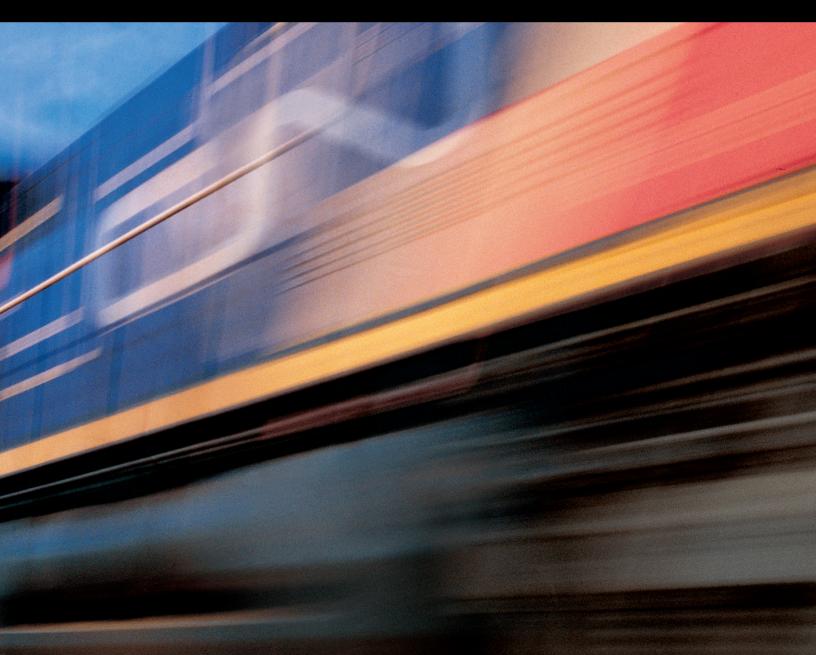
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Together into our next century



2019 QUARTERLY REVIEW THIRD QUARTER





CN reports strong third-quarter financial results

Productivity gains and cost management efforts drive Company's operating ratio to 57.9%

MONTREAL, October 22, 2019 — CN (TSX: CNR) (NYSE: CNI) today reported its financial and operating results for the third quarter ended September 30, 2019.

"CN delivered strong results, despite a softening economy," said JJ Ruest, president and chief executive officer of CN. "Our team of experienced railroaders swiftly aligned resources with the weaker demand to achieve solid efficiency gains. We remain committed to our long-term agenda of growing faster than the economy at low incremental cost, and to taking Scheduled Railroading to the next level by deploying advanced operating technology."

Financial results highlights

Third-quarter 2019 compared to third-quarter 2018

- Revenues increased by four per cent, or C\$142 million, to C\$3,830 million.
- Diluted earnings per share (EPS) increased by eight per cent (or 11 per cent on an adjusted basis (1) to
- Operating ratio of 57.9 per cent, an improvement of 1.6 points.
- Operating income increased by eight per cent, or C\$121 million, to C\$1,613 million.
- Strong balance sheet with adjusted debt-to-adjusted-EBITDA of less than 2.0X (1).

Revised 2019 financial outlook (2)

In light of the deterioration in North American rail demand, as the economy continues to weaken, CN is now targeting to deliver 2019 adjusted diluted EPS growth in the high single-digit range this year versus last year's adjusted diluted EPS of C\$5.50 (1), compared with its July 23, 2019 financial outlook which called for low doubledigit growth in adjusted diluted EPS; and now assumes slightly negative volume growth in 2019 in terms of revenue ton miles (RTMs).

Third-quarter 2019 revenues, traffic volumes and expenses

Revenues for the third quarter of 2019 were C\$3,830 million, an increase of C\$142 million or four per cent, when compared to the same period in 2018. The increase was mainly due to freight rate increases and higher intermodal revenues.

RTMs, measuring the relative weight and distance of freight transported by CN, declined by one per cent from the year-earlier period. Freight revenue per RTM increased by six per cent over the year-earlier period, mainly driven by freight rate increases and higher intermodal revenues.

Operating expenses for the third quarter increased by one per cent to C\$2,217 million, mainly driven by increased purchased services and material expense, as well as higher depreciation and amortization expense; partly offset by lower fuel costs and record fuel productivity.

Press Release

(1) Non-GAAP Measures

CN reports its financial results in accordance with United States generally accepted accounting principles (GAAP). CN also uses non-GAAP measures in this news release that do not have any standardized meaning prescribed by GAAP, such as adjusted performance measures. 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 the expected impact of certain income and expense items, as well as those items noted in the reconciliation tables provided in the attached supplementary schedule, Non-GAAP Measures. However, management cannot individually quantify on a forward-looking basis the impact of these items on its 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. By their nature, forward-looking statements involve risks, uncertainties and assumptions. The Company cautions that its assumptions may not materialize and that current economic conditions render such assumptions, although reasonable at the time they were made, subject to greater uncertainty. Forward-looking statements may be identified by the use of terminology such as "believes," "expects," "anticipates," "assumes," "outlook," "plans," "targets," or other similar words.

2019 key assumptions

CN has made a number of economic and market assumptions in preparing its 2019 outlook. The Company now assumes that North American industrial production for the year will increase in the range of 0.5 to one per cent (compared to its July 23, 2019 assumption of approximately one per cent), and continues to assume U.S. housing starts of approximately 1.25 million units and U.S. motor vehicle sales of approximately 17 million units. For the 2018/2019 crop year, the grain crops in both Canada and the United States were in line with their respective three-year averages. The Company assumes that the 2019/2020 grain crop in Canada will be in line with the three-year average and that the 2019/2020 grain crop in the United States will be below the three-year average. CN now assumes RTM volume growth in 2019 will be slightly negative compared to 2018 (compared to its July 23, 2019 assumption that total RTMs would increase in the mid single digits). CN assumes continued pricing above rail inflation. CN assumes that in 2019, the value of the Canadian dollar in U.S. currency will be approximately \$0.75, and now assumes that in 2019 the average price of crude oil (West Texas Intermediate) will be in the range of US \$55 to US\$60 per barrel (compared to its July 23, 2019 assumption in the range of US\$60 to US\$65 per barrel). In 2019, CN plans to invest approximately C\$3.9 billion in its capital program, of which C\$1.6 billion is targeted toward track and railway infrastructure maintenance.

Forward-looking statements are not guarantees of future performance and involve risks, uncertainties and other factors which may cause the actual results or performance of the Company to be materially different from the outlook or any future results or performance implied by such statements. Accordingly, readers are advised not to place undue reliance on forward-looking statements. Important risk factors that could affect the forward-looking statements include, but are not limited to, the effects of general economic and business conditions; 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 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 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.

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.

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.sedar.com as well as on the U.S. Securities and Exchange Commission's website at www.sec.gov through EDGAR.

Press Release

CN is a true backbone of the economy transporting more than C\$250 billion worth of goods annually for a wide range of business sectors, ranging from resource products to manufactured products to consumer goods, across a rail network of approximately 20,000 route-miles spanning Canada and mid-America. CN – Canadian National Railway Company, along with its operating railway subsidiaries – serves the cities and ports of Vancouver, Prince Rupert, B.C., Montreal, Halifax, New Orleans, and Mobile, Ala., and the metropolitan areas of Toronto, Edmonton, Winnipeg, Calgary, Chicago, Memphis, Detroit, Duluth, Minn./Superior, Wis., and Jackson, Miss., with connections to all points in North America. For more information about CN, visit the Company's website at www.cn.ca.

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	Three months ended S	eptember 30	Nine months ended S	ptember 30	
	2019	2018	2019	2018	
Financial measures					
Key financial performance indicators (1)					
Total revenues (\$ millions)	3,830	3,688	11,333	10,513	
Freight revenues (\$ millions)	3,618	3,463	10,790	9,947	
Operating income (\$ millions)	1,613	1,492	4,375	4,041	
Adjusted operating income (\$ millions) (2)	1,613	1,492	4,459	4,041	
Net income (\$ millions)	1,195	1,134	3,343	3,185	
Adjusted net income (\$ millions) (2)	1,195	1,102	3,293	2,963	
Diluted earnings per share (\$)	1.66	1.54	4.62	4.31	
Adjusted diluted earnings per share (\$) (2)	1.66	1.50	4.56	4.01	
Free cash flow (\$ millions) (2)	700	585	1,499	1,881	
Gross property additions (\$ millions)	961	1,002	3,061	2,267	
Share repurchases (\$ millions)	394	521	1,271	1,537	
Dividends per share (\$)	0.5375	0.4550	1.6125	1.3650	
Financial position (1)					
Total assets (\$ millions)	44,096	40,209	44,096	40,209	
Total liabilities (\$ millions)	25,596	22,603	25,596	22,603	
Shareholders' equity (\$ millions)	18,500	17,606	18,500	17,606	
Financial ratio					
Operating ratio (%)	57.9	59.5	61.4	61.6	
Adjusted operating ratio (%) (2)	57.9	59.5	60.7	61.6	
Operational measures (3)					
Statistical operating data					
Gross ton miles (GTMs) (millions)	124,410	123,042	367,875	359,622	
Revenue ton miles (RTMs) (millions)	60,849	61,642	184,245	181,848	
Carloads (thousands)	1,531	1,525	4,487	4,439	
Route miles (includes Canada and the U.S.)	19,500	19,500	19,500	19,500	
Employees (end of period)	27,290	26,143	27,290	26,143	
Employees (average for the period)	27,269	25,905	26,803	25,216	
Key operating measures		-,		-, -	
Freight revenue per RTM (cents)	5.95	5.62	5.86	5.47	
-					
Freight revenue per carload (\$)	2,363 4,562	2,271 4,750	2,405 13,725	2,241	
GTMs per average number of employees (thousands)	4,562 1.78	•	13,725	14,262 1.80	
Operating expenses per GTM (cents)		1.78			
Labor and fringe benefits expense per GTM (cents)	0.56	0.57	0.59	0.58	
Diesel fuel consumed (US gallons in millions)	110.1	113.4	342.5	339.9	
Average fuel price (\$/US gallon)	3.05	3.42	3.13	3.32	
GTMs per US gallon of fuel consumed	1,130	1,085	1,074	1,058	
Car velocity (car miles per day)	209	195	198	183	
Through dwell (hours) Through naturals train speed (miles per hours)	7.7	7.8	7.9	8.6	
Through network train speed (miles per hour)	18.7	17.9	18.2	17.8	
Locomotive utilization (trailing GTMs per total horsepower)	201	207	200	207	
Safety indicators (4)					
Injury frequency rate (per 200,000 person hours)	1.90	1.60	1.95	1.78	
Accident rate (per million train miles)	1.75	1.90	2.08	2.18	

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

⁽²⁾ See supplementary schedule entitled Non-GAAP Measures for an explanation of these non-GAAP measures.

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 these indicators are provided on CN's website, www.cn.ca/glossary.

Based on Federal Railroad Administration (FRA) reporting criteria.

Supplementary Information – unaudited

	Thre	e months	ended Septem	ber 30	Nine months ended September 30						
	2019	2018	% Change Fav (Unfav)	% Change at constant currency Fav (Unfav) (1)	2019	2018	% Change	% Change at constant currency Fav (Unfav) (1)			
Revenues (\$ millions) (2)	2019	2016	rav (Ulliav)	rav (Olliav)	2019	2016	rav (Ulliav)	rav (Ulliav)			
	700	665	4.00/	4.00/	2 200	4.045	250/	220/			
Petroleum and chemicals	788	665	18%	18%	2,298	1,845	25%	22%			
Metals and minerals	425	457	(7%)	(8%)	1,286	1,292	—% (20()	(3%)			
Forest products	450	508	(11%)	(12%)	1,393	1,420	(2%)	(4%)			
Coal	168	169	(1%)	(1%)	508	486	5%	3%			
Grain and fertilizers	552	568	(3%)	(3%)	1,770	1,698	4%	3%			
Intermodal	1,018	897	13%	13%	2,860	2,574	11%	10%			
Automotive	217	199	9%	9%	675	632	7%	4%			
Total freight revenues	3,618	3,463	4%	4%	10,790	9,947	8%	6%			
Other revenues	212	225	(6%)	(6%)	543	566	(4%)	(6%)			
Total revenues	3,830	3,688	4%	3%	11,333	10,513	8%	6%			
Revenue ton miles (RTMs) (millions) (3)											
Petroleum and chemicals	14,042	12,437	13%	13%	41,148	34,609	19%	19%			
Metals and minerals	6,458	7,442	(13%)	(13%)	19,860	21,924	(9%)	(9%)			
Forest products	6,813	7,920	(14%)	(14%)	20,902	22,803	(8%)	(8%)			
Coal	4,563	4,474	2%	2%	13,556	12,916	5%	5%			
Grain and fertilizers	12,722	13,481	(6%)	(6%)	41,634	41,671	—%	—%			
Intermodal	15,294	14,982	2%	2%	44,176	44,883	(2%)	(2%)			
Automotive	957	906	6%	6%	2,969	3,042	(2%)	(2%)			
Total RTMs	60,849	61,642	(1%)	(1%)	184,245	181,848	1%	1%			
Freight revenue / RTM (cents) (2) (3)		-									
Petroleum and chemicals	5.61	5.35	5%	4%	5.58	5.33	5%	2%			
Metals and minerals	6.58	6.14	7%	6%	6.48	5.89	10%	7%			
Forest products	6.61	6.41	3%	2%	6.66	6.23	7%	4%			
Coal	3.68	3.78	(3%)	(3%)	3.75	3.76	- %	(2%)			
Grain and fertilizers	4.34	4.21	3%	3%	4.25	4.07	4%	3%			
Intermodal	6.66	5.99	11%	11%	6.47	5.73	13%	12%			
Automotive	22.68	21.96	3%	3%	22.73	20.78	9%	7%			
Total freight revenue / RTM	5.95	5.62	6%	5%	5.86	5.47	7%	5%			
Carloads (thousands) (3)	3.33	3.02		370	3.00	3.47	770	370			
Petroleum and chemicals	177	161	100/	100/	E10	460	11%	11%			
Metals and minerals	177 270	161 268	10% 1%	10% 1%	519 774	469 775	—%	—%			
Forest products	93	108	(14%)	(14%)	289	317	— % (9%)	— / ₀ (9%)			
Coal	86	86	—%	—%	256	252	2%	2%			
Grain and fertilizers	145	156	— % (7%)	— % (7%)	461	463	—%	%			
Intermodal	693	685	1%	1%	1,980	1,966	—% 1%	—% 1%			
Automotive	67	61	10%	10%	208	1,966	6%	6%			
Total carloads				—%							
	1,531	1,525	—%	—%	4,487	4,439	1%	1%			
Freight revenue / carload (\$) (2) (3)											
Petroleum and chemicals	4,452	4,130	8%	7%	4,428	3,934	13%	10%			
Metals and minerals	1,574	1,705	(8%)	(8%)	1,661	1,667	-%	(3%)			
Forest products	4,839	4,704	3%	2%	4,820	4,479	8%	5%			
Coal	1,953	1,965	(1%)	(1%)	1,984	1,929	3%	1%			
Grain and fertilizers	3,807	3,641	5%	4%	3,839	3,667	5%	3%			
Intermodal	1,469	1,309	12%	12%	1,444	1,309	10%	9%			
Automotive	3,239	3,262	(1%)	(1%)	3,245	3,208	1%	(1%)			
Total freight revenue / carload	2,363	2,271	4%	3%	2,405	2,241	7%	5%			

⁽¹⁾ See supplementary schedule entitled Non-GAAP Measures 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, constant currency, free cash flow 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

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

For the nine months ended September 30, 2019, the Company's adjusted net income was \$3,293 million, or \$4.56 per diluted share, which excludes a deferred income tax recovery of \$112 million (\$0.15 per diluted share) in the second quarter, resulting from the enactment of a lower provincial corporate income tax rate, and a depreciation and amortization expense of \$84 million, or \$62 million after-tax (\$0.09 per diluted share) in the first quarter, related to costs previously capitalized for a Positive Train Control (PTC) back office system following the deployment of a replacement system.

For the three and nine months ended September 30, 2018, the Company's adjusted net income was \$1,102 million, or \$1.50 per diluted share, and \$2,963 million, or \$4.01 per diluted share, respectively. The adjusted figures for the three months ended September 30, 2018 exclude 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). The adjusted figures for the nine months ended September 30, 2018 also exclude a gain on transfer of the Company's finance lease in the passenger rail facilities in downtown 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), both in the second quarter.

