



2020 ANNUAL REPORT

CP PROUD



PERFORMANCE HIGHLIGHTS

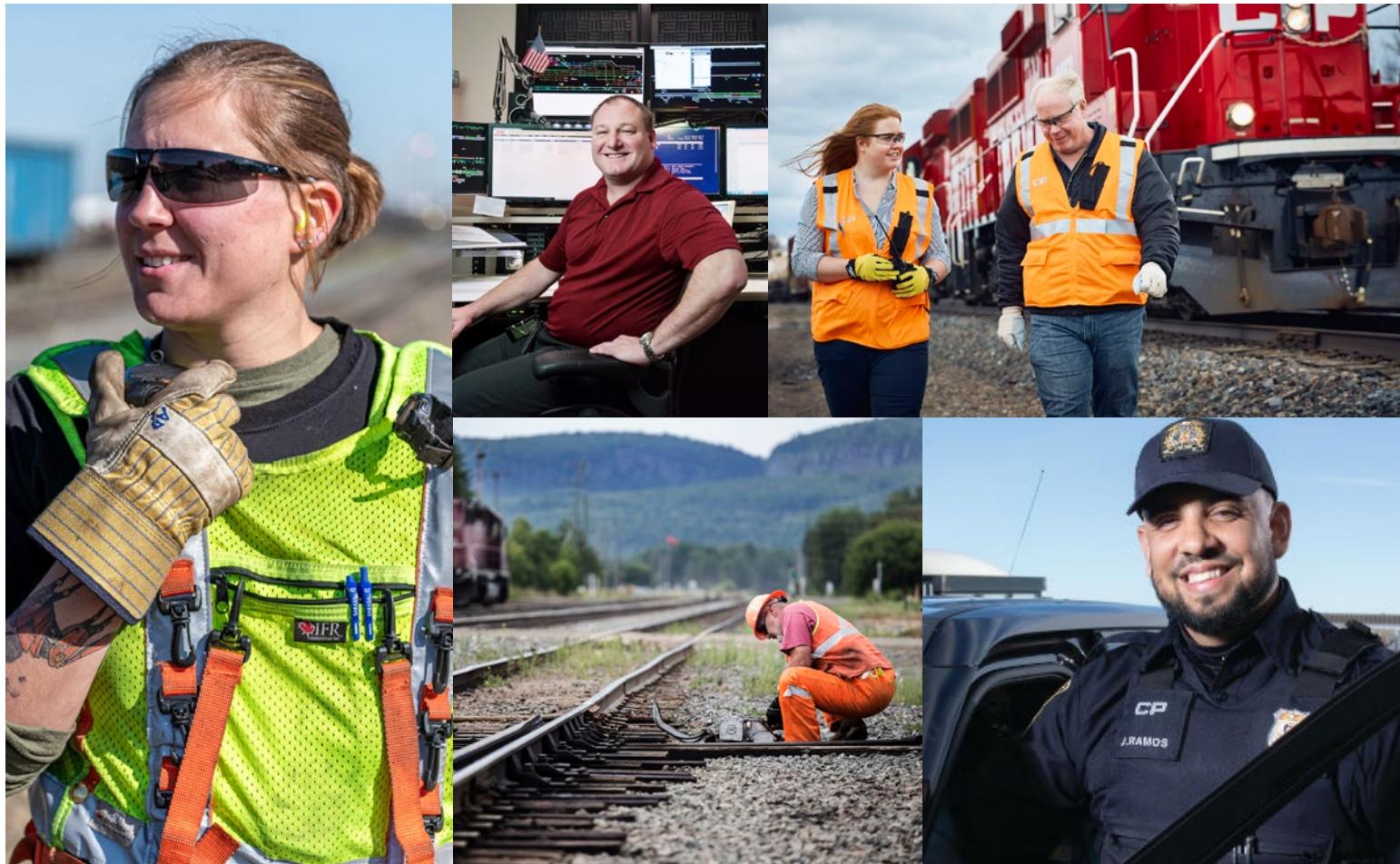
\$ in millions of Canadian dollars except for per share data, ratios, or unless otherwise indicated

	2016	2017	2018	2019	2020
FINANCIAL HIGHLIGHTS					
Total revenues	\$6,232	\$6,554	\$7,316	\$7,792	\$7,710
Operating income	\$2,411	\$2,519	\$2,831	\$3,124	\$3,311
Adjusted operating income ⁽¹⁾	\$2,411	\$2,468	\$2,831	\$3,124	\$3,311
Operating ratio ⁽²⁾	61.3%	61.6%	61.3%	59.9%	57.1%
Adjusted operating ratio ⁽¹⁾	61.3%	62.4%	61.3%	59.9%	57.1%
Net income	\$1,599	\$2,405	\$1,951	\$2,440	\$2,444
Adjusted income ⁽¹⁾	\$1,549	\$1,666	\$2,080	\$2,290	\$2,403
Diluted earnings per share ("EPS")	\$10.63	\$16.44	\$13.61	\$17.52	\$17.97
Adjusted diluted EPS ⁽¹⁾	\$10.29	\$11.39	\$14.51	\$16.44	\$17.67
Cash provided by operating activities	\$2,089	\$2,182	\$2,712	\$2,990	\$2,802
Cash used in investing activities	(\$1,069)	(\$1,295)	(\$1,458)	(\$1,803)	(\$2,030)
Cash used in financing activities	(\$1,493)	(\$700)	(\$1,542)	(\$1,111)	(\$764)
Free cash ⁽¹⁾	\$1,007	\$874	\$1,289	\$1,357	\$1,157
Return on average shareholders' equity ⁽²⁾	33.9%	43.4%	29.8%	35.6%	34.0%
Adjusted return on invested capital ("Adjusted ROIC") ⁽¹⁾	14.0%	14.7%	16.2%	16.9%	16.7%
Dividend payout ratio ⁽²⁾	17.4%	13.3%	18.5%	17.9%	19.8%
Adjusted dividend payout ratio ⁽¹⁾	18.0%	19.2%	17.3%	19.1%	20.1%
Long-term debt to Net income ratio ⁽²⁾	5.4	3.4	4.5	3.6	4.0
Adjusted net debt to Adjusted EBITDA ratio ⁽¹⁾	2.9	2.6	2.6	2.4	2.5
STATISTICAL HIGHLIGHTS⁽³⁾					
Revenue ton-miles ("RTMs") (millions)	135,952	142,540	154,207	154,378	151,891
Carloads (thousands)	2,525	2,634	2,740	2,766	2,708
Gross ton-miles ("GTM") (millions)	242,694	252,195	275,362	280,724	272,360
Locomotive productivity (GTM / operating horsepower)	204	201	198	202	207
Fuel efficiency (U.S. gallons of locomotive fuel consumed / 1,000 GTMs)	0.980	0.980	0.953	0.955	0.942
Average train weight - excluding local traffic (tons)	8,614	8,806	9,100	9,129	9,707
Average train length - excluding local traffic (feet)	7,217	7,214	7,313	7,388	7,929
Average terminal dwell (hours)	6.7	6.6	6.8	6.4	6.5
Average train speed (miles per hour, or "mph")	23.5	22.6	21.5	22.2	22.0
Total employees (end of period)	11,693	12,215	12,840	12,694	11,890
Workforce (end of period)	11,738	12,294	12,866	12,732	11,904
SAFETY INDICATORS⁽³⁾					
FRA personal injuries per 200,000 employee-hours	1.67	1.65	1.47	1.42	1.11
FRA train accidents per million train-miles	1.12	0.99	1.10	1.06	0.96

⁽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 Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations in our Annual Report on Form 10-K.

⁽²⁾ These measures are defined in Item 6. Selected Financial Data in our Annual Report on Form 10-K.

⁽³⁾ Certain statistical highlights and safety indicators have been updated to reflect new information or have been restated to conform with current presentation. The restatements of safety indicators reflect new information available within specified periods stipulated by the Federal Railroad Administration ("FRA") but that exceed the Company's financial reporting timeline.



One purpose.
One culture.
12,000 strong.



NOTE: Some photos were taken previous to COVID-19 mandated health and safety guidelines.



“ It's more than just a job.



“ It's not just what I do every day, it's what I love to do.



“ I'm honoured to be a part of this CP family.



“ I'm very proud to be a railroader.



“Pride means to me doing the best you can all the time.



“I love this job.

CP PROUD

In a time of adversity, our CP family didn't just meet the needs of the North American economy. We became stronger.

In the past year, we made our railroad safer and more efficient, increased capacity, created service solutions and further developed our greatest asset – our people.

CP's performance in a challenging environment is the result of a family of railroaders united by a single purpose and culture. A 12,000-strong team executing our precision scheduled railroading (PSR) operating model. A culture focused on service, performance and the pursuit of continued excellence, rooted in the values of accountability, diversity and pride.

When the COVID-19 pandemic began, our CP family embraced our role as essential workers with pride and fortitude. We continued to work on the ground across the network, to support the supply chain and provide goods and services for North Americans when they needed them most. Our CP family served from locomotives, shops, yards, offices and home offices to deliver as promised.

This year is a testament to the strength of PSR and our people. That is why we moved ahead with training and leadership development throughout the crisis so that our railroaders can continue to grow, whether they lead people, lead by example or both.

CP's strong results demonstrate our team's skill and ability to deliver for customers and shareholders alike, in any environment.

We have only just started to unlock our true potential.

CREATING NEW CAPACITY AND SERVICE SOLUTIONS

Our growth strategy is both simple and compelling: leverage our land holdings and franchise strengths and convert them into new service offerings that are meaningful for our customers.

We want to create relationships that are mutually beneficial: our customers strengthen their market presence and we grow with them. We provide customers with a service offering that's unique to CP and creates customer loyalty. This drives profitable, sustainable growth.

This past year, CP and A.P. Moller-Maersk announced that we will build and operate a world-class transload and distribution facility together in Vancouver, expanding supply chain options for customers of both companies. CP's unique landholdings in Vancouver enable us to bring to market a transload facility that

creates tremendous opportunity for sustainable growth. Together with Maersk, a global shipping leader, we will strengthen intermodal service in North America.

The opportunity matches CP's strategic land with a new customer looking to control their end-to-end supply chain, reduce third-party truck involvement and remove thousands of round trips from Vancouver roads. The new transload service will be an expansion of CP's existing Vancouver Intermodal Facility and will benefit from turnkey rail infrastructure. The import transload facility is planned to be operational in 2021.





RECORD GRAIN VOLUME

CP moved 31.32 million metric tonnes of Canadian grain and grain products in 2020, more than any prior calendar year in our history. This performance is a testament to the efficiency of CP's 8,500-foot High Efficiency Product train model, which more grain customers are converting to use, and strong collaboration with farmers and supply chain enablers.

NEW TRANSLOAD FACILITY

CP opened its new multi-commodity transload facility in Montréal. The new facility offers transloading services and supplementary intermodal transportation and distribution services from CP's Côte Saint-Luc yard, with 50 acres for future development to provide customers with access to new markets.



AUTOMOTIVE GEARING UP

We are growing with our customers and extending our reach in the automotive space, expanding auto compounds in Vancouver, Calgary and Cottage Grove, MN. Combined with a new auto compound in Chicago and a new NBSR compound in Saint John, we are well positioned to continue ramping up in this sector.



OUR NETWORK

873
MILES

AVERAGE LENGTH OF HAUL

**SHORTEST
ROUTES**

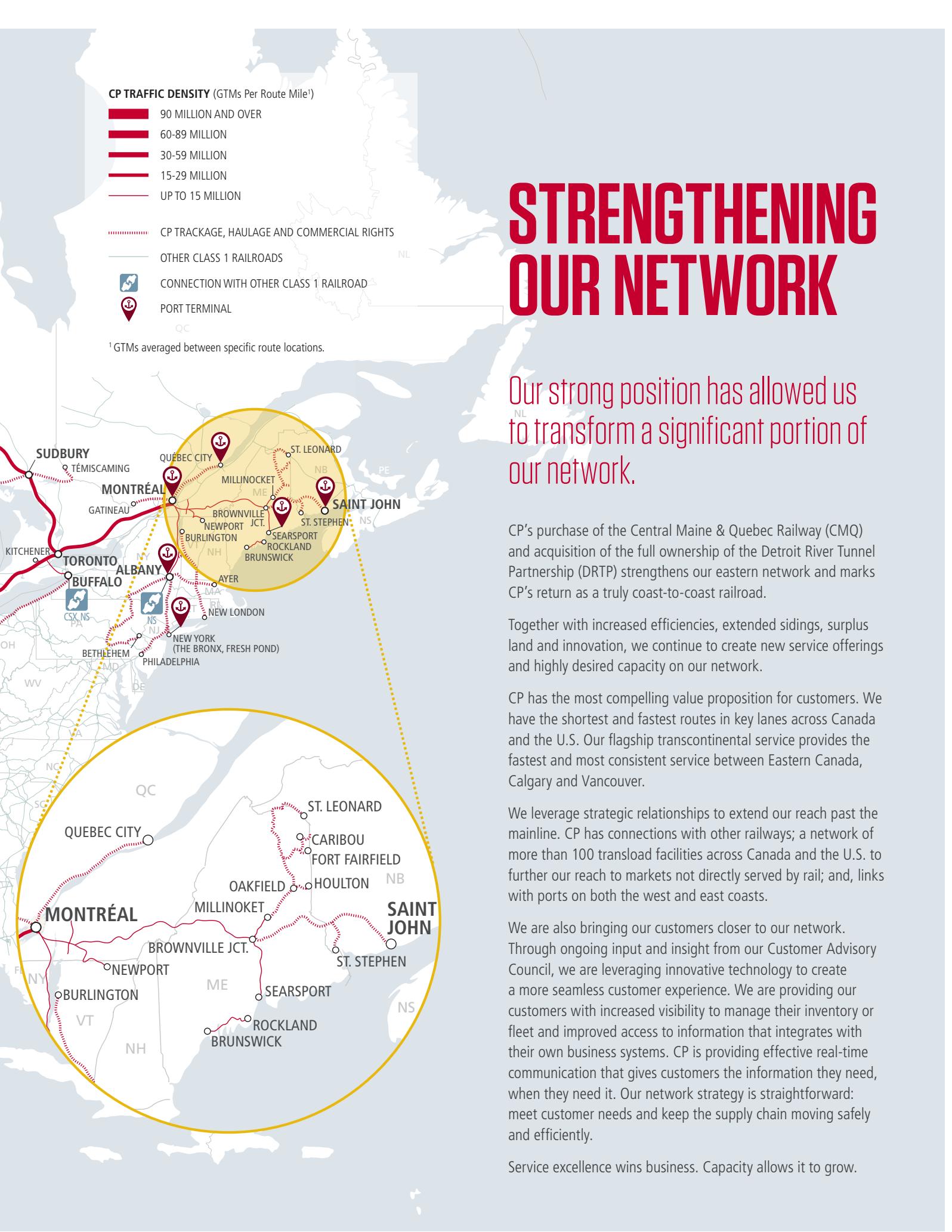
VANCOUVER TO U.S. MIDWEST
TORONTO TO CALGARY
SAINT JOHN TO MONTREAL
AND TORONTO

11 PORTS
SERVED ON WEST
AND EAST COASTS

13,000
MILE
RAIL NETWORK

**MOST BORDER
CROSSINGS**
IN WESTERN CANADA

100+
TRANSLOAD FACILITIES



The opportunities created by our return to the Atlantic region are generational.

EASTERN REACH EXPANDED

In June 2020, CP completed the acquisition of the CMQ and its rail lines primarily in Québec and Maine, stretching approximately 481 miles. CP is now a 13,000-mile rail network connecting the Atlantic coast to the Pacific coast across six Canadian provinces and 11 U.S. states.

The opportunities created by our return to the Atlantic region are generational.

After a 25-year absence, CP and its customers now have seamless, safe and efficient access to deep-water, congestion-free Atlantic Ocean ports at Searsport, Maine, and Saint John, N.B., via Eastern Maine Railway Company and New Brunswick Southern Railway.

The Port of Saint John can move products in every line of our business, including containers, automotive and bulk commodities. The Port of Searsport provides materials handling in many areas, including bulk, break-bulk, heavy lift and liquid transfer.

This expansion of CP's network directly and efficiently connects Atlantic Canada to Montréal, Toronto and the U.S. Midwest. We also have access to 10 additional transload facilities that serve a variety of commodities. Importantly, we now have a lane that is approximately 200 miles shorter than the competition, getting CP customers from the East Coast into Montréal, Toronto and Chicago faster. That's just the starting point as we continuously work to do better.

Our customers are aligned. After the successful calls to Port of Saint John in 2020, Hapag-Lloyd will begin regular service via CP to this key port starting in 2021.

CP has committed to investing up to \$90 million over three years into the CMQ property to enhance safety and efficiency over the corridor.

Complementing that investment is the Port of Saint John's \$205 million West Side Modernization project, which includes a new wharf, a terminal upgrade and a deeper shipping channel. These strategic investments, along with anticipated future investments, will make it possible for the Port of Saint John to

increase capacity four-fold to 800,000 TEUs (20-foot-equivalent units) in the future.

With a world-class terminal operator in DP World and CP's investment in the CMQ, we are giving customers and shareholders exposure to a new world-class gateway in the years to come.

CONSOLIDATING A KEY CORRIDOR

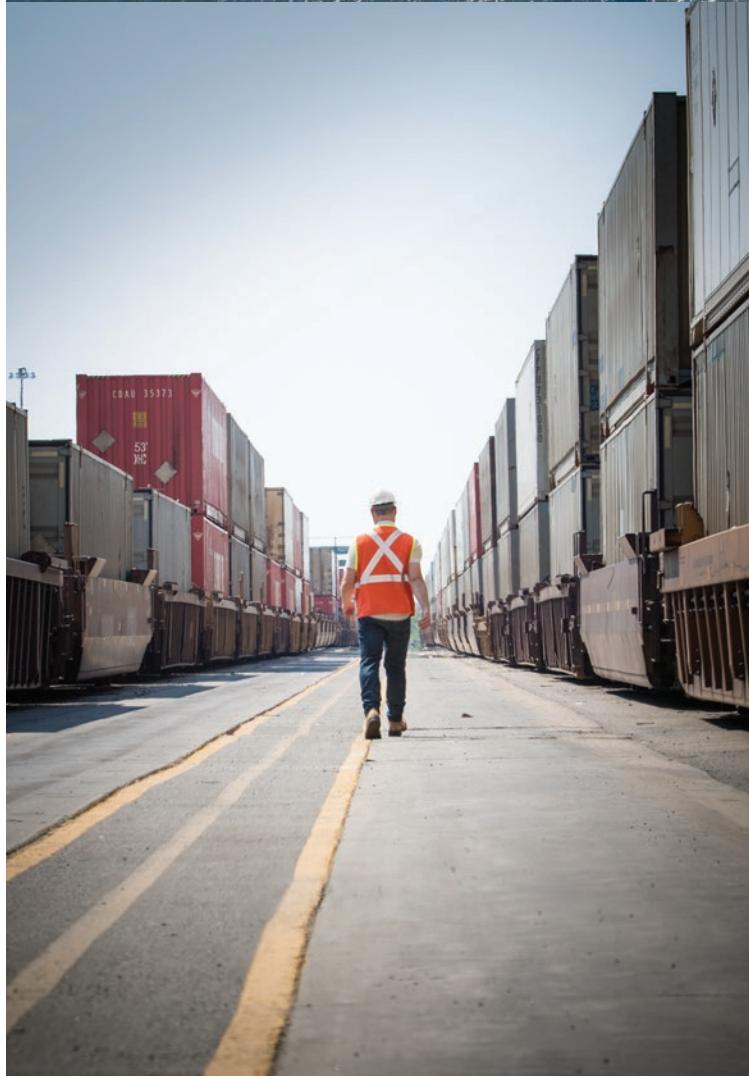
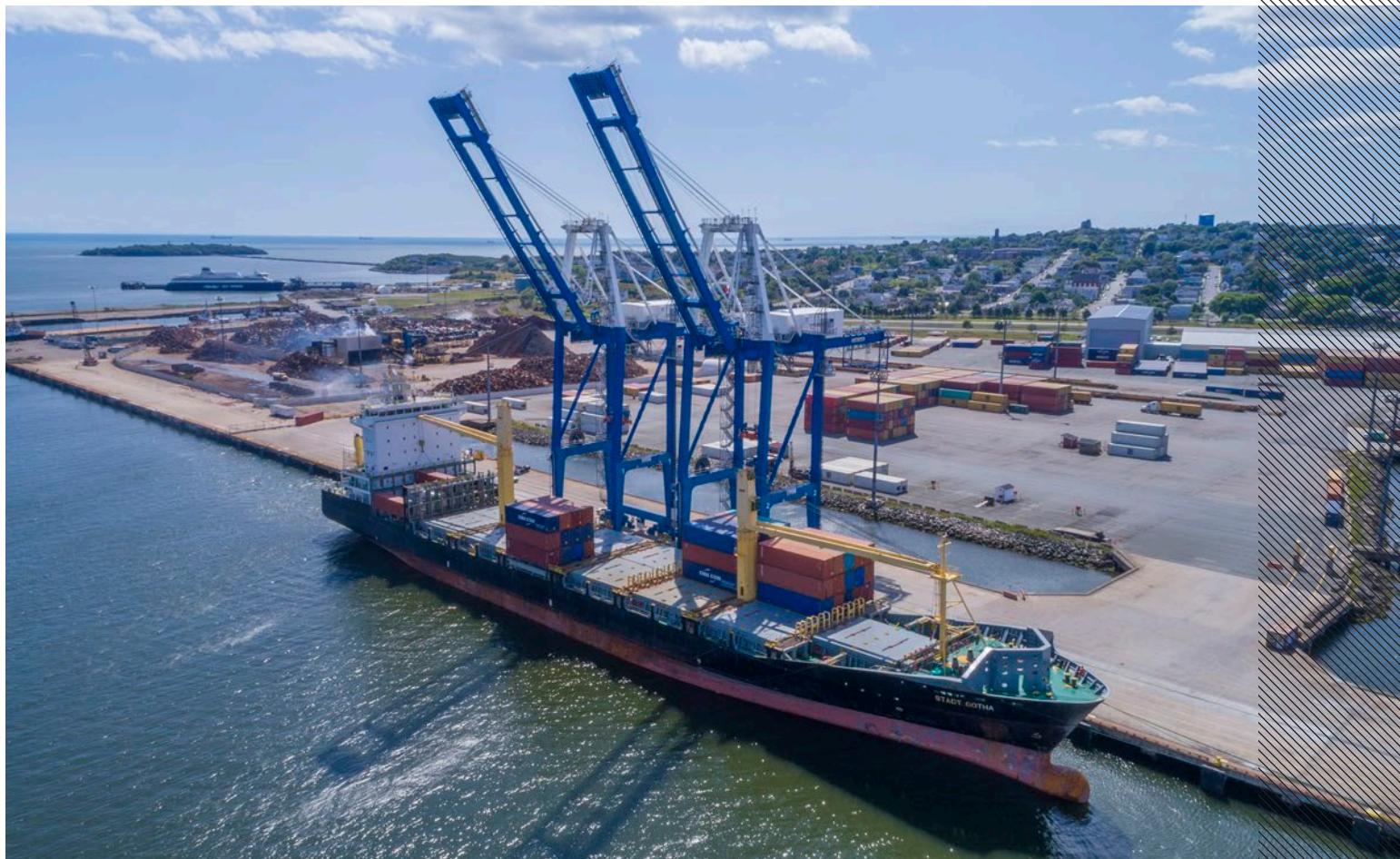
To further strengthen our eastern network, CP moved from minority owner to acquiring full control of the DRTP. By taking 100 percent ownership of the 1.6-mile tunnel linking Windsor, Ont., and Detroit, MI, CP can better operate the asset to the benefit of our customers and the North American supply chain. The accretive acquisition immediately reduces CP's operating costs and increases margins related to movements through the tunnel. Control of this strategic asset, combined with our purchase of CMQ, will further integrate the eastern part of our network and give us leverage to move more traffic from Atlantic Canada through to the Midwest.

ATLANTIC OPPORTUNITY

2 NEW PORTS
DEEP-WATER ACCESS AT
SEARSPORT, MAINE & SAINT JOHN, N.B.

4X CAPACITY
PORT SAINT JOHN CAPACITY PLANNED TO
INCREASE FROM 200,000 TO 800,000 TEUs

200 MILES SHORTER
GETTING CUSTOMERS FROM THE EAST COAST
INTO MONTRÉAL AND TORONTO FASTER



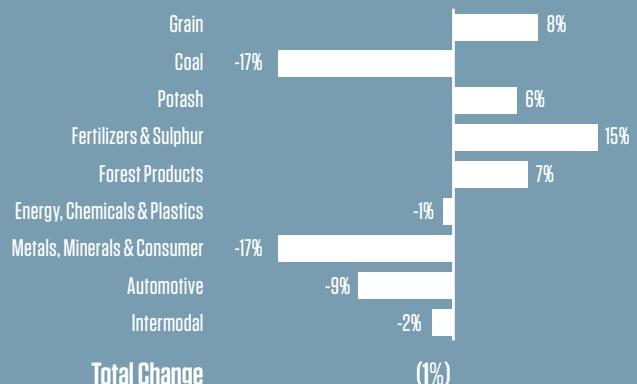
RESILIENCE: PERFORMANCE OVERCOMING ADVERSITY

Thanks to our industry-leading operating model and world-class employees, we have not only persevered throughout 2020 but are strongly positioned for the future.



FREIGHT REVENUE VARIANCE⁽ⁱ⁾

Foreign Exchange Adjusted % change, 2020 Freight Revenue vs 2019



3% DILUTED EPS
GROWTH

7% ADJUSTED DILUTED
EPS GROWTH⁽ⁱ⁾

⁽ⁱ⁾ These measures have no standardized meaning prescribed by accounting principles generally accepted in the United States ("GAAP") and, therefore, may not be comparable to similar measures presented by other companies. These measures are defined and reconciled in Non-GAAP Measures in Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations in our Annual Report on Form 10-K.

