CANADIAN NATIONAL RAILWAY CO
Form 6-K
March 22, 2017

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Form 6-K

REPORT OF FOREIGN ISSUER PURSUANT TO RULE 13a-16 OR 15d-16

OF THE SECURITIES EXCHANGE ACT OF 1934

For the month of March 2017

Commission File Number: 001-02413

Canadian National Railway Company

(Translation of registrant s name into English)

935 de la Gauchetiere Street West

Montreal, Quebec

Canada H3B 2M9

(Address of principal executive offices)

Indicate by check mark whether the registrant files or will file annual reports under cover of Form 20-F or Form 40-F:

Form 20-F	o	Form 40-F	x

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(1):

Yes	o	No	x

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(7):

Yes	o	No	x

Indicate by check mark whether by furnishing the information contained in this Form, the Registrant is also thereby furnishing the information to the Commission pursuant to Rule 12g3-2(b) under the Securities Exchange Act of 1934:

Yes	o	No	x

If Yes is marked, indicate below the file number assigned to the registrant in connection with Rule 12g3-2(b): N/A

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

		Canadian National Railway Company		
Date:	March 22, 2017	By:	/s/ Sean Finn	
			Name:	Sean Finn
			Title:	Executive Vice-President Corporate Services and Chief Legal Officer

CANADIAN NATIONAL RAILWAY COMPANY

Table of Contents

Item 1

Item 2

Item 3.

Item 4

Selected Railroad Statistics – unaudited

	2016	2015	2014
Financial			
Key financial performance indicators			
Total revenues ($ millions)	12,037	12,611	12,134
Rail freight revenues ($ millions)	11,326	11,905	11,455
Operating income ($ millions)	5,312	5,266	4,624
Net income ($ millions)	3,640	3,538	3,167
Diluted earnings per share ($)	4.67	4.39	3.85
Adjusted diluted earnings per share ($) (1)	4.59	4.44	3.76
Free cash flow ($ millions) (2)	2,520	2,373	2,220
Gross property additions ($ millions)	2,752	2,706	2,297
Share repurchases ($ millions)	2,000	1,750	1,505
Dividends per share ($)	1.50	1.25	1.00
Financial position			
Total assets ($ millions)	37,057	36,402	31,687
Total liabilities ($ millions)	22,216	21,452	18,217
Shareholders' equity ($ millions)	14,841	14,950	13,470
Financial ratios			
Operating ratio (%)	55.9	58.2	61.9
Adjusted debt-to-adjusted	1.75	1.71	1.57

EBITDA (times) (3)			
Operations (4)			
Statistical operating data			
Gross ton miles (GTMs) (millions)	423,426	442,084	448,765
Revenue ton miles (RTMs) (millions)	214,327	224,710	232,138
Carloads (thousands)	5,205	5,485	5,625
Route miles (includes Canada and the U.S.)	19,600	19,600	19,600
Employees (end of year)	22,249	23,066	25,288
Employees (average for the year)	22,322	24,406	24,525
Key operating measures			
Rail freight revenue per RTM (cents)	5.28	5.30	4.93
Rail freight revenue per carload ($)	2,176	2,170	2,036
GTMs per average number of employees (thousands)	18,969	18,114	18,298
Operating expenses per GTM (cents)	1.59	1.66	1.67
Labor and fringe benefits expense per GTM (cents)	0.50	0.54	0.52
Diesel fuel consumed (US gallons in millions)	398.9	425.0	440.5
Average fuel price ($/US gallon)	2.34	2.68	3.72
	1,061	1,040	1,019

GTMs per US gallon of fuel consumed			
Terminal dwell (hours)	14.0	15.0	16.9
Train velocity (miles per hour)	27.3	26.3	25.7
Safety indicators (5)			
Injury frequency rate (per 200,000 person hours)	1.70	1.63	1.81
Accident rate (per million train miles)	1.42	2.06	2.73

(1) See the section entitled Adjusted performance measures in the MD&A for an explanation of this non-GAAP measure.

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

(3) See the section entitled Liquidity and capital resources - Adjusted debt-to-adjusted EBITDA multiple in the MD&A for an explanation of this non-GAAP measure.

(4) 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, as such, certain of the comparative data have been restated. Definitions of these indicators are provided on our website, www.cn.ca/glossary.

(5)

Based on Federal Railroad Administration (FRA) reporting criteria.

1 CN | 2016 Annual Report

Management's Discussion and Analysis

Contents

Management's Discussion and Analysis

This Management's Discussion and Analysis (MD&A) dated February 1, 2017, 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 2016 Annual Consolidated Financial Statements and Notes thereto. 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 2016 Annual Information Form and Form 40-F, may be found online on SEDAR at www.sedar.com, on EDGAR at www.sec.gov, 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 all three North American Free Trade Agreement (NAFTA) nations. A true backbone of the economy, CN handles over $250 billion worth of goods annually and carries almost 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. In 2016, no individual commodity group accounted for more than 24% of total revenues. From a geographic standpoint, 17% of revenues relate to United States (U.S.) domestic traffic, 34% transborder traffic, 18% Canadian domestic traffic and 31% overseas traffic. The Company is the originating carrier for approximately 85% of traffic moving along its network, which allows it both to capitalize on service advantages and build on opportunities to efficiently use assets.

Corporate organization

The Company manages its rail operations in Canada and the U.S. as one business segment. Financial information reported at this level, such as revenues, operating income and cash flow from operations, is used by the Company's corporate management in evaluating financial and operational performance and allocating resources across CN's network. The Company's strategic initiatives are developed and managed centrally by corporate management and are communicated to its regional activity centers (the Western Region, Eastern Region and Southern Region), whose role is to manage the day-to-day service requirements of their respective territories, control direct costs incurred locally, and execute the strategy and operating plan established by corporate management.
See Note 18 – Segmented information to the Company's 2016 Annual Consolidated Financial Statements for additional information on the Company's corporate organization, as well as selected financial information by geographic area.

Strategy overview

CN's business strategy is anchored on the continuous pursuit of Operational and Service Excellence, an unwavering commitment to safety and sustainability, and the development of a solid team of motivated and competent railroaders. CN's goal is to deliver valuable transportation services for its customers and to grow the business at low incremental cost. A clear strategic agenda, driven by a commitment to innovation, productivity, supply chain collaboration, running trains safely, and minimizing environmental impact, drives the Company's efforts to create value for customers. CN thereby creates value for its shareholders by striving for sustainable financial performance through profitable top-line growth, adequate free cash flow and return on invested capital. CN is also focused on returning value to shareholders through dividend payments and share repurchase programs.