The following table provides a reconciliation of net income and earnings per share, as reported for the three and nine months ended September 30, 2019 and 2018, to the adjusted performance measures presented herein:

	Three	e months end	Nine months ended September 30					
In millions, except per share data		2019	2018		2019		2018	
Net income	\$	1,195	\$ 1,134	\$	3,343	\$	3,185	
Adjustments:								
Depreciation and amortization		_	_		84		_	
Other income		_	(36)		_		(259)	
Income tax expense (recovery) (1)		_	4		(134)		37	
Adjusted net income	\$	1,195	\$ 1,102	\$	3,293	\$	2,963	
Basic earnings per share	\$	1.66	\$ 1.55	\$	4.63	\$	4.32	
Impact of adjustments, per share			(0.04)		(0.07)		(0.30)	
Adjusted basic earnings per share	\$	1.66	\$ 1.51	\$	4.56	\$	4.02	
Diluted earnings per share	\$	1.66	\$ 1.54	\$	4.62	\$	4.31	
Impact of adjustments, per share		_	(0.04)		(0.06)		(0.30)	
Adjusted diluted earnings per share	\$	1.66	\$ 1.50	\$	4.56	\$	4.01	

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

Non-GAAP Measures – unaudited

The following table provides a reconciliation of operating income and operating ratio, as reported for the three and nine months ended September 30, 2019 and 2018, to the adjusted performance measures presented herein:

	Thre	e months en	ded Sep	Nine months ended September 30					
In millions, except percentage		2019		2018		2019		2018	
Operating income	\$	1,613	\$	1,492	\$	4,375	\$	4,041	
Adjustment: Depreciation and amortization		_				84			
Adjusted operating income	\$	1,613	\$	1,492	\$	4,459	\$	4,041	
Operating ratio (1)		57.9%		59.5%		61.4%		61.6%	
Impact of adjustment		_		_		(0.7)-p	ts		
Adjusted operating ratio		57.9%		59.5%	60.7%			61.6%	

Operating ratio is defined as operating expenses 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 \$1.32 and \$1.33 per US\$1.00 for the three and nine months ended September 30, 2019, respectively, and \$1.31 and \$1.29 per US \$1.00 for the three and nine months ended September 30, 2018, respectively.

On a constant currency basis, the Company's net income for the three and nine months ended September 30, 2019 would have been lower by \$5 million (\$0.01 per diluted share) and \$63 million (\$0.09 per diluted share), respectively.

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 for the three and nine months ended September 30, 2019 and 2018, to free cash flow:

	Three	e months end	led Sept	Nine months ended September 30				
In millions		2019		2018		2019		2018
Net cash provided by operating activities	\$	1,692	\$	1,564	\$	4,405	\$	4,001
Net cash used in investing activities		(992)		(979)		(3,073)		(2,120)
Net cash provided before financing activities		700		585		1,332		1,881
Adjustment: Acquisition, net of cash acquired (1)		_		_		167		
Free cash flow	\$	700	\$	585	\$	1,499	\$	1,881

Relates to the acquisition of the TransX Group of Companies ("TransX"). See Note 3 - Business combination to CN's 2019 unaudited Interim Consolidated Financial Statements for additional information.

Non-GAAP Measures – unaudited

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 twelve months ended September 30,	2019	2018
Debt		\$ 13,768	\$ 11,894
Adjustments:			
Operating lease liabilities, including current portion (1)		536	495
Pension plans in deficiency		476	458
Adjusted debt		\$ 14,780	\$ 12,847
Net income		\$ 4,486	\$ 5,796
Interest expense		524	484
Income tax expense (recovery)		1,278	(422)
Depreciation and amortization		1,521	1,299
EBITDA		7,809	7,157
Adjustments:			
Other income		(144)	(287)
Other components of net periodic benefit income		(317)	(305)
Operating lease cost (1)		190	 200
Adjusted EBITDA		\$ 7,538	\$ 6,765
Adjusted debt-to-adjusted EBITDA multiple (times)		1.96	1.90

⁽¹⁾ The Company adopted Accounting Standards Update (ASU) 2016-02: Leases and related amendments (Topic 842) in the first quarter of 2019. The Company now includes operating lease liabilities, as defined by Topic 842, in adjusted debt and excludes operating lease cost, as defined by Topic 842, in adjusted EBITDA. Comparative balances previously referred to as present value of operating lease commitments and operating lease expense have not been adjusted and are now referred to as operating lease liabilities and operating lease cost, respectively. See Note 2 - Recent accounting pronouncements to CN's 2019 unaudited Interim Consolidated Financial Statements for additional information.

Consolidated Statements of Income – unaudited

	 Three mon Septem	 	Nine mon Septen	ths ended nber 30		
In millions, except per share data	2019	2018	2019		2018	
Revenues (Note 4)	\$ 3,830	\$ 3,688	\$ 11,333	\$	10,513	
Operating expenses						
Labor and fringe benefits	694	707	2,173		2,069	
Purchased services and material	552	485	1,681		1,444	
Fuel	391	437	1,231		1,266	
Depreciation and amortization (Note 5)	372	330	1,175		983	
Equipment rents	114	127	332		352	
Casualty and other	 94	 110	366		358	
Total operating expenses	2,217	2,196	6,958		6,472	
Operating income	1,613	1,492	4,375		4,041	
Interest expense	(135)	(121)	(402)		(367)	
Other components of net periodic benefit income (Note 6)	81	76	244		229	
Other income (Note 7)	26	48	51		283	
Income before income taxes	1,585	1,495	4,268		4,186	
Income tax expense (Note 8)	(390)	(361)	(925)		(1,001)	
Net income	\$ 1,195	\$ 1,134	\$ 3,343	\$	3,185	
Earnings per share (Note 9)						
Basic	\$ 1.66	\$ 1.55	\$ 4.63	\$	4.32	
Diluted	\$ 1.66	\$ 1.54	\$ 4.62	\$	4.31	
Weighted-average number of shares (Note 9)						
Basic	718.2	732.7	721.7		736.6	
Diluted	720.9	736.2	724.3		739.8	
Dividends declared per share	\$ 0.5375	\$ 0.4550	\$ 1.6125	\$	1.3650	

See accompanying notes to unaudited consolidated financial statements.

Consolidated Statements of Comprehensive Income – unaudited

	 Three mor Septen	 	Nine months ended September 30				
In millions	2019	2018		2019		2018	
Net income	\$ 1,195	\$ 1,134	\$	3,343	\$	3,185	
Other comprehensive income (loss) (Note 13)							
Net gain (loss) on foreign currency translation	60	(87)		(152)		110	
Net change in pension and other postretirement benefit plans (Note 6)	40	50		117		151	
Other comprehensive income (loss) before income taxes	100	(37)		(35)		261	
Income tax expense	 <u> </u>	 (30)		(63)		(11)	
Other comprehensive income (loss)	100	(67)		(98)		250	
Comprehensive income	\$ 1,295	\$ 1,067	\$	3,245	\$	3,435	

See accompanying notes to unaudited consolidated financial statements.

Consolidated Balance Sheets – unaudited

	Se	December 31	
In millions		2019	2018
Assets			
Current assets			
Cash and cash equivalents	\$	258	\$ 266
Restricted cash and cash equivalents (Note 10)		524	493
Accounts receivable		1,242	1,169
Material and supplies		608	557
Other current assets		428	 243
Total current assets		3,060	2,728
Properties		39,349	37,773
Operating lease right-of-use assets (Note 11)		554	_
Pension asset		784	446
Intangible assets, goodwill and other (Note 3)		349	 267
Total assets	\$	44,096	\$ 41,214
Liabilities and shareholders' equity			
Current liabilities			
Accounts payable and other	\$	2,127	\$ 2,316
Current portion of long-term debt		2,181	 1,184
Total current liabilities		4,308	3,500
Deferred income taxes		7,941	7,480
Other liabilities and deferred credits		657	501
Pension and other postretirement benefits		699	707
Long-term debt		11,587	11,385
Operating lease liabilities (Note 11)		404	_
Shareholders' equity			
Common shares		3,655	3,634
Common shares in Share Trusts (Note 10)		(156)	(175)
Additional paid-in capital		393	408
Accumulated other comprehensive loss (Note 13)		(2,947)	(2,849)
Retained earnings		17,555	16,623
Total shareholders' equity		18,500	 17,641
Total liabilities and shareholders' equity	\$	44,096	\$ 41,214

See accompanying notes to unaudited consolidated financial statements.

Consolidated Statements of Changes in Shareholders' Equity – unaudited

	Number of common shares				Common shares		Δα	ditional	Α	ccumulated other			Total
In millions	Outstanding	Share Trusts	Co	mmon shares		Share Trusts		paid-in capital	cor	nprehensive loss	Retained earnings	shar	eholders' equity
Balance at June 30, 2019	719.0	1.6	\$	3,661	\$	(149)	\$	390	\$	(3,047)	\$ 17,127	\$	17,982
Net income											1,195		1,195
Stock options exercised	0.1			10				(1)					9
Settlement of equity settled awards	_	_				_		(5)			(3)		(8)
Stock-based compensation expense and other								9			(1)		8
Repurchase of common shares (Note 10)	(3.2)			(16)							(378)		(394)
Share purchases by Share Trusts	(0.1)	0.1				(7)							(7)
Other comprehensive loss (Note 13)										100			100
Dividends											(385)		(385)
Balance at September 30, 2019	715.8	1.7	\$	3,655	\$	(156)	\$	393	\$	(2,947)	\$ 17,555	\$	18,500

		Number of common shares			Common shares		Additional		Accumulated other				Total
In millions	Outstanding	Share Trusts		mmon shares		Share Trusts		paid-in capital	cor	nprehensive loss	Retained earnings	shar	eholders' equity
Balance at December 31, 2018	725.3	2.0	\$	3,634	\$	(175)	\$	408	\$	(2,849)	\$ 16,623	\$	17,641
Net income											3,343		3,343
Stock options exercised	0.9			75				(10)					65
Settlement of equity settled awards	0.5	(0.5)				45		(55)			(60)		(70)
Stock-based compensation expense and other								50			(2)		48
Repurchase of common shares (Note 10)	(10.7)			(54)							(1,217)		(1,271)
Share purchases by Share Trusts	(0.2)	0.2				(26)							(26)
Other comprehensive loss (Note 13)										(98)			(98)
Dividends											(1,161)		(1,161)
Cumulative-effect adjustment from the adoption of ASU 2016-02 (1)											29		29
Balance at September 30, 2019	715.8	1.7	\$	3,655	\$	(156)	\$	393	\$	(2,947)	\$ 17,555	\$	18,500

The Company adopted Accounting Standards Update (ASU) 2016-02: Leases and related amendments (Topic 842) in the first quarter of 2019 using a modified retrospective approach with a cumulative-effect adjustment to Retained earnings recognized on January 1, 2019, with no restatement of comparative period financial information. See Note 2 - Recent accounting pronouncements for additional information.

See accompanying notes to unaudited consolidated financial statements.

Consolidated Statements of Changes in Shareholders' Equity – unaudited

	Number of common shares					Common shares		Additional		Accumulated other			Total
In millions	Outstanding	Share Trusts	Co	mmon shares		Share Trusts		paid-in capital	cor	mprehensive loss	Retained earnings	sh	areholders' equity
Balance at June 30, 2018	733.8	1.6	\$	3,629	\$	(137)	\$	393	\$	(2,467)	\$ 15,951	\$	17,369
Net income											1,134		1,134
Stock options exercised	0.3			19				(2)					17
Settlement of equity settled awards (1)	_	_				_		(3)			(3)		(6)
Stock-based compensation expense and other								13			(1)		12
Repurchase of common shares (Note 10)	(4.6)			(24)							(497)		(521)
Other comprehensive income (Note 13)										(67)			(67)
Dividends											(332)		(332)
Balance at September 30, 2018	729.5	1.6	\$	3,624	\$	(137)	\$	401	\$	(2,534)	\$ 16,252	\$	17,606

	Number common sh			mmon shares	Δα	ditional	,	Accumulated other			Total
In millions	Outstanding	Share Trusts	mmon shares	Share Trusts		paid-in capital	co	mprehensive loss	Retained earnings	shar	eholders' equity
Balance at December 31, 2017	742.6	2.0	\$ 3,613	\$ (168)	\$	434	\$	(2,784)	\$ 15,561	\$	16,656
Net income									3,185		3,185
Stock options exercised	1.4		88			(12)					76
Settlement of equity settled awards (1)	0.4	(0.4)		31		(65)			(30)		(64)
Stock-based compensation expense and other						44			(2)		42
Repurchase of common shares (Note 10)	(14.9)		(77)						(1,460)		(1,537)
Other comprehensive income (Note 13)								250			250
Dividends									(1,002)		(1,002)
Balance at September 30, 2018	729.5	1.6	\$ 3,624	\$ (137)	\$	401	\$	(2,534)	\$ 16,252	\$	17,606

⁽¹⁾ In the fourth quarter of 2018, the Company changed its presentation with respect to the settlement of equity settled awards when purchasing shares on the open market, on a retrospective basis. Comparative balances have been reclassified to conform to the current presentation. The impact of this reclassification on the balance at September 30, 2018 increased Additional paid-in capital by \$287 million, decreased Common shares by \$232 million and decreased Retained earnings by \$55 million. See Note 14 - Share capital to the Company's 2018 Annual Consolidated Financial Statements for additional information.

See accompanying notes to unaudited consolidated financial statements.

Consolidated Statements of Cash Flows - unaudited

	Three months ended September 30				Nine months ended September 30			
In millions	:	2019		2018		2019		2018
Operating activities								
Net income	\$ 1	,195	\$	1,134	\$	3,343	\$	3,185
Adjustments to reconcile net income to net cash provided by operating activities:	•	•	•	, -	•		·	-,
Depreciation and amortization		372		330		1,175		983
Pension income and funding ⁽¹⁾		(50)		(36)		(218)		(156)
Deferred income taxes		284		172		479		401
Gain on disposal of property (Note 7)		_		(36)		_		(259)
Changes in operating assets and liabilities:				, ,				, ,
Accounts receivable		42		(57)		(27)		(117)
Material and supplies		39		(4)		(51)		(133)
Accounts payable and other		(210)		(30)		(664)		(15)
Other current assets		(19)		58		(20)		51
Other operating activities, net (1)		39		33		388		61
Net cash provided by operating activities	1	,692		1,564		4,405		4,001
Investing activities				<u> </u>				
Property additions		(961)		(1,002)		(2,847)		(2,267)
· ·		(901)		(1,002)				(2,267)
Acquisition, net of cash acquired (Note 3)		_		40		(167)		— 194
Disposal of property (Note 7)		(21)						_
Other investing activities, net		(31)		(17)		(59) (3,073)		(47)
Net cash used in investing activities		(992)		(979)		(3,073)		(2,120)
Financing activities								
Issuance of debt (Note 10)		150		1,137		940		2,423
Repayment of debt		(58)		(991)		(98)		(2,022)
Change in commercial paper, net (Note 10)		202		21		323		447
Settlement of foreign exchange forward contracts on debt		(8)		31		7		38
Issuance of common shares for stock options exercised		9		17		65		76
Withholding taxes remitted on the net settlement of equity settled		(4)		(3)		(60)		(49)
awards (Note 12)								
Repurchase of common shares (Note 10)		(399)		(521)		(1,263)		(1,521)
Purchase of common shares for settlement of equity settled awards		(4)		(3)		(10)		(15)
Purchase of common shares by Share Trusts		(7)		(222)		(26)		(1.002)
Dividends paid Assurisition additional cash consideration (Note 3)		(385)		(332)		(1,161)		(1,002)
Acquisition, additional cash consideration (Note 3)		(25) (529)		(644)		(25) (1,308)	-	(1.625)
Net cash used in financing activities		(329)		(644)		(1,300)		(1,625)
Effect of foreign exchange fluctuations on cash, cash equivalents, restricted cash and restricted cash equivalents		(1)		(11)		(1)		_
Net increase (decrease) in cash, cash equivalents, restricted cash, and restricted cash equivalents		170		(70)		23		256
Cash, cash equivalents, restricted cash, and restricted cash equivalents, beginning of period		612		879		759		553
Cash, cash equivalents, restricted cash, and restricted cash								
	\$	782	\$	809	\$	782	\$	809
Cash and cash equivalents, end of period	\$	258	\$	317	\$	258	\$	317
Restricted cash and cash equivalents, end of period		524		492		524		492
Cash, cash equivalents, restricted cash, and restricted cash equivalents, end of period	\$	782	\$	809	\$	782	\$	809
Supplemental cash flow information								
	\$	(191)	\$	(164)	\$	(433)	\$	(399)
Interest paid								

⁽¹⁾ In the first quarter of 2019, the Company began presenting Pension income and funding as a separate line on the Consolidated Statements of Cash Flows. Previously pension income and funding was included in Other operating activities, net. Comparative figures have been adjusted to conform to the current presentation.

See accompanying notes to unaudited 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, 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 unaudited Interim Consolidated Financial Statements have been prepared using accounting policies consistent with those used in preparing CN's 2018 Annual Consolidated Financial Statements, except as disclosed in Note 2 - Recent accounting pronouncements, and should be read in conjunction with such statements and Notes thereto.