+6%
RECORD AVG. TRAIN
WEIGHTS

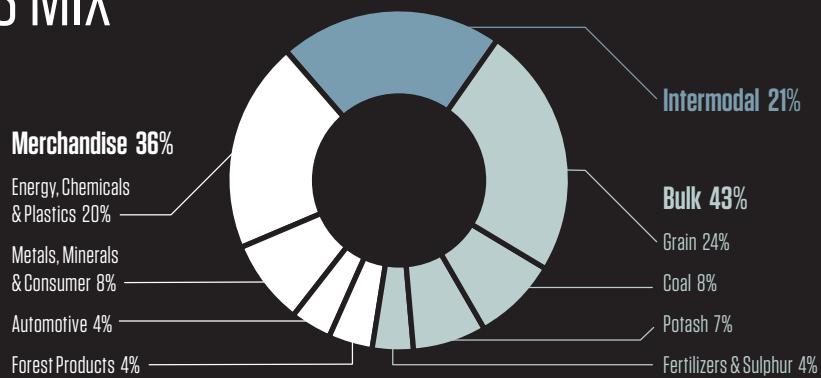
+7%
RECORD AVG. TRAIN
LENGTHS

571%
OPERATING RATIO
COMPANY RECORD



BUSINESS MIX

% of 2020 Freight Revenue



15th STRAIGHT YEAR
INDUSTRY LEADER IN SAFETY
0.96: FEDERAL RAILROAD ADMINISTRATION REPORTABLE
TRAIN ACCIDENT FREQUENCY (PER MILLION TRAIN-MILES)



TRAIN INSPECTION PORTAL

Our high-speed camera-based train inspection system is capable of producing full body high-resolution images of trains at track speed.



BETTER, SAFER, MORE EFFICIENT

We innovate today for safer and more efficient rail operations tomorrow. We are focused on developing and implementing technology that provides practical solutions to enhance our best-in-class safety and efficiency.

Our technology enables us to optimize assets and proactively manage repairs across the network to minimize potentially costly failures and enhance network efficiency. Our technology innovations are aimed at reducing dwell, improving speed, running longer and heavier trains and ensuring that we continue to operate North America's safest railway. All of these innovations will help CP operate safely and control costs.

SAFETY THROUGH AUTOMATION

TRAIN INSPECTION PORTAL

Located on our Maple Creek subdivision, our high-speed camera-based train inspection system is capable of producing full body high-resolution images of trains at track speed. The system uses multiple algorithms to help identify defective car components and detects 87 percent more required repairs than visual inspections. CP's portal stands apart from other similar portals through the use of infrared imaging which better detects issues and reduces the likelihood for images to be distorted. The portal produces 72 high-resolution images per car. CP received a Transport Canada exemption for visual inspections for outbound loaded potash trains. When used in conjunction with the cold wheel brake test alternative, loaded potash trains do not require any manual or brake inspections and are free to depart, which reduces dwell by up to four hours for every train. In addition, undercarriage imaging inspects the underside of all passing railcars and locomotives to identify missing bolts, bent or broken rigging, open bottom gates, broken coupling systems and draft arrangements. Combining all of these systems, we are able to reduce dwell, improve employee productivity, inspect trains 360 degrees and increase safety.

AUTONOMOUS TRACK GEOMETRY MEASUREMENT SYSTEM (ATGMS)

ATGMS is a system that uses a non-contact, laser-based optical measuring system attached beneath a boxcar that operates in revenue train service. We are able to detect, in real-time, defects that predict track deterioration. Our technology allows us to improve service, better prevent derailments and reduce service failures.

VEHICLE TRACK INSPECTION

Technology mounted on our locomotives can identify possible track deviations by measuring vertical and horizontal accelerations. Algorithms are then used to determine the type and severity of deviation and notifications are automatically sent to field personnel for remediation. Our vehicle track interaction systems now analyze more than 600,000 miles of data annually on our network.

CP INNOVATION

BROKEN RAIL DETECTION IN DARK TERRITORY

In our non-signaled territories, or dark territories, we are leveraging cost-effective technologies to automatically detect broken rails by running circuits through the rail. This provides the same benefit of identifying broken rail as Centralized Traffic Control at a tenth of the cost.

COLD WHEEL TECHNOLOGY

Our cold wheel technology can evaluate air brakes on descending grades using wheel temperatures. A wheel with no heat when descending a grade signifies that the brakes may not be applying effectively. We are able to leverage this technology to optimize assets by efficiently completing repairs. This test,

which was developed by CP, has a 32 percent higher detection rate than traditional inspections. CP proactively worked with Transport Canada to obtain an exemption from visual inspection requirements, which reduces terminal dwell. The exemption allows us to remove 2,400 hours of annual inspection time for each of the coal, potash, and sulphur fleets. We have received an exemption for grain, and are seeking an additional exemption for intermodal.

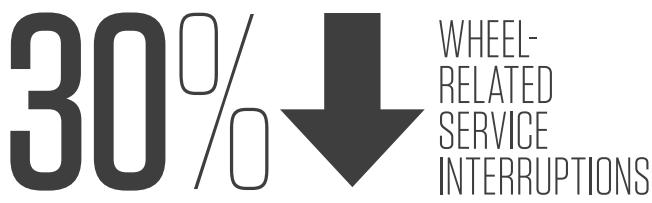
CRACKED WHEEL DETECTION

We have invented a method to detect and proactively remove wheels that have potential to break. The award-winning detection system identifies metallurgical defects in the surface of the wheels that could be missed via traditional visual inspection. This technology enables CP to detect defects and conduct proactive maintenance before a wheel failure occurs.

ENHANCED RAIL FLAW DETECTION

Leveraging our cracked wheel technology, we have applied this innovation to identify rolling contact fatigue electromagnetically on the surface of the rail. The technology uses an algorithm to identify the depth of cracks in the rail, compared to the rest of the analyzed rail, and if deemed an outlier, the rail is flagged for repair. We are then able to proactively manage rail repairs through either rail grinding or replacement. With this rail technology, we are able to better prevent derailments and avoid service failures.

OPTIMIZING OPERATIONS*



*Compared to previous technology and methods.

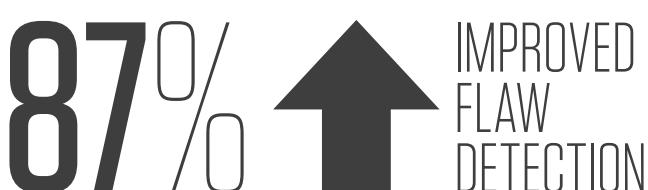
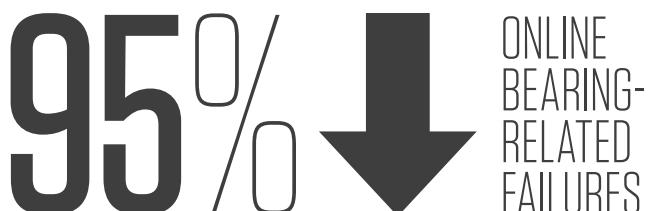
LEVERAGING BIG DATA

WHEEL LIFE FORECASTING

Leveraging data analytics, CP can predict within a month when wheel failures may occur, which improves safety, reduces online failures and decreases the need to set off cars in transit, which impacts network speed. We are able to use this data to proactively conduct maintenance on the affected wheels and reduce mechanical failures. Our wheel analytics have reduced wheel-related service interruptions by 30 percent. In addition, private car owners can subscribe to our reports to conduct their own proactive maintenance, which will continue to drive down service interruptions.

PREDICTIVE BEARING FAILURE

Our acoustic detector system predicts when a bearing is going to fail up to three months in advance. The microphones located next to the track are able to detect bearing defects before failure by inferring acoustic signals from train noises. Our patented detection process has reduced online bearing-related failures by 95 percent by enabling proactive detection and replacement. In 2018, our predictive analytics innovation was recognized with a safety award by the Railway Association of Canada.



SUSTAINABLY DRIVEN

Sustainability is ingrained in CP's precision scheduled railroading culture.

Do better. Do more with less. Create long-term, win-win relationships with customers. Be mindful of our people, shareholders and the communities we operate in – and be safe. Our focus on long-term sustainable growth is aligned with environmental, social and governance performance.

CP's leadership in sustainability was recognized by several organizations in 2020.

We were added to the 2020 Dow Jones Sustainability Index North America, which measures corporate sustainability leaders' performance through a comprehensive assessment of economic, environmental and social criteria, in a year that saw a record number of participants in the Corporate Sustainability Assessment. CDP (formerly the Carbon Disclosure Project) awarded CP a leadership level score of A- for our 2020 climate

change disclosure. CP has been a contributing participant to CDP for more than a decade, consistently disclosing progress on improving the management of greenhouse gas emissions and ongoing energy efficiency initiatives. World Finance's Sustainability Awards 2020 recognized us as a sustainability leader in the transportation industry for our efforts in transitioning to a low-carbon economy. Corporate Knights Magazine included CP on its Best 50 Corporate Citizens list, and we were named one of Canada's Best Diversity Employers for 2020.

Year-in, year-out, we are committed to operating in an ethical and responsible manner that considers our obligations to employees, customers, communities and shareholders – and we are seeking to understand how we can leverage our people, processes and technology to become even better.



Rendering of solar installation at our Calgary headquarters, to be completed in early 2021.

ENVIRONMENTAL

**RAIL VS.
TRUCKING** **75%** 
LESS GHG EMISSIONS

44%  **REDUCED GHG
INTENSITY
(2020 VS 1990)**

SOCIAL

**HELPED RAISE
THROUGH
CP HAS HEART** **\$2.47M**
TO IMPROVE THE HEART HEALTH OF NORTH AMERICANS

43%  **TRAIN
ACCIDENT
FREQUENCY
(2020 VS 2012)**

GOVERNANCE

54.5% OF DIRECTORS
ARE MEMBERS OF
DESIGNATED GROUPS

ENVIRONMENTAL

At CP, we believe moving freight by rail will continue to play a crucial role in the low carbon economy in North America. In 2020, we released our first public statement on climate change, demonstrating our commitment to take action and meet the challenge of climate change. Our statement supports the goals of the Paris Agreement and the Pan-Canadian Framework on Clean Growth and Climate Change, which seek to limit global temperature rise to well below 2°C above pre-industrial levels. CP committed to establishing a science-based emissions reduction target to guide its climate action. In 2020, we completed a comprehensive scenario analysis to understand the full range of possible climate change impacts to our business and align with the recommendations of the Task Force on Climate-Related Financial Disclosure. Through this work, we plan to formalize the integration of climate-related risks into our enterprise risk-management mechanisms and develop strategies for mitigation of risk and pursuit of opportunity.

This past year, we broke ground on one of the largest private solar operations in Alberta at our headquarters in Calgary. The installation will be completed in 2021 and is expected to generate more power than consumed annually at this location. It will also help avoid an estimated 2,600 tonnes of carbon emissions a year.

SOCIAL

CP believes that we must focus on not only our economic impact, but also on the ways in which we contribute to society. Whether it's establishing a culture of integrity, inclusion, diversity and respect within our workforce; integrating workplace, operational and public safety into everything we do; supporting communities along our network through job creation, business partnerships or educational programs; or supporting healthy lifestyle initiatives, we recognize that our success is directly linked to building positive relationships with all of our stakeholders.

In 2020, we retained our status as the industry's leader with the lowest FRA-reportable train accident rate in North America for the 15th consecutive year, demonstrating the effectiveness of our efforts to protect public safety and the environment.

Our culture is focused on people. We believe that different backgrounds, experiences and perspectives enhance creativity and innovation and encourage diversity of thought in the workplace. In 2020, CP provided respectful and inclusive workplace training to 1,885 employees. Additionally,



approximately 800 management employees completed diversity and inclusion education sessions. Since 2019, more than 1,500 executives, engineering, mechanical, operations, network services and head office management employees received Indigenous cultural awareness training as part of CP's support for diversity and inclusion in our workplace.

In response to ongoing social unrest and social injustice across the U.S., CP donated US\$1 million to three organizations to support the people of Minneapolis (home to the headquarters of our U.S. operations) and meaningful positive social change nationally. CP also continued to support the development and advancement of women within our operations; increased our veteran recruitment and hiring efforts; and, progressed our relationships with associations and organizations that attract, recruit and support skilled immigrants, persons with disabilities and women.

GOVERNANCE

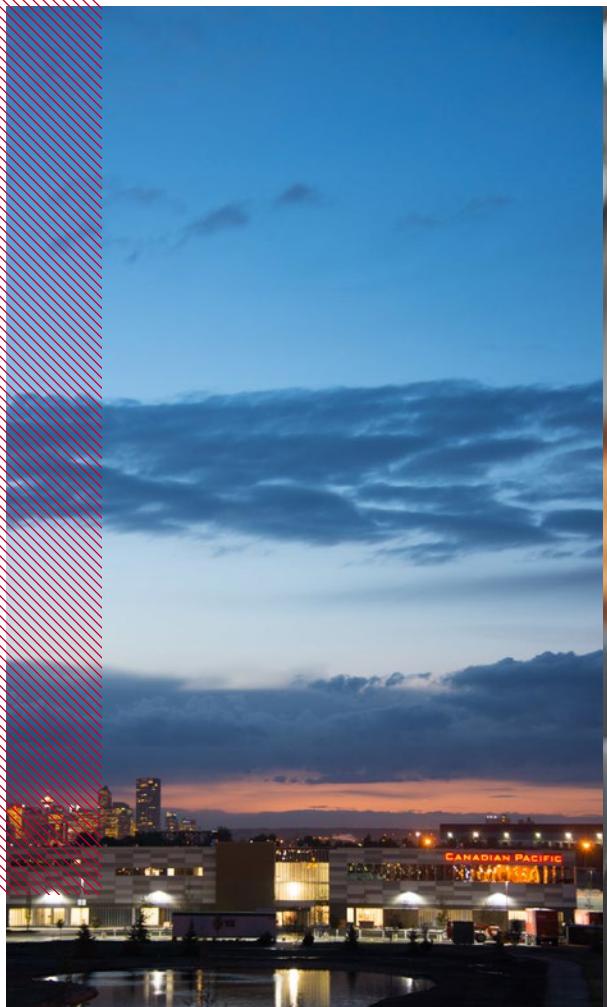
Our commitment to sustainability and resulting performance is guided by our Board of Directors, comprising of a diverse group of individuals with expertise in rail, strategic planning, risk management, crisis response, finance and accounting, executive compensation and human resources. Led by Isabelle Courville,

the first female chair of any Class 1 railroad in North America, CP's board has 45 percent female representation and nine percent visible minority representation. Accordingly, 54.5 percent of CP's Board are members of designated groups.

The Board works with our executive leaders to establish and regularly review short and long-term strategic objectives for CP. The Board also oversees these efforts through several committees, including the Risk and Sustainability Committee, formed in 2019, which monitors oversight of CP's key risks, strategies and sustainability topics.

CP remains committed to increasing diversity throughout all levels of the organization and implemented an employee diversity and inclusion policy. In addition, CP's Board of Directors adopted a Board diversity policy, which outlines that recommendation of directors for election or appointment to the Board will be made based on balance of skills, background, experience and knowledge, and will take into account diversity considerations, such as gender, age, ethnicity and different abilities.

For more information on our sustainability commitment and reporting, visit sustainability.cpr.ca



LETTER TO SHAREHOLDERS FROM THE PRESIDENT AND CEO

OUR CP FAMILY IS RESILIENT, TOUGH AND COMMITTED

This past year demonstrated the full strength of our conviction and pride in being CP railroaders.

In a time of great challenge and need during a global pandemic, the CP family delivered. North Americans now recognize, more than ever before, that the railroaders who deliver supplies they count on are essential workers.

More capacity, new service solutions, innovations in safety, environmental leadership and extended network reach – all the result of our 12,000-strong family of railroaders united by the shared purpose and values of precision scheduled railroading (PSR). As 2020 has clearly shown, there are no limits to what we can achieve together.

The playbook for our ongoing success is straightforward: deliver excellent service that provides value to customers and rewards to shareholders; do it safely and with the lowest possible environmental impact; provide a rewarding workplace that invests in its people; and grow in lockstep with our operating model, not at its expense.

I am extremely proud of our operational performance during a volatile year. The people who power our railroad did an extraordinary job effectively managing service, train weights, train lengths and crews as volumes came back. As a true PSR railroad, we know a low operating ratio is an outcome of running the business the right way. In 2019, our operating ratio was sub-60 percent, a company record. Despite the extraordinary challenges thrown at us in 2020, we produced a new record-low operating ratio of 57.1 percent. This year-over-year improvement truly demonstrates the resiliency of our PSR operating model and the power of our culture of accountability, particularly while operating

in a tough environment. In 2020, facing economic headwinds, we grew reported diluted earnings per share 3 percent to 17.97 and adjusted diluted earnings per share 7 percent to \$17.67⁽¹⁾ and our share price appreciated by 33 percent.

We also continue to create value that cannot be easily replicated – unique, exceptional service offerings and cost structures that are second to none. CP has the shortest lengths of haul in key domestic markets and we have built upon that competitive advantage with faster and more reliable service. CP also possesses significant land holdings at key locations across our network, giving us optionality to create unique market solutions for customers.

There are no shortcuts to long-term, sustainable success. If we are going to win in this marketplace, we've got to consistently provide meaningful, sustainable customer-focused solutions.

SUSTAINABLE GROWTH

If we're investing in growth, it has to make sense for the long term and fit with our franchise. Sustainable means sticking to our model.

Our agreement with Maersk is a textbook example. In Vancouver, approximately 25 percent of what comes off tidewater gets transloaded, as opposed to 75 percent at other West Coast ports. Most goods are trucked off the port in a very congested area. We're solving that. Our proposal to Maersk: let's build a facility inside our existing land footprint, provide you with rail service from the port and reduce the need for trucking.

⁽¹⁾ This measure has no standardized meaning prescribed by GAAP and, therefore, may not be comparable to similar measures presented by other companies. This measure is defined and reconciled in Non-GAAP Measures in Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations in our Annual Report on Form 10-K.



There are no shortcuts to long-term, sustainable success. If we are going to win in this marketplace, we've got to consistently provide meaningful, sustainable customer-focused solutions.

Together, we are constructing a new, world-class transload and distribution facility in Vancouver to expand CP's and Maersk's supply chain options for customers. It's a win-win for CP, for Maersk and for the environment.

In lockstep with the grain supply chain, we are also moving record volumes of grain as a result of the 8,500-foot High Efficiency Product train model. Our new high efficiency railcars carry 15 percent more grain by volume. Working in close collaboration with grain shippers, we continue to set records for Canadian grain across all metrics and have yet to reach our full potential as more customers adopt our model. We continue to invest in our grain fleet with additional hopper cars coming into service each week. Since announcing a half-billion-dollar plan in 2018, CP has added more than 3,800 new hopper cars to its fleet via purchase or lease.

Our recent acquisition of Central Maine & Quebec Railway has extended our reach and gives us deep-water, congestion-free access to two Atlantic Ocean ports – and a transformational opportunity to create new capacity, service and growth. Hapag-Lloyd will begin regular service with CP and Port of Saint John starting in 2021. CP's 200-mile route advantage to key centers like Montreal, Toronto and Chicago provides unmatched service and the opportunity to grow the Port of Saint John into the key Atlantic Canada trade gateway. CP, along with the Port of Saint John, is investing in improvements and new capacity to bring more long-term customers online.

These are just some of the many new service offerings and opportunities across all of our lines of business that point to strong growth potential in 2021 and beyond.

SAFETY INNOVATION

Operating safely is a foundational principle at CP. I am proud to state that this past year, CP achieved a new record low for Federal Railroad Administration (FRA)-reportable injuries and held our position as the safest Class 1 railroad in North America for the 15th straight year, based on FRA-reportable train accident frequency. We continued to strengthen our Home Safe program to help ensure our railroaders go home safely, and made milestone achievements not only in improving safety but also in strengthening network efficiency. For example, our train inspection portal technology and cold wheel brake test innovation can detect significantly more defects than traditional inspections. Both innovations have made our operations safer and earned exemptions from Transport Canada, reducing dwell times for certain fleets.

ENVIRONMENTAL ACTION

Profitable, sustainable growth means having a modern long-term vision for this historic railroad. Our focus remains on delivering value for shareholders and customers as we transition to a low-carbon economy in North America. Times of change or disruption provide opportunities for leadership through both example and action. Across the supply chain, we are taking action when it comes to making a positive impact on the environment.

This past year, we released our first public statement on climate change, supporting the goals of the Paris Agreement and the Pan-Canadian Framework on Clean Growth and Climate Change, which seek to limit global temperature rise to well below 2°C above pre-industrial levels. We are backing that statement up with innovative initiatives such as building a solar panel farm at our headquarters in Calgary. This will be one of the largest private solar operations in the province and is expected to generate more power than consumed annually at our headquarters by early 2021. We are also developing North America's first line-haul hydrogen-powered locomotive. CP's Hydrogen Locomotive Program will retrofit a line-haul locomotive with hydrogen fuel cells and battery technology to drive the locomotive's electric traction motors.

As our volumes and market presence grow, more truck traffic is removed from the roads. Estimates show that our new transload facility with Maersk will remove up to 100,000 trucks from Metro Vancouver's congested roads and reduce greenhouse gas emissions by over 4,000 tons per year. This is good for our business and for the environment. Rail produces 75 percent less greenhouse gas emissions than trucks and is four times more fuel efficient. CP's fuel efficiency exceeds the North American Class 1



railway average – since 1990, we've improved our fuel use by more than 40 percent.

Our world-class railroaders will continue to develop and implement solutions that drive safety, sustainability, reliability and efficiency.

DEVELOPING PEOPLE

The challenges presented by the pandemic emphasized the fact that our people are our greatest asset. That is why, instead of pulling back, we ramped up training and leadership development throughout the year so that our railroaders can continue to grow. The past year came with unexpected and extraordinary opportunities for the CP family at all levels and in all areas of the business to step up and become even stronger.

We also embraced the opportunity to review and improve our diversity initiatives, and took further steps to help ensure we are attracting, hiring, retaining and nurturing a workforce where all employees have equal opportunities to succeed and advance. Three new diversity councils – racial, Indigenous and

gender – were established to help ensure we consider diversity and inclusion when we make decisions, provide feedback on corporate direction and promote initiatives that relate to each council's area of focus.

I am deeply grateful to our CP family for their resilience and effort throughout a historically challenging year, and remain optimistic about what lies ahead. We know that our PSR operating model works in good times; this year has further demonstrated how well it works when times get tough.

Individually and collectively, we are CP Proud!

Sincerely,

KEITH CREEL

President and CEO

LETTER FROM THE CHAIR

This past year was extraordinary in so many ways. As essential workers, the CP team continued to deliver safely and efficiently in the face of COVID-19. 2020 highlighted CP's collective commitment and the depth and breadth of the team, led by President and CEO Keith Creel. It was also a year where CP focused intensely on sustainability and its commitment to environmental, social and governance stewardship.

ENVIRONMENTAL

Despite the ongoing challenges of 2020, CP grew stronger and continued to operate safely and sustainably. In July, CP released its first public statement on climate change. The statement acknowledges the effects of rising global temperatures and lays out CP's commitment to ongoing efforts to mitigate the impacts. In 2021, CP will establish a science-based emissions reduction target to guide its climate action.

Railroads have a powerful role to play as we transition to a less carbon-intensive economy. This past year, CP forged new relationships with other transportation industry sustainability leaders like Maersk. The relationship with Maersk will see thousands of trucks come off publicly funded highways across the Lower Mainland of British Columbia. This type of forward-thinking collaboration is a win for CP, the supply chain and the environment.

Because of its ongoing collaborative efforts and commitment, CP saw improvements in its scoring by major sustainability ratings firms. In November, CP was named to the Dow Jones Sustainability Index North America, and in December, the CDP recognized CP for leadership on climate action with an A- score on its 2020 climate change disclosure. This past year CP was also named to Corporate Knights' 2020 list of Canada's best corporate citizens and the World Finance Sustainability Awards 2020 named the company a sustainability leader in the transportation industry.

SAFETY AND SOCIAL

In 2020, CP did not depart from its commitment to safety, leading the North American industry for a 15th straight year with the lowest Federal Railroad Administration (FRA)-reportable train accident frequency. CP continues to focus on safety, which is an ongoing journey, not a destination.



CP also continued to invest in its communities, despite the pandemic. These investments included a US\$1 million donation to one national and two Minneapolis-based organizations. In 2020, CP Has Heart helped raise nearly \$2.5 million for cardiac causes across the CP network, bringing the total since 2014 to \$23 million, and CP ran a virtual Holiday Train, donating \$1.24 million to 201 food banks in communities that ordinarily host in-person events. Since 1999, the Holiday Train has helped raise \$19 million and collected 4.8 million pounds for food banks in the communities in which CP operates.

GOVERNANCE

In January 2020, the Board enacted a diversity policy and we continue to focus on diversity, especially as we look at Board renewal. Our Board is currently made up of 45 percent women with one member who is a visible minority. Women chair two of our four standing committees, and one of those committees is chaired by our visible minority Board member. We believe this diversity makes us stronger and better equipped to serve CP shareholders.

In 2020, CP ranked second in the Globe and Mail's annual comprehensive ranking of Canada's corporate boards, known as "Board Games", in part due to our strong focus on governance.

2020 was also the first time in our nearly 140-year history we hosted a virtual Annual General Meeting. To put it simply, it was a year like no other. Thanks to the CP family, customers and shareholders, the company persevered and prospered.

While it was not the first time this management team has faced challenges, it served as another reminder of the resilience of their leadership and of the sustainable nature of this historic, proud company.

Sincerely,

A handwritten signature in black ink, appearing to read "Isabelle Courville".

ISABELLE COURVILLE

Chair of the Board

CANADIAN PACIFIC
RAILWAY LIMITED
**FORM
10-K**

CANADIAN PACIFIC RAILWAY LIMITED

FORM 10-K TABLE OF CONTENTS

PART I

	Page
Item 1. Business	26
Item 1A. Risk Factors	44
Item 1B. Unresolved Staff Comments	47
Item 2. Properties	48
Item 3. Legal Proceedings	52
Item 4. Mine Safety Disclosures	52
Information about our Executive Officers	53

PART II

Item 5. Market for Registrant's Common Equity, Related Shareholder Matters and Issuer Purchases of Equity Securities	56
Item 6. Selected Financial Data	58
Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations	59
Item 7A. Quantitative and Qualitative Disclosures About Market Risk	99
Item 8. Financial Statements and Supplementary Data	100
Item 9. Changes in and Disagreements With Accountants on Accounting and Financial Disclosure	146
Item 9A. Controls and Procedures	146
Item 9B. Other Information	148

PART III

Item 10. Directors, Executive Officers and Corporate Governance	150
Item 11. Executive Compensation	150
Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters	150
Item 13. Certain Relationships and Related Transactions, and Director Independence	150
Item 14. Principal Accounting Fees and Services	150

PART IV

Item 15. Exhibits, Financial Statement Schedule	152
Item 16. Form 10-K Summary	158
Signatures	159

PART I

ITEM 1. BUSINESS

Company Overview

Canadian Pacific Railway Limited ("CPRL"), together with its subsidiaries ("CP" or the "Company"), owns and operates a transcontinental freight railway in Canada and the United States ("U.S."). CP provides rail and intermodal transportation services over a network of approximately 13,000 miles, directly serving the principal business centres of Canada from Montréal, Québec, to Vancouver, British Columbia ("B.C."), and the U.S. Northeast and Midwest regions. CP's railway network feeds directly into the U.S. heartland from the East and West coasts. Agreements with other carriers extend the Company's market reach in Canada, through the U.S. and into Mexico. CP transports bulk commodities, merchandise freight and intermodal traffic. For additional information regarding CP's network and geographical locations, refer to Item 2. Properties.