CN's success and long-term economic viability depend on the presence of a supportive regulatory and policy environment that drives investment and innovation. CN's success also depends on a stream of capital investments that supports its business strategy. These investments cover a wide range of areas, from track infrastructure and rolling stock, to information and operating technologies, and other equipment and assets that improve the safety, efficiency and reliability of CN's service offering. Investments in track infrastructure enhance the productivity and integrity of the plant, and increase the capacity and the fluidity of the network. The acquisition of new locomotives and railcars generates several key benefits. New locomotives increase fuel productivity and efficiency, and improve the reliability of service.

Management's Discussion and Analysis

Locomotives equipped with distributed power allow for greater productivity of trains, particularly in cold weather, while improving train handling and safety. Targeted railcar acquisitions aim to tap growth opportunities, complementing the fleet of privately owned railcars that traverse CN's network. CN's strategic investments in information technology provide access to timely and accurate information which supports CN's ongoing efforts to drive innovation and efficiency in service, cost control, asset utilization, and safety and employee engagement.

Balancing "Operational and Service Excellence"

The basic driver of the Company's business is demand for reliable, efficient, and cost effective transportation for customers. As such, the Company's focus is the pursuit of Operational and Service Excellence: striving to operate safely and efficiently while providing a high level of service to customers.

For many years, CN has operated with a mindset that drives cost efficiency and asset utilization. That mindset flows naturally from CN's Precision Railroading model, which focuses on improving every process that affects delivery of customers' goods. It is a highly disciplined process whereby CN handles individual rail shipments according to a specific trip plan and manages all aspects of railroad operations to meet customer commitments efficiently and profitably. This calls for the relentless measurement of results and the use of such results to generate further execution improvements in the service provided to customers. The Company's continuous search for efficiency is best captured in its performance according to key operating metrics such as car velocity, train speed, and yard and locomotive productivity. All are at the center of a highly productive and fluid railroad operation, requiring daily engagement in the field. The Company works hard to run more efficient trains, reduce dwell times at terminals and improve overall network velocity. With CN's business model, fewer railcars and locomotives are needed to ship the same amount of freight in a tight, reliable and efficient operation. The railroad is run based on a disciplined operating methodology, executing with a sense of urgency and accountability. This philosophy is a key contributor to CN's earnings growth and return on invested capital.

CN understands the importance of balancing its drive for productivity with efforts to enhance customer service. The Company's efforts to deliver Operational and Service Excellence are anchored on an end-to-end supply chain mindset, working closely with customers and supply chain partners, as well as involving all relevant areas of the Company in the process. By fostering better end-to-end service performance and encouraging all supply chain players to continuously improve daily engagement, information sharing, problem solving, and execution, CN aims to help customers achieve greater competitiveness in their own markets. Supply chain collaboration agreements with ports, terminal operators and customers leverage key performance metrics that drive efficiencies across the entire supply chain.

The Company is strengthening its commitment to Operational and Service Excellence through a wide range of innovations anchored on its continuous improvement philosophy. CN is building on its industry leadership in terms of fast and reliable hub-to-hub service by continuing to improve across the range of customer touch points. The Company's major push in first-mile/last-mile service is all about improving the quality of customer interactions – developing a sharper outside-in perspective; better monitoring of traffic forecasts; higher and more responsive car order fulfillment; and proactive customer communication at the local level.

CN's broad-based service innovations benefit customers and support the Company's goal to drive top-line growth. CN understands the importance of being the best operator in the business, and being the best service innovator as well.

Delivering safely and responsibly

CN is committed to the safety of its employees, the communities in which it operates and the environment. Safety consciousness permeates every aspect of CN's operations. The Company's long-term safety improvement is driven by continued significant investments in infrastructure, rigorous safety processes and a focus on employee training and safety awareness. CN continues to strengthen its safety culture by investing significantly in training, coaching, recognition and employee involvement initiatives.

CN's Safety Management Plan is the framework for putting safety at the center of its day-to-day operations. This proactive plan is designed to minimize risk, drive continuous improvement in the reduction of injuries and accidents, and engage employees at all levels of the organization. CN believes that the rail industry can enhance safety by working more closely with communities. Under CN's structured Community Engagement program, the Company engages with municipal officers and their emergency responders in an effort to assist them in their emergency response planning. In many cases, this outreach includes face-to-face meetings, during which CN discusses its comprehensive safety programs; its safety performance; the nature, volume and economic importance of dangerous commodities it transports through their communities; a review of emergency response planning; and arranging for training sessions for emergency responders. The outreach builds on CN's involvement in the Transportation Community Awareness and Emergency Response (TRANSCAER®), through which the Company has been working for many years to help communities in Canada and the U.S. understand the movement of hazardous materials and what is required in the event of transportation incidents.

CN has been deepening its commitment to a sustainable operation for many years, and has made sustainability an integral part of its business strategy. The best way in which CN can positively impact the environment is by continuously improving the efficiency of its operations, and reducing its carbon footprint. As part of the Company's comprehensive sustainability action plan and to comply with CN's environmental policy, the Company engages in a number of initiatives, including the use of fuel-efficient locomotives and trucks that reduce

4 CN | 2016 Annual Report

greenhouse gas emissions; increasing operational and building efficiencies; investing in energy-efficient data centers and recycling programs for information technology systems; reducing, recycling and reusing waste and scrap at its facilities and on its network; engaging in modal shift agreements that favor low emission transport services; and participating in the Carbon Disclosure Project (CDP) to gain a more comprehensive view of its carbon footprint. The Company combines its expert resources, environmental management procedures, training and audits for employees and contractors, and emergency preparedness response activities to help ensure that it conducts its operations and activities while protecting the natural environment. The Company's environmental activities include monitoring CN's environmental performance in Canada and the U.S. (ensuring compliance), identifying environmental issues inside the Company, and managing them in accordance with CN's environmental policy, which is overseen by the Environment, Safety and Security Committee of the Board of Directors. Certain risk mitigation strategies, such as periodic audits, employee training programs and emergency plans and procedures, are in place to minimize the environmental risks to the Company.
The Company's CDP Report, CN's Sustainability Report entitled "Delivering Responsibly" and the Company's Corporate Governance Manual, which outlines the role and responsibilities of the Environment, Safety and Security Committee of the Board of Directors, are available on CN's website in the Delivering Responsibly section.