2 - Recent accounting pronouncements

The following recent Accounting Standards Updates (ASUs) issued by the Financial Accounting Standards Board (FASB) were adopted by the Company during the first nine months of 2019:

ASU 2016-02 Leases and related amendments (Topic 842)

The ASU requires a lessee to recognize a right-of-use asset and a lease liability on the balance sheet for all leases greater than twelve months and requires additional qualitative and quantitative disclosures. The lessor accounting model under the new standard is substantially unchanged. The guidance must be applied using a modified retrospective approach. Entities may elect to apply the guidance to each prior period presented with a cumulative-effect adjustment to retained earnings recognized at the beginning of the earliest period presented or to apply the guidance with a cumulative-effect adjustment to retained earnings recognized at the beginning of the period of adoption.

The new standard provides a number of practical expedients and accounting policy elections upon transition. On January 1, 2019, the Company did not elect the package of three practical expedients that permits the Company not to reassess prior conclusions about lease qualification, classification and initial direct costs. Upon adoption, the Company elected the following practical expedients:

- the use-of-hindsight practical expedient to reassess the lease term and the likelihood that a purchase option will be exercised;
- the land easement practical expedient to not evaluate land easements that were not previously accounted for as leases under Topic 840;
- the short-term lease exemption for all asset classes that permits entities not to recognize right-of-use assets and lease liabilities onto the balance sheet for leases with terms of twelve months or less; and
- the practical expedient to not separate lease and non-lease components for the freight car asset category.

The Company adopted this standard in the first quarter of 2019 with an effective date of January 1, 2019 using a modified retrospective approach with a cumulative-effect adjustment to Retained earnings recognized on January 1, 2019, with no restatement of comparative period financial information. As at January 1, 2019, the cumulative-effect adjustment to adopt the new standard increased the balance of Retained earnings by \$29 million, relating to a deferred gain on a sale-leaseback transaction of a real estate property. The initial adoption transition adjustment to record right-of-use assets and lease liabilities for leases over twelve months on the Company's Consolidated Balance Sheet was \$756 million to each balance. The initial adoption transition adjustment is comprised of finance and operating leases of \$215 million and \$541 million, respectively. New finance lease right-of-use assets and finance lease liabilities are a result of the reassessment of leases with purchase options that are reasonably certain to be exercised by the Company under the transition to Topic 842, previously accounted for as operating leases.

ASU 2017-04 Intangibles - Goodwill and other (Topic 350): Simplifying the test for goodwill impairment

The ASU simplifies the goodwill impairment test by removing the requirement to compare the implied fair value of goodwill with its carrying amount. Under the new standard, goodwill impairment tests are performed by comparing the fair value of a reporting unit with its carrying amount, recognizing an impairment charge for the amount by which the carrying amount exceeds the reporting unit's fair value, up to the value of goodwill. In addition, the standard simplifies the goodwill impairment test for reporting units with a zero or negative carrying amount, such that all reporting units apply the same impairment test. An entity is required to disclose the amount of goodwill allocated to each reporting unit with a zero or negative carrying amount of net assets.

The guidance must be applied prospectively. The ASU is effective for annual and any interim impairment tests for periods beginning after December 15, 2019. Early adoption is permitted for interim or annual goodwill impairment tests performed on testing dates after January 1, 2017.

The Company adopted this standard in the first quarter of 2019 with an effective date of January 1, 2019. The adoption of this standard did not have an impact on the Company's Consolidated Financial Statements.

Accounting policy for goodwill

The Company recognizes goodwill as the excess of the purchase price over the fair value of net assets acquired in business combinations. Goodwill is not amortized. Instead, goodwill is tested for impairment annually as of the first day of the fiscal fourth quarter or more frequently when events or changes in circumstances indicate that the carrying amount may not be recoverable. If impairment exists, a loss is recognized.

The following recent ASU issued by FASB has an effective date after September 30, 2019 and has not been adopted by the Company:

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

The ASU requires financial assets measured at amortized cost to be presented at the net amount expected to be collected. The new standard replaces the current incurred loss impairment methodology with one that reflects expected credit losses. The adoption of the ASU is not expected to have a significant impact on the Company's Consolidated Financial Statements. CN will adopt the requirements of the ASU effective January 1, 2020.

Other recently issued ASUs required to be applied for periods beginning on or after September 30, 2019 have been evaluated by the Company and will not have a significant impact on the Company's Consolidated Financial Statements.

3 - Business combination

2019

Acquisition of the TransX Group of Companies

On March 20, 2019, the Company acquired the TransX Group of Companies ("TransX"). TransX provides various transportation and logistics services, including intermodal, truckload, less than truckload and specialized services. The acquisition positions CN to strengthen its intermodal business, and allows the Company to expand capacity and foster additional supply chain solutions. The acquisition was subject to a number of conditions, including regulatory review by the Competition Bureau Canada and Canada's Ministry of Transportation. On March 18, 2019, the Competition Bureau Canada issued a No Action Letter, satisfying the only outstanding condition and allowing the Company to close the transaction.

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

The total purchase price of \$195 million included an initial cash payment of \$170 million, and contingent consideration of \$25 million payable upon achievement of certain operational or financial targets through 2019. The acquisition date fair value of the additional consideration, recorded as a contingent liability, was estimated based on the expected outcome of operational and financial targets, and remained unchanged since that date. The fair value measure was based on Level 3 inputs not observable in the market. On August 27, 2019, the additional consideration was paid.

The following table summarizes the consideration transferred to acquire TransX, as well as the preliminary fair value of the assets acquired and liabilities assumed, and goodwill that were recognized at the acquisition date:

		March 20
In millions		2019
Consideration transferred		
Cash paid at closing	\$	170
Additional cash consideration		25
Fair value of total consideration transferred	\$	195
Recognized amounts of identifiable assets acquired and liabilities assumed (1)	,	
Current assets	\$	92
Non-current assets (2)		260
Current liabilities		(131)
Non-current liabilities		(84)
Total identifiable net assets (3)	\$	137
Goodwill (4)	\$	58

The Company's purchase price allocation is preliminary, based on information available to the Company to date, and subject to change over the measurement period, which may be up to one year from the acquisition date.

4 - Revenues

The following table provides disaggregated information for revenues:

	Three	months end	ded Sept	tember 30	Nine	e months end	led Sept	tember 30
In millions		2019		2018		2019		2018
Freight revenues								
Petroleum and chemicals	\$	788	\$	665	\$	2,298	\$	1,845
Metals and minerals		425		457		1,286		1,292
Forest products		450		508		1,393		1,420
Coal		168		169		508		486
Grain and fertilizers		552		568		1,770		1,698
Intermodal		1,018		897		2,860		2,574
Automotive		217		199		675		632
Total freight revenues	\$	3,618	\$	3,463	\$	10,790	\$	9,947
Other revenues		212		225		543		566
Total revenues (1)	\$	3,830	\$	3,688	\$	11,333	\$	10,513
Revenues by geographic area								
Canada	\$	2,605	\$	2,442	\$	7,682	\$	7,039
United States (U.S.)		1,225		1,246		3,651		3,474
Total revenues (1)	\$	3,830	\$	3,688	\$	11,333	\$	10,513

As at September 30, 2019, the Company had remaining performance obligations related to freight in-transit, for which revenues of \$79 million are expected to be recognized in the next period.

Contract liabilities

Contract liabilities represent consideration received from customers for which the related performance obligation has not been satisfied. Contract liabilities are recognized into revenues when or as the related performance obligation is satisfied. The Company includes contract liabilities within Accounts payable and other and Other liabilities and deferred credits on the Consolidated Balance Sheets.

Includes identifiable intangible assets of \$34 million.

Includes finance and operating lease right-of-use assets and liabilities.

The goodwill acquired through the business combination is mainly attributable to the premium of an established business operation. The goodwill is not deductible for tax purposes.

The following table provides a reconciliation of the beginning and ending balances of contract liabilities for the three and nine months ended September 30, 2019 and 2018:

	Three	months end	ded Sept	Nine months ended September :					
In millions		2019		2018		2019		2018	
Beginning balance	\$	243	\$	4	\$	3	\$	3	
Revenue recognized included in the beginning balance		(5)		(2)		(2)		(3)	
Increase due to consideration received, net of revenue recognized		4		2		241		4	
Ending balance	\$	242	\$	4	\$	242	\$	4	
Current portion - End of period	\$	66	\$	4	\$	66	\$	4	

5 - Properties

In the first quarter of 2019, the Company recognized an expense of \$84 million related to costs previously capitalized for a Positive Train Control (PTC) back office system following the deployment of a replacement system. The expense was recognized in Depreciation and amortization on the Consolidated Statements of Income.

6 - 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 13 - Pensions and other postretirement benefits to the Company's 2018 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 nine months ended September 30, 2019 and 2018:

	Thre	e m	ont	ns end	led S	Septer	nber	30	Nine m	onths end	ed S	epten	ber :	30
	P	ensi	ons		р	Otl ostret ben		ent	Pens	ions	po	Otl ostret ben	reme	ent
In millions	201	9	2	018	2	019	2	018	2019	2018	2	019	2	018
Current service cost	\$ 3	8	\$	46	\$	1	\$	1	\$ 114	\$ 125	\$	2	\$	2
Other components of net periodic benefit cost (income) (1)														
Interest cost	14	9		142		2		3	447	426		6		7
Expected return on plan assets	(27	2)	((271)		_		_	(814)	(813)		_		_
Amortization of prior service cost		1		1		_		_	3	3		_		_
Amortization of net actuarial loss (gain)	3	9		50		_		(1)	116	150		(2)		(2)
Total Other components of net periodic benefit cost (income) (1)	(8	3)		(78)		2		2	(248)	(234)		4		5
Net periodic benefit cost (income)	\$ (4	5)	\$	(32)	\$	3	\$	3	\$ (134)	\$ (109)	\$	6	\$	7

In the second quarters of 2019 and 2018, the Company revised its estimate of full year net periodic benefit cost (income) for pensions to reflect updated plan demographic information.

Pension contributions

Pension contributions for the nine months ended September 30, 2019 and 2018 of \$102 million and \$64 million, respectively, primarily represent contributions to the Company's main pension plan, the CN Pension Plan, for the current service cost as determined under the Company's applicable actuarial valuations for funding purposes. In 2019, the Company expects to make total cash contributions of approximately \$135 million for all of the Company's pension plans.

7 – Other income

Included in Other income are gains and losses on the disposal of land and property, foreign exchange gains and losses related to foreign exchange forward contracts and the re-measurement of foreign currency denominated monetary assets and liabilities, and other.

Disposal of property

2018

Doney and St-Francois Spurs

On September 5, 2018, the Company completed the sale of property located in Montreal, Quebec (the "Doney and St-Francois Spurs") for cash proceeds of \$40 million. The transaction resulted in a gain of \$36 million (\$32 million after-tax) that was recorded in Other income on that date.

Central Station Railway Lease

On April 9, 2018, the Company completed the transfer of its finance lease in the passenger rail facilities in Montreal, Quebec, together with its interests in related railway operating agreements (the "Central Station Railway Lease") for cash proceeds of \$115 million. The transaction resulted in a gain of \$184 million (\$156 million after-tax) that was recorded in Other income on that date. The gain includes the difference between the net book value of the asset and the cash proceeds, the extinguishment of the finance lease obligation, and the recognition of a gain previously deferred from a sale-leaseback transaction.

Calgary Industrial Lead

On April 6, 2018, the Company completed the sale of land located in Calgary, Alberta, excluding the rail fixtures (the "Calgary Industrial Lead"), for cash proceeds of \$39 million. The transaction resulted in a gain of \$39 million (\$34 million after-tax) that was recorded in Other income on that date.

8 – Income taxes

Income tax expense was \$390 million and \$925 million for the three and nine months ended September 30, 2019, respectively, compared to \$361 million and \$1,001 million, respectively, for the same periods in 2018. The income tax expense for the nine months ended September 30, 2019 includes a deferred income tax recovery of \$112 million recorded in the second quarter resulting from the enactment of a lower provincial corporate income tax rate.

9 - Earnings per share

	Three	e months en	ded Sept	tember 30	Nine	months end	led Sept	ember 30
In millions, except per share data		2019		2018		2019		2018
Net income	\$	1,195	\$	1,134	\$	3,343	\$	3,185
Weighted-average basic shares outstanding		718.2		732.7		721.7		736.6
Dilutive effect of stock-based compensation		2.7		3.5		2.6		3.2
Weighted-average diluted shares outstanding		720.9		736.2		724.3		739.8
Basic earnings per share	\$	1.66	\$	1.55	\$	4.63	\$	4.32
Diluted earnings per share	\$	1.66	\$	1.54	\$	4.62	\$	4.31
Units excluded from the calculation as their inclusion would not have a dilutive effect							,	
Stock options		_		_		0.5		0.7
Performance share units		0.1		0.1		0.2		0.3

10 - Financing activities

Shelf prospectus and registration statement

On February 8, 2019, under its current shelf prospectus and registration statement, the Company issued \$350 million 3.00% Notes due 2029 and \$450 million 3.60% Notes due 2049 in the Canadian capital markets, which resulted in net proceeds of \$790 million. The Company's shelf prospectus and registration statement, under which CN may issue debt securities in the Canadian and U.S. capital markets until March 13, 2020, has remaining capacity of \$3.5 billion. Access to the Canadian and U.S. capital markets under the shelf prospectus and registration statement is dependent on market conditions.

Non-revolving credit facility

On July 25, 2019, the Company entered into an agreement for a non-revolving term loan credit facility in the principal amount of up to US\$300 million, secured by rolling stock, which may be drawn upon during the period from July 25, 2019 to March 31, 2020. Term loans made under the facility have a tenor of 20 years, bear interest at a variable rate, and are prepayable at any time without penalty. The credit facility is available for financing or refinancing the purchase of equipment. As at September 30, 2019, the Company had no outstanding borrowings under its non-revolving credit facility and there were no draws during the nine months ended September 30, 2019.

Revolving credit facility

The Company has an unsecured revolving credit facility with a consortium of lenders which is available for general corporate purposes including backstopping the Company's commercial paper programs. On March 15, 2019, the Company's revolving credit facility agreement was amended, which extended the term of the credit facility by one year and increased the credit facility from \$1.8 billion to \$2.0 billion, effective May 5, 2019. The amended credit facility of \$2.0 billion consists of a \$1.0 billion tranche maturing on May 5, 2022 and a \$1.0 billion tranche maturing on May 5, 2024. Under the amended credit facility, the Company has the option to request an extension once a year to maintain the tenors of three years and five years of the respective tranches subject to the consent of the individual lenders. The accordion feature, which provides for an additional \$500 million of credit under the facility, remains unchanged. The credit facility agreement contains customary terms and conditions, which were substantially unchanged by the amendment. The credit facility provides for borrowings at various benchmark interest rates, plus applicable margins, based on CN's debt credit ratings. The credit facility agreement has one financial covenant, which limits debt as a percentage of total capitalization, and with which the Company is in compliance.

As at September 30, 2019 and December 31, 2018, the Company had no outstanding borrowings under its revolving credit facility and there were no draws during the nine months ended September 30, 2019.

Commercial paper

The Company has a commercial paper program in Canada and in the U.S. Both programs are backstopped by the Company's revolving credit facility. As of May 5, 2019, the maximum aggregate principal amount of commercial paper that could be issued increased from \$1.8 billion to \$2.0 billion, or the US dollar equivalent on a combined basis.

As at September 30, 2019 and December 31, 2018, the Company had total commercial paper borrowings of US\$1,119 million (\$1,482 million) and US\$862 million (\$1,175 million), respectively, at a weighted-average interest rate of 2.14% and 2.47%, 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 nine months ended September 30, 2019 and 2018:

	Thre	e months end	led Sep	tember 30	Nine	months end	ed Sept	ember 30
In millions		2019		2018		2019		2018
Commercial paper with maturities less than 90 days								
Issuance of commercial paper	\$	1,582	\$	2,175	\$	3,625	\$	6,071
Repayment of commercial paper		(1,296)		(2,004)		(3,620)		(5,941)
Change in commercial paper with maturities less than 90 days, net		286		171		5		130
Commercial paper with maturities of 90 days or greater								
Issuance of commercial paper		437		332		1,634		903
Repayment of commercial paper		(521)		(482)		(1,316)		(586)
Change in commercial paper with maturities of 90 days or								
greater, net		(84)		(150)		318		317
Change in commercial paper, net	\$	202	\$	21	\$	323	\$	447

Accounts receivable securitization program

The Company has an agreement, expiring on February 1, 2021, to sell an undivided co-ownership interest in a revolving pool of accounts receivable to unrelated trusts for maximum cash proceeds of \$450 million. As at September 30, 2019, the Company had accounts receivable securitization borrowings of \$150 million at a weighted-average interest rate of 1.88%, secured by and limited to \$168 million of accounts receivable, presented in Current portion of long-term debt on the Consolidated Balance Sheets. As at December 31, 2018, the Company had no proceeds received under the accounts receivable securitization program.

