Non-GAAP Measures – unaudited

In this supplementary schedule, the "Company" or "CN" refers to Canadian National Railway Company and, as the context requires, 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

Management believes that adjusted net income, adjusted earnings per share, adjusted operating income, adjusted operating ratio and adjusted operating margin are useful measures of performance that can facilitate period-to-period comparisons, as they exclude items that do not necessarily arise as part of CN's normal day-to-day operations and could distort the analysis of trends in business performance. In 2018, the Company began disclosing adjusted operating income, adjusted operating ratio and adjusted operating margin. Management uses adjusted performance measures, which exclude certain income and expense items in its results that management believes are not reflective of CN's underlying business operations, to set performance goals and as a means to measure CN's performance. The exclusion of such income and expense items in these measures does not, however, imply that these items are necessarily non-recurring. These measures do not have any standardized meaning prescribed by GAAP and therefore, may not be comparable to similar measures presented by other companies.

For the three months and year ended December 31, 2018, the Company reported adjusted net income of $1,093 million, or $1.49 per diluted share, and $4,056 million, or $5.50 per diluted share, respectively. The adjusted figures for the three months ended December 31, 2018 exclude employee termination benefits and severance costs related to a workforce reduction program of $27 million, or $20 million after-tax ($0.03 per diluted share) and a gain previously deferred on the 2014 disposal of a segment of the Guelph subdivision located between Georgetown and Kitchener, Ontario, together with the rail fixtures and certain passenger agreements (the "Guelph"), of $79 million, or $70 million after-tax ($0.10 per diluted share). The adjusted figures for the year ended December 31, 2018 exclude employee termination benefits and severance costs related to a workforce reduction program of $27 million, or $20 million after-tax ($0.03 per diluted share) and the gains on disposals of property of $338 million, or $292 million after-tax ($0.40 per diluted share), consisting of the following:

- in the fourth quarter, a gain previously deferred on the 2014 disposal of the Guelph, of $79 million, or $70 million after-tax ($0.10 per diluted share);
- in the third quarter, a gain on disposal of property located in Montreal, Quebec (the "Doney and St-Francois Spurs") of $36 million, or $32 million after-tax ($0.04 per diluted share); and
- in the second quarter, a gain on transfer of the Company's capital lease in the passenger rail facilities in Montreal, Quebec, together with its interests in related railway operating agreements (the "Central Station Railway Lease"), of $184 million, or $156 million after-tax ($0.21 per diluted share), and a gain on disposal of land located in Calgary, Alberta, excluding the rail fixtures (the "Calgary Industrial Lead"), of $39 million, or $34 million after-tax ($0.05 per diluted share).

For the three months and year ended December 31, 2017, the Company's adjusted net income was $897 million, or $1.20 per diluted share, and $3,778 million, or $4.99 per diluted share, respectively. The adjusted figures for the three months ended December 31, 2017 exclude a deferred income tax recovery of $1,764 million ($2.35 per diluted share) resulting from the enactment of a lower federal corporate income tax rate due to the U.S. *Tax Cuts and Jobs Act* ("U.S. Tax Reform") and a deferred income tax expense of $50 million ($0.07 per diluted share) resulting from the enactment of higher provincial corporate income tax rates. The adjusted figures for the year ended December 31, 2017 exclude a net deferred income tax recovery of $1,706 million ($2.25 per diluted share) consisting of the following:

- in the fourth quarter, a deferred income tax recovery of $1,764 million ($2.33 per diluted share) resulting from the enactment of the U.S. Tax Reform and a deferred income tax expense of $50 million ($0.07 per diluted share) resulting from the enactment of higher provincial corporate income tax rates;
- in the third quarter, a deferred income tax expense of $31 million ($0.04 per diluted share) resulting from the enactment of a higher state corporate income tax rate;
- in the second quarter, a deferred income tax recovery of $18 million ($0.02 per diluted share) resulting from the enactment of a lower provincial corporate income tax rate; and
- in the first quarter, a deferred income tax recovery of $5 million ($0.01 per diluted share) resulting from the enactment of a lower provincial corporate income tax rate.