CPRL was incorporated on June 22, 2001, under the *Canada Business Corporations Act* and controls and owns all of the Common Shares of Canadian Pacific Railway Company ("CPRC"), which was incorporated in 1881 by Letters Patent pursuant to an Act of the Parliament of Canada. CPRL's registered, executive and corporate head office is located at 7550 Ogden Dale Road S.E., Calgary, Alberta T2C 4X9. CPRL's Common Shares (the "Common Shares") are listed on the Toronto Stock Exchange ("TSX") and the New York Stock Exchange ("NYSE") under the symbol "CP".

For purposes of this annual report, all references herein to "CP", "the Company", "we", "our" and "us" refer to 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. All references to currency amounts included in this annual report, including the Consolidated Financial Statements, are in Canadian dollars unless specifically noted otherwise.

Strategy

CP is continuing the journey to become the best railway in North America, with a culture of responsibility and accountability focused on five key foundations:

- **Provide Service:** Providing efficient and consistent transportation solutions for the Company's customers. "Doing what we say we are going to do" is what drives CP in providing a reliable product with a lower cost operating model. Centralized planning aligned with local execution is bringing the Company closer to the customer and accelerating decision-making.
- **Control Costs:** Controlling and removing unnecessary costs from the organization, eliminating bureaucracy and continuing to identify productivity enhancements are the keys to success.
- **Optimize Assets:** Through longer and heavier trains, and improved asset utilization, the Company is moving increased volumes with fewer locomotives and cars while unlocking capacity for future growth potential.
- **Operate Safely:** Each year, CP safely moves millions of carloads of freight across North America while ensuring the safety of our people and the communities through which we operate. Safety is never to be compromised. CP strives for continuous implementation of state-of-the-art safety technology, safety management systems, and safety culture with our employees to ensure safe, efficient operations across our network.
- **Develop People:** CP recognizes that none of the other foundations can be achieved without its people. Every CP employee is a railroader and the Company has established a culture focused on our values of accountability, diversity and pride, in everything we do. Coaching and mentoring all employees into becoming leaders will continue to drive CP forward.

Starting in 2012, CP transformed its operations by investing in the network and executing a precision scheduled railroading model that lowers costs, optimizes assets, and provides better, more competitive service.

Today, we continue to apply our long-term strategy: leverage our lower cost base, network strengths and improved service to drive sustainable, profitable growth. While the accomplishments during the turnaround were tremendous, CP's journey to become North America's best-performing rail carrier is far from over. As a Company, we will remain focused on our next level of service, productivity, and innovation to continue to generate sustainable value for our customers and results for our shareholders.

Business Developments

COVID-19 pandemic

The effects of the COVID-19 pandemic on consumer demand resulted in lower volumes in the following lines of business: Energy, chemicals and plastics, Metals, minerals and consumer products, and Automotive.

As COVID-19 continued to spread throughout Canada and the United States during 2020, CP conducted business as usual, to the greatest extent possible in the circumstances, while continuing to apply the principles of precision scheduled railroading to respond to changes in demand. The Company is continuing to take a variety of measures to ensure the availability of its transportation services throughout our network, promote the safety and security of our

employees, and support the communities in which we operate. Certain modifications the Company has made in response to the COVID-19 pandemic include but are not limited to: implementing periods of working at home for certain office employees; restricting employee business travel; implementing post-travel employee screening; strengthening clean workplace practices; reinforcing socially responsible sick leave recommendations; limiting visitor and third-party access to Company facilities; launching internal COVID-19 resources for employees; creating a pandemic response team comprised of employees and members of senior management; and encouraging telephonic and video conference-based meetings along with other hygiene and social distancing practices recommended by health authorities including Health Canada, the U.S. Centers for Disease Control and Prevention, and the World Health Organization. CP supported employees by working with labour unions to shorten recall times to be prepared for demand increases while supplementing employment insurance payments and maintaining health benefit coverage for employees during that period. CP also awarded a bonus for our frontline employees who worked or were laid off in 2020 due to the COVID-19 pandemic. CP is responding to this crisis through measures designed to protect our workforce and prevent disruptions to the central role the Company's operations provide to the North American economy. CP's service is deemed essential as part of the transportation industry. We believe that we remain well positioned to adjust to market conditions to assist our customers as they work to manage their supply chain and inventories.

Preventative measures that serve to minimize the risk of exposure to COVID-19 remain in effect, including modifying our workspace to implement physical distancing measures, and continuously reevaluating our efforts with safety as a top priority.

In addition to the above, we have also observed many other companies, including companies in our industry, taking precautionary and preemptive actions to address the COVID-19 pandemic, and companies may take further actions that alter their normal business operations. We will continue to actively monitor the situation and may take further actions that could materially alter our business operations as may be required or recommended by federal, provincial, state or local authorities, or that we determine are in the best interests of our employees, customers, shareholders, partners, suppliers, and other stakeholders.

Additional information concerning the impact COVID-19 may have to our future business and results of operations is provided in Part I, Item 1A. Risk Factors.

Other current business developments

On January 27, 2021, CP announced its Board of Directors will seek shareholder and regulatory approval for the implementation of a five-for-one share split of CP's issued and outstanding common shares. The share split is subject to the approval of shareholders at the Annual and Special Meeting of Shareholders scheduled to be held on April 21, 2021 and to the requirements of the Toronto Stock Exchange ("TSX") and New York Stock Exchange ("NYSE"). CP also announced a normal course issuer bid ("NCIB") commencing January 29, 2021, to purchase up to 3.33 million Common Shares in the open market for cancellation before January 28, 2022.

On December 22, 2020, CP acquired full ownership of the Detroit River Tunnel Partnership ("DRTP"), which owns a 1.6-mile rail tunnel linking Windsor, Ontario, and Detroit, Michigan. The purchase price for the transaction was approximately \$398 million, net of cash acquired. CP previously owned a 16.5 percent interest in the partnership and was its designated operator. The acquisition will reduce CP's operating costs related to movements through the tunnel while further integrating the eastern part of our network. For additional information regarding this acquisition, refer to Item 8. Financial Statements and Supplementary Data, Note 10 Business combination.

In the fourth quarter of 2020, CP announced its plan to develop North America's first line-haul hydrogen-powered locomotive. CP's Hydrogen Locomotive Program will retrofit a line-haul locomotive with hydrogen fuel cells and battery technology to drive the locomotive's electric traction motors. Once operational, CP will conduct rail service trials and qualification testing to evaluate the technology's readiness for the freight-rail sector. The work builds on CP's prior experience with testing low-emitting locomotive technologies, including biofuels, compressed natural gas and battery-powered solutions. This project aligns with CP's focus on finding innovative solutions to support a sustainable future.

In the fourth quarter of 2020, CP received a leadership level score of A- from CDP for its 2020 climate change disclosure. This accomplishment represented a significant milestone in CP's journey to integrate climate-related risks and opportunities into the company's sustainability programs and reporting practices. CDP is an internationally recognized non-profit organization that runs a global environmental disclosure platform assessing companies on their climate-related performance and transparency.

In the fourth quarter of 2020, CP was added to the 2020 Dow Jones Sustainability Index North America. The index measures corporate sustainability leaders' performance through a comprehensive assessment of economic, environmental and social criteria. The top companies were selected from a record number of participants.

In the third quarter of 2020, CP released its first public statement on climate change, acknowledging the effects of rising global temperatures and our commitment to ongoing efforts to mitigate the impacts. The statement supports the goals of the Paris Agreement and the Pan-Canadian Framework on Clean Growth and Climate Change, which seek to limit global temperature rise to well below 2°C above pre-industrial levels. In support of this initiative, we plan to establish a science-based emissions reduction target to guide our climate action.

On July 21, 2020, CP increased its quarterly dividend to \$0.95 per share on the outstanding Common Shares, from \$0.83 per share from the prior quarter.

In the second quarter of 2020, CP completed its previously announced acquisition of Central Maine and Québec Railway U.S. Inc. ("CMQ U.S."). Together with the December 30, 2019 completion of the acquisition of Central Maine & Québec Railway Canada Inc. ("CMQ Canada"), the acquisition of CMQ U.S. completed CP's purchase of the entire Central Maine & Québec Railway ("CMQ") network originally announced on November 20, 2019, for approximately \$174 million (U.S. \$133 million). CMQ U.S. and CMQ Canada will continue to operate in the U.S. and in Canada respectively as subsidiaries of CP. CMQ owns rail lines primarily in Québec and Maine, stretching approximately 481 miles, and primarily moving forest products, refined petroleum products, chemicals and plastics. This acquisition provides CP with strategic access into the U.S. Northeast and Atlantic Canada. The transaction provides CP customers with seamless, safe and efficient access to ports at Searsport, Maine, and to Saint John, New Brunswick, via Eastern Maine Railway Company and New Brunswick Southern Railway. With the CMQ acquisition, CP is now a 13,000-mile rail network connecting the Atlantic coast to the Pacific coast across six Canadian provinces and 11 U.S. states. For additional information regarding this acquisition, refer to Item 8. Financial Statements and Supplementary Data, Note 10 Business combination.

On April 21, 2020, the Company held its annual meeting of shareholders, which was conducted via a virtual only format by live webcast online for the first time. All 11 director nominees were elected.

Prior Developments

On December 17, 2019, the Company announced an NCIB, commencing December 20, 2019, to purchase up to 4.80 million Common Shares in the open market for cancellation before December 19, 2020.

During the first quarter of 2019, the Company experienced severe winter operating conditions and an increase in the frequency and severity of casualty incidents and derailments. As a result, the Company incurred significant costs to manage severe weather conditions, as well as direct casualty costs, and higher operating costs. During this period and the subsequent network recovery the Company also experienced losses and deferrals of potential revenues.

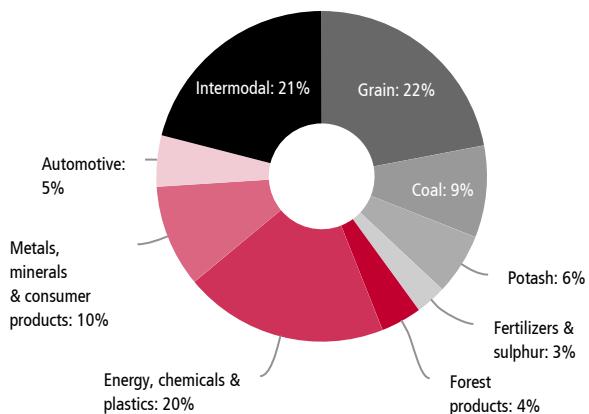
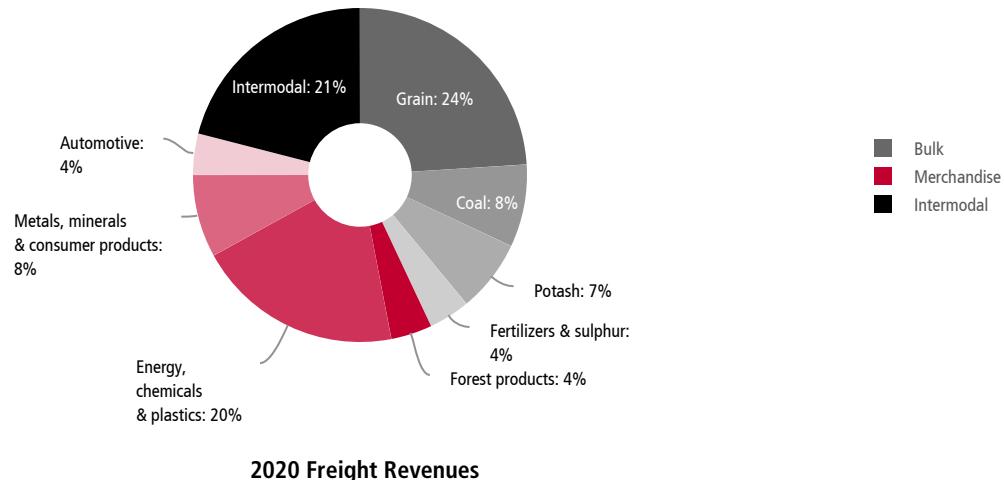
Operations

The Company operates in only one operating segment: rail transportation. Although the Company provides a breakdown of revenue by business line, the overall financial and operational performance of the Company is analyzed as one segment due to the integrated nature of the rail network. Additional information regarding the Company's business and operations, including revenue and financial information, and information by geographic location is presented in Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations, and Item 8. Financial Statements and Supplementary Data, Note 27 Segmented and geographic information.

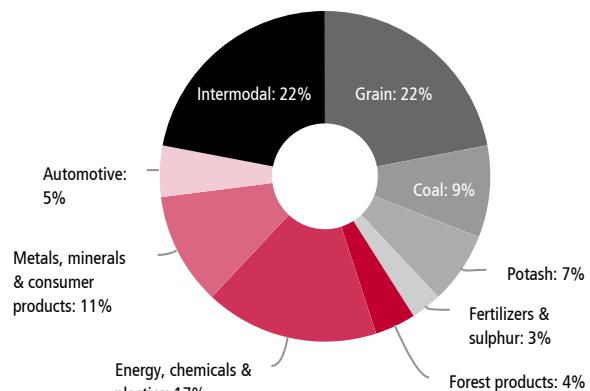
Lines of Business

The Company transports bulk commodities, merchandise freight, and intermodal traffic. Bulk commodities, which typically move in large volumes across long distances, include Grain, Coal, Potash, and Fertilizers and sulphur. Merchandise freight consists of industrial and consumer products, such as Energy, chemicals and plastics, Metals, minerals and consumer products, Forest products, and Automotive. Intermodal traffic consists largely of retail goods in overseas containers that can be transported by train, ship and truck, and in domestic containers and trailers that can be moved by train and truck.

The Company's revenues are primarily derived from transporting freight. The following chart shows the Company's Freight revenue by each line of business in 2020, 2019 and 2018:

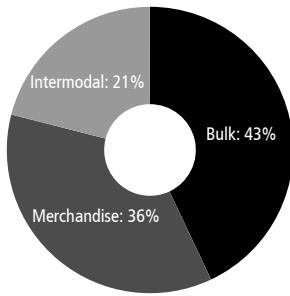


2019 Freight Revenues

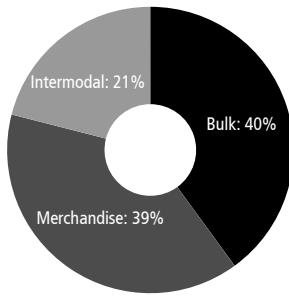


2018 Freight Revenues

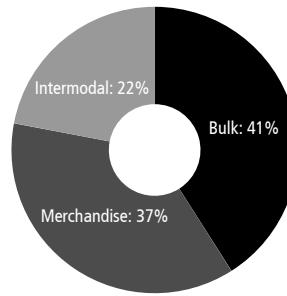
In 2020, the Company generated Freight revenues totalling \$7,541 million (\$7,613 million in 2019 and \$7,152 million in 2018). The following charts compare the percentage of the Company's total Freight revenues derived from each of the three major business lines in 2020, 2019 and 2018:



2020 Freight Revenues



2019 Freight Revenues

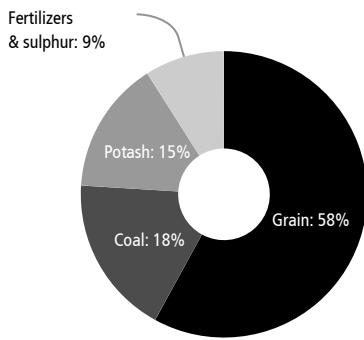


2018 Freight Revenues

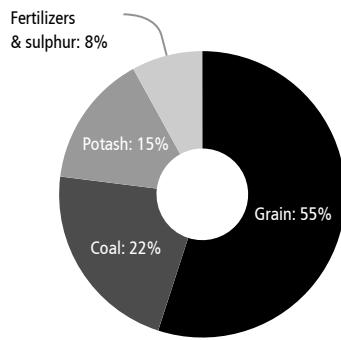
BULK

The Company's Bulk business represented approximately 43% of total Freight revenues in 2020.

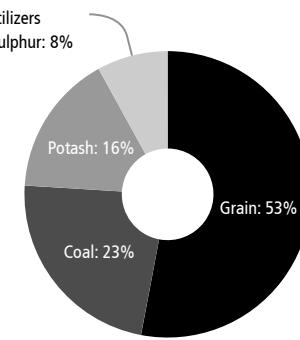
The following charts compare the percentage of the Company's Bulk freight revenues by commodity business in 2020, 2019 and 2018:



2020 Bulk Revenues
(43% of Freight Revenues)



2019 Bulk Revenues
(40% of Freight Revenues)

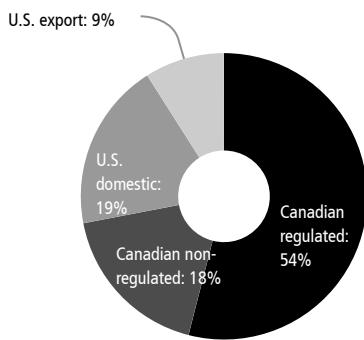


2018 Bulk Revenues
(41% of Freight Revenues)

Grain

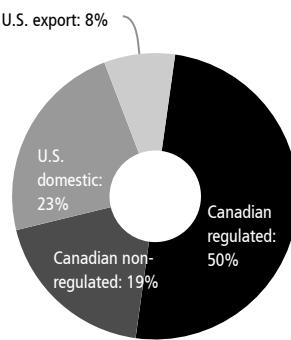
The Company's Grain business represented approximately 58% of Bulk revenues, and was 24% of total Freight revenues in 2020.

The following charts compare the percentage of the Company's Grain freight revenues generated from Canadian and U.S. shipments in 2020, 2019 and 2018:



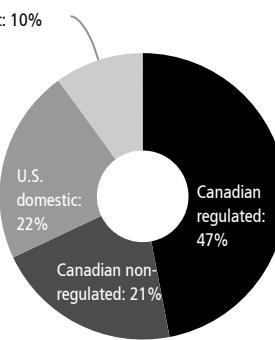
2020 Grain Revenues

(58% of Bulk Revenues; 24% of Freight Revenues)



2019 Grain Revenues

(55% of Bulk Revenues; 22% of Freight Revenues)



2018 Grain Revenues

(53% of Bulk Revenues; 22% of Freight Revenues)

CP's Grain network is unique among railways in North America as it is strategically positioned in the heart of grain-producing regions of western Canada and the Northern Plains of the U.S. Canadian grain transported by CP consists of both whole grains, such as wheat, canola, durum, pulses, and barley, and processed products such as oils, meals, and malt. This business is centred in the Canadian Prairies (Saskatchewan, Alberta, and Manitoba), with grain shipped primarily west to the Port of Vancouver, and east to the Port of Thunder Bay for export. Grain is also shipped to the U.S., to eastern Canada, and to Mexico for domestic consumption.

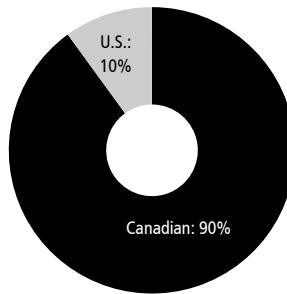
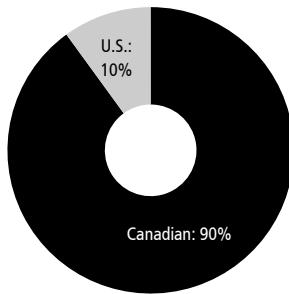
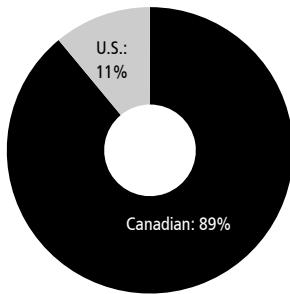
Canadian grain includes a division of business that is regulated by the Canadian government through the *Canada Transportation Act* ("CTA"). This regulated business is subject to a maximum revenue entitlement ("MRE"). Under the CTA, railways can set their own rates for individual movements. However, the MRE governs aggregate revenue earned by the railway based on a formula that factors in the total volumes, length of haul, average revenue per ton, and inflationary adjustments. The regulation applies to western Canadian export grain shipments to the ports of Vancouver and Thunder Bay.

U.S. grain transported by CP consists of both whole grains, such as wheat, soybeans, corn and durum, and processed products such as feed, meals and flour. This business is centred in the states of Minnesota, North Dakota, and Iowa. Grain destined for domestic consumption moves east via Chicago, to the U.S. Northeast or is interchanged with other carriers to the U.S. Pacific Northwest and U.S. Southeast. In partnership with other railways, CP also moves grain to export terminals in the U.S. Pacific Northwest and the Gulf of Mexico. Export grain traffic is also shipped to ports at Superior and Duluth.

Coal

The Company's Coal business represented approximately 18% of Bulk revenues, and was 8% of total Freight revenues in 2020.

The following charts compare the percentage of the Company's Coal freight revenues generated from Canadian and U.S. shipments in 2020, 2019 and 2018:



2020 Coal Revenues

(18% of Bulk Revenues; 8% of Freight Revenues)

2019 Coal Revenues

(22% of Bulk Revenues; 9% of Freight Revenues)

2018 Coal Revenues

(23% of Bulk Revenues; 9% of Freight Revenues)

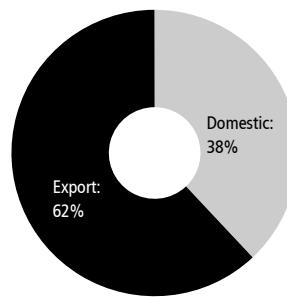
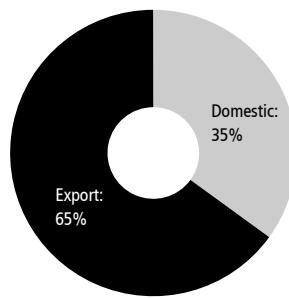
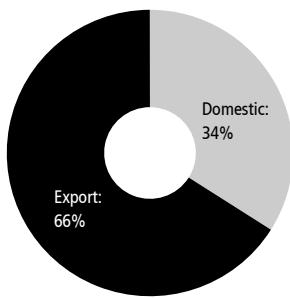
In Canada, CP handles mostly metallurgical coal destined for export for use in the steelmaking process. CP's Canadian coal traffic originates mainly from Teck Resources Limited's mines in southeastern B.C. CP moves coal west from these mines to port terminals for export to world markets (Pacific Rim, Europe and South America), and east for the U.S. Midwest markets.

In the U.S., CP moves primarily thermal coal from connecting railways, serving the thermal coal fields in the Powder River Basin in Montana and Wyoming, which is delivered to power-generating facilities in the U.S. Midwest.

Potash

The Company's Potash business represented approximately 15% of Bulk revenues, and was 7% of total Freight revenues in 2020.

The following charts compare the percentage of the Company's Potash freight revenues generated from export and domestic potash shipments in 2020, 2019 and 2018:



2020 Potash Revenues

(15% of Bulk Revenues; 7% of Freight Revenues)

2019 Potash Revenues

(15% of Bulk Revenues; 6% of Freight Revenues)

2018 Potash Revenues

(16% of Bulk Revenues; 7% of Freight Revenues)

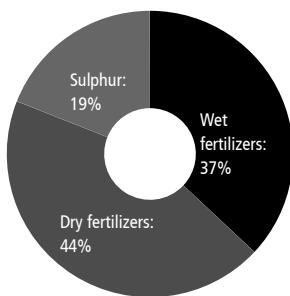
The Company's Potash traffic moves mainly from Saskatchewan to offshore markets through the ports of Vancouver, Portland, and Thunder Bay, and to markets in the U.S. All potash shipments for export beyond Canada and the U.S. are marketed by Canpotex Limited and K+S Potash Canada. Canpotex is an

export company owned in equal shares by Nutrien Ltd. and The Mosaic Company. Independently, these producers move domestic potash with CP primarily to the U.S. Midwest for local application.

Fertilizers and Sulphur

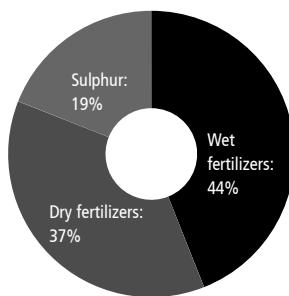
The Company's Fertilizers and sulphur business represented approximately 9% of Bulk revenues, and was 4% of total Freight revenues in 2020.

The following charts compare the percentage of the Company's Fertilizers and sulphur freight revenues generated from dry fertilizers, wet fertilizers and sulphur transportation in 2020, 2019 and 2018:



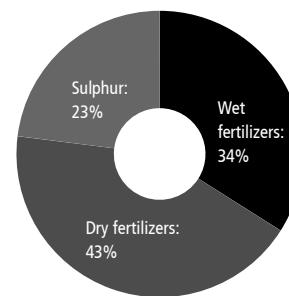
2020 Fertilizers & Sulphur Revenues

(9% of Bulk Revenues; 4% of Freight Revenues)



2019 Fertilizers & Sulphur Revenues

(8% of Bulk Revenues; 3% of Freight Revenues)



2018 Fertilizers & Sulphur Revenues

(8% of Bulk Revenues; 3% of Freight Revenues)

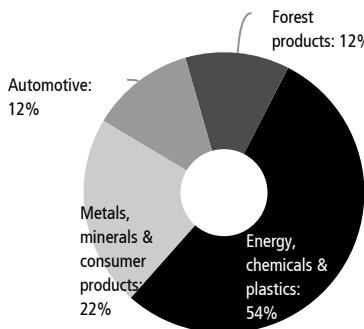
Dry fertilizers include: phosphate, urea, ammonium sulphate, and nitrate. Wet fertilizers are primarily anhydrous ammonia. More than half of CP's fertilizer shipments originate from production facilities in Alberta, where abundant sources of natural gas and other chemicals provide feedstock for fertilizer production.

