

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, constant currency, free cash flow, adjusted debt-to-adjusted EBITDA multiple, return on invested capital (ROIC) and adjusted ROIC. 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 diluted 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 months and year ended December 31, 2022, the Company’s adjusted net income was \$1,420 million, or \$2.10 per diluted share, and \$5,134 million, or \$7.46 per diluted share, respectively. The adjusted figures for the year ended December 31, 2022 exclude advisory fees related to shareholder matters of \$22 million, or \$16 million after-tax (\$0.02 per diluted share) recorded in Casualty and other within the Consolidated Statements of Income.

For the three months and year ended December 31, 2021, the Company’s adjusted net income was \$1,211 million, or \$1.71 per diluted share, and \$4,225 million, or \$5.95 per diluted share, respectively. ⁽¹⁾ The adjusted figures exclude:

- employee termination benefits and severance costs related to a workforce reduction program of \$39 million, or \$29 million after-tax (\$0.04 per diluted share) recorded in the third quarter in Labor and fringe benefits within the Consolidated Statements of Income;
- advisory fees related to shareholder matters of \$20 million, or \$15 million after-tax (\$0.02 per diluted share) of which \$13 million, or \$10 million after-tax (\$0.01 per diluted share) was recorded in the fourth quarter and \$7 million, or \$5 million after-tax (\$0.01 per diluted share) was recorded in the third quarter in Casualty and other within the Consolidated Statements of Income;
- the recovery of \$137 million, or \$102 million after-tax (\$0.14 per diluted share) recorded in the first quarter related to the loss on assets held for sale in the second quarter of 2020, to reflect an agreement for the sale for on-going rail operations, certain non-core rail lines in Wisconsin, Michigan and Ontario to a short line operator;
- transaction-related costs, consisting of an advance to Kansas City Southern (KCS) and a related refund, net of transaction costs, of \$84 million, or \$70 million after-tax (\$0.10 per diluted share), recorded in the third quarter resulting from the terminated CN Merger Agreement with KCS;
- amortization of bridge financing and other fees of \$97 million, or \$84 million after-tax (\$0.11 per diluted share), of which \$65 million, or \$60 million after-tax (\$0.08 per diluted share) was recorded in the third quarter and \$32 million, or \$24 million after-tax (\$0.03 per diluted share) was recorded in the second quarter, resulting from the KCS transaction, recorded in Interest expense within the Consolidated Statements of Income; and
- merger termination fee paid by KCS to CN of \$886 million, or \$770 million after-tax (\$1.08 per diluted share), recorded in the third quarter resulting from KCS’ notice of termination of the CN Merger Agreement with KCS.

(1) See Note 2 – Change in accounting policy to the Company’s unaudited Interim Consolidated Financial Statements for additional information.

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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 months and years ended December 31, 2022 and 2021, to the non-GAAP adjusted performance measures presented herein:

<i>In millions, except per share data</i>	Three months ended December 31		Year ended December 31	
	2022	2021	2022	2021
Net income ⁽¹⁾	\$ 1,420	\$ 1,201	\$ 5,118	\$ 4,899
<i>Adjustments:</i>				
<i>Operating expense adjustments:</i>				
Workforce reduction program	—	—	—	39
Advisory fees related to shareholder matters	—	13	22	20
Recovery of loss on assets held for sale	—	—	—	(137)
Transaction-related costs	—	—	—	84
<i>Non-operating expense adjustments:</i>				
Amortization of bridge financing and other fees	—	—	—	97
Merger termination fee	—	—	—	(886)
<i>Tax adjustments:</i>				
Tax effect of adjustments ⁽²⁾	—	(3)	(6)	109
<i>Total adjustments</i>	—	10	16	(674)
<i>Adjusted net income ⁽¹⁾</i>	\$ 1,420	\$ 1,211	\$ 5,134	\$ 4,225
Diluted earnings per share ⁽¹⁾	\$ 2.10	\$ 1.70	\$ 7.44	\$ 6.90
<i>Impact of adjustments, per share</i>	—	0.01	0.02	(0.95)
<i>Adjusted diluted earnings per share ⁽¹⁾</i>	\$ 2.10	\$ 1.71	\$ 7.46	\$ 5.95

(1) See Note 2 – Change in accounting policy to the Company's unaudited Interim Consolidated Financial Statements for additional information.

