

ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following Management's Discussion and Analysis of Financial Condition and Results of Operations ("MD&A") is intended to enhance a reader's understanding of the Company's results of operations and financial condition. The MD&A is provided as a supplement to, and should be read in conjunction with the Company's Interim Consolidated Financial Statements and the related notes for the three and nine months ended September 30, 2022 in Item 1. Financial Statements, other information in this report, and Item 8. Financial Statements and Supplementary Data of the Company's 2021 Annual Report on Form 10-K. Except where otherwise indicated, all financial information reflected herein is expressed in Canadian dollars.

For purposes of this report, all references herein to "CP", "the Company", "we", "our" and "us" refer to Canadian Pacific Railway Limited ("CPRL"), CPRL and its subsidiaries, CPRL and one or more of its subsidiaries, or one or more of CPRL's subsidiaries, as the context may require.

Available Information

CP makes available on or through its website www.cpr.ca free of charge, its annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and all amendments to those reports as soon as reasonably practicable after such reports are filed with or furnished to the Securities and Exchange Commission ("SEC"). Our website also contains charters for our Board of Directors and each of its committees, our corporate governance guidelines and our Code of Business Ethics. SEC filings made by CP are also accessible through the SEC's website at www.sec.gov. The information on our website is not part of this quarterly report on Form 10-Q.

The Company has included the Chief Executive Officer ("CEO") and Chief Financial Officer ("CFO") certifications regarding the Company's public disclosure required by Section 302 of the Sarbanes-Oxley Act of 2002 as Exhibits to this report.

Executive Summary

Third Quarter of 2022 Results

- Financial performance* - In the third quarter of 2022, CP reported Diluted earnings per share ("EPS") of \$0.96, an increase of 37% compared to the same period of 2021. This increase was primarily due to equity earnings of Kansas City Southern ("KCS"), higher volumes as measured by revenue ton-miles ("RTMs"), and the favourable impact of changes in fuel prices, partially offset by a higher average number of shares outstanding due to shares issued related to the KCS acquisition and higher interest expense primarily due to debt issued related to the KCS acquisition. Core adjusted diluted EPS was \$1.01 in the third quarter of 2022, an increase of 15% compared to the same period of 2021. This increase was due to the same factors discussed above for the increase in Diluted EPS, except that Core adjusted EPS excludes the impact of KCS purchase accounting, acquisition-related costs, deferred tax recovery due to Iowa state tax rate change, deferred tax recovery on the outside basis difference of the investment in KCS, as well as FX loss on debt and lease liabilities recognized in 2021.

CP reported Net income of \$891 million in the third quarter of 2022, an increase of 89% compared to the same period of 2021. This increase was primarily due to equity earnings of KCS, higher volumes as measured by RTMs, and the favourable impact of changes in fuel prices, partially offset by higher interest expense primarily due to debt issued related to the KCS acquisition. Core adjusted income was \$945 million in the third quarter of 2022, an increase of 60% compared to the same period of 2021. This increase was due to the same factors discussed above for the increase in Net income, except that Core adjusted income excludes the impact of KCS purchase accounting, acquisition-related costs, deferred tax recovery due to Iowa state tax rate change, deferred tax recovery on the outside basis difference of the investment in KCS, as well as FX loss on debt and lease liabilities recognized in 2021.

CP reported an Operating ratio of 59.5% in the third quarter of 2022, a 70 basis point improvement compared to the same period of 2021. Adjusted operating ratio was 58.7%, a 70 basis point improvement compared to the same period of 2021. These improvements were primarily due to higher volumes as measured by RTMs and higher freight rates, partially offset cost inflation.

Core adjusted diluted EPS, Core adjusted income, and Adjusted operating ratio are defined and reconciled in Non-GAAP Measures and discussed further in Results of Operations of this Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations.

- Total revenues* - Total revenues increased by 19% in the third quarter of 2022 to \$2,312 million compared to the same period of 2021. This increase was primarily due to increased freight revenue per RTM and higher volumes as measured by RTMs.
- Operating performance* - CP's average train weight increased by 3% to 10,247 tons and average train length increased by 4% to 8,578 feet, compared to the same period in 2021. These increases were a result of improvements in operating plan efficiency and continued improvements in bulk train efficiency due to moving heavier and longer Potash trains. These

metrics are discussed further in Performance Indicators of this Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations.

Recent Developments

- On March 16, 2022, CP issued a 72-hour notice to the Teamsters Canada Rail Conference ("TCRC") - Train & Engine, of its plan to lock-out employees at 00:01 Eastern Time on March 20, 2022 if the TCRC leadership and the Company were unable to come to a negotiated settlement or agree to binding arbitration. The TCRC represents approximately 3,000 locomotive engineers, conductors, and train and yard workers across Canada. On March 19, 2022, while the Company was still engaged in ongoing negotiations facilitated by federal mediators, the TCRC withdrew its services in the final hours before the deadline for a legal strike or lockout to potentially occur. On March 22, 2022, CP reached an agreement with the TCRC Negotiating Committee to enter into binding arbitration. This agreement enabled CP employees to return to work effective noon March 22, 2022 local time to resume our essential services for our customers and the North American supply chain.

The work stoppage resulted in lower volumes during the first quarter. Once the TCRC members returned to work on March 22, 2022, the Company quickly re-established service.

On August 15, 2022, CP entered into a new two-year collective agreement with the TCRC following binding arbitration. The new agreement includes a 3.5 percent wage increase in 2022 and 2023 and increased benefits. Under the arbitration decision, the TCRC will also join a CP pension improvement account. The new collective agreement is effective from January 1, 2022 to December 31, 2023.

Prior Developments

- On July 20, 2022, KCS and its affiliate Kansas City Southern de México, S.A. de C.V. ("KCSM") announced an agreement extending the concession exclusivity rights granted to KCSM for an additional 10 years.

KCSM reached an agreement with the Mexican Ministry of Infrastructure, Communications and Transportation ("SICT") to fund a new investment in the Celaya-NBA Line Railway Bypass and other infrastructure. As part of the agreement, the SICT has authorized the amendment of KCSM's Concession Title effective July 14, 2022, to extend the exclusivity rights granted to KCSM for an additional period of 10 years. Under this amendment, KCSM's exclusivity will now expire in 2037.

The U.S. Surface Transportation Board's ("STB") review of CP's proposed control of KCS is expected to be completed in the first quarter of 2023. Prior to obtaining STB control approval, KCS's management and Board of Directors will continue to steward KCS while it is in trust, pursuing its independent business plan and growth strategies.

Specific risk factors related to the KCS acquisition and pending KCS business combination are provided in Part I, Item 1A. Risk Factors of the Company's 2021 Annual Report on Form 10-K.

- On April 27, 2022, at the Company's Annual and Special Meeting of Shareholders, all nine director nominees were elected.

Performance Indicators

The following table lists the key measures of the Company's operating performance:

	For the three months ended September 30			For the nine months ended September 30		
	2022	2021	% Change	2022	2021	% Change
Operations Performance						
Gross ton-miles ("GTMs") (millions)	68,482	64,665	6	199,512	207,347	(4)
Train miles (thousands)	7,237	6,999	3	21,390	22,406	(5)
Average train weight - excluding local traffic (tons)	10,247	9,973	3	10,093	9,953	1
Average train length - excluding local traffic (feet)	8,578	8,285	4	8,387	8,192	2
Average terminal dwell (hours)	7.8	7.2	8	8.0	7.1	13
Average train speed (miles per hour, or "mph")	21.5	21.7	(1)	21.5	21.4	—
Locomotive productivity (GTMs / operating horsepower)	202	203	—	196	204	(4)
Fuel efficiency (U.S. gallons of locomotive fuel consumed / 1,000 GTMs)	0.927	0.907	2	0.949	0.928	2
Total Employees and Workforce						
Total employees (average)	13,004	12,485	4	12,427	12,411	—
Total employees (end of period)	13,087	12,262	7	13,087	12,262	7
Workforce (end of period)	13,144	12,301	7	13,144	12,301	7
Safety Indicators⁽¹⁾						
FRA personal injuries per 200,000 employee-hours	0.86	0.98	(12)	0.96	0.98	(2)
FRA train accidents per million train-miles	0.37	1.54	(76)	0.84	1.13	(26)

⁽¹⁾ Federal Railroad Administration ("FRA") personal injuries per 200,000 employee-hours for the three and nine months ended September 30, 2021, previously reported as 0.97 and 0.97, were restated to 0.98 and 0.98, respectively in this report. FRA train accidents per million train-miles for the nine months ended September 30, 2021, previously reported as 1.09, was restated to 1.13 in this report. These restatements reflect new information available within specified periods stipulated by the FRA but that exceed the Company's financial reporting timeline.

Operations Performance

These key measures are used by management as comparisons to historical operating results and in the planning process to facilitate decisions that continue to drive further productivity improvements in the Company's operations. Results of these key measures reflect how effective CP's management is at controlling costs and executing the Company's operating plan and strategy. Continued monitoring of these key measures ensures that the Company can take appropriate actions to ensure the delivery of superior service and be able to grow its business at low incremental cost.

Three months ended September 30, 2022 compared to the three months ended September 30, 2021

- A **GTM** is defined as the movement of one ton of train weight over one mile. GTMs are calculated by multiplying total train weight by the distance the train moved. Total train weight comprises the weight of the freight cars, their contents, and any inactive locomotives. An increase in GTMs indicates additional workload. GTMs increased by 6% in the third quarter of 2022 compared to the same period of 2021. This increase was mainly attributable to higher volumes of Intermodal, Potash and frac sand. This increase was partially offset by lower volumes of Coal and Canadian grain.
- **Train miles** are defined as the sum of the distance moved by all trains operated on the network. Train miles provide a measure of the productive utilization of our network. A smaller increase in train miles relative to increases in volumes, as measured by RTMs, and/or workload, as measured by GTMs, indicate improved train productivity. Train miles increased by 3% in the third quarter of 2022 compared to the same period of 2021. This increase reflects the impact of a 6% increase in workload (GTMs), partially offset by a 3% increase in average train weights.
- **Average train weight** is defined as the average gross weight of CP trains, both loaded and empty. This excludes trains in short-haul service, work trains used to move CP's track equipment and materials, and the haulage of other railways' trains on CP's network. An increase in average train weight indicates improved asset utilization and may also be the result of moving heavier commodities. Average train weight increased by 3% in the third quarter of 2022 compared to the same period of 2021. This increase was a result of improvements in operating plan efficiency and proportionally higher volumes of Potash, which is a heavier commodity.

- **Average train length** is defined as the average total length of CP trains, both loaded and empty. This includes all cars and locomotives on the train and is calculated as the sum of each car or locomotive's length multiplied by the distance travelled, divided by train miles. This excludes trains in short-haul service, work trains used to move CP's track equipment and materials, and the haulage of other railways' trains on CP's network. An increase in average train length indicates improved asset utilization. Average train length increased by 4% in the third quarter of 2022 compared to the same period of 2021. This increase was a result of improvements in operating plan efficiency and higher volumes of Intermodal and Potash, which move in longer trains.
- **Average terminal dwell** is defined as the average time a freight car resides within terminal boundaries expressed in hours. The timing starts with a train arriving at the terminal, a customer releasing the car to the Company, or a car arriving at interchange from another railway. The timing ends when the train leaves, a customer receives the car from CP, or the freight car is transferred to another railway. Freight cars are excluded if they are being stored at the terminal or used in track repairs. A decrease in average terminal dwell indicates improved terminal performance resulting in faster cycle times and improved railcar utilization. Average terminal dwell increased by 8% in the third quarter of 2022 compared to the same period of 2021, primarily as a result of moving proportionally lower volumes of bulk commodities, which require less processing times in yards.
- **Average train speed** is defined as a measure of the line-haul movement from origin to destination including terminal dwell hours. It is calculated by dividing the total train miles travelled by the total train hours operated. This calculation does not include delay time related to customers or foreign railroads and excludes the time and distance travelled by: i) trains used in or around CP's yards; ii) passenger trains; and iii) trains used for repairing track. An increase in average train speed indicates improved on-time performance resulting in improved asset utilization. Average train speed decreased by 1% in the third quarter of 2022 compared to the same period of 2021. This decrease is primarily as a result of increased track and roadway programs.
- **Locomotive productivity** is defined as the daily average GTMs divided by daily average operating horsepower. Operating horsepower excludes units offline, tied up or in storage, or in use on other railways, and includes foreign units online. An increase in locomotive productivity indicates more efficient locomotive utilization and may also be the result of moving heavier commodities. Locomotive productivity was flat in the third quarter of 2022 compared to the same period of 2021.
- **Fuel efficiency** is defined as U.S. gallons of locomotive fuel consumed per 1,000 GTMs. Fuel consumed includes gallons from freight, yard and commuter service but excludes fuel used in capital projects and other non-freight activities. An improvement in fuel efficiency indicates operational cost savings and CP's commitment to corporate sustainability through a reduction of greenhouse gas emissions intensity. Fuel efficiency decreased by 2% in the third quarter of 2022 compared to the same period of 2021. This decrease in efficiency was due to higher volumes of Intermodal, which has lower horsepower utilization.

Nine months ended September 30, 2022 compared to the nine months ended September 30, 2021

- **GTMs** decreased by 4% for the first nine months of 2022 compared to the same period of 2021. This decrease was mainly attributable to lower volumes of Canadian grain, Coal, and Energy, chemicals and plastics. This decrease was partially offset by higher volumes of U.S. grain, Intermodal, Potash, and frac sand.
- **Train miles** decreased by 5% for the first nine months of 2022 compared to the same period of 2021. This decrease reflected the impact of a 4% decrease in workload (GTMs) and a 1% increase in average train weights.
- **Average train weight** increased by 1% for the first nine months of 2022 compared to the same period of 2021. This increase was a result of improvements in operating plan efficiency and moving longer and heavier Potash trains. This increase was partially offset by moving lower volumes of Canadian grain and Coal, which are heavier commodities.
- **Average train length** increased by 2% for the first nine months of 2022 from the same period of 2021. This increase was primarily due to improvements in operating plan efficiency and higher volumes of Intermodal and Potash, which move in longer trains.
- **Average terminal dwell** increased by 13% in the first nine months of 2022 compared to the same period of 2021. This increase was primarily as a result of proportionally lower volumes of bulk commodities, which require less processing time in yards, and harsher winter operating conditions in the first quarter of 2022.
- **Average train speed** was flat in the first nine months of 2022 compared to the same period of 2021.
- **Locomotive productivity** decreased by 4% in the first nine months of 2022 compared to the same period of 2021, as a result of harsher winter operating conditions in the first quarter of 2022.

- **Fuel efficiency** decreased by 2% in the first nine months of 2022 compared to the same period of 2021. This decrease in efficiency was due to lower locomotive productivity and harsher winter operating conditions in the first quarter of 2022, and lower volumes of Canadian grain, which has higher horsepower utilization.

Total Employees and Workforce

An **employee** is defined as an individual currently engaged in full-time, part-time, or seasonal employment with CP while **workforce** is defined as total employees plus contractors and consultants. The Company monitors employment and workforce levels in order to efficiently meet service and strategic requirements. The number of employees is a key driver to total compensation and benefits costs.

The average number of total employees increased by 4% for the three months ended September 30, 2022 and was flat for the nine months ended, compared to the same periods of 2021. The total number of employees and total workforce as at September 30, 2022 increased 7% compared to September 30, 2021. The increase in average number of employees for the three months ended September 30, 2022, and the increase in total employees and workforce as at September 30, 2022 were due to increased workload as measured in GTMs.

Safety Indicators

Safety is a key priority and core strategy for CP's management, employees, and Board of Directors. Personal injuries and train accidents are indicators of the effectiveness of the Company's safety systems, and are used by management to evaluate and, as necessary, alter the Company's safety systems, procedures, and protocols. Each measure follows U.S. FRA reporting guidelines, which can result in restatement after initial publication to reflect new information available within specified periods stipulated by the FRA but that exceed the Company's financial reporting timeline.

The **FRA personal injuries per 200,000 employee-hours** frequency is the number of personal injuries, multiplied by 200,000 and divided by total employee hours. Personal injuries are defined as injuries that require employees to lose time away from work, modify their normal duties or obtain medical treatment beyond minor first aid. FRA employee-hours are the total hours worked, excluding vacation and sick time, by all employees, excluding contractors. The FRA personal injuries per 200,000 employee-hours frequency for CP was 0.86 in the third quarter of 2022, a decrease from 0.98 in the same period of 2021. For the first nine months of 2022, the FRA personal injury rate per 200,000 employee-hours for CP was 0.96, a decrease from 0.98 in the same period of 2021.

The **FRA train accidents per million train-miles** frequency is the number of train accidents, multiplied by 1,000,000 and divided by total train miles. Train accidents included in this metric meet or exceed the FRA reporting threshold of U.S. \$11,300 in 2022 and U.S. \$11,200 in damage for 2021. The FRA train accidents per million train-miles was 0.37 in the third quarter of 2022, a decrease from 1.54 in the same period of 2021. For the first nine months of 2022, the FRA train accidents per million train-miles was 0.84, a decrease from 1.13 in the same period of 2021.

Financial Highlights

The following table presents selected financial data related to the Company's financial results as of, and for the three and nine months ended, September 30, 2022 and the comparative figures in 2021. The financial highlights should be read in conjunction with Item 1. Financial Statements and this Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations.