Most sulphur is produced in Alberta as a byproduct of processing sour natural gas, refining crude oil, and upgrading bitumen produced in the Alberta oil sands. Sulphur is a raw material used primarily in the manufacturing of sulphuric acid, which is used most extensively in the production of phosphate fertilizers.

MERCHANDISE

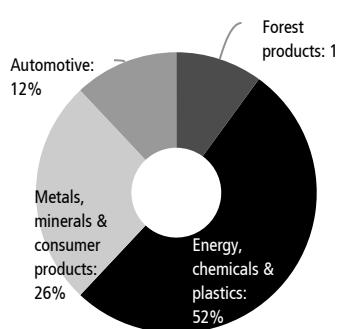
The Company's Merchandise business represented approximately 36% of total Freight revenues in 2020.

The following charts compare the percentage of the Company's Merchandise freight revenue by commodity business in 2020, 2019 and 2018:



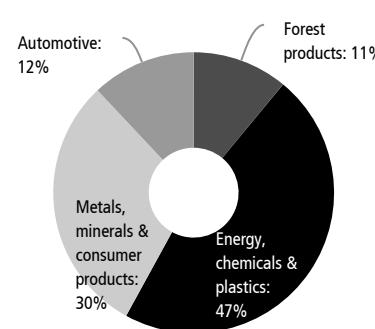
2020 Merchandise Revenues

(36% of Freight Revenues)



2019 Merchandise Revenues

(39% of Freight Revenues)



2018 Merchandise Revenues

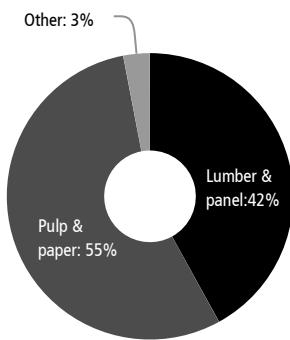
(37% of Freight Revenues)

Merchandise products move in both mixed freight and unit trains, in a variety of car types. Service involves delivering products to many different customers and destinations. In addition to traditional rail service, CP moves merchandise traffic through a network of truck-rail transload facilities, expanding the reach of CP's network to non-rail served facilities.

Forest Products

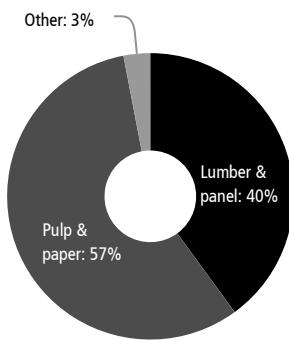
The Company's Forest products business represented approximately 12% of Merchandise revenues, and was 4% of total Freight revenues in 2020.

The following charts compare the percentage of the Company's Forest products freight revenues generated from pulp and paper (wood pulp, paperboard, newsprint, and paper), lumber and panel, and other shipments in 2020, 2019 and 2018:



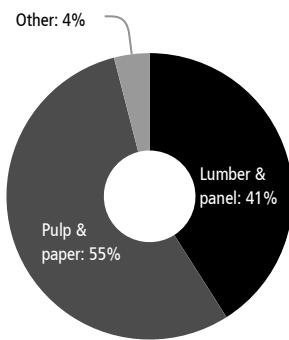
2020 Forest Products Revenues

(12% of Merchandise Revenues;
4% of Freight Revenues)



2019 Forest Products Revenues

(10% of Merchandise Revenues;
4% of Freight Revenues)



2018 Forest Products Revenues

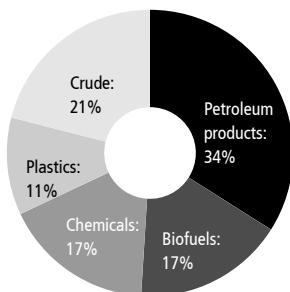
(11% of Merchandise Revenues;
4% of Freight Revenues)

Forest products traffic includes pulp and paper, and lumber and panel shipped from key producing areas in B.C., Ontario, Québec, Alberta, and New Brunswick, to destinations throughout North America, including Vancouver and Montreal to export markets.

Energy, Chemicals and Plastics

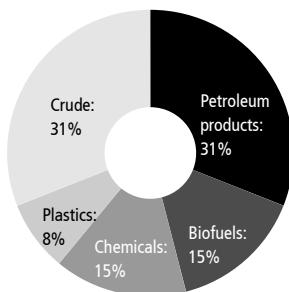
The Company's Energy, chemicals and plastics business represented approximately 54% of Merchandise revenues, and was 20% of total Freight revenues in 2020.

The following charts compare the percentage of the Company's Energy, chemicals and plastics freight revenues generated from petroleum products, crude, chemicals, biofuels, and plastics shipments in 2020, 2019 and 2018:



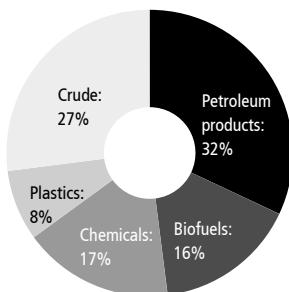
2020 Energy, Chemicals & Plastics Revenues

(54% of Merchandise Revenues;
20% of Freight Revenues)



2019 Energy, Chemicals & Plastics Revenues

(52% of Merchandise Revenues;
20% of Freight Revenues)



2018 Energy, Chemicals & Plastics Revenues

(47% of Merchandise Revenues;
17% of Freight Revenues)

Petroleum products consist of commodities such as liquefied petroleum gas ("LPG"), fuel oil, asphalt, gasoline, condensate (diluent), and lubricant oils. The majority of the Company's western Canadian energy traffic originates in the Alberta Industrial Heartland, Canada's largest hydrocarbon processing region, and Saskatchewan. The Bakken formation region in Saskatchewan and North Dakota is another source of condensate, LPG, and other refined petroleum. Interchanges with several rail interline partners give the Company access to destination and export markets in the U.S. West Coast, the U.S. Midwest, and Mexico, as well as the Texas and Louisiana petrochemical corridor and port connections.

Crude moves from production facilities throughout Alberta, North Dakota, and Saskatchewan. CP provides efficient routes to refining markets in the Gulf Coast, the U.S. Northeast, and the West Coast through connections with our railway partners.

The Company's chemical traffic includes products such as ethylene glycol, caustic soda, sulphuric acid, methanol, styrene, and soda ash. These shipments originate from western Canada, the Gulf of Mexico, the U.S. Midwest, and eastern Canada, and move to end markets in Canada, the U.S. and overseas.

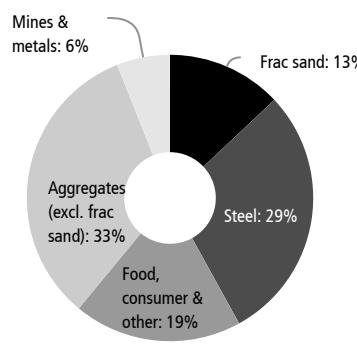
CP's biofuels traffic originates mainly from facilities in the U.S. Midwest, shipping primarily to destinations in the U.S. Northeast.

The most commonly shipped plastics products are polyethylene and polypropylene. Approximately half of the Company's plastics traffic originates in central and northern Alberta and moves to various North American destinations.

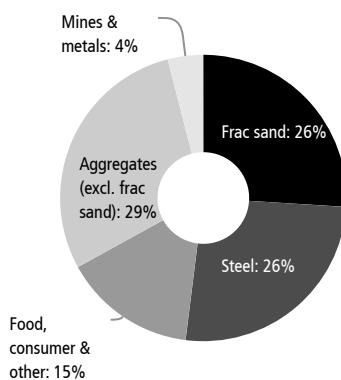
Metals, Minerals and Consumer Products

The Company's Metals, minerals and consumer products business represented approximately 22% of Merchandise revenues, and was 8% of total Freight revenues in 2020.

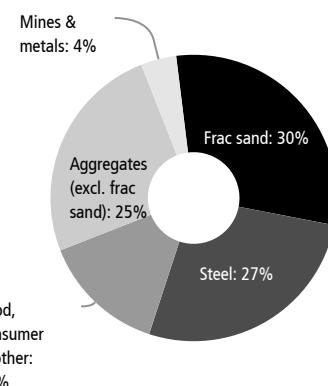
The following charts compare the percentage of the Company's Metals, minerals and consumer products freight revenues generated from aggregates (excluding frac sand), steel, frac sand, food and consumer products, and non-ferrous metals transportation in 2020, 2019 and 2018:



2020 Metals, Minerals & Consumer Products Revenues
(22% of Merchandise Revenues;
8% of Freight Revenues)



2019 Metals, Minerals & Consumer Products Revenues
(26% of Merchandise Revenues;
10% of Freight Revenues)



2018 Metals, Minerals & Consumer Products Revenues
(30% of Merchandise Revenues;
11% of Freight Revenues)

Aggregate products include coarse particulate and composite materials such as cement, limestone, clay, and gypsum. Cement is the leading commodity within aggregates, and is shipped directly from production facilities in Alberta, Québec, and Ontario to energy and construction projects in the U.S. Midwest, Canadian Prairies, and the U.S. Pacific Northwest.

The majority of frac sand originates at mines located along the Company's network in Wisconsin and moves to the Bakken, Marcellus Shale, Permian Basin, and other shale formations across North America.

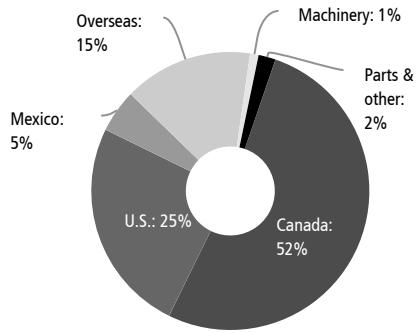
CP transports steel in various forms from mills in the U.S. Midwest, Ontario, and Saskatchewan to a variety of industrial users. The Company carries base metals such as aluminum, zinc, and lead. CP also moves ores from mines to smelters and refineries for processing, and the processed metal to automobile and consumer products manufacturers.

Food, consumer, and other products traffic consists of a diverse mix of goods, including food products, railway equipment, building materials, and waste products.

Automotive

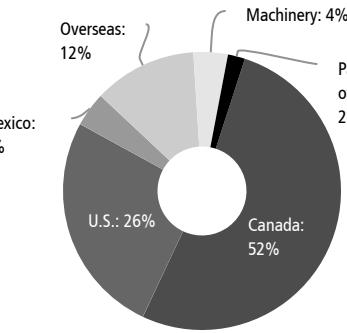
The Company's Automotive business represented approximately 12% of Merchandise revenues, and was 4% of total Freight revenues in 2020.

The following charts compare the percentage of the Company's Automotive freight revenues generated by movements of finished vehicles from Canadian, U.S., overseas, and Mexican origins, machinery, and parts and other in 2020, 2019 and 2018:



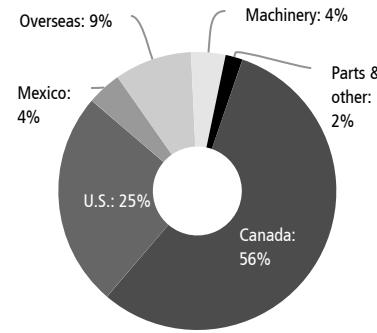
2020 Automotive Revenues

(12% of Merchandise Revenues;
4% of Freight Revenues)



2019 Automotive Revenues

(12% of Merchandise Revenues;
5% of Freight Revenues)



2018 Automotive Revenues

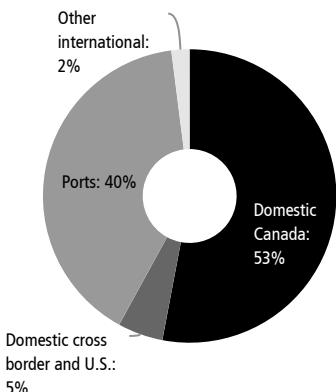
(12% of Merchandise Revenues;
5% of Freight Revenues)

CP's Automotive portfolio consists of four finished vehicle traffic components: Canadian-produced vehicles that ship to the U.S. from Ontario production facilities; U.S.-produced vehicles that ship within the U.S. as well as cross border shipments to Canadian markets; vehicles from overseas that move through the Port of Vancouver to eastern Canadian markets; and Mexican-produced vehicles that ship to the U.S. and Canada. In addition to finished vehicles, CP ships machinery, pre-owned vehicles, and automotive parts. A comprehensive network of automotive compounds is utilized to facilitate final delivery of vehicles to dealers throughout Canada and in the U.S.

INTERMODAL

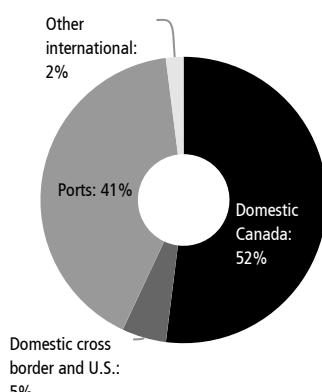
The Company's Intermodal business represented approximately 21% of total Freight revenues in 2020.

The following charts compare the percentage of the Company's Intermodal freight revenues generated from Canada, ports, cross border transportation, other international, and U.S. in 2020, 2019 and 2018:



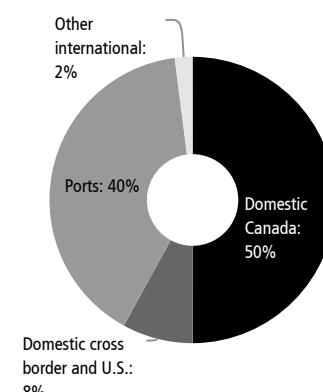
2020 Intermodal Revenues

(21% of Freight Revenues)



2019 Intermodal Revenues

(21% of Freight Revenues)



2018 Intermodal Revenues

(22% of Freight Revenues)

Domestic intermodal freight consists primarily of manufactured consumer products that are predominantly moved in 53-foot containers within North America. International intermodal freight moves in marine containers to and from ports and North American inland markets.

CP's domestic intermodal business moves goods from a broad spectrum of industries including wholesale, retail, food, forest products, and various other commodities. Key service factors in domestic intermodal include consistent on-time delivery, the ability to provide door-to-door service, and the availability of value-added services. The majority of the Company's domestic intermodal business originates in Canada, where CP markets its services directly to retailers and manufacturers, providing complete door-to-door service and maintaining direct relationships with its customers. In the U.S., the Company's service is delivered mainly through intermodal marketing companies.

CP's international intermodal business consists primarily of containerized traffic moving between the ports of Vancouver, Montréal, Saint John, and inland points across Canada and the U.S. Import traffic from the Port of Vancouver is mainly long-haul business destined for eastern Canada and the U.S. Midwest and Northeast. CP works closely with the Port of Montréal, a major year-round East Coast gateway to Europe, to serve markets primarily in the U.S. Midwest and Canada. CP's access to the Port of Saint John provides the fastest rail service from the east coast to the Canadian and U.S. Midwest markets for import and export cargo from Europe, South America, and Asia.

Fuel Cost Adjustment Program

The short-term volatility in fuel prices may adversely or positively impact revenues. CP employs a fuel cost adjustment program designed to respond to fluctuations in fuel prices and help reduce volatility to changing fuel prices. Fuel surcharge revenues are earned on individual shipments and are based primarily on the price of On-Highway Diesel. As such, fuel surcharge revenues are a function of freight volumes and fuel prices. Fuel surcharge revenues accounted for approximately 4% of the Company's Freight revenues in 2020. The Company is also subject to carbon taxation systems and levies in some jurisdictions in which it operates, the costs of which are passed on to the shipper. As such, fuel surcharge revenue includes carbon taxes and levy recoveries.

Freight revenues included fuel surcharge revenues of \$297 million in 2020, a decrease of \$167 million, or 36%, from \$464 million in the same period of 2019. This decrease was primarily due to lower fuel prices. This decrease was partially offset by the timing of recoveries from CP's fuel cost adjustment program and increased carbon tax recoveries.

Non-freight Revenues

Non-freight revenues accounted for approximately 2% of the Company's Total revenues in 2020. Non-freight revenues are generated from leasing certain assets; other arrangements, including logistical services and contracts with passenger service operators; and switching fees.

Significant Customers

For each of the years ended December 31, 2020, 2019 and 2018, the company's revenues and operations were not dependent on any major customers.

Competition

The Company is in the ground transportation and logistics business. The Company sees competition in this segment from other railways, motor carriers, ship and barge operators, and pipelines. Depending on the specific market, competing railways, motor carriers, and other competitors may exert pressure on price and service levels. The Company continually evaluates the market needs and the competition. The Company responds as it deems appropriate to provide competitive services to the market. This includes developing new offerings such as transload facilities, new train services, and other logistics services.

Seasonality

Volumes and revenues from certain goods are stronger during different periods of the year. First-quarter revenues are typically lower mainly due to winter weather conditions, closure of the Port of Thunder Bay, and reduced transportation of retail goods. Second and third quarter revenues generally improve compared to the first quarter, as fertilizer volumes are typically highest during the second quarter and demand for construction-related goods is generally highest in the third quarter. Revenues are typically strongest in the fourth quarter, primarily as a result of the transportation of grain after the harvest, fall fertilizer programs, and increased demand for retail goods moved by rail. Operating income is also affected by seasonal fluctuations. Operating income is typically lowest in the first quarter, due to lower freight revenue and higher operating costs associated with winter conditions.

Government Regulation

The Company's railway operations are subject to extensive federal laws, regulations, and rules in both Canada and the U.S., which directly affect how operations and business activities are managed.

Economic Regulation - Canada

The Company's rail operations in Canada are subject to economic regulation by the Canadian Transportation Agency (the "Agency") as delegated by the *Canada Transportation Act*. The *Canada Transportation Act* indirectly regulates rates by providing remedies for freight rates, including ancillary charges, remedies for level of service, long-haul interswitching rates, and regulated interswitching rates in Canada. The CTA regulates the MRE for the movement of export grain, construction and abandonment of railways, commuter and passenger access, and noise and vibration-related disputes.

In 2018, the *Transportation Modernization Act* became law. The legislation amended the *Canada Transportation Act* and the *Railway Safety Act* ("RSA"), among other Acts, to (1) replace the previous 160 kilometre extended interswitching limit and the competitive line rate provisions with a new long-haul interswitching regime; (2) modify the existing Level of Service remedy for shippers by instructing the Agency to determine, upon receipt of a complaint, if a railway company is fulfilling its common carrier obligation to the "highest level of service that is reasonable in the circumstances"; (3) allow the existing Service Level Agreement arbitration remedy to include the consideration of reciprocal financial penalties; (4) increase the threshold for summary Final Offer Arbitration from \$750,000 to \$2 million; (5) bifurcate the Volume-Related Composite Price Index component of the annual MRE determination for transportation of regulated grain, to encourage hopper car investment by CP and Canadian National Railway ("CN"); (6) mandate the installation of locomotive voice and video recorders ("LVVRs"), with statutory permission for random access by railway companies and Transport Canada ("TC") to the LVVR data in order to proactively strengthen railway safety in Canada; and (7) compel railways to provide additional data to the federal government.

Economic Regulation - U.S.

The Company's U.S. rail operations are subject to economic regulation by the Surface Transportation Board (the "STB"). The STB provides economic regulatory oversight and administers *Title 49 of the United States Code* and related *Code of Federal Regulations*. The STB has jurisdiction over railroad rate and service issues and proposed railroad mergers and other transactions.

The *STB Reauthorization Act of 2015* resulted in numerous changes to the structure and composition of the STB, removing it from under the Department of Transport and establishing the STB as an independent U.S. agency, as well as increasing STB Board membership from three to five members. Notably, the law vests in the STB certain limited enforcement powers, by authorizing it to investigate rail carrier violations on the STB Board's own initiative. The law also requires the STB to establish a voluntary binding arbitration process to resolve rail rate and practice disputes.

Safety Regulation - Canada

The Company's operations in Canada are subject to safety regulatory oversight by TC pursuant to the RSA. The RSA regulates safety-related aspects of railway operations in Canada, including the delegation of inspection, investigation and enforcement powers to TC. TC is also responsible for overseeing the transportation of dangerous goods as set out under the *Transportation of Dangerous Goods Act* ("TDGA").

After the tragic accident in Lac-Mégantic, Québec, in July 2013 involving a non-related short-line railway company, the Government of Canada implemented several measures pursuant to the RSA and the TDGA. These modifications implemented changes with respect to rules associated with securing unattended trains; the classification of crude being imported, handled, offered for transport, or transported; and the provision of information to municipalities through which dangerous goods are transported by rail. The U.S. federal government has taken similar actions. These changes did not have a material impact on CP's operating practices.

In 2015, *An Act to amend the Canada Transportation Act and the Railway Safety Act* became law. The legislation sets out minimum insurance requirements for federally regulated railways based on amounts of crude and toxic inhalation hazards ("TIH") or poisonous inhalation hazards moved. It also imposes strict liability; limits railway liability to the minimum insurance level; mandates the creation of a fund paid for by levies on crude shipments, to be utilized for damages beyond a railway's liability; allows railways and insurers to maintain rights to pursue other parties (subrogation); and prevents shifting liability to shippers from railways except through written agreement.

The Company is allocating resources, including working with public and private rail crossing owners, to meet the *Grade Crossings Regulations*, under the RSA, which came into force in 2014. The regulations require existing crossings to meet specified safety standards by November 2021.

On November 25, 2020, the Minister of Transport announced updated *Duty and Rest Period Rules for Railway Operating Employees*. The new rules, founded on modern-day fatigue management principles, reduce the length of a duty period and increase the length of the minimum rest period between shifts. The rules establish limits on the total number of duty hours, 60 hours in a seven-day period and 192 hours in a 28-day period. These requirements will be phased in 30 months from the date of the announcement. The new rules also require federally regulated railways, including the Company, to complete a Fatigue Management Plan by November 25, 2021, and implement the Fitness for Duty provisions by November 25, 2022.

Safety Regulation - U.S.

The Company's U.S. operations are subject to safety regulations enforced by the Federal Railroad Administration ("FRA"), and the Pipelines and Hazardous Materials Safety Administration ("PHMSA"). The FRA regulates safety-related aspects of the Company's railway operations in the U.S. under the Federal Railroad Safety Act, as well as rail portions of other safety statutes. The PHMSA regulates the safe transportation of all hazardous materials by rail.

On October 29, 2015, the *Surface Transportation Extension Act of 2015* ("STEA") was signed into law. The law extends, by three years, the deadline for the U.S. rail industry to implement Positive Train Control ("PTC"), a set of highly advanced technologies designed to prevent train-to-train collisions, speed-related derailments, and other accidents caused by human error by determining the precise location, direction and speed of trains, warning train operators of potential problems, and taking immediate action if an operator does not respond. Legislation passed by the U.S. Congress in 2008 mandated that PTC systems be operable by the end of 2015 on rail lines used to transport passengers or toxic-by-inhalation materials. The STEA extended the deadline to install and activate PTC to December 31, 2018, with an optional two-year extension (December 31, 2020) under certain circumstances. The Company received the two-year extension to ensure safe and effective implementation of PTC on its rail network. CP successfully implemented PTC and was PTC compliant as of December 1, 2020.

For further details on the capital expenditures associated with compliance with the PTC regulatory mandate, refer to Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations, Liquidity and Capital Resources.

Various other regulators directly and indirectly affect the Company's operations in areas such as health, safety, security, environmental, and other matters.

Environmental Laws and Regulations

The Company's operations and real estate assets are subject to extensive federal, provincial, state, and local environmental laws and regulations governing emissions to the air, management and remediation of historical contaminant sites, discharges to waters and the handling, storage, transportation, and disposal of waste and other materials. If the Company is found to have violated such laws or regulations, it could have a material adverse effect on the Company's business, financial condition, or operating results. In addition, in operating a railway, it is possible that releases of hazardous materials during derailments or other accidents may occur that could cause harm to human health or to the environment. Costs of remediation, damages and changes in regulations could materially affect the Company's operating results, financial condition, and reputation.

The Company has implemented an Environmental Management System to facilitate the reduction of environmental risk. Specific environmental programs are in place to address areas such as air emissions, wastewater, management of vegetation, chemicals and waste, storage tanks, and fueling facilities. CP has also undertaken environmental impact assessments and risk assessments to identify, prevent, and mitigate environmental risks. There is continued focus on preventing spills and other incidents that have a negative impact on the environment. There is an established strategic emergency response contractor network, and spill equipment kits are located across Canada and the U.S. to ensure a rapid and efficient response in the event of an environmental incident. In addition, emergency preparedness and response plans are regularly updated and tested. In 2020, updates to CP's comprehensive oil spill response plan were made in accordance with the changes in the PHMSA regulations.

The Company has developed an environmental audit program that comprehensively, systematically, and regularly assesses the Company's facilities for compliance with legal requirements and the Company's policies for conformance to accepted industry standards. Included in this is a corrective action follow-up process and semi-annual review by senior management.

CP focuses on key strategies, identifying tactics and actions to support and operationalize our environmental commitments. The Company's strategies include:

- Implementing measures to minimize or prevent environmental impacts from our operations and facilities, and to ensure compliance with applicable environmental laws and regulations;
- Maintaining an Environmental Management System to provide consistent, effective guidance and resources to CP employees in regard to the management of air emissions, dangerous goods and waste materials, emergency preparedness and response, petroleum products management, and water and wastewater systems;
- Reducing environmental and safety risk through business processes to identify and mitigate potential environmental impacts related to all CP operations and activities;
- Ensuring that new or altered operations and other business activities are evaluated, planned, permitted in accordance with applicable regulations, and executed to mitigate environmental risk;
- Engaging with relevant stakeholders to consider and discuss CP's environmental management practices and environmental issues and concerns associated with our operations;
- Employing best practices, proven technologies, and safe operating standards for activities involving elevated environmental risk; and
- Planning and preparing for emergency responses to ensure all appropriate steps are taken in the event of a derailment, spill, or other incident involving a release to the environment.