(2) 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 months and years ended December 31, 2022 and 2021, to the non-GAAP adjusted performance measures presented herein:

<i>In millions, except percentages</i>	Three months ended December 31		Year ended December 31	
	2022	2021	2022	2021
Operating income	\$ 1,912	\$ 1,566	\$ 6,840	\$ 5,616
<i>Operating expense adjustments:</i>				
Workforce reduction program	—	—	—	39
Advisory fees related to shareholder matters	—	13	22	20
Recovery of loss on assets held for sale	—	—	—	(137)
Transaction-related costs	—	—	—	84
<i>Total operating expense adjustments</i>	—	13	22	6
<i>Adjusted operating income</i>	\$ 1,912	\$ 1,579	\$ 6,862	\$ 5,622
Operating expenses	\$ 2,630	\$ 2,187	\$ 10,267	\$ 8,861
<i>Total operating expense adjustments</i>	—	(13)	(22)	(6)
<i>Adjusted operating expenses</i>	\$ 2,630	\$ 2,174	\$ 10,245	\$ 8,855
Operating ratio	57.9 %	58.3 %	60.0 %	61.2 %
<i>Impact of adjustments</i>	— %	(0.4)%	(0.1)%	— %
<i>Adjusted operating ratio</i>	57.9 %	57.9 %	59.9 %	61.2 %

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 \$1.36 and \$1.30 per US\$1.00 for the three months and year ended December 31, 2022, respectively, and \$1.26 and \$1.25 per US\$1.00 for the three months and year ended December 31, 2021, respectively.

On a constant currency basis, the Company's Net income for the three months and year ended December 31, 2022 would have been lower by \$49 million (\$0.07 per diluted share) and lower by \$90 million (\$0.13 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 months and year ended December 31, 2022:

<i>In millions, except per share data</i>	Three months ended December 31				Year ended December 31			
	2022	Constant currency impact	2021	% Change at constant currency Fav (Unfav)	2022	Constant currency impact	2021	% Change at constant currency Fav (Unfav)
Revenues								
Petroleum and chemicals	\$ 794	\$ (37)	\$ 755	–%	\$ 3,229	\$ (74)	\$ 2,816	12%
Metals and minerals	500	(29)	393	20%	1,911	(57)	1,548	20%
Forest products	517	(29)	435	12%	2,006	(57)	1,740	12%
Coal	235	(5)	165	39%	937	(11)	618	50%
Grain and fertilizers	954	(32)	643	43%	2,783	(56)	2,475	10%
Intermodal	1,184	(29)	1,049	10%	4,906	(58)	4,115	18%
Automotive	216	(13)	146	39%	797	(24)	576	34%
<i>Total freight revenues</i>	4,400	(174)	3,586	18%	16,569	(337)	13,888	17%
Other revenues	142	(7)	167	(19%)	538	(15)	589	(11%)
<i>Total revenues</i>	4,542	(181)	3,753	16%	17,107	(352)	14,477	16%
Operating expenses								
Labor and fringe benefits	731	(20)	674	(5%)	2,935	(43)	2,879	–%
Purchased services and material	576	(16)	504	(11%)	2,191	(33)	2,082	(4%)
Fuel	672	(46)	419	(49%)	2,518	(88)	1,513	(61%)
Depreciation and amortization	451	(13)	383	(14%)	1,729	(25)	1,598	(7%)
Equipment rents	84	(5)	82	4%	338	(10)	336	2%
Casualty and other	116	(5)	125	11%	556	(15)	506	(7%)
Recovery of loss on assets held for sale	–	–	–	–%	–	–	(137)	(100%)
Transaction-related costs	–	–	–	–%	–	–	84	100%
<i>Total operating expenses</i>	2,630	(105)	2,187	(15%)	10,267	(214)	8,861	(13%)
<i>Operating income</i>	1,912	(76)	1,566	17%	6,840	(138)	5,616	19%
Interest expense	(153)	11	(125)	(14%)	(548)	18	(610)	13%
Other components of net periodic benefit income ⁽¹⁾	124	–	112	11%	498	–	407	22%
Merger termination fee	–	–	–	–%	–	–	886	(100%)
Other income (loss)	(2)	–	21	(110%)	(27)	–	43	(163%)
<i>Income before income taxes</i> ⁽¹⁾	1,881	(65)	1,574	15%	6,763	(120)	6,342	5%
Income tax expense ⁽¹⁾	(461)	16	(373)	(19%)	(1,645)	30	(1,443)	(12%)
Net income ⁽¹⁾	\$ 1,420	\$ (49)	\$ 1,201	14%	\$ 5,118	\$ (90)	\$ 4,899	3%
Diluted earnings per share ⁽¹⁾	\$ 2.10	\$ (0.07)	\$ 1.70	19%	\$ 7.44	\$ (0.13)	\$ 6.90	6%

(1) See Note 2 – Change in accounting policy to the Company's unaudited Interim Consolidated Financial Statements for additional information.