Bilateral letter of credit facilities

The Company has a series of committed and uncommitted bilateral letter of credit facility agreements. On March 15, 2019, the Company extended the maturity date of the committed bilateral letter of credit facility agreements to April 28, 2022. The agreements are held with various banks to support the Company's requirements to post letters of credit in the ordinary course of business. Under these agreements, the Company has the option from time to time to pledge collateral in the form of cash or cash equivalents, for a minimum term of one month, equal to at least the face value of the letters of credit issued.

As at September 30, 2019, the Company had outstanding letters of credit of \$426 million (\$410 million as at December 31, 2018) under the committed facilities from a total available amount of \$462 million (\$447 million as at December 31, 2018) and \$148 million (\$137 million as at December 31, 2018) under the uncommitted facilities.

As at September 30, 2019, included in Restricted cash and cash equivalents was \$429 million (\$408 million as at December 31, 2018) and \$90 million (\$80 million as at December 31, 2018) which were pledged as collateral under the committed and uncommitted bilateral letter of credit facilities, respectively.

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 22.0 million common shares between February 1, 2019 and January 31, 2020. As at September 30, 2019, the Company had repurchased 9.2 million common shares for \$1,118 million under its current NCIB.

The Company repurchased 4.1 million common shares under its previous NCIB effective between October 30, 2018 and January 31, 2019, which allowed for the repurchase of up to 5.5 million common shares.

The following table provides the information related to the share repurchases for the three and nine months ended September 30, 2019 and 2018:

	Thre	Three months ended September 30				Nine months ended Septemb				
In millions, except per share data		2019		2018		2019		2018		
Number of common shares repurchased		3.2		4.6		10.7		14.9		
Weighted-average price per share	\$	122.29	\$	114.01	\$	118.49	\$	103.41		
Amount of repurchase (1)	\$	394	\$	521	\$	1,271	\$	1,537		

⁽¹⁾ Includes settlements in subsequent periods.

Share Trusts

The Company's Employee Benefit Plan Trusts ("Share Trusts") purchase CN's common shares on the open market, which are used to deliver common shares under the Share Units Plan and, beginning in 2019, the Employee Share Investment Plan (ESIP) (see *Note 12 – Stock-based compensation*). Shares purchased by the Share Trusts are retained until the Company instructs the trustee to transfer shares to participants of the Share Units Plan or the ESIP. Additional information relating to Share Trusts is provided in *Note 14 – Share capital* to the Company's 2018 Annual Consolidated Financial Statements.

11 - Leases

The Company engages in short and long-term leases for rolling stock including locomotives and freight cars, equipment, real estate and service contracts that contain embedded leases. The Company determines whether or not a contract contains a lease at inception. Leases with a term of twelve months or less are not recorded by the Company on the Consolidated Balance Sheets.

Finance and operating lease right-of-use assets and liabilities are recognized based on the present value of the future lease payments over the lease term at the commencement date. Where the implicit interest rate is not determinable from the lease, the Company uses internal incremental borrowing rates by tenor and currency to initially measure leases over twelve months on the Consolidated Balance Sheets. Operating lease expense is recognized on a straight-line basis over the lease term.

The Company's lease contracts may contain termination, renewal, and/or purchase options, residual value guarantees, or a combination thereof, all of which are evaluated by the Company on a quarterly basis. The majority of renewal options available extend the lease term from one to five years. The Company accounts for such contract options when the Company is reasonably certain that it will exercise one of these options.

Lease contracts may contain lease and non-lease components that the Company generally accounts for separately, with the exception of the freight car asset category for which the Company has elected to not separate the lease and non-lease components.

The following table provides the Company's lease costs for the three and nine months ended September 30, 2019:

	Three months ended September 30	Nin	e months ended September 30
In millions	2019	,	2019
Finance lease cost			
Amortization of right-of-use assets	\$ 4	\$	8
Interest on lease liabilities	2		6
Total finance lease cost	6		14
Operating lease cost	43		129
Short-term lease cost	12		34
Variable lease cost (1)	15		47
Total lease cost (2)	\$ 76	\$	224

⁽¹⁾ Mainly relates to leases of trucks for the Company's freight delivery service contracts.

The following table provides the Company's lease right-of-use assets and lease liabilities, and their classification on the Consolidated Balance Sheet as at September 30, 2019:

		Sep	tember 30
In millions	Classification		2019
Lease right-of-use assets	3		
Finance leases	Properties	\$	622
Operating leases	Operating lease right-of-use assets		554
Total lease right-of-use as:	sets	\$	1,176
Lease liabilities			
Current			
Finance leases	Current portion of long-term debt	\$	135
Operating leases	Accounts payable and other		132
Noncurrent			
Finance leases	Long-term debt		83
Operating leases	Operating lease liabilities		404
Total lease liabilities		\$	754

⁽²⁾ Includes lease costs from purchased services and material and equipment rents in the Consolidated Statements of Income.

The following table provides the remaining lease terms and discount rates for the Company's leases as at September 30, 2019:

	September 30
	2019
Weighted-average remaining lease term (years)	
Finance leases	1.0
Operating leases	6.9
Weighted-average discount rate (%)	
Finance leases	2.9
Operating leases	3.2

The following table provides additional information for the Company's leases for the three and nine months ended September 30, 2019:

	 onths ended eptember 30	Nine months ended September 30			
In millions	 2019	2019			
Cash paid for amounts included in the measurement of lease liabilities					
Operating cash outflows from operating leases	\$ 44	\$	131		
Operating cash outflows from finance leases	\$ 1	\$	5		
Financing cash outflows from finance leases	\$ 58	\$	78		
Right-of-use assets obtained in exchange for new finance lease liabilities	\$ _	\$	_		
Right-of-use assets obtained in exchange for new operating lease liabilities	\$ 30	\$	71		

The following table provides the maturities of lease liabilities for the next five years and thereafter as at September 30, 2019:

In millions	Finance leases	Operation	ng leases (1)	Total
2019	\$ 85	\$	41	\$ 126
2020	62		136	198
2021	73		107	180
2022	1		72	73
2023	_		50	50
2024 and thereafter	3		191	194
Total lease payments	\$ 224	\$	597	\$ 821
Less: Imputed interest	6		61	
Present value of lease payments	\$ 218	\$	536	

⁽¹⁾ Includes \$70 million related to renewal options that are reasonably certain to be exercised.

12 - Stock-based compensation

The Company has various stock-based compensation plans for eligible employees. A description of the major plans is provided in *Note 15 – Stock-based compensation* to the Company's 2018 Annual Consolidated Financial Statements.

	Three	months end	ded Sept	ember 30	Nine months ended September 30				
In millions		2019		2018		2019		2018	
Share Units Plan (1)	\$	1	\$	9	\$	23	\$	26	
Voluntary Incentive Deferral Plan (VIDP) (2)		_		3		4		4	
Stock option awards		2		3		9		9	
Employee share investment plan (ESIP)		5		10		9		28	
Total stock-based compensation expense	\$	8	\$	25	\$	45	\$	67	
Income tax impacts of stock-based compensation						,			
Tax benefit recognized in income	\$	2	\$	6	\$	10	\$	16	
Excess tax benefit recognized in income	\$	1	\$	1	\$	22	\$	12	

⁽¹⁾ Performance share unit (PSU) awards are granted under the Share Units Plan.

Share Units Plan

		Equity settled								
	PSUs	s-ROIC (1)		PSU	s-TSR (2)					
	Units		nted-average ate fair value	Units		ted-average te fair value				
	In millions			In millions						
Outstanding at December 31, 2018	1.1	\$	46.10	0.4	\$	100.93				
Granted	0.4	\$	70.52	0.1	\$	128.02				
Settled (3)	(0.4)	\$	35.11	(0.2)	\$	95.31				
Forfeited	(0.1)	\$	61.22		\$	116.50				
Outstanding at September 30, 2019	1.0	\$	58.27	0.3	\$	112.04				

⁽¹⁾ The grant date fair value of equity settled PSUs-ROIC granted in 2019 of \$26 million is calculated using a lattice-based valuation model. As at September 30, 2019, total unrecognized compensation cost related to all outstanding awards was \$22 million and is expected to be recognized over a weighted-average period of 1.6 years.

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

⁽²⁾ The grant date fair value of equity settled PSUs-TSR granted in 2019 of \$15 million is calculated using a Monte Carlo simulation model. As at September 30, 2019, total unrecognized compensation cost related to all outstanding awards was \$12 million and is expected to be recognized over a weighted-average period of 1.7 years.

⁽³⁾ Equity settled PSUs-ROIC granted in 2016 met the minimum share price condition for settlement and attained a performance vesting factor of 200%. Equity settled PSUs-TSR granted in 2016 attained a performance vesting factor of 100%. In the first quarter of 2019, these awards were settled, net of the remittance of the participants' withholding tax obligation of \$50 million, by way of disbursement from the Share Trusts of 0.5 million common shares.

Voluntary Incentive Deferral Plan

	Equit		Cash settled			
	D	DSUs (1)				
	Units		ted-average te fair value	Units		
	In millions			In millions		
Outstanding at December 31, 2018	0.8	\$	79.23	0.2		
Granted	0.1	\$	113.59	_		
Settled (3)	(0.2)	\$	80.51	(0.1)		
Outstanding at September 30, 2019 (4)	0.7	\$	81.95	0.1		

- (1) The grant date fair value of equity settled DSUs granted in 2019 of \$4 million is calculated using the Company's stock price on the grant date. As at September 30, 2019, the aggregate intrinsic value of all equity settled DSUs outstanding amounted to \$80 million.
- (2) The fair value of cash settled DSUs as at September 30, 2019 is based on the intrinsic value. As at September 30, 2019, the liability for all cash settled DSUs was \$15 million (\$19 million as at December 31, 2018). The closing stock price used to determine the liability was \$118.96.
- (3) For the nine months ended September 30, 2019, the Company purchased 0.1 million common shares for the settlement of equity settled DSUs, net of the remittance of the participants' withholding tax obligation of \$10 million.
- (4) 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 for cash and equity settled DSUs have not been quantified as they relate to a minimal number of units.

Stock option awards

	Options o	Options outstanding				
	Number of options	_	hted-average exercise price			
	In millions					
Outstanding at December 31, 2018 (1)	4.2	\$	79.73			
Granted (2)	0.9	\$	110.76			
Exercised	(0.9)	\$	70.05			
Forfeited	(0.2)	\$	103.04			
Outstanding at September 30, 2019 (1) (2) (3)	4.0	\$	86.79			
Exercisable at September 30, 2019 (1) (3)	1.9	\$	71.60			

- (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 2019 of \$15 million (\$16.29 per option) is calculated using the Black-Scholes option-pricing model. As at September 30, 2019, total unrecognized compensation cost related to all outstanding awards was \$13 million and is expected to be recognized over a weighted-average period of 2.2 years.
- (3) The weighted-average term to expiration of options outstanding was 6.8 years and the weighted-average term to expiration of exercisable stock options was 5.1 years. As at September 30, 2019, the aggregate intrinsic value of in-the-money stock options outstanding amounted to \$129 million and the aggregate intrinsic value of stock options exercisable amounted to \$89 million.

Employee Share Investment Plan

The Company has an ESIP which gives eligible employees the opportunity to subscribe for up to 10% of their gross salaries to purchase shares of the Company on the open market. Participants receive a Company contribution equal to 35% of the amount invested, up to 6% of their gross salary.

Beginning January 1, 2019, Company contributions to the ESIP, which consist of shares purchased on the open market, are subject to a one-year vesting period and are forfeited should certain participant contributions be sold or disposed of prior to vesting. Company contributions to the ESIP are held in Share Trusts until vesting, at which time shares are delivered to the employee.

The following table provides a summary of the activity related to the ESIP:

	ESIP
	Shares
	In millions
Unvested contributions, December 31, 2018	<u> </u>
Company contributions (1)	0.2
Unvested contributions, September 30, 2019	0.2

⁽¹⁾ The weighted average fair value of the shares contributed was \$118.79.

13 - Accumulated other comprehensive loss

In millions	Foreign currency anslation ustments	postre	Pension and other etirement efit plans	Total before tax	re	me tax ecovery ense) (1)		Total net of tax
Balance at June 30, 2019	\$ (253)	\$	(3,804)	\$ (4,057)	\$	1,010	\$	(3,047)
Other comprehensive income (loss) before reclassifications:								
Foreign exchange gain on translation of net investment in foreign operations	143			143		_		143
Foreign exchange loss on translation of US dollar-denominated debt designated as a hedge of the net investment in foreign operations (2)	(83)			(83)		11		(72)
Amounts reclassified from Accumulated other comprehensive loss:								
Amortization of net actuarial loss			39	39 ⁽³⁾		(10)	(4)	29
Amortization of prior service cost			1	 1 (3)		(1)		
Other comprehensive income	 60		40	100				100
Balance at September 30, 2019	\$ (193)	\$	(3,764)	\$ (3,957)	\$	1,010	\$	(2,947)

In millions	-	Foreign currency ranslation justments	•	Pension and other tretirement enefit plans	Total before tax	ncome tax recovery expense) (1)		Total net of tax
Balance at December 31, 2018	\$	(41)	\$	(3,881)	\$ (3,922)	\$ 1,073	\$	(2,849)
Other comprehensive income (loss) before reclassifications:								
Foreign exchange loss on translation of net investment in foreign operations		(383)			(383)	_		(383)
Foreign exchange gain on translation of US dollar-denominated debt designated as a hedge of the net investment in foreign								
operations (2)		231			231	(32)		199
Amounts reclassified from Accumulated other comprehensive loss:								
Amortization of net actuarial loss				114	114 (3)	(30) (4))	84
Amortization of prior service cost				3	 3 (3)	(1)		2
Other comprehensive income (loss)		(152)		117	(35)	(63)		(98)
Balance at September 30, 2019	\$	(193)	\$	(3,764)	\$ (3,957)	\$ 1,010	\$	(2,947)

Footnotes to the tables follow on the next page.

In millions	Foreign currency ranslation justments	•	Pension and other stretirement enefit plans	Total before tax	Income tax recovery (expense) (1)		Total net of tax
Balance at June 30, 2018	\$ (247)	\$	(3,021)	\$ (3,268)	\$ 801	\$	(2,467)
Other comprehensive income (loss) before reclassifications:							
Foreign exchange loss on translation of net investment in foreign operations	(215)			(215)	_		(215)
Foreign exchange gain on translation of US dollar-denominated debt designated as a hedge of the net investment in foreign							
operations ⁽²⁾	128			128	(17)		111
Amounts reclassified from Accumulated other comprehensive loss:							
Amortization of net actuarial loss			49	49 (3)	(13)	4)	36
Amortization of prior service cost			1	1 (3)	<u> </u>		1
Other comprehensive income (loss)	(87)		50	(37)	(30)		(67)
Balance at September 30, 2018	\$ (334)	\$	(2,971)	\$ (3,305)	\$ 771	\$	(2,534)

In millions	Foreign currency ranslation ustments	•	Pension and other tretirement enefit plans	Total before tax	Income tax recovery expense) (1)	Total net of tax
Balance at December 31, 2017	\$ (444)	\$	(3,122)	\$ (3,566)	\$ 782	\$ (2,784)
Other comprehensive income (loss) before reclassifications:						
Foreign exchange gain on translation of net investment in foreign operations	327			327	_	327
Foreign exchange loss on translation of US dollar-denominated debt designated as a hedge of the net investment in foreign						
operations (2)	(217)			(217)	29	(188)
Amounts reclassified from Accumulated other comprehensive loss:						
Amortization of net actuarial loss			148	148 (3)	(40) ⁽⁴⁾	108
Amortization of prior service cost			3	3 (3)		3
Other comprehensive income (loss)	110		151	261	(11)	250
Balance at September 30, 2018	\$ (334)	\$	(2,971)	\$ (3,305)	\$ 771	\$ (2,534)

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

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.

Reclassified to Other components of net periodic benefit income in the Consolidated Statements of Income and included in net periodic benefit cost. See Note 6 -(3) Pensions and other postretirement benefits.

Included in Income tax expense in the Consolidated Statements of Income.

14 - Major commitments and contingencies

Purchase commitments

As at September 30, 2019, the Company had fixed and variable commitments to purchase locomotives, rail, wheels, engineering services, information technology services and licenses, railroad ties, rail cars, as well as other equipment and services with a total estimated cost of \$1,886 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 September 30, 2019, the Company had aggregate reserves for personal injury and other claims of \$342 million, of which \$79 million was recorded as a current liability (\$346 million as at December 31, 2018, of which \$97 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 September 30, 2019, 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 operations are subject to numerous federal, provincial, state, municipal and local environmental laws and regulations in Canada and the U.S. concerning, among other things, emissions into the air; discharges into waters; the generation, handling, storage, transportation, treatment and disposal of waste, hazardous substances, and other materials; decommissioning of underground and aboveground storage tanks; and soil and groundwater contamination. A risk of environmental liability is inherent in railroad and related transportation operations; real estate ownership, operation or control; and other commercial activities of the Company with respect to both current and past operations.