Security

CP is subject to statutory and regulatory directives in Canada and the U.S. that address security concerns. CP plays a critical role in the North American transportation system. Rail lines, facilities and equipment, including railcars carrying hazardous materials, could be direct targets or indirect casualties of terrorist attacks, actions by criminal and non-criminal organizations, and activities by individuals. Regulations by the U.S. Department of Transportation and the Department of Homeland Security in the U.S. include speed restrictions, chain of custody and security measures, which can impact service and increase costs for the transportation of hazardous materials, especially TIH materials. New regulations published by TC under the TDGA have added requirements for railway companies to take actions to mitigate security risks of transporting dangerous goods by rail. In addition, insurance premiums for some or all of the Company's current coverage could increase significantly, or certain coverage may not be available to the Company in the future. While CP will continue to work closely with Canadian and U.S. government agencies, future decisions by these agencies on security matters or decisions by the industry in response to security threats to the North American rail network could have a material adverse effect on the Company's business, financial condition, or operating results.

CP takes the following security measures:

- CP employs its own police service that works closely with communities and other law enforcement and government agencies to promote railway safety and infrastructure security. As a railway law enforcement agency, CP Police Services is headquartered in Calgary, with police officers assigned to over 25 field offices responsible for railway police operations in six Canadian provinces and 14 U.S. states. CP Police Services operates on the CP rail network as well as in areas where CP has non-railway operations;
- CP's Police Communication Centre ("PCC") operates 24 hours a day. PCC receives reports of emergencies, dangerous or potentially dangerous conditions, and other safety and security issues from our employees, the public, and law enforcement and other government officials. PCC ensures that proper emergency responders are notified as well as governing bodies;
- CP's Security Management Plan is a comprehensive, risk-based plan modelled on and developed in conjunction with the security plan prepared by the Association of American Railroads post-September 11, 2001. Under this plan, CP routinely examines and prioritizes railway assets, physical and cyber vulnerabilities, and threats, as well as tests and revises measures to provide essential railway security. To address cyber security risks, CP implements mitigation programs that evolve with the changing technology threat environment. The Company has also worked diligently to establish backup sites to ensure a seamless transition in the event that the Company's operating systems are the target of a cyber-attack. By doing so, CP is able to maintain network fluidity; and
- CP security efforts consist of a wide variety of measures including employee training, periodic security assessments, engagement with our customers, and training of emergency responders.

Human Capital Management

CP is focused on attracting, developing, and retaining a resilient, high performing workforce that delivers on providing service for our customers. CP's culture is guided by three core values: Accountability, Diversity, and Pride. These values drive our actions. Everything we do is grounded in precision scheduled railroading and our five foundations of Provide Service, Control Costs, Optimize Assets, Operate Safely, and Develop People.

At CP, our approximately 12,000-strong team of railroaders across North America underpin CP's success and bring value to our customers and shareholders. Accordingly, Develop People is one foundation of how we do business, illustrating our focus and energy towards empowering our people, providing an engaging culture and cultivating an industry leading team.

Total Employees and Workforce

An employee is defined by the Company as an individual currently engaged in full-time, part-time, or seasonal employment with CP. The total number of employees as of December 31, 2020, was 11,890, a decrease of 804, or 6%, compared to 12,694 as at December 31, 2019, due to reduced workload as measured in GTMs and more efficient resource planning.

Workforce is defined as total employees plus contractors and consultants. The total workforce as at December 31, 2020 was 11,904, a decrease of 828, or 7%, compared to 12,732 as at December 31, 2019, due to more efficient resource planning.

Unionized Workforce

Class I railways are party to collective bargaining agreements with various labour unions. The majority of CP's employees belong to labour unions and are subject to these agreements. CP manages collaborative relationships with union members in both Canada and the U.S.

CP employs approximately 12,000 active employees across North America with three-quarters based in Canada and the remainder in the United States. Unionized employees represent nearly 72% of our workforce and are represented by 36 active bargaining units.

Canada

Within Canada there are eight bargaining units representing approximately 6,600 Canadian unionized active employees. From time to time, we negotiate to renew collective agreements with various unionized groups of employees. In such cases, the collective agreements remain in effect until the bargaining process has been exhausted (pursuant to the *Canada Labour Code*). One agreement is pending ratification and one other remains open for renewal and is

under negotiation as of December 31, 2020. Agreements are in place with the other six bargaining units in Canada, two are effective until December 31, 2021, and four are effective until 2022.

U.S.

In the U.S., there are currently 28 active bargaining units on three subsidiary railroads representing nearly 1,900 unionized active employees. Nine agreements are open for amendment and are under negotiation at this time. 15 agreements will become amendable in 2021 and one in 2022. Negotiations have been concluded with respect to the remaining three agreements which will expire beyond 2022.

Health and Safety

CP is an industry leader in rail safety and we are committed to protecting our employees, our communities, our environment, and our customers' goods. This is CP's 15th consecutive year as industry leader in train accident statistics. Operate Safely is one of our five foundations of successful railroading and it starts with knowing and following the rules. Aside from running trains, many of our employees work in yards, terminals, and shops across our network with machinery and heavy equipment, or in extreme weather conditions. Their safety and security is of utmost importance to CP and is foundational to the way we view employee safety education and training. CP HomeSafe™ is an initiative designed to improve our safety culture by tapping into the human side of safety and promoting both safety engagement and feedback. HomeSafe™ puts everyone on the same level and empowers all employees to begin a safety conversation, no matter the rank or position. Safety performance is disclosed publicly on a quarterly basis using standardized metrics set out by the FRA. Additional information on FRA safety measures is included in Performance Indicators in Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations.

Talent Management

CP's approach for talent management begins with our Human Resources department, which oversees recruitment, hiring, development, engagement, and retention with the current and future workforce and leadership of CP.

The Management Resources and Compensation Committee of the Board of Directors reviews and informs CP's compensation plan and programming, and makes recommendations to the Board on succession planning for senior management and processes to identify, develop, and retain executive talent. Additionally, as part of CP's succession planning program, senior leaders are actively engaged in building the pool of future leaders, and present their development plans to the Board.

CP maintains a number of internal policies related to recruitment, relocation, compensation, employment equity, and diversity and inclusion. The effective implementation of these policies alongside our ongoing workforce initiatives ensures CP's attraction and recruitment, employee development, succession, engagement, and diversity and inclusion practices are consistent and aligned with CP's commitments, foundations and values.

Attraction and Recruitment

With a rail network spanning Canada and the U.S., we employ a number of recruitment and retention tactics to attract the best and diverse talent across North America. CP offers many rewarding career opportunities in a variety of roles within the organization in both operating and support functions. We base our recruitment strategy on workforce planning needs, and our focus is on ensuring that we have a diverse candidate pool to fill our open positions.

CP recognizes the valuable skills and experience that veterans have gained from serving their country. Our veteran program was recognized as part of Canada's Best Diversity Employers® of 2020 and we were named part of the top 10 Military Friendly® employers in the U.S. for 2021.

CP tracks recruitment performance and success rates to better understand which tactics, benefits, and strategic partnerships are most successful in bringing in and retaining new talent.

Talent Development & Succession

As part of our core foundation and commitment to Develop People, we encourage all employees to take an active role in their career planning and development. We believe that investing in our employees leads to improved workplace morale and fosters a supportive working environment.

Training and Development

CP offers a variety of training courses through our Learning Management System that provides online and technical training, including mandatory, role-specific and voluntary courses. This enables our employees to succeed in their current roles and prepares them for career advancement opportunities.

Non-union employees also complete annual performance management and development action plans with their supervisors to set individual goals and track progress against Company expectations as well as long-term career goals.

CP offers key development programs for current and emerging leaders. For our Operations groups, CP's Leadership Management Trainee program provides internal and external candidates with comprehensive training on the critical skills necessary for railway operations and people leadership. Upon successful completion of the six to seven month program, participants qualify for a variety of operations frontline leader roles.

Leadership skills are long considered a core trait of CP employees. We encourage staff to develop leadership expertise as part of ongoing training and development through regular performance reviews and CP-specific skill development programs. Our Consequence Leadership training program focuses on creating a high-performance culture and feedback-rich environment at CP. The online learning module and interactive workshops introduce a practical set of tools and thought processes for instilling communications skills and management capabilities in our leaders and our employees. The goal is to create a constructive environment that improves bottom-line results and enables employees to perform at their best. To complement the Consequence Leadership training program, CP has developed in-house training to enhance leadership capabilities among leaders across the organization to ensure a long-term focus on our foundation to Develop People. For employees interested in further developing their leadership skills, CP also offers on-demand learning through Harvard ManageMentor.

Succession Management

CP undergoes extensive succession planning for both executive and management level positions. We measure the retention of our most critical positions and develop potential successors to be ready to fill critical roles as soon as positions become available. Looking ahead, CP is developing succession and development goals for the many high-potential successors for all critical positions, and will begin to measure the success rate of placing emerging leaders in those key positions.

Retention & Engagement

CP's career development programs and diverse and inclusive workplace culture help drive employee retention and engagement. In addition, we have adopted a performance-based culture, and reward employees for dedication and hard work. CP's competitive compensation and benefits packages are benchmarked yearly to ensure they reflect changes in the market. CP offers employees a wellness and fitness subsidy program. Along with our community investment programs, CP's employee programs and resources illustrate our dedication to our employees' well-being and satisfaction with their careers at CP.

CP periodically administers non-union surveys to measure employee perspectives and engagement. In 2019, we administered a new Employee Perspective survey to continue gathering actionable data regarding employee satisfaction and engagement, and to gain insight into what motivates and inspires our employees. These surveys help CP to better tailor our development and retention efforts.

Employee recognition programs are in place to celebrate wins and highlight the great work of our employees. CP's CEO on the Spot awards, Annual Safety Awards and Broken Wheel Awards recognize good performance, heroic acts, milestones, and safety excellence with cash rewards. In addition, CP's annual CEO Awards of Excellence and gala recognizes employees who have gone above and beyond the call of duty to exemplify CP's five foundations and support our focus on providing superior service to our customers and driving value for our shareholders.

Diversity and Inclusion

Diversity is one of our core values at CP. We believe that different backgrounds, experiences, and perspectives enhance creativity and innovation and encourage diversity of thought in the workplace. Fostering an inclusive environment where all employees feel empowered to strive for and achieve success supports our high-performance culture and is integral to our growth and success as an organization.

CP recognizes the importance of Board member diversity as a critical component of objective oversight and continuous improvement. As of December 31, 2020, women represented 46% of CP's 2020 Board Membership.

CP has regulatory requirements to report on workforce diversity representation in Canada (Employment Equity Act) and the U.S. (Equal Employment Opportunity Commission). CP currently collects diversity data on the following categories: women, persons with disabilities, minorities (visible minorities), and Indigenous peoples (Canada) from employees through voluntary self-disclosure. CP continues to focus our efforts on attracting, recruiting, and developing a diverse workforce. This data is shared in various disclosures and government reporting, internally with employees and leaders as well as our Board of Directors.

Year over Year Diversity Representation

Canada and U.S. Diversity Percentages⁽¹⁾	2020	2019	2018
Women	10%	10%	10%
Persons with disabilities	3%	3%	2%
Minorities (visible minorities) ⁽²⁾	13%	13%	13%
Indigenous peoples (Canada only)	3%	4%	3%

⁽¹⁾ Percentages are based on total workforce (total number of active employees) at year-end.

⁽²⁾ Minority is a term used in the U.S., Visible Minority is a term used in Canada.

CP continues to work collaboratively with our employees, communities along our network, and partner organizations in Canada and the U.S. to progress and support CP's commitment toward a more representative and inclusive workplace. Some of our initiatives include:

- Establishing three diversity councils (Indigenous, Gender and Racial). Each council is chaired by a CP executive and represents a diverse group of employees. The councils work to ensure we consider diversity and inclusion when we make decisions, provide feedback on corporate directions and promote initiatives that relate to each council's area of focus;
- Continuing our existing partnerships with associations and organizations that attract, recruit, and support skilled immigrants, transitioning veterans, persons with disabilities, and women;
- Working with Indigenous groups to develop relationships that are more meaningful, create targeted outreach programs and employment opportunities, and better understand their history, culture, and opportunities for collaboration.
- Supporting the development and advancement of women at CP; and
- Increasing employee awareness regarding CP's workplace diversity and inclusion practices through communications, education, and training.

Further, CP recently published a Diversity Commitment. This commitment re-enforces the efforts we have made, and will continue to make, in our journey to becoming a more diverse and inclusive company, one that we and those we do business with are proud to be a part.

We pride ourselves on offering a diverse workplace with a variety of careers in both our corporate and field locations. We recruit and hire talent based on relevant skills and experience, and seek to attract the highest quality candidates regardless of gender, age, cultural heritage, or ethnic origin. One of our primary objectives is attracting, recruiting, retaining, and developing a workforce representative of the communities in which we operate.

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 U.S. Securities and Exchange Commission ("SEC"). Our website also contains charters for each of the committees of our Board of Directors, our corporate governance guidelines and our Code of Business Ethics. This Form 10-K and other SEC filings made by CP are also accessible through the SEC's website at www.sec.gov.

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* and applicable securities laws in Canada as Exhibits to this annual report.

All references to our websites contained herein do not constitute incorporation by reference of information contained on such websites and such information should not be considered part of this document.

ITEM 1A. RISK FACTORS

The risks set forth in the following risk factors could have a materially adverse effect on the Company's business, financial condition, results of operations, and liquidity, and could cause those results to differ materially from those expressed or implied in the Company's forward-looking statements and forward-looking information (collectively, "forward-looking statements").

The information set forth in this Item 1A. Risk Factors should be read in conjunction with the rest of the information included in this annual report, including Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations and Item 8. Financial Statements and Supplementary Data.

Business Risks

The COVID-19 pandemic has negatively affected and may continue to negatively affect the Company's business and operating results.

The effects of the COVID-19 pandemic on consumer demand resulted in lower volumes in several of the Company's lines of business, including Energy, chemicals and plastics, Metals, minerals and consumer products, and Automotive. The future impacts of COVID-19 on the Company's business or operating and financial results are unpredictable and cannot be identified or assessed with certainty at this time. The COVID-19 pandemic has adversely affected the global economy and resulted in a widespread economic downturn which has adversely impacted and could continue to adversely impact demand for our services and otherwise cause interruptions, including fluctuations to commodity prices, disruptions or restrictions on the ability to transport freight in the ordinary course, temporary closures of facilities and ports, or the facilities and ports of our customers, partners, suppliers or other third-party service providers, and/or changes to export/import restrictions. The pandemic caused by COVID-19 has impacted and may continue to impact the seasonal trends that typically characterize our revenues and operating income. There is no assurance that the outbreak will not continue to have a material and adverse impact on our business or results of operations. Additionally, our operations could be further negatively affected if a significant number of our employees are unable to perform their normal duties, including because of contracting COVID-19 or based on further direction from governments, public health authorities or regulatory agencies. The extent of the impact, if any, will depend on developments, many of which are beyond our control, including actions taken by governments, financial institutions, monetary policy authorities, and public health authorities to contain and respond to public health concerns and general economic conditions as a result of the pandemic. The COVID-19 pandemic may also result in continued substantial market volatility and declines, which could adversely impact future net periodic benefit costs and funding requirements of CP's pension plans. Furthermore, certain impacts of the COVID-19 pandemic, including demand for our services and to economic conditions generally, could continue following the pandemic or the expiration or termination of government actions in respect of the pandemic.

We will continue to actively monitor the situation and may take further actions that alter our business operations as may be required or recommended by federal, provincial, state or local authorities, or that we determine are in the best interests of our employees, customers, partners, suppliers, shareholders and other stakeholders. We cannot be certain of potential effects that any such alterations or modifications may have on our business or operating and financial results in future fiscal periods.

To the extent COVID-19 adversely affects our business or operating and financial results, it may also have the effect of heightening many of the other risks described above and below.

As a common carrier, the Company is required by law to transport dangerous goods and hazardous materials, which could expose the Company to significant costs and claims. Railways, including CP, are legally required to transport dangerous goods and hazardous materials as part of their common carrier obligations regardless of risk or potential exposure to loss. CP transports dangerous goods and hazardous materials, including but not limited to crude oil, ethanol and TIH materials such as chlorine gas and anhydrous ammonia. A train accident involving hazardous materials could result in significant claims against CP arising from personal injury, property or natural resource damage, environmental penalties and remediation obligations. Such claims, if insured, could exceed the existing insurance coverage commercially available to CP, which could have a material adverse effect on CP's financial condition, operating results, and liquidity. CP is also required to comply with rules and regulations regarding the handling of dangerous goods and hazardous materials in Canada and the U.S. Noncompliance with these rules and regulations can subject the Company to significant penalties and could factor in litigation arising out of a train accident. Changes to these rules and regulations could also increase operating costs, reduce operating efficiencies and impact service delivery.

The Company is subject to significant governmental legislation and regulation over commercial, operating and environmental matters. The Company's railway operations are subject to extensive federal laws, regulations and rules in both Canada and the U.S. Operations are subject to economic and safety regulations in Canada primarily by the Agency and TC. The Company's U.S. operations are subject to economic and safety regulation by the STB and the FRA. Various other regulators directly and indirectly affect the Company's operations in areas such as health, safety, security, environmental and other matters. Additional economic regulation of the rail industry by these regulators or the Canadian and U.S. federal and state or provincial legislative bodies, whether under new or existing laws, could have a significant negative impact on the Company's ability to determine prices for rail services and result in a material adverse effect in the future on the Company's business, financial position, results of operations, and liquidity in a particular year or quarter. This potential material adverse effect could also result in reduced capital spending on the Company's rail network or in abandonment of lines.

The Company's compliance with safety and security regulations may result in increased capital expenditures and operating costs. For example, compliance with the *Rail Safety Improvement Act of 2008* has resulted in additional capital expenditures associated with the statutorily mandated implementation of PTC. In addition to increased capital expenditures, implementation of such regulations may result in reduced operational efficiency and service levels, as well as increased operating expenses.

The Company's operations are subject to extensive federal, state, provincial and local environmental laws concerning, among other matters, emissions to the air, land and water and the handling of hazardous materials and wastes. Violation of these laws and regulations can result in significant fines and penalties, as well as other potential impacts on CP's operations. These laws can impose strict, and in some circumstances, joint and several liability on both current and former owners, and on operators of facilities. Such environmental liabilities may also be raised by adjacent landowners or third parties. In addition, in operating a railway, it is possible that releases of hazardous materials during derailments or other accidents may occur that could cause harm to human health or to the environment. Costs of remediation, damages and changes in regulations could materially affect the Company's operating results and reputation. The Company has been, and may in the future be, subject to allegations or findings to the effect that it has violated, or is strictly liable under, environmental laws or regulations. The Company currently has obligations at existing sites for investigation, remediation and monitoring, and will likely have obligations at other sites in the future. The actual costs associated with both current and long-term liabilities may vary from the Company's estimates due to a number of factors including, but not limited to changes in: the content or interpretation of environmental laws and regulations; required remedial actions; technology associated with site investigation or remediation; and the involvement and financial viability of other parties that may be responsible for portions of those liabilities.

The Company faces competition from other transportation providers and failure to compete effectively could adversely affect financial results. The Company faces significant competition for freight transportation in Canada and the U.S., including competition from other railways, motor carriers, ship and barge operators, and pipelines. Competition is based mainly on quality of service, freight rates and access to markets. Other transportation modes generally use public rights-of-way that are built and maintained by government entities, while CP and other railways must use internal resources to build and maintain their rail networks. Competition with the trucking industry is generally based on freight rates, flexibility of service and transit time performance. Any future improvements or expenditures materially increasing the quality or reducing the cost of alternative modes of transportation, or legislation that eliminates or significantly reduces the burden of the size or weight limitations currently applicable to trucking carriers, could have a material adverse effect on CP's financial results.

The operations of carriers with which the Company interchanges may adversely affect operations. The Company's ability to provide rail services to customers in Canada and the U.S. also depends upon its ability to maintain cooperative relationships with connecting carriers with respect to, among other matters, revenue division, car supply and locomotive availability, data exchange and communications, reciprocal switching, interchange, and trackage rights. Deterioration in the operations or services provided by connecting carriers, or in the Company's relationship with those connecting carriers, could result in CP's inability to meet customers' demands or require the Company to use alternate train routes, which could result in significant additional costs and network inefficiencies and adversely affect our business, operating results, and financial condition.

The Company may be subject to litigation and other claims that could result in significant expenditures. By nature of its operations, the Company is exposed to potential for litigation and other claims, including personal injury claims, labour and employment disputes, commercial and contract disputes, environmental liability, freight claims and property damage claims. Accruals are made in accordance with applicable accounting standards and based on an ongoing assessment of the likelihood of success of the claim together with an evaluation of the damages or other monetary relief sought. Material changes to litigation trends, a catastrophic rail incident or series of incidents involving freight loss, property damage, personal injury, environmental liability, or other claims, and other significant matters could have a material adverse impact to the Company's results of operations, financial position and liquidity, in each case, to the extent not covered by insurance.

The Company may be affected by acts of terrorism, war, or risk of war. CP plays a critical role in the North American transportation system and therefore could become the target for acts of terrorism or war. CP is also involved in the transportation of hazardous materials, which could result in CP's equipment or infrastructure being direct targets or indirect casualties of terrorist attacks. Acts of terrorism, or other similar events, any government response thereto, and war or risk of war could cause significant business interruption to CP and may adversely affect the Company's results of operations, financial condition and liquidity.

Severe weather or natural disasters could result in significant business interruptions and costs to the Company. CP is exposed to severe weather conditions and natural disasters including earthquakes, hurricanes, floods, fires, avalanches, mudslides, extreme temperatures and significant precipitation that may cause business interruptions that can adversely affect the Company's entire rail network. This could result in increased costs, increased liabilities and decreased revenues, which could have a material adverse effect on the Company's results of operations, financial condition, and liquidity. Insurance maintained by the Company to protect against loss of business and other related consequences resulting from these natural occurrences is subject to coverage limitations, depending on the nature of the risk insured. This insurance may not be sufficient to cover all of the Company's damages or damages to others, and may not continue to be available at commercially reasonable rates. Even with insurance, if any natural occurrence leads to a catastrophic interruption of services, the Company may not be able to restore services without a significant interruption in operations.

Human Capital Risks

The availability of qualified personnel could adversely affect the Company's operations. Changes in employee demographics, training requirements and the availability of qualified personnel, particularly locomotive engineers and trainpersons, could negatively impact the Company's ability to meet demand for rail services. Unpredictable increases in the demand for rail services may increase the risk of having insufficient numbers of trained personnel, which could have a material adverse effect on the Company's results of operations, financial condition and liquidity. In addition, changes in operations and other technology improvements may significantly impact the number of employees required to meet the demand for rail services.

Strikes or work stoppages could adversely affect the Company's operations. Class I railways are party to collective bargaining agreements with various labour unions. The majority of CP's employees belong to labour unions and are subject to these agreements. Disputes with regard to the terms of these agreements or the Company's potential inability to negotiate acceptable contracts with these unions could result in, among other things, strikes, work stoppages, slowdowns or lockouts, which could cause a significant disruption of the Company's operations and have a material adverse effect on the Company's results of operations, financial condition and liquidity. Additionally, future national labour agreements, or provisions of labour agreements related to health care, could significantly increase the Company's costs for health and welfare benefits, which could have a material adverse impact on its financial condition and liquidity.

Volatility Risks

The Company may be affected by fluctuating fuel prices. Fuel expense constitutes a significant portion of the Company's operating costs. Fuel prices can be subject to dramatic fluctuations, and significant price increases could have a material adverse effect on the Company's results of operations. The Company currently employs a fuel cost adjustment program to help reduce volatility in changing fuel prices, but the Company cannot be certain that it will always be able to fully mitigate rising or elevated fuel costs through this program. Factors affecting fuel prices include worldwide oil demand, international politics, weather, refinery capacity, supplier and upstream outages, unplanned infrastructure failures, environmental and sustainability policies, and labour and political instability.

Technology Risks

The Company relies on technology and technological improvements to operate its business. Information technology is critical to all aspects of CP's business. If the Company were to experience a significant disruption or failure of one or more of its information technology or communications systems (either as a result of an intentional cyber or malicious act, or an unintentional error) it could result in service interruptions or other failures, misappropriation of confidential information and deficiencies, which could have a material adverse effect on the Company's results of operations, financial condition, and liquidity. If CP is unable to acquire or implement new technology, the Company may suffer a competitive disadvantage, which could also have an adverse effect on its results of operations, financial condition, and liquidity.

Supply Chain Risks

Disruptions within the supply chain could negatively affect the Company's operational efficiencies and increase costs. The North American transportation system is integrated. CP's operations and service may be negatively impacted by service disruptions of other transportation links, such as ports, handling facilities, customer facilities and other railways. A prolonged service disruption at one of these entities could have a material adverse effect on the Company's results of operations, financial condition, and liquidity.

The Company is dependent on certain key suppliers of core railway equipment and materials that could result in increased price volatility or significant shortages of materials, which could adversely affect results of operations, financial condition, and liquidity. Due to the complexity and specialized nature of core railway equipment and infrastructure (including rolling stock equipment, locomotives, rail and ties), there can be a limited number of suppliers of rail equipment and materials available. Should these specialized suppliers cease production or experience capacity or supply shortages, this concentration of suppliers could result in CP experiencing cost increases or difficulty in obtaining rail equipment and materials, which could have a material adverse effect on the Company's results of operations, financial condition and liquidity. Additionally, CP's operations are dependent on the availability of diesel fuel. A significant fuel supply shortage arising from production decreases, increased demand in existing or emerging foreign markets, disruption of oil imports, disruption of domestic refinery production, damage to refinery or pipeline infrastructure, political unrest, war or other factors could have a material adverse effect on the Company's results of operations, financial position and liquidity in a particular year or quarter.

General Risk Factors

Global Risks

Global economic conditions could negatively affect demand for commodities and other freight transported by the Company. A decline or disruption in domestic, cross border or global economic conditions that affect the supply or demand for the commodities that CP transports may decrease CP's freight volumes and may result in a material adverse effect on CP's financial or operating results and liquidity. Economic conditions resulting in bankruptcies of one or more large customers could have a significant impact on CP's financial position, results of operations, and liquidity in a particular year or quarter.

