues	**4,057**	4,344	(7%)	(9%)	**8,370**	8,052	4%	1%
Revenue ton miles (RTMs) *(millions)* (3)								
Petroleum and chemicals	**10,426**	12,330	(15%)	(15%)	**21,445**	23,889	(10%)	(10%)
Metals and minerals	**6,740**	7,149	(6%)	(6%)	**13,828**	13,412	3%	3%
Forest products	**5,754**	6,650	(13%)	(13%)	**11,810**	12,469	(5%)	(5%)
Coal	**5,965**	6,127	(3%)	(3%)	**11,813**	11,495	3%	3%
Grain and fertilizers	**13,592**	12,453	9%	9%	**30,610**	25,804	19%	19%
Intermodal	**12,611**	15,070	(16%)	(16%)	**24,870**	28,626	(13%)	(13%)
Automotive	**789**	772	2%	2%	**1,462**	1,410	4%	4%
Total RTMs	**55,877**	60,551	(8%)	(8%)	**115,838**	117,105	(1%)	(1%)
Freight revenue / RTM *(cents)* (2)(3)								
Petroleum and chemicals	**7.17**	6.72	7%	3%	**7.35**	6.63	11%	7%
Metals and minerals	**7.37**	6.52	13%	9%	**7.42**	6.50	14%	9%
Forest products	**8.34**	7.71	8%	4%	**8.39**	7.53	11%	7%
Coal	**4.41**	4.06	9%	7%	**4.45**	3.86	15%	13%
Grain and fertilizers	**5.06**	4.85	4%	1%	**5.06**	4.68	8%	5%
Intermodal	**7.79**	8.80	(11%)	(13%)	**8.02**	8.32	(4%)	(5%)
Automotive	**29.78**	26.94	11%	7%	**30.78**	26.45	16%	11%
Total freight revenue / RTM	**6.97**	6.93	1%	(2%)	**7.00**	6.66	5%	2%
Carloads *(thousands)* (3)								
Petroleum and chemicals	**151**	162	(7%)	(7%)	**312**	321	(3%)	(3%)
Metals and minerals	**248**	236	5%	5%	**485**	445	9%	9%
Forest products	**77**	86	(10%)	(10%)	**158**	164	(4%)	(4%)
Coal	**132**	129	2%	2%	**262**	247	6%	6%
Grain and fertilizers	**152**	142	7%	7%	**330**	287	15%	15%
Intermodal	**550**	664	(17%)	(17%)	**1,062**	1,253	(15%)	(15%)
Automotive	**59**	55	7%	7%	**113**	103	10%	10%
Total carloads	**1,369**	1,474	(7%)	(7%)	**2,722**	2,820	(3%)	(3%)
Freight revenue / carload *($)* (2)(3)								
Petroleum and chemicals	**4,954**	5,117	(3%)	(6%)	**5,051**	4,938	2%	(1%)
Metals and minerals	**2,004**	1,975	1%	(2%)	**2,115**	1,960	8%	3%
Forest products	**6,234**	5,965	5%	1%	**6,272**	5,726	10%	5%
Coal	**1,992**	1,930	3%	1%	**2,008**	1,798	12%	9%
Grain and fertilizers	**4,526**	4,254	6%	3%	**4,694**	4,209	12%	8%
Intermodal	**1,787**	1,997	(11%)	(12%)	**1,879**	1,901	(1%)	(3%)
Automotive	**3,983**	3,782	5%	2%	**3,982**	3,621	10%	5%
Total freight revenue / carload	**2,844**	2,846	—%	(3%)	**2,981**	2,767	8%	4%

(1) This non-GAAP measure does not have any standardized meaning prescribed by GAAP and therefore, may not be comparable to similar measures presented by other companies. See the supplementary schedule entitled *Non-GAAP Measures – Constant currency* for an explanation of this non-GAAP measure.

(2) Amounts expressed in Canadian dollars.

(3) Statistical operating data and related key operating measures are unaudited and based on estimated data available at such time and are subject to change as more complete information becomes available.

NON-GAAP MEASURES – UNAUDITED

In this supplementary schedule, the "Company" or "CN" refers to Canadian National Railway Company, together with its wholly-owned subsidiaries. Financial information included in this schedule is expressed in Canadian dollars, unless otherwise noted.

CN reports its financial results in accordance with United States generally accepted accounting principles (GAAP). The Company also uses non-GAAP measures that do not have any standardized meaning prescribed by GAAP, including adjusted performance measures, free cash flow, constant currency and adjusted debt-to-adjusted EBITDA multiple. These non-GAAP measures 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.

Adjusted performance measures

Adjusted net income, adjusted earnings per share, adjusted operating income, adjusted operating expenses and adjusted operating ratio are non-GAAP measures that are used to set performance goals and to measure CN's performance. Management believes that these adjusted performance measures provide additional insight to management and investors into the Company's operations and underlying business trends as well as facilitate period-to-period comparisons, as they exclude certain significant items that are not reflective of CN's underlying business operations and could distort the analysis of trends in business performance. These items may include:

i. operating expense adjustments: workforce reduction program, depreciation expense on the deployment of replacement system, advisory fees related to shareholder matters, losses and recoveries from assets held for sale, business acquisition-related costs;
ii. non-operating expense adjustments: business acquisition-related financing fees, merger termination income, gains and losses on disposal of property; and
iii. the effect of tax law changes and rate enactments.

These non-GAAP 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, 2023, the Company's net income was $1,167 million, or $1.76 per diluted share, and $2,387 million, or $3.58 per diluted share, respectively. There were no adjustments in the second quarter and the first half of 2023.

For the three and six months ended June 30, 2022, the Company's adjusted net income was $1,334 million, or $1.93 per diluted share, and $2,259 million, or $3.25 per diluted share, respectively. The adjusted figures for the three and six months ended June 30, 2022 exclude advisory fees related to shareholder matters of $12 million, or $9 million after-tax ($0.01 per diluted share), and $22 million, or $16 million after-tax ($0.03 per diluted share), respectively, recorded in Casualty and other within the Consolidated Statements of Income.

Adjusted net income is defined as Net income in accordance with GAAP adjusted for certain significant items. Adjusted diluted earnings per share is defined as adjusted net income divided by the weighted-average diluted shares outstanding. The following table provides a reconciliation of Net income and Earnings per share in accordance with GAAP, as reported for the three and six months ended June 30, 2023 and 2022, to the non-GAAP adjusted performance measures presented herein:

	Three months ended June 30		Six months ended June 30	
In millions, except per share data	**2023**	2022	**2023**	2022
Net income	**$ 1,167**	$ 1,325	**$ 2,387**	$ 2,243
Adjustments:				
Advisory fees related to shareholder matters	**—**	12	**—**	22
Tax effect of adjustments (1)	**—**	(3)	**—**	(6)
Total adjustments	**—**	9	**—**	16
Adjusted net income	**$ 1,167**	$ 1,334	**$ 2,387**	$ 2,259
Diluted earnings per share	**$ 1.76**	$ 1.92	**$ 3.58**	$ 3.22
Impact of adjustments, per share	**—**	0.01	**—**	0.03
Adjusted diluted earnings per share	**$ 1.76**	$ 1.93	**$ 3.58**	$ 3.25

(1) The tax impact of adjustments is based on the nature of the item for tax purposes and related tax rates in the applicable jurisdiction.

NON-GAAP MEASURES – UNAUDITED

Adjusted operating income is defined as Operating income in accordance with GAAP adjusted for certain significant operating expense items. Adjusted operating expenses is defined as Operating expenses in accordance with GAAP adjusted for certain significant operating expense items. Adjusted operating ratio is defined as adjusted operating expenses as a percentage of revenues. The following table provides a reconciliation of Operating income, Operating expenses and operating ratio, as reported for the three and six months ended June 30, 2023 and 2022, to the non-GAAP adjusted performance measures presented herein:

	Three months ended June 30		Six months ended June 30	
In millions, except percentages	**2023**	2022	**2023**	2022
Operating income	**$ 1,600**	$ 1,769	**$ 3,262**	$ 2,996
Adjustment:				
Advisory fees related to shareholder matters	**—**	12	**—**	22
Total adjustment	**—**	12	**—**	22
Adjusted operating income	**$ 1,600**	$ 1,781	**$ 3,262**	$ 3,018
Operating expenses	**$ 2,457**	$ 2,575	**$ 5,108**	$ 5,056
Total adjustment	**—**	(12)	**—**	(22)
Adjusted operating expenses	**$ 2,457**	$ 2,563	**$ 5,108**	$ 5,034
Operating ratio	**60.6 %**	59.3 %	**61.0 %**	62.8 %
Impact of adjustment	**— %**	(0.3)%	**— %**	(0.3)%
Adjusted operating ratio	**60.6 %**	59.0 %	**61.0 %**	62.5 %

Free cash flow

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 (i) business acquisitions and (ii) merger transaction-related payments, cash receipts and cash income taxes, which are items that are not indicative of operating trends. 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.

The following table provides a reconciliation of Net cash provided by operating activities in accordance with GAAP, as reported for the three and six months ended June 30, 2023 and 2022, to the non-GAAP free cash flow presented herein:

	Three months ended June 30		Six months ended June 30	
In millions	**2023**	2022	**2023**	2022
Net cash provided by operating activities	**$ 1,985**	$ 1,713	**$ 3,040**	$ 2,283
Net cash used in investing activities	**(885)**	(716)	**(1,347)**	(817)
Net cash provided before financing activities	**1,100**	997	**1,693**	1,466
Adjustment:				
Cash income taxes for merger transaction-related payments and cash receipts (1)	**—**	—	**—**	102
Free cash flow	**$ 1,100**	$ 997	**$ 1,693**	$ 1,568

(1) Relates to income tax payments of $102 million for KCS merger transaction-related payments and cash receipts. See *Note 4 – Acquisition* to the Company's 2022 Annual Consolidated Financial Statements for additional information.

NON-GAAP MEASURES – UNAUDITED

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 weighted average foreign exchange rates used to translate transactions denominated in US dollars of the comparable period of the prior year.

The average foreign exchange rates were $1.34 and $1.35 per US$1.00 for the three and six months ended June 30, 2023, respectively, and $1.28 and $1.27 per US$1.00 for the three and six months ended June 30, 2022, respectively. On a constant currency basis, the Company's net income for the three and six months ended June 30, 2023 would have been lower by $34 million ($0.05 per diluted share) and $76 million ($0.11 per diluted share), respectively.

The following table provides a reconciliation of the impact of constant currency and related percentage change at constant currency on the financial results, as reported for the three and six months ended June 30, 2023:

	Three months ended June 30				Six months ended June 30			
In millions, except per share data	**2023**	Constant currency impact	2022	% Change at constant currency Fav (Unfav)	**2023**	Constant currency impact	2022	% Change at constant currency Fav (Unfav)
Revenues								
Petroleum and chemicals	**$ 748**	$ (23)	$ 829	(13%)	**$ 1,576**	$ (56)	$ 1,585	(4%)
Metals and minerals	**497**	(19)	466	3%	**1,026**	(47)	872	12%
Forest products	**480**	(18)	513	(10%)	**991**	(43)	939	1%
Coal	**263**	(5)	249	4%	**526**	(11)	444	16%
Grain and fertilizers	**688**	(19)	604	11%	**1,549**	(46)	1,208	24%
Intermodal	**983**	(17)	1,326	(27%)	**1,995**	(38)	2,382	(18%)
Automotive	**235**	(8)	208	9%	**450**	(19)	373	16%
Total freight revenues	**3,894**	(109)	4,195	(10%)	**8,113**	(260)	7,803	1%
Other revenues	**163**	(6)	149	5%	**257**	(9)	249	—%
Total revenues	**4,057**	(115)	4,344	(9%)	**8,370**	(269)	8,052	1%
Operating expenses								
Labor and fringe benefits	**747**	(13)	681	(8%)	**1,559**	(33)	1,434	(6%)
Purchased services and material	**571**	(10)	557	(1%)	**1,164**	(23)	1,095	(4%)
Fuel	**485**	(23)	672	31%	**1,042**	(55)	1,197	18%
Depreciation and amortization	**449**	(9)	423	(4%)	**897**	(20)	843	(4%)
Equipment rents	**83**	(3)	87	8%	**173**	(8)	182	9%
Casualty and other	**122**	(4)	155	24%	**273**	(11)	305	14%
Total operating expenses	**2,457**	(62)	2,575	7%	**5,108**	(150)	5,056	2%
Operating income	**1,600**	(53)	1,769	(13%)	**3,262**	(119)	2,996	5%
Interest expense	**(173)**	8	(128)	(29%)	**(338)**	18	(254)	(26%)
Other components of net periodic benefit income	**120**	—	124	(3%)	**239**	—	249	(4%)
Other income (loss)	**1**	—	(10)	110%	**2**	—	(24)	108%
Income before income taxes	**1,548**	(45)	1,755	(14%)	**3,165**	(101)	2,967	3%
Income tax expense	**(381)**	11	(430)	14%	**(778)**	25	(724)	(4%)
Net income	**$ 1,167**	$ (34)	$ 1,325	(14%)	**$ 2,387**	$ (76)	$ 2,243	3%
Diluted earnings per share	**$ 1.76**	$ (0.05)	$ 1.92	(11%)	**$ 3.58**	$ (0.11)	$ 3.22	8%

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 the last twelve months of adjusted EBITDA. Adjusted debt is defined as the sum of Long-term debt and Current portion of long-term debt as reported on the Company's Consolidated Balance Sheets as well as Operating lease liabilities, including current portion and pension plans in deficiency recognized on the Company's Consolidated Balance Sheets due to the debt-like nature of their contractual and financial obligations. Adjusted EBITDA is calculated as Net income excluding Interest expense, Income tax expense, Depreciation and amortization, operating lease cost, Other components of net periodic benefit income, Other income (loss), and other significant items that are not reflective of CN's underlying business operations and which could distort the analysis of trends in business performance. Adjusted debt and adjusted EBITDA are non-GAAP measures used to compute the Adjusted debt-to-adjusted EBITDA multiple. 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 in accordance with GAAP, reported as at and for the twelve months ended June 30, 2023 and 2022, to the adjusted measures presented herein, which have been used to calculate the non-GAAP adjusted debt-to-adjusted EBITDA multiple:

In millions, unless otherwise indicated	*As at and for the twelve months ended June 30,*	**2023**		2022
Debt	**$**	**16,938**	$	14,372
Adjustments:				
Operating lease liabilities, including current portion (1)		**410**		419
Pension plans in deficiency (2)		**350**		443
Adjusted debt	**$**	**17,698**	$	15,234
Net income	**$**	**5,262**	$	5,130
Interest expense		**632**		576
Income tax expense		**1,699**		1,512
Depreciation and amortization		**1,783**		1,631
Operating lease cost (3)		**147**		135
Other components of net periodic benefit income		**(488)**		(459)
Other loss		**1**		30
Adjustments:				
Workforce reduction program (4)		**—**		39
Advisory fees related to shareholder matters (5)		**—**		42
Transaction-related costs (6)		**—**		84
Merger termination fee (6)		**—**		(886)
Adjusted EBITDA	**$**	**9,036**	$	7,834
Adjusted debt-to-adjusted EBITDA multiple *(times)*		**1.96**		1.94

(1) Represents the present value of operating lease payments.

(2) Represents the total funded deficit of all defined benefit pension plans with a projected benefit obligation in excess of plan assets.

(3) Represents the operating lease costs recorded in Purchased services and material and Equipment rents within the Consolidated Statements of Income.

(4) Relates to employee termination benefits and severance costs related to a workforce reduction program. See the section entitled *Adjusted performance measures* of the Company's 2022 Annual MD&A for additional information.