The Company is or may be liable for remediation costs at individual sites, in some cases along with other potentially responsible parties, associated with actual or alleged contamination. The ultimate cost of addressing these known contaminated sites cannot be definitively established given that the estimated environmental liability for any given site may vary depending on the nature and extent of the contamination; the nature of anticipated response actions, taking into account the available clean-up techniques; evolving regulatory standards governing environmental liability; and the number of potentially responsible parties and their financial viability. As a result, liabilities are recorded based on the results of a four-phase assessment conducted on a site-by-site basis. A liability is initially recorded when environmental assessments occur, remedial efforts are probable, and when the costs, based on a specific plan of action in terms of the technology to be used and the extent of the corrective action required, can be reasonably estimated. The Company estimates the costs related to a particular site using cost scenarios established by external consultants based on the extent of contamination and expected costs for remedial efforts. In the case of multiple parties, the Company accrues its allocable share of liability taking into account the Company's alleged responsibility, the number of potentially responsible parties and their ability to pay their respective share of the liability. Adjustments to initial estimates are recorded as additional information becomes available.

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.

As at September 30, 2019, the Company had aggregate accruals for environmental costs of \$55 million, of which \$37 million was recorded as a current liability (\$61 million as at December 31, 2018, of which \$39 million was recorded as a current liability). The Company anticipates that the majority of the liability at September 30, 2019 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 17 - Major commitments and contingencies to the Company's 2018 Annual Consolidated Financial Statements.

As at September 30, 2019, the Company had outstanding letters of credit of \$426 million (\$410 million as at December 31, 2018) under the committed bilateral letter of credit facilities and \$148 million (\$137 million as at December 31, 2018) under the uncommitted bilateral letter of credit facilities, and surety and other bonds of \$147 million (\$160 million as at December 31, 2018), 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 September 30, 2019, the maximum potential liability under these guarantee instruments was \$721 million (\$707 million as at December 31, 2018), of which \$681 million (\$659 million as at December 31, 2018) related to other employee benefit liabilities and workers' compensation and \$40 million (\$48 million as at December 31, 2018) related to other liabilities. The guarantee instruments expire at various dates between 2019 and 2021.

As at September 30, 2019, 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.

15 - 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. As at September 30, 2019, the Company had outstanding foreign exchange forward contracts with a notional value of US\$1,310 million (US\$1,465 million as at December 31, 2018). Changes in the fair value of foreign exchange forward contracts, resulting from changes in foreign exchange rates, are recognized in Other income in the Consolidated Statement of Income as they occur.

For the three and nine months ended September 30, 2019, the Company recorded a gain of \$23 million and a loss of \$46 million, respectively, related to foreign exchange forward contracts compared to a loss of \$25 million and a gain of \$60 million, respectively, for the same periods in 2018. These gains and losses were largely offset by the re-measurement of US dollar-denominated monetary assets and liabilities recorded in Other income.

As at September 30, 2019, the fair value of outstanding foreign exchange forward contracts included in Other current assets and Accounts payable and other was \$6 million and \$3 million, respectively (\$67 million and \$nil, respectively, as at December 31, 2018).

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. The fair value of these financial instruments is not determined using quoted prices, but rather from market observable information. The fair value of derivative financial instruments, classified as Level 2, used to manage the Company's exposure to foreign currency risk and included in Other current assets and Accounts payable and other 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 guoted 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 September 30, 2019, the Company's debt, excluding finance leases, had a carrying amount of \$13,550 million (\$12,540 million as at December 31, 2018) and a fair value of \$15,781 million (\$13,287 million as at December 31, 2018).

This Management's Discussion and Analysis (MD&A) dated October 22, 2019, 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 2019 unaudited Interim Consolidated Financial Statements and Notes thereto. It should also be read in conjunction with the Company's 2018 audited Annual Consolidated Financial Statements and Notes thereto, and the 2018 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 2018 Annual Information Form and Form 40-F, may be found online on SEDAR at www.sedar.com, on the SEC's website at www.sec.gov through EDGAR, and on the Company's website at www.cn.ca in the Investors section. Printed copies of such documents may be obtained by contacting CN's Corporate Secretary's Office.

Business profile

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

CN's freight revenues are derived from seven commodity groups representing a diversified and balanced portfolio of goods transported between a wide range of origins and destinations. This product and geographic diversity better positions the Company to face economic fluctuations and enhances its potential for growth opportunities. For the year ended December 31, 2018, no individual commodity group accounted for more than 25% of total revenues. From a geographic standpoint, 15% of revenues relate to U.S. domestic traffic, 34% transborder traffic, 17% Canadian domestic traffic and 34% overseas traffic. The Company is the originating carrier for over 85%, and the originating and terminating carrier for over 65%, of traffic moving along its network, which allows it both to capitalize on service advantages and build on opportunities to efficiently use assets.

Strategy overview

A description of the Company's strategy is provided in the section entitled Strategy overview of the Company's 2018 Annual MD&A.

Third quarter 2019 compared to third quarter 2018

- CN delivered higher third quarter operating income, net income and earnings per share, notwithstanding the weakening economic environment that contributed to a 1% decline in volumes in terms of revenue ton miles (RTMs).
- Net income increased by \$61 million, or 5%, to \$1,195 million, and diluted earnings per share increased by 8% to \$1.66.
- Adjusted net income increased by \$93 million, or 8%, to \$1,195 million, and adjusted diluted earnings per share increased by 11% to \$1.66. (1)
- Operating income was \$1,613 million, an increase of \$121 million, or 8%.
- Operating ratio was 57.9%, a 1.6-point improvement.
- Free cash flow was \$700 million, an increase of \$115 million. (2)
- The Company repurchased 3.2 million common shares, returning \$394 million to its shareholders.
- CN paid a quarterly dividend of \$0.5375 per share, representing an increase of 18%, amounting to \$385 million.
- CN delivered a 4% improvement in fuel productivity, producing an all time record performance and supporting the Company's
 sustainability agenda. The Company's sustainability practices once again earned it a place on the Dow Jones Sustainability World and
 North American Indices, for the 8th and 11th consecutive year, respectively; CN is the only Canadian company and the only North
 American railroad listed in the Transportation and Transportation Infrastructure sector World Index.
- (1) See the section of this MD&A entitled Adjusted performance measures for an explanation of these non-GAAP measures.
- (2) See the section of this MD&A entitled Liquidity and capital resources Free cash flow for an explanation of this non-GAAP measure.

Acquisitions

On August 29, 2019, the Company announced it had reached an agreement to acquire the Massena rail line from CSX Corporation, which represents more than 220 miles of track between Valleyfield, Quebec, and Woodard, New York. The acquisition will allow CN to continue to expand its network and foster additional supply chain solutions. As at October 22, 2019, the acquisition remains subject to regulatory review.

On May 9, 2019, the Company announced it had reached an agreement to acquire the intermodal division of the Alberta-based H&R Transport Limited ("H&R"). The acquisition positions CN to expand its presence in moving customer goods by offering more end to end rail supply chain solutions to a wider range of customers. As at October 22, 2019, the acquisition remains subject to customary closing conditions.

On March 20, 2019, following satisfaction of all closing conditions, the Company acquired the TransX Group of Companies ("TransX"). TransX provides various transportation and logistics services, including intermodal, truckload, less than truckload and specialized services. The acquisition positions CN to strengthen its intermodal business, and allows the Company to expand capacity and foster additional supply chain solutions, to continue to create value for customers. TransX's results of operations have been included in the Company's results of operations, since the acquisition date, March 20, 2019. TransX's revenues are included as freight revenues within the intermodal commodity group. The inclusion of TransX's results of operations impacted the Company's Revenues and Operating expenses, in particular Purchased services and materials and Labor and fringe benefits, for the three and nine months ended September 30, 2019 when compared to the same periods in 2018. See the section of this MD&A entitled *Liquidity and capital resources - Investing activities* for additional information.

2019 Business outlook and assumptions

For 2019, the Company continues to expect growth across a range of commodities, particularly in Canadian coal exports, refined petroleum products and natural gas liquids, Canadian grain and petroleum crude compared to 2018. The Company also continues to expect lower volumes of U.S. coal exports, forest products, potash and frac sand compared to 2018. The Company now expects volumes of intermodal traffic to be lower than 2018.

Underpinning the 2019 business outlook, the Company now assumes that North American industrial production will increase in the range of 0.5 to one percent. For the 2018/2019 crop year, the grain crops in both Canada and the U.S. were in line with their respective three-year averages. The Company assumes that the 2019/2020 grain crop in Canada will be in line with the three-year average and that the 2019/2020 grain crop in the U.S. will be below the three-year average.

The forward-looking statements discussed in this 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.

Forward-looking statements

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

Forward-looking statements include, but are not limited to, those set forth in the table below, which also presents key assumptions used in determining the forward-looking statements. See also the section of this MD&A entitled *Strategy overview - 2019 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 Long-term growth opportunities being less affected by current economic conditions 						
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	 North American and global economic growth 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 the actual results or performance of the Company to be materially different from the outlook or any future results or performance implied by such statements. Accordingly, readers are advised not to place undue reliance on forward-looking statements. Important risk factors that could affect the forward-looking statements include, but are not limited to, the effects of general economic and business conditions; 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 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 2018 Annual MD&A for a description of major risk factors.

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

Financial highlights

	Thre	ee months end	ded Sep	Nine months ended September 30					
In millions, except percentage and per share data		2019		2018		2019	,	2018	
Revenues	\$	3,830	\$	3,688	\$	11,333	\$	10,513	
Operating income	\$	1,613	\$	1,492	\$	4,375	\$	4,041	
Adjusted operating income (1)	\$	1,613	\$	1,492	\$	4,459	\$	4,041	
Net income	\$	1,195	\$	1,134	\$	3,343	\$	3,185	
Adjusted net income (1)	\$	1,195	\$	1,102	\$	3,293	\$	2,963	
Basic earnings per share	\$	1.66	\$	1.55	\$	4.63	\$	4.32	
Adjusted basic earnings per share (1)	\$	1.66	\$	1.51	\$	4.56	\$	4.02	
Diluted earnings per share	\$	1.66	\$	1.54	\$	4.62	\$	4.31	
Adjusted diluted earnings per share (1)	\$	1.66	\$	1.50	\$	4.56	\$	4.01	
Dividends declared per share	\$	0.5375	\$	0.4550	\$	1.6125	\$	1.3650	
Total assets	\$	44,096	\$	40,209	\$	44,096	\$	40,209	
Total long-term liabilities	\$	21,288	\$	18,784	\$	21,288	\$	18,784	
Operating ratio		57.9%		59.5%		61.4%		61.6%	
Adjusted operating ratio (1)		57.9%		59.5%		60.7%		61.6%	
Free cash flow (2)	\$	700	\$	585	\$	1,499	\$	1,881	

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

Financial results

Third quarter and first nine months of 2019 compared to corresponding periods in 2018

Net income for the third quarter of 2019 was \$1,195 million, an increase of \$61 million, or 5%, and diluted earnings per share increased by 8% to \$1.66, when compared to the same period in 2018. Net income for the nine months ended September 30, 2019 was \$3,343 million, an increase of \$158 million, or 5%, and diluted earnings per share increased by 7% to \$4.62, when compared to the same period in 2018.

Operating income for the quarter ended September 30, 2019 increased by \$121 million, or 8%, to \$1,613 million when compared to the same period in 2018. Operating income for the nine months ended September 30, 2019 increased by \$334 million, or 8%, to \$4,375 million when compared to the same period in 2018. The increases in both periods were mainly due to freight rate increases, lower fuel costs, and record fuel productivity; partly offset by higher purchased services and material expense, as well as higher depreciation and amortization expense. The positive translation impact of a weaker Canadian dollar also contributed to the increase in the first nine months.

The operating ratio, defined as operating expenses as a percentage of revenues, was 57.9% in the third quarter of 2019, compared to 59.5% in the third quarter of 2018, a 1.6-point improvement. The nine-month operating ratio was 61.4% in 2019 compared to 61.6% in 2018, a 0.2-point improvement.

Revenues for the third quarter of 2019 were \$3,830 million compared to \$3,688 million for the same period in 2018, an increase of \$142 million, or 4%. Revenues for the first nine months of 2019 were \$11,333 million, an increase of \$820 million, or 8%, when compared to the same period in 2018. The increases in both periods were mainly due to freight rate increases and the inclusion of TransX in the intermodal commodity group. The positive translation impact of a weaker Canadian dollar also contributed to the increase in the first nine months.

Operating expenses for the third quarter of 2019 were \$2,217 million compared to \$2,196 million for the same period in 2018, an increase of \$21 million, or 1%. Operating expenses for the first nine months of 2019 were \$6,958 million compared to \$6,472 million for the same period in 2018, an increase of \$486 million, or 8%. The increases in both periods were mainly driven by increased purchased services and material expense, as well as higher depreciation and amortization expense; partly offset by lower fuel costs and record fuel productivity. The negative translation impact of a weaker Canadian dollar also contributed to the increase in the first nine months.

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

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 entitled *Adjusted performance measures*, *Constant currency* and *Liquidity and capital resources*.

Adjusted performance measures

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

For the nine months ended September 30, 2019, the Company's adjusted net income was \$3,293 million, or \$4.56 per diluted share, which excludes a deferred income tax recovery of \$112 million (\$0.15 per diluted share) in the second quarter, resulting from the enactment of a lower provincial corporate income tax rate, and a depreciation and amortization expense of \$84 million, or \$62 million after-tax (\$0.09 per diluted share) in the first quarter, related to costs previously capitalized for a Positive Train Control (PTC) back office system following the deployment of a replacement system.

For the three and nine months ended September 30, 2018, the Company's adjusted net income was \$1,102 million, or \$1.50 per diluted share, and \$2,963 million, or \$4.01 per diluted share, respectively. The adjusted figures for the three months ended September 30, 2018 exclude 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). The adjusted figures for the nine months ended September 30, 2018 also exclude a gain on transfer of the Company's finance lease in the passenger rail facilities in downtown 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), both in the second quarter.

The following table provides a reconciliation of net income and earnings per share, as reported for the three and nine months ended September 30, 2019 and 2018, to the adjusted performance measures presented herein:

	Three	e months en	Nine months ended September 30					
In millions, except per share data		2019	2018		2019		2018	
Net income	\$	1,195	\$	1,134	\$	3,343	\$	3,185
Adjustments:								
Depreciation and amortization		_		_		84		_
Other income		_		(36)		_		(259)
Income tax expense (recovery) (1)				4		(134)		37
Adjusted net income	\$	1,195	\$	1,102	\$	3,293	\$	2,963
Basic earnings per share	\$	1.66	\$	1.55	\$	4.63	\$	4.32
Impact of adjustments, per share		_		(0.04)		(0.07)		(0.30)
Adjusted basic earnings per share	\$	1.66	\$	1.51	\$	4.56	\$	4.02
Diluted earnings per share	\$	1.66	\$	1.54	\$	4.62	\$	4.31
Impact of adjustments, per share		_		(0.04)		(0.06)		(0.30)
Adjusted diluted earnings per share	\$	1.66	\$	1.50	\$	4.56	\$	4.01

⁽¹⁾ The tax effect of adjustments 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 and operating ratio, as reported for the three and nine months ended September 30, 2019 and 2018, to the adjusted performance measures presented herein:

In millions, except percentage	Thre	e months en	ded Sep	Nine months ended September 30					
		2019		2018		2019		2018	
Operating income	\$	1,613	\$	1,492	\$	4,375	\$	4,041	
Adjustment: Depreciation and amortization		_				84			
Adjusted operating income	\$	1,613	\$	1,492	\$	4,459	\$	4,041	
Operating ratio (1)	57.9%			59.5%		61.4%	61.6%		
Impact of adjustment	_			_		(0.7)-p	_		
Adjusted operating ratio			59.5%	60.7%			61.6%		

⁽¹⁾ Operating ratio is defined as operating expenses 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 \$1.32 and \$1.33 per US\$1.00 for the three and nine months ended September 30, 2019, respectively, and \$1.31 and \$1.29 per US \$1.00 for the three and nine months ended September 30, 2018, respectively.

On a constant currency basis, the Company's net income for the three and nine months ended September 30, 2019 would have been lower by \$5 million (\$0.01 per diluted share) and \$63 million (\$0.09 per diluted share), respectively.