The Company may be directly and indirectly affected by the impacts of global climate change. There is potential for significant impacts to CP's business and rail infrastructure due to changes in global climate conditions. Increasing frequency, intensity and duration of extreme weather events such as

flooding, storms and forest fires may result in substantial costs to respond during the event, to recover from the event and possibly to modify existing or implementing new infrastructure to prevent recurrence. The Company is currently subject to emerging regulatory programs that place a price on carbon emissions associated with railway operations in Canada. Government bodies at the provincial and federal level are imposing carbon taxation systems and cap and trade market mechanisms in the Canadian jurisdictions in which CP operates. As a significant consumer of diesel fuel, an escalating price on carbon emissions will lead to a corresponding increase of the Company's business costs. Programs that place a price on carbon emissions or other government restrictions on certain market sectors may further impact current and potential customers including thermal coal, petroleum crude oil and renewable fuel sectors. Introduction of, or changes to, regulations by government bodies in response to these anticipated impacts could result in a significant increase in expenses and could adversely affect our business performance, results of operations, financial position, and liquidity.

Liquidity Risks

The state of capital markets could adversely affect the Company's liquidity. Weakness in the capital and credit markets could negatively impact the Company's access to capital. From time to time, the Company relies on the capital markets to provide some of its capital requirements, including the issuance of long-term debt instruments and commercial paper. Significant instability or disruptions of the capital markets and the credit markets, or deterioration of the Company's financial condition due to internal or external factors could restrict or eliminate the Company's access to, and/or significantly increase the cost of, various financing sources, including bank credit facilities and issuance of corporate bonds. Instability or disruptions of the capital markets and deterioration of the Company's financial condition, alone or in combination, could also result in a reduction in the Company's credit rating to below investment grade, which could also further prohibit or restrict the Company from accessing external sources of short-term and long-term debt financing, and/or significantly increase the associated costs.

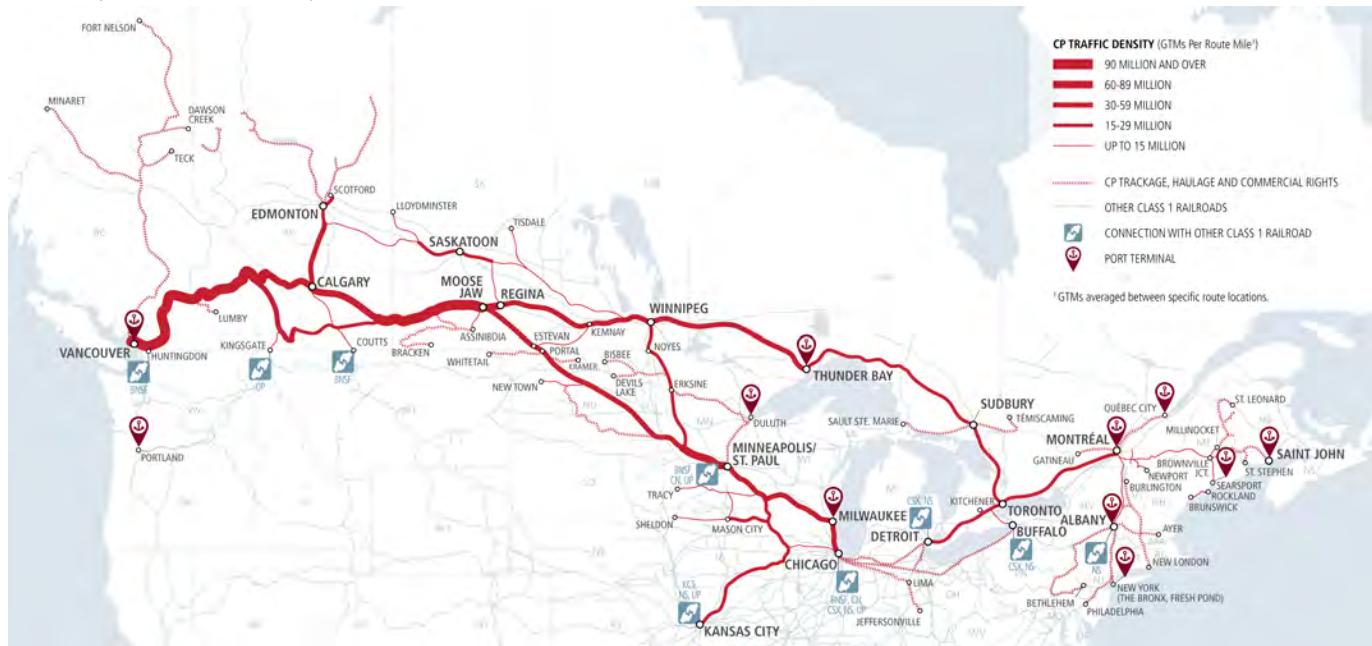
ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 2. PROPERTIES

Network Geography

The Company's network in Canada extends from the Port of Vancouver on Canada's Pacific Coast to the Port of Montréal and eastern Québec up into the Port of Saint John, New Brunswick via haulage, and to the U.S. industrial centres of Chicago, Illinois; Detroit, Michigan; Buffalo and Albany, New York; Kansas City, Missouri; and Minneapolis, Minnesota.



The Company's network is composed of three primary corridors: Western, Central and Eastern.

The Western Corridor: Vancouver to Thunder Bay

Overview – The Western Corridor links Vancouver with Thunder Bay, which is the Western Canadian terminus of the Company's Eastern Corridor. With service through Calgary, the Western Corridor is an important part of the Company's routes between Vancouver and the U.S. Midwest, and between Vancouver and eastern Canada. The Western Corridor provides access to the Port of Thunder Bay, Canada's primary Great Lakes bulk terminal.

Products – The Western Corridor is the Company's primary route for bulk and resource products traffic from western Canada to the Port of Vancouver for export. CP also handles significant volumes of international intermodal containers and domestic general merchandise traffic.

Feeder Lines – CP supports its Western Corridor with four significant feeder lines: the "Coal Route", which links southeastern B.C. coal deposits to the Western Corridor and to coal terminals at the Port of Vancouver; the "Edmonton-Calgary Route", which provides rail access to Alberta's Industrial Heartland (north of Edmonton, Alberta) in addition to the petrochemical facilities in central Alberta; the "Pacific CanAm Route", which connects Calgary and Medicine Hat in Alberta with Pacific Northwest rail routes at Kingsgate, B.C. via the Crowsnest Pass in Alberta; and the "North Main Line Route" that provides rail service to customers between Portage la Prairie, Manitoba, and Wetaskiwin, Alberta, including intermediate stations at Yorkton and Saskatoon in Saskatchewan. This line is an important collector of Canadian grain and fertilizer, serving the potash mines located east and west of Saskatoon and many high-throughput grain elevators and processing facilities. In addition, this line provides direct access to refining and upgrading facilities at Lloydminster, Alberta, and western Canada's largest pipeline terminal at Hardisty, Alberta.

Connections – The Company's Western Corridor connects with the Union Pacific Railroad ("UP") at Kingsgate and with Burlington Northern Santa Fe Railway ("BNSF") at Coutts, Alberta, and at New Westminster and Huntingdon in B.C. This corridor also connects with CN at many locations including Thunder Bay, Winnipeg, Manitoba, Regina and Saskatoon in Saskatchewan, Red Deer, Camrose, Calgary and Edmonton in Alberta, Kamloops and several locations in the Greater Vancouver area in B.C.

Yards and Repair Facilities – CP supports rail operations on the Western Corridor with main rail yards at Vancouver, Calgary, Edmonton, Moose Jaw in Saskatchewan, Winnipeg and Thunder Bay. The Company has locomotive and railcar repair facilities at Golden in B.C., Vancouver, Calgary, Moose Jaw and Winnipeg. CP also has major intermodal terminals at Vancouver, Calgary, Edmonton, Regina and Winnipeg.

The Central Corridor: Moose Jaw and Winnipeg to Chicago and Kansas City

Overview – The Central Corridor connects with the Western Corridor at Moose Jaw and Winnipeg. By running south to Chicago and Kansas City, through the Twin Cities of Minneapolis and St. Paul, Minnesota, and through Milwaukee, Wisconsin, CP provides a direct, single-carrier route between western Canada and the U.S. Midwest, providing access to Great Lakes and Mississippi River ports. From La Crosse, Wisconsin, the Central Corridor continues south towards Kansas City via the Quad Cities (Davenport and Bettendorf in Iowa, and Rock Island and Moline in Illinois), providing an efficient route for traffic destined for southern U.S. and Mexican markets. CP's Kansas City line also has a direct connection into Chicago and by extension to points east on CP's network such as Toronto, Ontario and the Port of Montréal in Québec.

Products – Traffic transported on the Central Corridor includes intermodal containers from the Port of Vancouver, fertilizers, chemicals, crude, frac sand, Automotive, and Grain and other agricultural products.

Feeder Lines – The Company has operating rights over BNSF tracks between Minneapolis and St. Paul along with connectivity to the twin ports of Duluth, Minnesota and Superior, Wisconsin. CP maintains its own yard facilities that provide an outlet for grain from the U.S. Midwest to the grain terminals at these ports. This is a strategic entry point for large dimensional shipments that can be routed via CP's network to locations such as Alberta's Industrial Heartland to serve the needs of the oil sands and energy industry. CP's route from Winona, Minnesota, to Tracy, Minnesota, provides access to key agricultural and industrial commodities. CP's feeder line between Drake and New Town in North Dakota is geographically situated in a highly strategic region for Bakken oil production. CP also owns two significant feeder lines in North Dakota and western Minnesota operated by the Dakota Missouri Valley and Western Railroad and the Northern Plains Railroad, respectively. Both of these short lines are also active in providing service to agricultural and Bakken-oil-related customers.

Connections – The Company's Central Corridor connects with all major railways at Chicago. Outside of Chicago, CP has major connections with BNSF at Minneapolis, Minot, North Dakota, and the Duluth-Superior Terminal and with UP at St. Paul and Mankato, Minnesota. CP connects with CN at Milwaukee and Chicago. At Kansas City, CP connects with Kansas City Southern ("KCS"), BNSF, Norfolk Southern Railway ("NS") and UP. CP's Central Corridor also links to several short-line railways that primarily serve grain and coal producing areas in the U.S., and extend CP's market reach in the rich agricultural areas of the U.S. Midwest. A haulage arrangement with Genesee & Wyoming Inc., provides Intermodal service to Jeffersonville, Ohio.

Yards and Repair Facilities – The Company supports rail operations on the Central Corridor with main rail yards in Chicago, Milwaukee, St. Paul and Glenwood in Minnesota, and Mason City and Davenport in Iowa. In addition, CP has a major locomotive repair facility at St. Paul and car repair facilities at St. Paul and Chicago. CP shares a yard with KCS in Kansas City. CP owns 49% of the Indiana Harbor Belt Railroad, a switching railway serving Greater Chicago and northwest Indiana. CP is also part owner of the Belt Railway Company of Chicago, which is the largest intermediate switching terminal railroad in the U.S. CP has major intermodal terminals in Minneapolis and Chicago as well as a dried distillers' grains transload facility that complements the service offering in Chicago.

The Eastern Corridor: Thunder Bay to Eastern Québec, Detroit and Albany

Overview – The Eastern Corridor extends from Thunder Bay through to the Port of Montréal, Searsport, Maine and the Port of Saint John, via haulage agreement, and from Toronto to Chicago via Detroit or Buffalo. The Company's Eastern Corridor provides shippers direct rail service from Toronto, Montréal, and Saint John to Calgary and Vancouver via the Company's Western Corridor and to the U.S. via the Central Corridor. This is a key element of the Company's transcontinental intermodal service. The corridor also supports the Company's market position at the Port of Montréal by providing one of the shortest rail routes for European cargo destined to the U.S. Midwest, using the CP-owned route between Montréal and Detroit, coupled with a trackage rights arrangement on NS tracks between Detroit and Chicago or the CP-owned route between Montréal and Buffalo coupled with a haulage arrangement on CSX Corporation ("CSX") tracks between Buffalo and Chicago. CP's 2019 acquisition of CMQ Canada and the 2020 acquisition of CMQ U.S. extends access through southern and eastern Québec to Saint John, New Brunswick and the U.S. Northeast including Searsport, Maine. In 2020, CP acquired full ownership of the DRTP. The 1.6-mile tunnel linking Windsor and Detroit will continue to be operated by CP.

Products – Major traffic categories transported in the Eastern Corridor include Forest products, chemicals and plastics, crude, ethanol, Metals, minerals and consumer products, Intermodal, automotive products and general merchandise.

Feeder Lines – A major feeder line serves the steel industry at Hamilton, Ontario and provides connections with both CSX and NS at Buffalo. The Delaware & Hudson Railway Company, Inc. ("D&H") feeder line extends from Montréal to Albany.

Connections – The Eastern Corridor connects with a number of short-line railways including routes from Montréal to Québec City, Québec and Brownsville Junction, Maine to Saint John, New Brunswick. Connections are also made with PanAm Southern at Mechanicville, New York, for service to the Boston and New England areas, the Vermont Railway at Whitehall, New York, and at Northern Main Junction. Through haulage arrangements, CP has service to Fresh Pond, New York, to connect with New York & Atlantic Railway as well as direct access to the Bronx and Queens, New York. CP can also access Philadelphia as well as a number of short-lines in Pennsylvania. Connections are also made with CN at a number of locations, including Sudbury, North Bay, Windsor, London, Hamilton and Toronto in Ontario, and Montréal in Québec. CP also connects in New York with the two eastern Class I railways; NS and CSX at Buffalo, NS at Schenectady and CSX at Albany.

Yards and Repair Facilities – CP supports its rail operations in the Eastern Corridor with major rail yards at Sudbury, Toronto, London and Montréal. The Company has locomotive repair facilities at Montréal and Toronto and car repair facilities at Thunder Bay, Toronto and Montréal. The Company's largest intermodal facility is located in the northern Toronto suburb of Vaughan and serves the Greater Toronto and southwestern Ontario areas. CP also operates intermodal terminals at Montréal and Detroit. CP also has transload facilities in Agincourt, Milton, and Hamilton, Ontario and in Montréal, Québec to meet a variety of commodity needs in these areas.

Right-of-Way

The Company's rail network is standard gauge, which is used by all major railways in Canada, the U.S. and Mexico. Continuous welded rail is used on the core main line rail network.

CP uses different train control systems on portions of the Company's owned track, depending on the volume of rail traffic. Remotely controlled centralized traffic control signals are used in various corridors to authorize the movement of trains. CP has implemented PTC on 2,117 miles of its U.S. network.

In other corridors, train movements are directed by written instructions transmitted electronically and by radio from rail traffic controllers to train crews. In some specific areas of intermediate traffic density, CP uses an automatic block signalling system in conjunction with written instructions from rail traffic controllers.

Network Investment

The Company continually assesses its network to ensure appropriate capacity to meet market demand. As part of CP's annual capital program, the Company has made substantial investments to support current and future volumes, including upgrading the network to handle longer and heavier trains, such as extending sidings to accommodate new train lengths. The Company's operating metrics, such as average train speed, length, and weight, demonstrate efficient utilization of network capacity, discussed in Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations, Performance Indicators.

Track and Infrastructure

CP operates on a network of approximately 13,000 miles of track, of which 2,300 miles CP accesses under trackage rights. The Company's owned track miles include leases with wholly owned subsidiaries where the term of the lease exceeds 99 years. CP's track network represents the size of the Company's operations that connects markets, customers and other railways. Of the total mileage operated, approximately 5,400 miles are located in western Canada, 2,500 miles in eastern Canada (including CMQ Canada), 4,500 miles in the U.S. Midwest and 700 miles in the U.S. Northeast. CP's network accesses the U.S. markets directly through four wholly owned subsidiaries: Soo Line Railroad Company ("Soo Line"), a Class I railway operating in the U.S. Midwest; the Dakota, Minnesota & Eastern Railroad ("DM&E"), which operates in the U.S. Midwest; the D&H, which operates between eastern Canada and the U.S. Northeast; and the CMQ U.S., which operates in the U.S. Northeast.

At December 31, 2020, the breakdown of CP operated track miles is as follows:

	Total
First main track	13,046
Second and other main track	1,051
Passing sidings and yard track	4,261
Industrial and way track	878
Total track miles	19,236

Rail Facilities

CP operates numerous facilities including: terminals for intermodal, transload, automotive and other freight; classification rail yards for train-building and switching, storage-in-transit and other activities; offices to administer and manage operations; dispatch centres to direct traffic on the rail network; crew quarters to house train crews along the rail line; shops and other facilities for fuelling; maintenance and repairs of locomotives; and facilities for maintenance of freight cars and other equipment. The Company continues to invest in terminal upgrades and new facilities to accommodate incremental growth in volumes, such as creating additional capacity with the redesign of the classification yard at Alyth in Calgary. The Company's average terminal dwell is an indicator of efficient utilization of yard capacity, discussed in Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations, Performance Indicators. Typically in all of our major yards, CP Police Services has offices to ensure the safety and security of the yards and operations.

The following table includes the major yards, terminals and transload facilities on CP's network:

Classification Yards	Intermodal Terminals	Transload Facilities
Vancouver, British Columbia	Vancouver, British Columbia	Vancouver, British Columbia
Calgary, Alberta	Calgary, Alberta	Toronto, Ontario
Edmonton, Alberta	Edmonton, Alberta	Hamilton, Ontario
Moose Jaw, Saskatchewan	Regina, Saskatchewan	Côte Saint-Luc, Québec
Winnipeg, Manitoba	Winnipeg, Manitoba	
Toronto, Ontario	Vaughan, Ontario	
Montréal, Québec	Lachine, Québec	
Chicago, Illinois	Chicago, Illinois	
St. Paul, Minnesota	Minneapolis, Minnesota	

Equipment

CP's equipment includes: owned and leased locomotives and railcars; heavy maintenance equipment and machinery; other equipment and tools in our shops, offices and facilities; and vehicles for maintenance, transportation of crews, and other activities. In this section, owned equipment includes units acquired by CP, equipment leased to third parties, and units held under finance leases, and leased equipment includes units under a short-term or long-term operating lease.

The Company's locomotive fleet is composed of largely high-adhesion alternating current locomotives that are more fuel efficient and reliable and have superior hauling capacity as compared with standard direct current locomotives. The Company is continuing a modernization program on several of the oldest locomotives in the fleet in order to improve reliability and availability, as well as to introduce new technology to the fleet. CP's locomotive productivity, defined as the daily average GTMs divided by daily average operating horsepower, for the years ended December 31, 2020, 2019, and 2018, was 207, 202, and 198 GTMs per Operating horsepower, respectively. Operating horsepower excludes units offline, tied up or in storage, or in use on other railways, and includes foreign units online. As of December 31, 2020, the Company had 310 locomotives in storage. As of December 31, 2020, CP owned or leased the following locomotive units:

Locomotives	Owned	Leased	Total	Average Age (in years)
Line haul	770	62	832	14
Road switcher	566	14	580	30
Total locomotives	1,336	76	1,412	20

CP's average in-service utilization percentage for freight cars, for the years ended December 31, 2020, 2019, and 2018, was 81%, 81%, and 84%, respectively. Average in-service utilization is defined as average active fleet for the year divided by total cars, excluding company service cars and tank cars as these are utilized only as required for non-revenue movements. As of December 31, 2020, CP owned and leased the following units of freight cars:

Freight cars	Owned	Leased	Total	Average Age (in years)
Box car	2,502	545	3,047	31
Covered hopper	8,623	7,693	16,316	21
Flat car	1,436	998	2,434	26
Gondola	3,623	1,595	5,218	22
Intermodal	1,315	150	1,465	16
Multi-level autorack	2,800	1,017	3,817	26
Company service car	2,413	176	2,589	45
Open top hopper	113	—	113	34
Tank car	33	32	65	14
Total freight cars	22,858	12,206	35,064	24

As of December 31, 2020, CP owned and leased the following units of intermodal equipment:

Intermodal equipment	Owned	Leased	Total	Average Age (in years)
Containers	8,150	—	8,150	7
Chassis	6,374	109	6,483	12
Total intermodal equipment	14,524	109	14,633	9

Headquarters Office Building

CP owns and operates a multi-building campus in Calgary encompassing the head office building, a data centre, training facility and other office and operational buildings.

The Company's main dispatch centre is located in Calgary, and is the primary dispatching facility in Canada. Rail traffic controllers coordinate and dispatch crews, and manage the day-to-day locomotive management along the network, 24 hours a day, and seven days a week. The operations centre has a complete backup system in the event of any power disruption.

In addition to fully operational redundant systems, CP has a fully integrated Business Continuity Centre, should CP's operations centre be affected by any natural disaster, fire, cyber-attack or hostile threat.

CP also maintains a secondary dispatch centre located in Minneapolis, where a facility similar to the one in Calgary exists. It services the dispatching needs of locomotives and train crews working in the U.S.

Capital Expenditures

The Company incurs expenditures to expand and enhance its rail network, rolling stock and other infrastructure. These expenditures are aimed at improving efficiency and safety of our operations. Such investments are also an integral part of the Company's multi-year capital program and support growth initiatives. For further details, refer to Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations, Liquidity and Capital Resources.

Encumbrances

Refer to Item 8. Financial Statements and Supplementary Data, Note 16 Debt, for information on the Company's finance lease obligations and assets held as collateral under these agreements.

ITEM 3. LEGAL PROCEEDINGS

For further details, refer to Item 8. Financial Statements and Supplementary Data, Note 25 Commitments and contingencies.

SEC regulations require the disclosure of any proceeding under environmental laws to which a government authority is a party unless the registrant reasonably believes it will not result in sanctions over a certain threshold. The Company uses a threshold of U.S. \$1 million for the purposes of determining proceedings requiring disclosure.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

INFORMATION ABOUT OUR EXECUTIVE OFFICERS

Our executive officers are appointed by the Board of Directors and they hold office until their successors are appointed, subject to resignation, retirement or removal by the Board of Directors. There are no family relationships among our officers, nor any arrangement or understanding between any officer and any other person pursuant to which the officer was selected. As of the date of this filing, the executive officers' names, ages and business experience are:

Name, Age and Position	Business Experience
Keith Creel, 52 President and Chief Executive Officer	<p>Mr. Creel became President and CEO of CP on January 31, 2017. Previously, he was President and Chief Operating Officer ("COO") from February 5, 2013, to January 30, 2017.</p> <p>Prior to joining CP, Mr. Creel was Executive Vice-President and COO at CN from January 2010 to February 2013. During his time at CN, Mr. Creel held various positions including Executive Vice-President, Operations, Senior Vice-President Eastern Region, Senior Vice-President Western Region, and Vice-President of the Prairie Division.</p> <p>Mr. Creel began his railroad career at Burlington Northern Railway in 1992 as an intermodal ramp manager in Birmingham, Alabama. He also spent part of his career at Grand Trunk Western Railroad as a superintendent and general manager, and at Illinois Central Railroad as a trainmaster and director of corridor operations, prior to its merger with CN in 1999.</p>
Mark Redd, 50 Executive Vice-President, Operations	<p>Mr. Redd has been Executive Vice-President Operations since September 1, 2019. Before this appointment, he was Senior Vice-President Operations Western Region from February 2, 2017, to August 31, 2019, and Vice-President Operations Western Region from April 20, 2016, to February 1, 2017.</p> <p>Previous to these roles, he was General Manager Operations U.S. West and General Manager Operations Central Division. He was named CP's 2016 Railroader of the Year. Prior to joining CP in October 2013, Mr. Redd worked for over 20 years at Kansas City Southern Railway where he held a variety of leadership positions in network and field operations. Mr. Redd holds bachelor and Master of Business Administration ("MBA") degrees from the University of Missouri – Kansas City.</p>
Nadeem Velani, 48 Executive Vice-President and Chief Financial Officer	<p>Mr. Velani has been Executive Vice-President and CFO of CP since October 17, 2017. Previous to this appointment, he was the Vice-President and CFO of CP from October 19, 2016, to October 16, 2017, Vice-President, Investor Relations from October 28, 2015, and Assistant Vice-President, Investor Relations from March 11, 2013.</p> <p>Prior to joining CP, Mr. Velani spent 15 years at CN where he worked in a variety of positions in Strategic and Financial Planning, Investor Relations, Sales and Marketing, and the Office of the President and CEO.</p> <p>Mr. Velani holds a Bachelor of Economics degree from Western University and an MBA in Finance/International Business from McGill University.</p>
John Brooks, 50 Executive Vice-President and Chief Marketing Officer	<p>Mr. Brooks has been Executive Vice-President and Chief Marketing Officer ("CMO") of CP since February 14, 2019. Previous to this appointment, he was the Senior Vice-President and CMO of CP from February 14, 2017, to February 13, 2019. He has worked in senior marketing roles at CP since he joined the Company in 2007, most recently as Vice-President, Marketing – Bulk and Intermodal.</p> <p>Mr. Brooks began his railroading career with UP and later helped start I&M Rail Link, LLC, which was purchased by DM&E in 2002. Mr. Brooks was Vice-President, Marketing at DM&E prior to it being acquired by CP in 2007.</p> <p>With more than 20 years in the railroading business, Mr. Brooks brings a breadth of experience to the CMO role that is pivotal to CP's continued and future success.</p>

Laird Pitz, 76 Senior Vice-President and Chief Risk Officer	<p>Mr. Pitz has been Senior Vice-President and Chief Risk Officer ("CRO") of CP since October 17, 2017. Previously, he was the Vice-President and CRO of CP from October 29, 2014, to October 16, 2017, and the Vice-President, Security and Risk Management of CP from April 2014 to October 2014.</p> <p>Prior to joining CP, Mr. Pitz was retired from March 2012 to April 2014, and Vice-President, Risk Mitigation of CN from September 2003 to March 2012.</p> <p>Mr. Pitz, a Vietnam War veteran and former Federal Bureau of Investigation special agent, is a 40-year career professional who has directed strategic and operational risk mitigation, security and crisis management functions for companies operating in a wide range of fields, including defence, logistics and transportation.</p>
James Clements, 51 Senior Vice-President, Strategic Planning and Technology Transformation	<p>Mr. Clements has been Senior Vice-President, Strategic Planning and Technology Transformation since September 1, 2019. Before this appointment, he was the Vice-President, Strategic Planning and Transportation Services of CP from 2014. Mr. Clements has responsibilities that include strategic network issues, Network Service Centre operations and Information Services. In addition, he has responsibility for all of CP's facilities and real estate across North America.</p> <p>Mr. Clements has been at CP for 26 years and his previous experience covers a wide range of areas of CP's business, including car management, finance, joint facilities agreements, logistics, grain marketing and sales in both Canada and the U.S., as well as marketing and sales responsibility for various other lines of business at CP.</p>
Jeffrey Ellis, 53 Chief Legal Officer and Corporate Secretary	<p>He has an MBA in Finance/International Business from McGill University and a Bachelor of Science in Computer Science and Mathematics from McMaster University.</p> <p>Mr. Ellis has been Chief Legal Officer and Corporate Secretary of CP since November 23, 2015. Mr. Ellis is accountable for the overall strategic leadership, oversight and performance of the legal, corporate secretarial, government relations and public affairs functions of CP in Canada and the U.S.</p>
Mike Foran, 47 Vice-President, Market Strategy and Asset Management	<p>Prior to joining CP in 2015, Mr. Ellis was the U.S. General Counsel at BMO Financial Group ("BMO"). Before joining BMO in 2006, Mr. Ellis was with the law firm of Borden Ladner Gervais LLP in Toronto, Ontario.</p> <p>Mr. Ellis has Bachelor of Arts and Master of Arts degrees from the University of Toronto, Juris Doctor and Master of Laws degrees from Osgoode Hall Law School, and an MBA from the Richard Ivey School of Business, Western University. Mr. Ellis is a member of the bars of New York, Illinois, Ontario and Alberta.</p>
Michael Redeker, 60 Vice-President and Chief Information Officer	<p>Mr. Foran has been Vice-President, Market Strategy and Asset Management of CP since February 14, 2017. His prior roles with CP include Vice-President Network Transportation from 2014 to 2017, Assistant Vice-President Network Transportation from 2013 to 2014, and General Manager – Asset Management from 2012 to 2013. In over 20 years at CP, Mr. Foran has worked in operations, business development, marketing and general management.</p> <p>Mr. Foran holds an Executive MBA from the Ivey School of Business at Western University and a Bachelor of Commerce from the University of Calgary.</p>
Chad Rolstad, 44 Vice-President, Human Resources and Chief Culture Officer	<p>Mr. Redeker has been Vice-President and Chief Information Officer ("CIO") of CP since October 15, 2012.</p> <p>Prior to joining CP, Mr. Redeker was Vice-President and CIO of Alberta Treasury Branch from May 2007 to September 2012. He also spent 11 years at IBM Canada, where he focused on delivering quality information technology services within the financial services industry.</p> <p>Mr. Rolstad has been Vice-President, Human Resources since February 14, 2019, and the Chief Culture Officer since September 1, 2019. Previous to this appointment, he was Assistant Vice-President, Human Resources of CP from August 1, 2018, to February 13, 2019, and Assistant Vice-President, Strategic Procurement of CP from April 10, 2017, to July 31, 2018.</p> <p>Prior to joining CP, Mr. Rolstad held various leadership positions at BNSF Railway in marketing and operations.</p>
	Mr. Rolstad has a Bachelor of Science from the Colorado School of Mines and an MBA from Duke University.