(in millions, except per share data, percentages and ratios)	For the three months ended September 30		For the nine months ended September 30	
	2022	2021	2022	2021
Financial Performance and Liquidity				
Total revenues	\$ 2,312	\$ 1,942	\$ 6,352	\$ 5,955
Operating income	937	774	2,340	2,374
Adjusted operating income ⁽¹⁾	955	789	2,397	2,521
Net income	891	472	2,246	2,320
Core adjusted income ⁽¹⁾	945	592	2,455	1,881
Basic EPS	0.96	0.71	2.42	3.48
Diluted EPS	0.96	0.70	2.41	3.46
Core adjusted diluted EPS ⁽¹⁾	1.01	0.88	2.63	2.81
Dividends declared per share	0.190	0.190	0.570	0.570
Cash provided by operating activities	1,102	548	2,422	3,084
Cash used in investing activities	(410)	(2,129)	(978)	(2,820)
Cash (used in) provided by financing activities	(721)	902	(1,409)	(194)
Free cash ⁽¹⁾	721	203	1,514	1,245
Financial Position				
	As at September 30, 2022		As at December 31, 2021	
Total assets	\$	73,435	\$	68,177
Total long-term debt, including current portion		20,575		20,127
Total shareholders' equity		37,814		33,829
Financial Ratios	For the three months ended September 30		For the nine months ended September 30	
	2022	2021	2022	2021
Operating ratio ⁽²⁾	59.5%	60.2%	63.2%	60.1%
Adjusted operating ratio ⁽¹⁾	58.7%	59.4%	62.3%	57.7%
	For the twelve months ended September 30			
	2022		2021	
Return on average shareholders' equity ⁽³⁾		11.8%		36.6%
Adjusted return on invested capital ("Adjusted ROIC") ⁽¹⁾		8.9%		15.9%
Long-term debt to Net income ratio ⁽⁴⁾		7.4		3.2
Adjusted net debt to adjusted EBITDA ratio ⁽¹⁾		4.3		2.4
Pro-forma adjusted Net Debt to Pro-forma adjusted EBITDA Ratio ⁽¹⁾		4.1		N/A

⁽¹⁾ These measures have no standardized meanings prescribed by accounting principles generally accepted in the United States of America ("GAAP") and, therefore, may not be comparable to similar measures presented by other companies. These measures are defined and reconciled in Non-GAAP Measures of this Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations.

⁽²⁾ Operating ratio is defined as operating expenses divided by revenues, further discussed in Results of Operations of this Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations.

⁽³⁾ Return on average shareholders' equity is defined as Net income divided by average shareholders' equity, averaged between the beginning and ending balance over a twelve month period, further discussed in Results of Operations of this Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations.

⁽⁴⁾ Long-term debt to Net income ratio is defined as long-term debt, including long-term debt maturing within one year, divided by Net income, further discussed in Liquidity and Capital Resources of this Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations.

Results of Operations

Three months ended September 30, 2022 compared to the three months ended September 30, 2021

Income

Operating income was \$937 million in the third quarter of 2022, an increase of \$163 million, or 21%, from \$774 million in the same period of 2021. This increase was primarily due to:

- higher freight volumes as measured by RTMs;
- the favourable impact of changes in fuel prices of \$84 million;
- higher freight rates; and
- lower casualty costs.

This increase was partially offset by lower crude liquidated damages, including customer volume commitments, due to the completion of customer contracts and cost inflation.

Adjusted operating income was \$955 million in the third quarter of 2022, an increase of \$166 million, or 21%, from \$789 million in the same period of 2021. This increase was due to the same factors discussed above for the increase in Operating income.

Net income was \$891 million in the third quarter of 2022, an increase of \$419 million, or 89%, from \$472 million in the same period of 2021. This increase was primarily due to:

- equity earnings of KCS of \$221 million;
- higher operating income of \$163 million;
- lower acquisition-related costs associated with the KCS acquisition of \$83 million in Other expense; and
- no FX translation loss on U.S. dollar-denominated debt and lease liabilities compared to \$46 million recognized in 2021.

This increase was partially offset by higher interest expense primarily due to debt issued related to the KCS acquisition and higher income tax expense as a result of higher taxable earnings.

Core adjusted income was \$945 million in the third quarter of 2022, an increase of \$353 million, or 60%, from \$592 million in the same period of 2021. This increase was due to equity earnings of KCS, excluding the impact of KCS purchase accounting of \$42 million and acquisition-related costs of \$12 million and higher Adjusted operating income of \$166 million.

This increase was partially offset by higher interest expense primarily due to debt issued related to the KCS acquisition and higher income tax expense due to higher taxable earnings.

Diluted Earnings per Share

Diluted EPS was \$0.96 in the third quarter of 2022, an increase of \$0.26, or 37%, from \$0.70 in the same period of 2021. This increase was due to higher Net income, partially offset by a higher average number of outstanding shares due to shares issued for the KCS acquisition.

Core adjusted diluted EPS was \$1.01 in the third quarter of 2022, an increase of \$0.13, or 15%, from \$0.88 in the same period of 2021. This increase was due to higher Core adjusted income, partially offset by a higher average number of outstanding shares due to shares issued for the KCS acquisition.

Operating Ratio

The Operating ratio provides the percentage of revenues used to operate the railway. A lower percentage normally indicates higher efficiency in the operation of the railway. The Company's Operating ratio was 59.5% in the third quarter of 2022, a 70 basis point improvement from 60.2% in the same period of 2021. This improvement was primarily due to:

- higher freight volumes as measured by RTMs;
- higher freight rates; and
- lower casualty costs.

This improvement was partially offset by:

- cost inflation;
- lower crude liquidated damages, including customer volume commitments, due to the completion of customer contracts; and
- a decrease in fuel efficiency of 2% due to higher volumes of Intermodal, which has lower horsepower utilization.

Adjusted operating ratio was 58.7% in the third quarter of 2022, a 70 basis point improvement from 59.4% in the same period of 2021. This improvement was primarily due to the same factors discussed above for the improvement in Operating ratio, except that Adjusted operating ratio excludes the acquisition-related costs associated with the KCS acquisition that were recognized in Purchased services and other in both periods.

Adjusted operating income, Core adjusted income, Core adjusted diluted EPS, and Adjusted Operating ratio are defined and reconciled in Non-GAAP Measures of this Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations.

Return on Average Shareholders' Equity and Adjusted Return on Invested Capital

Return on average shareholders' equity and Adjusted ROIC are measures used by management to determine how productively the Company uses its long-term capital investments, representing critical indicators of good operating and investment decisions. Adjusted ROIC is also an important performance criteria in determining certain elements of the Company's long-term incentive plan.

Return on average shareholders' equity was 11.8% for the twelve months ended September 30, 2022, a 2,480 basis point decrease compared to 36.6% for the twelve months ended September 30, 2021. This decrease was primarily due to higher average shareholders' equity driven by shares issued for the KCS acquisition and lower accumulated Net income.

Adjusted ROIC was 8.9% for the twelve months ended September 30, 2022, a 700 basis point decrease compared to 15.9% for the twelve months ended September 30, 2021. This decrease was primarily due to shares and higher average long-term debt issued for the KCS acquisition, partially offset by higher Adjusted income. Adjusted ROIC is a Non-GAAP measure, which is defined and reconciled from Return on average shareholders' equity, the most comparable measure calculated in accordance with GAAP, in Non-GAAP Measures of this Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations.

Nine months ended September 30, 2022 compared to the nine months ended September 30, 2021

Income

Operating income was \$2,340 million in the first nine months of 2022, a decrease of \$34 million, or 1%, from \$2,374 million in the same period of 2021. This decrease was primarily due to:

- lower volumes as measured by RTMs;
- lower crude liquidated damages, including customer volume commitments, due to the completion of customer contracts;
- cost inflation; and
- a gain on exchange of property and construction easements in Chicago of \$50 million in 2021.

This decrease was partially offset by:

- higher freight rates;
- the favourable impact of changes in fuel prices of \$137 million; and
- lower acquisition-related costs of \$90 million associated with the KCS acquisition that were recognized in Purchased services and other.

Adjusted operating income was \$2,397 million in the first nine months of 2022, a decrease of \$124 million, or 5%, from \$2,521 million in the same period of 2021. This decrease reflected the same factors discussed above for the decrease in Operating income, except that Adjusted operating income excludes the acquisition-related costs associated with the KCS acquisition that were recognized in Purchased services and other in both periods.

Net income was \$2,246 million in the first nine months of 2022, a decrease of \$74 million, or 3%, from \$2,320 million in the same period of 2021. This decrease was primarily due to:

- the \$845 million merger termination payment received in the second quarter of 2021 in connection with KCS's termination of the Agreement and Plan of Merger (the "Original Merger Agreement");
- higher interest expense primarily due to debt issued related to the KCS acquisition;
- no FX translation gain on U.S. dollar-denominated debt and lease liabilities compared to \$39 million recognized in 2021; and
- lower Operating income of \$34 million.

This decrease was partially offset by:

- equity earnings of KCS of \$627 million;
- lower acquisition-related costs associated with the KCS transaction of \$295 million in Other expense; and
- lower income tax expense due to lower taxable earnings.

Core adjusted income was \$2,455 million in the first nine months of 2022, an increase of \$574 million, or 31%, from \$1,881 million in the same period of 2021. This increase was due to equity earnings of KCS, excluding the impact of KCS purchase accounting of \$121 million and acquisition-related costs of \$39 million, and lower income tax expense due to lower taxable earnings, partially offset by higher interest expense primarily due to debt issued related to the KCS acquisition and lower Adjusted operating income of \$124 million.

Diluted Earnings per Share

Diluted EPS was \$2.41 in the first nine months of 2022, a decrease of \$1.05, or 30%, from \$3.46 in the same period of 2021. This decrease was due to a higher average number of outstanding shares driven by shares issued for the KCS acquisition and lower Net income.

Core adjusted diluted EPS was \$2.63 in the first nine months of 2022, a decrease of \$0.18, or 6%, from \$2.81 in the same period of 2021. This decrease was due to a higher average number of outstanding shares driven by shares issued for the KCS acquisition, partially offset by higher Core adjusted income.

Operating Ratio

The Company's Operating ratio was 63.2% in the first nine months of 2022, a 310 basis point increase from 60.1% in the same period of 2021. This increase was primarily due to:

- cost inflation;
- lower crude liquidated damages, including customer volume commitments, due to the completion of customer contracts; and
- the unfavourable impact of changes in fuel prices, net of fuel recoveries;
- lower volumes as measured by RTMs; and
- a gain on the exchange of property and construction easements in Chicago in 2021.

This increase was partially offset by higher freight rates and lower acquisition-related costs associated with the KCS acquisition that were recognized in Purchased services and other.

Adjusted operating ratio was 62.3% in the first nine months of 2022, a 460 basis point increase from 57.7% in the same period of 2021. This increase was due to the same factors as discussed above for the increase in operating ratio, except that Adjusted operating ratio excludes the acquisition-related costs associated with the KCS transaction that were recognized in Purchased services and other in both periods.

Adjusted operating income, Core adjusted income, Core adjusted diluted EPS, and Adjusted Operating ratio are defined and reconciled in Non-GAAP Measures of this Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations.

Impact of FX on Earnings

Fluctuations in FX affect the Company's results because U.S. dollar-denominated revenues and expenses are translated into Canadian dollars. U.S. dollar-denominated revenues and expenses increase (decrease) when the Canadian dollar weakens (strengthens) in relation to the U.S. dollar.

On October 21, 2022, the noon buying rate certified for customs purposes by the U.S. Federal Reserve Bank of New York was U.S. \$1.00 = \$1.37 Canadian dollar.

The following tables set forth, for the periods indicated, the average exchange rate between the Canadian dollar and the U.S. dollar expressed in the Canadian dollar equivalent of one U.S. dollar, the high and low exchange rates and period end exchange rates for the periods indicated. Average for year-end periods are calculated by using the exchange rates on the last day of each full month during the relevant period. These rates are based on the noon buying rate certified for customs purposes by the U.S. Federal Reserve Bank of New York set forth in the H.10 statistical release of the Federal Reserve Board.

Average exchange rates (Canadian/U.S. dollar)	2022	2021
For the three months ended - September 30	\$ 1.31	\$ 1.26
For the nine months ended - September 30	\$ 1.28	\$ 1.25

Ending exchange rates (Canadian/U.S. dollar)	2022	2021
Beginning of year - January 1	\$ 1.28	\$ 1.28
Beginning of quarter - July 1	\$ 1.29	\$ 1.24
End of quarter - September 30	\$ 1.38	\$ 1.27

	For the three months ended September 30		For the nine months ended September 30	
High/Low exchange rates (Canadian/U.S. dollar)	2022	2021	2022	2021
High	\$ 1.38	\$ 1.29	\$ 1.38	\$ 1.29
Low	\$ 1.27	\$ 1.23	\$ 1.25	\$ 1.20

In the third quarter of 2022, the impact of a stronger U.S. dollar resulted in an increase in total revenues of \$31 million, an increase in total operating expenses of \$17 million, and an increase in interest expense of \$2 million from the same period of 2021. In the first nine months of 2022, the impact of a stronger U.S. dollar resulted in an increase in total revenues of \$65 million, an increase in total operating expenses of \$34 million, and an increase in interest expense of \$6 million from the same period of 2021.

There was no material change in the impact of FX on total revenues and operating expenses during the third quarter and first nine months ended September 30, 2022 from the information provided in Part II, Item 7A. Quantitative and Qualitative Disclosure about Market Risk in CP's 2021 Annual Report on Form 10-K.

Impact of Fuel Price on Earnings

Fluctuations in fuel prices affect the Company's results because fuel expense constitutes a significant portion of CP's operating costs. As fuel prices fluctuate, there will be an impact on earnings due to the timing of recoveries from CP's fuel cost adjustment program. The following table indicates the average fuel price for the three and nine months ended September 30, 2022 and the comparative periods of 2021.

Average Fuel Price (U.S. dollars per U.S. gallon)	2022	2021
For the three months ended - September 30	\$ 4.33	\$ 2.70
For the nine months ended - September 30	\$ 4.13	\$ 2.59

The impact of fuel prices on earnings includes the impacts of carbon taxes, levies, and obligations under cap-and-trade programs recovered and paid, on revenues and expenses, respectively.

In the third quarter of 2022, the favourable impact of fuel prices on Operating income was \$84 million. Higher fuel prices, the favourable impact of the timing of recoveries under CP's fuel cost adjustment program, and increased carbon tax recoveries resulted in an increase in Total revenues of \$206 million. Higher fuel prices resulted in an increase in Total operating expenses of \$122 million from the same period of 2021.

In the first nine months of 2022, the favourable impact of fuel prices on Operating income was \$137 million. Higher fuel prices and increased carbon tax recoveries resulted in an increase in Total revenues of \$511 million. Higher fuel prices resulted in Total operating expenses of \$374 million from the same period of 2021.

Impact of Share Price on Earnings

Fluctuations in the Common Share price affect the Company's operating expenses because share-based liabilities are measured at fair value. The Company's Common Shares are listed on the Toronto Stock Exchange ("TSX") and the New York Stock Exchange ("NYSE") with ticker symbol "CP". The following tables indicate the opening and closing Common Share price on the TSX and the NYSE for the three and nine months ended September 30, 2022 and the comparative periods in 2021.

TSX (in Canadian dollars)	2022	2021
Opening Common Share price, as at January 1	\$ 90.98	\$ 88.31
Ending Common Share price, as at June 30	\$ 89.91	\$ 95.32
Ending Common Share price, as at September 30	\$ 92.21	\$ 82.71
Change in Common Share price for the three months ended September 30	\$ 2.30	\$ (12.61)
Change in Common Share price for the nine months ended September 30	\$ 1.23	\$ (5.60)
NYSE (in U.S. dollars)	2022	2021
Opening Common Share price, as at January 1	\$ 71.94	\$ 69.34
Ending Common Share price, as at June 30	\$ 69.84	\$ 76.91
Ending Common Share price, as at September 30	\$ 66.72	\$ 65.07
Change in Common Share price for the three months ended September 30	\$ (3.12)	\$ (11.84)
Change in Common Share price for the nine months ended September 30	\$ (5.22)	\$ (4.27)

In the third quarter of 2022, the impact of the change in Common Share prices resulted in a decrease in stock-based compensation expense of \$3 million compared to a decrease of \$27 million in the same period of 2021.

In the first nine months of 2022, the impact of the change in Common Share prices resulted in a decrease in stock-based compensation expense of \$6 million compared to a decrease of \$10 million in the same period of 2021.

The impact of share price on stock-based compensation is discussed further in Item 3. Quantitative and Qualitative Disclosures About Market Risk, Share Price Impact on Stock-Based Compensation.

Operating Revenues

The Company's revenues are primarily derived from transporting freight. Changes in freight volumes generally contribute to corresponding changes in freight revenues and certain variable expenses, such as fuel, equipment rents, and crew costs. Non-freight revenue is generated from leasing of certain assets; other arrangements, including contracts with passenger service operators and logistical services; and interline switching fees.

For the three months ended September 30	2022	2021	Total Change	% Change	FX Adjusted % Change ⁽¹⁾
Freight revenues (in millions)	\$ 2,264	\$ 1,896	\$ 368	19	17
Non-freight revenues (in millions)	48	46	2	4	4
Total revenues (in millions)	\$ 2,312	\$ 1,942	\$ 370	19	17
Carloads (in thousands)	730.0	665.0	65.0	10	N/A
Revenue ton-miles (in millions)	37,569	35,391	2,178	6	N/A
Freight revenue per carload (in dollars)	\$ 3,101	\$ 2,851	\$ 250	9	7
Freight revenue per revenue ton-mile (in cents)	6.03	5.36	0.67	13	11

⁽¹⁾ FX Adjusted % Change does not have any standardized meaning prescribed by GAAP and, therefore, is unlikely to be comparable to similar measures presented by other companies. FX Adjusted % Change is defined and reconciled in Non-GAAP Measures of this Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations.