Building a solid team of railroaders
CN's ability to develop the best railroaders in the industry has been a key contributor to the Company's success. CN recognizes that without the right people – no matter how good a service plan or business model a company may have – it will not be able to fully execute. The Company is addressing changes in employee demographics that will span multiple years, with the workforce undergoing a major renewal. This is why the Company is focused on hiring the right people, onboarding them successfully, helping them build positive relationships with their colleagues, and helping all employees to grow and develop. As part of its strategy to build a solid team of railroaders, the Company leverages its state-of-the-art training facilities in preparing employees to be highly skilled, safety conscious and confident in their work environment. Curricula for technical training and leadership development has been designed to meet the learning needs of CN's railroaders – both current and future. These programs and initiatives provide a solid platform for the assessment and development of the Company's talent pool, and are tightly integrated with the Company's business strategy. Progress made in developing current and future leaders through the Company's leadership development programs is reviewed by the Human Resources and Compensation Committee of the Board of Directors.

2016 Highlights
Leadership changes
On June 7, 2016, CN announced a number of leadership changes including Claude Mongeau's decision, due to a health condition, to step down from his role as President and Chief Executive Officer (CEO) and member of the Board of Directors at the end of June 2016, as well as the appointment of Executive Vice-President and Chief Financial Officer (CFO) Luc Jobin to President and CEO on July 1, 2016, and member of the Board of Directors on June 30, 2016. Additionally, on June 27, 2016, the Company announced that Ghislain Houle would become Executive Vice-President and CFO, and that Mike Cory would assume the role of Executive Vice-President and Chief Operating Officer following the retirement of Jim Vena, also effective as of July 1, 2016.

Reinvestment in the business
CN spent $2.75 billion in its capital program, with $1.6 billion invested to maintain the safety and integrity of the network, particularly track infrastructure; $0.55 billion for equipment capital expenditures, including 90 new high-horsepower locomotives, $0.3 billion on initiatives to support growth and drive productivity, and $0.3 billion for the U.S. federal government legislative Positive Train Control (PTC) implementation.

Shareholder returns
The Company repurchased 26.4 million of its common shares under its share repurchase program during the year, returning $2 billion to its shareholders. CN also increased its quarterly dividend per share by 20% to $0.3750 from $0.3125 in 2015, effective for the first quarter of 2016, and paid $1,159 million in dividends in 2016.

Sustainability
The Company's sustainability practices once again earned it a place on the Dow Jones Sustainability World and North American Indices as well as a position on the Climate A List by CDP in 2016.

Financial highlights

- CN attained record operating income, net income, and earnings per share in 2016, as well as a record operating ratio.
- Net income increased by $102 million, or 3%, to $3,640 million in 2016, with diluted earnings per share rising 6% to $4.67.
- Adjusted net income remained flat at $3,581 million in 2016, with adjusted diluted earnings per share increasing 3% to $4.59. See the section of this MD&A entitled Adjusted performance measures for an explanation of these non-GAAP measures.
- Operating income increased by $46 million, or 1%, to $5,312 million in 2016. The increase in operating income reflects the Company's efforts to manage costs in a lower volume environment, while continuing to drive the Company's agenda of Operational and Service Excellence.
- CN's operating ratio improved by 2.3 points to 55.9% in 2016, the lowest annual operating ratio in its history.
- Revenues decreased by $574 million, or 5%, to $12,037 million in 2016, compared to the prior year.
- Operating expenses decreased by $620 million, or 8%, to $6,725 million in 2016.
- The Company generated record free cash flow of $2,520 million, a 6% increase over 2015. See the section of this MD&A entitled Liquidity and capital resources - Free cash flow for an explanation of this non-GAAP measure.

2017 Business outlook and assumptions

The Company expects to see growth across a range of commodities, particularly in intermodal traffic, grain, finished vehicles, and lumber and panels. The Company continues to see volume weakness in thermal coal shipments to domestic markets.

Underpinning the 2017 business outlook, the Company assumes that North American industrial production will increase in the range of one to two percent. For the 2016/2017 crop year, the grain crops in both Canada and the U.S. were above their respective five-year averages. The Company assumes that the 2017/2018 grain crops in both Canada and the U.S. will be in line with their respective five-year averages.

Value creation in 2017

- CN plans to invest approximately $2.5 billion in its 2017 capital program, of which $1.6 billion is targeted toward track infrastructure, $0.4 billion on the U.S. federal government legislative Positive Train Control (PTC) implementation, $0.3 billion on initiatives to drive productivity, and $0.2 billion on equipment capital expenditures.
- The Company's Board of Directors approved an increase of 10% to the quarterly dividend to common shareholders, from $0.3750 per share in 2016 to $0.4125 per share in 2017.
- The Company's new share repurchase program allows for the repurchase of up to 33.0 million common shares between October 30, 2016 and October 29, 2017. As at December 31, 2016, the Company had repurchased 3.5 million common shares under this program.

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.

Management's Discussion and Analysis

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 these forward-looking statements. See also the section of this MD&A entitled Strategy overview – 2017 Business outlook and assumptions.

Forward-looking statements	Key assumptions
Statements relating to revenue growth opportunities, including	· North American and global economic growth
those referring to general economic and business conditions	· Long-term growth opportunities being less affected by current economic conditions
Statements relating to the Company's ability to meet debt	· North American and global economic growth
repayments and future obligations in the foreseeable future,	· Adequate credit ratios
including income tax payments, and capital spending	· 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 known and unknown 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; security threats; reliance on technology; trade restrictions; transportation of hazardous materials; various events which could disrupt operations, including natural events such as severe weather, droughts, 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; 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 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 outlook

During the year, the Company issued and updated its 2016 financial outlook. The 2016 actual results were higher than the Company's last 2016 financial outlook that was issued on October 25, 2016, as a result of higher than expected volumes in the fourth quarter of 2016 and operating productivity gains, including cost-management initiatives.