PART II

ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED SHAREHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

Share Information

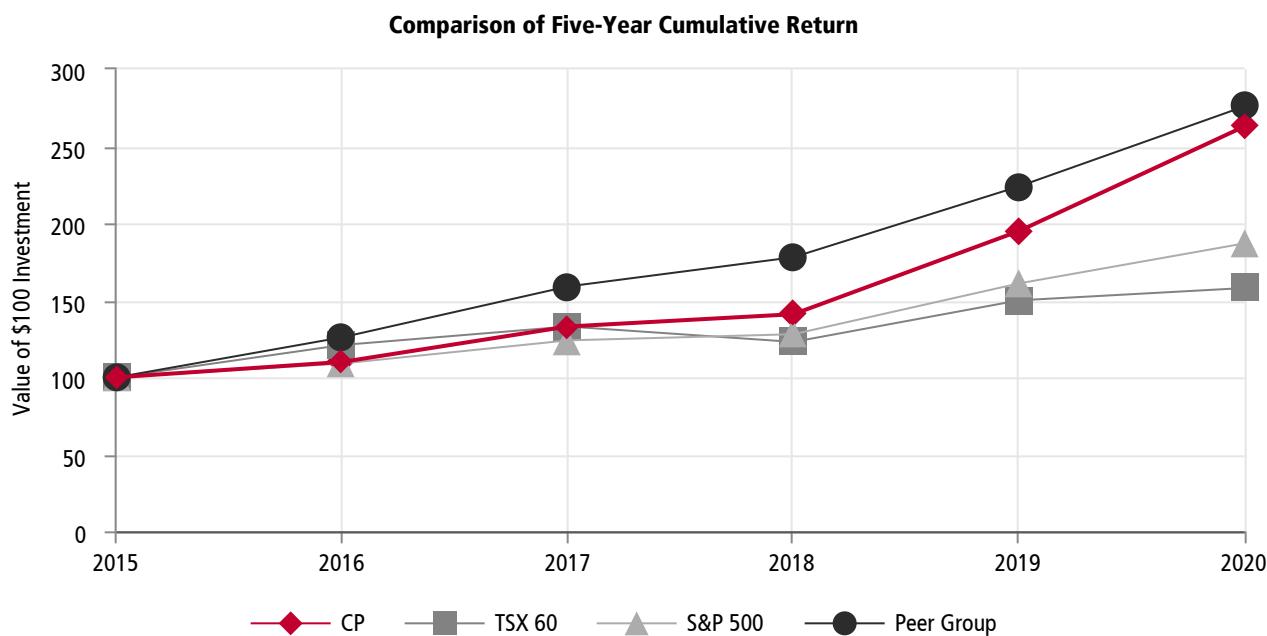
The Common Shares are listed on the TSX and on the NYSE under the symbol "CP".

Share Capital

At February 17, 2021, the latest practicable date prior to the date of this Annual Report on Form 10-K, there were 133,297,236 Common Shares and no preferred shares issued and outstanding, which consists of 13,779 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. Each option granted can be exercised for one Common Share. At February 17, 2021, 1,521,584 options were outstanding under the MSOIP and stand-alone option agreements entered into with Mr. Keith Creel. There are 733,836 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 340,000 options available to be issued in the future.

Stock Performance Graph

The following graph provides an indicator of cumulative total shareholder return on the Common Shares, of an assumed investment of \$100, as compared to the TSX 60 Index ("TSX 60"), the Standard & Poor's 500 Stock Index ("S&P 500"), and the peer group index (comprising CN, KCS, UP, NS and CSX) on December 31 for each of the years indicated. The values for the assumed investments depicted on the graph and in the table have been calculated assuming that any dividends are reinvested.



Issuer Purchase of Equity Securities

CP has established a share repurchase program which is further described in Item 8. Financial Statements and Supplementary Data, Note 20 Shareholders' equity. The following table presents the number of Common Shares repurchased during each month of the fourth quarter of 2020 and the average price paid by CP for the repurchase of such Common Shares.

2020	Total number of shares purchased⁽¹⁾	Average price paid per share⁽²⁾	Total number of shares purchased as part of publicly announced plans or programs	Maximum number of shares that may yet be purchased under the plans or programs
October 1 to October 31	230,195	\$ 407.28	230,195	1,620,676
November 1 to November 30	451,299	425.89	451,299	1,169,377
December 1 to December 31	640,000	429.23	640,000	nil ⁽³⁾
Ending Balance	1,321,494	\$ 424.26	1,321,494	N/A

⁽¹⁾ Includes shares repurchased but not yet cancelled at quarter end.

⁽²⁾ Includes brokerage fees.

⁽³⁾ The Company's NCIB expired on December 19, 2020. At the time of expiration, 529,377 Common Shares authorized for repurchase had not yet been purchased by the Company.

ITEM 6. SELECTED FINANCIAL DATA

The following table presents as of, and for the years ended, December 31, selected financial data related to the Company's financial results for the last five fiscal years. The selected financial data should be read in conjunction with Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations and Item 8. Financial Statements and Supplementary Data.

For information regarding historical exchange rates, please see Impact of Foreign Exchange on Earnings in Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations.

(in millions, except per share data, percentage and ratios)	2020	2019	2018	2017	2016
Financial Performance and Liquidity					
Total revenues	\$ 7,710	\$ 7,792	\$ 7,316	\$ 6,554	\$ 6,232
Operating income	3,311	3,124	2,831	2,519	2,411
Adjusted operating income ⁽¹⁾	3,311	3,124	2,831	2,468	2,411
Net income	2,444	2,440	1,951	2,405	1,599
Adjusted income ⁽¹⁾	2,403	2,290	2,080	1,666	1,549
Basic earnings per share ("EPS")	18.05	17.58	13.65	16.49	10.69
Diluted EPS	17.97	17.52	13.61	16.44	10.63
Adjusted diluted EPS ⁽¹⁾	17.67	16.44	14.51	11.39	10.29
Dividends declared per share	3.5600	3.1400	2.5125	2.1875	1.8500
Cash provided by operating activities	2,802	2,990	2,712	2,182	2,089
Cash used in investing activities	(2,030)	(1,803)	(1,458)	(1,295)	(1,069)
Cash used in financing activities	(764)	(1,111)	(1,542)	(700)	(1,493)
Free cash ⁽¹⁾	1,157	1,357	1,289	874	1,007
Financial Position					
Total assets	\$ 23,640	\$ 22,367	\$ 21,254	\$ 20,135	\$ 19,221
Total long-term debt, including current portion	9,771	8,757	8,696	8,159	8,684
Total shareholders' equity	7,319	7,069	6,636	6,437	4,626
Financial Ratios					
Operating ratio ⁽²⁾	57.1%	59.9%	61.3%	61.6%	61.3%
Adjusted operating ratio ⁽¹⁾	57.1%	59.9%	61.3%	62.4%	61.3%
Return on average shareholders' equity ⁽³⁾	34.0%	35.6%	29.8%	43.4%	33.9%
Adjusted return on invested capital ("Adjusted ROIC") ⁽¹⁾	16.7%	16.9%	16.2%	14.7%	14.0%
Dividend payout ratio ⁽⁴⁾	19.8%	17.9%	18.5%	13.3%	17.4%
Adjusted dividend payout ratio ⁽¹⁾	20.1%	19.1%	17.3%	19.2%	18.0%
Long-term debt to Net income ratio ⁽⁵⁾	4.0	3.6	4.5	3.4	5.4
Adjusted net debt to adjusted EBITDA ratio ⁽¹⁾	2.5	2.4	2.6	2.6	2.9

⁽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 7. 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 7. 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 rolling 12-month period, further discussed in Results of Operations of this Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations.

⁽⁴⁾ Dividend payout ratio is defined as dividends declared per share divided by Diluted EPS, further discussed in Liquidity and Capital Resources of this Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations.

⁽⁵⁾ 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 7. Management's Discussion and Analysis of Financial Condition and Results of Operations.

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

INDEX TO MANAGEMENT'S DISCUSSION AND ANALYSIS

	Page
Executive Summary	60
2021 Outlook	60
Performance Indicators	61
Results of Operations	64
Impact of Foreign Exchange on Earnings	67
Impact of Fuel Price on Earnings	68
Impact of Share Price on Earnings	68
Operating Revenues	69
Operating Expenses	75
Other Income Statement Items	78
Liquidity and Capital Resources	79
Share Capital	84
Non-GAAP Measures	84
Off-Balance Sheet Arrangements	92
Critical Accounting Estimates	93
Forward-Looking Statements	97

The following discussion and analysis should be read in conjunction with the Company's Consolidated Financial Statements and the related notes in Item 8. Financial Statements and Supplementary Data, and other information in this annual report. Except where otherwise indicated, all financial information reflected herein is expressed in Canadian dollars.

Executive Summary

2020 Results

- Financial performance** – In 2020, CP reported Diluted earnings per share ("EPS") of \$17.97, a 3% increase from \$17.52 in 2019. Adjusted diluted EPS increased to \$17.67, a 7% increase compared to \$16.44 in 2019. CP's commitment to service and operational efficiency produced an Operating ratio of 57.1%. Adjusted diluted EPS is defined and reconciled in Non-GAAP Measures and discussed further in Results of Operations of this Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations.
- Total revenues** – CP's Total revenues decreased by 1% to \$7,710 million in 2020 from \$7,792 million in 2019, driven primarily by the unfavourable impact of lower fuel surcharge revenue as a result of lower fuel prices, and lower volumes as measured by revenue ton-miles ("RTMs") primarily due to the impacts of COVID-19. This decrease was partially offset by higher liquidated damages, including customer volume commitments, and higher freight rates.
- Operating performance** – Average train weight increased by 6% to 9,707 tons and average train length increased by 7% to 7,929 feet due to improvements in operating plan efficiency, in each case compared to 2019. These metrics are discussed further in Performance Indicators of this Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations.

The following table compares 2020 outlook to actual results:

	RTM growth	Adjusted diluted EPS ⁽¹⁾	Capital expenditures
Outlook	Mid-single-digit growth Revised quarterly and updated at the end of the third quarter to low single-digit decrease	High single-digit to low double-digit growth Revised quarterly and updated at the end of the third quarter to at least mid-single-digit Adjusted diluted EPS growth from full-year 2019 Adjusted diluted EPS of \$16.44.	Approximately \$1.60 billion
Actual outcomes	RTMs decreased by 2,487 million, or 2%	Adjusted diluted EPS growth of 7% to \$17.67	\$1.67 billion

⁽¹⁾ Adjusted diluted EPS is defined and reconciled in Non-GAAP Measures of this Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations. As described in the 2021 Outlook section below, CP had not calculated an outlook for Diluted EPS in 2020.

The updates in RTM growth and Adjusted diluted EPS expectations were based on the impacts of the COVID-19 pandemic on consumer demand in the following lines of business: Energy, chemicals and plastics, Metals, minerals and consumer products, and Automotive. CP revised its outlook quarterly given the evolving nature of impacts from the COVID-19 pandemic.

2021 Outlook

With a 2021 plan that encompasses profitable sustainable growth, CP expects high single-digit RTM growth and double-digit Adjusted diluted EPS growth. CP's expectations for Adjusted diluted EPS growth in 2021 are based on Adjusted diluted EPS of \$17.67 in 2020. For the purposes of this outlook, CP assumes an effective tax rate of 24.6 percent. CP estimates other components of net periodic benefit recovery to increase by approximately \$40 million versus 2020. As CP continues to invest in service, productivity and safety, the Company plans to invest approximately \$1.55 billion in capital programs in 2021. Capital programs are defined and discussed further in Liquidity and Capital Resources of this Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations.

Adjusted diluted EPS is defined and discussed further in Non-GAAP Measures and in Forward-Looking Statements of this Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations. Although CP has provided a forward-looking Non-GAAP measure (Adjusted diluted EPS), management is unable to reconcile, without unreasonable efforts, the forward-looking Adjusted diluted EPS to the most comparable GAAP measure, 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 changes in income tax rates and a change to an uncertain tax item. These or other similar, large unforeseen transactions affect diluted EPS but may be excluded from CP's Adjusted diluted EPS. Additionally, the Canadian dollar-to-U.S. exchange rate is unpredictable and can have a significant impact on CP's reported results but may be excluded from CP's Adjusted diluted EPS. In particular, CP excludes the foreign exchange ("FX")

impact of translating the Company's debt and lease liabilities from Adjusted diluted EPS. Please see Forward-Looking Statements of this Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations for further discussion.

Performance Indicators

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

For the year ended December 31	2020	2019	2018	% Change	
				2020 vs. 2019	2019 vs. 2018
Operations Performance					
Gross ton-miles ("GTMs") (millions)	272,360	280,724	275,362	(3)	2
Train miles (thousands)	30,324	32,924	32,312	(8)	2
Average train weight – excluding local traffic (tons)	9,707	9,129	9,100	6	—
Average train length – excluding local traffic (feet)	7,929	7,388	7,313	7	1
Average terminal dwell (hours)	6.5	6.4	6.8	2	(6)
Average train speed (miles per hour, or "mph")	22.0	22.2	21.5	(1)	3
Locomotive productivity (GTMs / operating horsepower, or "GTMs/OHP")	207	202	198	2	2
Fuel efficiency (U.S. gallons of locomotive fuel consumed /1,000 GTMs)	0.942	0.955	0.953	(1)	—
Total Employees and Workforce					
Total employees (average)	12,168	13,103	12,756	(7)	3
Total employees (end of period)	11,890	12,694	12,840	(6)	(1)
Workforce (end of period)	11,904	12,732	12,866	(7)	(1)
Safety Indicators⁽¹⁾					
FRA personal injuries per 200,000 employee-hours	1.11	1.42	1.47	(22)	(3)
FRA train accidents per million train-miles	0.96	1.06	1.10	(9)	(4)

⁽¹⁾ FRA personal injuries per 200,000 employee-hours for the year ended December 31, 2018, previously reported as 1.48, was restated to 1.47 in this report. This restatement reflects 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.

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 for 2020 were 272,360 million, a 3% decrease compared with 280,724 million in 2019. This decrease was primarily driven by decreased volumes of crude, Coal, and frac sand. This decrease was partially offset by increased volumes of Grain, Potash, and Fertilizers and sulphur.

GTMs in 2019 were 280,724 million, a 2% increase compared with 275,362 million in 2018. This increase was primarily driven by increased volumes of Energy, chemicals and plastics and Intermodal. This increase was partially offset by decreased volumes of Potash, frac sand, and Coal.

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, indicates improved train productivity. Train miles for 2020 were 30,324 thousands, a decrease of 8% compared with 32,924 thousands in 2019. This decrease reflects the impact of a 3% decrease in workload (GTMs), as well as a 6% increase in average train weights.

Train miles in 2019 were 32,924, an increase of 2% compared with 32,312 thousands in 2018. This reflects the impact of higher GTMs in 2019.

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 of 9,707 tons in 2020 increased by 578 tons, or 6% compared with 9,129 tons in 2019. This increase was a result of improvements in operating plan efficiency, continued improvements in operational efficiency due to moving longer and heavier export potash and Grain trains, and improved winter operating conditions in the first quarter of 2020. This increase was partially offset by moving lower volumes of heavier commodities such as Canadian coal and crude. Improvements for Grain trains were driven by the High Efficiency Product ("HEP") train model, which is an 8,500-foot train model that features the new high-capacity grain hopper cars and increased grain carrying capacity.

Average train weight of 9,129 tons in 2019 increased by 29 tons from 9,100 tons in 2018. This slight increase was a result of improvements in operating plan efficiency. This increase was partially offset by the implementation of CP's winter contingency plan in the first quarter of 2019 resulting in shorter and lighter trains within the operating plan.

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 railroads' trains on CP's network. An increase in average train length indicates improved asset utilization. Average train length of 7,929 feet in 2020 increased by 541 feet, or 7%, compared with 7,388 feet in 2019. This increase was a result of improvements in operating plan efficiency and continued improvements in operational efficiency due to moving longer Grain and export potash trains. This increase was partially offset by moving lower volumes of commodities such as Canadian coal, which move in longer trains. Improvements for Grain trains were driven by the 8,500-foot HEP train model.

Average train length of 7,388 feet in 2019 increased by 75 feet, or 1%, from 7,313 feet in 2018. This was a result of improvements in operating plan efficiency and increased Intermodal volumes which move on longer trains. This increase was partially offset by the implementation of CP's winter contingency plan in the first quarter of 2019 resulting in shorter and lighter trains within the operating plan.

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 railroad. The timing ends when the train leaves, a customer receives the car from CP, or the freight car is transferred to another railroad. 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 of 6.5 hours in 2020 increased by 2% from 6.4 hours in 2019. This unfavourable increase was a result of aligning the operating plan to demand in order to maintain network efficiencies in the last three quarters of 2020. Aligning the operating plan to demand resulted in increased average train weight, average train length, and increased locomotive productivity.

Average terminal dwell of 6.4 hours in 2019 favourably decreased by 6% from 6.8 hours in 2018. This favourable decrease was due to improved network fluidity.

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 railways 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 was 22.0 mph in 2020, a decrease of 1%, from 22.2 mph in 2019. This decrease in speed was a result of aligning the operating plan to demand in order to maintain network efficiencies in the last three quarters of 2020, partially offset by improved winter operating conditions in the first quarter of 2020. Aligning the operating plan to demand resulted in increased average train weight, average train length, and increased locomotive productivity.

Average train speed in 2019 was 22.2 mph, an increase of 3%, from 21.5 mph in 2018. This increase in speed was due to the completion of network infrastructure projects, partially offset by the impact of harsh winter operating conditions and network disruptions in the first quarter of 2019.

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 207 GTMs/OHP in 2020, an increase of 5 GTMs/OHP, or 2%, compared to 202 GTMs/OHP in 2019. This increase was primarily due to improvements in operating plan efficiency as a result of aligning the operating plan to demand.

Locomotive productivity was 202 GTMs/OHP in 2019, an increase of 4 GTMs/OHP, or 2%, compared to 198 GTMs/OHP in 2018. This increase was primarily due to improvements in operating plan efficiency as a result of aligning the operating plan to demand.

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 for 2020 was 0.942 U.S. gallons/1,000 GTMs, an improvement of 1% compared to 2019. This improvement was primarily due to improved winter operating conditions in the first quarter of 2020. Fuel efficiency for 2019 of 0.955 U.S. gallons/1,000 GTMs was flat compared to 2018.

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 for 2020 decreased by 935, or 7%, compared with 2019. This decrease was primarily due to more efficient resource planning, including furloughs associated with the economic downturn caused by COVID-19, partially offset by the addition of CMQ employees. The total number of employees as at December 31, 2020 was 11,890, a decrease of 804, or 6%, compared to 12,694 as at December 31, 2019, due to reduced workload as measured in GTMs and more efficient resource planning.

The average number of total employees for 2019 increased by 347, or 3%, compared to 2018. This increase was primarily due to growth in workload as measured in GTMs. The total number of employees as at December 31, 2019 was 12,694, a decrease of 146, or 1%, compared to 12,840 as at December 31, 2018, due to more efficient resource planning and reduced workload in the fourth quarter, partially offset by the addition of CMQ Canada employees.

The total workforce as at December 31, 2020 was 11,904, a decrease of 828, or 7%, compared to 12,732 as at December 31, 2019, due to more efficient resource planning.

The total workforce as at December 31, 2019 was 12,732, a decrease of 134, or 1%, compared to 12,866 as at December 31, 2018, due to more efficient resource planning.

Safety Indicators

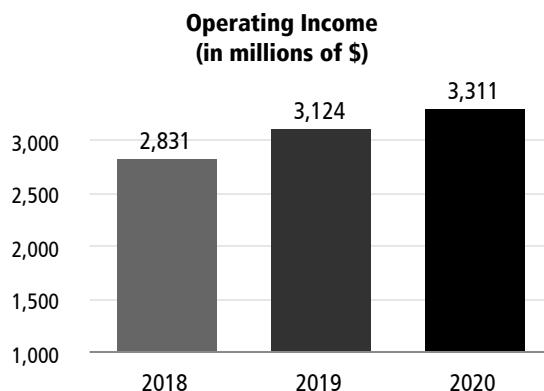
Safety is a key priority and core strategy for CP's management, employees, and Board of Directors. Personal injuries and train accidents are indicators of the effectiveness of the Company's safety systems, and are used by management to evaluate and, as necessary, alter the Company's safety systems, procedures, and protocols. Each measure follows U.S. Federal Railroad Administration ("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 1.11 in 2020, compared with 1.42 in 2019 and 1.47 in 2018.

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. \$10,700 in damage. The FRA train accidents per million train-miles frequency for CP was 0.96 in 2020, compared with 1.06 in 2019 and 1.10 in 2018.

Results of Operations

Income



Operating income was \$3,311 million in 2020, an increase of \$187 million, or 6%, from \$3,124 million in 2019. This increase was primarily due to:

- liquidated damages, including customer volume commitments, and higher freight rates;
- the efficiencies generated from improved operating performance and asset utilization;
- a gain of \$68 million as a result of the remeasurement to fair value of the previously held equity investment in the Detroit River Tunnel Partnership ("DRTP");
- the impact of harsher winter operating conditions in 2019; and
- decreased operating expense associated with lower casualty costs incurred in 2020.

This increase was partially offset by:

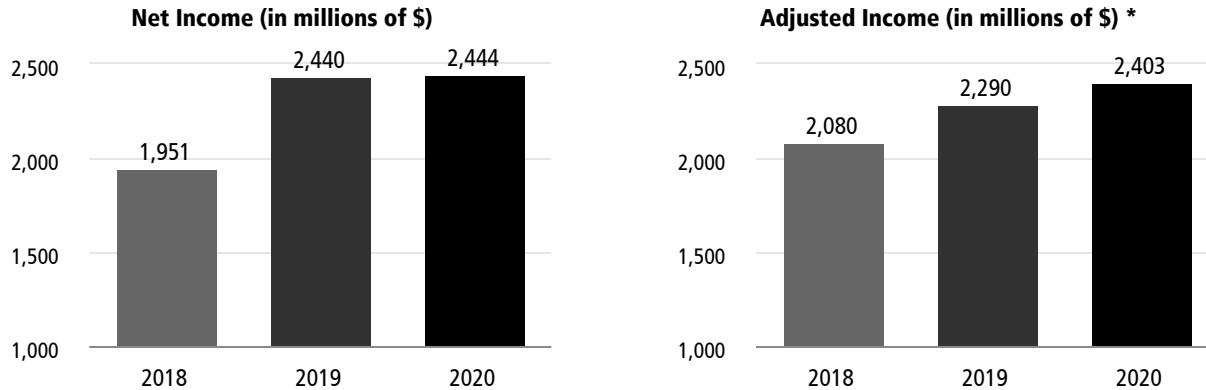
- lower volumes as measured by RTMs;
- higher depreciation and amortization of \$71 million (excluding FX);
- cost inflation; and
- higher stock-based compensation of \$37 million primarily driven by an increase in stock price.

Operating income was \$3,124 million in 2019, an increase of \$293 million, or 10%, from \$2,831 million in 2018. This increase was primarily due to:

- higher freight rates;
- the efficiencies generated from improved operating performance and asset utilization;
- the favourable impact of change in FX of \$39 million; and
- the favourable impact from changes in fuel prices of \$38 million.

This increase was partially offset by:

- increased operating expense associated with higher casualty costs in 2019 of \$76 million (excluding FX);
- higher stock-based compensation of \$58 million;
- cost inflation; and
- increased weather related costs as a result of harsh winter operating conditions in the first quarter of 2019.



*Adjusted income is defined and reconciled in Non-GAAP Measures of this Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations.

Net income was \$2,444 million in 2020, an increase of \$4 million, from \$2,440 million in 2019. This increase was primarily due to:

- higher Operating income;
- a deferred tax recovery relating to a tax return filing election for the state of North Dakota; and
- a provision for an uncertain tax item of a prior period in 2019.