Revenues

	Three months ended September 30							Nine months ended September 30							
In millions, unless otherwise indicated		2019		2018	% Change	% Change at constant currency		2019		2018	% Change	% Change at constant currency			
Freight revenues	\$	3,618	\$	3,463	4%	4%	\$	10,790	\$	9,947	8%	6%			
Other revenues		212		225	(6%)	(6%)		543		566	(4%)	(6%)			
Total revenues	\$	3,830	\$	3,688	4%	3%	\$	11,333	\$	10,513	8%	6%			
Freight revenues															
Petroleum and chemicals	\$	788	\$	665	18%	18%	\$	2,298	\$	1,845	25%	22%			
Metals and minerals		425		457	(7%)	(8%)		1,286		1,292	-%	(3%)			
Forest products		450		508	(11%)	(12%)		1,393		1,420	(2%)	(4%)			
Coal		168		169	(1%)	(1%)		508		486	5%	3%			
Grain and fertilizers		552		568	(3%)	(3%)		1,770		1,698	4%	3%			
Intermodal		1,018		897	13%	13%		2,860		2,574	11%	10%			
Automotive		217		199	9%	9%		675		632	7%	4%			
Total freight revenues	\$	3,618	\$	3,463	4%	4%	\$	10,790	\$	9,947	8%	6%			
Revenue ton miles (RTMs) (millions)		60,849		61,642	(1%)	(1%)		184,245		181,848	1%	1%			
Freight revenue/RTM (cents)		5.95		5.62	6%	5%		5.86		5.47	7%	5%			
Carloads (thousands)		1,531		1,525	%	%		4,487		4,439	1%	1%			
Freight revenue/carload (\$)		2,363		2,271	4%	3%		2,405		2,241	7%	5%			

Revenues for the quarter ended September 30, 2019 were \$3,830 million compared to \$3,688 million in the same period in 2018, an increase of \$142 million, or 4%. Revenues for the first nine months of 2019 were \$11,333 million, an increase of \$820 million, or 8%, when compared to the same period in 2018. The increases in both periods were mainly due to freight rate increases and the inclusion of TransX in the intermodal commodity group. The positive translation impact of a weaker Canadian dollar also contributed to the increase in the first nine months.

Fuel surcharge revenues decreased by \$18 million in the third quarter and increased by \$33 million in the first nine months of 2019 when compared to the same periods in 2018. The decrease in the third quarter was a result of lower applicable fuel surcharge rates. The increase in the first nine months was mainly due to higher volumes, as well as the positive translation impact of a weaker Canadian dollar.

RTMs, measuring the relative weight and distance of freight transported by the Company, declined by 1% in the third quarter and increased by 1% in the first nine months of 2019 when compared to the same periods in 2018. Freight revenue per RTM increased by 6% in the third quarter and 7% in the first nine months of 2019 when compared to the same periods in 2018, mainly driven by freight rate increases and the inclusion of TransX. The positive translation impact of a weaker Canadian dollar also contributed to the increase in revenue per RTM in the first nine months.

Petroleum and chemicals

	Three months ended September 30							Nine months ended September 30						
	% Change at constant									% Change at constant				
	2019		2018	% Change	currency		2019		2018	% Change	currency			
Revenues (millions)	\$ 788	\$	665	18%	18%	\$	2,298	\$	1,845	25%	22%			
RTMs (millions)	14,042		12,437	13%	13%		41,148		34,609	19%	19%			
Revenue/RTM (cents)	5.61		5.35	5%	4%		5.58		5.33	5%	2%			
Carloads (thousands)	177		161	10%	10%		519		469	11%	11%			

Revenues for this commodity group increased by \$123 million, or 18%, in the third quarter and \$453 million, or 25%, in the first nine months of 2019 when compared to the same periods in 2018. The increases in both periods were mainly due to higher volumes of petroleum crude, natural gas liquids and refined petroleum products, as well as freight rate increases. The positive translation impact of a weaker Canadian dollar also contributed to the increase in the first nine months.

Revenue per RTM increased by 5% in both the third quarter and first nine months of 2019 when compared to the same periods in 2018, mainly due to freight rate increases, partly offset by an increase in the average length of haul. The positive translation impact of a weaker Canadian dollar also contributed to the increase in revenue per RTM in the first nine months.

Metals and minerals

	Three months ended September 30							Nine months ended September 30							
	% Change at constant											% Change at constant			
		2019		2018	% Change	currency		2019		2018	% Change	currency			
Revenues (millions)	\$	425	\$	457	(7%)	(8%)	\$	1,286	\$	1,292	%	(3%)			
RTMs (millions)		6,458		7,442	(13%)	(13%)		19,860		21,924	(9%)	(9%)			
Revenue/RTM (cents)		6.58		6.14	7%	6%		6.48		5.89	10%	7%			
Carloads (thousands)		270		268	1%	1%		774		775	—%	%			

Revenues for this commodity group decreased by \$32 million, or 7%, in the third quarter and \$6 million, remaining flat, in the first nine months of 2019 when compared to the same periods in 2018. The decrease in the third quarter was mainly due to lower volumes of frac sand, partly offset by freight rate increases. In the first nine months, lower volumes of frac sand were offset by freight rate increases and the positive translation impact of a weaker Canadian dollar.

Revenue per RTM increased by 7% in the third quarter and 10% in the first nine months of 2019 when compared to the same periods in 2018, mainly due to a significant decrease in the average length of haul and freight rate increases. The positive translation impact of a weaker Canadian dollar also contributed to the increase in revenue per RTM in the first nine months.

Forest products

	 Three	mor	nths end	ed Septembe	er 30	Nine	mor	nths ende	ed Septembe	er 30
	2019		2018	% Change	% Change at constant currency	2019		2018	% Change	% Change at constant currency
Revenues (millions)	\$ 450	\$	508	(11%)	(12%)	\$ 1,393	\$	1,420	(2%)	(4%)
RTMs (millions)	6,813		7,920	(14%)	(14%)	20,902		22,803	(8%)	(8%)
Revenue/RTM (cents)	6.61		6.41	3%	2%	6.66		6.23	7%	4%
Carloads (thousands)	93		108	(14%)	(14%)	289		317	(9%)	(9%)

Revenues for this commodity group decreased by \$58 million, or 11%, in the third quarter and \$27 million, or 2%, in the first nine months of 2019 when compared to the same periods in 2018. The decreases in both periods were mainly due to lower volumes of a broad range of forest products, partly offset by freight rate increases. The decrease in the first nine months was also partly offset by the positive translation impact of a weaker Canadian dollar.

Revenue per RTM increased by 3% in the third quarter and 7% in the first nine months of 2019 when compared to the same periods in 2018, mainly due to freight rate increases. The positive translation impact of a weaker Canadian dollar also contributed to the increase in revenue per RTM in the first nine months.

Coal

	 Three	mor	nths end	ed Septembe	r 30	Nine	mor	nths ende	ed Septembe	er 30
					% Change at constant					% Change at constant
	2019		2018	% Change	currency	2019		2018	% Change	currency
Revenues (millions)	\$ 168	\$	169	(1%)	(1%)	\$ 508	\$	486	5%	3%
RTMs (millions)	4,563		4,474	2%	2%	13,556		12,916	5%	5%
Revenue/RTM (cents)	3.68		3.78	(3%)	(3%)	3.75		3.76	%	(2%)
Carloads (thousands)	86		86	—%	%	256		252	2%	2%

Revenues for this commodity group decreased by \$1 million, or 1%, in the third quarter and increased by \$22 million, or 5%, in the first nine months of 2019 when compared to the same periods in 2018. The decrease in the third quarter was mainly due to lower U.S. thermal coal exports via the Gulf Coast, partly offset by higher metallurgical and thermal coal exports via west coast ports. The increase in the first nine months was mainly due to higher metallurgical and thermal coal exports via west coast ports, freight rate increases and the positive translation impact of a weaker Canadian dollar; partly offset by reduced U.S. thermal coal exports via the Gulf Coast.

Revenue per RTM decreased by 3% in the third quarter and remained flat in the first nine months of 2019 when compared to the same periods in 2018. The decrease in the third quarter was mainly due to an increase in the average length of haul.

Grain and fertilizers

	 Three	e mo	nths end	ed Septembe	er 30	Nine	mor	nths ende	ed Septembe	er 30
					% Change at constant					% Change at constant
	2019		2018	% Change	currency	2019		2018	% Change	currency
Revenues (millions)	\$ 552	\$	568	(3%)	(3%)	\$ 1,770	\$	1,698	4%	3%
RTMs (millions)	12,722		13,481	(6%)	(6%)	41,634		41,671	%	-%
Revenue/RTM (cents)	4.34		4.21	3%	3%	4.25		4.07	4%	3%
Carloads (thousands)	145		156	(7%)	(7%)	461		463	-%	-%

Revenues for this commodity group decreased by \$16 million, or 3%, in the third quarter and increased by \$72 million, or 4%, in the first nine months of 2019 when compared to the same periods in 2018. The decrease in the third quarter was mainly due to lower export volumes of Canadian wheat, U.S. corn, and lower volumes of potash; partly offset by freight rate increases. The increase in the first nine months was mainly due to higher export volumes of wheat, increased exports of U.S. soybean and corn, freight rate increases and the positive translation impact of a weaker Canadian dollar; partly offset by lower volumes of potash.

Revenue per RTM increased by 3% in the third quarter and 4% in the first nine months of 2019 when compared to the same periods in 2018, mainly due to freight rate increases. The positive translation impact of a weaker Canadian dollar also contributed to the increase in revenue per RTM in the first nine months.

Intermodal

	 Three	e mo	nths end	ed Septembe	r 30	Nine	mor	nths ende	d Septembe	er 30
					% Change at constant					% Change at constant
	2019		2018	% Change	currency	2019		2018	% Change	currency
Revenues (millions)	\$ 1,018	\$	897	13%	13%	\$ 2,860	\$	2,574	11%	10%
RTMs (millions)	15,294		14,982	2%	2%	44,176		44,883	(2%)	(2%)
Revenue/RTM (cents)	6.66		5.99	11%	11%	6.47		5.73	13%	12%
Carloads (thousands)	693		685	1%	1%	1,980		1,966	1%	1%

Revenues for this commodity group increased by \$121 million, or 13%, in the third quarter and \$286 million, or 11%, in the first nine months of 2019 when compared to the same periods in 2018. The increases in both periods were mainly due to the inclusion of TransX. Also impacting both periods were higher international container traffic via the Port of Prince Rupert and freight rate increases; partly offset by lower international container traffic via the port of Vancouver, as well as reduced domestic retail shipments (mainly impacting the first half of 2019). The positive translation impact of a weaker Canadian dollar also contributed to the increase in the first nine months.

Revenue per RTM increased by 11% in the third quarter and 13% in the first nine months of 2019 when compared to the same periods in 2018, mainly due to the inclusion of TransX. Also impacting both periods were freight rate increases and in the first half of 2019, the positive translation impact of a weaker Canadian dollar.

Automotive

	Three	nths end	ed Septembe	r 30	Nine	mon	ths ende	ed Septembe	er 30	
					% Change at constant					% Change at constant
	2019		2018	% Change	currency	2019		2018	% Change	currency
Revenues (millions)	\$ 217	\$	199	9%	9%	\$ 675	\$	632	7%	4%
RTMs (millions)	957		906	6%	6%	2,969		3,042	(2%)	(2%)
Revenue/RTM (cents)	22.68		21.96	3%	3%	22.73		20.78	9%	7%
Carloads (thousands)	67		61	10%	10%	208		197	6%	6%

Revenues for this commodity group increased by \$18 million, or 9%, in the third quarter and \$43 million, or 7%, in the first nine months of 2019 when compared to the same periods in 2018. The increase in the third quarter was mainly due to higher volumes of domestic finished vehicles and increased finished vehicle imports via the Port of Vancouver; and freight rate increases. The increase in the first nine months was mainly due to higher volumes of domestic vehicles and vehicle parts, the positive translation impact of a weaker Canadian dollar, as well as freight rate increases; partly offset by lower import volumes of finished vehicles via the Port of Halifax.

Revenue per RTM increased by 3% in the third quarter and 9% in the first nine months of 2019 when compared to the same periods in 2018. The increase in the third quarter was mainly due to freight rate increases. The increase in the first nine months was mainly due to a decrease in the average length of haul, the positive translation impact of a weaker Canadian dollar and freight rate increases.

Other revenues

	 Three	mon	ths end	ed Septemb	er 30	Nine	mon	ths ende	ed Septembe	er 30	
					% Change at constant						% Change at constant
	2019	2018	% Change	currency		2019		2018	% Change	currency	
Revenues (millions)	\$ 212	\$	225	(6%)	(6%)	\$	543	\$	566	(4%)	(6%)

Other revenues decreased by \$13 million, or 6%, in the third quarter and \$23 million, or 4%, in the first nine months of 2019 when compared to the same periods in 2018. The decreases in both periods were mainly due to lower revenues from vessels.

Operating expenses

Operating expenses for the third quarter of 2019 were \$2,217 million compared to \$2,196 million in the same period of 2018. Operating expenses for the first nine months of 2019 were \$6,958 million compared to \$6,472 million in the same period of 2018. The increases of \$21 million, or 1%, in the third quarter and \$486 million, or 8%, in the first nine months of 2019 were mainly driven by increased purchased services and material expense, as well as higher depreciation and amortization expense; partly offset by lower fuel costs and record fuel productivity. The negative translation impact of a weaker Canadian dollar also contributed to the increase in the first nine months.

	Three	e mor	ths end	ed Septemb	er 30	Nine	mon	ths ende	ed Septembe	er 30
In millions	2019		2018	% Change	% Change at constant currency	2019		2018	% Change	% Change at constant currency
Labor and fringe benefits	\$ 694	\$	707	2%	2%	\$ 2,173	\$	2,069	(5%)	(4%)
Purchased services and material	552		485	(14%)	(13%)	1,681		1,444	(16%)	(15%)
Fuel	391		437	11%	11%	1,231		1,266	3%	6%
Depreciation and amortization	372		330	(13%)	(12%)	1,175		983	(20%)	(18%)
Equipment rents	114		127	10%	11%	332		352	6%	8%
Casualty and other	94		110	15%	15%	366		358	(2%)	—%_
Total operating expenses	\$ 2,217	\$	2,196	(1%)	%	\$ 6,958	\$	6,472	(8%)	(6%)

Labor and fringe benefits

Labor and fringe benefits expense decreased by \$13 million, or 2%, in the third quarter and increased by \$104 million, or 5%, in the first nine months of 2019 when compared to the same periods in 2018. The decrease in the third quarter was mainly due to lower incentive compensation, partly offset by higher headcount primarily due to the inclusion of TransX and general wage increases. The increase in the first nine months was mainly due to higher headcount primarily due to the inclusion of TransX, general wage increases and the negative translation impact of a weaker Canadian dollar; partly offset by lower incentive compensation.

Purchased services and material

Purchased services and material expense increased by \$67 million, or 14%, in the third quarter and \$237 million, or 16%, in the first nine months of 2019 when compared to the same periods in 2018. The increases in both periods were mainly due to the inclusion of TransX. Also contributing to the increase in the first nine months were higher repairs, maintenance and materials costs, higher costs for services purchased from outside contractors and the negative translation impact of a weaker Canadian dollar.

Fuel

Fuel expense decreased by \$46 million, or 11%, in the third quarter and \$35 million, or 3%, in the first nine months of 2019 when compared to the same periods in 2018. The decreases in both periods were mainly due to lower fuel prices and record fuel productivity. The decrease in the first nine months was partly offset by the negative translation impact of a weaker Canadian dollar and increased volumes of traffic.

Depreciation and amortization

Depreciation and amortization expense increased by \$42 million, or 13%, in the third quarter and \$192 million, or 20%, in the first nine months of 2019 when compared to the same periods in 2018. The increase in the third quarter was mainly due to net asset additions. The increase in the first nine months was mainly due to net asset additions, an expense related to costs previously capitalized for a PTC back office system following the deployment of a replacement system and the negative translation impact of a weaker Canadian dollar.

Equipment rents

Equipment rents expense decreased by \$13 million, or 10%, in the third quarter and \$20 million, or 6%, in the first nine months of 2019 when compared to the same periods in 2018. The decreases in both periods were mainly due to lower costs for leased locomotives. The decrease in the first nine months was partly offset by the negative translation impact of a weaker Canadian dollar.

Casualty and other

Casualty and other expense decreased by \$16 million, or 15%, in the third quarter and increased by \$8 million, or 2%, in the first nine months of 2019 when compared to the same periods in 2018. The decrease in the third quarter was mainly due to lower workers' compensation expense. The increase in the first nine months was mainly due to higher incident costs and the negative translation impact of a weaker Canadian dollar; partly offset by lower legal provisions.

Other income and expenses

Interest expense

Interest expense was \$135 million and \$402 million for the three and nine months ended September 30, 2019, respectively, compared to \$121 million and \$367 million, respectively, for the same periods in 2018. The increases were mainly due to a higher average level of debt and the negative translation impact of a weaker Canadian dollar; partly offset by a lower average interest rate.

Other components of net periodic benefit income

Other components of net periodic benefit income was \$81 million and \$244 million for the three and nine months ended September 30, 2019, respectively, compared to \$76 million and \$229 million, respectively, for the same periods in 2018. The increases were mainly due to lower amortization of net actuarial loss, partly offset by higher interest cost.