Non-GAAP Measures – unaudited

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 months and years ended December 31, 2022 and 2021, to the non-GAAP free cash flow presented herein:

<i>In millions</i>	Three months ended December 31		Year ended December 31	
	2022	2021	2022	2021
Net cash provided by operating activities	\$ 2,272	\$ 2,086	\$ 6,667	\$ 6,971
Net cash used in investing activities	(937)	(860)	(2,510)	(2,873)
<i>Net cash provided before financing activities</i>	1,335	1,226	4,157	4,098
<i>Adjustments:</i>				
Cash income taxes for merger transaction-related payments and cash receipts ⁽¹⁾	—	—	102	—
Transaction-related costs ⁽²⁾	—	36	—	125
Advance for acquisition ⁽³⁾	—	—	—	845
Refund of advance for acquisition ⁽³⁾	—	—	—	(886)
Merger termination fee ⁽³⁾	—	—	—	(886)
<i>Total adjustments</i>	—	36	102	(802)
Free cash flow	\$ 1,335	\$ 1,262	\$ 4,259	\$ 3,296

(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 unaudited Interim Consolidated Financial Statements for additional information.

(2) Relates to transaction-related costs of \$125 million paid. See Note 4 – Acquisition to the Company's unaudited Interim Consolidated Financial Statements for additional information.

(3) See Note 4 – Acquisition to the Company's unaudited Interim Consolidated Financial Statements for additional information.

Adjusted debt-to-adjusted EBITDA multiple

Management believes that the adjusted debt-to-adjusted EBITDA multiple is a useful credit measure because it reflects the Company's ability to service its debt and other long-term obligations. The Company calculates the adjusted debt-to-adjusted EBITDA multiple as adjusted debt divided by 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 years ended December 31, 2022 and 2021, respectively, to the adjusted measures presented herein, which have been used to calculate the non-GAAP adjusted debt-to-adjusted EBITDA multiple:

<i>In millions, unless otherwise indicated</i>	<i>As at and for the year ended December 31,</i>		2022	2021
Debt	\$	15,429	\$	12,485
<i>Adjustments:</i>				
Operating lease liabilities, including current portion ⁽¹⁾		466		430
Pension plans in deficiency ⁽²⁾		353		447
Adjusted debt	\$	16,248	\$	13,362
Net income ⁽³⁾	\$	5,118	\$	4,899
Interest expense		548		610
Income tax expense ⁽³⁾		1,645		1,443
Depreciation and amortization		1,729		1,598
Operating lease cost ⁽⁴⁾		142		131
Other components of net periodic benefit income ⁽³⁾		(498)		(407)
Other loss (income)		27		(43)
<i>Adjustments:</i>				
Workforce reduction program ⁽⁵⁾		—		39
Advisory fees related to shareholder matters ⁽⁶⁾		22		20
Recovery of loss on assets held for sale ⁽⁷⁾		—		(137)
Transaction-related costs ⁽⁸⁾		—		84
Merger termination fee ⁽⁹⁾		—		(886)
Adjusted EBITDA	\$	8,733	\$	7,351
Adjusted debt-to-adjusted EBITDA multiple (times)		1.86		1.82

(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) In the first quarter of 2022, the Company changed its method of calculating market-related values of pension assets for its defined benefit plans using a retrospective approach. Comparative figures have been restated to conform to the change in methodology. See Note 2 – Change in accounting policy to the Company's unaudited Interim Consolidated Financial Statements for additional information.

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

(5) Relates to employee termination benefits and severance costs related to a workforce reduction program, recorded in Labor and fringe benefits within the Consolidated Statements of Income.

(6) Relates to advisory fees related to shareholder matters recorded in Casualty and other within the Consolidated Statements of Income.

(7) Relates to the recovery of \$137 million of the \$486 million loss on assets held for sale recorded in the second quarter of 2020, resulting from the Company entering into an agreement for the sale of non-core lines. See Note 5 – Assets held for sale to the Company's unaudited Interim Consolidated Financial Statements for additional information.

(8) Relates to transaction costs incurred as a result of the terminated CN Merger Agreement of \$84 million, consisting of \$125 million of transaction-related costs, partially offset by \$41 million of income generated as a result of the applicable foreign exchange rates prevailing at the time of payment and related receipt of the US\$700 million advance to KCS. See Note 4 – Acquisition to the Company's unaudited Interim Consolidated Financial Statements for additional information.

(9) Relates to the termination fee resulting from KCS terminating the CN Merger Agreement and entering into a merger agreement with CP. See Note 4 – Acquisition to the Company's unaudited Interim Consolidated Financial Statements for additional information.

Non-GAAP Measures – unaudited

ROIC and adjusted ROIC

ROIC and adjusted ROIC are useful measures for management and investors to evaluate the efficiency of the Company's use of capital funds and allow investors to assess the operating and investment decisions made by management. The Company calculates ROIC as return divided by average invested capital, both of which are non-GAAP measures. Return is defined as Net income plus interest expense after-tax, calculated using the Company's effective tax rate. Average invested capital is defined as the sum of Total shareholders' equity, Long-term debt and Current portion of long-term debt less Cash and cash equivalents, and Restricted cash and cash equivalents, averaged between the beginning and ending balance over the last twelve-month period. The Company calculates adjusted ROIC as adjusted return divided by average invested capital, both of which are non-GAAP measures. Adjusted return is defined as adjusted net income plus interest expense after-tax, calculated using the Company's adjusted effective tax rate. Return, average invested capital, ROIC, adjusted return and adjusted ROIC 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 Net income and adjusted net income to return and adjusted return, respectively, as well as the calculation of average invested capital, which have been used to calculate ROIC and adjusted ROIC:

<i>In millions, except percentage</i>	<i>As at and for the year ended December 31,</i>		2022	2021
Net income ⁽¹⁾	\$	5,118	\$	4,899
Interest expense		548		610
Tax on interest expense ⁽²⁾		(133)		(139)
Return ⁽¹⁾	\$	5,533	\$	5,370
Average total shareholders' equity	\$	22,064	\$	21,198
Average long-term debt		13,175		11,987
Average current portion of long-term debt		783		709
Less: Average cash, cash equivalents, restricted cash and restricted cash equivalents		(1,088)		(1,221)
Average invested capital	\$	34,934	\$	32,673
ROIC ⁽¹⁾		15.8%		16.4%
Adjusted net income ⁽¹⁾⁽³⁾	\$	5,134	\$	4,225
Interest expense		548		610
Less: Amortization of bridge financing and other fees ⁽⁴⁾		—		(97)
Tax on interest expense less amortization of bridge financing and other fees ⁽⁵⁾		(133)		(123)
Adjusted return ⁽¹⁾	\$	5,549	\$	4,615
Average invested capital	\$	34,934	\$	32,673
Adjusted ROIC ⁽¹⁾		15.9%		14.1%

(1) See Note 2 – Change in accounting policy to the Company's unaudited Interim Consolidated Financial Statements for additional information.

(2) The effective tax rate, defined as income tax expense as a percentage of income before income taxes, used to calculate the tax on interest expense for 2022 was 24.3% (2021 - 22.8%).

(3) 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 – Adjusted performance measures for an explanation of this non-GAAP measure.

(4) Relates to amortization of bridge financing and other fees resulting from the KCS transaction, recorded in Interest expense within the Consolidated Statements of Income. See Note 4 - Acquisition to the Company's unaudited Interim Consolidated Financial Statements for additional information.

(5) The adjusted effective tax rate is a Non-GAAP measure, defined as Income tax expense, net of tax adjustments as presented in Adjusted performance measures as a percentage of Income before taxes, net of pre-tax adjustments as presented in Adjusted performance measures. This measure does not have any standardized meaning prescribed by GAAP and therefore, may not be comparable to a similar measure presented by other companies. The adjusted effective tax rate used to calculate the adjusted tax on interest expense less amortization of bridge financing and other fees for 2022 was 24.3% (2021 - 24.0%).