(5) Relates to advisory fees related to shareholder matters recorded in Casualty and other within the Consolidated Statements of Income. See the section entitled *Adjusted performance measures* of the Company's 2022 Annual MD&A for additional information.

(6) Relates to the terminated CN Merger Agreement. See *Note 4 – Acquisition* to the Company's 2022 Annual Consolidated Financial Statements and the section entitled *Adjusted performance measures* of the Company's 2022 Annual MD&A for additional information.

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CONSOLIDATED STATEMENTS OF INCOME – UNAUDITED

In millions, except per share data	Three months ended June 30 2023	Three months ended June 30 2022	Six months ended June 30 2023	Six months ended June 30 2022
Revenues *(Note 3)*	**$ 4,057**	$ 4,344	**$ 8,370**	$ 8,052
Operating expenses				
Labor and fringe benefits	**747**	681	**1,559**	1,434
Purchased services and material	**571**	557	**1,164**	1,095
Fuel	**485**	672	**1,042**	1,197
Depreciation and amortization	**449**	423	**897**	843
Equipment rents	**83**	87	**173**	182
Casualty and other	**122**	155	**273**	305
Total operating expenses	**2,457**	2,575	**5,108**	5,056
Operating income	**1,600**	1,769	**3,262**	2,996
Interest expense	**(173)**	(128)	**(338)**	(254)
Other components of net periodic benefit income *(Note 4)*	**120**	124	**239**	249
Other income (loss)	**1**	(10)	**2**	(24)
Income before income taxes	**1,548**	1,755	**3,165**	2,967
Income tax expense	**(381)**	(430)	**(778)**	(724)
Net income	**$ 1,167**	$ 1,325	**$ 2,387**	$ 2,243
Earnings per share *(Note 5)*				
Basic	**$ 1.76**	$ 1.92	**$ 3.59**	$ 3.23
Diluted	**$ 1.76**	$ 1.92	**$ 3.58**	$ 3.22
Weighted-average number of shares *(Note 5)*				
Basic	**661.6**	690.0	**665.0**	694.2
Diluted	**663.1**	691.7	**666.5**	696.0
Dividends declared per share	**$ 0.7900**	$ 0.7325	**$ 1.5800**	$ 1.4650

See accompanying Notes to Interim Consolidated Financial Statements.

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME – UNAUDITED

In millions	Three months ended June 30 2023	Three months ended June 30 2022	Six months ended June 30 2023	Six months ended June 30 2022
Net income	**$ 1,167**	$ 1,325	**$ 2,387**	$ 2,243
Other comprehensive income (loss) *(Note 8)*				
Net gain (loss) on foreign currency translation	**(77)**	156	**(87)**	101
Net change in pension and other postretirement benefit plans *(Note 4)*	**(2)**	69	**(2)**	109
Derivative instruments (*Note 10*)	**21**	25	**18**	25
Other comprehensive income (loss) before income taxes	**(58)**	250	**(71)**	235
Income tax recovery (expense)	**(35)**	11	**(39)**	(13)
Other comprehensive income (loss)	**(93)**	261	**(110)**	222
Comprehensive income	**$ 1,074**	$ 1,586	**$ 2,277**	$ 2,465

See accompanying Notes to Interim Consolidated Financial Statements.

CONSOLIDATED BALANCE SHEETS – UNAUDITED

In millions	*As at*	**June 30 2023**	December 31 2022
Assets			
Current assets			
Cash and cash equivalents		**$ 539**	$ 328
Restricted cash and cash equivalents *(Note 6)*		**451**	506
Accounts receivable		**1,223**	1,371
Material and supplies		**757**	692
Other current assets		**296**	320
Total current assets		**3,266**	3,217
Properties		**43,546**	43,537
Operating lease right-of-use assets		**416**	470
Pension asset		**3,245**	3,033
Intangible assets, goodwill and other		**403**	405
Total assets		**$ 50,876**	$ 50,662
Liabilities and shareholders' equity			
Current liabilities			
Accounts payable and other		**$ 2,394**	$ 2,785
Current portion of long-term debt		**1,107**	1,057
Total current liabilities		**3,501**	3,842
Deferred income taxes		**9,910**	9,796
Other liabilities and deferred credits		**461**	441
Pension and other postretirement benefits		**480**	486
Long-term debt		**15,831**	14,372
Operating lease liabilities		**295**	341
Total liabilities		**30,478**	29,278
Shareholders' equity			
Common shares		**3,573**	3,613
Common shares in Share Trusts		**(142)**	(170)
Additional paid-in capital		**369**	381
Accumulated other comprehensive loss *(Note 8)*		**(2,079)**	(1,969)
Retained earnings		**18,677**	19,529
Total shareholders' equity		**20,398**	21,384
Total liabilities and shareholders' equity		**$ 50,876**	$ 50,662

See accompanying Notes to Interim Consolidated Financial Statements.

CONSOLIDATED STATEMENTS OF CHANGES IN SHAREHOLDERS' EQUITY - UNAUDITED

In millions	Number of common shares Outstanding	Share Trusts	Common shares	Common shares in Share Trusts	Additional paid-in capital	Accumulated other comprehensive loss	Retained earnings	Total shareholders' equity
Balance at March 31, 2023	664.0	1.1	$ 3,589	$ (141)	$ 360	$ (1,986)	$ 19,037	$ 20,859
Net income							1,167	1,167
Stock options exercised	0.1		20		(2)			18
Settlement of equity settled awards	—	—		6	(11)		2	(3)
Stock-based compensation and other					22		(1)	21
Repurchase of common shares *(Note 6)*	(6.6)		(36)				(1,007)	(1,043)
Share purchases by Share Trusts	—	—		(7)				(7)
Other comprehensive loss *(Note 8)*						(93)		(93)
Dividends							(521)	(521)
Balance at June 30, 2023	**657.5**	**1.1**	**$ 3,573**	**$ (142)**	**$ 369**	**$ (2,079)**	**$ 18,677**	**$ 20,398**

In millions	Number of common shares Outstanding	Share Trusts	Common shares	Common shares in Share Trusts	Additional paid-in capital	Accumulated other comprehensive loss	Retained earnings	Total shareholders' equity
Balance at December 31, 2022	671.0	1.4	$ 3,613	$ (170)	$ 381	$ (1,969)	$ 19,529	$ 21,384
Net income							2,387	2,387
Stock options exercised	0.3		36		(5)			31
Settlement of equity settled awards	0.3	(0.3)		42	(57)		(25)	(40)
Stock-based compensation and other					50		(1)	49
Repurchase of common shares (Note 6)	(14.1)		(76)				(2,166)	(2,242)
Share purchases by Share Trusts	—	—		(14)				(14)
Other comprehensive loss *(Note 8)*						(110)		(110)
Dividends							(1,047)	(1,047)
Balance at June 30, 2023	**657.5**	**1.1**	**$ 3,573**	**$ (142)**	**$ 369**	**$ (2,079)**	**$ 18,677**	**$ 20,398**

See accompanying Notes to Interim Consolidated Financial Statements.

CONSOLIDATED STATEMENTS OF CHANGES IN SHAREHOLDERS' EQUITY - UNAUDITED

In millions	Number of common shares Outstanding	Share Trusts	Common shares	Common shares in Share Trusts	Additional paid-in capital	Accumulated other comprehensive loss	Retained earnings	Total shareholders' equity
Balance at March 31, 2022	693.3	0.9	$ 3,695	$ (88)	$ 382	$ (2,280)	$ 20,143	$ 21,852
Net income							1,325	1,325
Stock options exercised	—		7		(1)			6
Settlement of equity settled awards	0.1	(0.1)		6	(25)		(15)	(34)
Stock-based compensation and other					18		(1)	17
Repurchase of common shares *(Note 6)*	(7.8)		(42)				(1,131)	(1,173)
Share purchases by Share Trusts	(0.1)	0.1		(6)				(6)
Other comprehensive income *(Note 8)*						261		261
Dividends							(504)	(504)
Balance at June 30, 2022	685.5	0.9	$ 3,660	$ (88)	$ 374	$ (2,019)	$ 19,817	$ 21,744

In millions	Number of common shares Outstanding	Share Trusts	Common shares	Common shares in Share Trusts	Additional paid-in capital	Accumulated other comprehensive loss	Retained earnings	Total shareholders' equity
Balance at December 31, 2021	700.9	1.1	$ 3,704	$ (103)	$ 397	$ (2,241)	$ 20,987	$ 22,744
Net income							2,243	2,243
Stock options exercised	0.4		41		(6)			35
Settlement of equity settled awards	0.3	(0.3)		27	(66)		(18)	(57)
Stock-based compensation and other					49		(1)	48
Repurchase of common shares *(Note 6)*	(16.0)		(85)				(2,381)	(2,466)
Share purchases by Share Trusts	(0.1)	0.1		(12)				(12)
Other comprehensive income *(Note 8)*						222		222
Dividends							(1,013)	(1,013)
Balance at June 30, 2022	685.5	0.9	$ 3,660	$ (88)	$ 374	$ (2,019)	$ 19,817	$ 21,744

See accompanying Notes to Interim Consolidated Financial Statements.

CONSOLIDATED STATEMENTS OF CASH FLOWS – UNAUDITED

In millions	Three months ended June 30		Six months ended June 30	
	2023	2022	**2023**	2022
Operating activities				
Net income	**$ 1,167**	$ 1,325	**$ 2,387**	$ 2,243
Adjustments to reconcile net income to net cash provided by operating activities:				
Depreciation and amortization	**449**	423	**897**	843
Pension income and funding	**(105)**	(92)	**(210)**	(204)
Deferred income taxes	**109**	120	**179**	108
Changes in operating assets and liabilities:				
Accounts receivable	**165**	(29)	**144**	(284)
Material and supplies	**3**	(65)	**(70)**	(132)
Accounts payable and other	**105**	(52)	**(452)**	(421)
Other current assets	**51**	25	**21**	(18)
Other operating activities, net	**41**	58	**144**	148
Net cash provided by operating activities	**1,985**	1,713	**3,040**	2,283
Investing activities				
Property additions	**(875)**	(707)	**(1,336)**	(1,086)
Proceeds from assets held for sale	**—**	—	**—**	273
Other investing activities, net	**(10)**	(9)	**(11)**	(4)
Net cash used in investing activities	**(885)**	(716)	**(1,347)**	(817)
Financing activities				
Issuance of debt *(Note 6)*	**1,730**	—	**1,730**	—
Repayment of debt	**(215)**	(12)	**(227)**	(29)
Change in commercial paper, net *(Note 6)*	**(989)**	686	**239**	1,706
Settlement of foreign exchange forward contracts on debt	**(12)**	13	**(2)**	12
Issuance of common shares for stock options exercised	**18**	6	**31**	35
Withholding taxes remitted on the net settlement of equity settled awards *(Note 7)*	**(2)**	(18)	**(37)**	(41)
Repurchase of common shares *(Note 6)*	**(1,045)**	(1,172)	**(2,205)**	(2,430)
Purchase of common shares for settlement of equity settled awards	**(2)**	(16)	**(3)**	(16)
Purchase of common shares by Share Trusts	**(7)**	(6)	**(14)**	(12)
Dividends paid	**(521)**	(504)	**(1,047)**	(1,013)
Net cash used in financing activities	**(1,045)**	(1,023)	**(1,535)**	(1,788)
Effect of foreign exchange fluctuations on cash, cash equivalents, restricted cash and restricted cash equivalents	**(2)**	1	**(2)**	1
Net increase (decrease) in cash, cash equivalents, restricted cash, and restricted cash equivalents	**53**	(25)	**156**	(321)
Cash, cash equivalents, restricted cash, and restricted cash equivalents, beginning of period	**937**	1,045	**834**	1,341
Cash, cash equivalents, restricted cash, and restricted cash equivalents, end of period	**$ 990**	$ 1,020	**$ 990**	$ 1,020
Cash and cash equivalents, end of period	**$ 539**	$ 465	**$ 539**	$ 465
Restricted cash and cash equivalents, end of period	**451**	555	**451**	555
Cash, cash equivalents, restricted cash, and restricted cash equivalents, end of period	**$ 990**	$ 1,020	**$ 990**	$ 1,020
Supplemental cash flow information				
Interest paid	**$ (115)**	$ (86)	**$ (366)**	$ (257)
Income taxes paid	**$ (284)**	$ (370)	**$ (708)**	$ (690)

See accompanying Notes to Interim Consolidated Financial Statements.

1 – Basis of presentation

In these notes, the "Company" or "CN" refers to Canadian National Railway Company, together with its wholly-owned subsidiaries. The accompanying unaudited Interim Consolidated Financial Statements ("Interim Consolidated Financial Statements"), expressed in Canadian dollars, have been prepared in accordance with United States generally accepted accounting principles (GAAP) for interim financial statements. Accordingly, they do not include all of the disclosures required by GAAP for complete financial statements. In management's opinion, all adjustments (consisting of normal recurring accruals) considered necessary for fair presentation have been included. Interim operating results are not necessarily indicative of the results that may be expected for the full year.

These Interim Consolidated Financial Statements have been prepared using accounting policies consistent with those used in preparing CN's 2022 Annual Consolidated Financial Statements and should be read in conjunction with such statements and Notes thereto.

2 – Recent accounting pronouncements

The following Accounting Standards Updates (ASU) issued by the Financial Accounting Standards Board (FASB) have been adopted by the Company:

ASU 2020-04 and ASU 2022-06 Reference rate reform (Topic 848): Facilitation of the effects of reference rate reform on financial reporting and related amendments
On March 31, 2023, the Company amended the non-revolving credit facility to transition to Secured Overnight Financing Rates (SOFR) succeeding London Interbank Offered Rates (LIBOR) (see *Note 6 – Financing activities*). The Company was eligible and has elected to use the optional expedient provided by the ASU which allowed the amendment to be accounted for as a non substantial modification of an existing debt. As a result, the amendment did not have a significant impact to the Company's Interim Consolidated Financial Statements and related disclosures.

Additional information relating to the facilitation of the effects of reference rate reform on financial reporting and related amendments is provided in *Note 3 – Recent accounting pronouncements* to the Company's 2022 Annual Consolidated Financial Statements and the section entitled *Recent accounting pronouncements* of the Company's 2022 Annual MD&A.

Other recently issued ASUs required to be applied on or after June 30, 2023 have been evaluated by the Company and are not expected to have a significant impact on the Company's Consolidated Financial Statements.

3 – Revenues

The following table provides disaggregated information for revenues for the three and six months ended June 30, 2023 and 2022:

	Three months ended June 30		Six months ended June 30	
In millions	**2023**	2022	**2023**	2022
Freight revenues				
Petroleum and chemicals	**$ 748**	$ 829	**$ 1,576**	$ 1,585
Metals and minerals	**497**	466	**1,026**	872
Forest products	**480**	513	**991**	939
Coal	**263**	249	**526**	444
Grain and fertilizers	**688**	604	**1,549**	1,208
Intermodal	**983**	1,326	**1,995**	2,382
Automotive	**235**	208	**450**	373
Total freight revenues	**3,894**	4,195	**8,113**	7,803
Other revenues	**163**	149	**257**	249
Total revenues (1)	**$ 4,057**	$ 4,344	**$ 8,370**	$ 8,052
Revenues by geographic area				
Canada	**$ 2,772**	$ 2,953	**$ 5,722**	$ 5,446
United States (U.S.)	**1,285**	1,391	**2,648**	2,606
Total revenues (1)	**$ 4,057**	$ 4,344	**$ 8,370**	$ 8,052

(1) As at June 30, 2023, the Company had remaining performance obligations related to freight in-transit, for which revenues of $91 million ($102 million as at June 30, 2022) are expected to be recognized in the next period.