Freight revenues were \$2,264 million in the third quarter of 2022, an increase of \$368 million, or 19%, from \$1,896 million in the same period of 2021. This increase was primarily due to increased freight revenue per RTM and higher volumes as measured by RTMs.

RTMs are defined as the movement of one revenue-producing ton of freight over a distance of one mile. RTMs measure the relative weight and distance of rail freight moved by the Company. RTMs for the third quarter of 2022 were 37,569 million, an increase of 2,178 million, or 6%, from 35,391 million in the same period of 2021. This increase was mainly attributable to higher volumes of Intermodal, Potash, and frac sand. This increase was partially offset by lower volumes of Coal and Canadian grain.

Freight revenue per RTM is defined as freight revenue per revenue-producing ton of freight over a distance of one mile. This is an indicator of yield. Freight revenue per RTM was 6.03 cents in the third quarter of 2022, an increase of 0.67 cents, or 13%, from 5.36 cents in the same period of 2021. This increase was primarily due to higher fuel surcharge revenue as a result of higher fuel prices of \$206 million, higher freight rates, and the favourable impact of the change in FX of \$31 million. This increase was partially offset by lower crude liquidated damages, including customer volume commitments, due to the completion of customer contracts.

Carloads are defined as revenue-generating shipments of containers and freight cars. Carloads were 730.0 thousand in the third quarter of 2022, an increase of 65.0 thousand, or 10%, from 665.0 thousand in the same period of 2021. This increase was primarily due to higher volumes of Intermodal, Potash, and frac sand. This increase was partially offset by lower volumes of crude.

Freight revenue per carload is defined as freight revenue per revenue-generating shipment of containers or freight cars. This is an indicator of yield. Freight revenue per carload was \$3,101 in the third quarter of 2022, an increase of \$250, or 9%, from \$2,851 in the same period of 2021. This increase was primarily due to higher fuel surcharge revenue as a result of higher fuel prices of \$206 million, higher freight rates, and the favourable impact of the change in FX of \$31 million. This increase was partially offset by lower crude liquidated damages, including customer volume commitments, due to the completion of customer contracts.

Non-freight revenues were \$48 million in the third quarter of 2022, an increase of \$2 million, or 4%, from \$46 million in the same period of 2021. This increase was primarily due to higher interline switching fees.

For the nine months ended September 30	2022	2021	Total Change	% Change	FX Adjusted % Change ⁽¹⁾
Freight revenues (in millions)	\$ 6,214	\$ 5,822	\$ 392	7	6
Non-freight revenues (in millions)	138	133	5	4	3
Total revenues (in millions)	\$ 6,352	\$ 5,955	\$ 397	7	6
Carloads (in thousands)	2,068.4	2,079.9	(11.5)	(1)	N/A
Revenue ton-miles (in millions)	109,355	113,725	(4,370)	(4)	N/A
Freight revenue per carload (in dollars)	\$ 3,004	\$ 2,799	\$ 205	7	6
Freight revenue per revenue ton-mile (in cents)	5.68	5.12	0.56	11	10

⁽¹⁾ FX Adjusted % Change does not have any standardized meaning prescribed by GAAP and, therefore, is unlikely to be comparable to similar measures presented by other companies. FX Adjusted % Change is defined and reconciled in Non-GAAP Measures of this Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations.

Freight revenues were \$6,214 million in the first nine months of 2022, an increase of \$392 million, or 7%, from \$5,822 million in the same period of 2021. This increase was primarily due to increased freight revenue per RTM, partially offset by lower volumes as measured by RTMs.

RTMs for the first nine months of 2022 were 109,355 million, a decrease of 4,370 million, or 4% from 113,725 million in the same period of 2021. This decrease was mainly attributable to lower volumes of Canadian grain, Coal, and Energy, chemicals and plastics. This decrease was partially offset by higher volumes of U.S. grain, Intermodal, Potash, and frac sand.

Freight revenue per RTM was 5.68 cents in the first nine months of 2022, an increase of 0.56 cents, or 11%, from 5.12 cents in the same period in 2021. This increase was primarily due to higher fuel surcharge revenue as a result of higher fuel prices of \$511 million, higher freight rates, and the favourable impact of the change in FX of \$64 million. This increase was partially offset by lower crude liquidated damages, including customer volume commitments, due to the completion of customer contracts.

Carloads were 2,068.4 thousand in the first nine months of 2022, a decrease of 11.5 thousand, or 1%, from 2,079.9 thousand in the same period of 2021. This decrease was primarily due to lower volumes of Canadian grain, Energy, chemicals and plastics, Coal, and Automotive. This decrease was partially offset by higher volumes of Intermodal, frac sand, and Potash.

Freight revenue per carload was \$3,004 in the first nine months of 2022, an increase of \$205, or 7%, from \$2,799 in the same period of 2021. This increase was primarily due to higher fuel surcharge revenue as a result of higher fuel prices of \$511 million, higher freight rates, and the favourable impact of the change in FX of \$64 million. This increase was partially offset by lower crude liquidated damages, including customer volume commitments, due to the completion of customer contracts.

Non-freight revenues were \$138 million in the first nine months of 2022, an increase of \$5 million, or 4%, from \$133 million in the same period of 2021. This increase was primarily due to higher revenue from passenger service operators and higher leasing revenue, partially offset by lower revenue from logistical services.

Fuel Cost Adjustment Program

Freight revenues include fuel surcharge revenues associated with CP's fuel cost adjustment program, which is designed to respond to fluctuations in fuel prices and help reduce exposure to changing fuel prices. The surcharge is applied to shippers through tariffs and by contract, within agreed-upon guidelines. This program includes recoveries of carbon taxes, levies, and obligations under cap-and-trade programs. Freight revenues included fuel surcharge revenues of \$393 million in the third quarter of 2022, an increase of \$245 million, or 166%, from \$148 million in the same period of 2021. This increase was primarily due to higher fuel prices, higher volumes, and increased carbon tax recoveries.

In the first nine months of 2022, fuel surcharge revenues were \$941 million, an increase of \$575 million, or 157%, from \$366 million in the same period of 2021. This increase was primarily due to higher fuel prices and increased carbon tax recoveries.

Lines of Business

Grain

For the three months ended September 30	2022	2021	Total Change	% Change	FX Adjusted % Change ⁽¹⁾
Freight revenues (in millions)	\$ 391	\$ 352	\$ 39	11	9
Carloads (in thousands)	87.6	89.0	(1.4)	(2)	N/A
Revenue ton-miles (in millions)	7,577	7,715	(138)	(2)	N/A
Freight revenue per carload (in dollars)	\$ 4,463	\$ 3,955	\$ 508	13	11
Freight revenue per revenue ton-mile (in cents)	5.16	4.56	0.60	13	11

⁽¹⁾ FX Adjusted % Change does not have any standardized meaning prescribed by GAAP and, therefore, is unlikely to be comparable to similar measures presented by other companies. FX Adjusted % Change is defined and reconciled in Non-GAAP Measures of this Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations.

Grain revenue was \$391 million in the third quarter of 2022, an increase of \$39 million, or 11%, from \$352 million in the same period of 2021. This increase was primarily due to increased freight revenue per RTM and higher volumes of U.S. corn from the U.S. Midwest to western Canada. This increase was partially offset by lower volumes of Canadian grain primarily to eastern Canada and Vancouver due to drought conditions that impacted the 2021-2022 Canadian crop size, as well as a delayed harvest for the 2022-2023 crop year. Freight revenue per RTM increased due to higher fuel surcharge revenue as a result of higher fuel prices, higher freight rates, and the favourable impact of the change in FX.

For the nine months ended September 30	2022	2021	Total Change	% Change	FX Adjusted % Change ⁽¹⁾
Freight revenues (in millions)	\$ 1,121	\$ 1,244	\$ (123)	(10)	(11)
Carloads (in thousands)	255.4	323.8	(68.4)	(21)	N/A
Revenue ton-miles (in millions)	23,335	28,564	(5,229)	(18)	N/A
Freight revenue per carload (in dollars)	\$ 4,389	\$ 3,842	\$ 547	14	13
Freight revenue per revenue ton-mile (in cents)	4.80	4.36	0.44	10	9

⁽¹⁾ FX Adjusted % Change does not have any standardized meaning prescribed by GAAP and, therefore, is unlikely to be comparable to similar measures presented by other companies. FX Adjusted % Change is defined and reconciled in Non-GAAP Measures of this Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations.

Grain revenue was \$1,121 million in the first nine months of 2022, a decrease of \$123 million, or 10%, from \$1,244 million in the same period of 2021. This decrease was primarily due to lower volumes of Canadian grain to Vancouver and eastern Canada due to drought conditions that impacted the 2021-2022 Canadian crop size. This decrease was partially offset by higher volumes of U.S. corn from the U.S. Midwest to western Canada and increased freight revenue per RTM. Freight revenue per RTM increased due to higher fuel surcharge revenue as a result of higher fuel prices, higher freight rates, and the favourable impact of the change in FX. RTMs decreased less than carloads due to moving higher volumes of U.S. corn from the U.S. Midwest to western Canada, which has a longer length of haul.

Coal

For the three months ended September 30	2022	2021	Total Change	% Change	FX Adjusted % Change ⁽¹⁾
Freight revenues (in millions)	\$ 156	\$ 158	\$ (2)	(1)	(2)
Carloads (in thousands)	71.6	73.4	(1.8)	(2)	N/A
Revenue ton-miles (in millions)	3,857	4,334	(477)	(11)	N/A
Freight revenue per carload (in dollars)	\$ 2,179	\$ 2,153	\$ 26	1	1
Freight revenue per revenue ton-mile (in cents)	4.04	3.65	0.39	11	10

⁽¹⁾ FX Adjusted % Change does not have any standardized meaning prescribed by GAAP and, therefore, is unlikely to be comparable to similar measures presented by other companies. FX Adjusted % Change is defined and reconciled in Non-GAAP Measures of this Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations.

Coal revenue was \$156 million in the third quarter of 2022, a decrease of \$2 million, or 1%, from \$158 million in the same period of 2021. This decrease was primarily due to lower volumes of Canadian coal to Vancouver as a result of production challenges at the mines. This decrease was partially offset by increased freight revenue per RTM and higher volumes of Canadian coal to Kamloops, B.C. Freight revenue per RTM increased due to higher fuel surcharge revenue as a result of higher fuel prices, higher freight rates, and the favourable impact of the change in FX. RTMs decreased more than carloads due to moving lower volumes

of Canadian coal to Vancouver, which has a longer length of haul, and moving higher volumes of Canadian coal to Kamloops, B.C., which has a shorter length of haul.

For the nine months ended September 30	2022	2021	Total Change	% Change	FX Adjusted % Change ⁽¹⁾
Freight revenues (in millions)	\$ 458	\$ 491	\$ (33)	(7)	(7)
Carloads (in thousands)	213.2	224.2	(11.0)	(5)	N/A
Revenue ton-miles (in millions)	12,037	14,451	(2,414)	(17)	N/A
Freight revenue per carload (in dollars)	\$ 2,148	\$ 2,190	\$ (42)	(2)	(2)
Freight revenue per revenue ton-mile (in cents)	3.80	3.40	0.40	12	12

⁽¹⁾ FX Adjusted % Change does not have any standardized meaning prescribed by GAAP and, therefore, is unlikely to be comparable to similar measures presented by other companies. FX Adjusted % Change is defined and reconciled in Non-GAAP Measures of this Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations.

Coal revenue was \$458 million in the first nine months of 2022, a decrease of \$33 million, or 7%, from \$491 million in the same period of 2021. This decrease was primarily due to lower volumes of Canadian coal to Vancouver as a result of production challenges at the mines, partially offset by higher volumes of Canadian coal to Kamloops, B.C. and increased freight revenue per RTM. Freight revenue per RTM increased due to higher fuel surcharge revenue as a result of higher fuel prices and higher freight rates. RTMs decreased more than carloads due to moving lower volumes of Canadian coal to Vancouver, which has a longer length of haul, and moving higher volumes of Canadian coal to Kamloops, B.C., which has a shorter length of haul.

Potash

For the three months ended September 30	2022	2021	Total Change	% Change	FX Adjusted % Change ⁽¹⁾
Freight revenues (in millions)	\$ 170	\$ 113	\$ 57	50	48
Carloads (in thousands)	45.7	35.8	9.9	28	N/A
Revenue ton-miles (in millions)	5,164	3,941	1,223	31	N/A
Freight revenue per carload (in dollars)	\$ 3,720	\$ 3,156	\$ 564	18	16
Freight revenue per revenue ton-mile (in cents)	3.29	2.87	0.42	15	13

⁽¹⁾ FX Adjusted % Change does not have any standardized meaning prescribed by GAAP and, therefore, is unlikely to be comparable to similar measures presented by other companies. FX Adjusted % Change is defined and reconciled in Non-GAAP Measures of this Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations.

Potash revenue was \$170 million in the third quarter of 2022, an increase of \$57 million, or 50%, from \$113 million in the same period of 2021. This increase was primarily due to higher volumes of export potash to Vancouver as a result of the prior year impacts of the B.C. wildfires, higher volumes of export potash to Thunder Bay, higher volumes of domestic potash as a result of the prior year impact of mine closures, and increased freight revenue per RTM. Freight revenue per RTM increased due to higher fuel surcharge revenue as a result of higher fuel prices, higher freight rates, and the favourable impact of the change in FX. RTMs increased more than carloads due to moving higher volumes of export potash to Vancouver, which has a longer length of haul.

For the nine months ended September 30	2022	2021	Total Change	% Change	FX Adjusted % Change ⁽¹⁾
Freight revenues (in millions)	\$ 445	\$ 348	\$ 97	28	26
Carloads (in thousands)	125.1	114.8	10.3	9	N/A
Revenue ton-miles (in millions)	14,297	12,705	1,592	13	N/A
Freight revenue per carload (in dollars)	\$ 3,557	\$ 3,031	\$ 526	17	16
Freight revenue per revenue ton-mile (in cents)	3.11	2.74	0.37	14	12

⁽¹⁾ FX Adjusted % Change does not have any standardized meaning prescribed by GAAP and, therefore, is unlikely to be comparable to similar measures presented by other companies. FX Adjusted % Change is defined and reconciled in Non-GAAP Measures of this Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations.

Potash revenue was \$445 million in the first nine months of 2022, an increase of \$97 million, or 28%, from \$348 million in the same period of 2021. This increase was primarily due to increased freight revenue per RTM and higher volumes of export potash to Vancouver, Thunder Bay, and the U.S. Pacific Northwest. This increase was partially offset by lower volumes of domestic potash. Freight revenue per RTM increased due to higher fuel surcharge revenue as a result of higher fuel prices, higher freight rates, and the favourable impact of the change in FX. RTMs increased more than carloads due to moving higher volumes of export potash, which has a longer length of haul.

Fertilizers and Sulphur

For the three months ended September 30	2022	2021	Total Change	% Change	FX Adjusted % Change ⁽¹⁾
Freight revenues (in millions)	\$ 81	\$ 72	\$ 9	13	11
Carloads (in thousands)	14.9	15.1	(0.2)	(1)	N/A
Revenue ton-miles (in millions)	1,138	1,141	(3)	—	N/A
Freight revenue per carload (in dollars)	\$ 5,436	\$ 4,768	\$ 668	14	12
Freight revenue per revenue ton-mile (in cents)	7.12	6.31	0.81	13	11

⁽¹⁾ FX Adjusted % Change does not have any standardized meaning prescribed by GAAP and, therefore, is unlikely to be comparable to similar measures presented by other companies. FX Adjusted % Change is defined and reconciled in Non-GAAP Measures of this Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations.

Fertilizers and sulphur revenue was \$81 million in the third quarter of 2022, an increase of \$9 million, or 13%, from \$72 million in the same period of 2021. This increase was primarily due to increased freight revenue per RTM and higher volumes of dry fertilizers, partially offset by lower volumes of sulphur and wet fertilizers. Freight revenue per RTM increased due to higher fuel surcharge revenue as a result of higher fuel prices, higher freight rates, and the favourable impact of the change in FX.

For the nine months ended September 30	2022	2021	Total Change	% Change	FX Adjusted % Change ⁽¹⁾
Freight revenues (in millions)	\$ 244	\$ 227	\$ 17	7	6
Carloads (in thousands)	46.8	48.4	(1.6)	(3)	N/A
Revenue ton-miles (in millions)	3,585	3,673	(88)	(2)	N/A
Freight revenue per carload (in dollars)	\$ 5,214	\$ 4,690	\$ 524	11	9
Freight revenue per revenue ton-mile (in cents)	6.81	6.18	0.63	10	8

⁽¹⁾ FX Adjusted % Change does not have any standardized meaning prescribed by GAAP and, therefore, is unlikely to be comparable to similar measures presented by other companies. FX Adjusted % Change is defined and reconciled in Non-GAAP Measures of this Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations.

Fertilizers and sulphur revenue was \$244 million in the first nine months of 2022, an increase of \$17 million, or 7%, from \$227 million in the same period of 2021. This increase was primarily due to increased freight revenue per RTM and higher volumes of dry fertilizers, partially offset by lower volumes of wet fertilizers and sulphur. Freight revenue per RTM increased due to higher fuel surcharge revenue as a result of higher fuel prices, higher freight rates, and the favourable impact of the change in FX.