Management's Discussion and Analysis

Financial highlights

In millions, except percentage and per share data	2016	2015	2014	Change Favorable/(Unfavorable) 2016 vs 2015	2015 vs 2014
Revenues	$12,037	$12,611	$12,134	(5%)	4%
Operating income	$5,312	$5,266	$4,624	1%	14%
Net income	$3,640	$3,538	$3,167	3%	12%
Adjusted net income (1)	$3,581	$3,580	$3,095	-	16%
Basic earnings per share	$4.69	$4.42	$3.86	6%	15%
Adjusted basic earnings per share (1)	$4.61	$4.47	$3.77	3%	19%
Diluted earnings per share	$4.67	$4.39	$3.85	6%	14%
Adjusted diluted earnings per share (1)	$4.59	$4.44	$3.76	3%	18%
Dividends declared per share	$1.50	$1.25	$1.00	20%	25%
Total assets	$37,057	$36,402	$31,687	2%	15%
Total long-term liabilities	$19,208	$18,454	$16,016	(4%)	(15%)
Operating ratio	55.9%	58.2%	61.9%	2.3-pts	3.7-pts
Free cash flow (2)	$2,520	$2,373	$2,220	6%	7%

(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.

2016 compared to 2015

Net income for the year ended December 31, 2016 was $3,640 million, an increase of $102 million, or 3%, when compared to 2015, with diluted earnings per share rising 6% to $4.67.
Operating income for the year ended December 31, 2016 increased by $46 million, to $5,312 million. The operating ratio, defined as operating expenses as a percentage of revenues, was 55.9% in 2016, compared to 58.2% in 2015, a 2.3-point improvement.
Revenues for the year ended December 31, 2016, totaled $12,037 million compared to $12,611 million in 2015. The decrease of $574 million, or 5%, was mainly attributable to lower volumes of crude oil, coal, and frac sand; as well as lower applicable fuel surcharge rates. These factors were partly offset by the positive translation impact of the weaker Canadian dollar and freight rate increases.
Operating expenses for the year ended December 31, 2016 amounted to $6,725 million compared to $7,345 million in 2015. The decrease of $620 million, or 8%, was mainly due to lower costs resulting from operating productivity gains, including cost-management initiatives and decreased volumes of traffic, lower pension expense, and lower fuel prices, partly offset by the negative translation impact of a weaker Canadian dollar on US dollar-denominated expenses.

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.

Management's Discussion and Analysis

Adjusted performance measures

Management believes that adjusted net income and adjusted earnings per share 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 these 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 items in adjusted net income and adjusted earnings per share 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 year ended December 31, 2016, the Company reported adjusted net income of $3,581 million, or $4.59 per diluted share, which excludes a gain on disposal of approximately one mile of elevated track leading into Montreal's Central Station, together with the rail fixtures (collectively the "Viaduc du Sud"), of $76 million, or $66 million after-tax ($0.09 per diluted share) that was recorded in the fourth quarter, and a deferred income tax expense of $7 million ($0.01 per diluted share) resulting from the enactment of a higher provincial corporate income tax rate that was recorded in the second quarter.

For the year ended December 31, 2015, the Company reported adjusted net income of $3,580 million, or $4.44 per diluted share, which excludes a deferred income tax expense of $42 million ($0.05 per diluted share) resulting from the enactment of a higher provincial corporate income tax rate that was recorded in the second quarter.

For the year ended December 31, 2014, the Company reported adjusted net income of $3,095 million, or $3.76 per diluted share, which excludes a gain on disposal of the Deux-Montagnes subdivision, including the Mont-Royal tunnel, together with the rail fixtures (collectively the "Deux-Montagnes"), of $80 million, or $72 million after-tax ($0.09 per diluted share) that was recorded in the first quarter.

The following table provides a reconciliation of net income and earnings per share, as reported for the years ended December 31, 2016, 2015 and 2014 to the adjusted performance measures presented herein:

In millions, except per share data Year ended December 31,	2016	2015	2014
Net income as reported	$3,640	$3,538	$3,167
Adjustments:			
Other income	(76)	-	(80)
Income tax expense	17	42	8
Adjusted net income	$3,581	$3,580	$3,095
Basic earnings per share as reported	$4.69	$4.42	$3.86
Impact of adjustments, per share	(0.08)	0.05	(0.09)
Adjusted basic earnings per share	$4.61	$4.47	$3.77
Diluted earnings per share as reported	$4.67	$4.39	$3.85
Impact of adjustments, per share	(0.08)	0.05	(0.09)
Adjusted diluted earnings per share	$4.59	$4.44	$3.76

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 of the prior year. The average foreign exchange rates were $1.33 and $1.28 per US$1.00, for the years ended December 31, 2016 and 2015, respectively.

On a constant currency basis, the Company's net income for the year ended December 31, 2016 would have been lower by $85 million ($0.11 per diluted share).

Management's Discussion and Analysis

Revenues

In millions, unless otherwise indicated Year ended December 31,	2016	2015	% Change	% Change at constant currency
Rail freight revenues	$11,326	$11,905	(5%)	(7%)
Other revenues	711	706	1%	(1%)
Total revenues	$12,037	$12,611	(5%)	(7%)
Rail freight revenues				
Petroleum and chemicals	$2,174	$2,442	(11%)	(13%)
Metals and minerals	1,218	1,437	(15%)	(17%)
Forest products	1,797	1,728	4%	1%
Coal	434	612	(29%)	(30%)
Grain and fertilizers	2,098	2,071	1%	-
Intermodal	2,846	2,896	(2%)	(3%)
Automotive	759	719	6%	3%
Total rail freight revenues	$11,326	$11,905	(5%)	(7%)
Revenue ton miles (RTMs) (millions)	214,327	224,710	(5%)	(5%)
Rail freight revenue/RTM (cents)	5.28	5.30	-	(2%)
Carloads (thousands)	5,205	5,485	(5%)	(5%)
Rail freight revenue/carload (dollars)	2,176	2,170	-	(2%)

Revenues for the year ended December 31, 2016, totaled $12,037 million compared to $12,611 million in 2015. The decrease of $574 million, or 5%, was mainly attributable to lower volumes of crude oil, coal, and frac sand; as well as lower applicable fuel surcharge rates. These factors were partly offset by the positive translation impact of the weaker Canadian dollar and freight rate increases.

Fuel surcharge revenues decreased by $316 million in 2016, mainly as a result of lower applicable fuel surcharge rates.

In 2016, revenue ton miles (RTMs), measuring the relative weight and distance of rail freight transported by the Company, declined by 5% relative to 2015.

Rail freight revenue per RTM, a measurement of yield defined as revenue earned on the movement of a ton of freight over one mile, remained flat when compared to 2015, mainly driven by lower applicable fuel surcharge rates and an increase in the average length of haul; offset by the positive translation impact of a weaker Canadian dollar and freight rate increases.