Contract liabilities

The following table provides a reconciliation of the beginning and ending balances of contract liabilities for the three and six months ended June 30, 2023 and 2022:

	Three months ended June 30		Six months ended June 30	
In millions	**2023**	2022	**2023**	2022
Beginning balance	**$ 34**	$ 43	**$ 28**	$ 74
Revenue recognized included in the beginning balance	**(14)**	(42)	**(12)**	(74)
Increase due to consideration received, net of revenue recognized	**21**	16	**25**	17
Ending balance	**$ 41**	$ 17	**$ 41**	$ 17
Current portion - Ending balance	**$ 13**	$ 17	**$ 13**	$ 17

4 – Pensions and other postretirement benefits

The Company has various retirement benefit plans under which substantially all of its employees are entitled to benefits at retirement age, generally based on compensation and length of service and/or contributions. Additional information relating to the retirement benefit plans is provided in *Note 18 – Pensions and other postretirement benefits* to the Company's 2022 Annual Consolidated Financial Statements.

The following table provides the components of net periodic benefit cost (income) for defined benefit pension and other postretirement benefit plans for the three and six months ended June 30, 2023 and 2022:

	Three months ended June 30				Six months ended June 30			
	Pensions		Other postretirement benefits		Pensions		Other postretirement benefits	
In millions	**2023**	2022	**2023**	2022	**2023**	2022	**2023**	2022
Current service cost	**$ 20**	$ 38	**$ —**	$ —	**$ 41**	$ 79	**$ —**	$ 1
Other components of net periodic benefit income:								
Interest cost	**176**	117	**2**	1	**352**	234	**4**	2
Expected return on plan assets	**(296)**	(283)	**—**	—	**(593)**	(566)	**—**	—
Amortization of prior service credit	**—**	—	**(1)**	—	**—**	—	**(2)**	—
Amortization of net actuarial loss (gain)	**1**	42	**(2)**	(1)	**3**	83	**(3)**	(2)
Total Other components of net periodic benefit income	**(119)**	(124)	**(1)**	—	**(238)**	(249)	**(1)**	—
Net periodic benefit cost (income) (1)	**$ (99)**	$ (86)	**$ (1)**	$ —	**$ (197)**	$ (170)	**$ (1)**	$ 1

(1) In the second quarters of 2023 and 2022, the Company revised its estimate of full year net periodic benefit cost (income) for pensions to reflect updated plan demographic information and the resulting impacts were not significant.

Pension contributions

Pension contributions for the six months ended June 30, 2023 and 2022 were $26 million and $45 million, respectively. The contributions for the six months ended June 30, 2022 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. For the six months ended June 30, 2023, based on the results of the December 31, 2022 funding valuations, the CN Pension Plan remained fully funded and at a level such that the Company continues to be prohibited from making contributions to the CN Pension Plan. For all of 2023, the Company expects to make total cash contributions of approximately $50 million for all of the Company's pension plans.

5 – Earnings per share

The following table provides a reconciliation between basic and diluted earnings per share for the three and six months ended June 30, 2023 and 2022:

	Three months ended June 30		Six months ended June 30	
In millions, except per share data	**2023**	2022	**2023**	2022
Net income	**$ 1,167**	$ 1,325	**$ 2,387**	$ 2,243
Weighted-average basic shares outstanding	**661.6**	690.0	**665.0**	694.2
Dilutive effect of stock-based compensation	**1.5**	1.7	**1.5**	1.8
Weighted-average diluted shares outstanding	**663.1**	691.7	**666.5**	696.0
Basic earnings per share	**$ 1.76**	$ 1.92	**$ 3.59**	$ 3.23
Diluted earnings per share	**$ 1.76**	$ 1.92	**$ 3.58**	$ 3.22
Units excluded from the calculation as their inclusion would not have a dilutive effect				
Stock options	**1.0**	0.6	**1.0**	0.6
Performance share units	**0.6**	0.2	**0.5**	0.3

6 – Financing activities

For details on the Company's available financing sources, see *Note 16 – Debt* to the Company's 2022 Annual Consolidated Financial Statements. For the six months ended June 30, 2023, the following changes occurred:

Shelf prospectus and registration statement

As at June 30, 2023, the remaining capacity of the shelf prospectus and registration statement, filed on May 4, 2022, was $2.3 billion. Access to the Canadian and U.S. capital markets under the shelf prospectus and registration statement is dependent on market conditions.

Notes and debentures

For the six months ended June 30, 2023, the Company issued and repaid the following:

- On May 10, 2023, issuance of $550 million 4.15% Notes due 2030, $400 million 4.40% Notes due 2033 and $800 million 4.70% Notes due 2053 in the Canadian capital markets, which resulted in total net proceeds of $1,730 million; and
- On May 15, 2023, repayment of US$150 million ($203 million) 7.63% Notes due 2023 upon maturity.

For the six months ended June 30, 2022, there was no activity.

Revolving credit facilities

On March 17, 2023, the Company's revolving credit facility agreements were amended to extend their respective tenors by one additional year each. The unsecured credit facility of $2.5 billion consists of two tranches of $1.25 billion now maturing on March 31, 2026 and March 31, 2028. The unsecured credit facility of $1.0 billion is now maturing on March 17, 2025. The credit facilities were also amended to include fallback language that addresses the cessation of Canadian Dollar Offered Rate (CDOR) and adoption of Canadian Overnight Repo Rate Average (CORRA). Both revolving credit facility agreements have one financial covenant, which limits debt as a percentage of total capitalization. The Company is in compliance as of June 30, 2023.

As at June 30, 2023 and December 31, 2022, the Company had no outstanding borrowings under these revolving credit facilities and there were no draws during the six months ended June 30, 2023.

Equipment loans

On March 31, 2023, the Company amended its non-revolving term loan facility to transition from LIBOR to SOFR. The facility will now bear interest at SOFR and CDOR plus a margin for U.S. dollar denominated and Canadian dollar denominated borrowings, respectively. The facility now includes fallback language that addresses the cessation of CDOR and adoption of CORRA.

As at June 30, 2023 and December 31, 2022, the Company had outstanding borrowings of US$526 million ($697 million) and US$542 million ($734 million), respectively, at a weighted-average interest rate of 5.89% and 5.22%, respectively. The Company repaid US$15 million ($20 million) on its equipment loans during the first six months of 2023.

On March 31, 2023, the Company entered into new loan supplements to the existing agreement for an additional principal amount of US$304 million, which is available to be drawn through March 31, 2024. Term loans made under these loan supplements have a tenor of 15 years, bear interest at SOFR and CDOR plus a margin, are repayable in equal quarterly installments and are secured by rolling stock. As at June 30, 2023, the Company had no outstanding borrowings under this loan supplement.

Commercial paper

As at June 30, 2023 and December 31, 2022, the Company had total commercial paper borrowings of US$801 million ($1,061 million) and US$594 million ($805 million), respectively, at a weighted-average interest rate of 5.19% and 4.27%, respectively, presented in Current portion of long-term debt on the Consolidated Balance Sheets.

The following table provides a summary of cash flows associated with the issuance and repayment of commercial paper for the three and six months ended June 30, 2023 and 2022:

	Three months ended June 30		Six months ended June 30	
In millions	**2023**	2022	**2023**	2022
Commercial paper with maturities less than 90 days				
Issuance	**$ 2,365**	$ 3,823	**$ 6,046**	$ 5,503
Repayment	**(3,008)**	(3,506)	**(6,240)**	(4,054)
Change in commercial paper with maturities less than 90 days, net	**$ (643)**	$ 317	**$ (194)**	$ 1,449
Commercial paper with maturities of 90 days or greater				
Issuance	**$ 227**	$ 398	**$ 1,006**	$ 427
Repayment	**(573)**	(29)	**(573)**	(170)
Change in commercial paper with maturities of 90 days or greater, net	**$ (346)**	$ 369	**$ 433**	$ 257
Change in commercial paper, net	**$ (989)**	$ 686	**$ 239**	$ 1,706

Bilateral letter of credit facilities

On March 17, 2023, the Company extended the maturity date of its committed bilateral letter of credit facility agreements to April 28, 2026.

As at June 30, 2023, the Company had outstanding letters of credit of $338 million ($396 million as at December 31, 2022) under the committed facilities from a total available amount of $360 million ($470 million as at December 31, 2022) and $152 million ($100 million as at December 31, 2022) under the uncommitted facilities.

As at June 30, 2023, included in Restricted cash and cash equivalents was $341 million ($397 million as at December 31, 2022) and $100 million ($100 million as at December 31, 2022) which were pledged as collateral under the committed and uncommitted bilateral letter of credit facilities, respectively, and $10 million held in escrow as at June 30, 2023 ($9 million as at December 31, 2022).

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 32.0 million common shares between February 1, 2023 and January 31, 2024. As at June 30, 2023, the Company had repurchased 11.6 million common shares for $1,833 million under its current NCIB.

The Company repurchased 31.9 million common shares under its previous NCIB effective between February 1, 2022 and January 31, 2023, which allowed for the repurchase of up to 42.0 million common shares.

The following table provides the information related to the share repurchases for the three and six months ended June 30, 2023 and 2022:

	Three months ended June 30		Six months ended June 30	
In millions, except per share data	**2023**	2022	**2023**	2022
Number of common shares repurchased	**6.6**	7.8	**14.1**	16.0
Weighted-average price per share (1)	**$ 158.67**	$ 149.16	**$ 159.33**	$ 153.95
Amount of repurchase (1)(2)	**$ 1,043**	$ 1,173	**$ 2,242**	$ 2,466

(1) Includes brokerage fees.

(2) Includes settlements in subsequent periods.

7 – Stock-based compensation

The Company has various stock-based compensation plans for eligible employees. A description of the major plans is provided in *Note 20 – Stock-based compensation* to the Company's 2022 Annual Consolidated Financial Statements.

The following table provides the Company’s total stock-based compensation expense for awards under all employee plans, as well as the related tax benefit and excess tax benefit recognized in income, for the three and six months ended June 30, 2023 and 2022:

	Three months ended June 30		Six months ended June 30	
In millions	**2023**	2022	**2023**	2022
Share Units Plan [1]	**$ 10**	$ 7	**$ 22**	$ 19
Voluntary Incentive Deferral Plan (VIDP) [2]	**—**	(1)	**—**	—
Stock option awards	**3**	3	**6**	5
Employee Share Investment Plan (ESIP)	**7**	6	**13**	12
Total stock-based compensation expense	**$ 20**	$ 15	**$ 41**	$ 36
Income tax impacts of stock-based compensation				
Tax benefit recognized in income	**$ 4**	$ 3	**$ 10**	$ 9
Excess tax benefit recognized in income	**$ —**	$ 7	**$ 10**	$ 12

(1) Performance share unit (PSU) awards are granted under the Share Units Plan and are comprised of awards which are settled based on a level of attainment of a target return on invested capital (ROIC) and total shareholder return (TSR).

(2) Deferred share unit (DSU) awards are granted under the Voluntary Incentive Deferral Plan.

Share Units Plan

The following table provides a summary of the activity related to PSU awards for the six months ended June 30, 2023:

	PSUs-ROIC [1]		PSUs-TSR [2]	
	Units	Weighted-average grant date fair value	Units	Weighted-average grant date fair value
	In millions		*In millions*	
Outstanding at December 31, 2022	0.7	$ 73.21	0.4	$ 160.40
Granted	0.2	$ 89.40	0.1	$ 174.11
Settled [3]	(0.2)	$ 74.02	(0.1)	$ 153.22
Forfeited	—	$ 78.89	—	$ 165.85
Outstanding at June 30, 2023	**0.7**	**$ 78.74**	**0.4**	**$ 167.76**

(1) The grant date fair value of equity settled PSUs-ROIC granted in 2023 of $22 million is calculated using a lattice-based valuation model. As at June 30, 2023, total unrecognized compensation cost related to all outstanding awards was $27 million and is expected to be recognized over a weighted-average period of 2.1 years.

(2) The grant date fair value of equity settled PSUs-TSR granted in 2023 of $23 million is calculated using a Monte Carlo simulation model. As at June 30, 2023, total unrecognized compensation cost related to all outstanding awards was $28 million and is expected to be recognized over a weighted-average period of 2.1 years.

(3) Equity settled PSUs-ROIC granted in 2020 met the minimum share price condition for settlement and attained a performance vesting factor of 120%. Equity settled PSUs-TSR granted in 2020 attained a performance vesting factor of 162%. In the first quarter of 2023, these awards were settled, net of the remittance of the participants' withholding tax obligation of $35 million, by way of disbursement from the Share Trusts of 0.3 million common shares.

Voluntary Incentive Deferral Plan

The following table provides a summary of the activity related to equity settled DSU awards for the six months ended June 30, 2023:

	DSUs (1)		
	Units		Weighted-average grant date fair value
	In millions		
Outstanding at December 31, 2022	0.3	$	106.60
Granted	—	$	157.22
Settled (2)	—	$	126.70
Outstanding at June 30, 2023 (3)	**0.3**	**$**	**112.91**

(1) The grant date fair value of equity settled DSUs granted in 2023 of $6 million is calculated using the Company's stock price on the grant date. As at June 30, 2023, the aggregate intrinsic value of all equity settled DSUs outstanding amounted to $54 million.

(2) For the six months ended June 30, 2023, the Company purchased common shares for the settlement of equity settled DSUs, net of the remittance of the participants' withholding tax obligation of $2 million.

(3) The total fair value of equity settled DSU awards vested, the number of units outstanding that were nonvested, unrecognized compensation cost and the remaining recognition period have not been quantified as they relate to a minimal number of units.

As at June 30, 2023 the liability for cash settled DSUs was $5 million based on a closing stock price of $160.42 ($7 million based on a closing stock price of $160.84 as at December 31, 2022).

Stock option awards

The following table provides the activity of stock option awards for options outstanding and the weighted-average exercise price for the six months ended June 30, 2023:

	Options outstanding		
	Number of options		Weighted-average exercise price
	In millions		
Outstanding at December 31, 2022 (1)	3.3	$	119.08
Granted (2)	0.5	$	157.94
Exercised	(0.3)	$	99.20
Forfeited	—	$	145.62
Outstanding at June 30, 2023 (1)(2)(3)	**3.5**	**$**	**125.17**
Exercisable at June 30, 2023 (1)(3)	**2.0**	**$**	**107.89**

(1) Stock options with a US dollar exercise price have been translated into Canadian dollars using the foreign exchange rate in effect at the balance sheet date.

(2) The grant date fair value of options granted in 2023 of $18 million ($32.79 per option) is calculated using the Black-Scholes option-pricing model. As at June 30, 2023, total unrecognized compensation cost related to all outstanding awards was $25 million and is expected to be recognized over a weighted-average period of 3.6 years.

(3) The weighted-average term to expiration of options outstanding was 6.5 years and the weighted-average term to expiration of exercisable stock options was 5.1 years. As at June 30, 2023, the aggregate intrinsic value of in-the-money stock options outstanding amounted to $124 million and the aggregate intrinsic value of stock options exercisable amounted to $104 million.

Employee Share Investment Plan

The following table provides a summary of the activity related to the ESIP for the six months ended June 30, 2023:

	ESIP		
	Number of shares		Weighted-average share price
	In millions		
Unvested contributions at December 31, 2022	0.1	$	154.12
Company contributions	0.1	$	159.21
Forfeited	—	$	158.76
Vested (1)	—	$	153.70
Unvested contributions at June 30, 2023 (2)	**0.2**	**$**	**158.19**

(1) As at June 30, 2023, total fair value of units purchased with Company contributions that vested in 2023 was $11 million.