Other income

Other income was \$26 million and \$51 million for the three and nine months ended September 30, 2019, respectively, compared to \$48 million and \$283 million, respectively, for the same periods in 2018. Included in Other income for both periods of 2018 was a gain on disposal of the Doney and St-Francois Spurs of \$36 million. Also included in Other income for the nine months ended September 30, 2018 was a gain on the transfer of the Central Station Railway Lease of \$184 million and a gain on disposal of the Calgary Industrial Lead of \$39 million.

Income tax expense

Income tax expense was \$390 million and \$925 million for the three and nine months ended September 30, 2019, respectively, compared to \$361 million and \$1,001 million, respectively, for the same periods in 2018. Income tax expense for the nine months ended September 30, 2019 included a deferred income tax recovery of \$112 million recorded in the second quarter resulting from the enactment of a lower provincial corporate income tax rate.

The effective tax rates for the three and nine months ended September 30, 2019 were 24.6% and 21.7%, respectively, compared to 24.1% and 23.9%, respectively, for the same periods in 2018. Excluding the aforementioned deferred income tax recovery, the effective tax rate for the nine months ended September 30, 2019 was 24.3%. The increases in the effective tax rates were mainly attributable to lower gains on disposal of property in 2019, taxed at the lower capital gain inclusion rate.

Summary of quarterly financial data

			2019			20)18				2017
		Q	uarters			Qua	rter	s		Ç)uarter
In millions, except per share data	Third		Second	First	Fourth	Third		Second	First		Fourth
Revenues	\$ 3,830	\$	3,959	\$ 3,544	\$ 3,808	\$ 3,688	\$	3,631	\$ 3,194	\$	3,285
Operating income (1)	\$ 1,613	\$	1,682	\$ 1,080	\$ 1,452	\$ 1,492	\$	1,519	\$ 1,030	\$	1,225
Net income (1)	\$ 1,195	\$	1,362	\$ 786	\$ 1,143	\$ 1,134	\$	1,310	\$ 741	\$	2,611
Basic earnings per share	\$ 1.66	\$	1.89	\$ 1.08	\$ 1.57	\$ 1.55	\$	1.78	\$ 1.00	\$	3.50
Diluted earnings per share	\$ 1.66	\$	1.88	\$ 1.08	\$ 1.56	\$ 1.54	\$	1.77	\$ 1.00	\$	3.48
Dividends per share	\$ 0.5375	\$	0.5375	\$ 0.5375	\$ 0.4550	\$ 0.4550	\$	0.4550	\$ 0.4550	\$	0.4125

⁽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 entitled Adjusted performance measures of this MD&A as well as the Company's 2018 Annual MD&A for additional information on these items.

Revenues generated by the Company during the year are influenced by seasonal weather conditions, general economic conditions, cyclical demand for rail transportation, and competitive forces in the transportation marketplace (see the section entitled *Business risks* of the Company's 2018 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 2018 Annual MD&A. There were no significant changes during the first nine months of 2019, except as noted below.

As at September 30, 2019 and December 31, 2018, the Company had Cash and cash equivalents of \$258 million and \$266 million, respectively; Restricted cash and cash equivalents of \$524 million and \$493 million, respectively; and a working capital deficit of \$1,248 million and \$772 million, respectively. There are currently no specific requirements relating to working capital other than in the normal course of business as discussed herein.

The Company expects cash from operations and its various sources of financing to be sufficient to meet its ongoing obligations. The Company is not aware of any trends or expected fluctuations in its liquidity that would impact its ongoing operations or financial condition as at the date of this MD&A.

The Company adopted Accounting Standards Update (ASU) 2016-02: Leases and related amendments (Topic 842) in the first quarter of 2019 using a modified retrospective approach with no restatement of comparative period financial information. Comparative balances previously referred to as capital leases are now referred to as finance leases. See the section of this MD&A entitled *Recent accounting pronouncements* for additional information.

Available financing sources

Shelf prospectus and registration statement

On February 8, 2019, under its current shelf prospectus and registration statement, the Company issued \$350 million 3.00% Notes due 2029 and \$450 million 3.60% Notes due 2049 in the Canadian capital markets, which resulted in net proceeds of \$790 million. The Company's shelf prospectus and registration statement, under which CN may issue debt securities in the Canadian and U.S. capital markets until March 13, 2020, has remaining capacity of \$3.5 billion. Access to the Canadian and U.S. capital markets under the shelf prospectus and registration statement is dependent on market conditions.

Non-revolving credit facility

On July 25, 2019, the Company entered into an agreement for a non-revolving term loan credit facility in the principal amount of up to US\$300 million, secured by rolling stock, which may be drawn upon during the period from July 25, 2019 to March 31, 2020. Term loans made under the facility have a tenor of 20 years, bear interest at a variable rate, and are prepayable at any time without penalty. The credit facility is available for financing or refinancing the purchase of equipment. As at September 30, 2019, the Company had no outstanding borrowings under its non-revolving credit facility and there were no draws during the nine months ended September 30, 2019.

Revolving credit facility

On March 15, 2019, the Company's revolving credit facility agreement was amended, which extended the term of the credit facility by one year and increased the credit facility from \$1.8 billion to \$2.0 billion, effective May 5, 2019. The increase in capacity provides the Company with additional financial flexibility. The amended credit facility of \$2.0 billion consists of a \$1.0 billion tranche maturing on May 5, 2022 and a \$1.0 billion tranche maturing on May 5, 2024. The accordion feature, which provides for an additional \$500 million of credit under the facility, subject to the consent of individual lenders, remains unchanged. As at September 30, 2019 and December 31, 2018, the Company had no outstanding borrowings under its revolving credit facility and there were no draws during the nine months ended September 30, 2019.

Commercial paper

The Company's commercial paper programs are backstopped by the Company's revolving credit facility. As of May 5, 2019, the maximum aggregate principal amount of commercial paper that could be issued increased from \$1.8 billion to \$2.0 billion, or the US dollar equivalent on a combined basis. As at September 30, 2019 and December 31, 2018, the Company had total commercial paper borrowings of US\$1,119 million (\$1,482 million) and US\$862 million (\$1,175 million), respectively, presented in Current portion of long-term debt on the Consolidated Balance Sheets.

Accounts receivable securitization program

The Company has an agreement, expiring on February 1, 2021, to sell an undivided co-ownership interest in a revolving pool of accounts receivable to unrelated trusts for maximum cash proceeds of \$450 million. As at September 30, 2019, the Company had accounts receivable securitization borrowings of \$150 million, secured by and limited to \$168 million of accounts receivable, presented in Current portion of long-term debt on the Consolidated Balance Sheets. As at December 31, 2018, the Company had no proceeds received under the accounts receivable securitization program.

Bilateral letter of credit facilities

The Company has a series of committed and uncommitted bilateral letter of credit facility agreements. On March 15, 2019, the Company extended the maturity date of the committed bilateral letter of credit facility agreements to April 28, 2022. As at September 30, 2019, the Company had outstanding letters of credit of \$426 million (\$410 million as at December 31, 2018) under the committed facilities from a total available amount of \$462 million (\$447 million as at December 31, 2018) and \$148 million (\$137 million as at December 31, 2018) under the uncommitted facilities. As at September 30, 2019, included in Restricted cash and cash equivalents was \$429 million (\$408 million as at December 31, 2018) and \$90 million (\$80 million as at December 31, 2018) which were pledged as collateral under the committed and uncommitted bilateral letter of credit facilities, respectively.

Additional information relating to the Company's financing sources is provided in the section entitled Liquidity and capital resources – Available financing sources of the Company's 2018 Annual MD&A as well as Note 10 - Financing activities to the Company's unaudited Interim Consolidated Financial Statements.

Credit ratings

The Company's long-term debt and commercial paper credit ratings remain unchanged from those described in the section entitled Liquidity and capital resources - Credit ratings of the Company's 2018 Annual MD&A.

Cash flows

	Т	hree mon	ths e	nded Sep	teml	ber 30	Nine mon	ths e	nded Sept	temb	er 30
In millions		2019		2018		Variance	2019		2018	\	/ariance
Net cash provided by operating activities	\$	1,692	\$	1,564	\$	128	\$ 4,405	\$	4,001	\$	404
Net cash used in investing activities		(992)		(979)		(13)	(3,073)		(2,120)		(953)
Net cash used in financing activities		(529)		(644)		115	(1,308)		(1,625)		317
Effect of foreign exchange fluctuations on cash, cash equivalents, restricted cash, and restricted cash equivalents		(1)		(11)		10	(1)		_		(1)
Net increase (decrease) in cash, cash equivalents, restricted cash, and restricted cash equivalents		170		(70)		240	23		256		(233)
Cash, cash equivalents, restricted cash, and restricted cash equivalents, beginning of period		612		879		(267)	759		553		206
Cash, cash equivalents, restricted cash, and restricted cash equivalents, end of period	\$	782	\$	809	\$	(27)	\$ 782	\$	809	\$	(27)

Operating activities

Net cash provided by operating activities increased by \$128 million in the third quarter and \$404 million in the first nine months of 2019 when compared to the same periods in 2018. The increase in the third quarter was mainly due to higher cash earnings, partly offset by unfavorable changes in working capital. The increase in the first nine months was mainly due to higher cash earnings and advance consideration received related to a long-term rail freight contract; partly offset by unfavorable changes in working capital.

Pension contributions

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

Actuarial valuations are generally required on an annual basis for all Canadian defined benefit pension plans, or when deemed appropriate by the Office of the Superintendent of Financial Institutions (OSFI). Actuarial valuations are also required annually for the Company's U.S. qualified defined benefit pension plans. For accounting purposes, the funded status is calculated under GAAP. For funding purposes, the funded status of the Company's Canadian registered defined benefit pension plans is calculated under going concern and solvency scenarios as prescribed under federal pension legislation and is subject to guidance issued by the Canadian Institute of Actuaries and OSFI. The federal pension legislation requires funding deficits to be paid over a number of years. Alternatively, a letter of credit can be subscribed to fulfill solvency deficit payments.

The Company's most recently filed actuarial valuations for funding purposes for its Canadian registered defined benefit pension plans conducted as at December 31, 2018 indicated a funding excess on a going concern basis of approximately \$3.3 billion and a funding excess on a solvency basis of approximately \$0.5 billion calculated using the three-year average of the plans' hypothetical wind-up ratio.

Pension contributions for the nine months ended September 30, 2019 and 2018 of \$102 million and \$64 million, respectively, primarily represent contributions to the CN Pension Plan, for the current service cost as determined under the Company's applicable actuarial

valuations for funding purposes. The increase was mainly due to higher current service cost contributions remitted in advance for 2019 compared to 2018. In 2019, the Company expects to make total cash contributions of approximately \$135 million for all of its pension plans.

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

Additional information relating to the pension plans is provided in *Note 13 – Pensions and other postretirement benefits* to the Company's 2018 Annual Consolidated Financial Statements.

Income tax payments

Net income tax payments for the nine months ended September 30, 2019 and 2018 were \$644 million and \$669 million, respectively. The decrease was due to lower required instalment payments in Canada, partly offset by higher income tax payments in the U.S. For 2019, the Company's net income tax payments are expected to be approximately \$850 million.

Investing activities

Net cash used in investing activities increased by \$13 million in the third quarter and \$953 million in the first nine months of 2019 when compared to the same periods in 2018. The increase in the third quarter was mainly as a result of lower proceeds received from the disposal of property in the current year, partly offset by lower property additions. The increase in the first nine months of 2019 was mainly as a result of higher property additions, primarily locomotives, lower proceeds received from the disposal of property in the current year and the acquisition of TransX.

Property additions

	Three	months end	ded Sept	ember 30	Nine	months end	led Sept	ember 30
In millions		2019		2018		2019		2018
Track and roadway	\$	705	\$	719	\$	1,712	\$	1,652
Rolling stock		83		106		844		188
Buildings		19		16		40		37
Information technology		105		129		280		311
Other		49		32		185		79
Gross property additions		961		1,002		3,061		2,267
Less: Finance leases (1)		_		_		214		_
Property additions (2)	\$	961	\$	1,002	\$	2,847	\$	2,267

⁽¹⁾ Includes re-measurement of finance leases.

Acquisition

On March 20, 2019, the Company acquired TransX for a total purchase price of \$195 million, which included an initial cash payment of \$170 million, and contingent consideration of \$25 million payable upon achievement of certain operational or financial targets through 2019. On August 27, 2019, the additional consideration was paid.

The preliminary allocation of the purchase price to the assets acquired and liabilities assumed was performed on the basis of their respective fair values. The Company used a third party to assist in establishing the fair values of the assets acquired and liabilities assumed which resulted in the recognition of identifiable net assets of \$137 million and goodwill of \$58 million. The goodwill acquired through the business combination is mainly attributable to the premium of an established business operation. The Company's purchase price allocation is preliminary and subject to change over the measurement period, which may be up to one year from the acquisition date.

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

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

2019 Capital expenditure program

For 2019, the Company continues to expect to invest approximately \$3.9 billion in its capital program. Additional details of the Company's 2019 capital program are provided in the section entitled *Liquidity and capital resources* – *Cash flows* of the Company's 2018 Annual MD&A.

⁽²⁾ Includes \$38 million and \$151 million associated with the U.S. federal government legislative PTC implementation in the three and nine months ended September 30, 2019, respectively (\$114 million and \$346 million in the three and nine months ended September 30, 2018, respectively).

Financing activities

Net cash used in financing activities decreased by \$115 million in the third quarter and \$317 million in the first nine months of 2019 when compared to the same periods in 2018. The decrease in the third quarter was primarily driven by higher net issuance of commercial paper and lower repurchases of common shares; partly offset by lower net issuance of debt and higher dividends paid. The decrease in the first nine months was mainly due to lower net repayment of debt and lower repurchases of common shares; partly offset by higher dividends paid and lower net issuance of commercial paper.

Debt financing activities

Debt financing activities in the first nine months of 2019 included the following:

- On February 8, 2019, issuance of \$350 million 3.00% Notes due 2029 and \$450 million 3.60% Notes due 2049 in the Canadian capital markets, which resulted in total net proceeds of \$790 million;
- Net issuance of commercial paper of \$202 million in the third quarter and \$323 million in the first nine months;
- Proceeds from the accounts receivable securitization program of \$150 million in the third quarter and first nine months; and
- Repayment of finance leases of \$58 million in the third quarter and \$78 million in the first nine months.

Debt financing activities in the first nine months of 2018 included the following:

- On August 30, 2018, early redemption of US\$550 million 5.55% Notes due 2019 for US\$558 million (\$720 million), which resulted in a loss of US\$8 million (\$10 million) that was recorded in Other income;
- On July 31, 2018, issuance of \$350 million 3.20% Notes due 2028 and \$450 million 3.60% Notes due 2048 in the Canadian capital markets, which resulted in total net proceeds of \$787 million;
- On July 15, 2018, repayment of US\$200 million (\$264 million) 6.80% Notes due 2018 upon maturity;
- On May 15, 2018, repayment of US\$325 million (\$415 million) 5.55% Notes due 2018 upon maturity;
- On February 6, 2018, issuance of US\$300 million (\$374 million) 2.40% Notes due 2020 and US\$600 million (\$749 million) 3.65% Notes due 2048 in the U.S. capital markets, which resulted in total net proceeds of \$1,106 million;
- Net issuance of commercial paper of \$21 million in the third quarter and \$447 million in the first nine months;
- Proceeds from the accounts receivable securitization program of \$350 million in the third guarter and \$530 million in the first nine months;
- Repayment of accounts receivable securitization borrowings of \$600 million in the first nine months; and
- Repayment of finance leases of \$7 million in the third quarter and \$23 million in the first nine months.

Additional information relating to the Company's outstanding debt securities is provided in Note 11 – Debt to the Company's 2018 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 22.0 million common shares between February 1, 2019 and January 31, 2020. As at September 30, 2019, the Company had repurchased 9.2 million common shares for \$1,118 million under its current NCIB.

The Company repurchased 4.1 million common shares under its previous NCIB effective between October 30, 2018 and January 31, 2019, which allowed for the repurchase of up to 5.5 million common shares.

The following table provides the information related to the share repurchases for the three and nine months ended September 30, 2019 and 2018:

	Thre	e months en	ded Sep	tember 30	Nin	e months end	led Sept	tember 30
In millions, except per share data		2019		2018		2019		2018
Number of common shares repurchased		3.2		4.6		10.7		14.9
Weighted-average price per share	\$	122.29	\$	114.01	\$	118.49	\$	103.41
Amount of repurchase (1)	\$	394	\$	521	\$	1,271	\$	1,537

⁽¹⁾ Includes settlements in subsequent periods.

Share Trusts

The Company's Employee Benefit Plan Trusts ("Share Trusts") purchase CN's common shares on the open market, which are used to deliver common shares under the Share Units Plan and, beginning in 2019, the Employee Share Investment Plan (ESIP). Shares purchased by the

Share Trusts are retained until the Company instructs the trustee to transfer shares to participants of the Share Units Plan or the ESIP. Additional information relating to Share Trusts is provided in *Note 14 – Share capital* to the Company's 2018 Annual Consolidated Financial Statements.