Non-GAAP Measures – unaudited

The following table provides a reconciliation of net income and earnings per share, as reported for the three months and years ended December 31, 2018 and 2017, to the adjusted performance measures presented herein:

	Three months ended December 31		Year ended December 31	
In millions, except per share data	**2018**	2017	**2018**	2017
Net income	**$ 1,143**	$ 2,611	**$ 4,328**	$ 5,484
Adjustments:				
Operating expenses	**27**	—	**27**	—
Other income	**(79)**	—	**(338)**	—
Income tax expense (recovery) (1)	**2**	(1,714)	**39**	(1,706)
Adjusted net income	**$ 1,093**	$ 897	**$ 4,056**	$ 3,778
Basic earnings per share	**$ 1.57**	$ 3.50	**$ 5.89**	$ 7.28
Impact of adjustments, per share	**(0.07)**	(2.29)	**(0.37)**	(2.26)
Adjusted basic earnings per share	**$ 1.50**	$ 1.21	**$ 5.52**	$ 5.02
Diluted earnings per share	**$ 1.56**	$ 3.48	**$ 5.87**	$ 7.24
Impact of adjustments, per share	**(0.07)**	(2.28)	**(0.37)**	(2.25)
Adjusted diluted earnings per share	**$ 1.49**	$ 1.20	**$ 5.50**	$ 4.99

(1) *The tax effect of adjustments to Other income reflects tax rates in the applicable jurisdiction and the nature of the item for tax purposes.*

The following table provides a reconciliation of operating income, operating ratio and operating margin, as reported for the three months and years ended December 31, 2018 and 2017, to the adjusted performance measures presented herein:

	Three months ended December 31		Year ended December 31	
In millions, except percentage	**2018**	2017	**2018**	2017
Operating income (1)	**$ 1,452**	$ 1,225	**$ 5,493**	$ 5,243
Adjustment: Operating expenses	**27**	—	**27**	—
Adjusted operating income	**$ 1,479**	$ 1,225	**$ 5,520**	$ 5,243
Operating ratio (1) (2)	**61.9%**	62.7%	**61.6%**	59.8%
Impact of adjustment	**(0.7)-pts**	—	**(0.1)-pts**	—
Adjusted operating ratio	**61.2%**	62.7%	**61.5%**	59.8%
Operating margin (1) (3)	**38.1%**	37.3%	**38.4%**	40.2%
Impact of adjustment	**0.7-pts**	—	**0.1-pts**	—
Adjusted operating margin	**38.8%**	37.3%	**38.5%**	40.2%

(1) *The Company adopted Accounting Standards Update (ASU) 2017-07: Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost in 2018 on a retrospective basis. Comparative figures have been adjusted to conform to the current presentation. See Note 2 - Recent accounting pronouncements to CN's 2018 unaudited Interim Consolidated Financial Statements for additional information.*

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

(3) *Operating margin is defined as operating income as a percentage of revenues.*

Constant currency

Financial results at constant currency allow results to be viewed without the impact of fluctuations in foreign currency exchange rates, thereby facilitating period-to-period comparisons in the analysis of trends in business performance. Measures at constant currency are considered non-GAAP measures and do not have any standardized meaning prescribed by GAAP and therefore, may not be comparable to similar measures presented by other companies. Financial results at constant currency are obtained by translating the current period results denominated in US dollars at the foreign exchange rates of the comparable period in the prior year. The average foreign exchange rates were $1.321 and $1.296 per US$1.00, respectively, for the three months and year ended December 31, 2018, and $1.272 and $1.298 per US $1.00 for the three months and year ended December 31, 2017.

On a constant currency basis, the Company’s net income for the three months and year ended December 31, 2018 would have been lower by $24 million ($0.03 per diluted share) and higher by $4 million ($0.01 per diluted share), respectively.