(2) As at June 30, 2023, total unrecognized compensation cost related to all outstanding awards was $15 million and is expected to be recognized over the next twelve months.

8 – Accumulated other comprehensive loss

The following tables present the changes in Accumulated other comprehensive loss by component for the three and six months ended June 30, 2023 and 2022:

In millions	Foreign currency translation	Pension and other postretirement benefit plans	Derivative instruments	Total before tax	Income tax recovery (expense) [1]	Total net of tax
Balance at March 31, 2023	$ (80)	$ (2,669)	$ –	$ (2,749)	$ 763	$ (1,986)
Other comprehensive income (loss) before reclassifications:						
Translation of net investment [2]	(307)			(307)	–	(307)
Translation of US dollar debt [3]	230			230	(30)	200
Derivative instruments [4]			21	21	(5)	16
Amounts reclassified from Accumulated other comprehensive loss:						
Amortization of prior service credit [5]		(1)		(1)	–	(1)
Amortization of net actuarial loss [5]		(1)		(1)	–	(1)
Other comprehensive income (loss)	(77)	(2)	21	(58)	(35)	(93)
Balance at June 30, 2023	**$ (157)**	**$ (2,671)**	**$ 21**	**$ (2,807)**	**$ 728**	**$ (2,079)**

In millions	Foreign currency translation	Pension and other postretirement benefit plans	Derivative instruments	Total before tax	Income tax recovery (expense) [1]	Total net of tax
Balance at December 31, 2022	$ (70)	$ (2,669)	$ 3	$ (2,736)	$ 767	$ (1,969)
Other comprehensive income (loss) before reclassifications:						
Translation of net investment [2]	(347)			(347)	–	(347)
Translation of US dollar debt [3]	260			260	(35)	225
Derivative instruments [4]			18	18	(4)	14
Amounts reclassified from Accumulated other comprehensive loss:						
Amortization of prior service credit [5]		(2)		(2)	–	(2)
Other comprehensive income (loss)	(87)	(2)	18	(71)	(39)	(110)
Balance at June 30, 2023	**$ (157)**	**$ (2,671)**	**$ 21**	**$ (2,807)**	**$ 728**	**$ (2,079)**

In millions	Foreign currency translation	Pension and other postretirement benefit plans	Derivative instruments	Total before tax	Income tax recovery (expense) [1]	Total net of tax
Balance at March 31, 2022	$ (491)	$ (2,379)	$ 5	$ (2,865)	$ 585	$ (2,280)
Other comprehensive income (loss) before reclassifications:						
Translation of net investment [2]	423			423	–	423
Translation of US dollar debt [3]	(267)			(267)	36	(231)
Derivative Instruments [4]			25	25	(6)	19
Prior service credit arising during the period [6]		21		21	(5)	16
Actuarial gain arising during the period [6]		7		7	(2)	5
Amounts reclassified from Accumulated other comprehensive loss:						
Amortization of net actuarial loss [5]		41		41	(12)	29
Other comprehensive income	156	69	25	250	11	261
Balance at June 30, 2022	$ (335)	$ (2,310)	$ 30	$ (2,615)	$ 596	$ (2,019)

Footnotes to the tables follow on the next page.

In millions	Foreign currency translation	Pension and other postretirement benefit plans	Derivative instruments	Total before tax	Income tax recovery (expense) (1)	Total net of tax
Balance at December 31, 2021	$ (436)	$ (2,419)	$ 5	$ (2,850)	$ 609	$ (2,241)
Other comprehensive income (loss) before reclassifications:						
Translation of net investment (2)	272			272	–	272
Translation of US dollar debt (3)	(171)			(171)	22	(149)
Derivative Instruments (4)			25	25	(6)	19
Prior service credit arising during the period (6)		21		21	(5)	16
Actuarial gain arising during the period (6)		7		7	(2)	5
Amounts reclassified from Accumulated other comprehensive loss:						
Amortization of net actuarial loss (5)		81		81	(22)	59
Other comprehensive income (loss)	101	109	25	235	(13)	222
Balance at June 30, 2022	$ (335)	$ (2,310)	$ 30	$ (2,615)	$ 596	$ (2,019)

(1) The Company releases stranded tax effects from Accumulated other comprehensive loss to Net income upon the liquidation or termination of the related item.

(2) Foreign exchange gains or losses on translation of net investment in foreign operations.

(3) Foreign exchange gains or losses on translation of US dollar-denominated debt designated as a hedge of the net investment in foreign operations. The Company designates US dollar-denominated debt of the parent company as a foreign currency hedge of its net investment in foreign operations. Accordingly, from the dates of designation, foreign exchange gains and losses on translation of the Company's US dollar-denominated debt are recorded in Accumulated other comprehensive loss, which minimizes the volatility of earnings resulting from the conversion of US dollar-denominated debt into Canadian dollars.

(4) Treasury locks gains or losses on Derivative instruments. See *Note 10 – Financial instruments* for additional information.

(5) Total before tax reclassified to Other components of net periodic benefit income in the Consolidated Statements of Income and included in net periodic benefit cost. See *Note 4 – Pensions and other postretirement benefits* for additional information.

(6) Amendments to the postretirement medical benefits plans in the U.S. resulted in a prior service credit and an actuarial gain. See *Note 18 - Pensions and other postretirement benefits* to the Company's 2022 Annual Consolidated Financial Statements.

9 – Major commitments and contingencies

Purchase commitments

As at June 30, 2023, the Company had fixed and variable commitments to purchase locomotives, information technology services and licenses, railroad cars, engineering services, wheels, rail, rail ties as well as other equipment and services with a total estimated cost of $2,218 million. Costs of variable commitments were estimated using forecasted prices and volumes.

Contingencies

In the normal course of business, the Company becomes involved in various legal actions seeking compensatory and occasionally punitive damages, including actions brought on behalf of various purported classes of claimants and claims relating to employee and third-party personal injuries, occupational disease and property damage, arising out of harm to individuals or property allegedly caused by, but not limited to, derailments or other accidents.

As at June 30, 2023, the Company had aggregate reserves for personal injury and other claims of $290 million, of which $40 million was recorded as a current liability ($296 million as at December 31, 2022, of which $45 million was recorded as a current liability).

Although the Company considers such provisions to be adequate for all its outstanding and pending claims, the final outcome with respect to actions outstanding or pending as at June 30, 2023, or with respect to future claims, cannot be reasonably determined. When establishing provisions for contingent liabilities the Company considers, where a probable loss estimate cannot be made with reasonable certainty, a range of potential probable losses for each such matter, and records the amount it considers the most reasonable estimate within the range. However, when no amount within the range is a better estimate than any other amount, the minimum amount in the range is accrued. For matters where a loss is reasonably possible but not probable, a range of potential losses cannot be estimated due to various factors which may include the limited availability of facts, the lack of demand for specific damages and the fact that proceedings were at an early stage. Based on information currently available, the Company believes that the eventual outcome of the actions against the Company will not, individually or in the aggregate, have a material adverse effect on the Company's financial position. However, due to the inherent inability to predict with certainty unforeseeable future developments, there can be no assurance that the ultimate resolution of these actions will not have a material adverse effect on the Company's results of operations, financial position or liquidity.

Environmental matters

The Company's provision for specific environmental sites is undiscounted and includes costs for remediation and restoration of sites, as well as monitoring costs. Costs related to any unknown existing or future contamination will be accrued in the period in which they become probable and reasonably estimable. Additional information relating to the Company's environmental matters is provided in *Note 22 – Major commitments and contingencies* to the Company's 2022 Annual Consolidated Financial Statements.

As at June 30, 2023, the Company had aggregate accruals for environmental costs of $59 million, of which $38 million was recorded as a current liability ($59 million as at December 31, 2022, of which $41 million was recorded as a current liability). The Company anticipates that the majority of the liability at June 30, 2023 will be paid out over the next five years. Based on the information currently available, the Company considers its accruals to be adequate.

Guarantees and indemnifications

A description of the Company's guarantees and indemnifications is provided in *Note 22 – Major commitments and contingencies* to the Company's 2022 Annual Consolidated Financial Statements.

As at June 30, 2023, the Company had outstanding letters of credit of $338 million ($396 million as at December 31, 2022) under the committed bilateral letter of credit facilities and $152 million ($100 million as at December 31, 2022) under the uncommitted bilateral letter of credit facilities, and surety and other bonds of $173 million ($171 million as at December 31, 2022), all issued by financial institutions with investment grade credit ratings to third parties to indemnify them in the event the Company does not perform its contractual obligations.

As at June 30, 2023, the maximum potential liability under these guarantee instruments was $663 million ($667 million as at December 31, 2022), of which $623 million ($625 million as at December 31, 2022) related to other employee benefit liabilities and workers' compensation and $40 million ($42 million as at December 31, 2022) related to other liabilities. The guarantee instruments expire at various dates between 2023 and 2025.

As at June 30, 2023, the Company had not recorded a liability with respect to guarantees and indemnifications as the Company did not expect to make any payments under its guarantees and indemnifications.

10 – Financial instruments

Derivative financial instruments

The Company uses derivative financial instruments from time to time in the management of its foreign currency and interest rate exposures. The Company has limited involvement with derivative financial instruments in the management of its risks and does not hold or issue them for trading or speculative purposes.

Foreign currency risk

As at June 30, 2023, the Company had outstanding foreign exchange forward contracts to purchase a notional value of US$732 million (US$1,311 million as at December 31, 2022). These outstanding contracts are at a weighted-average exchange rate of $1.34 per US$1.00 ($1.33 per US$1.00 as at December 31, 2022) with exchange rates ranging from $1.33 to $1.37 per US$1.00 ($1.29 to $1.37 per US$1.00 as at December 31, 2022). The weighted-average term of the contracts is 142 days (157 days as at December 31, 2022) with terms ranging from 28 days to 290 days (29 days to 300 days as at December 31, 2022). Changes in the fair value of foreign exchange forward contracts, resulting from changes in foreign exchange rates, are recognized in Other income (loss) in the Consolidated Statements of Income as they occur.

For the three and six months ended June 30, 2023, the Company recorded losses of $33 million and $27 million, respectively, related to foreign exchange forward contracts compared to gains of $60 million and $36 million, respectively, for the same periods in 2022.

As at June 30, 2023, the fair value of outstanding foreign exchange forward contracts included in Other current assets and Accounts payable and other was $nil and $15 million, respectively ($33 million and $4 million, respectively, as at December 31, 2022).

Interest rate risk

As at June 30, 2023, the aggregate notional amount of treasury lock agreements entered into was US$450 million to hedge US Treasury benchmark rates related to an expected debt issuance in 2023. The treasury locks are designated as cash flow hedging instruments. The cumulative gains or losses of the treasury locks are recorded in Accumulated other comprehensive loss in derivative instruments. The treasury locks will be settled in 2023 upon the issuance of debt at which point the cumulative gains or losses recorded in Accumulated other comprehensive loss will be amortized in earnings as a reduction or increase of interest expense over the term of the corresponding debt.

As at June 30, 2023, the fair value of outstanding treasury lock agreements included in Other current assets and Accounts payable and other was $18 million and $nil, respectively ($nil and $nil, respectively, as at December 31, 2022).

Fair value of financial instruments

The financial instruments that the Company measures at fair value on a recurring basis in periods subsequent to initial recognition are categorized into the following levels of the fair value hierarchy based on the degree to which inputs are observable:

- Level 1: Inputs are quoted prices for identical instruments in active markets
- Level 2: Significant inputs (other than quoted prices included in Level 1) are observable
- Level 3: Significant inputs are unobservable

The carrying amounts of Cash and cash equivalents and Restricted cash and cash equivalents approximate fair value. These financial instruments include highly liquid investments purchased three months or less from maturity, for which the fair value is determined by reference to quoted prices in active markets.

The carrying amounts of Accounts receivable, Other current assets and Accounts payable and other approximate fair value due to their short maturity, unless otherwise specified. The fair value of derivative financial instruments, included in Other current assets and Accounts payable and other is classified as Level 2 and is used to manage the Company's exposure to foreign currency risk and interest rate risk. The fair value is measured by discounting future cash flows using a discount rate derived from market data for financial instruments subject to similar risks and maturities.

The carrying amount of the Company's debt does not approximate fair value. The fair value is estimated based on quoted market prices for the same or similar debt instruments, as well as discounted cash flows using current interest rates for debt with similar terms, company rating, and remaining maturity. The Company classifies debt as Level 2. As at June 30, 2023, the Company's debt, excluding finance leases, had a carrying amount of $16,929 million ($15,419 million as at December 31, 2022) and a fair value of $15,846 million ($14,137 million as at December 31, 2022). The carrying amount of debt excluding finance leases exceeded the fair value due to market rates being higher than the stated coupon rates.

Contents

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, including statements based on management's assessment and assumptions and publicly available information with respect to CN. By their nature, forward-looking statements involve risks, uncertainties and assumptions. CN 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 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 *2023 Business outlook and assumptions.*

Forward-looking statements	Key assumptions
Statements relating to revenue growth opportunities, including those referring to general economic and business conditions	• North American and global economic growth in the long term • Long-term growth opportunities being less affected by current economic conditions • No material disruption of CN's operations or of the economy's supply chains as a result of pandemics or geopolitical conflicts and tensions
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	• 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	• 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 actual results, performance or achievements of CN to be materially different from the outlook or any future results, performance or achievements 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, general economic and business conditions, including factors impacting global supply chains such as pandemics and geopolitical conflicts and tensions; 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 2022 Annual MD&A for a description of major risk factors relating to CN.

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. Information contained on, or accessible through, our website is not part of this MD&A.

Introduction

This Management's Discussion and Analysis (MD&A), dated July 25, 2023, 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 June 30, 2023 Interim Consolidated Financial Statements. It should also be read in conjunction with the Company's 2022 Annual Consolidated Financial Statements, and the 2022 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 2022 Annual Information Form and Form 40-F, may be found online on SEDAR+ at www.sedarplus.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.

2023 Second quarter highlights

Second quarter 2023 compared to second quarter 2022

Financial results

- Revenues of $4,057 million, a decrease of $287 million, or 7%.
- Operating income of $1,600 million, a decrease of $169 million, or 10%.
- Operating ratio, defined as operating expenses as a percentage of revenues, of 60.6%, an increase of 1.3-points, or an increase of 1.6-points on an adjusted basis. (1)(2)
- Diluted earnings per share (EPS) of $1.76, a decrease of 8%, or a decrease of 9% compared to second quarter 2022 adjusted EPS. (1)(2)
- Free cash flow for the second quarter of 2023 was $1,100 million, an increase of $103 million, or 10%. (1)(3)
- Free cash flow for the first half of 2023 was $1,693 million, an increase of $125 million, or 8%. (1)(3)

Operating performance

- Injury frequency rate of 1.00 (per 200,000 person hours), an improvement of 17% and accident rate of 1.91 (per million train miles), a deterioration of 5%. (4)
- Through dwell of 6.8 (entire railroad, hours), an improvement of 6%.
- Car velocity of 216 (car miles per day), an improvement of 3%.
- Through network train speed of 19.9 (mph), an improvement of 3%.
- Fuel efficiency of 0.888 (US gallons of locomotive fuel consumed per 1,000 gross ton miles (GTMs)), 6% less efficient.
- Train length of 7,934 (feet), a decrease of 6%.
- Revenue ton miles (RTMs) of 55,877 (million), a decrease of 8%.