Forest Products

For the three months ended September 30	2022	2021	Total Change	% Change	FX Adjusted % Change ⁽¹⁾
Freight revenues (in millions)	\$ 109	\$ 89	\$ 20	22	18
Carloads (in thousands)	18.5	18.7	(0.2)	(1)	N/A
Revenue ton-miles (in millions)	1,488	1,419	69	5	N/A
Freight revenue per carload (in dollars)	\$ 5,892	\$ 4,759	\$ 1,133	24	20
Freight revenue per revenue ton-mile (in cents)	7.33	6.27	1.06	17	13

⁽¹⁾ FX Adjusted % Change does not have any standardized meaning prescribed by GAAP and, therefore, is unlikely to be comparable to similar measures presented by other companies. FX Adjusted % Change is defined and reconciled in Non-GAAP Measures of this Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations.

Forest products revenue was \$109 million in the third quarter of 2022, an increase of \$20 million, or 22%, from \$89 million in the same period of 2021. This increase was primarily due to increased freight revenue per RTM and higher volumes of lumber, partially offset by lower volumes of paperboard. Freight revenue per RTM increased due to higher fuel surcharge revenue as a result of higher fuel prices, higher freight rates, and the favourable impact of the change in FX. RTMs increased while carloads decreased due to moving higher volumes of lumber from western Canada to the U.S. Midwest, which has a longer length of haul, and lower volumes of paperboard from Kansas City and Minneapolis to the U.S. Midwest, which have shorter lengths of haul.

For the nine months ended September 30	2022	2021	Total Change	% Change	FX Adjusted % Change ⁽¹⁾
Freight revenues (in millions)	\$ 299	\$ 259	\$ 40	15	13
Carloads (in thousands)	55.3	55.1	0.2	—	N/A
Revenue ton-miles (in millions)	4,366	4,290	76	2	N/A
Freight revenue per carload (in dollars)	\$ 5,407	\$ 4,701	\$ 706	15	12
Freight revenue per revenue ton-mile (in cents)	6.85	6.04	0.81	13	11

⁽¹⁾ FX Adjusted % Change does not have any standardized meaning prescribed by GAAP and, therefore, is unlikely to be comparable to similar measures presented by other companies. FX Adjusted % Change is defined and reconciled in Non-GAAP Measures of this Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations.

Forest products revenue was \$299 million in the first nine months of 2022, an increase of \$40 million, or 15%, from \$259 million in the same period of 2021. This increase was primarily due to increased freight revenue per RTM, higher volumes of newsprint from Saint John, N.B., and higher volumes of paper and panel products from B.C. This increase was partially offset by lower volumes of lumber. Freight revenue per RTM increased due to higher fuel surcharge revenue as a result of higher fuel prices, higher freight rates, and the favourable impact of the change in FX.

Energy, Chemicals and Plastics

For the three months ended September 30	2022	2021	Total Change	% Change	FX Adjusted % Change ⁽¹⁾
Freight revenues (in millions)	\$ 360	\$ 392	\$ (32)	(8)	(10)
Carloads (in thousands)	75.1	78.2	(3.1)	(4)	N/A
Revenue ton-miles (in millions)	6,286	6,330	(44)	(1)	N/A
Freight revenue per carload (in dollars)	\$ 4,794	\$ 5,013	\$ (219)	(4)	(6)
Freight revenue per revenue ton-mile (in cents)	5.73	6.19	(0.46)	(7)	(9)

⁽¹⁾ FX Adjusted % Change does not have any standardized meaning prescribed by GAAP and, therefore, is unlikely to be comparable to similar measures presented by other companies. FX Adjusted % Change is defined and reconciled in Non-GAAP Measures of this Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations.

Energy, chemicals and plastics revenue was \$360 million in the third quarter of 2022, a decrease of \$32 million, or 8%, from \$392 million in the same period of 2021. This decrease was primarily due to decreased freight revenue per RTM and lower volumes of conventional crude and petroleum products. This decrease was partially offset by higher fuel surcharge revenue as a result of higher fuel prices, higher volumes of DRUbit™ crude to Kansas City and ethylene glycol, the favourable impact of the change in FX, and higher freight rates. Freight revenue per RTM decreased primarily due to lower crude liquidated damages, including customer volume commitments, as a result of the completion of customer contracts. Carloads decreased more than RTMs due to moving lower volumes of conventional crude to Noyes, MN and Kingsgate, B.C., which have shorter lengths of haul, and higher volumes to DRUbit™ crude to Kansas City, which has a longer length of haul.

For the nine months ended September 30	2022	2021	Total Change	% Change	FX Adjusted % Change ⁽¹⁾
Freight revenues (in millions)	\$ 1,010	\$ 1,149	\$ (139)	(12)	(13)
Carloads (in thousands)	221.2	241.5	(20.3)	(8)	N/A
Revenue ton-miles (in millions)	18,221	19,328	(1,107)	(6)	N/A
Freight revenue per carload (in dollars)	\$ 4,566	\$ 4,758	\$ (192)	(4)	(5)
Freight revenue per revenue ton-mile (in cents)	5.54	5.94	(0.40)	(7)	(8)

⁽¹⁾ FX Adjusted % Change does not have any standardized meaning prescribed by GAAP and, therefore, is unlikely to be comparable to similar measures presented by other companies. FX Adjusted % Change is defined and reconciled in Non-GAAP Measures of this Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations.

Energy, chemicals and plastics revenue was \$1,010 million in the first nine months of 2022, a decrease of \$139 million, or 12%, from \$1,149 million in the same period of 2021. This decrease was primarily due to decreased freight revenue per RTM and lower volumes of conventional crude, petroleum products, and plastics. This decrease was partially offset by higher fuel surcharge revenue as a result of higher fuel prices, higher volumes of DRUbit™ crude to Kansas City, higher freight rates, and the favourable impact of the change in FX. Freight revenue per RTM decreased primarily due to lower crude liquidated damages, including customer volume commitments, as a result of the completion of customer contracts. Carloads decreased more than RTMs due to moving lower volumes of conventional crude to Noyes, MN and Kingsgate, B.C., which have shorter lengths of haul, and moving higher volumes of DRUbit™ crude to Kansas City, which has a longer length of haul.

Metals, Minerals and Consumer Products

For the three months ended September 30	2022	2021	Total Change	% Change	FX Adjusted % Change ⁽¹⁾
Freight revenues (in millions)	\$ 246	\$ 196	\$ 50	26	22
Carloads (in thousands)	66.0	60.4	5.6	9	N/A
Revenue ton-miles (in millions)	3,225	2,992	233	8	N/A
Freight revenue per carload (in dollars)	\$ 3,727	\$ 3,245	\$ 482	15	12
Freight revenue per revenue ton-mile (in cents)	7.63	6.55	1.08	16	14

⁽¹⁾ FX Adjusted % Change does not have any standardized meaning prescribed by GAAP and, therefore, is unlikely to be comparable to similar measures presented by other companies. FX Adjusted % Change is defined and reconciled in Non-GAAP Measures of this Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations.

Metals, minerals and consumer products revenue was \$246 million in the third quarter of 2022, an increase of \$50 million, or 26%, from \$196 million in the same period of 2021. This increase was primarily due to increased freight revenue per RTM and higher volumes of frac sand to the Bakken and Marcellus shale formations, partially offset by lower volumes of steel. Freight revenue per RTM increased due to higher fuel surcharge revenue as a result of higher fuel prices, higher freight rates, and the favourable impact of the change in FX.

For the nine months ended September 30	2022	2021	Total Change	% Change	FX Adjusted % Change ⁽¹⁾
Freight revenues (in millions)	\$ 655	\$ 535	\$ 120	22	20
Carloads (in thousands)	187.2	177.2	10.0	6	N/A
Revenue ton-miles (in millions)	8,852	8,328	524	6	N/A
Freight revenue per carload (in dollars)	\$ 3,499	\$ 3,019	\$ 480	16	14
Freight revenue per revenue ton-mile (in cents)	7.40	6.42	0.98	15	13

⁽¹⁾ FX Adjusted % Change does not have any standardized meaning prescribed by GAAP and, therefore, is unlikely to be comparable to similar measures presented by other companies. FX Adjusted % Change is defined and reconciled in Non-GAAP Measures of this Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations.

Metals, minerals and consumer products revenue was \$655 million in the first nine months of 2022, an increase of \$120 million, or 22%, from \$535 million in the same period of 2021. This increase was primarily due to increased freight revenue per RTM and higher volumes of frac sand to the Marcellus and Bakken shale formations, partially offset by lower volumes of steel. Freight revenue per RTM increased due to higher fuel surcharge revenue as a result of higher fuel prices, higher freight rates, and the favourable impact of the change in FX.

Automotive

For the three months ended September 30	2022	2021	Total Change	% Change	FX Adjusted % Change ⁽¹⁾
Freight revenues (in millions)	\$ 111	\$ 83	\$ 28	34	31
Carloads (in thousands)	25.1	23.3	1.8	8	N/A
Revenue ton-miles (in millions)	418	403	15	4	N/A
Freight revenue per carload (in dollars)	\$ 4,422	\$ 3,562	\$ 860	24	21
Freight revenue per revenue ton-mile (in cents)	26.56	20.60	5.96	29	26

⁽¹⁾ FX Adjusted % Change does not have any standardized meaning prescribed by GAAP and, therefore, is unlikely to be comparable to similar measures presented by other companies. FX Adjusted % Change is defined and reconciled in Non-GAAP Measures of this Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations.

Automotive revenue was \$111 million in the third quarter of 2022, an increase of \$28 million, or 34%, from \$83 million in the same period of 2021. This increase was primarily due to increased freight revenue per RTM and higher volumes moving from Ontario to Chicago and Kansas City. Freight revenue per RTM increased due to higher fuel surcharge revenue as a result of higher fuel prices, the favorable impact of the change in FX and higher freight rates. Carloads increased more than RTMs due to moving higher volumes from Ontario to Chicago and Kansas City, which have shorter lengths of haul.

For the nine months ended September 30	2022	2021	Total Change	% Change	FX Adjusted % Change ⁽¹⁾
Freight revenues (in millions)	\$ 322	\$ 289	\$ 33	11	10
Carloads (in thousands)	78.0	85.4	(7.4)	(9)	N/A
Revenue ton-miles (in millions)	1,308	1,378	(70)	(5)	N/A
Freight revenue per carload (in dollars)	\$ 4,128	\$ 3,384	\$ 744	22	20
Freight revenue per revenue ton-mile (in cents)	24.62	20.97	3.65	17	15

⁽¹⁾ FX Adjusted % Change does not have any standardized meaning prescribed by GAAP and, therefore, is unlikely to be comparable to similar measures presented by other companies. FX Adjusted % Change is defined and reconciled in Non-GAAP Measures of this Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations.

Automotive revenue was \$322 million in the first nine months of 2022, an increase of \$33 million, or 11%, from \$289 million in the same period of 2021. This increase was primarily due to increased freight revenue per RTM, partially offset by lower volumes as a result of global supply chain challenges. Freight revenue per RTM increased due to higher fuel surcharge revenue as a result of higher fuel prices, higher freight rates, and the favourable impact of the change in FX. Carloads decreased more than RTMs due to moving proportionately lower volumes within the U.S. Midwest and eastern Canada, which has a shorter length of haul.

Intermodal

For the three months ended September 30	2022	2021	Total Change	% Change	FX Adjusted % Change ⁽¹⁾
Freight revenues (in millions)	\$ 640	\$ 441	\$ 199	45	44
Carloads (in thousands)	325.5	271.1	54.4	20	N/A
Revenue ton-miles (in millions)	8,416	7,116	1,300	18	N/A
Freight revenue per carload (in dollars)	\$ 1,966	\$ 1,627	\$ 339	21	20
Freight revenue per revenue ton-mile (in cents)	7.60	6.20	1.40	23	22

⁽¹⁾ FX Adjusted % Change does not have any standardized meaning prescribed by GAAP and, therefore, is unlikely to be comparable to similar measures presented by other companies. FX Adjusted % Change is defined and reconciled in Non-GAAP Measures of this Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations.

Intermodal revenue was \$640 million in the third quarter of 2022, an increase of \$199 million, or 45%, from \$441 million in the same period of 2021. This increase was primarily due to increased freight revenue per RTM, higher international intermodal volumes to and from the Port of Vancouver and the Port of Saint John, onboarding new international intermodal customers, and higher domestic retail volumes. Freight revenue per RTM increased due to higher fuel surcharge revenue as a result of higher fuel prices, higher intermodal ancillary revenue, higher freight rates, and the favourable impact of the change in FX.

For the nine months ended September 30	2022	2021	Total Change	% Change	FX Adjusted % Change ⁽¹⁾
Freight revenues (in millions)	\$ 1,660	\$ 1,280	\$ 380	30	29
Carloads (in thousands)	886.2	809.5	76.7	9	N/A
Revenue ton-miles (in millions)	23,354	21,008	2,346	11	N/A
Freight revenue per carload (in dollars)	\$ 1,873	\$ 1,581	\$ 292	18	18
Freight revenue per revenue ton-mile (in cents)	7.11	6.09	1.02	17	16

⁽¹⁾ FX Adjusted % Change does not have any standardized meaning prescribed by GAAP and, therefore, is unlikely to be comparable to similar measures presented by other companies. FX Adjusted % Change is defined and reconciled in Non-GAAP Measures of this Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations.

Intermodal revenue was \$1,660 million in the first nine months of 2022, an increase of \$380 million, or 30%, from \$1,280 million in the same period of 2021. This increase was primarily due to increased freight revenue per RTM, higher volumes due to onboarding new international customers, higher international volumes to and from the Port of Saint John and the Port of Montreal, and higher domestic wholesale and retail volumes. Freight revenue per RTM increased due to higher fuel surcharge revenue as a result of higher fuel prices, higher intermodal ancillary revenue, higher freight rates, and the favourable impact of the change in FX.

Operating Expenses

For the three months ended September 30
(in millions of Canadian dollars)

	2022	2021	Total Change	% Change	FX Adjusted % Change ⁽¹⁾
Compensation and benefits	\$ 393	\$ 381	\$ 12	3	2
Fuel	358	199	159	80	75
Materials	66	51	15	29	29
Equipment rents	33	31	2	6	3
Depreciation and amortization	213	203	10	5	4
Purchased services and other	312	303	9	3	2
Total operating expenses	\$ 1,375	\$ 1,168	\$ 207	18	16

⁽¹⁾ FX Adjusted % Change does not have any standardized meaning prescribed by GAAP and, therefore, is unlikely to be comparable to similar measures presented by other companies. FX Adjusted % Change is defined and reconciled in Non-GAAP Measures of this Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations.

Operating expenses were \$1,375 million in the third quarter of 2022, an increase of \$207 million, or 18%, from \$1,168 million in the same period of 2021. This increase was primarily due to:

- the unfavourable impact of changes in fuel prices of \$122 million;
- cost inflation;
- higher volume variable expenses as a result of an increase in workload as measured by GTMs;
- the unfavourable impact of the change in FX of \$17 million; and
- a decrease in fuel efficiency of 2% due to higher volumes of Intermodal, which has lower horsepower utilization.

This increase was partially offset by lower casualty costs incurred in 2022.

For the nine months ended September 30
(in millions of Canadian dollars)

	2022	2021	Total Change	% Change	FX Adjusted % Change ⁽¹⁾
Compensation and benefits	\$ 1,154	\$ 1,165	\$ (11)	(1)	(2)
Fuel	1,001	623	378	61	58
Materials	191	164	27	16	16
Equipment rents	97	92	5	5	3
Depreciation and amortization	634	605	29	5	4
Purchased services and other	935	932	3	—	—
Total operating expenses	\$ 4,012	\$ 3,581	\$ 431	12	11

⁽¹⁾ FX Adjusted % Change does not have any standardized meaning prescribed by GAAP and, therefore, is unlikely to be comparable to similar measures presented by other companies. FX Adjusted % Change is defined and reconciled in Non-GAAP Measures of this Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations.

Operating expenses were \$4,012 million in the first nine months of 2022, an increase of \$431 million, or 12%, from \$3,581 million in the same period of 2021. This increase was primarily due to:

- the unfavourable impact of changes in fuel prices of \$374 million;
- cost inflation;
- a gain on the exchange of property and construction easements in Chicago of \$50 million in 2021;
- a decrease in efficiencies primarily due to harsh winter weather conditions in the first quarter of 2022; and
- the unfavourable impact of the changes in FX of \$34 million.

This increase was partially offset by lower acquisition-related costs of \$90 million associated with the KCS acquisition that were recognized in Purchased services and other and lower volume variable expenses as a result of a decrease in workload as measured by GTMs.

Compensation and Benefits

Compensation and benefits expense includes employee wages, salaries, fringe benefits, and stock-based compensation. Compensation and benefits expense was \$393 million in the third quarter of 2022, an increase of \$12 million, or 3%, from \$381 million in the same period of 2021.

This increase was primarily due to:

- impact of wage and benefit inflation;
- increased volume variable expense as a result of an increase in workload as measured by GTMs; and

- increased new hire training costs.

This increase was partially offset by:

- lower stock-based compensation of \$5 million;
- lower defined benefit pension current service cost of \$5 million; and
- decreased incentive compensation.

Compensation and benefits expense was \$1,154 million in the first nine months of 2022, a decrease of \$11 million, or 1%, from \$1,165 million in the same period of 2021. This decrease was primarily due to:

- decreased incentive compensation;
- lower volume variable expense as a result of a decrease in workload as measured by GTMs; and
- lower defined benefit pension current service cost of \$17 million.

This decrease was partially offset by the impact of wage and benefit inflation and unfavourable impact of the change in FX of \$8 million.

Fuel

Fuel expense consists mainly of fuel used by locomotives and includes provincial, state, and federal fuel taxes. Fuel expense was \$358 million in the third quarter of 2022, an increase of \$159 million, or 80%, from \$199 million in the same period of 2021. This increase was primarily due to:

- the unfavourable impact of higher fuel prices of \$122 million;
- an increase in workload, as measured by GTMs;
- a decrease in fuel efficiency of 2% due to higher volumes of Intermodal, which has lower horsepower utilization; and
- the unfavourable impact of the change in FX of \$6 million.

Fuel expense was \$1,001 million in the first nine months of 2022, an increase of \$378 million, or 61%, from \$623 million in the same period of 2021. This increase was primarily due to:

- the unfavourable impact of higher fuel prices of \$374 million;
- a decrease in fuel efficiency of 2% due to lower locomotive productivity and harsher winter operating conditions in the first quarter of 2022, and lower volumes of Canadian grain, which has higher horsepower utilization; and
- the unfavourable impact of the change in FX of \$12 million.

This increase was partially offset by a decrease in workload, as measured by GTMs.

Materials

Materials expense includes the cost of materials used for the maintenance of track, locomotives, freight cars, and buildings, as well as software sustainment. Materials expense was \$66 million in the third quarter of 2022, an increase of \$15 million, or 29%, from \$51 million in the same period of 2021. This increase was primarily due to the unfavourable impact of inflation including higher non-locomotive fuel prices, and higher spending on locomotive and track maintenance.

Materials expense was \$191 million in the first nine months of 2022, an increase of \$27 million, or 16%, from \$164 million in the same period of 2021. This increase was primarily due to:

- the unfavourable impact of inflation including higher non-locomotive fuel prices;
- an increase in non-locomotive fuel consumption; and
- higher spending on track maintenance.

Equipment Rents

Equipment rents expense includes the cost associated with using other railways' freight cars, intermodal equipment, and locomotives, net of rental income received from other railways for the use of CP's equipment. Equipment rents expense was \$33 million in the third quarter of 2022, an increase of \$2 million, or 6%, from \$31 million in the same period of 2021. This increase was primarily due to greater usage of pooled freight cars and lower price incentives received on Intermodal cars.

This increase was partially offset by higher container rents in 2022 and higher receipts for CP rolling stock used by other railways.

Equipment rents expense was \$97 million in the first nine months of 2022, an increase of \$5 million, or 5%, from \$92 million in the same period of 2021. This increase was primarily due to:

- lower price incentives received on Intermodal cars;
- greater usage of pooled freight cars; and
- slower cycle times.

This increase was partially offset by higher receipts for CP rolling stock used by other railways and higher container rents in 2022.

Depreciation and Amortization

Depreciation and amortization expense represents the charge associated with the use of track and roadway, buildings, rolling stock, information systems, and other depreciable assets. Depreciation and amortization was \$213 million and \$634 million for the three and nine months ended September 30, 2022, an increase of \$10 million or 5%, and an increase of \$29 million or 5%, respectively, compared to the same periods of 2021. These increases were primarily due to a higher depreciable asset base as well as the unfavourable impact of the change in FX of \$2 million.

Purchased Services and Other

For the three months ended September 30 (in millions of Canadian dollars)	2022	2021	Total Change	% Change
Support and facilities	\$ 83	\$ 80	\$ 3	4
Track and operations	68	66	2	3
Intermodal	59	50	9	18
Equipment	26	26	—	—
Casualty	24	42	(18)	(43)
Property taxes	32	30	2	7
Other	23	17	6	35
Land sales	(3)	(8)	5	(63)
Total Purchased services and other	\$ 312	\$ 303	\$ 9	3

Purchased services and other expense encompasses a wide range of third-party costs, including expenses for joint facilities, personal injuries and damage claims, environmental remediation, property taxes, contractor and consulting fees, insurance, and gains on land sales. Purchased services and other expense was \$312 million in the third quarter of 2022, an increase of \$9 million, or 3%, from \$303 million in the same period of 2021. This increase was primarily due to:

- cost inflation;
- higher expenses due to higher events and sponsorship costs;
- lower gains on land sales; and
- the unfavorable impact of the change in FX of \$4 million.

This increase was partially offset by:

- lower expenses primarily due to the reduced severity of casualty incidents;
- expenses due to the wildfire response in British Columbia in 2021, reported in Support and facilities, and Track and operations; and
- lower legal expenses compared to the same period in 2021, reported in Support and facilities.

For the nine months ended September 30 (in millions of Canadian dollars)	2022	2021	Total Change	% Change
Support and facilities	\$ 249	\$ 214	\$ 35	16
Track and operations	217	204	13	6
Intermodal	167	154	13	8
Equipment	82	80	2	3
Casualty	74	101	(27)	(27)
Property taxes	103	98	5	5
Other	56	148	(92)	(62)
Land sales	(13)	(67)	54	(81)
Total Purchased services and other	\$ 935	\$ 932	\$ 3	—

Purchased services and other expense was \$935 million in the first nine months of 2022, an increase of \$3 million from \$932 million in the same period of 2021. This increase was primarily due to:

- a gain on the exchange of property and construction easements in Chicago of \$50 million in 2021;
- cost inflation;
- higher expenses primarily due to higher events and sponsorship costs;

- increased purchased services due to harsher weather conditions, reported in Track and operations;
- a \$7 million arbitration settlement in 2021, reported in Track and operations;
- the unfavorable impact of the change in FX of \$7 million; and
- higher intermodal expenses related to pickup and delivery, reported in Intermodal.

This increase was partially offset by:

- lower acquisition-related costs of \$90 million associated with the KCS acquisition, reported in Other;
- lower expenses primarily due to the reduced severity of casualty incidents; and
- lower expenses from lower volumes, reported in Intermodal, and Track and operations.

Other Income Statement Items

Equity Earnings of Kansas City Southern

In the third quarter of 2022, the Company recognized \$221 million (U.S. \$169 million) equity income of KCS in the Company's Interim Consolidated Statements of Income. This amount is net of amortization of basis differences of \$42 million (U.S. \$32 million) associated with KCS purchase accounting and net of acquisition-related costs incurred by KCS. No similar equity income existed in the same period of 2021 as CP acquired KCS into trust on December 14, 2021.

On a historical basis, without any effect of purchase accounting, KCS recorded net income attributable to controlling interests of \$263 million (U.S. \$201 million) in the third quarter of 2022, a favourable change of \$66 million (U.S. \$45 million), or 34%, from a \$197 million (U.S. \$156 million) net income. This change was primarily due to higher revenues of \$180 million (U.S. \$138 million) and lower acquisition-related costs, partially offset by higher fuel cost of \$56 million (U.S. \$43 million). Acquisition-related costs (net of tax) incurred by KCS in the third quarter of 2022 were \$12 million (U.S. \$10 million), a decrease of \$23 million (U.S. \$18 million), or 66%, from \$35 million (U.S. \$28 million) in the same period of 2021. These values have been translated at the average FX rate of \$1.31 and \$1.26 CAD per USD for the three months ended September 30, 2022 and 2021, respectively.

In the first nine months of 2022, the Company recognized \$627 million (U.S. \$489 million) equity income of KCS in the Company's Interim Consolidated Statements of Income. This amount is net of amortization of basis differences of \$121 million (U.S. \$94 million) associated with KCS purchase accounting and net of acquisition-related costs incurred by KCS.

On a historical basis, without any effect of purchase accounting, KCS recorded net income attributable to controlling interests of \$748 million (U.S. \$583 million) in the first nine months of 2022, a favourable change of \$835 million (U.S. \$653 million), or 961%, from a \$87 million (U.S. \$70 million) net loss. This change was primarily due to lower acquisition-related costs, including the merger termination fee paid to CP in the same period of 2021, and higher revenues of \$393 million (U.S. \$306 million), partially offset by higher fuel cost of \$145 million (U.S. \$113 million). Acquisition-related costs (net of tax) incurred by KCS in the first nine months of 2022 were \$39 million (U.S. \$30 million), a decrease of \$727 million (U.S. \$583 million), or 95%, from \$766 million (U.S. \$613 million) in the same period of 2021. These values have been translated at the average FX rate of \$1.28 and \$1.25 CAD per USD for the first nine months of 2022 and 2021, respectively.

Other Expense

Other expense consists of gains and losses from the change in FX on debt and lease liabilities and working capital, costs related to financing, shareholder costs, equity income, and other non-operating expenditures. Other expense was \$7 million in the third quarter of 2022, a decrease of \$117 million, or 94%, compared to other expense of \$124 million in the same period of 2021. This decrease was primarily due to acquisition-related costs of \$83 million in 2021 which included losses on interest rate hedges of \$111 million, bridge facility fees of \$2 million, and gains on FX hedges of \$30 million. In addition, an FX translation loss of \$46 million was incurred in the third quarter of 2021 compared to nil in the same period of 2022 as a result of the designation of all U.S. dollar-denominated debt and lease liabilities as a net investment hedge following the KCS acquisition in the fourth quarter of 2021. This decrease was partially offset by higher FX losses on cash and working capital of \$9 million in the third quarter of 2022 as compared to the same period in 2021.

Other expense was \$13 million in the first nine months of 2022, a decrease of \$240 million, or 95%, from \$253 million in the same period of 2021. This decrease was primarily due to acquisition-related costs of \$295 million in 2021 which included losses on interest rate hedges of \$261 million, bridge facility and backstop revolver fees of \$47 million, and gains on FX hedges of \$13 million. This decrease was partially offset by an FX translation gain of \$39 million in the first nine months of 2021 compared to nil in the same period of 2022 as a result of the designation of all U.S. dollar-denominated debt and lease liabilities as discussed above, and higher FX losses on cash and working capital of \$10 million in the nine months ended September 30, 2022 as compared to the same period in 2021.

FX translation gains and losses on debt and lease liabilities are discussed further in Non-GAAP Measures of this Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations.

Merger Termination Fee

On May 21, 2021, KCS terminated the Original Merger Agreement with CP to enter into a definitive agreement with Canadian National Railway. At the same time and in accordance with the terms of the Original Merger Agreement, KCS paid CP a termination fee of \$845 million (U.S. \$700 million). This amount is reported as "Merger termination fee" in the Company's Interim Consolidated Statements of Income for the nine months ended September 30, 2021. No similar items were received in the same period of 2022.

Other Components of Net Periodic Benefit Recovery

Other components of net periodic benefit recovery is related to the Company's pension and other post-retirement and post-employment benefit plans. It includes interest cost on benefit obligations, expected return on fund assets, recognized net actuarial losses, and amortization of prior service costs. Other components of net periodic benefit recovery was \$102 million and \$304 million for the three and nine months ended September 30, 2022, an increase of \$7 million or 7%, and an increase of \$18 million or 6%, respectively, compared to the same periods of 2021. These increases were primarily due to decreases in recognized net actuarial losses of \$14 million and \$42 million, respectively, partially offset by increases in the interest cost on benefit obligations of \$7 million and \$23 million, respectively.

Net Interest Expense

Net interest expense includes interest on long-term debt and finance leases. Net interest expense was \$166 million in the third quarter of 2022, an increase of \$62 million, or 60%, from \$104 million in the same period of 2021. This increase was primarily due to interest of \$65 million incurred on long-term debt and the U.S. \$500 million term facility issued for the KCS acquisition, and higher interest on commercial paper of \$5 million as a result of higher interest rates along with a higher average outstanding balance, partially offset by the favourable impact of \$9 million related to repayment of maturing long-term debt.

Net interest expense was \$486 million in the first nine months of 2022, an increase of \$171 million, or 54%, from \$315 million in the same period of 2021. This increase was primarily due to interest of \$192 million incurred on long-term debt and the U.S. \$500 million term facility issued for the KCS acquisition, and higher interest on commercial paper of \$7 million as a result of higher interest rates along with a higher average outstanding balance, partially offset by the favourable impacts of \$25 million related to repayment of maturing long-term debt and \$13 million as a result of a lower effective interest rates.

Income Tax Expense

Income tax expense was \$196 million in the third quarter of 2022, an increase of \$27 million, or 16%, from \$169 million in the same period of 2021. This increase was primarily due to higher taxable earnings and lower tax recoveries on acquisition-related costs associated with the KCS acquisition.

This increase was partially offset by:

- a deferred tax recovery of \$12 million on the revaluation of deferred income tax balances as at January 1, 2022 as a result of an Iowa state corporate tax rate decrease enacted during the third quarter of 2022;
- an outside basis deferred tax recovery arising from the difference between the carrying amount of CP's investment in KCS for financial reporting and the underlying tax basis of this investment; and
- a lower effective tax rate.

Income tax expense was \$526 million in the first nine months of 2022, a decrease of \$91 million, or 15%, from \$617 million in the same period of 2021. This decrease was primarily due to:

- higher taxable earnings in 2021 due to the merger termination payment received in connection with KCS's termination of the Original Merger Agreement of \$845 million (U.S. \$700 million);
- the deferred tax recovery described above; and
- a lower effective tax rate.

This decrease was partially offset by lower tax recoveries on acquisition-related costs associated with the KCS acquisition, and an outside basis deferred tax expense arising from the difference between the carrying amount of CP's investment in KCS for financial reporting and the underlying tax basis of this investment.

The effective tax rate in the third quarter and first nine months of 2022, including equity earnings of KCS and other discrete items, was 18.01% and 18.97%, respectively, compared to 26.36% and 21.00% in the same periods of 2021. The effective tax rate in the third quarter and first nine months of 2022, excluding discrete items, was 24.25% compared to 24.60% for the same periods in 2021.

The Company expects an annualized effective tax rate in 2022 between 24.00% and 24.50%, which excludes equity earnings of KCS and other discrete items. The Company's 2022 outlook for its annualized effective income tax rate is based on certain assumptions about events and developments that may or may not materialize or that may be offset entirely or partially by new events and developments. This is discussed further in Item 1A. Risk Factors of CP's 2021 Annual Report on Form 10-K.

Liquidity and Capital Resources

The Company's primary sources of liquidity include its Cash and cash equivalents, commercial paper program, bilateral letter of credit facilities, and revolving credit facility. The Company believes that these sources as well as cash flow generated through operations and existing debt capacity are adequate to meet its short-term and long-term cash requirements. The Company is not aware of any material trends, events, or uncertainties that would create any deficiencies in the Company's liquidity.

As at September 30, 2022, the Company had \$138 million of Cash and cash equivalents compared to \$69 million at December 31, 2021.

As at September 30, 2022, the Company's existing revolving credit facility was undrawn, unchanged from December 31, 2021, from a total available amount of U.S. \$1.3 billion. During the three and nine months ended September 30, 2022, the Company repaid in full the outstanding borrowings of U.S. \$400 million (\$504 million) and U.S. \$500 million (\$636 million) respectively on the U.S. \$500 million unsecured non-revolving term credit facility (the "term facility"). The facility was automatically terminated on September 15, 2022 following the final principal repayment. The revolving credit facility agreement requires the Company to maintain a financial covenant. As at September 30, 2022, the Company was in compliance with all terms and conditions of the credit facility arrangements and satisfied the financial covenant.

The Company has a commercial paper program that enables it to issue commercial paper up to a maximum aggregate principal amount of U.S. \$1.0 billion in the form of unsecured promissory notes. This commercial paper program is backed by the revolving credit facility. As at September 30, 2022, total commercial paper borrowings were U.S. \$525 million, compared to U.S. \$265 million as at December 31, 2021.

As at September 30, 2022, under its bilateral letter of credit facilities, the Company had letters of credit drawn of \$75 million, compared to \$58 million as at December 31, 2021, from a total available amount of \$300 million. Under the bilateral letter of credit facilities, the Company has the option to post collateral in the form of Cash or cash equivalents, equal at least to the face value of the letter of credit issued. As at September 30, 2022 and December 31, 2021, the Company did not have any collateral posted on its bilateral letter of credit facilities.

Contractual Commitments

The Company's material cash requirements from known contractual obligations and commitments to make future payments primarily consist of long-term debt and related interest, future capital commitments, supplier purchases, leases, and other long term liabilities. Debt and finance leases, interest obligations related to debt and finance leases, and letters of credit amount to \$1,237 million, \$656 million and \$75 million within the next 12 months, respectively, with the remaining amount committed thereafter of \$19,513 million, \$14,044 million and nil, respectively. Future capital commitments amount to \$356 million within the next 12 months, with the remaining amount committed thereafter of \$144 million.

Supplier purchase agreements, operating leases, and other long-term liabilities amount to \$943 million, \$74 million, and \$56 million within the next 12 months, respectively, with the remaining amount committed thereafter of \$548 million, \$231 million and \$402 million, respectively. Other long-term liabilities include expected cash payments for environmental remediation, post-retirement benefits, worker's compensation benefits, long-term disability benefits, pension benefit payments for the Company's non-registered supplemental pension plan, and certain other long-term liabilities. Pension payments are discussed further in Critical Accounting Estimates of this Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations.

Guarantees

The Company accrues for all guarantees that it expects to pay. As at September 30, 2022, these accruals amounted to \$5 million (December 31, 2021 - \$14 million).

Operating Activities

Cash provided by operating activities was \$1,102 million in the third quarter of 2022, an increase of \$554 million, or 101%, compared to \$548 million in the same period of 2021. This increase was primarily due to a dividend received of \$259 million from KCS in the third quarter of 2022, the favourable change in working capital, and an increase in cash generating income compared to the same period of 2021.

Cash provided by operating activities was \$2,422 million in the first nine months of 2022, a decrease of \$662 million, or 21%, compared to \$3,084 million in the same period of 2021. The decrease for the first nine months was primarily due to lower cash generating income as a result of the \$845 million merger termination fee received from KCS in the second quarter of 2021 and an unfavourable change in working capital driven by acquisition-related payables in 2021, offset by dividends of \$593 million received from KCS in 2022.

Investing Activities

Cash used in investing activities was \$410 million in the third quarter of 2022, a decrease of \$1,719 million, or 81%, compared to \$2,129 million in the same period of 2021. This decrease was primarily due to merger payments of \$1,773 million (U.S. \$1,400 million) made to KCS in September 2021, partially offset by higher capital additions.

Cash used in investing activities was \$978 million in the first nine months of 2022, a decrease of \$1,842 million, or 65%, compared to \$2,820 million in the same period of 2021. The decrease for the first nine months of 2022 compared to the same periods of 2021 was primarily due to merger payments of \$1,773 million (U.S.\$1,400) made to KCS in September 2021 and lower capital additions, partially offset by lower proceeds from the sale of properties and other assets.

Free Cash

CP generated positive Free cash of \$721 million in the third quarter of 2022, an increase of \$518 million, or 255%, from \$203 million in the same period of 2021. The increase was due to an increase in Cash provided by operating activities, partially offset by higher capital additions during the third quarter of 2022 compared to the same period of 2021. For the first nine months of 2022, CP generated positive Free cash of \$1,514 million, an increase of \$269 million, or 22%, from \$1,245 million in the same period of 2021. The increase was due to an increase in Cash provided by operating activities and lower capital additions during the first nine months of 2022 compared to the same periods of 2021.

Free cash is affected by seasonal fluctuations and by other factors including the size of the Company's capital programs. Free cash is defined and reconciled in Non-GAAP Measures of this Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations.

Financing Activities

Cash used in financing activities was \$721 million in the third quarter of 2022, a change of \$1,623 million, or 180%, compared to cash provided by financing activities of \$902 million in the same period of 2021. This change was primarily due to the net repayment of commercial paper of \$42 million in the third quarter of 2022 compared to a net issuance of \$713 million in the third quarter of 2021, principal repayments of \$504 million (U.S. \$400 million) on a term loan during the third quarter of 2022 compared to borrowings under term loan of \$633 million (U.S. \$500 million) in the third quarter of 2021, and higher dividends paid as a result of a higher number of shares outstanding associated with the shares issued to acquire KCS in the fourth quarter of 2021. This change was partially offset by repayments on long term debt of \$7 million during the three months ended September 30, 2022 compared to \$318 million during the same period of 2021.

Cash used in financing activities was \$1,409 million in the first nine months of 2022, an increase of \$1,215 million, or 626%, compared to \$194 million in the same period of 2021. This increase was primarily due to principal repayments of \$636 million (U.S. \$500 million) on a term loan compared to borrowings under term loan of \$633 million (U.S. \$500 million) in 2021, principal repayments of \$125 million of the Company's 5.100% 10-year Medium Term Notes and \$313 million (U.S. \$250 million) of the Company's 4.500% 10-year Notes at maturity in January 2022, principal repayment of \$97 million (U.S. \$76 million) of the Company's 6.99% Finance lease at maturity in March 2022, and higher dividends paid as a result of a higher number of shares outstanding associated with the shares issued to acquire KCS in the fourth quarter of 2021. This increase was partially offset by a net issuance of commercial paper of \$298 million during the nine months ended September 30, 2022 compared to net repayments of \$66 million during the first nine months of 2021, and repayment of long-term debt of \$349 million during the first nine months of 2021.

Credit Measures

Credit ratings provide information relating to the Company's operations and liquidity, and affect the Company's ability to obtain short-term and long-term financing and/or the cost of such financing.

A strong investment grade credit rating is an important measure in assessing the Company's ability to maintain access to public financing and to minimize the cost of capital. It also affects the ability of the Company to engage in certain collateralized business activities on a cost-effective basis.

Credit ratings and outlooks are based on the rating agencies' methodologies and can change from time to time to reflect their views of CP. Their views are affected by numerous factors including, but not limited to, the Company's financial position and liquidity along with external factors beyond the Company's control.

As at September 30, 2022, CP's credit ratings from Standard & Poor's Rating Services ("Standard & Poor's") and Moody's Investor Service ("Moody's") remain unchanged from December 31, 2021.

Credit ratings as at September 30, 2022⁽¹⁾

Long-term debt		Outlook
Standard & Poor's		
Long-term corporate credit	BBB+	stable
Senior secured debt	A	stable
Senior unsecured debt	BBB+	stable
Moody's		
Senior unsecured debt	Baa2	stable
Commercial paper program		
Standard & Poor's	A-2	N/A
Moody's	P-2	N/A

⁽¹⁾ Credit ratings are not recommendations to purchase, hold or sell securities and do not address the market price or suitability of a specific security for a particular investor. Credit ratings are based on the rating agencies' methodologies and may be subject to revision or withdrawal at any time by the rating agencies.

Financial Ratios

The Long-term debt to Net income ratio for the twelve months ended September 30, 2022 and September 30, 2021 was 7.4 and 3.2, respectively. This increase was primarily due to a higher debt balance in connection with the KCS acquisition and lower net income for the twelve months ended September 30, 2022.

The Adjusted net debt to Adjusted earnings before interest, tax, depreciation and amortization ("EBITDA") ratio for the twelve months ended September 30, 2022 and September 30, 2021 was 4.3 and 2.4, respectively. This increase was primarily due to a higher debt balance in connection with the KCS acquisition, partially offset by higher Adjusted EBITDA. The Adjusted net debt to Adjusted EBITDA ratio is a Non-GAAP measure, which is defined and reconciled from the Long-term debt to Net income ratio, the most comparable measure calculated in accordance with GAAP, in Non-GAAP Measures of this Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations.

The Pro-forma Adjusted Net Debt to Pro-forma Adjusted EBITDA ratio for the trailing twelve month ended September 30, 2022 was 4.1. This increase from the Adjusted net debt to Adjusted EBITDA ratio in the same period of 2021 was primarily due to a higher debt balance in connection with the KCS acquisition, partially offset by higher Pro-forma adjusted EBITDA. Beginning in the first quarter of 2022, CP added disclosure of Pro-forma Adjusted Net Debt to Pro-forma Adjusted EBITDA Ratio to better align with CP's debt covenant calculation, which takes into account the trailing twelve month adjusted EBITDA of KCS as well as KCS's outstanding debt. Please see Non-GAAP Measures of this Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations for further discussion. Over the long term, CP targets an Adjusted net debt to Adjusted EBITDA ratio of 2.0 to 2.5.

Although CP has provided a target Non-GAAP measure (Adjusted Net Debt to Adjusted EBITDA ratio), management is unable to reconcile, without unreasonable efforts, the target Adjusted Net Debt to Adjusted EBITDA ratio to the most comparable GAAP measure (Long-term debt to Net income ratio), due to unknown variables and uncertainty related to future results. These unknown variables may include unpredictable transactions of significant value. In recent years, CP has recognized acquisition-related costs, the merger termination payment received, changes in the outside basis tax difference between the carrying amount of CP's equity investment in KCS and its tax basis of the investment, changes in income tax rates, and a change to an uncertain tax item. Acquisition-related costs include legal, consulting, financing fees, integration planning costs consisting of third-party services and system migration, fair value gain or loss on FX forward contracts and interest rate hedges, FX gain on U.S. dollar-denominated cash on hand from the issuances of long-term debt to fund the KCS acquisition, and transaction and integration costs (net of tax) incurred by KCS which were recognized within the Equity loss of KCS). KCS has also recognized significant transaction costs and FX gains and losses. These or other similar, large unforeseen transactions affect Net income but may be excluded from CP's Adjusted EBITDA. Additionally, the U.S.-to-Canada dollar exchange rate is unpredictable and can have a significant impact on CP's reported results but may be excluded from CP's Adjusted EBITDA. In particular, CP excludes the FX impact of translating the Company's debt and lease liabilities, interest and taxes from Adjusted EBITDA. Please see Forward-Looking Statements in this Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations for further discussion.

Supplemental Guarantor Financial Information

Canadian Pacific Railway Company ("CPRC"), a 100%-owned subsidiary of CPRL, is the issuer of certain securities which are fully and unconditionally guaranteed by CPRL on an unsecured basis. The other subsidiaries of CPRC do not guarantee the securities and are referred to below as the "Non-Guarantor Subsidiaries". The following is a description of the terms and conditions of the guarantees with respect to securities for which CPRC is the issuer and CPRL provides a full and unconditional guarantee.

As of the date of the filing of the Form 10-Q, CPRC had U.S. \$12,050 million principal amount of debt securities outstanding due through 2115, and U.S. \$30 million and GBP £3 million in perpetual 4% consolidated debenture stock, for all of which CPRL is the guarantor subject to Section 13(a) or 15(d) of the Securities Exchange Act of 1934 (the "Exchange Act"), as amended. As of the same date, CPRC also had \$3,300 million principal amount of debt securities issued under Canadian securities law due through 2050 for which CPRL is the guarantor and not subject to the Exchange Act.

CPRL fully and unconditionally guarantees the payment of the principal (and premium, if any) and interest on the debt securities and consolidated debenture stock issued by CPRC, any sinking fund or analogous payments payable with respect to such securities, and any additional amounts payable when they become due, whether at maturity or otherwise. The guarantee is CPRL's unsubordinated and unsecured obligation and ranks equally with all of CPRL's other unsecured, unsubordinated obligations.

CPRL will be released and relieved of its obligations under the guarantees after obligations to the holders are satisfied in accordance with the terms of the respective instruments.

Pursuant to Rule 13-01 of the SEC's Regulation S-X, the Company provides summarized financial and non-financial information of CPRC in lieu of providing separate financial statements of CPRC.

More information on the securities under this guarantee structure can be found in Exhibit 22.1 List of Issuers and Guarantor Subsidiaries of this quarterly report.

Summarized Financial Information

The following tables present summarized financial information for CPRC (Subsidiary Issuer) and CPRL (Parent Guarantor) on a combined basis after elimination of (i) intercompany transactions and balances among CPRC and CPRL; (ii) equity in earnings from and investments in the Non-Guarantor Subsidiaries; and (iii) intercompany dividend income.

Statements of Income

(in millions of Canadian dollars)	CPRC (Subsidiary Issuer) and CPRL (Parent Guarantor)	
	For the nine months ended September 30, 2022	For the year ended December 31, 2021
Total revenues	\$ 4,566	\$ 5,924
Total operating expenses	2,985	3,712
Operating income ⁽¹⁾	1,581	2,212
Less: Other ⁽²⁾	192	(522)
Income before income tax expense	1,389	2,734
Net income	\$ 1,005	\$ 2,548

⁽¹⁾ Includes net lease costs incurred from non-guarantor subsidiaries for the nine months ended September 30, 2022 and for the year ended December 31, 2021 of \$323 million and \$431 million, respectively.

⁽²⁾ Includes Other expense, Merger termination fee, Other components of net periodic benefit recovery, and Net interest expense.

Balance Sheets

(in millions of Canadian dollars)	CPRC (Subsidiary Issuer) and CPRL (Parent Guarantor)	
	As at September 30, 2022	As at December 31, 2021
Assets		
Current assets	\$ 1,229	\$ 963
Properties	11,590	11,342
Other non-current assets	2,865	2,536
Liabilities		
Current liabilities	\$ 2,397	\$ 2,789
Long-term debt	19,334	18,574
Other non-current liabilities	3,108	3,008

Excluded from the Income Statements and Balance Sheets above are the following significant intercompany transactions and balances that CPRC and CPRL have with the Non-Guarantor Subsidiaries:

Cash Transactions with Non-Guarantor Subsidiaries

(in millions of Canadian dollars)	CPRC (Subsidiary Issuer) and CPRL (Parent Guarantor)	
	For the nine months ended September 30, 2022	For the year ended December 31, 2021
Dividend income from non-guarantor subsidiaries	\$ 126	\$ 297
Capital contributions to non-guarantor subsidiaries	—	(134)
Redemption of shares by non-guarantor subsidiaries	115	1,370

Balances with Non-Guarantor Subsidiaries

(in millions of Canadian dollars)	CPRC (Subsidiary Issuer) and CPRL (Parent Guarantor)	
	As at September 30, 2022	As at December 31, 2021
Assets		
Accounts receivable, intercompany	\$ 226	\$ 344
Short-term advances to affiliates	2,680	2,859
Long-term advances to affiliates	7,714	7,616
Liabilities		
Accounts payable, intercompany	\$ 187	\$ 212
Short-term advances from affiliates	2,633	2,777
Long-term advances from affiliates	89	82

Share Capital

At October 25, 2022, the latest practicable date, there were 930,123,568 Common Shares and no preferred shares issued and outstanding, which consists of 15,288 holders of record of the Common Shares. In addition, CP has a Management Stock Option Incentive Plan ("MSOIP"), under which key officers and employees are granted options to purchase the Common Shares. Options issued prior to the share split described in the Executive Summary now each provide rights over five shares. For consistency, all number of options presented herein are shown on the basis of the number of shares subject to the options. On April 27, 2022, at the Annual and Special Meeting, the Company's shareholders approved an amendment to the MSOIP to increase the maximum number of shares available for issuance under the MSOIP, effective at and after April 27, 2022, by 20,000,000 Common Shares. At October 25, 2022, 7,727,281 options were outstanding under the MSOIP and stand-alone option agreements entered into with Mr. Keith Creel. There are 22,509,537 options available to be issued by the Company's MSOIP in the future. CP has a Director's Stock Option Plan ("DSOP"), under which directors are granted options to purchase Common Shares. There are no outstanding options under the DSOP, which has 1,700,000 options available to be issued in the future.

Non-GAAP Measures

The Company presents Non-GAAP measures to provide a basis for evaluating underlying earnings and liquidity trends in the Company's business that can be compared with the results of operations in prior periods. In addition, these Non-GAAP measures facilitate a multi-period assessment of long-term profitability, allowing management and other external users of the Company's consolidated financial information to compare profitability on a long-term basis, including assessing future profitability, with that of the Company's peers.

These Non-GAAP measures have no standardized meaning and are not defined by GAAP and, therefore, may not be comparable to similar measures presented by other companies. The presentation of these Non-GAAP measures is not intended to be considered in isolation from, as a substitute for, or as superior to the financial information presented in accordance with GAAP.

Non-GAAP Performance Measures

The Company uses adjusted earnings results including Adjusted income, Adjusted diluted earnings per share, Adjusted operating income and Adjusted operating ratio to evaluate the Company's operating performance and for planning and forecasting future business operations and future profitability. Core adjusted income and Core adjusted diluted earnings per share are presented to provide financial statement users with additional transparency by isolating for the impact of KCS purchase accounting. KCS purchase accounting represents the amortization of basis differences, being the difference in value between the consideration paid to acquire KCS and the underlying carrying value of the net assets of KCS immediately prior to its acquisition by the Company. All assets subject to KCS purchase accounting contribute to income generation and will continue to amortize over their estimated useful lives. These Non-GAAP measures are presented in Financial Highlights and discussed further in other sections of this Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations. These Non-GAAP measures provide meaningful supplemental information regarding operating results because they exclude certain significant items that are not considered indicative of future financial trends either by nature or amount or provide improved comparability to past performance. As a result, these items are excluded for management assessment of operational performance, allocation of resources and preparation of annual budgets. These significant items may include, but are not limited to, restructuring and asset impairment charges, individually significant gains and losses from sales of assets, acquisition-related costs, the merger termination payment received, the foreign exchange ("FX") impact of translating the Company's debt and lease liabilities (including borrowings under the credit facility), discrete tax items, changes in the outside basis tax difference between the carrying amount of CP's equity investment in KCS and its tax basis of this investment, changes in income tax rates, changes to an uncertain tax item, and certain items outside the control of management. Acquisition-related costs include legal, consulting, financing fees, integration planning costs consisting of third-party services and system migration, fair value gain or loss on FX forward contracts and interest rate hedges, FX gain on U.S. dollar-denominated cash on hand from the issuances of long-term debt to fund the KCS acquisition, and transaction and integration costs incurred by KCS which were recognized within Equity earnings of Kansas City Southern in the Company's Interim Consolidated Statements of Income. These items may not be non-recurring. However, excluding these significant items from GAAP results allows for a consistent understanding of the Company's consolidated financial performance when performing a multi-period assessment including assessing the likelihood of future results. Accordingly, these Non-GAAP financial measures may provide insight to investors and other external users of the Company's consolidated financial information.

In the first nine months of 2022, there were three significant items included in Net income as follows:

- in the third quarter, a deferred tax recovery of \$12 million due to a decrease in the Iowa state tax rate that favourably impacted Diluted EPS by 1 cent;
- a net deferred tax expense of \$8 million on changes in the outside basis difference of the equity investment in KCS that unfavourably impacted Diluted EPS by 1 cent as follows:
 - in the third quarter, a deferred tax recovery of \$9 million on changes in the outside basis difference of the equity investment in KCS that favourably impacted Diluted EPS by 1 cent;
 - in the second quarter, a deferred tax expense of \$49 million on changes in the outside basis difference of the equity investment in KCS that unfavourably impacted Diluted EPS by 5 cents; and
 - in the first quarter, a deferred tax recovery of \$32 million on changes in the outside basis difference of the equity investment in KCS that favourably impacted Diluted EPS by 3 cents; and
- acquisition-related costs of \$96 million in connection with the KCS acquisition (\$92 million after current tax recovery of \$4 million), including costs of \$57 million recognized in Purchased services and other, and \$39 million recognized in Equity earnings of KCS, that unfavourably impacted Diluted EPS by 9 cents as follows:
 - in the third quarter, acquisition-related costs of \$30 million (\$33 million after current tax expense of \$3 million), including costs of \$18 million recognized in Purchased services and other and \$12 million recognized in Equity earnings of KCS, that unfavourably impacted Diluted EPS by 3 cents;
 - in the second quarter, acquisition-related costs of \$33 million (\$29 million after current tax recovery of \$4 million), including costs of \$19 million recognized in Purchased services and other and \$14 million recognized in Equity earnings of KCS, that unfavourably impacted Diluted EPS by 3 cents; and
 - in the first quarter, acquisition-related costs of \$33 million (\$30 million after current tax recovery of \$3 million), including costs of \$20 million recognized in Purchased services and other and \$13 million recognized in Equity earnings of KCS, that unfavourably impacted Diluted EPS by 3 cents.

In 2021, there were four significant items included in Net income as follows:

- in the fourth quarter, a deferred tax recovery of \$33 million on changes in the outside basis difference of the equity investment in KCS that favourably impacted Diluted EPS by 5 cents;
- in the second quarter, the merger termination payment received of \$845 million (\$748 million after current taxes) in connection with KCS's termination of the Original Merger Agreement effective May 21, 2021 that favourably impacted Diluted EPS by \$1.11;
- during the course of the year, acquisition-related costs of \$599 million in connection with the KCS acquisition (\$500 million after current tax recovery of \$107 million net of deferred tax expense of \$8 million), including costs of \$183 million recognized in Purchased services and other, \$169 million recognized in Equity loss of KCS, and \$247 million recognized in Other expense (income), that unfavourably impacted Diluted EPS by 75 cents as follows:
 - in the fourth quarter, acquisition-related costs of \$157 million (\$157 million after current tax recovery of \$13 million net of deferred tax expense of \$13 million), including costs of \$36 million recognized in Purchased services and other, \$169

million in Equity loss of KCS, and a \$48 million recovery recognized in Other (income) expense, that unfavourably impacted Diluted EPS by 22 cents;

- in the third quarter, acquisition-related costs of \$98 million (\$80 million after current tax recovery of \$61 million net of deferred tax expense of \$43 million), including costs of \$15 million recognized in Purchased services and other and \$83 million recognized in Other expense (income), that unfavourably impacted Diluted EPS by 12 cents;
- in the second quarter, acquisition-related costs of \$308 million (\$236 million after current taxes of \$25 million and deferred taxes of \$47 million), including costs of \$99 million recognized in Purchased services and other and \$209 million recognized in Other expense (income), that unfavourably impacted Diluted EPS by 35 cents; and
- in the first quarter, acquisition-related costs of \$36 million (\$27 million after current taxes of \$8 million and deferred taxes of \$1 million), including costs of \$33 million recognized in Purchased services and other and \$3 million recognized in Other expense (income), that unfavourably impacted Diluted EPS by 4 cents; and
- during the course of the year, a net non-cash gain of \$7 million (\$6 million after deferred tax) due to FX translation of debt and lease liabilities that favourably impacted Diluted EPS by 1 cent as follows:
 - in the fourth quarter, a \$32 million loss (\$28 million after deferred tax) that unfavourably impacted Diluted EPS by 4 cents;
 - in the third quarter, a \$46 million loss (\$40 million after deferred tax) that unfavourably impacted Diluted EPS by 6 cents;
 - in the second quarter, a \$52 million gain (\$45 million after deferred tax) that favourably impacted Diluted EPS by 7 cents; and
 - in the first quarter, a \$33 million gain (\$29 million after deferred tax) that favourably impacted Diluted EPS by 4 cents.

In the three months ended December 31, 2020, there were two significant items included in Net income as follows:

- a deferred tax recovery of \$29 million due to a change relating to a tax return filing election for the state of North Dakota that favourably impacted Diluted EPS by 5 cents; and
- a \$103 million non-cash gain (\$90 million after deferred tax) due to FX translation of debt that favourably impacted Diluted EPS by 13 cents.

Reconciliation of GAAP Performance Measures to Non-GAAP Performance Measures

The following tables reconcile the most directly comparable measures presented in accordance with GAAP to the Non-GAAP measures presented in Financial Highlights and discussed further in other sections of this Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations:

Adjusted income is calculated as Net income reported on a GAAP basis adjusted for significant items. Core adjusted income is calculated as Adjusted income less KCS purchase accounting.

(in millions of Canadian dollars)	For the three months ended September 30		For the nine months ended September 30	
	2022	2021	2022	2021
Net income as reported	\$ 891	\$ 472	\$ 2,246	\$ 2,320
Less significant items (pre-tax):				
Acquisition-related costs	(30)	(98)	(96)	(442)
Merger termination fee	—	—	—	845
Impact of FX translation (loss) gain on debt and lease liabilities	—	(46)	—	39
Add:				
Tax effect of adjustments ⁽¹⁾	3	(24)	(4)	3
Deferred tax (recovery) expense on the outside basis difference of the investment in KCS	(9)	—	8	—
Income tax rate changes	(12)	—	(12)	—
Adjusted income	\$ 903	\$ 592	\$ 2,334	\$ 1,881
Less: KCS purchase accounting	(42)	—	(121)	—
Core adjusted income	\$ 945	\$ 592	\$ 2,455	\$ 1,881

⁽¹⁾ The tax effect of adjustments was calculated as the pre-tax effect of the adjustments multiplied by the applicable tax rate for the above items of (6.73%) and 4.35% for the three and nine months ended September 30, 2022, respectively, and 16.88% and 0.68% for the three and nine months ended September 30, 2021, respectively. The applicable tax rates reflect the taxable jurisdictions and nature, being on account of capital or income, of the significant items.

Adjusted diluted earnings per share is calculated using Adjusted income, as defined above, divided by the weighted-average diluted number of Common Shares outstanding during the period as determined in accordance with GAAP. Core adjusted diluted earnings per share is calculated as Adjusted diluted earnings per share less KCS purchase accounting.

	For the three months ended September 30		For the nine months ended September 30	
	2022	2021	2022	2021
Diluted earnings per share as reported	\$ 0.96	\$ 0.70	\$ 2.41	\$ 3.46
Less significant items (pre-tax):				
Acquisition-related costs	(0.03)	(0.15)	(0.10)	(0.66)
Merger termination fee	—	—	—	1.26
Impact of FX translation (loss) gain on debt and lease liabilities	—	(0.07)	—	0.06
Add:				
Tax effect of adjustments ⁽¹⁾	—	(0.04)	(0.01)	0.01
Deferred tax (recovery) expense on the outside basis difference of the investment in KCS	(0.01)	—	0.01	—
Income tax rate changes	(0.01)	—	(0.01)	—
Adjusted diluted earnings per share	\$ 0.97	\$ 0.88	\$ 2.50	\$ 2.81
Less: KCS purchase accounting	(0.04)	—	(0.13)	—
Core adjusted diluted earnings per share	\$ 1.01	\$ 0.88	\$ 2.63	\$ 2.81

⁽¹⁾ The tax effect of adjustments was calculated as the pre-tax effect of the adjustments multiplied by the applicable tax rate for the above items of (6.73%) and 4.35% for the three and nine months ended September 30, 2022, respectively, and 16.88% and 0.68% for the three and nine months ended September 30, 2021, respectively. The applicable tax rates reflect the taxable jurisdictions and nature, being on account of capital or income, of the significant items.

Adjusted operating income is calculated as Operating income reported on a GAAP basis less significant items.

	For the three months ended September 30		For the nine months ended September 30	
(in millions of Canadian dollars)	2022	2021	2022	2021
Operating income as reported	\$ 937	\$ 774	\$ 2,340	\$ 2,374
Less significant item:				
Acquisition-related costs	(18)	(15)	(57)	(147)
Adjusted operating income	\$ 955	\$ 789	\$ 2,397	\$ 2,521

Adjusted operating ratio excludes those significant items that are reported within operating income.

	For the three months ended September 30		For the nine months ended September 30	
	2022	2021	2022	2021
Operating ratio as reported	59.5 %	60.2 %	63.2 %	60.1 %
Less significant item:				
Acquisition-related costs	0.8 %	0.8 %	0.9 %	2.4 %
Adjusted operating ratio	58.7 %	59.4 %	62.3 %	57.7 %

Adjusted ROIC

Adjusted ROIC is calculated as Adjusted return divided by Adjusted average invested capital. Adjusted return is defined as Net income adjusted for interest expense, tax effected at the Company's adjusted annualized effective tax rate, and significant items in the Company's Consolidated Financial Statements, tax effected at the applicable tax rate. Adjusted average invested capital is defined as the sum of total Shareholders' equity, Long-term debt, and Long-term debt maturing within one year, as presented in the Company's Consolidated Financial Statements, each averaged between the beginning and ending balance over a trailing twelve month period, adjusted for the impact of significant items, tax effected at the applicable tax rate, on closing balances as part of this average. Adjusted ROIC excludes significant items reported in the Company's Consolidated Financial Statements, as these significant items are not considered indicative of future financial trends either by nature or amount, and excludes interest expense, net of tax, to incorporate returns on the Company's overall capitalization. Adjusted ROIC is a performance measure that measures how productively the Company uses its long-term capital investments, representing critical indicators of good

operating and investment decisions made by management, and is an important performance criteria in determining certain elements of the Company's long-term incentive plan. Adjusted ROIC, which is reconciled below from Return on average shareholders' equity, the most comparable measure calculated in accordance with GAAP, is also presented in Financial Highlights and discussed further in Results of Operations of this Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations.

Calculation of Return on average shareholders' equity

(in millions of Canadian dollars, except for percentages)	For the twelve months ended September 30	
	2022	2021
Net income as reported	\$ 2,778	\$ 3,122
Average shareholders' equity	\$ 23,641	\$ 8,524
Return on average shareholders' equity	11.8 %	36.6 %

Reconciliation of Net income to Adjusted return

(in millions of Canadian dollars)	For the twelve months ended September 30	
	2022	2021
Net income as reported	\$ 2,778	\$ 3,122
Add:		
Net interest expense	611	427
Tax on interest ⁽¹⁾	(145)	(104)
Significant items (pre-tax):		
Acquisition-related costs	253	442
Merger termination fee	—	(845)
Impact of FX translation loss (gain) on debt and lease liabilities	32	(142)
Tax on significant items ⁽²⁾	(8)	16
Deferred tax recovery on the outside basis difference of the investment in KCS	(25)	—
Income tax rate changes	(12)	(29)
Adjusted return	\$ 3,484	\$ 2,887

⁽¹⁾ Tax was calculated at the adjusted annualized effective tax rate of 23.73% and 24.34% for the twelve months ended September 30, 2022 and 2021, respectively.

⁽²⁾ Tax was calculated as the pre-tax effect of the adjustments multiplied by the applicable tax rate for the above items of 2.97% and 2.57% for the twelve months ended September 30, 2022 and 2021, respectively. The applicable tax rates reflect the taxable jurisdictions and nature, being on account of capital or income, of the significant items.

Reconciliation of Average shareholders' equity to Adjusted average invested capital

(in millions of Canadian dollars)	For the twelve months ended September 30	
	2022	2021
Average shareholders' equity	\$ 23,641	\$ 8,524
Average long-term debt, including long-term debt maturing within one year	15,272	9,877
	\$ 38,913	\$ 18,401
Less:		
Significant items (pre-tax):		
Acquisition-related costs	(127)	(221)
Merger termination fee	—	423
Tax on significant items ⁽¹⁾	2	—
Deferred tax recovery on the outside basis difference of the investment in KCS	13	—
Income tax rate changes	6	15
Adjusted average invested capital	\$ 39,019	\$ 18,184

⁽¹⁾ Tax was calculated at the pre-tax effect of the adjustment multiplied by the applicable tax rate of 1.71% and 0.51% for the twelve months ended September 30, 2022 and 2021, respectively. The applicable tax rate reflects the taxable jurisdiction and nature, being on account of capital or income, of the significant item.

Calculation of Adjusted ROIC

(in millions of Canadian dollars, except for percentages)	For the twelve months ended September 30	
	2022	2021
Adjusted return	\$ 3,484	\$ 2,887
Adjusted average invested capital	\$ 39,019	\$ 18,184
Adjusted ROIC	8.9 %	15.9 %

Free Cash

Free cash is calculated as Cash provided by operating activities, less Cash used in investing activities, adjusted for changes in Cash and cash equivalents balances resulting from FX fluctuations, the operating cash flow impacts of acquisition-related costs associated with the KCS transaction, the merger termination payment received related to KCS's termination of the Original Merger Agreement and the payment to KCS related to the KCS Acquisition. Free cash is a measure that management considers to be a valuable indicator of liquidity. Free cash is useful to investors and other external users of the Company's Consolidated Financial Statements as it assists with the evaluation of the Company's ability to generate cash to satisfy debt obligations and discretionary activities such as dividends, share repurchase programs, and other strategic opportunities. The acquisition-related costs and the merger termination fee related to the KCS acquisition are not indicative of operating trends and have been excluded from Free cash. The payment to KCS is not indicative of investment trends and has also been excluded from free cash. Free cash should be considered in addition to, rather than as a substitute for, Cash provided by operating activities. Free cash is presented in Financial Highlights and discussed further in Liquidity and Capital Resources of this Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations.

Reconciliation of Cash Provided by Operating Activities to Free Cash

(in millions of Canadian dollars)	For the three months ended September 30		For the nine months ended September 30	
	2022	2021	2022	2021
Cash provided by operating activities	\$ 1,102	\$ 548	\$ 2,422	\$ 3,084
Cash used in investing activities	(410)	(2,129)	(978)	(2,820)
Effect of foreign currency fluctuations on U.S. dollar-denominated cash and cash equivalents	13	10	21	6
Less:				
Acquisition-related costs	(16)	(1)	(49)	(47)
Merger termination fee	—	—	—	845
Payment to Kansas City Southern	—	(1,773)	—	(1,773)
Free cash	\$ 721	\$ 203	\$ 1,514	\$ 1,245

Foreign Exchange Adjusted % Change

FX adjusted % change allows certain financial 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. Financial result variances at constant currency are obtained by translating the comparable period of the prior year results denominated in U.S. dollars at the foreign exchange rates of the current period.

FX adjusted % changes in revenues are further used in calculating FX adjusted % change in freight revenue per carload and RTM. These items are presented in Operating Revenues of this Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations. FX adjusted % changes in revenues are as follows:

For the three months ended September 30					
(in millions of Canadian dollars)	Reported 2022	Reported 2021	Variance due to FX	FX Adjusted 2021	FX Adjusted % Change
Freight revenues by line of business					
Grain	\$ 391	\$ 352	\$ 7	\$ 359	9
Coal	156	158	1	159	(2)
Potash	170	113	2	115	48
Fertilizers and sulphur	81	72	1	73	11
Forest products	109	89	3	92	18
Energy, chemicals and plastics	360	392	7	399	(10)
Metals, minerals and consumer products	246	196	5	201	22
Automotive	111	83	2	85	31
Intermodal	640	441	3	444	44
Freight revenues	2,264	1,896	31	1,927	17
Non-freight revenues	48	46	—	46	4
Total revenues	\$ 2,312	\$ 1,942	\$ 31	\$ 1,973	17

For the nine months ended September 30					
(in millions of Canadian dollars)	Reported 2022	Reported 2021	Variance due to FX	FX Adjusted 2021	FX Adjusted % Change
Freight revenues by line of business					
Grain	\$ 1,121	\$ 1,244	\$ 14	\$ 1,258	(11)
Coal	458	491	1	492	(7)
Potash	445	348	4	352	26
Fertilizers and sulphur	244	227	4	231	6
Forest products	299	259	6	265	13
Energy, chemicals and plastics	1,010	1,149	14	1,163	(13)
Metals, minerals and consumer products	655	535	10	545	20
Automotive	322	289	5	294	10
Intermodal	1,660	1,280	6	1,286	29
Freight revenues	6,214	5,822	64	5,886	6
Non-freight revenues	138	133	1	134	3
Total revenues	\$ 6,352	\$ 5,955	\$ 65	\$ 6,020	6

FX adjusted % changes in operating expenses are presented in Operating Expenses of this Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations. FX adjusted % changes in operating expenses are as follows:

(in millions of Canadian dollars)	For the three months ended September 30				
	Reported 2022	Reported 2021	Variance due to FX	FX Adjusted 2021	FX Adjusted % Change
Compensation and benefits	\$ 393	\$ 381	\$ 4	\$ 385	2
Fuel	358	199	6	205	75
Materials	66	51	—	51	29
Equipment rents	33	31	1	32	3
Depreciation and amortization	213	203	2	205	4
Purchased services and other	312	303	4	307	2
Total operating expenses	\$ 1,375	\$ 1,168	\$ 17	\$ 1,185	16

(in millions of Canadian dollars)	For the nine months ended September 30				
	Reported 2022	Reported 2021	Variance due to FX	FX Adjusted 2021	FX Adjusted % Change
Compensation and benefits	\$ 1,154	\$ 1,165	\$ 8	\$ 1,173	(2)
Fuel	1,001	623	12	635	58
Materials	191	164	1	165	16
Equipment rents	97	92	2	94	3
Depreciation and amortization	634	605	4	609	4
Purchased services and other	935	932	7	939	—
Total operating expenses	\$ 4,012	\$ 3,581	\$ 34	\$ 3,615	11

Adjusted Net Debt to Adjusted EBITDA Ratio and Pro-forma adjusted Net Debt to Pro-forma adjusted EBITDA Ratio

Adjusted net debt to Adjusted earnings before interest, tax, depreciation and amortization ("EBITDA") ratio is calculated as Adjusted net debt divided by Adjusted EBITDA. The Adjusted net debt to Adjusted EBITDA ratio is a key credit measure used to assess the Company's financial capacity. The ratio provides information on the Company's ability to service its debt and other long-term obligations from operations, excluding significant items. The Adjusted net debt to Adjusted EBITDA ratio, which is reconciled below from the Long-term debt to Net income ratio, the most comparable measure calculated in accordance with GAAP, is also presented in Financial Highlights and discussed further in Results of Operations of this Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations.

Beginning in the first quarter of 2022, CP added disclosure of Pro-forma adjusted net debt to Pro-forma adjusted EBITDA ratio to better align with CP's debt covenant calculation, which incorporates the trailing twelve month adjusted EBITDA of KCS as well as KCS's outstanding debt. CP is incorporating the trailing twelve month adjusted EBITDA of KCS on a pro-forma basis, as CP is not entitled to earnings prior to the acquisition date of December 14, 2021. CP does not control KCS while it is in the voting trust during review of our merger application by the STB, though CP is the beneficial owner of KCS's outstanding shares and receives cash dividends from KCS. The adjustment to include the trailing twelve month EBITDA and KCS's outstanding debt provides users of the financial statements with better insight into CP's progress in achieving deleveraging commitments. KCS's disclosed U.S. dollar financial values for the trailing twelve months ended September 30, 2022 were adjusted to Canadian dollars reflecting the FX rate for the appropriate period presented. We have not presented 2021 Pro-forma adjusted net debt to Pro-forma adjusted EBITDA as CP was not the beneficial owner of KCS's shares as at September 30, 2021.

Calculation of Long-term Debt to Net Income Ratio

(in millions of Canadian dollars, except for ratios)	2022	2021
Long-term debt including long-term debt maturing within one year as at September 30	\$ 20,575	\$ 9,968
Net income for the twelve months ended September 30	\$ 2,778	\$ 3,122
Long-term debt to Net income ratio	7.4	3.2

Reconciliation of Long-term Debt to Adjusted Net Debt and Pro-forma Adjusted Net Debt

Adjusted net debt is defined as Long-term debt, Long-term debt maturing within one year, and Short-term borrowing as reported on the Company's Consolidated Balance Sheets adjusted for pension plans deficit, operating lease liabilities recognized on the Company's Consolidated Balance Sheets, and Cash and cash equivalents. Adjusted net debt is used as a measure of debt and long-term obligations as part of the calculation of Adjusted Net Debt to Adjusted EBITDA.

(in millions of Canadian dollars) ⁽¹⁾	2022	2021
CP Long-term debt including long-term debt maturing within one year as at September 30	\$ 20,575	\$ 9,968
Add:		
Pension plans deficit ⁽²⁾	265	323
Operating lease liabilities	280	274
Less:		
Cash and cash equivalents	138	210
CP Adjusted net debt as at September 30	\$ 20,982	\$ 10,355
KCS's long-term debt including long-term debt maturing within one year as at September 30	\$ 5,183	N/A
Add:		
KCS operating lease liabilities	116	N/A
Less:		
KCS cash and cash equivalents	225	N/A
KCS Adjusted net debt as at September 30	5,074	N/A
CP Adjusted net debt as at September 30	20,982	N/A
Pro-forma Adjusted net debt as at September 30	\$ 26,056	N/A

⁽¹⁾ KCS's amounts were translated at the September 30, 2022 period end FX rate of \$1.37.

⁽²⁾ Pension plans deficit is the total funded status of the Pension plans in deficit only.

Reconciliation of Net Income to EBIT, Adjusted EBIT and Adjusted EBITDA and Pro-forma Adjusted EBITDA

Earnings before interest and tax ("EBIT") is calculated as Net income before Net interest expense and Income tax expense. Adjusted EBIT excludes significant items reported in both Operating income and Other expense. Adjusted EBITDA is calculated as Adjusted EBIT plus operating lease expense and Depreciation and amortization, less Other components of net periodic benefit recovery. Adjusted EBITDA is used as a measure of liquidity derived from operations, excluding significant items, as part of the calculation of Adjusted Net Debt to Adjusted EBITDA.

(in millions of Canadian dollars) ⁽¹⁾	For the twelve months ended September 30	
	2022	2021
CP Net income as reported	\$ 2,778	\$ 3,122
Add:		
Net interest expense	611	427
Income tax expense	677	812
EBIT	4,066	4,361
Less significant items (pre-tax):		
Acquisition-related costs	(253)	(442)
Merger termination fee	—	845
Impact of FX translation (loss) gain on debt and lease liabilities	(32)	142
Adjusted EBIT	4,351	3,816
Add:		
Operating lease expense	77	71
Depreciation and amortization	840	802
Less:		
Other components of net periodic benefit recovery	405	371
CP Adjusted EBITDA	\$ 4,863	\$ 4,318
Net income attributable to KCS and subsidiaries	\$ 1,497	N/A
Add:		
KCS interest expense	200	N/A
KCS income tax expense	498	N/A
KCS EBIT	2,195	N/A
Less significant item (pre-tax):		
KCS merger income	599	N/A
KCS Adjusted EBIT	1,596	N/A
Add:		
KCS total lease cost	40	N/A
KCS depreciation and amortization	491	N/A
KCS Adjusted EBITDA	2,127	N/A
CP Adjusted EBITDA	\$ 4,863	N/A
Less:		
Equity earnings of KCS ⁽²⁾	486	N/A
Acquisition-related costs of KCS ⁽³⁾	208	N/A
Pro-forma Adjusted EBITDA	\$ 6,296	N/A

⁽¹⁾ KCS's amounts were translated at the quarterly average FX rate of \$1.30, \$1.28, \$1.27, and \$1.26 for Q3 2022, Q2 2022, Q1 2022, and Q4 2021, respectively.

⁽²⁾ Equity earnings of KCS were part of CP's reported net income and therefore have been deducted in arriving to the Pro-forma Adjusted EBITDA.

⁽³⁾ Acquisition-related costs of KCS have been adjusted in CP's Adjusted EBITDA calculation above, therefore have been deducted in arriving to the Pro-forma Adjusted EBITDA.

Calculation of Adjusted Net Debt to Adjusted EBITDA Ratio and Pro-forma Adjusted Net Debt to Pro-forma Adjusted EBITDA Ratio

(in millions of Canadian dollars, except for ratios)	2022	2021
Adjusted net debt as at September 30	\$ 20,982	\$ 10,355
Adjusted EBITDA for the twelve months ended September 30	\$ 4,863	\$ 4,318
Adjusted net debt to Adjusted EBITDA ratio	4.3	2.4

(in millions of Canadian dollars, except for ratios)	2022	2021
Pro-forma adjusted net debt as at September 30	\$ 26,056	N/A
Pro-forma adjusted EBITDA for the twelve months ended September 30	\$ 6,296	N/A
Pro-forma adjusted net debt to Pro-forma adjusted EBITDA ratio	4.1	N/A

Critical Accounting Estimates

To prepare Consolidated Financial Statements that conform with GAAP, the Company is required to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the date of the Consolidated Financial Statements, and the reported amounts of revenues and expenses during the reported periods. Using the most current information available, the Company reviews estimates on an ongoing basis, including those related to environmental liabilities, pensions and other benefits, property, plant and equipment, deferred income taxes, and personal injury and other claims liabilities. Additional information concerning critical accounting estimates is supplemented in Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations of the Company's 2021 Annual Report on Form 10-K.

The development, selection and disclosure of these estimates, and this MD&A, have been reviewed by the Board of Directors' Audit and Finance Committee, which is composed entirely of independent directors.

Forward-Looking Statements

This Management's Discussion and Analysis of Financial Condition and Results of Operations and Quarterly Report on Form 10-Q contains certain forward-looking statements within the meaning of the *United States Private Securities Litigation Reform Act of 1995* and forward-looking information within the meaning of other relevant securities legislation, including applicable securities laws in Canada (collectively referred to herein as "forward-looking statements"). Forward-looking statements typically include words such as "financial expectations", "key assumptions", "anticipate", "believe", "expect", "plan", "will", "outlook", "should" or similar words suggesting future outcomes. To the extent that CP has provided forecasts or targets using Non-GAAP financial measures, the Company may not be able to provide a reconciliation to a GAAP measure without unreasonable efforts, due to unknown variables and uncertainty related to future results.

This Management's Discussion and Analysis of Financial Condition and Results of Operations and Quarterly Report on Form 10-Q includes forward-looking statements relating, but not limited to, statements concerning the Company's expected impacts resulting from changes in the U.S.-to-Canadian dollar exchange rate, and the effective tax rate, as well as statements concerning the Company's operations, anticipated financial performance, business prospects and strategies, including statements concerning the anticipation that cash flow from operations and various sources of financing will be sufficient to meet debt repayments and obligations in the foreseeable future and concerning anticipated capital programs, statements regarding future payments including income taxes, statements regarding the Company's greenhouse gas ("GHG") emissions targets and statements concerning the pending KCS business combination.

The forward-looking statements contained in this Management's Discussion and Analysis of Financial Condition and Results of Operations and Quarterly Report on Form 10-Q are based on current expectations, estimates, projections and assumptions, having regard to the Company's experience and its perception of historical trends, and includes, but is not limited to, expectations, estimates, projections and assumptions relating to: changes in business strategies; North American and global economic growth; commodity demand growth; sustainable industrial and agricultural production; commodity prices and interest rates; foreign exchange rates (as specified herein); effective tax rates (as specified herein); performance of our assets and equipment; sufficiency of our budgeted capital expenditures in carrying out our business plan; geopolitical conditions; applicable laws, regulations and government policies; the availability and cost of labour, services and infrastructure; the satisfaction by third parties of their obligations to the Company; and the anticipated impacts of the COVID-19 pandemic on the Company's business, operating results, cash flows and/or financial condition. Although the Company believes the expectations, estimates, projections and assumptions reflected in the forward-looking statements presented herein are reasonable as of the date hereof, there can be no assurance that they will prove to be correct. Current conditions, economic and otherwise, render assumptions, although reasonable when made, subject to greater uncertainty.

With respect to the pending KCS business combination, we can provide no assurance when or if the combination will be completed. Completion of the combination is subject to the receipt of final approval from the STB of the CP-KCS control application by December 31, 2023. There can be no assurance of receipt of this final approval by December 31, 2023. Additionally, even if such final approval is received, there can be no guarantee of the successful integration of KCS or that the combined Company will realize the anticipated benefits of the business combination, whether financial, strategic or otherwise, and this may be exacerbated by changes to the economic, political and global environment in which the merged company will operate.

Our GHG emissions targets are subject to a number of inherent risks, assumptions and uncertainties that include, but are not limited to, changes in carbon markets, evolving sustainability strategies and scientific or technological developments. Additionally, although our data underlying GHG emissions estimates have been internally vetted using accepted and relevant

scientific and technical methodologies, historical performance data may become outdated due to a variety of factors, including improvement in our data collection and measuring systems, activities such as joint ventures, mergers and acquisitions or divestitures, and industry-driven changes to methodologies. As a result of these and other factors, we may not achieve our stated targets.

Undue reliance should not be placed on forward-looking statements as actual results may differ materially from those expressed or implied by forward-looking statements. By their nature, forward-looking statements involve numerous inherent risks and uncertainties that could cause actual results to differ materially from the forward-looking statements, including but not limited to the following factors: changes in business strategies; general North American and global economic, credit and business conditions; risks associated with agricultural production such as weather conditions and insect populations; the availability and price of energy commodities; the effects of competition and pricing pressures; industry capacity; shifts in market demand; changes in commodity prices; uncertainty surrounding timing and volumes of commodities being shipped via CP; inflation; geopolitical instability; changes in laws, regulations and government policies, including regulation of rates; changes in taxes and tax rates; potential increases in maintenance and operating costs; changes in fuel prices; uncertainties of investigations, proceedings or other types of claims and litigation; labour disputes; risks and liabilities arising from derailments; transportation of dangerous goods; timing of completion of capital and maintenance projects; currency and interest rate fluctuations; effects of changes in market conditions and discount rates on the financial position of pension plans and investments; trade restrictions or other changes to international trade arrangements; climate change; various events that could disrupt operations, including severe weather, such as droughts, floods, avalanches and earthquakes, and cybersecurity attacks, as well as security threats and governmental response to them, and technological changes; and the pandemic created by the outbreak of COVID-19 and its variants and resulting effects on economic conditions, the demand environment for logistics requirements and energy prices, restrictions imposed by public health authorities or governments, fiscal and monetary policy responses by governments and financial institutions, and disruptions to global supply chains. The foregoing list of factors is not exhaustive.

There are more specific factors that could cause actual results to differ materially from those described in the forward-looking statements contained in this Management's Discussion and Analysis of Financial Condition and Results of Operations and Quarterly Report on Form 10-Q. These more specific factors are identified and discussed in Item 1A. Risk Factors of CP's 2021 Annual Report on Form 10-K. Other risks are detailed from time to time in reports filed by CP with securities regulators in Canada and the United States.

The forward-looking statements contained in this Management's Discussion and Analysis of Financial Condition and Results of Operations and Quarterly Report on Form 10-Q are made as of the date hereof. Except as required by law, CP undertakes no obligation to update publicly or otherwise revise any forward-looking statements, or the foregoing assumptions and risks affecting such forward-looking statements, whether as a result of new information, future events or otherwise.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Foreign Exchange Risk

Although CP conducts business primarily in Canada, a significant portion of its revenues, expenses, assets and liabilities including debt are denominated in U.S. dollars. In addition, equity earnings or losses of KCS are denominated in U.S. dollars. The value of the Canadian dollar is affected by a number of domestic and international factors, including, without limitation, economic performance, and Canadian, U.S. and international monetary policies. Consequently, the Company's results are affected by fluctuations in the exchange rate between these currencies. As at September 30, 2022, CP expects that every \$0.01 weakening (or strengthening) of the Canadian dollar relative to the U.S. dollar, positively (or negatively) impacts Total revenues by approximately \$35 million (December 31, 2021 – approximately \$30 million), negatively (or positively) impacts Operating expenses by approximately \$20 million (December 31, 2021 – approximately \$13 million), and negatively (or positively) impacts Net interest expense by approximately \$4 million (December 31, 2021 – approximately \$3 million) on an annualized basis.

CP uses U.S. dollar-denominated debt and operating lease liabilities to hedge its net investment in U.S. operations. As at September 30, 2022, the net investment in U.S. operations is greater than the total U.S. denominated debt. Consequently, FX translation on the Company's unhedged net investment in U.S. operations is recognized in Other comprehensive income. There is no additional impact on earnings in Other expense (income) related to the FX translation on the Company's debt and operating lease liabilities.

To manage its exposure to fluctuations in exchange rates between Canadian and U.S. dollars, CP may sell or purchase U.S. dollar forwards at fixed rates in future periods. In addition, changes in the exchange rate between the Canadian dollar and other currencies (including the U.S. dollar) make the goods transported by the Company more or less competitive in the world marketplace and may in turn positively or negatively affect revenues.

Subject to final approval by the STB, CP anticipates consummating a business combination with KCS at which time CP will also reassess its functional currency.

Share Price Impact on Stock-Based Compensation

Based on information available at September 30, 2022, for every \$1.00 change in share price, stock-based compensation expense has a corresponding change of approximately \$1.9 million to \$2.0 million (December 31, 2021 - approximately \$1.5 million to \$2.0 million). This excludes the impact of changes in share price relative to the S&P/TSX 60 Index, S&P 500 Industrials Index, and to Class I railways, which may trigger different performance share unit payouts. Stock-based compensation may also be impacted by non-market performance conditions.

Additional information concerning stock-based compensation is included in Item 1. Financial Statements, Note 16 Stock-based compensation.

Interest Rate Risk

Debt financing forms part of the Company's capital structure. The debt agreements entered into expose CP to increased interest costs on future fixed debt instruments and existing variable rate debt instruments, should market rates increase. As at September 30, 2022, a hypothetical one percentage point change in interest rates on the Company's floating rate debt obligations outstanding is not material. In addition, the present value of the Company's assets and liabilities will also vary with interest rate changes. To manage interest rate exposure, CP may enter into forward rate agreements such as treasury rate locks or bond locks that lock in rates for a future date, thereby protecting against interest rate increases. CP may also enter into swap agreements whereby one party agrees to pay a fixed rate of interest while the other party pays a floating rate. Contingent on the direction of interest rates, the Company may incur higher costs depending on the contracted rate.

The fair value of the Company's fixed rate debt may fluctuate with changes in market interest rates. A hypothetical one percentage point decrease in interest rates as of September 30, 2022 would result in an increase of approximately \$1.4 billion to the fair value of the Company's debt as at September 30, 2022 (December 31, 2021 - approximately \$2.3 billion). Fair values of CP's fixed rate debt are estimated by considering the impact of the hypothetical interest rates on quoted market prices and current borrowing rates, but do not consider other factors that could impact actual results.

Information concerning market risks is supplemented in Item 1. Financial Statements, Note 13 Financial instruments.

ITEM 4. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

As of September 30, 2022, an evaluation was carried out under the supervision of and with the participation of CP's management, including its CEO and CFO, of the effectiveness of the design and operation of the Company's disclosure controls and procedures as defined in Rules 13a-15(e) and 15d-15(e) of the Exchange Act. Based on that evaluation, the CEO and CFO concluded that these disclosure controls and procedures were effective as of September 30, 2022, to ensure that information required to be disclosed by the Company in reports that it files or submits under the Exchange Act is (i) recorded, processed, summarized and reported within the time periods specified by the SEC rules and forms and (ii) accumulated and communicated to the Company's management, including the CEO and CFO, as appropriate, to allow timely decisions regarding required disclosure.

Changes in Internal Control over Financial Reporting

During the third quarter of 2022, the Company has not identified any changes in internal control over financial reporting that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.