Non-GAAP Measures – unaudited

Free cash flow

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

The following table provides a reconciliation of net cash provided by operating activities as reported to free cash flow for the three months and years ended December 31, 2018 and 2017:

	Three months ended December 31		Year ended December 31	
In millions	**2018**	2017	**2018**	2017
Net cash provided by operating activities	**$ 1,917**	$ 1,349	**$ 5,918**	$ 5,516
Net cash used in investing activities	**(1,284)**	(892)	**(3,404)**	(2,738)
Free cash flow	**$ 633**	$ 457	**$ 2,514**	$ 2,778

Adjusted debt-to-adjusted EBITDA multiple

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

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

In millions, unless otherwise indicated	*As at and for the year ended December 31,*	**2018**	2017
Debt		**$ 12,569**	$ 10,828
Adjustments:			
Present value of operating lease commitments (1)		**579**	478
Pension plans in deficiency		**477**	455
Adjusted debt (2)		**$ 13,625**	$ 11,761
Net income		**$ 4,328**	$ 5,484
Interest expense		**489**	481
Income tax expense (recovery)		**1,354**	(395)
Depreciation and amortization		**1,329**	1,281
EBITDA		**7,500**	6,851
Adjustments:			
Other income		**(376)**	(12)
Other components of net periodic benefit income		**(302)**	(315)
Operating lease expense		**218**	191
Adjusted EBITDA (2)		**$ 7,040**	$ 6,715
Adjusted debt-to-adjusted EBITDA multiple *(times)*		**1.94**	1.75

(1) Operating lease commitments have been discounted using the Company's implicit interest rate for each of the periods presented.

(2) In the first quarter of 2018, the Company redefined adjusted debt to include the present value of operating lease commitments and pension plans in deficiency, and adjusted EBITDA to exclude other income, other components of net periodic benefit income and operating lease expense, in order to better align the Company's definition of adjusted debt-to-adjusted EBITDA multiple with similar measures used by credit rating agencies. Comparative figures have been adjusted to conform to the current definition.

Return on invested capital (ROIC) and adjusted ROIC

In 2018, the Company began disclosing ROIC and adjusted ROIC, which management believes are useful measures of the efficiency in the use of capital funds. The Company calculates ROIC as return divided by average invested capital. 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 a twelve-month period. The Company calculates adjusted ROIC as adjusted return divided by average invested capital. Adjusted return is defined as adjusted net income plus interest expense after-tax, calculated using the Company's effective tax rate, excluding the tax effect of adjustments used to determine adjusted net income. ROIC 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,*		**2018**		2017
Net income	**$**	**4,328**	$	5,484
Interest expense		**489**		481
Tax on interest expense (1)		**(116)**		(124)
Return	**$**	**4,701**	$	5,841
Average total shareholders' equity		**17,149**		15,749
Average long-term debt		**10,067**		9,098
Average current portion of long-term debt		**1,632**		1,785
Less: Average cash, cash equivalents, restricted cash and restricted cash equivalents		**(656)**		(613)
Average invested capital	**$**	**28,192**	$	26,019
ROIC		**16.7%**		22.4%
Adjusted net income (2)	**$**	**4,056**	$	3,778
Interest expense		**489**		481
Adjusted tax on interest expense (3)		**(120)**		(124)
Adjusted return	**$**	**4,425**	$	4,135
Average invested capital	**$**	**28,192**	$	26,019
Adjusted ROIC		**15.7%**		15.9%

(1) The effective tax rate for 2018 used to calculate the tax on interest expense was 23.8% (2017 - 25.8%). Due to the negative effective tax rate reported by the Company in 2017, tax on interest expense for 2017 was calculated using an adjusted effective tax rate.

(2) See the section entitled Adjusted performance measures for an explanation of this non-GAAP measure.

(3) The adjusted effective tax rate for 2018 used to calculate the adjusted tax on interest expense was 24.5% (2017 - 25.8%).