Petroleum and chemicals

Year ended December 31,	2016	2015	% Change	% Change at constant currency
Revenues (millions)	$2,174	$2,442	(11%)	(13%)
RTMs (millions)	43,395	51,103	(15%)	(15%)
Revenue/RTM (cents)	5.01	4.78	5%	2%

The petroleum and chemicals commodity group comprises a wide range of commodities, including chemicals and plastics, refined petroleum products, natural gas liquids, crude oil and sulfur. The primary markets for these commodities are within North America, and as such, the performance of this commodity group is closely correlated with the North American economy as well as oil and gas production. Most of the Company's petroleum and chemicals shipments originate in the Louisiana petrochemical corridor between New Orleans and Baton Rouge; in Western Canada, a key oil and gas development area and a major center for natural gas feedstock and world-scale petrochemicals and plastics; and in eastern Canadian regional plants.

For the year ended December 31, 2016, revenues for this commodity group decreased by $268 million, or 11%, when compared to 2015. The decrease was mainly due to lower shipments of crude oil due to increased pipeline capacity, and reduced shipments of sulfur; as well as lower applicable fuel surcharge rates. These factors were partly offset by the positive translation impact of a weaker Canadian dollar; higher volumes of refined petroleum products; and freight rate increases.

Revenue per RTM increased by 5% in 2016, mainly due to a decrease in the average length of haul, the positive translation impact of a weaker Canadian dollar, and freight rate increases, partly offset by lower applicable fuel surcharge rates.

Management's Discussion and Analysis

Percentage of 2016 revenues	
Chemicals and plastics	46%
Refined petroleum products	33%
Crude and condensate	17%
Sulfur	4%

Year ended December 31,	2016	2015	2014
Carloads (thousands)	599	640	655

Metals and minerals

Year ended December 31,	2016	2015	% Change	% Change at constant currency
Revenues (millions)	$1,218	$1,437	(15%)	(17%)
RTMs (millions)	20,233	21,828	(7%)	(7%)
Revenue/RTM (cents)	6.02	6.58	(9%)	(11%)

The metals and minerals commodity group consists primarily of materials related to oil and gas development, steel, iron ore, non-ferrous base metals and ores, construction materials and machinery and dimensional (large) loads. The Company provides unique rail access to base metals, iron ore and frac sand mining as well as aluminum and steel producing regions, which are among the most important in North America. This strong origin franchise, coupled with the Company's access to port facilities and the end markets for these commodities, has made CN a leader in the transportation of metals and minerals products. The key drivers for this market segment are oil and gas development, automotive production, and non-residential construction.

For the year ended December 31, 2016, revenues for this commodity group decreased by $219 million, or 15%, when compared to 2015. The decrease was mainly due to decreased shipments of energy-related commodities including frac sand, drilling pipe, and semi-finished steel products; and lower applicable fuel surcharge rates, partly offset by the positive translation impact of a weaker Canadian dollar.

Revenue per RTM decreased by 9% in 2016, mainly due to an increase in the average length of haul and lower applicable fuel surcharge rates, partly offset by the positive translation impact of a weaker Canadian dollar.

Percentage of 2016 revenues	
Metals	33%
Minerals	27%
Energy materials	21%
Iron ore	19%

Year ended December 31,	2016	2015	2014
Carloads (thousands)	807	886	1,063

Forest products

Year ended December 31,	2016	2015	% Change	% Change at constant currency
Revenues (millions)	$1,797	$1,728	4%	1%
RTMs (millions)	31,401	30,097	4%	4%
Revenue/RTM (cents)	5.72	5.74	-	(3%)

The forest products commodity group includes various types of lumber, panels, paper, wood pulp and other fibers such as logs, recycled paper, wood chips, and wood pellets. The Company has extensive rail access to the western and eastern Canadian fiber-producing regions, which are among the largest fiber source areas in North America. In the U.S., the Company is strategically located to serve both the Midwest and southern U.S. corridors with interline connections to other Class I railroads. The key drivers for the various commodities are: for lumber and panels, housing starts and renovation activities primarily in the U.S.; for fibers (mainly wood pulp), the consumption of paper, pulpboard and tissue in North American and offshore markets; and for newsprint, advertising lineage, non-print media and overall economic conditions, primarily in the U.S.

Management's Discussion and Analysis

For the year ended December 31, 2016, revenues for this commodity group increased by $69 million, or 4%, when compared to 2015. The increase was mainly due to higher shipments of lumber and panels to the U.S. due to continued improvement in the U.S. housing market; freight rate increases; and the positive translation impact of a weaker Canadian dollar. These factors were partly offset by lower applicable fuel surcharge rates and decreased shipments of paper products amidst weak market conditions.
Revenue per RTM remained flat in 2016, mainly due to lower applicable fuel surcharge rates and an increase in the average length of haul, offset by the positive translation impact of a weaker Canadian dollar and freight rate increases.

Percentage of 2016 revenues	
Lumber and panels	53%
Pulp and paper	47%

Year ended December 31,	2016	2015	2014
Carloads (thousands)	440	441	433

Coal

Year ended December 31,	2016	2015	% Change	% Change at constant currency
Revenues (millions)	$434	$612	(29%)	(30%)
RTMs (millions)	11,032	15,956	(31%)	(31%)
Revenue/RTM (cents)	3.93	3.84	2%	1%

The coal commodity group consists of thermal grades of bituminous coal, metallurgical coal and petroleum coke. Canadian thermal and metallurgical coal are largely exported via terminals on the west coast of Canada to offshore markets. In the U.S., thermal coal is transported from mines served in southern Illinois, or from western U.S. mines via interchange with other railroads, to major utilities in the Midwest and Southeast U.S., as well as offshore markets via terminals in the Gulf of Mexico.
For the year ended December 31, 2016, revenues for this commodity group decreased by $178 million, or 29%, when compared to 2015. The decrease was mainly due to lower volumes of thermal coal to U.S. coal-fired utilities, continued global oversupply impacting export shipments of thermal coal via the U.S. Gulf Coast and metallurgical coal via west coast ports; as well as lower applicable fuel surcharge rates. These factors were partly offset by freight rate increases and the positive translation impact of a weaker Canadian dollar.
Revenue per RTM increased by 2% in 2016, mainly due to a decrease in the average length of haul, freight rate increases, and the positive translation impact of a weaker Canadian dollar, partly offset by lower applicable fuel surcharge rates.

Percentage of 2016 revenues	
Coal	78%
Petroleum coke	22%

Year ended December 31,	2016	2015	2014
Carloads (thousands)	333	438	519

Grain and fertilizers

Year ended December 31,	2016	2015	% Change	% Change at constant currency

Revenues (millions)	$2,098	$2,071	1%	-
RTMs (millions)	51,485	50,001	3%	3%
Revenue/RTM (cents)	4.07	4.14	(2%)	(3%)

Management's Discussion and Analysis

The grain and fertilizers commodity group depends primarily on crops grown and fertilizers processed in Western Canada and the U.S. Midwest. The grain segment consists of three primary segments: food grains (mainly wheat, oats and malting barley), feed grains and feed grain products (including feed barley, feed wheat, peas, corn, ethanol and dried distillers grains), and oilseeds and oilseed products (primarily canola seed, oil and meal, and soybeans). Production of grain varies considerably from year to year, affected primarily by weather conditions, seeded and harvested acreage, the mix of grains produced and crop yields. Grain exports are sensitive to the size and quality of the crop produced, international market conditions and foreign government policy. The majority of grain produced in Western Canada and moved by CN is exported via the ports of Vancouver, Prince Rupert and Thunder Bay. These rail movements are subject to government regulation and to a revenue cap, which effectively establishes a maximum revenue entitlement that railways can earn. In the U.S., grain grown in Illinois and Iowa is exported as well as transported to domestic processing facilities and feed markets. The Company also serves major producers of potash in Canada, as well as producers of ammonium nitrate, urea and other fertilizers across Canada and the U.S.

For the year ended December 31, 2016, revenues for this commodity group increased by $27 million, or 1%, when compared to 2015. The increase was mainly due to higher volumes of Canadian oilseeds and oilseed products, and higher export volumes of U.S. soybeans and corn; the positive translation impact of a weaker Canadian dollar; and freight rate increases. These factors were partly offset by lower volumes of Canadian wheat and lower applicable fuel surcharge rates.

Revenue per RTM decreased by 2% in 2016, mainly due to an increase in the average length of haul and lower applicable fuel surcharge rates, partly offset by the positive translation impact of a weaker Canadian dollar and freight rate increases.

Percentage of 2016 revenues	
Oilseeds	36%
Food grains	22%
Feed grains	22%
Fertilizers	20%

Year ended December 31,	2016	2015	2014
Carloads (thousands)	602	607	640

Intermodal

Year ended December 31,	2016	2015	% Change	% Change at constant currency
Revenues (millions)	$2,846	$2,896	(2%)	(3%)
RTMs (millions)	53,056	52,144	2%	2%
Revenue/RTM (cents)	5.36	5.55	(3%)	(5%)

The intermodal commodity group includes rail and trucking services and is comprised of two segments: domestic and international. The domestic segment transports consumer products and manufactured goods, serving both retail and wholesale channels, within domestic Canada, domestic U.S., Mexico and transborder, while the international segment handles import and export container traffic, serving the major ports of Vancouver, Prince Rupert, Montreal, Halifax, New Orleans and Mobile. The domestic segment is driven by consumer markets, with growth generally tied to the economy. The international segment is driven by North American economic and trade conditions.

For the year ended December 31, 2016, revenues for this commodity group decreased by $50 million, or 2%, when compared to 2015. The decrease was mainly due to lower applicable fuel surcharge rates and decreased international volumes via the Port of Vancouver. These factors were partly offset by increased international volumes via the Port of Halifax, and higher domestic retail volumes in the industrial and grocery products segments; freight rate increases; and the positive translation impact of a weaker Canadian dollar.

Revenue per RTM decreased by 3% in 2016, mainly due to lower applicable fuel surcharge rates, partly offset by the positive translation impact of a weaker Canadian dollar and freight rate increases.

Percentage of 2016 revenues	
International	63%
Domestic	37%

Year ended December 31,	2016	2015	2014
Carloads (thousands)	2,163	2,232	2,086

Automotive

Year ended December 31,	2016	2015	% Change	% Change at constant currency
Revenues (millions)	$759	$719	6%	3%
RTMs (millions)	3,725	3,581	4%	4%
Revenue/RTM (cents)	20.38	20.08	1%	(1%)

The automotive commodity group moves both domestic finished vehicles and parts throughout North America, providing rail access to certain vehicle assembly plants in Canada, and Michigan and Mississippi in the U.S. The Company also serves vehicle distribution facilities in Canada and the U.S., as well as parts production facilities in Michigan and Ontario. The Company serves shippers of import finished vehicles via the ports of Halifax and Vancouver, and through interchange with other railroads. The Company's automotive revenues are closely correlated to automotive production and sales in North America.

For the year ended December 31, 2016, revenues for this commodity group increased by $40 million, or 6%, when compared to 2015. The increase was mainly due to higher volumes of domestic finished vehicle traffic and increased finished vehicle imports via the Port of Halifax; the positive translation impact of a weaker Canadian dollar; and freight rate increases. These factors were partly offset by lower applicable fuel surcharge rates.

Revenue per RTM increased by 1% in 2016, mainly due to a decrease in the average length of haul, the positive translation impact of a weaker Canadian dollar and freight rate increases, partly offset by lower applicable fuel surcharge rates.

Percentage of 2016 revenues	
Finished vehicles	93%
Auto parts	7%

Year ended December 31,	2016	2015	2014
Carloads (thousands)	261	241	229

Other revenues

Year ended December 31,	2016	2015	% Change	% Change at constant currency
Revenues (millions)	$711	$706	1%	(1%)

Other revenues are largely derived from non-rail services that support CN's rail business including vessels and docks, warehousing and distribution, automotive logistic services, freight forwarding and transportation management; as well as other revenues including commuter train revenues.

For the year ended December 31, 2016, Other revenues increased by $5 million, or 1%, when compared to 2015, mainly due to higher revenues from automotive logistic services and the positive translation impact of a weaker Canadian dollar, partly offset by lower revenues from freight forwarding and docks.

Percentage of 2016 revenues	
Vessels and docks	50%
Other non-rail services	39%
Other revenues	11%

Management's Discussion and Analysis

Operating expenses

Operating expenses for the year ended December 31, 2016 amounted to $6,725 million compared to $7,345 million in 2015. The decrease of $620 million, or 8%, in 2016 was mainly due to lower costs resulting from operating productivity gains, including cost-management initiatives and decreased volumes of traffic, lower pension expense, and lower fuel prices, partly offset by the negative translation impact of a weaker Canadian dollar on US dollar-denominated expenses.

In millions	Year ended December 31,	2016	2015	% Change	% Change at constant currency
Labor and fringe benefits		$2,119	$2,406	12%	13%
Purchased services and material		1,592	1,729	8%	9%
Fuel		1,051	1,285	18%	20%
Depreciation and amortization		1,225	1,158	(6%)	(4%)
Equipment rents		375	373	(1%)	3%
Casualty and other		363	394	8%	11%
Total operating expenses		$6,725	$7,345	8%	10%

Labor and fringe benefits

Labor and fringe benefits expense includes wages, payroll taxes, and employee benefits such as incentive compensation, including stock-based compensation; health and welfare; and pension and other postretirement benefits. Certain incentive and stock-based compensation plans are based on financial and market performance targets and the related expense is recorded in relation to the attainment of such targets.

Labor and fringe benefits expense decreased by $287 million, or 12%, in 2016 when compared to 2015. The decrease was primarily a result of a lower average headcount due to lower volumes of traffic and increased productivity, and lower pension expense, partly offset by the negative translation impact of the weaker Canadian dollar.

Purchased services and material

Purchased services and material expense primarily includes the cost of services purchased from outside contractors; materials used in the maintenance of the Company's track, facilities and equipment; transportation and lodging for train crew employees; utility costs; and the net costs of operating facilities jointly used by the Company and other railroads.

Purchased services and material expense decreased by $137 million, or 8%, in 2016 when compared to 2015. The decrease was mainly due to lower repairs and maintenance costs, resulting from lower volumes of traffic and cost-management initiatives, as well as favorable winter conditions in the first quarter, and lower accident costs. The decrease was partly offset by the negative translation impact of the weaker Canadian dollar.

Fuel

Fuel expense includes fuel consumed by assets, including locomotives, vessels, vehicles and other equipment as well as federal, provincial and state fuel taxes.

Fuel expense decreased by $234 million, or 18%, in 2016 when compared to 2015. The decrease was primarily due to lower fuel prices, lower volumes of traffic, and productivity gains, partly offset by the negative translation impact of the weaker Canadian dollar.

Depreciation and amortization

Depreciation expense is affected by capital additions, railroad property retirements from disposal, sale and/or abandonment and other adjustments including asset impairments.

Depreciation and amortization expense increased by $67 million, or 6%, in 2016 when compared to 2015. The increase was mainly due to net capital additions and the negative translation impact of the weaker Canadian dollar, partly offset by the net favorable impact of depreciation studies.

Equipment rents

Equipment rents expense includes rental expense for the use of freight cars owned by other railroads or private companies and for the short- or long-term lease of freight cars, locomotives and intermodal equipment, net of rental income from other railroads for the use of the Company's cars and locomotives.

Equipment rents expense increased by $2 million, or 1%, in 2016 when compared to 2015. The increase was primarily due to higher costs for the use of locomotives from other railroads, and the negative translation impact of the weaker Canadian dollar, partly offset by lower car and equipment lease expenses.

Casualty and other

Casualty and other expense includes expenses for personal injuries, environmental, freight and property damage, insurance, bad debt, operating taxes, and travel expenses.

Casualty and other expense decreased by $31 million, or 8%, in 2016 when compared to 2015. The decrease was mainly due to lower accident costs, and the favorable impacts of a legal settlement and an insurance recovery, partly offset by a bad debt provision related to the bankruptcy of an international intermodal customer, an increase in U.S. personal injury and other claims pursuant to a recent actuarial study, an increase in property taxes and the negative translation impact of the weaker Canadian dollar.

Other income and expenses

Interest expense

Interest expense was $480 million compared to $439 million in 2015. The increase was mainly due to a higher level of debt and the negative translation impact of the weaker Canadian dollar on US dollar-denominated interest expense.

Other income

In 2016, the Company recorded other income of $95 million compared to $47 million in 2015. Included in Other income for 2016 was a gain on disposal of the Viaduc du Sud of $76 million.

Income tax expense

The Company recorded income tax expense of $1,287 million for the year ended December 31, 2016, compared to $1,336 million in 2015. Included in the 2016 figure was deferred income tax expense of $7 million resulting from the enactment of a higher provincial corporate income tax rate. Included in the 2015 figure was a deferred income tax expense of $42 million resulting from the enactment of a higher provincial corporate income tax rate.

The effective tax rate for 2016 was 26.1% compared to 27.4% in 2015. Excluding the net deferred income tax expense of $7 million and $42 million in 2016 and 2015, respectively, the effective tax rate for 2016 was 26.0% compared to 26.5% in 2015. The decrease in the effective tax rate was primarily due to the impact of a lower proportion of the Company's pre-tax income being earned in higher tax rate jurisdictions. For 2017, the Company does not anticipate the effective tax rate to be significantly different from those in 2016 and 2015, estimated at approximately 26.5%.

2015 compared to 2014

In 2015, net income was $3,538 million, an increase of $371 million, or 12%, when compared to 2014, with diluted earnings per share rising 14% to $4.39. The $371 million increase was mainly due to higher operating income net of the related income taxes, partly offset by an increase in Interest expense and a decrease in Other income.

Operating income for the year ended December 31, 2015 increased by $642 million, or 14%, to $5,266 million. The operating ratio, defined as operating expenses as a percentage of revenues, was 58.2% in 2015, compared to 61.9% in 2014, a 3.7-point improvement.

Revenues for the year ended December 31, 2015 increased by $477 million, or 4%, to $12,611 million, mainly attributable to:

- the positive translation impact of the weaker Canadian dollar on US dollar-denominated revenues;
- freight rate increases; and

- solid overseas intermodal demand, higher volumes of finished vehicle traffic, and increased shipments of lumber and panels to U.S. markets.

These factors were partly offset by a lower applicable fuel surcharge rate; and decreased shipments of energy-related commodities including crude oil, frac sand and drilling pipe, lower volumes of semi-finished steel products and short-haul iron ore, reduced shipments of coal due to weaker North American and global demand, as well as lower U.S. grain exports via the Gulf of Mexico.

Operating expenses for the year ended December 31, 2015 decreased by $165 million, or 2%, to $7,345 million, primarily due to lower fuel expense and cost-management efforts, partly offset by the negative translation impact of a weaker Canadian dollar on US dollar-denominated expenses.