(1) These non-GAAP measures do not have any standardized meaning prescribed by GAAP and therefore, may not be comparable to similar measures presented by other companies.
(2) See the section of this MD&A entitled *Adjusted performance measures* for an explanation and reconciliation of these non-GAAP measures.
(3) See the section of this MD&A entitled *Liquidity and capital resources – Free cash flow* for an explanation and reconciliation of this non-GAAP measure.
(4) Based on Federal Railroad Administration (FRA) reporting criteria.

Canadian regulatory update

On June 22, 2023, Bill C-47 an *Act to implement certain provisions of the budget tabled in Parliament on March 28, 2023*, received Royal Assent and the proposed amendments to the Canada Transportation Act were adopted. These amendments provide for the extension of the interswitching limits located in the Prairie provinces from 30 km to 160 km. This extension will be in force for a trial period of 18 months. The Canadian Transportation Agency must, within 90 days of the coming into force of these new provisions, determine the interswitching rate per car to be charged. This rate will apply to all commodities moving under interswitching rules from that date. No assurance can be given that these and any other current or future regulatory or legislative initiatives by the Canadian federal government and agencies will not materially adversely affect the Company's results of operations or its competitive and financial position.

Labor workforce and negotiations

As at June 30, 2023, CN employed a total of 18,308 employees in Canada, of which 13,482, or 74%, were unionized employees, and 6,870 employees in the U.S., of which 5,806, or 85%, were unionized employees.

On May 1, 2023, the collective agreement with Unifor was ratified by its members, renewing the collective agreement for a two-year term expiring on December 31, 2024. Unifor represents approximately 3,000 Canadian employees working in various departments such as Mechanical, Intermodal, Facility Management, and in clerical positions.

On May 26, 2023, the collective agreement with Teamsters Canada Rail Conference (TCRC) was ratified by its members, renewing the collective agreement for a one-year term expiring on December 31, 2023. TCRC represents approximately 6,000 Canadian employees working as Locomotive Engineers, Yard Coordinators and Yard Conductors on our mainline, short lines and yards.

2023 Business outlook and assumptions

The Company continues to assume negative North American industrial production in 2023. For the 2022/2023 crop year, the grain crop in Canada was above its three-year average (or in line when excluding the significantly lower 2021/2022 crop year) and the U.S. grain crop was in line with its three-year average. The Company now assumes that the 2023/2024 grain crop in Canada will be below its three-year average (excluding the significantly lower 2021/2022 crop year) and the U.S. grain crop will be above its three-year average (compared to the April 24, 2023 assumption that the 2023/2024 grain crops in Canada and the U.S. will be in line with their respective three-year averages (excluding the significantly lower 2021/2022 crop year in Canada)). Additionally, CN now also assumes that in 2023 there will be no further significant impact from Canadian wildfires.

In 2023, the Company will continue to invest in its capital program to improve the safety, efficiency and integrity of its network. These investments will enable and support the growth of the Company and will be financed with cash generated from operations or with cash from financing activities as required.

The forward-looking statements discussed in this *2023 Business outlook and assumptions* section are subject to risks and uncertainties that could cause actual results or performance to differ materially from those expressed or implied in such statements and are based on certain factors and assumptions which the Company considers reasonable, about events, developments, prospects and opportunities that may not materialize or that may be offset entirely or partially by other events and developments. In addition to the assumptions and expectations discussed in this section, reference should be made to the section of this MD&A entitled *Forward-looking statements* for assumptions and risk factors affecting such statements.

Financial highlights

The following table lists key measures of the Company's financial performance and liquidity for the three and six months ended June 30, 2023 and 2022 and financial position measures as at June 30, 2023 and December 31, 2022:

In millions, except percentages and per share data	Three months ended June 30 2023	2022	% Change Fav (Unfav)	Six months ended June 30 2023	2022	% Change Fav (Unfav)
Financial performance and liquidity						
Revenues	**$ 4,057**	$ 4,344	(7%)	**$ 8,370**	$ 8,052	4%
Operating income	**$ 1,600**	$ 1,769	(10%)	**$ 3,262**	$ 2,996	9%
Adjusted operating income (1)(2)	**$ 1,600**	$ 1,781	(10%)	**$ 3,262**	$ 3,018	8%
Net income	**$ 1,167**	$ 1,325	(12%)	**$ 2,387**	$ 2,243	6%
Adjusted net income (1)(2)	**$ 1,167**	$ 1,334	(13%)	**$ 2,387**	$ 2,259	6%
Basic earnings per share	**$ 1.76**	$ 1.92	(8%)	**$ 3.59**	$ 3.23	11%
Diluted earnings per share	**$ 1.76**	$ 1.92	(8%)	**$ 3.58**	$ 3.22	11%
Adjusted diluted earnings per share (1)(2)	**$ 1.76**	$ 1.93	(9%)	**$ 3.58**	$ 3.25	10%
Dividends per share	**$ 0.7900**	$ 0.7325	8%	**$ 1.5800**	$ 1.4650	8%
Operating ratio (3)	**60.6%**	59.3%	(1.3) pts	**61.0%**	62.8%	1.8 pts
Adjusted operating ratio (1)(2)	**60.6%**	59.0%	(1.6) pts	**61.0%**	62.5%	1.5 pts
Net cash provided by operating activities	**$ 1,985**	$ 1,713	16%	**$ 3,040**	$ 2,283	33%
Net cash used in investing activities	**$ 885**	$ 716	(24%)	**$ 1,347**	$ 817	(65%)
Free cash flow (1)(4)	**$ 1,100**	$ 997	10%	**$ 1,693**	$ 1,568	8%

In millions, except percentages	**As at June 30, 2023**	As at December 31, 2022	% Change Fav (Unfav)
Financial position			
Total assets	**$ 50,876**	$ 50,662	—%
Total long-term liabilities (5)	**$ 26,977**	$ 25,436	(6%)

(1) These non-GAAP measures do not have any standardized meaning prescribed by GAAP and therefore, may not be comparable to similar measures presented by other companies.

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

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

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

(5) Total long-term liabilities is the difference between Total liabilities and Total current liabilities.

Financial results

Second quarter and first half of 2023 compared to corresponding periods in 2022

Revenues for the second quarter of 2023 were $4,057 million compared to $4,344 million for the same period in 2022, a decrease of $287 million, or 7%. The decrease in the second quarter was mainly due to lower volumes of intermodal, crude oil, U.S. grain exports and forest products, primarily as a result of lower demand for freight services to move consumer goods and customer outages caused by Canadian wildfires, lower ancillary services including container storage and lower fuel surcharge revenues as a result of lower fuel prices; partly offset by freight rate increases, the positive translation impact of a weaker Canadian dollar and higher export volumes of Canadian grain.

Revenues for the first half of 2023 were $8,370 million compared to $8,052 million for the same period in 2022, an increase of $318 million, or 4%. The increase in the first half was mainly due to freight rate increases, the positive translation impact of a weaker Canadian dollar, higher export volumes of Canadian grain and higher fuel surcharge revenues as a result of higher fuel prices; partly offset by lower ancillary services including container storage and lower volumes of intermodal, U.S. grain exports, crude oil and forest products, primarily as a result of lower demand for freight services to move consumer goods and customer outages caused by Canadian wildfires.

Operating expenses for the second quarter of 2023 were $2,457 million compared to $2,575 million for the same period in 2022, a decrease of $118 million, or 5%. Operating expenses for the first half of 2023 were $5,108 million compared to $5,056 million for the same period in 2022, an increase of $52 million, or 1%. The decrease of $118 million, or 5%, in the second quarter was mainly due to lower fuel prices; partly offset by higher labor and fringe benefits expense mainly driven by higher average headcount and general wage increases and the negative translation impact of a weaker Canadian dollar. The increase of $52 million, or 1%, in the first half of 2023 was mainly due to the negative translation impact of a weaker Canadian dollar, higher labor and fringe benefits expense mainly driven by higher average headcount and general wage increases, higher purchased services and material expense; partly offset by lower fuel prices.

Operating income for the second quarter of 2023 decreased by $169 million, or 10%, to $1,600 million when compared to the same period in 2022. Operating income for the first half of 2023 increased by $266 million, or 9%, to $3,262 million when compared to the same period in 2022. The operating ratio, defined as operating expenses as a percentage of revenues, was 60.6% in the second quarter of 2023 compared to 59.3% in the second quarter of 2022, a 1.3-point increase. The operating ratio for the first half of 2023 was 61.0% compared to 62.8% in 2022, a 1.8-point improvement.

Net income for the second quarter of 2023 was $1,167 million, a decrease of $158 million, or 12%, and diluted earnings per share decreased by 8% to $1.76, when compared to the same period in 2022. Net income for the first half of 2023 was $2,387 million, an increase of $144 million, or 6%, and diluted earnings per share increased by 11% to $3.58, when compared to the same period in 2022.

Operating highlights

The following table lists key measures of the Company's operating performance, for the purpose of measuring the efficiency and effectiveness of train operations, for the three and six months ended June 30, 2023 and 2022:

	Three months ended June 30			Six months ended June 30		
	2023	2022	% Change Fav (Unfav)	**2023**	2022	% Change Fav (Unfav)
Gross ton miles (GTMs) *(millions)* (1)	**109,693**	120,742	(9%)	**225,135**	231,808	(3%)
Train weight *(tons)* (2)	**9,062**	9,512	(5%)	**9,099**	9,478	(4%)
Train length *(feet)* (3)	**7,934**	8,427	(6%)	**7,843**	8,320	(6%)
Through network train speed *(miles per hour)* (4)	**19.9**	19.3	3%	**20.0**	18.0	11%
Fuel efficiency *(US gallons of locomotive fuel consumed per 1,000 GTMs)* (5)	**0.888**	0.838	(6%)	**0.895**	0.873	(3%)
Through dwell *(entire railroad, hours)* (6)	**6.8**	7.2	6%	**6.9**	8.1	15%
Car velocity *(car miles per day)* (7)	**216**	209	3%	**213**	185	15%

(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) Train length: An efficiency measurement on average trailing length of each mainline train on the network. Calculated as the total of car foot miles (the sum of car length multiplied by miles travelled for each trailing car) divided by total train miles, this measure provides insight on how well each train was maximized in terms of its capacity to move traffic.

(4) 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.

(5) 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.

(6) 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.

(7) Car velocity: The average miles per day traveled by loaded and empty cars (including all active cars whether private, foreign or CN owned) 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.

The Company's focus on scheduled railroading has resulted in year-over-year improvements in car velocity, train speed and through dwell. However, GTMs were negatively impacted in the second quarter and first half of 2023 mainly due to lower demand for freight services to move consumer goods and customer outages caused by Canadian wildfires. In addition, fuel efficiency was negatively impacted in the second quarter mainly due to reduced train lengths as well as the impact of operational disruptions related to the Canadian wildfires.

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 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 of this MD&A entitled *Adjusted performance measures, Constant currency* and *Liquidity and capital resources*.

Adjusted performance measures

Adjusted net income, adjusted earnings per share, adjusted operating income, adjusted operating expenses and adjusted operating ratio are non-GAAP measures that are used to set performance goals and to measure CN's performance. Management believes that these adjusted performance measures provide additional insight to management and investors into the Company's operations and underlying business trends as well as facilitate period-to-period comparisons, as they exclude certain significant items that are not reflective of CN's underlying business operations and could distort the analysis of trends in business performance. These items may include:

i. operating expense adjustments: workforce reduction program, depreciation expense on the deployment of replacement system, advisory fees related to shareholder matters, losses and recoveries from assets held for sale, business acquisition-related costs;
ii. non-operating expense adjustments: business acquisition-related financing fees, merger termination income, gains and losses on disposal of property; and
iii. the effect of tax law changes and rate enactments.

These non-GAAP 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, 2023, the Company's net income was $1,167 million, or $1.76 per diluted share, and $2,387 million, or $3.58 per diluted share, respectively. There were no adjustments in the second quarter and the first half of 2023.

For the three and six months ended June 30, 2022, the Company's adjusted net income was $1,334 million, or $1.93 per diluted share, and $2,259 million, or $3.25 per diluted share, respectively. The adjusted figures for the three and six months ended June 30, 2022 exclude advisory fees related to shareholder matters of $12 million, or $9 million after-tax ($0.01 per diluted share), and $22 million, or $16 million after-tax ($0.03 per diluted share), respectively, recorded in Casualty and other within the Consolidated Statements of Income.

Adjusted net income is defined as Net income in accordance with GAAP adjusted for certain significant items. Adjusted diluted earnings per share is defined as adjusted net income divided by the weighted-average diluted shares outstanding. The following table provides a reconciliation of Net income and Earnings per share in accordance with GAAP, as reported for the three and six months ended June 30, 2023 and 2022, to the non-GAAP adjusted performance measures presented herein:

	Three months ended June 30				Six months ended June 30			
In millions, except per share data		**2023**		2022		**2023**		2022
Net income	**$**	**1,167**	$	1,325	**$**	**2,387**	$	2,243
Adjustments:								
Advisory fees related to shareholder matters		**—**		12		**—**		22
Tax effect of adjustments [(1)]		**—**		(3)		**—**		(6)
Total adjustments		**—**		9		**—**		16
Adjusted net income	**$**	**1,167**	$	1,334	**$**	**2,387**	$	2,259
Diluted earnings per share	**$**	**1.76**	$	1.92	**$**	**3.58**	$	3.22
Impact of adjustments, per share		**—**		0.01		**—**		0.03
Adjusted diluted earnings per share	**$**	**1.76**	$	1.93	**$**	**3.58**	$	3.25

(1) The tax impact of adjustments is based on the nature of the item for tax purposes and related tax rates in the applicable jurisdiction.

Adjusted operating income is defined as Operating income in accordance with GAAP adjusted for certain significant operating expense items. Adjusted operating expenses is defined as Operating expenses in accordance with GAAP adjusted for certain significant operating expense items. Adjusted operating ratio is defined as adjusted operating expenses as a percentage of revenues. The following table provides a reconciliation of Operating income, Operating expenses and operating ratio, as reported for the three and six months ended June 30, 2023 and 2022, to the non-GAAP adjusted performance measures presented herein:

	Three months ended June 30				Six months ended June 30			
In millions, except percentages		**2023**		2022		**2023**		2022
Operating income	**$**	**1,600**	$	1,769	**$**	**3,262**	$	2,996
Adjustment:								
Advisory fees related to shareholder matters		**—**		12		**—**		22
Total adjustment		**—**		12		**—**		22
Adjusted operating income	**$**	**1,600**	$	1,781	**$**	**3,262**	$	3,018
Operating expenses	**$**	**2,457**	$	2,575	**$**	**5,108**	$	5,056
Total adjustment		**—**		(12)		**—**		(22)
Adjusted operating expenses	**$**	**2,457**	$	2,563	**$**	**5,108**	$	5,034
Operating ratio		**60.6 %**		59.3 %		**61.0 %**		62.8 %
Impact of adjustment		**— %**		(0.3)%		**— %**		(0.3)%
Adjusted operating ratio		**60.6 %**		59.0 %		**61.0 %**		62.5 %

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 weighted average foreign exchange rates used to translate transactions denominated in US dollars of the comparable period of the prior year.

The average foreign exchange rates were $1.34 and $1.35 per US$1.00 for the three and six months ended June 30, 2023, respectively, and $1.28 and $1.27 per US$1.00 for the three and six months ended June 30, 2022, respectively. On a constant currency basis, the Company's net income for the three and six months ended June 30, 2023 would have been lower by $34 million ($0.05 per diluted share) and $76 million ($0.11 per diluted share), respectively.