Dividends paid

The Company paid quarterly dividends of \$0.5375 per share amounting to \$385 million and \$1,161 million in the third quarter and first nine months of 2019, respectively, compared to \$332 million and \$1,002 million, respectively, at the quarterly rate of \$0.4550 per share for the same periods in 2018.

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 September 30, 2019:

In millions	Total	2019	2020	2021	2022	2023	2024 & thereafter
Debt obligations (1)	\$ 13,550	\$ 1,616	\$ 420	\$ 771	\$ 323	\$ 191	\$ 10,229
Interest on debt obligations	9,687	80	506	497	479	464	7,661
Finance lease obligations (2)	224	85	62	73	1	_	3
Operating lease obligations (3)	597	41	136	107	72	50	191
Purchase obligations (4)	1,886	901	533	171	119	83	79
Other long-term liabilities (5)	784	29	77	54	46	41	537
Total contractual obligations	\$ 26,728	\$ 2,752	\$ 1,734	\$ 1,673	\$ 1,040	\$ 829	\$ 18,700

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

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 for the three and nine months ended September 30, 2019 and 2018, to free cash flow:

In millions	Three months ended September 30				Nine months ended September 30			
		2019		2018		2019		2018
Net cash provided by operating activities	\$	1,692	\$	1,564	\$	4,405	\$	4,001
Net cash used in investing activities		(992)		(979)		(3,073)		(2,120)
Net cash provided before financing activities		700		585		1,332		1,881
Adjustment: Acquisition, net of cash acquired (1)		_		_		167		_
Free cash flow	\$	700	\$	585	\$	1,499	\$	1,881

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

⁽²⁾ Includes \$6 million of imputed interest.

⁽³⁾ Includes \$70 million related to renewal options reasonably certain to be exercised and \$61 million of imputed interest.

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

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

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 twelve months ended September 30,	2019	2018
Debt		\$ 13,768	\$ 11,894
Adjustments:			
Operating lease liabilities, including current portion (1)		536	495
Pension plans in deficiency		476	458
Adjusted debt		\$ 14,780	\$ 12,847
Net income		\$ 4,486	\$ 5,796
Interest expense		524	484
Income tax expense (recovery)		1,278	(422)
Depreciation and amortization		1,521	1,299
EBITDA		7,809	7,157
Adjustments:			
Other income		(144)	(287)
Other components of net periodic benefit income		(317)	(305)
Operating lease cost (1)		190	200
Adjusted EBITDA		\$ 7,538	\$ 6,765
Adjusted debt-to-adjusted EBITDA multiple (times)		1.96	1.90

⁽¹⁾ The Company adopted Accounting Standards Update (ASU) 2016-02: Leases and related amendments (Topic 842) in the first quarter of 2019. The Company now includes operating lease liabilities, as defined by Topic 842, in adjusted debt and excludes operating lease cost, as defined by Topic 842, in adjusted EBITDA. Comparative balances previously referred to as present value of operating lease commitments and operating lease expense have not been adjusted and are now referred to as operating lease liabilities and operating lease cost, respectively. See the section of this MD&A entitled Recent accounting pronouncements 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 September 30, 2019, the Company has not recorded a liability with respect to guarantees and indemnifications. Additional information relating to guarantees and indemnifications is provided in *Note 14 – Major commitments and contingencies* to the Company's unaudited Interim Consolidated Financial Statements.

Outstanding share data

As at October 22, 2019, the Company had 715.3 million common shares and 4.0 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 2018 Annual MD&A.

Foreign currency risk

The estimated annual impact on Net income of a one-cent change in the Canadian dollar relative to the US dollar is approximately \$30 million.

Derivative financial instruments

As at September 30, 2019, the Company had outstanding foreign exchange forward contracts with a notional value of US\$1,310 million (US\$1,465 million as at December 31, 2018). For the three and nine months ended September 30, 2019, the Company recorded gain of \$23 million and a loss of \$46 million, respectively, related to foreign exchange forward contracts compared to a loss of \$25 million and a gain of \$60 million, respectively, for the same periods in 2018. These gains and losses were largely offset by the re-measurement of US dollar-denominated monetary assets and liabilities recorded in Other income.

As at September 30, 2019, the fair value of outstanding foreign exchange forward contracts included in Other current assets and Accounts payable and other was \$6 million and \$3 million, respectively (\$67 million and \$nil, respectively, as at December 31, 2018).

Fair value of financial instruments

As at September 30, 2019, the Company's debt, excluding finance leases, had a carrying amount of \$13,550 million (\$12,540 million as at December 31, 2018) and a fair value of \$15,781 million (\$13,287 million as at December 31, 2018).

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

Recent accounting pronouncements

The following recent ASUs issued by the Financial Accounting Standards Board (FASB) were adopted by the Company during the first nine months of 2019:

ASU 2016-02 Leases and related amendments (Topic 842)

The ASU requires a lessee to recognize a right-of-use asset and a lease liability on the balance sheet for all leases greater than twelve months and requires additional qualitative and quantitative disclosures. The lessor accounting model under the new standard is substantially unchanged. The guidance must be applied using a modified retrospective approach. Entities may elect to apply the guidance to each prior period presented with a cumulative-effect adjustment to retained earnings recognized at the beginning of the earliest period presented or to apply the guidance with a cumulative-effect adjustment to retained earnings recognized at the beginning of the period of adoption.

The new standard provides a number of practical expedients and accounting policy elections upon transition. On January 1, 2019, the Company did not elect the package of three practical expedients that permits the Company not to reassess prior conclusions about lease qualification, classification and initial direct costs. Upon adoption, the Company elected the following practical expedients:

- the use-of-hindsight practical expedient to reassess the lease term and the likelihood that a purchase option will be exercised;
- the land easement practical expedient to not evaluate land easements that were not previously accounted for as leases under Topic 840;
- the short-term lease exemption for all asset classes that permits entities not to recognize right-of-use assets and lease liabilities onto the balance sheet for leases with terms of twelve months or less; and
- the practical expedient to not separate lease and non-lease components for the freight car asset category.

The Company adopted this standard in the first quarter of 2019 with an effective date of January 1, 2019 using a modified retrospective approach with a cumulative-effect adjustment to Retained earnings recognized on January 1, 2019, with no restatement of comparative period financial information. As at January 1, 2019, the cumulative-effect adjustment to adopt the new standard increased the balance of Retained earnings by \$29 million, relating to a deferred gain on a sale-leaseback transaction of a real estate property. The initial adoption transition adjustment to record right-of-use assets and lease liabilities for leases over twelve months on the Company's Consolidated Balance Sheet was \$756 million to each balance. The initial adoption transition adjustment is comprised of finance and

operating leases of \$215 million and \$541 million, respectively. New finance lease right-of-use assets and finance lease liabilities are a result of the reassessment of leases with purchase options that are reasonably certain to be exercised by the Company under the transition to Topic 842, previously accounted for as operating leases.

ASU 2017-04 Intangibles - Goodwill and other (Topic 350): Simplifying the test for goodwill impairment

The ASU simplifies the goodwill impairment test by removing the requirement to compare the implied fair value of goodwill with its carrying amount. Under the new standard, goodwill impairment tests are performed by comparing the fair value of a reporting unit with its carrying amount, recognizing an impairment charge for the amount by which the carrying amount exceeds the reporting unit's fair value, up to the value of goodwill. In addition, the standard simplifies the goodwill impairment test for reporting units with a zero or negative carrying amount, such that all reporting units apply the same impairment test. An entity is required to disclose the amount of goodwill allocated to each reporting unit with a zero or negative carrying amount of net assets.

The guidance must be applied prospectively. The ASU is effective for annual and any interim impairment tests for periods beginning after December 15, 2019. Early adoption is permitted for interim or annual goodwill impairment tests performed on testing dates after January 1, 2017.

The Company adopted this standard in the first quarter of 2019 with an effective date of January 1, 2019. The adoption of this standard did not have an impact on the Company's Consolidated Financial Statements.

The following recent ASU issued by FASB has an effective date after September 30, 2019 and has not been adopted by the Company:

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

The ASU requires financial assets measured at amortized cost to be presented at the net amount expected to be collected. The new standard replaces the current incurred loss impairment methodology with one that reflects expected credit losses. The adoption of the ASU is not expected to have a significant impact on the Company's Consolidated Financial Statements. CN will adopt the requirements of the ASU effective January 1, 2020.

Other recently issued ASUs required to be applied for periods beginning on or after September 30, 2019 have been evaluated by the Company and will not 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 2018 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 nine months of 2019.

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

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 2018 Annual MD&A for a detailed description of such key areas of business risks and uncertainties with respect to: Competition, Environmental matters, Personal injury and other legal claims, Labor negotiations, Regulation, Economic conditions, Pension funding volatility, Reliance on technology and related cybersecurity risk, Trade restrictions, Terrorism and international conflicts, Customer credit risk, Liquidity, Supplier concentration, Availability of qualified personnel, Fuel costs, Foreign exchange, Interest rates, Transportation network disruptions, Severe weather and Climate change, which is incorporated herein by reference. Additional risks and uncertainties not currently known to management or that may currently not be considered material by management, could nevertheless also have an adverse effect on the Company's business.

There have been no material changes to the risks described in the Company's 2018 Annual MD&A. The following is an update on environmental matters, labor negotiations, regulatory matters and trade restrictions.

Environmental matters

On June 21, 2019, Parliament adopted Bill C-69 which, amongst other legislative updates, enacts the new *Impact Assessment Act* that will replace, as of a date to be determined by the Governor in Council, the current *Canadian Environmental Assessment Act*, 2012. The list of projects, including railway projects, subject to the new *Impact Assessment Act* will be adopted by regulations currently being developed through consultations, to which CN participated.

Labor negotiations

As at September 30, 2019, CN employed a total of 19,501 employees in Canada, of which 14,003, or 72%, were unionized employees, and 7,789 employees in the U.S., of which 6,506, or 84%, were unionized employees.

Canadian workforce

On February 5, 2019, the collective agreement with the United Steelworkers governing track and bridge workers was ratified by its members, renewing the collective agreement for a five-year term expiring on December 31, 2023.

On March 22, 2019, CN received notice to commence collective bargaining with the Teamsters Canada Rail Conference (TCRC) to renew the collective agreements covering conductors and yard service employees. On June 26, 2019, the Minister of Labour appointed conciliators to assist the parties in their negotiations. On August 23, 2019, the parties agreed to extend the conciliation period. Negotiations are ongoing.

On May 10, 2019, the collective agreements with Unifor for three bargaining units covering clerical and intermodal employees, and other classifications, were ratified by its members, renewing the collective agreements for a 45-month term expiring on December 31, 2022.

On October 2, 2019, subsequent to the tentative agreement reached with Unifor to renew the collective agreement governing owner-operator truck drivers which was rejected by the membership on May 10, 2019, a revised agreement was ratified by its members, renewing that collective agreement through December 31, 2023.

On June 14, 2019, the collective agreement with the TCRC governing rail traffic controllers was ratified by its members, renewing the collective agreement for a four-year term expiring on December 31, 2022.

U.S. workforce

Collective agreements covering all non-operating and operating craft employees at Grand Trunk Western Railroad Company (GTW), companies owned by Illinois Central Corporation (ICC), companies owned by Wisconsin Central Ltd. (WC) and Bessemer & Lake Erie Railroad Company (BLE), and all employees at Pittsburgh and Conneaut Dock Company (PCD) have been ratified with the exception of one union group. The collective bargaining agreement covering laborers represented by the United Steelworkers at PCD continues to be bargained on a local basis. The terms and conditions of existing agreements generally continue to apply until new agreements are reached or the processes of the *Railway Labor Act* have been exhausted.

There can be no assurance that the Company will be able to renew and have its collective agreements ratified without any strikes or lockouts or that the resolution of these collective bargaining negotiations will not have a material adverse effect on the Company's results of operations or financial position.

Regulation

Economic regulation - U.S.

Pursuant to the Passenger Rail Investment and Improvement Act of 2008 (PRIIA), the U.S. Congress authorized the Surface Transportation Board (STB) to investigate any railroad over whose track Amtrak operates that fails to meet heightened performance standards jointly promulgated by the Federal Railroad Administration (FRA) and Amtrak for Amtrak operations extending over two calendar quarters and to determine the cause of such failures. Should the STB commence an investigation and determine that a failure to meet these standards is due to the host railroad's failure to provide preference to Amtrak, the STB is authorized to assess damages against the host railroad.

The rail industry had previously challenged as unconstitutional Congress' delegation to Amtrak and the FRA of joint authority to promulgate the PRIIA performance standards. On March 23, 2017, the U.S. District Court for the District of Columbia concluded that Section 207 of PRIIA was void and unconstitutional and vacated the performance standards. The Government defendants challenged this decision in the U.S. Court of Appeals for the District of Columbia. On July 20, 2018, the U.S. Court of Appeals for the District of Columbia Circuit reversed the judgment of the District Court and held that the constitutional defect could be appropriately remedied by severing the arbitration provision in Section 207(d). The U.S. Court of Appeals noted that the aspect of the District Court's decision that vacated the performance standards is final because the Government defendants did not challenge it on appeal. On October 24, 2018, the U.S. Court of Appeals denied the rail industry's petition for rehearing. On June 3, 2019, the U.S. Supreme Court denied the rail industry's petition for review. On August 8, 2019, the STB issued interim findings and guidance to National Railroad Passenger Corporation (Amtrak) and the Company regarding the terms and conditions for Amtrak's use of the Company's lines. The STB ordered Board-sponsored mediation.

Safety regulation - Canada

On May 24, 2019, Transport Canada published the proposed *Locomotive Voice and Video Recorder Regulations* ("LVVR") and invited interested parties to comment by July 24, 2019. The LVVR draft regulations, to be adopted pursuant to the *Transportation Modernization Act* (Bill C-49), will require railway companies to procure and install LVVR equipment within two years after their coming into force. The LVVR regulations set out the technical specifications of the equipment, deal with record keeping, provide for privacy protection and detail how railway companies can access the information on a random basis. LVVR technology will assist in preventing accidents and facilitate investigations to better understand the circumstances of accidents. On July 24, 2019, CN provided its submission. Transport Canada is expected to issue a revised version of the proposed regulations when all comments have been reviewed.

Safety regulation - U.S.

On February 28, 2019, in coordination with the FRA, the Pipeline and Hazardous Materials Safety Administration (PHMSA) issued a final rule for oil spill response plans and information sharing for high-hazard flammable trains for the purpose of improving oil spill response readiness and mitigating the effects of oil-related rail incidents. On March 29, 2019, the Association of American Railroads sought reconsideration from PHMSA of certain aspects of the final rule.

During the third quarter of 2019, the STB announced various proposed rules and policy statements related to the reporting of rail service data, the agency's methodology for determining the rail industry's cost of capital, and rate reasonableness standards, in addition to issuing proposals concerning demurrage and accessorial charges. The STB also announced a hearing to explore policy changes concerning revenue adequacy.

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

Trade restrictions

Global as well as North American trade conditions, including trade barriers on certain commodities, may interfere with the free circulation of goods across Canada and the U.S. or the cost associated therewith. Following the expiration of the Softwood Lumber Agreement (SLA) between Canada and the U.S., including the expiration of the one-year moratorium period preventing the U.S. from launching any trade action against Canadian producers, on January 3, 2018, based on affirmative final determinations by both the U.S. Department of Commerce and the U.S. International Trade Commission, antidumping and countervailing duty orders were imposed on imports of Canadian softwood lumber to the U.S. Canada responded to the imposition by the U.S. of antidumping and countervailing duties, in connection with lumber and other commodities, by filing a complaint with the World Trade Organization (WTO). In June 2019, Canada appealed the WTO panel ruling of April 2019 that allowed the U.S. to continue to use their current methodology to calculate anti-dumping tariffs on lumber.

On November 30, 2018, the U.S., Canada and Mexico signed the United States-Mexico-Canada Agreement (USMCA), a new trade agreement to replace the North American Free Trade Agreement, which is subject to ratification by the legislature of Canada and the U.S., with Mexico having ratified it on June 19, 2019. On May 17, 2019, Canada and the U.S. reached an understanding on tariffs of steel and

aluminum to eliminate all tariffs the U.S. imposed on Canadian imports of steel and aluminum, and all tariffs Canada imposed in retaliation for the action taken by the U.S.

It remains too early to assess the potential outcome of the legislative path toward ratification of the USMCA by Canada and the U.S., and other ongoing various trade actions taken by governments and agencies. As such, there can be no assurance that the USMCA and other trade actions will not materially adversely affect the volume of rail shipments and/or revenues from commodities carried by the Company, and thus materially and negatively impact earnings and/or cash flow.

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 September 30, 2019, have concluded that the Company's disclosure controls and procedures were effective.

During the third quarter ended September 30, 2019, there was no change in the Company's internal control over financial reporting that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting.