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 earnings before interest, income taxes, depreciation and amortization (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 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 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, 2021, the Company's adjusted net income was \$1,209 million, or \$1.71 per diluted share, and \$4,218 million, or \$5.94 per diluted share, respectively. 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 (\$0.02 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 \$65 million, or \$60 million after-tax (\$0.08 per diluted share) recorded in the third quarter and \$32 million, or \$24 million after-tax (\$0.03 per diluted share) 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.

For the year ended December 31, 2020, the Company reported adjusted net income of \$3,784 million, or \$5.31 per diluted share, which excludes a loss of \$486 million, or \$363 million after-tax (\$0.51 per diluted share) in the second quarter, resulting from the Company's decision to market for sale for on-going rail operations, certain non-core lines in Wisconsin, Michigan and Ontario, and a current income tax recovery of \$141 million (\$0.20 per diluted share) in the first quarter resulting from the enactment of the *Coronavirus Aid, Relief, and Economic Security* (CARES) *Act*, a U.S. tax-and-spending package aimed at providing additional stimulus to address the economic impact of the COVID-19 pandemic.

Non-GAAP Measures – unaudited

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, 2021 and 2020, to the non-GAAP adjusted performance measures presented herein:

	Three months ended December 31					Year ended December 31			
In millions, except per share data		2021		2020		2021		2020	
Net income	\$	1,199	\$	1,021	\$	4,892	\$	3,562	
Adjustments:									
Operating expense adjustments:									
Workforce reduction program		-		_		39		-	
Advisory fees related to shareholder matters		13		_		20		-	
Loss (recovery) on assets held for sale		-		_		(137)		486	
Transaction-related costs		-		_		84		-	
Non-operating expense adjustments:									
Amortization of bridge financing and other fees		-		_		97		_	
Merger termination fee		-		_		(886)		_	
Tax adjustments:									
Tax effect of adjustments ⁽¹⁾		(3)		_		109		(123)	
Tax law changes and rate enactments		-		_		-		(141)	
Total adjustments		10		_		(674)		222	
Adjusted net income	\$	1,209	\$	1,021	\$	4,218	\$	3,784	
Diluted earnings per share	\$	1.69	\$	1.43	\$	6.89	\$	5.00	
Impact of adjustments, per share		0.02		_		(0.95)		0.31	
Adjusted diluted earnings per share	\$	1.71	\$	1.43	\$	5.94	\$	5.31	

(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 months and years ended December 31, 2021 and 2020, to the non-GAAP adjusted performance measures presented herein:

	Th	ree months ended Dec	ember 31	Year ended December 31			
In millions, except percentages		2021	2020	2021	2020		
Operating income	\$	1,566 \$	1,411 \$	5,616 \$	4,777		
Operating expense adjustments:							
Workforce reduction program		-	_	39	-		
Advisory fees related to shareholder matters		13	_	20	-		
Loss (recovery) on assets held for sale		-	_	(137)	486		
Transaction-related costs		-	_	84	_		
Total operating expense adjustments		13	—	6	486		
Adjusted operating income	\$	1,579 \$	1,411 \$	5,622 \$	5,263		
Operating expenses	\$	2,187 \$	2,245 \$	8,861 \$	9,042		
Total operating expense adjustments		(13)	_	(6)	(486)		
Adjusted operating expenses	\$	2,174 \$	2,245 \$	8,855 \$	8,556		
Operating ratio		58.3 %	61.4 %	61.2 %	65.4 %		
Impact of adjustments		(0.4)%	- %	- %	(3.5)%		
Adjusted operating ratio		57.9 %	61.4 %	61.2 %	61.9 %		

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 \$1.26 and \$1.25 per US\$1.00 for the three months and year ended December 31, 2021, respectively, and \$1.30 and \$1.34 per US\$1.00 for the three months and year ended December 31, 2020, respectively.

On a constant currency basis, the Company's Net income for the three months and year ended December 31, 2021 would have been higher by \$27 million (\$0.04 per diluted share) and higher by \$166 million (\$0.23 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, 2021:

	Three months ended December 31			١					
In millions, except per share data	2021		Constant currency impact	2020	% Change at constant currency Fav (Unfav)	2021	Constant currency impact	2020	% Change at constant currency Fav (Unfav)
Revenues									
Petroleum and chemicals	\$755	\$	16 \$	664	16% \$	2,816	\$ 128 \$	2,631	12%
Metals and minerals	393		11	354	14%	1,548	83	1,409	16%
Forest products	435		12	433	3%	1,740	93	1,700	8%
Coal	165		2	126	33%	618	17	527	20%
Grain and fertilizers	643		12	742	(12%)	2,475	80	2,609	(2%)
Intermodal	1,049		14	1,036	3%	4,115	95	3,751	12%
Automotive	146		5	152	(1%)	576	32	591	3%
Total freight revenues	3,586		72	3,507	4%	13,888	528	13,218	9%
Other revenues	167		5	149	15%	589	29	601	3%
Total revenues	3,753		77	3,656	5%	14,477	557	13,819	9%
Operating expenses									
Labor and fringe benefits	674		8	755	10%	2,879	65	2,723	(8%)
Purchased services and material	504		7	565	10%	2,082	60	2,152	-%
Fuel	419		13	303	(43%)	1,513	94	1,152	(39%)
Depreciation and amortization	383		5	402	3%	1,598	44	1,589	(3%)
Equipment rents	82		2	97	13%	336	19	432	18%
Casualty and other	125		3	123	(4%)	506	27	508	(5%)
Loss (recovery) on assets held for sale	-		_	-	N/A	(137)	(12)	486	131%
Transaction-related costs	-		-	_	N/A	84	47	_	N/A
Total operating expenses	2,187		38	2,245	1%	8,861	344	9,042	(2%)
Operating income	1,566		39	1,411	14%	5,616	213	4,777	22%
Interest expense	(125))	(3)	(134)	4%	(610)	(35)	(554)	(16%)
Other components of net periodic benefit income	110		_	78	41%	398	_	315	26%
Merger termination fee	-		_	-	N/A	886	39	_	N/A
Other income	21		_	_	N/A	43	4	6	683%
Income before income taxes	1,572		36	1,355	19%	6,333	221	4,544	44%
Income tax expense	(373))	(9)	(334)	(14%)	(1,441)	(55)	(982)	(52%)
Net income	1,199	\$	27 \$	1,021	20% \$	4,892	\$ 166 \$	3,562	42%
Diluted earnings per share	\$ 1.69	\$	0.04 \$	1.43	21% \$	6.89	\$ 0.23 \$	5.00	42%

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 business acquisitions and merger transaction-related payments and cash receipts, 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, 2021 and 2020, to the non-GAAP free cash flow presented herein:

	Three months ended December 31				Year ended December 31			
In millions		2021		2020	2021		2020	
Net cash provided by operating activities	\$	2,086	\$	2,008	\$ 6,971	\$	6,165	
Net cash used in investing activities		(860)		(868)	(2,873)		(2,946)	
Net cash provided before financing activities		1,226		1,140	4,098		3,219	
Adjustments:								
Transaction-related costs ⁽¹⁾		36		_	125		_	
Advance for acquisition ⁽²⁾		-		_	845		_	
Refund of advance for acquisition		-		_	(886)		_	
Merger termination fee		-		_	(886)		_	
Acquisitions, net of cash acquired ⁽³⁾		_		_	-		8	
Total adjustments		36		_	(802)		8	
Free cash flow	\$	1,262	\$	1,140	\$ 3,296	\$	3,227	

(1) Relates to transaction-related costs of \$125 million paid. See Note 3 - Acquisitions, Terminated CN KCS merger agreement, to CN's unaudited Interim Consolidated Financial Statements for additional information.

(2) Relates to the advance paid to KCS of US\$700 million (\$845 million). See Note 3 - Acquisitions, Terminated CN KCS merger agreement, to CN's unaudited Interim Consolidated Financial Statements for additional information.

(3) Relates to the acquisition of H&R Transport Limited ("H&R"). See Note 3 - Business combinations to the Company's 2020 Annual 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, 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, 2021 and 2020, respectively, 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 year ended December 31,	2021	2020
Debt	\$	12,485	\$ 12,906
Adjustments:			
Operating lease liabilities, including current portion ⁽¹⁾		430	418
Pension plans in deficiency ⁽²⁾		447	553
Adjusted debt	\$	13,362	\$ 13,877
Net income	\$	4,892	\$ 3,562
Interest expense		610	554
Income tax expense		1,441	982
Depreciation and amortization		1,598	1,589
Operating lease cost ⁽³⁾		131	143
Other components of net periodic benefit income		(398)	(315)
Other income		(43)	(6)
Adjustments:			
Workforce reduction program ⁽⁴⁾		39	_
Advisory fees related to shareholder matters ⁽⁵⁾		20	_
Loss (recovery) on assets held for sale		(137)	486
Transaction-related costs		84	_
Merger termination fee		(886)	_
Adjusted EBITDA	\$	7,351	\$ 6,995
Adjusted debt-to-adjusted EBITDA multiple (times)		1.82	 1.98

(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, recorded in Labor and fringe benefits within the Consolidated Statements of Income.

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

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:

In millions, except percentage	As at and for the year ended December 31,	2021	2020
Net income	\$	4,892	\$ 3,562
Interest expense		610	554
Tax on interest expense ⁽¹⁾		(139)	(120)
Return	\$	5,363	\$ 3,996
Average total shareholders' equity	\$	21,198	\$ 18,846
Average long-term debt		11,987	11,931
Average current portion of long-term debt		709	1,420
Less: Average cash, cash equivalents, restricted cash and restricted	cash equivalents	(1,221)	(844)
Average invested capital	\$	32,673	\$ 31,353
ROIC		16.4%	12.7%
Adjusted net income ⁽²⁾	\$	4,218	\$ 3,784
Interest expense		610	554
Less: Amortization of bridge financing and other fees ⁽³⁾		(97)	_
Tax on interest expense less amortization of bridge financing and ot	ner fees ⁽⁴⁾	(123)	(137)
Adjusted return	\$	4,608	\$ 4,201
Average invested capital	\$	32,673	\$ 31,353
Adjusted ROIC		14.1%	13.4%

(1) 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 2021 was 22.8% (2020 - 21.6%).

(2) 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.

(3) Relates to amortization of bridge financing and other fees resulting from the KCS transaction, recorded in Interest expense within the Consolidated Statements of Income.

(4) 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 2021 was 24.0% (2020 - 24.8%).