The following table provides a reconciliation of the impact of constant currency and related percentage change at constant currency on the financial results, as reported for the three and six months ended June 30, 2023:

	Three months ended June 30				Six months ended June 30			
In millions, except per share data	**2023**	Constant currency impact	2022	% Change at constant currency Fav (Unfav)	**2023**	Constant currency impact	2022	% Change at constant currency Fav (Unfav)
Revenues								
Petroleum and chemicals	**$ 748**	$ (23)	$ 829	(13%)	**$ 1,576**	$ (56)	$ 1,585	(4%)
Metals and minerals	**497**	(19)	466	3%	**1,026**	(47)	872	12%
Forest products	**480**	(18)	513	(10%)	**991**	(43)	939	1%
Coal	**263**	(5)	249	4%	**526**	(11)	444	16%
Grain and fertilizers	**688**	(19)	604	11%	**1,549**	(46)	1,208	24%
Intermodal	**983**	(17)	1,326	(27%)	**1,995**	(38)	2,382	(18%)
Automotive	**235**	(8)	208	9%	**450**	(19)	373	16%
Total freight revenues	**3,894**	(109)	4,195	(10%)	**8,113**	(260)	7,803	1%
Other revenues	**163**	(6)	149	5%	**257**	(9)	249	—%
Total revenues	**4,057**	(115)	4,344	(9%)	**8,370**	(269)	8,052	1%
Operating expenses								
Labor and fringe benefits	**747**	(13)	681	(8%)	**1,559**	(33)	1,434	(6%)
Purchased services and material	**571**	(10)	557	(1%)	**1,164**	(23)	1,095	(4%)
Fuel	**485**	(23)	672	31%	**1,042**	(55)	1,197	18%
Depreciation and amortization	**449**	(9)	423	(4%)	**897**	(20)	843	(4%)
Equipment rents	**83**	(3)	87	8%	**173**	(8)	182	9%
Casualty and other	**122**	(4)	155	24%	**273**	(11)	305	14%
Total operating expenses	**2,457**	(62)	2,575	7%	**5,108**	(150)	5,056	2%
Operating income	**1,600**	(53)	1,769	(13%)	**3,262**	(119)	2,996	5%
Interest expense	**(173)**	8	(128)	(29%)	**(338)**	18	(254)	(26%)
Other components of net periodic benefit income	**120**	—	124	(3%)	**239**	—	249	(4%)
Other income (loss)	**1**	—	(10)	110%	**2**	—	(24)	108%
Income before income taxes	**1,548**	(45)	1,755	(14%)	**3,165**	(101)	2,967	3%
Income tax expense	**(381)**	11	(430)	14%	**(778)**	25	(724)	(4%)
Net income	**$ 1,167**	$ (34)	$ 1,325	(14%)	**$ 2,387**	$ (76)	$ 2,243	3%
Diluted earnings per share	**$ 1.76**	$ (0.05)	$ 1.92	(11%)	**$ 3.58**	$ (0.11)	$ 3.22	8%

Revenues

The following table provides the components of total revenues and freight revenues, as well as other key operating measures, for the three and six months ended June 30, 2023 and 2022:

	Three months ended June 30				Six months ended June 30			
In millions, unless otherwise indicated	**2023**	2022	% Change	% Change at constant currency (1)	**2023**	2022	% Change	% Change at constant currency (1)
Freight revenues	**$ 3,894**	$ 4,195	(7%)	(10%)	**$ 8,113**	$ 7,803	4%	1%
Other revenues	**163**	149	9%	5%	**257**	249	3%	—%
Total revenues	**$ 4,057**	$ 4,344	(7%)	(9%)	**$ 8,370**	$ 8,052	4%	1%
Freight revenues								
Petroleum and chemicals	**$ 748**	$ 829	(10%)	(13%)	**$ 1,576**	$ 1,585	(1%)	(4%)
Metals and minerals	**497**	466	7%	3%	**1,026**	872	18%	12%
Forest products	**480**	513	(6%)	(10%)	**991**	939	6%	1%
Coal	**263**	249	6%	4%	**526**	444	18%	16%
Grain and fertilizers	**688**	604	14%	11%	**1,549**	1,208	28%	24%
Intermodal	**983**	1,326	(26%)	(27%)	**1,995**	2,382	(16%)	(18%)
Automotive	**235**	208	13%	9%	**450**	373	21%	16%
Total freight revenues	**$ 3,894**	$ 4,195	(7%)	(10%)	**$ 8,113**	$ 7,803	4%	1%
Revenue ton miles (RTMs) *(millions)* (2)	**55,877**	60,551	(8%)	(8%)	**115,838**	117,105	(1%)	(1%)
Freight revenue/RTM *(cents)* (3)	**6.97**	6.93	1%	(2%)	**7.00**	6.66	5%	2%
Carloads *(thousands)*	**1,369**	1,474	(7%)	(7%)	**2,722**	2,820	(3%)	(3%)
Freight revenue/carload *($)*	**2,844**	2,846	—%	(3%)	**2,981**	2,767	8%	4%

(1) This non-GAAP measure does not have any standardized meaning prescribed by GAAP and therefore, may not be comparable to similar measures presented by other companies. See the section of this MD&A entitled Constant currency for an explanation of this non-GAAP measure.

(2) RTMs is a measure of volumes and is calculated by multiplying the weight in tons of the shipment lading being transported by the number of miles that the shipment is transported on company lines.

(3) Freight revenue per RTM is an indicator of yield and represents revenue earned for transporting one ton of freight over a distance of one mile.

Revenues for the quarter ended June 30, 2023 were $4,057 million compared to $4,344 million for the same period in 2022, a decrease of $287 million, or 7%, mainly due to:

- lower RTMs of 8% mainly due to lower volumes of intermodal, crude oil, U.S. grain exports and forest products, primarily as a result of lower demand for freight services to move consumer goods and customer outages caused by Canadian wildfires; partly offset by higher export volumes of Canadian grain;
- partly offset by higher Freight revenue per RTM of 1% mainly due to a significant decrease in the average length of haul primarily as a result of lower intermodal and crude oil volumes, freight rate increases and the positive translation impact of a weaker Canadian dollar; partly offset by lower ancillary services including container storage and lower fuel surcharge revenues as a result of lower fuel prices.

Revenues for the first half of 2023 were $8,370 million compared to $8,052 million for the same period in 2022, an increase of $318 million, or 4%, mainly due to:

- higher Freight revenue per RTM of 5% mainly due to a decrease in the average length of haul, freight rate increases, the positive translation impact of a weaker Canadian dollar and higher fuel surcharge revenues as a result of higher fuel prices; partly offset by lower ancillary services including container storage;
- partly offset by lower RTMs of 1% mainly due to lower volumes of intermodal, U.S. grain exports, crude oil and forest products, primarily as a result of lower demand for freight services to move consumer goods and customer outages caused by Canadian wildfires; partly offset by higher export volumes of Canadian grain.

Fuel surcharge revenues decreased by $140 million in the second quarter of 2023 when compared to the same period in 2022, mainly due to lower fuel prices and lower volumes; partly offset by the positive translation impact of a weaker Canadian dollar. Fuel surcharge revenues increased by $119 million in the first half of 2023 when compared to the same period in 2022, mainly due to higher fuel prices and the positive translation impact of a weaker Canadian dollar; partly offset by lower volumes.

Petroleum and chemicals

	Three months ended June 30				Six months ended June 30			
	2023	2022	% Change	% Change at constant currency	**2023**	2022	% Change	% Change at constant currency
Revenues *(millions)*	**$ 748**	$ 829	(10%)	(13%)	**$ 1,576**	$ 1,585	(1%)	(4%)
RTMs *(millions)*	**10,426**	12,330	(15%)	(15%)	**21,445**	23,889	(10%)	(10%)
Revenue/RTM *(cents)*	**7.17**	6.72	7%	3%	**7.35**	6.63	11%	7%
Carloads *(thousands)*	**151**	162	(7%)	(7%)	**312**	321	(3%)	(3%)

Petroleum and chemicals revenues decreased by $81 million, or 10%, in the second quarter of 2023 when compared to the same period in 2022. The decrease was mainly due to:

- lower RTMs of 15%, mainly due to lower volumes of crude oil and chemicals and plastics mainly due to lower industrial production;
- partly offset by higher Revenue per RTM of 7%, mainly due to a decrease in the average length of haul, freight rate increases and the positive translation impact of a weaker Canadian dollar; partly offset by lower fuel surcharge revenues.

Petroleum and chemicals revenues decreased by $9 million, or 1%, in the first half of 2023 when compared to the same period in 2022. The decrease was mainly due to:

- lower RTMs of 10%, mainly due to lower volumes of crude oil and lower volumes of chemicals and plastics mainly due to lower industrial production;
- partly offset by higher Revenue per RTM of 11%, mainly due to a decrease in the average length of haul, the positive translation impact of a weaker Canadian dollar, freight rate increases and higher fuel surcharge revenues.

RTMs decreased more than Carloads in the second quarter and first half of 2023, when compared to the same periods in 2022, mainly due to lower shipments of crude oil, which has a longer length of haul.

Metals and minerals

	Three months ended June 30				Six months ended June 30			
	2023	2022	% Change	% Change at constant currency	**2023**	2022	% Change	% Change at constant currency
Revenues *(millions)*	**$ 497**	$ 466	7%	3%	**$ 1,026**	$ 872	18%	12%
RTMs *(millions)*	**6,740**	7,149	(6%)	(6%)	**13,828**	13,412	3%	3%
Revenue/RTM *(cents)*	**7.37**	6.52	13%	9%	**7.42**	6.50	14%	9%
Carloads *(thousands)*	**248**	236	5%	5%	**485**	445	9%	9%

Metals and minerals revenues increased by $31 million, or 7%, in the second quarter of 2023 when compared to the same period in 2022. The increase was mainly due to:

- higher Revenue per RTM of 13% mainly due to decrease in the average length of haul, freight rate increases and the positive translation impact of a weaker Canadian dollar, partly offset by lower fuel surcharge revenues;
- partly offset by lower RTMs of 6% mainly due to lower volumes of steel products and export volumes of iron ore and frac sand.

Metals and minerals revenues increased by $154 million, or 18%, in the first half of 2023 when compared to the same period in 2022. The increase was mainly due to:

- higher Revenue per RTM of 14% mainly due to the positive translation impact of a weaker Canadian dollar, freight rate increases and higher fuel surcharge revenues; and
- higher RTMs of 3% mainly due to higher volumes of frac sand, iron ore, non-ferrous metals and raw materials.

RTMs decreased while Carloads increased in the second quarter of 2023, when compared to the same period in 2022, mainly due to higher iron ore shipments, which has a lower length of haul. RTMs increased less than Carloads in the first half of 2023, when compared to the same period in 2022, mainly due to more revenue generating moves of empty customer-owned cars.

Forest products

	Three months ended June 30				Six months ended June 30			
	2023	2022	% Change	% Change at constant currency	**2023**	2022	% Change	% Change at constant currency
Revenues *(millions)*	**$ 480**	$ 513	(6%)	(10%)	**$ 991**	$ 939	6%	1%
RTMs *(millions)*	**5,754**	6,650	(13%)	(13%)	**11,810**	12,469	(5%)	(5%)
Revenue/RTM *(cents)*	**8.34**	7.71	8%	4%	**8.39**	7.53	11%	7%
Carloads *(thousands)*	**77**	86	(10%)	(10%)	**158**	164	(4%)	(4%)

Forest products revenues decreased by $33 million, or 6%, in the second quarter of 2023 when compared to the same period in 2022. The decrease was mainly due to:

- lower RTMs of 13% mainly due to lower demand for forest products and the negative impact of Canadian wildfires on customer supply chains;
- partly offset by higher Revenue per RTM of 8% mainly due to freight rate increase, the positive translation impact of a weaker Canadian dollar and a decrease in the average length of haul; partly offset by lower fuel surcharge revenues.

Forest products revenues increased by $52 million, or 6%, in the first half of 2023 when compared to the same period in 2022. The increase was mainly due to:

- higher Revenue per RTM of 11% mainly due to the positive translation impact of a weaker Canadian dollar, freight rate increases and increased fuel surcharge revenues;
- partly offset by lower RTMs of 5% mainly due to lower demand for forest products and the negative impact of Canadian wildfires on customer supply chains.

Coal

	Three months ended June 30				Six months ended June 30			
	2023	2022	% Change	% Change at constant currency	**2023**	2022	% Change	% Change at constant currency
Revenues *(millions)*	**$ 263**	$ 249	6%	4%	**$ 526**	$ 444	18%	16%
RTMs *(millions)*	**5,965**	6,127	(3%)	(3%)	**11,813**	11,495	3%	3%
Revenue/RTM *(cents)*	**4.41**	4.06	9%	7%	**4.45**	3.86	15%	13%
Carloads *(thousands)*	**132**	129	2%	2%	**262**	247	6%	6%

Coal revenues increased by $14 million, or 6%, in the second quarter of 2023 when compared to the same period in 2022. The increase was mainly due to:

- higher Revenue per RTM of 9% mainly due to freight rate increases, a decrease in the average length of haul and the positive translation impact of a weaker Canadian dollar, partly offset by lower fuel surcharge revenues;
- partly offset by lower RTMs of 3% mainly due to lower Canadian coal shipments and reduced U.S. coal export volumes; partly offset by higher shipments of U.S. domestic coal.

Coal revenues increased by $82 million, or 18% in the first half of 2023 when compared to the same period in 2022. The increase was mainly due to:

- higher Revenue per RTM of 15% mainly due to freight rate increases, higher fuel surcharge revenues, the positive translation impact of a weaker Canadian dollar and a decrease in the average length of haul; and
- higher RTMs of 3% mainly due to higher Canadian export volumes of thermal coal via west coast ports and higher volumes of U.S. domestic coal; partly offset by lower U.S. thermal coal export volumes.

RTMs decreased while Carloads increased in the second quarter of 2023, when compared to the same period in 2022, mainly due to lower U.S. coal export shipments, which has a longer length of haul and higher shipments of U.S. domestic coal, which has a shorter length of haul. RTMs increased less than Carloads in the first half of 2023, when compared to the same period in 2022, mainly due to lower U.S. coal export shipments, which has a longer length of haul and higher shipments of U.S. domestic coal, which has a shorter length of haul; partly offset by higher Canadian coal export shipments, which has a longer length of haul.

Grain and fertilizers

	Three months ended June 30				Six months ended June 30			
	2023	2022	% Change	% Change at constant currency	**2023**	2022	% Change	% Change at constant currency
Revenues *(millions)*	**$ 688**	$ 604	14%	11%	**$ 1,549**	$ 1,208	28%	24%
RTMs *(millions)*	**13,592**	12,453	9%	9%	**30,610**	25,804	19%	19%
Revenue/RTM *(cents)*	**5.06**	4.85	4%	1%	**5.06**	4.68	8%	5%
Carloads *(thousands)*	**152**	142	7%	7%	**330**	287	15%	15%

Grain and fertilizers revenues increased by $84 million, or 14%, in the second quarter of 2023 when compared to the same period in 2022. The increase was mainly due to:

- higher RTMs of 9% mainly due to higher volumes of Canadian grain, partly offset by reduced U.S. grain shipments; and
- higher Revenue per RTM of 4% mainly due to freight rate increases and the positive translation impact of a weaker Canadian dollar, partly offset by lower fuel surcharge revenues.

Grain and fertilizers revenues increased by $341 million, or 28%, in the first half of 2023 when compared to the same period in 2022. The increase was mainly due to:

- higher RTMs of 19% mainly due to higher volumes of Canadian grain, partly offset by reduced U.S. grain shipments; and
- higher Revenue per RTM of 8% mainly due to freight rate increases, the positive translation of a weaker Canadian dollar and higher fuel surcharge revenues, partly offset by an increase in the average length of haul.

RTMs increased more than Carloads in the first half of 2023, when compared to the same period in 2022, mainly due to higher Canadian grain export shipments, which has a longer length of haul.

Intermodal

	Three months ended June 30				Six months ended June 30			
	2023	2022	% Change	% Change at constant currency	**2023**	2022	% Change	% Change at constant currency
Revenues *(millions)*	**$ 983**	$ 1,326	(26%)	(27%)	**$ 1,995**	$ 2,382	(16%)	(18%)
RTMs *(millions)*	**12,611**	15,070	(16%)	(16%)	**24,870**	28,626	(13%)	(13%)
Revenue/RTM *(cents)*	**7.79**	8.80	(11%)	(13%)	**8.02**	8.32	(4%)	(5%)
Carloads *(thousands)*	**550**	664	(17%)	(17%)	**1,062**	1,253	(15%)	(15%)

Intermodal revenues decreased by $343 million, or 26%, in the second quarter of 2023 when compared to the same period in 2022. The decrease was mainly due to:

- lower RTMs of 16% mainly due to decreased shipments in both international and domestic segments mainly due to lower imports of consumer goods; and
- lower Revenue per RTM of 11% mainly due to lower ancillary services including container storage compared to significantly higher ancillary services in 2022 resulting from customer supply chain challenges and lower fuel surcharge revenues, partly offset by freight rate increases and the positive translation impact of a weaker Canadian dollar.

Intermodal revenues decreased by $387 million, or 16%, in the first half of 2023 when compared to the same periods in 2022. The decrease was mainly due to:

- lower RTMs of 13% mainly due to decreased shipments in both international and domestic segments driven by lower imports of consumer goods; and
- lower Revenue per RTM of 4% mainly due to the lower ancillary services including container storage compared to significant higher ancillary services in 2022 resulting from customer supply chain challenges, partly offset by freight rate increases, the positive translation impact of a weaker Canadian dollar and higher fuel surcharge revenues.

Automotive

	Three months ended June 30				Six months ended June 30			
	2023	2022	% Change	% Change at constant currency	**2023**	2022	% Change	% Change at constant currency
Revenues *(millions)*	**$ 235**	$ 208	13%	9%	**$ 450**	$ 373	21%	16%
RTMs *(millions)*	**789**	772	2%	2%	**1,462**	1,410	4%	4%
Revenue/RTM *(cents)*	**29.78**	26.94	11%	7%	**30.78**	26.45	16%	11%
Carloads *(thousands)*	**59**	55	7%	7%	**113**	103	10%	10%

Automotive revenues increased by $27 million, or 13%, in the second quarter of 2023 when compared to the same period in 2022. The increase was mainly due to:

- higher Revenue per RTM of 11% mainly due to freight rate increase and the positive translation impact of a weaker Canadian dollar, partly offset by lower fuel surcharge revenues; and
- higher RTMs of 2% due to higher volumes of finished vehicles.

Automotive revenues increased by $77 million, or 21%, in the first half of 2023 when compared to the same period in 2022. The increase was mainly due to:

- higher Revenue per RTM of 16% mainly due to freight rate increase, the positive translation impact of a weaker Canadian dollar, a decrease in average length of haul mainly due to lower imports and higher fuel surcharge revenues; and
- higher RTMs of 4% mainly due to higher volumes of finished vehicles.

RTMs increased less than Carloads in the second quarter of 2023, when compared to the same period in 2022, mainly due to more shipments of import finished vehicles, which has a lower tons per car. RTMs increased less than Carloads in the first half of 2023, when compared to the same period in 2022, mainly due to more shipments of import finished vehicles, which has a lower tons per car and more shipments of domestic vehicles, which has a shorter length of haul.

Other revenues

	Three months ended June 30				Six months ended June 30			
	2023	2022	% Change	% Change at constant currency	**2023**	2022	% Change	% Change at constant currency
Revenues *(millions)*	**$ 163**	$ 149	9%	5%	**$ 257**	$ 249	3%	—%

Other revenues increased by $14 million, or 9%, in the second quarter and $8 million, or 3%, in the first half of 2023 when compared to the same periods in 2022, mainly due to higher vessel and dock revenues from iron ore supply chain and increased automotive logistics revenues.

Operating expenses

Operating expenses for the second quarter of 2023 were $2,457 million compared to $2,575 million for the same period in 2022. Operating expenses for the first half of 2023 were $5,108 million compared to $5,056 million in the same period in 2022. The decrease of $118 million, or 5%, in the second quarter was mainly due to lower fuel prices; partly offset by higher labor and fringe benefits expense mainly driven by higher average headcount and general wage increases and the negative translation impact of a weaker Canadian dollar. The increase of $52 million, or 1%, in the first half of 2023 was mainly due to the negative translation impact of a weaker Canadian dollar, higher labor and fringe benefits expense mainly driven by higher average headcount and general wage increases, higher purchased services and material expense; partly offset by lower fuel prices.

The following table provides the components of total operating expenses for the three and six months ended June 30, 2023 and 2022:

	Three months ended June 30				Six months ended June 30			
In millions, unless otherwise indicated	**2023**	2022	% Change	% Change at constant currency [(1)]	**2023**	2022	% Change	% Change at constant currency [(1)]
Labor and fringe benefits	**$ 747**	$ 681	(10%)	(8%)	**$ 1,559**	$ 1,434	(9%)	(6%)
Purchased services and material	**571**	557	(3%)	(1%)	**1,164**	1,095	(6%)	(4%)
Fuel	**485**	672	28%	31%	**1,042**	1,197	13%	18%
Depreciation and amortization	**449**	423	(6%)	(4%)	**897**	843	(6%)	(4%)
Equipment rents	**83**	87	5%	8%	**173**	182	5%	9%
Casualty and other	**122**	155	21%	24%	**273**	305	10%	14%
Total operating expenses	**$ 2,457**	$ 2,575	5%	7%	**$ 5,108**	$ 5,056	(1%)	2%

(1) This non-GAAP measure does not have any standardized meaning prescribed by GAAP and therefore, may not be comparable to similar measures presented by other companies. See the section of this MD&A entitled *Constant currency* for an explanation of this non-GAAP measure.

Labor and fringe benefits

Labor and fringe benefits expense increased by $66 million, or 10%, in the second quarter and $125 million, or 9%, in the first half of 2023 when compared to the same periods in 2022, mainly due to higher average headcount, general wage increases and the negative translation impact of a weaker Canadian dollar; partly offset by lower pension expense.

Purchased services and material

Purchased services and material expense increased by $14 million, or 3%, in the second quarter and $69 million, or 6%, in the first half of 2023 when compared to the same periods in 2022, mainly due to higher contracted services, repairs and maintenance costs and the negative translation impact of a weaker Canadian dollar; partly offset by lower freight forwarding expense. In addition, the increase in the first half was also due to higher material costs.

Fuel

Fuel expense decreased by $187 million, or 28%, in the second quarter and $155 million, or 13%, in the first half of 2023 when compared to the same periods in 2022, mainly due lower fuel prices and lower volumes; partly offset by lower fuel efficiency and the negative translation impact of a weaker Canadian dollar.

Depreciation and amortization

Depreciation and amortization expense increased by $26 million, or 6% in the second quarter and $54 million, or 6%, in the first half of 2023 when compared to the same periods in 2022, mainly due to a higher depreciable asset base and the negative translation impact of a weaker Canadian dollar.

Equipment rents

Equipment rents expense decreased by $4 million, or 5%, in the second quarter and $9 million, or 5% in the first half of 2023 when compared to the same periods in 2022, mainly due to lower car hire expense; partly offset by the negative translation impact of a weaker Canadian dollar. In addition, the decrease in the first half of 2023 was also due to higher locomotive horsepower-hour income.

Casualty and other

Casualty and other expense decreased by $33 million, or 21%, in the second quarter and $32 million, or 10%, in the first half of 2023 when compared to the same periods in 2022, mainly due to advisory fees related to shareholder matters of $12 million in the second quarter of 2022 and $22 million in the first half of 2022, lower incident costs and lower legal provisions; partly offset by the negative translation impact of a weaker Canadian dollar.

Other income and expenses

Interest expense

Interest expense was $173 million and $338 million for the three and six months ended June 30, 2023 respectively, compared to $128 million and $254 million, respectively, for the same periods in 2022. The increase of $45 million and $84 million, respectively, were mainly due to the higher average level of debt, the negative translation impact of a weaker Canadian dollar and higher average interest rates.

Other components of net periodic benefit income

Other components of net periodic benefit income were $120 million and $239 million for the three and six months ended June 30, 2023, respectively, compared to $124 million and $249 million, respectively, for the same periods in 2022. The decrease of $4 million and $10 million, respectively, were mainly due to higher interest cost; partly offset by lower amortization of net actuarial loss and higher expected return on assets. These effects primarily resulted from changes to discount rates, lower actual returns compared to expected returns, as well as an increase to the Company’s expected long-term rate of return assumption in 2023.

Other income (loss)

Other income was $1 million and $2 million for the three and six months ended June 30, 2023, compared to other loss of $10 million and $24 million, respectively, for the same periods in 2022. The increase of $11 million and $26 million, respectively, were mainly due to the decrease in the fair value of an equity investment in autonomous driving technology in the second quarter and first half of 2022.

Income tax expense

Income tax expense was $381 million and $778 million for the three and six months ended June 30, 2023, respectively, compared to $430 million and $724 million, respectively, for the same periods in 2022. The effective tax rates for the three and six months ended June 30, 2023 were 24.6% compared to 24.5% and 24.4%, respectively, for the same periods in 2022.

Summary of quarterly financial data

	2023 Quarters		2022 Quarters				2021 Quarters	
In millions, except per share data	**Second**	First	Fourth	Third	Second	First	Fourth	Third
Revenues	**$ 4,057**	$ 4,313	$ 4,542	$ 4,513	$ 4,344	$ 3,708	$ 3,753	$ 3,591
Operating income [(1)]	**$ 1,600**	$ 1,662	$ 1,912	$ 1,932	$ 1,769	$ 1,227	$ 1,566	$ 1,341
Dividends per share	**$ 0.7900**	$ 0.7900	$ 0.7325	$ 0.7325	$ 0.7325	$ 0.7325	$ 0.6150	$ 0.6150
Financial measures impacted by change in accounting policy								
Net income [(1)(2)]	**$ 1,167**	$ 1,220	$ 1,420	$ 1,455	$ 1,325	$ 918	$ 1,201	$ 1,686
Net income as previously reported [(1)]	**N/A**	N/A	N/A	N/A	N/A	N/A	$ 1,199	$ 1,685
Basic earnings per share [(2)]	**$ 1.76**	$ 1.83	$ 2.10	$ 2.13	$ 1.92	$ 1.31	$ 1.70	$ 2.38
Basic earnings per share as previously reported	**N/A**	N/A	N/A	N/A	N/A	N/A	$ 1.70	$ 2.38
Diluted earnings per share [(1)(2)]	**$ 1.76**	$ 1.82	$ 2.10	$ 2.13	$ 1.92	$ 1.31	$ 1.70	$ 2.37
Diluted earnings per share as previously reported [(1)]	**N/A**	N/A	N/A	N/A	N/A	N/A	$ 1.69	$ 2.37

(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 2022 Annual MD&A for additional information on these items.

(2) See *Note 2 – Change in accounting policy* to the Company's 2022 Annual Consolidated Financial Statements for additional information.

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 2022 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 2022 Annual MD&A. There were no significant changes during the first half of 2023, except as noted below.

As at June 30, 2023 and December 31, 2022, the Company had Cash and cash equivalents of $539 million and $328 million, respectively; Restricted cash and cash equivalents of $451 million and $506 million, respectively; and a working capital deficit of $235 million and $625 million, respectively. (1) 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.

(1) The Company defines working capital as current assets of $3,266 million (December 31, 2022 - $3,217 million) less current liabilities of $3,501 million (December 31, 2022 - $3,842 million).

Available financing sources

For details on the Company's available financing sources, see section entitled *Liquidity and capital resources* to the Company's 2022 Annual MD&A as well as *Note 6 – Financing activities* to the Company's June 30, 2023 Interim Consolidated Financial Statements.

Shelf prospectus and registration statement

As at June 30, 2023, the remaining capacity of the shelf prospectus and registration statement, filed on May 4, 2022, was $2.3 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

On March 17, 2023, the Company's revolving credit facility agreements were amended to extend their respective tenors by one additional year each. The unsecured credit facility of $2.5 billion consists of two tranches of $1.25 billion now maturing on March 31, 2026 and March 31, 2028. The unsecured credit facility of $1.0 billion is now maturing on March 17, 2025. The credit facilities were also amended to include fallback language that addresses the cessation of Canadian Dollar Offered Rate (CDOR) and adoption of Canadian Overnight Repo Rate Average (CORRA).

As at June 30, 2023 and December 31, 2022, the Company had no outstanding borrowings under these revolving credit facilities.

Equipment loans

On March 31, 2023, the Company amended its non-revolving term loan facility to transition from LIBOR to SOFR. The facility will now bear interest at SOFR and CDOR plus a margin for U.S. dollar denominated and Canadian dollar denominated borrowings, respectively. The facility now includes fallback language that addresses the cessation of CDOR and adoption of CORRA.

As at June 30, 2023 and December 31, 2022, the Company had outstanding borrowings of US$526 million ($697 million) and US$542 million ($734 million), respectively.

On March 31, 2023, the Company entered into new loan supplements to the existing agreement for an additional principal amount of US$304 million, which is available to be drawn through March 31, 2024. Term loans made under these loan supplements have a tenor of 15 years, bear interest at SOFR and CDOR plus a margin, are repayable in equal quarterly installments and are secured by rolling stock. As at June 30, 2023, the Company had no outstanding borrowings under this loan supplement.

Commercial paper

As at June 30, 2023 and December 31, 2022, the Company had total commercial paper borrowings of US$801 million ($1,061 million) and US$594 million ($805 million), respectively, presented in Current portion of long-term debt on the Consolidated Balance Sheets.

Bilateral letter of credit facilities

On March 17, 2023, the Company extended the maturity date of its committed bilateral letter of credit facility agreements to April 28, 2026.

As at June 30, 2023, the Company had outstanding letters of credit of $338 million ($396 million as at December 31, 2022) under the committed facilities from a total available amount of $360 million ($470 million as at December 31, 2022) and $152 million ($100 million as at December 31, 2022) under the uncommitted facilities.

As at June 30, 2023, included in Restricted cash and cash equivalents was $341 million ($397 million as at December 31, 2022) and $100 million ($100 million as at December 31, 2022) which were pledged as collateral under the committed and uncommitted bilateral letter of credit facilities, respectively, and $10 million held in escrow as at June 30, 2023 ($9 million as at December 31, 2022).

Credit ratings

The Company's ability to access funding in the debt capital markets and the cost and amount of funding available depends in part on its credit ratings. Rating downgrades could limit the Company's access to the capital markets, or increase its borrowing costs.

In the second quarter the rating agencies took the following actions:

- DBRS maintained the outlook at stable and confirmed CN's long-term and short-term ratings at current levels at A and R-1 (low).
- Moody's Investors Service changed their outlook from negative to stable and confirmed the long-term and short-term debt ratings at A2 and P-1 respectively.
- Standard & Poor's changed their outlook from negative to stable and downgraded the long-term debt rating from A to A- and the commercial paper rating from A-1 to A-2.

The following table provides the Company's long-term debt and commercial paper credit ratings as of the date of this MD&A.

	Outlook	Long-term debt rating (1)	Commercial paper rating (1)
DBRS Morningstar	Stable	A	R-1 (low)
Moody's Investors Service	Stable	A2	P-1
Standard & Poor's	Stable	A-	A-2

(1) These credit ratings are not recommendations to purchase, hold, or sell the securities referred to above. Ratings may be revised or withdrawn at any time by the credit rating agencies. Each credit rating should be evaluated independently of any other credit rating.

Cash flows

The following table provides the cash flows for the three and six months ended June 30, 2023 and 2022:

	Three months ended June 30			Six months ended June 30		
In millions	**2023**	2022	Variance	**2023**	2022	Variance
Net cash provided by operating activities	**$ 1,985**	$ 1,713	$ 272	**$ 3,040**	$ 2,283	$ 757
Net cash used in investing activities	**(885)**	(716)	(169)	**(1,347)**	(817)	(530)
Net cash used in financing activities	**(1,045)**	(1,023)	(22)	**(1,535)**	(1,788)	253
Effect of foreign exchange fluctuations on cash, cash equivalents, restricted cash, and restricted cash equivalents	**(2)**	1	(3)	**(2)**	1	(3)
Net increase (decrease) in cash, cash equivalents, restricted cash, and restricted cash equivalents	**53**	(25)	78	**156**	(321)	477
Cash, cash equivalents, restricted cash, and restricted cash equivalents, beginning of period	**937**	1,045	(108)	**834**	1,341	(507)
Cash, cash equivalents, restricted cash, and restricted cash equivalents, end of period	**$ 990**	$ 1,020	$ (30)	**$ 990**	$ 1,020	$ (30)

Free cash flow

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 (i) business acquisitions and (ii) merger transaction-related payments, cash receipts and cash income taxes, which are items that are not indicative of operating trends. 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.

The following table provides a reconciliation of Net cash provided by operating activities in accordance with GAAP, as reported for the three and six months ended June 30, 2023 and 2022, to the non-GAAP free cash flow presented herein:

	Three months ended June 30		Six months ended June 30	
In millions	**2023**	2022	**2023**	2022
Net cash provided by operating activities	**$ 1,985**	$ 1,713	**$ 3,040**	$ 2,283
Net cash used in investing activities	**(885)**	(716)	**(1,347)**	(817)
Net cash provided before financing activities	**1,100**	997	**1,693**	1,466
Adjustment:				
Cash income taxes for merger transaction-related payments and cash receipts [(1)]	**—**	—	**—**	102
Free cash flow	**$ 1,100**	$ 997	**$ 1,693**	$ 1,568

(1) Relates to income tax payments of $102 million for KCS merger transaction-related payments and cash receipts. See *Note 4 – Acquisition* to the Company's 2022 Annual Consolidated Financial Statements for additional information.

Operating activities

Net cash provided by operating activities increased by $272 million in the second quarter of 2023 and by $757 million in the first half of 2023 when compared to the same periods in 2022. The increase in the second quarter of 2023 was mainly due to favorable changes in working capital items including lower income tax installment payments partly offset by lower Net income. The increase in the first half of 2023 was mainly due to favorable changes in working capital items and higher Net income.

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.

Additional information relating to the pension plans is provided in *Note 18 – Pensions and other postretirement benefits* to the Company's 2022 Annual Consolidated Financial Statements and the section entitled *Liquidity and capital resources* of the Company's 2022 Annual MD&A.

The Company's most recently filed actuarial valuations for funding purposes for its Canadian registered defined benefit pension plans conducted as at December 31, 2022 indicated a funding excess on a going concern basis of approximately $4.4 billion and a funding excess on a solvency basis of approximately $1.6 billion calculated using the three-year average of the plans' hypothetical wind-up ratio.

Pension contributions for the six months ended June 30, 2023 and 2022 were $26 million and $45 million, respectively. The contributions for the six months ended June 30, 2022 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. For the six months ended June 30, 2023, based on the results of the December 31, 2022 funding valuations, the CN Pension Plan remained fully funded and at a level such that the Company continues to be prohibited from making contributions to the CN Pension Plan. For all of 2023, the Company expects to make total cash contributions of approximately $50 million for all of the Company's 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.

Income tax payments

Net income tax payments for the six months ended June 30, 2023 and 2022 were $708 million and $690 million, respectively. The increase was mostly due to higher required installment payments in Canada. For 2023, the Company's net income tax payments are now expected to be approximately $1.35 billion.

Investing activities

Net cash used in investing activities increased by $169 million in the second quarter of 2023 and by $530 million in the first half of 2023 when compared to the same periods in 2022, mainly due to higher property additions. In addition, the increase in the first half of 2023 was also due to proceeds of $273 million received in 2022 from the sale of non-core lines.

Property additions

The following table provides the property additions for the three and six months ended June 30, 2023 and 2022:

	Three months ended June 30		Six months ended June 30	
In millions	**2023**	2022	**2023**	2022
Track and roadway	**$ 566**	$ 454	**$ 793**	$ 646
Rolling stock	**197**	159	**308**	240
Buildings	**16**	13	**28**	20
Information technology	**69**	67	**132**	131
Other	**27**	14	**75**	49
Property additions	**$ 875**	$ 707	**$ 1,336**	$ 1,086

2023 Capital expenditure program

In 2023, the Company will continue to invest in its capital program to improve the safety, efficiency and integrity of its network. These investments will enable and support the growth of the Company and will be financed with cash generated from operations or with cash from financing activities as required.

Financing activities

Net cash used in financing activities increased by $22 million in the second quarter of 2023 and decreased by $253 million in the first half of 2023 when compared to the same periods in 2022. The increase in the second quarter was due to higher net repayments of debt including commercial paper partly offset by lower repurchases of common shares. The decrease in the first half was primarily driven by lower repurchases of common shares and higher net issuance of debt including commercial paper.

Debt financing activities

Debt financing activities in the first half of 2023 included the following:

- On May 10, 2023, issuance of $550 million 4.15% Notes due 2030, $400 million 4.40% Notes due 2033 and $800 million 4.70% Notes due 2053 in the Canadian capital markets, which resulted in total net proceeds of $1,730 million;
- On May 15, 2023, repayment of US$150 million ($203 million) 7.63% Notes due 2023 upon maturity; and
- Net repayment of commercial paper of $989 million in the second quarter and net issuance of $239 million in the first half.

Debt financing activities in the first half of 2022 included the following:

- Net issuance of commercial paper of $686 million in the second quarter and $1,706 in the first half.

Additional information relating to the Company's outstanding debt securities is provided in *Note 16 – Debt* to the Company's 2022 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 32.0 million common shares between February 1, 2023 and January 31, 2024. As at June 30, 2023, the Company had repurchased 11.6 million common shares for $1,833 million under its current NCIB.

The Company repurchased 31.9 million common shares under its previous NCIB effective between February 1, 2022 and January 31, 2023, which allowed for the repurchase of up to 42.0 million common shares.

The following table provides the information related to the share repurchases for the three and six months ended June 30, 2023 and 2022:

	Three months ended June 30		Six months ended June 30	
In millions, except per share data	**2023**	2022	**2023**	2022
Number of common shares repurchased	**6.6**	7.8	**14.1**	16.0
Weighted-average price per share (1)	**$ 158.67**	$ 149.16	**$ 159.33**	$ 153.95
Amount of repurchase (1)(2)	**$ 1,043**	$ 1,173	**$ 2,242**	$ 2,466

(1) Includes brokerage fees.

(2) Includes settlements in subsequent periods.

Dividends paid

The Company paid quarterly dividends of $0.7900 per share amounting to $521 million and $1,047 million in the second quarter and first half of 2023 compared to $504 million and $1,013 million, at the quarterly rate of $0.7325 per share for the same periods in 2022.

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, 2023:

In millions	**Total**	2023	2024	2025	2026	2027	2028 & thereafter
Debt obligations (1)	**$ 16,929**	$ 1,083	$ 495	$ 384	$ 698	$ 35	$ 14,234
Interest on debt obligations	**12,200**	345	689	672	651	640	9,203
Finance lease obligations	**10**	1	2	2	4	1	—
Operating lease obligations (2)	**443**	68	113	93	57	33	79
Purchase obligations (3)	**2,218**	1,655	236	120	26	7	174
Other long-term liabilities (4)	**552**	51	45	43	27	23	363
Total contractual obligations	**$ 32,352**	**$ 3,203**	**$ 1,580**	**$ 1,314**	**$ 1,463**	**$ 739**	**$ 24,053**

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

(2) Includes $70 million related to renewal options reasonably certain to be exercised and $33 million of imputed interest.

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

(4) 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.

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 the last twelve months of adjusted EBITDA. Adjusted debt is defined as the sum of Long-term debt and Current portion of long-term debt as reported on the Company's Consolidated Balance Sheets as well as Operating lease liabilities, including current portion and pension plans in deficiency recognized on the Company's Consolidated Balance Sheets due to the debt-like nature of their contractual and financial obligations. Adjusted EBITDA is calculated as Net income excluding Interest expense, Income tax expense, Depreciation and amortization, operating lease cost, Other components of net periodic benefit income, Other income (loss), and other significant items that are not reflective of CN's underlying business operations and which could distort the analysis of trends in business performance. Adjusted debt and adjusted EBITDA are non-GAAP measures used to compute the Adjusted debt-to-adjusted EBITDA multiple. 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 in accordance with GAAP, reported as at and for the twelve months ended June 30, 2023 and 2022, to the adjusted measures presented herein, which have been used to calculate the non-GAAP adjusted debt-to-adjusted EBITDA multiple:

In millions, unless otherwise indicated	*As at and for the twelve months ended June 30,*	**2023**	2022
Debt		**$ 16,938**	$ 14,372
Adjustments:			
Operating lease liabilities, including current portion (1)		**410**	419
Pension plans in deficiency (2)		**350**	443
Adjusted debt		**$ 17,698**	$ 15,234
Net income		**$ 5,262**	$ 5,130
Interest expense		**632**	576
Income tax expense		**1,699**	1,512
Depreciation and amortization		**1,783**	1,631
Operating lease cost (3)		**147**	135
Other components of net periodic benefit income		**(488)**	(459)
Other loss		**1**	30
Adjustments:			
Workforce reduction program (4)		**—**	39
Advisory fees related to shareholder matters (5)		**—**	42
Transaction-related costs (6)		**—**	84
Merger termination fee (6)		**—**	(886)
Adjusted EBITDA		**$ 9,036**	$ 7,834
Adjusted debt-to-adjusted EBITDA multiple *(times)*		**1.96**	1.94

(1) Represents the present value of operating lease payments.

(2) Represents the total funded deficit of all defined benefit pension plans with a projected benefit obligation in excess of plan assets.

(3) Represents the operating lease costs recorded in Purchased services and material and Equipment rents within the Consolidated Statements of Income.

(4) Relates to employee termination benefits and severance costs related to a workforce reduction program. See the section entitled *Adjusted performance measures* of the Company's 2022 Annual MD&A for additional information.

(5) Relates to advisory fees related to shareholder matters recorded in Casualty and other within the Consolidated Statements of Income. See the section entitled *Adjusted performance measures* of the Company's 2022 Annual MD&A for additional information.

(6) Relates to the terminated CN Merger Agreement. See *Note 4 – Acquisition* to the Company's 2022 Annual Consolidated Financial Statements and the section entitled *Adjusted performance measures* of the Company's 2022 Annual MD&A for additional information.

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, 2023, the Company has not recorded a liability with respect to guarantees and indemnifications. Additional information relating to guarantees and indemnifications is provided in *Note 9 – Major commitments and contingencies* to the Company's June 30, 2023 Interim Consolidated Financial Statements.

Outstanding share data

As at July 25, 2023, the Company had 655.6 million common shares and 3.5 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 2022 Annual MD&A.

Derivative financial instruments

Foreign currency risk

As at June 30, 2023, the Company had outstanding foreign exchange forward contracts to purchase a notional value of US$732 million (US$1,311 million as at December 31, 2022). These outstanding contracts are at a weighted-average exchange rate of $1.34 per US$1.00 ($1.33 per US$1.00 as at December 31, 2022) with exchange rates ranging from $1.33 to $1.37 per US$1.00 ($1.29 to $1.37 per US$1.00 as at December 31, 2022). The weighted-average term of the contracts is 142 days (157 days as at December 31, 2022) with terms ranging from 28 days to 290 days (29 days to 300 days as at December 31, 2022). Changes in the fair value of foreign exchange forward contracts, resulting from changes in foreign exchange rates, are recognized in Other income (loss) in the Consolidated Statements of Income as they occur.

For the three and six months ended June 30, 2023, the Company recorded losses of $33 million and $27 million, respectively, related to foreign exchange forward contracts compared to gains of $60 million and $36 million, respectively, for the same periods in 2022.

As at June 30, 2023, the fair value of outstanding foreign exchange forward contracts included in Other current assets and Accounts payable and other was $nil and $15 million, respectively ($33 million and $4 million, respectively, as at December 31, 2022).

Interest rate risk

As at June 30, 2023, the aggregate notional amount of treasury lock agreements entered into was US$450 million to hedge US Treasury benchmark rates related to an expected debt issuance in 2023. The treasury locks are designated as cash flow hedging instruments. The cumulative gains or losses of the treasury locks are recorded in Accumulated other comprehensive loss in derivative instruments. The treasury locks will be settled in 2023 upon the issuance of debt at which point the cumulative gains or losses recorded in Accumulated other comprehensive loss will be amortized in earnings as a reduction or increase of interest expense over the term of the corresponding debt.

As at June 30, 2023, the fair value of outstanding treasury lock agreements included in Other current assets and Accounts payable and other was $18 million and $nil respectively ($nil and $nil, respectively, as at December 31, 2022).

Fair value of financial instruments

As at June 30, 2023, the Company's debt, excluding finance leases, had a carrying amount of 16,929 million ($15,419 million as at December 31, 2022) and a fair value of 15,846 million ($14,137 million as at December 31, 2022). The carrying amount of debt excluding finance leases exceeded the fair value due to market rates being higher than the stated coupon rates.

Additional information relating to financial instruments is provided in *Note 10 – Financial instruments* to the Company's June 30, 2023 Interim Consolidated Financial Statements.

Recent accounting pronouncements

The following Accounting Standards Updates (ASU) issued by the Financial Accounting Standards Board (FASB) have been adopted by the Company:

ASU 2020-04 and ASU 2022-06 Reference rate reform (Topic 848): Facilitation of the effects of reference rate reform on financial reporting and related amendments

On March 31, 2023, the Company amended the non-revolving credit facility to transition to Secured Overnight Financing Rates (SOFR) succeeding London Interbank Offered Rates (LIBOR) (see *Note 6 – Financing activities* to the Company's June 30, 2023 Interim Consolidated Financial Statements). The Company was eligible and has elected to use the optional expedient provided by the ASU which allowed the amendment to be accounted for as a non substantial modification of an existing debt. As a result, the amendment did not have a significant impact to the Company's Interim Consolidated Financial Statements and related disclosures.

Additional information relating to the facilitation of the effects of reference rate reform on financial reporting and related amendments is provided in *Note 3 – Recent accounting pronouncements* to the Company's 2022 Annual Consolidated Financial Statements and the section entitled *Recent accounting pronouncements* of the Company's 2022 Annual MD&A.

Other recently issued ASUs required to be applied on or after June 30, 2023 have been evaluated by the Company and are not expected to have a significant impact on the Company's Consolidated Financial Statements.

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 2022 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 2023.

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

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 2022 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, Pandemic risk, 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 and supply disruptions, 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.

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, 2023, have concluded that the Company's disclosure controls and procedures were effective.

During the second quarter ended June 30, 2023, there were no changes in the Company's internal control over financial reporting (as defined in *Exchange Act* Rules 13a-15(f) and 15d-15(f)) that materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.