Management's Discussion and Analysis

Revenues

In millions, unless otherwise indicated Year ended December 31,	2015	2014	% Change	% Change at constant currency
Rail freight revenues	$11,905	$11,455	4%	(4%)
Other revenues	706	679	4%	(6%)
Total revenues	$12,611	$12,134	4%	(5%)
Rail freight revenues				
Petroleum and chemicals	$2,442	$2,354	4%	(6%)
Metals and minerals	1,437	1,484	(3%)	(13%)
Forest products	1,728	1,523	13%	2%
Coal	612	740	(17%)	(25%)
Grain and fertilizers	2,071	1,986	4%	(3%)
Intermodal	2,896	2,748	5%	-
Automotive	719	620	16%	4%
Total rail freight revenues	$11,905	$11,455	4%	(4%)
Revenue ton miles (RTMs) (millions)	224,710	232,138	(3%)	(3%)
Rail freight revenue/RTM (cents)	5.30	4.93	8%	(1%)
Carloads (thousands)	5,485	5,625	(2%)	(2%)
Rail freight revenue/carload (dollars)	2,170	2,036	7%	(2%)

Revenues for the year ended December 31, 2015, totaled $12,611 million compared to $12,134 million in 2014. The increase of $477 million, or 4% was mainly attributable to the positive translation impact of the weaker Canadian dollar on US dollar-denominated revenues; freight rate increases; and solid overseas intermodal demand, higher volumes of finished vehicle traffic, and increased shipments of lumber and panels to U.S. markets. These factors were partly offset by a lower applicable fuel surcharge rate; and decreased shipments of energy-related commodities including crude oil, frac sand and drilling pipe, lower volumes of semi-finished steel products and short-haul iron ore, reduced shipments of coal due to weaker North American and global demand, as well as lower U.S. grain exports via the Gulf of Mexico.

Fuel surcharge revenues decreased by $575 million in 2015, mainly due to lower applicable fuel surcharge rates and lower freight volumes, partly offset by the positive translation impact of the weaker Canadian dollar.

In 2015, revenue ton miles (RTMs), measuring the relative weight and distance of rail freight transported by the Company, declined by 3% relative to 2014.

Rail freight revenue per RTM, a measurement of yield defined as revenue earned on the movement of a ton of freight over one mile, increased by 8% when compared to 2014, driven by the positive translation impact of the weaker Canadian dollar and freight rate increases, partly offset by a significant increase in the average length of haul, particularly in the second half of the year, and a lower applicable fuel surcharge rate.

Petroleum and chemicals

Year ended December 31,	2015	2014	% Change	% Change at constant currency
Revenues (millions)	$2,442	$2,354	4%	(6%)
RTMs (millions)	51,103	53,169	(4%)	(4%)
Revenue/RTM (cents)	4.78	4.43	8%	(2%)

For the year ended December 31, 2015, revenues for this commodity group increased by $88 million, or 4%, when compared to 2014. The increase was mainly due to the positive translation impact of a weaker Canadian dollar, freight

rate increases and higher shipments of natural gas liquids. These factors were partly offset by decreased shipments of crude oil and a lower applicable fuel surcharge rate.
Revenue per RTM increased by 8% in 2015, mainly due to the positive translation impact of a weaker Canadian dollar and freight rate increases, partly offset by a lower applicable fuel surcharge rate.

Management's Discussion and Analysis

Metals and minerals

Year ended December 31,	2015	2014	% Change	% Change at constant currency
Revenues (millions)	$1,437	$1,484	(3%)	(13%)
RTMs (millions)	21,828	24,686	(12%)	(12%)
Revenue/RTM (cents)	6.58	6.01	9%	(2%)

For the year ended December 31, 2015, revenues for this commodity group decreased by $47 million, or 3%, when compared to 2014. The decrease was mainly due to decreased shipments of energy-related commodities including frac sand and drilling pipe due to a reduction in oil and gas activities, and lower volumes of semi-finished steel products and short-haul iron ore; as well as a lower applicable fuel surcharge rate. These factors were partly offset by the positive translation impact of a weaker Canadian dollar and freight rate increases.
Revenue per RTM increased by 9% in 2015, mainly due to the positive translation impact of a weaker Canadian dollar and freight rate increases, partly offset by a significant increase in the average length of haul and a lower applicable fuel surcharge rate.

Forest products

Year ended December 31,	2015	2014	% Change	% Change at constant currency
Revenues (millions)	$1,728	$1,523	13%	2%
RTMs (millions)	30,097	29,070	4%	4%
Revenue/RTM (cents)	5.74	5.24	10%	(2%)

For the year ended December 31, 2015, revenues for this commodity group increased by $205 million, or 13%, when compared to 2014. The increase was mainly due to the positive translation impact of a weaker Canadian dollar; freight rate increases; and higher shipments of lumber and panels to U.S. markets, and increased offshore shipments of wood pulp. These factors were partly offset by a lower applicable fuel surcharge rate and decreased shipments of paper products.
Revenue per RTM increased by 10% in 2015, mainly due to the positive translation impact of a weaker Canadian dollar and freight rate increases, partly offset by a lower applicable fuel surcharge rate.

Coal

Year ended December 31,	2015	2014	% Change	% Change at constant currency
Revenues (millions)	$612	$740	(17%)	(25%)
RTMs (millions)	15,956	21,147	(25%)	(25%)
Revenue/RTM (cents)	3.84	3.50	10%	(1%)

For the year ended December 31, 2015, revenues for this commodity group decreased by $128 million, or 17%, when compared to 2014. The decrease was mainly due to lower shipments of metallurgical and thermal coal through west coast ports, and decreased volumes of thermal coal to U.S. utilities, and a lower applicable fuel surcharge rate. These factors were partly offset by the positive translation impact of a weaker Canadian dollar and freight rate increases.
Revenue per RTM increased by 10% in 2015, mainly due to a significant decrease in the average length of haul, the positive translation impact of a weaker Canadian dollar, and freight rate increases, partly offset by a lower applicable fuel surcharge rate.

Grain and fertilizers

Year ended December 31,	2015	2014	% Change	% Change at constant currency
Revenues (millions)	$2,071	$1,986	4%	(3%)
RTMs (millions)	50,001	51,326	(3%)	(3%)
Revenue/RTM (cents)	4.14	3.87	7%	-