This increase was partially offset by:

- an income tax recovery associated with changes in tax rates in 2019;
- lower FX translation gain on U.S. dollar-denominated debt and lease liabilities compared to 2019; and
- lower other components of net periodic benefit recovery.

Net income was \$2,440 million in 2019, an increase of \$489 million, or 25%, from \$1,951 million in 2018. This increase was primarily due to:

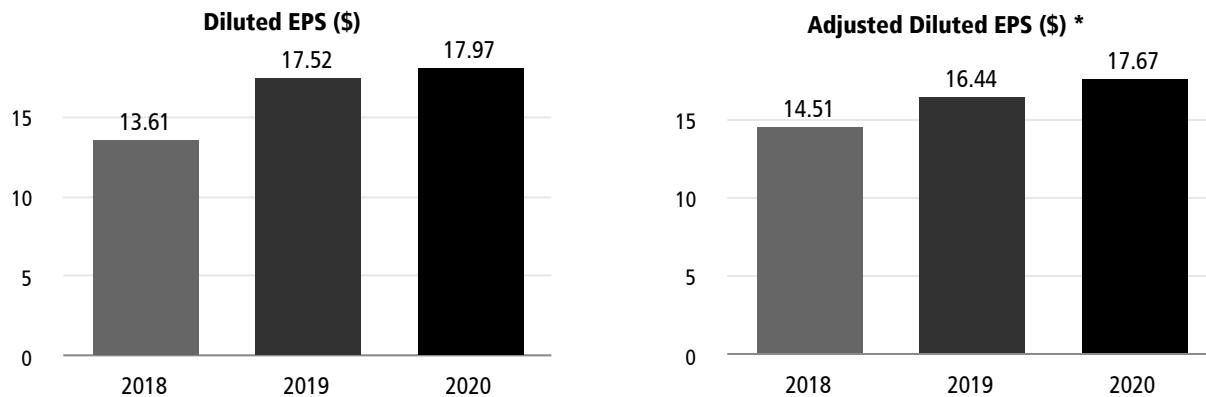
- higher Operating income;
- FX translation gains on debt and lease liabilities in 2019 compared to FX translation losses on debt in 2018; and
- a higher income tax recovery associated with changes in tax rates.

This increase was partially offset by higher income taxes due to higher taxable income and a provision for an uncertain tax item of a prior period.

Adjusted income, defined and reconciled in Non-GAAP Measures of this Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations, was \$2,403 million in 2020, an increase of \$113 million, or 5%, from \$2,290 million in 2019. This increase was primarily due to higher Operating income, partially offset by lower other components of net periodic benefit recovery.

Adjusted income was \$2,290 million in 2019, an increase of \$210 million, or 10%, from \$2,080 million in 2018. This increase was due to the same factors discussed above for the increase in Net income, except that Adjusted income excludes FX translation gains and losses on debt and lease liabilities, income tax recoveries associated with changes in tax rates, and a provision for an uncertain tax item of a prior period.

Diluted Earnings per Share



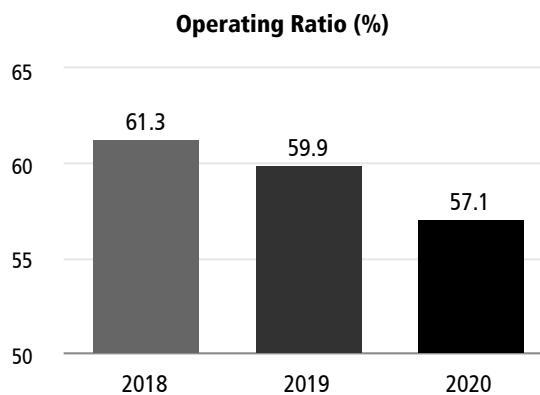
*Adjusted diluted EPS is defined and reconciled in Non-GAAP Measures of this Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations.

Diluted EPS was \$17.97 in 2020, an increase of \$0.45, or 3%, from \$17.52 in 2019. This increase was due to a lower average number of outstanding Common Shares due to the Company's share repurchase program, and higher Net income.

Diluted EPS was \$17.52 in 2019, an increase of \$3.91, or 29%, from \$13.61 in 2018. This increase was due to higher Net income and lower average number of outstanding Common Shares due to the Company's share repurchase program.

Adjusted diluted EPS, defined and reconciled in Non-GAAP Measures of this Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations, was \$17.67 in 2020, an increase of \$1.23, or 7%, from \$16.44 in 2019. Adjusted diluted EPS was \$16.44 in 2019, an increase of \$1.93, or 13%, from \$14.51 in 2018. These increases were due to higher Adjusted income and lower average number of outstanding Common Shares due to the Company's share repurchase program.

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 57.1% in 2020, a 280 basis point improvement from 59.9% in 2019. This improvement was primarily due to:

- liquidated damages, including customer volume commitments, and higher freight rates;
- the favourable impact of changes in fuel prices;

- the efficiencies generated from improved operating performance and asset utilization; and
- a gain as a result of the remeasurement to fair value of the previously held equity investment in DRTP.

This improvement was partially offset by:

- higher depreciation and amortization;
- cost inflation; and
- higher stock-based compensation.

The Company's Operating ratio was 59.9% in 2019, a 140 basis point improvement from 61.3% in 2018. This improvement was primarily due to:

- higher freight rates;
- the favourable impact of changes in fuel prices; and
- the efficiencies generated from improved performance and asset utilization.

This improvement was partially offset by:

- increased operating expense associated with higher casualty costs in 2019;
- higher stock-based compensation; and
- cost inflation.

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

Return on average shareholders' equity and Adjusted return on invested capital ("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 34.0% in 2020, a 160 basis point decrease compared to 35.6% in 2019. This decrease was due to higher average shareholders' equity due to accumulated Net income, partially offset by the impact of the Company's share repurchase program.

Return on average shareholders' equity was 35.6% in 2019, a 580 basis point increase compared to 29.8% in 2018. This increase was due to higher Net income. This increase was partially offset by higher average shareholders' equity due to accumulated Net income, partially offset by the impact of the Company's share repurchase program.

Adjusted ROIC was 16.7% in 2020, a 20 basis point decrease compared to 16.9% in 2019. This decrease was primarily due to higher average long-term debt, partially offset by higher Operating income.

Adjusted ROIC was 16.9% in 2019, a 70 basis point increase compared to 16.2% in 2018. This increase was primarily due to higher Operating income. This increase was partially offset by the increase in adjusted average invested capital primarily due to higher Adjusted income, partially offset by lower Common Shares due to the Company's share repurchase program.

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 7. Management's Discussion and Analysis of Financial Condition and Results of Operations.

Impact of Foreign Exchange 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 February 12, 2021, the noon buying rate certified for customs purposes by the U.S. Federal Reserve Bank of New York was U.S. \$1.00 = \$1.27 Canadian dollars.

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 period end exchange rates, and the high and low exchange rates for the periods indicated. Average exchange rates 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)	2020	2019	2018	2017	2016
For the year ended – December 31	\$ 1.34	\$ 1.33	\$ 1.30	\$ 1.30	\$ 1.33
For the three months ended – December 31	\$ 1.30	\$ 1.32	\$ 1.32	\$ 1.27	\$ 1.33

Exchange rates (Canadian/U.S. dollar)	2020	2019	2018	2017	2016
Beginning of year – January 1	\$ 1.30	\$ 1.36	\$ 1.25	\$ 1.34	\$ 1.38
Beginning of quarter – April 1	\$ 1.41	\$ 1.33	\$ 1.29	\$ 1.33	\$ 1.30
Beginning of quarter – July 1	\$ 1.36	\$ 1.31	\$ 1.32	\$ 1.30	\$ 1.29
Beginning of quarter – October 1	\$ 1.33	\$ 1.32	\$ 1.29	\$ 1.25	\$ 1.31
End of year – December 31	\$ 1.28	\$ 1.30	\$ 1.36	\$ 1.25	\$ 1.34
High/Low exchange rates (Canadian/U.S. dollar)	2020	2019	2018	2017	2016
High	\$ 1.45	\$ 1.36	\$ 1.37	\$ 1.37	\$ 1.46
Low	\$ 1.27	\$ 1.30	\$ 1.23	\$ 1.21	\$ 1.25

In 2020, the impact of a stronger U.S. dollar resulted in an increase in total revenues of \$33 million, an increase in total operating expenses of \$23 million and an increase in net interest expense of \$4 million. In 2019, the impact of a stronger U.S. dollar resulted in an increase in total revenues of \$87 million, an increase in total operating expenses of \$48 million and an increase in net interest expense of \$10 million.

The impact of fluctuations in the exchange rate between the Canadian dollar and the U.S. dollar on the Company's results is discussed further in Item 7A. Quantitative and Qualitative Disclosures About Market Risk, Foreign Exchange Risk.

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 a timing impact on earnings, as discussed further in Item 1. Business, Operations, Fuel Cost Adjustment Program and Item 1A. Risk Factors, Volatility Risks.

Average Fuel Price (U.S. dollars per U.S. gallon)	2020	2019	2018
For the year ended – December 31	\$ 1.90	\$ 2.49	\$ 2.72
For the three months ended – December 31	\$ 1.91	\$ 2.53	\$ 2.71

The impact of fuel price on earnings includes the impacts of provincial and federal carbon taxes and levies recovered and paid, on revenues and expenses, respectively.

In 2020, the favourable impact of fuel prices on Operating income was \$25 million. Lower fuel prices resulted in a decrease in total operating expenses of \$195 million. Lower fuel prices, partially offset by the timing of recoveries from CP's fuel cost adjustment program and increased carbon tax recoveries, resulted in a decrease in total revenues of \$170 million from 2019. In 2019, the impact of lower fuel prices resulted in a decrease in Total revenues of \$39 million and a decrease in Total operating expenses of \$77 million.

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 each quarter and the change in the price of the Common Shares on the TSX and the NYSE for the years ended December 31, 2020, 2019 and 2018:

Toronto Stock Exchange (in Canadian dollars)	2020	2019	2018
Opening Common Share price, as at January 1	\$ 331.03	\$ 242.24	\$ 229.66
Ending Common Share price, as at March 31	\$ 310.55	\$ 275.34	\$ 227.20
Ending Common Share price, as at June 30	\$ 345.32	\$ 308.43	\$ 240.92
Ending Common Share price, as at September 30	\$ 405.05	\$ 294.42	\$ 273.23
Ending Common Share price, as at December 31	\$ 441.53	\$ 331.03	\$ 242.24
Change in Common Share price for the year ended December 31	\$ 110.50	\$ 88.79	\$ 12.58

New York Stock Exchange (in U.S. dollars)	2020	2019	2018
Opening Common Share price, as at January 1	\$ 254.95	\$ 177.62	\$ 182.76
Ending Common Share price, as at March 31	\$ 219.59	\$ 206.03	\$ 176.50
Ending Common Share price, as at June 30	\$ 255.34	\$ 235.24	\$ 183.02
Ending Common Share price, as at September 30	\$ 304.43	\$ 222.46	\$ 211.94
Ending Common Share price, as at December 31	\$ 346.69	\$ 254.95	\$ 177.62
Change in Common Share price for the year ended December 31	\$ 91.74	\$ 77.33	\$ (5.14)

In 2020, the impact of the change in Common Share prices resulted in an increase in stock-based compensation expense of \$58 million compared to \$42 million in 2019, and \$2 million in 2018.

The impact of share price on stock-based compensation is discussed further in Item 7A. Quantitative and Qualitative Disclosures About Market Risk, Share Price Impact on Stock-Based Compensation.

Operating Revenues

For the year ended December 31	2020 vs. 2019						2019 vs. 2018					
	2020	2019	2018	Total Change	% Change	FX Adjusted % Change ⁽²⁾	2019	Total Change	% Change	FX Adjusted % Change ⁽²⁾		
Freight revenues (in millions) ⁽¹⁾	\$ 7,541	\$ 7,613	\$ 7,152	\$ (72)	(1)	(1)	\$ 461	6	5			
Non-freight revenues (in millions)	169	179	164	(10)	(6)	(6)	15	9	8			
Total revenues (in millions)	\$ 7,710	\$ 7,792	\$ 7,316	\$ (82)	(1)	(1)	\$ 476	7	5			
Carloads (in thousands)	2,708.4	2,766.4	2,739.8	(58.0)	(2)	N/A	26.6	1	N/A			
Revenue ton-miles (in millions)	151,891	154,378	154,207	(2,487)	(2)	N/A	171	—	N/A			
Freight revenue per carload (in dollars)	\$ 2,784	\$ 2,752	\$ 2,611	\$ 32	1	1	\$ 141	5	4			
Freight revenue per revenue ton-mile (in cents)	4.96	4.93	4.64	0.03	1	—	0.29	6	5			

⁽¹⁾ Freight revenues include fuel surcharge revenues of \$297 million in 2020, \$464 million in 2019 and \$492 million in 2018. Fuel surcharge revenues include recoveries of carbon taxes, levies, and obligations under cap-and-trade programs.

⁽²⁾ 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 7. Management's Discussion and Analysis of Financial Condition and Results of Operations.

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, crew costs, and equipment rents. Non-freight revenue is generated from other arrangements, including contracts with passenger service operators and logistical services; leasing of certain assets; and switching fees.

Freight Revenues

Freight revenues were \$7,541 million in 2020, a decrease of \$72 million, or 1%, from \$7,613 million in 2019. This decrease was primarily due to lower volumes as measured by RTMs. This decrease was partially offset by higher freight revenue per revenue ton-mile.

Freight revenues were \$7,613 million in 2019, an increase of \$461 million, or 6%, from \$7,152 million in 2018. This increase was primarily due to higher freight revenue per revenue ton-mile.

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 2020 were 151,891 million, a decrease of 2,487 million, compared with 154,378 million in 2019. This decrease was mainly attributable to lower volumes of crude, Coal and frac sand. This decrease was partially offset by higher volumes of Grain, Potash and Fertilizers and sulphur.

RTMs for 2019 were 154,378 million, an increase of 171 million compared with 154,207 million in 2018. This increase was mainly attributable to increased shipments of Energy, chemicals and plastics and Intermodal, partially offset by decreased shipments of Potash, frac sand and Coal.

Freight revenue per revenue ton-mile

Freight revenue per revenue ton-mile 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 revenue ton-mile was 4.96 cents in 2020, an increase of 0.03 cents, or 1%, from 4.93 cents in 2019. This increase was primarily due to higher liquidated damages, including customer volume commitments, higher freight rates, and the favourable impact of the change in FX of \$33 million. This increase was partially offset by the unfavourable impact of lower fuel surcharge revenue, as a result of lower fuel prices of \$170 million and moving lower volumes of Automotive, which has a higher freight revenue per revenue ton-mile compared to the corporate average.

Freight revenue per revenue ton-mile was 4.93 cents in 2019, an increase of 0.29 cents, or 6%, from 4.64 cents in 2018. This increase was primarily due to higher liquidated damages, including customer volume commitments, higher freight rates, and the favourable impact of the change in FX of \$86 million. This increase was partially offset by the unfavourable impact of lower fuel surcharge revenue, as a result of lower fuel prices of \$39 million.

Carloads

Carloads are defined as revenue-generating shipments of containers and freight cars. Carloads were 2,708.4 thousand in 2020, a decrease of 58.0 thousand, or 2%, from 2,766.4 thousand in 2019. This decrease was primarily due to lower volumes of crude, Coal, and frac sand. This decrease was partially offset by higher volumes of Grain and Potash.

Carloads were 2,766.4 thousand in 2019, an increase of 26.6 thousand, or 1%, from 2,739.8 thousand in 2018. This increase was mainly attributable to increased shipments of Energy, chemicals and plastics and Intermodal, partially offset by decreased shipments of frac sand and Potash.

Freight revenue per carload

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 \$2,784 in 2020, an increase of \$32, or 1%, from \$2,752 in 2019. This increase was primarily due to higher liquidated damages, including customer volume commitments, higher freight rates, and the favourable impact of the change in FX of \$33 million. This increase was partially offset by the unfavourable impact of lower fuel surcharge revenue, as a result of lower fuel prices of \$170 million.

Freight revenue per carload was \$2,752 in 2019, an increase of \$141, or 5%, from \$2,611 in 2018. This increase was primarily due to liquidated damages, including customer volume commitments, higher freight rates, and the favourable impact of the change in FX of \$86 million. This increase was partially offset by the unfavourable impact of lower fuel surcharge revenue, as a result of lower fuel prices of \$39 million.

Non-freight Revenues

Non-freight revenues were \$169 million in 2020, a decrease of \$10 million, or 6%, from \$179 million in 2019. This decrease was primarily due to lower revenue from passenger service operators.

Non-freight revenues were \$179 million in 2019, an increase of \$15 million, or 9%, from \$164 million in 2018. This increase was primarily due to higher switching fees and logistical services revenue.

Lines of Business

Grain

For the year ended December 31	2020 vs. 2019						2019 vs. 2018					
	2020	2019	2018	Total Change	% Change	FX Adjusted % Change ⁽¹⁾	2020	2019	2018	Total Change	% Change	FX Adjusted % Change ⁽¹⁾
Freight revenues (in millions)	\$ 1,829	\$ 1,684	\$ 1,566	\$ 145	9	8	\$ 118	\$ 118	\$ 118	—	—	6
Carloads (in thousands)	480.1	431.4	429.4	48.7	11	N/A	2.0	2.0	2.0	—	—	N/A
Revenue ton-miles (in millions)	41,747	36,941	36,856	4,806	13	N/A	85	85	85	—	—	N/A
Freight revenue per carload (in dollars)	\$ 3,810	\$ 3,904	\$ 3,645	\$ (94)	(2)	(3)	\$ 259	\$ 259	\$ 259	7	7	6
Freight revenue per revenue ton-mile (in cents)	4.38	4.56	4.25	(0.18)	(4)	(4)	0.31	0.31	0.31	7	7	6

⁽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 7. Management's Discussion and Analysis of Financial Condition and Results of Operations.

Grain revenue was \$1,829 million in 2020, an increase of \$145 million, or 9%, from \$1,684 million in 2019. This increase was primarily due to moving record volumes of Canadian grain, primarily to Vancouver and Thunder Bay, higher volumes of U.S. soybeans and corn to the U.S. Pacific Northwest, higher freight rates, and the favourable impact of the change in FX. This increase was partially offset by decreased freight revenue per ton-mile. Freight revenue per

revenue ton-mile decreased due to moving proportionately higher volumes of long haul soybeans and corn to U.S. Pacific Northwest, which also caused RTMs to increase more than carloads, and lower fuel surcharge revenue as a result of lower fuel prices.

Grain revenue was \$1,684 million in 2019, an increase of \$118 million, or 8%, from \$1,566 million in 2018. This increase was primarily due to increased freight revenue per revenue ton-mile, higher volumes of regulated Canadian grain, and the favourable impact of the change in FX. This increase was partially offset by lower volumes of U.S. grain, primarily corn, to the U.S. Pacific Northwest. Freight revenue per revenue ton-mile increased due to higher freight rates, primarily for regulated Canadian grain.

Coal

	2020 vs. 2019						2019 vs. 2018					
	2020	2019	2018	Total Change	% Change	FX Adjusted % Change ⁽¹⁾	2019	2018	Total Change	% Change	FX Adjusted % Change ⁽¹⁾	
For the year ended December 31												
Freight revenues (in millions)	\$ 566	\$ 682	\$ 673	\$ (116)	(17)	(17)	\$ 9	\$ 1	\$ 1	1	1	
Carloads (in thousands)	260.4	304.3	304.3	(43.9)	(14)	N/A	—	—	—	—	N/A	
Revenue ton-miles (in millions)	18,510	21,820	22,443	(3,310)	(15)	N/A	(623)	(3)	(3)	1	N/A	
Freight revenue per carload (in dollars)	\$ 2,174	\$ 2,241	\$ 2,211	\$ (67)	(3)	(3)	\$ 30	\$ 1	\$ 1	1	1	
Freight revenue per revenue ton-mile (in cents)	3.06	3.13	3.00	(0.07)	(2)	(2)	0.13	0.13	0.13	4	4	

⁽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 7. Management's Discussion and Analysis of Financial Condition and Results of Operations.

Coal revenue was \$566 million in 2020, a decrease of \$116 million, or 17%, from \$682 million in 2019. This decrease was primarily due to lower volumes of Canadian coal primarily to Vancouver, driven by supply chain challenges at both the mines and the ports, lower volumes of U.S. coal to Wisconsin, and decreased freight revenue per revenue ton-mile. Freight revenue per revenue ton-mile decreased due to the unfavourable impact of lower fuel surcharge revenue as a result of lower fuel prices.

Coal revenue was \$682 million in 2019, an increase of \$9 million, or 1%, from \$673 million in 2018. This increase was primarily due to higher freight revenue per revenue ton-mile. This increase was partially offset by lower volumes of Canadian coal, driven by supply chain challenges at both the mines and the ports. Freight revenue per revenue ton-mile increased due to higher freight rates. RTMs decreased while carloads remained flat due to moving proportionately higher volumes of short haul U.S. coal.

Potash

	2020 vs. 2019						2019 vs. 2018					
	2020	2019	2018	Total Change	% Change	FX Adjusted % Change ⁽¹⁾	2019	2018	Total Change	% Change	FX Adjusted % Change ⁽¹⁾	
For the year ended December 31												
Freight revenues (in millions)	\$ 493	\$ 462	\$ 486	\$ 31	7	6	\$ (24)	\$ (5)	\$ (6)	(5)	(6)	
Carloads (in thousands)	162.9	149.3	158.4	13.6	9	N/A	(9.1)	(6)	(6)	N/A	N/A	
Revenue ton-miles (in millions)	18,784	17,297	18,371	1,487	9	N/A	(1,074)	(6)	(6)	N/A	N/A	
Freight revenue per carload (in dollars)	\$ 3,026	\$ 3,094	\$ 3,071	\$ (68)	(2)	(3)	\$ 23	\$ 1	\$ 1	1	—	
Freight revenue per revenue ton-mile (in cents)	2.62	2.67	2.65	(0.05)	(2)	(2)	0.02	0.02	0.02	1	—	

⁽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 7. Management's Discussion and Analysis of Financial Condition and Results of Operations.

Potash revenue was \$493 million in 2020, an increase of \$31 million, or 7%, from \$462 million in 2019. This increase was primarily due to higher volumes of export potash following resolved international contract negotiations, higher freight rates, and the favourable impact of the change in FX. This increase was partially offset by decreased freight revenue per revenue ton-mile due to lower fuel surcharge revenue as a result of lower fuel prices.

Potash revenue was \$462 million in 2019, a decrease of \$24 million, or 5%, from \$486 million in 2018. This decrease was primarily due to lower volumes of domestic potash driven by poor weather affecting the application seasons, and lower volumes of export potash driven by unresolved international contract negotiations. This decrease was partially offset by the favourable impact of the change in FX.

Fertilizers and Sulphur

For the year ended December 31	2020 vs. 2019						2019 vs. 2018					
	2020	2019	2018	Total Change	% Change	FX Adjusted % Change ⁽¹⁾	2019	Total Change	% Change	FX Adjusted % Change ⁽¹⁾		
Freight revenues (in millions)	\$ 290	\$ 250	\$ 243	\$ 40	16	15	\$ 250	\$ 7	3	1		
Carloads (in thousands)	61.6	57.0	58.1	4.6	8	N/A	(1.1)	(2)	N/A			
Revenue ton-miles (in millions)	4,683	3,846	4,051	837	22	N/A	(205)	(5)	N/A			
Freight revenue per carload (in dollars)	\$ 4,708	\$ 4,386	\$ 4,186	\$ 322	7	6	\$ 200	5	3			
Freight revenue per revenue ton-mile (in cents)	6.19	6.50	6.00	(0.31)	(5)	(5)	0.50	8	7			

⁽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 7. Management's Discussion and Analysis of Financial Condition and Results of Operations.

Fertilizers and sulphur revenue was \$290 million in 2020, an increase of \$40 million, or 16%, from \$250 million in 2019. This increase was primarily due to higher volumes of dry fertilizers, sulphur, and wet fertilizers, as well as the favourable impact of the change in FX. This increase was partially offset by decreased freight revenue per revenue ton-mile due to lower fuel surcharge revenue as a result of lower fuel prices. RTMs increased more than carloads due to moving lower volumes of wet and dry fertilizers within Alberta, which has a shorter length of haul.

Fertilizers and sulphur revenue was \$250 million in 2019, an increase of \$7 million, or 3%, from \$243 million in 2018. This increase was primarily due to higher freight revenue per revenue ton-mile, the favourable impact of the change in FX, and higher volumes of wet fertilizer. This increase was partially offset by lower volumes of sulphur and dry fertilizer. Freight revenue per revenue ton-mile increased due to higher freight rates. RTMs decreased more than carloads due to moving proportionately less wet fertilizer to the U.S. Midwest, which has a longer length of haul.

Forest Products

For the year ended December 31	2020 vs. 2019						2019 vs. 2018					
	2020	2019	2018	Total Change	% Change	FX Adjusted % Change ⁽¹⁾	2019	Total Change	% Change	FX Adjusted % Change ⁽¹⁾		
Freight revenues (in millions)	\$ 328	\$ 304	\$ 284	\$ 24	8	7	\$ 304	\$ 20	7	5		
Carloads (in thousands)	71.6	71.5	68.6	0.1	—	N/A	2.9	4	N/A			
Revenue ton-miles (in millions)	5,491	4,974	4,763	517	10	N/A	211	4	N/A			
Freight revenue per carload (in dollars)	\$ 4,581	\$ 4,252	\$ 4,139	\$ 329	8	7	\$ 113	3	1			
Freight revenue per revenue ton-mile (in cents)	5.97	6.11	5.96	(0.14)	(2)	(3)	0.15	3	1			

⁽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 7. Management's Discussion and Analysis of Financial Condition and Results of Operations.

Forest products revenue was \$328 million in 2020, an increase of \$24 million, or 8%, from \$304 million in 2019. This increase was primarily due to higher volumes of lumber and wood pulp, higher freight rates, and the favourable impact of the change in FX. This increase was partially offset by decreased freight revenue per revenue ton-mile due to lower fuel surcharge revenue as a result of lower fuel prices. RTMs increased more than carloads due to moving higher volumes of panel products and wood pulp from Canada to the U.S., which has a longer length of haul.

Forest products revenue was \$304 million in 2019, an increase of \$20 million, or 7%, from \$284 million in 2018. This increase was primarily due to higher volumes of wood pulp, newsprint, and lumber, increased freight revenue per revenue ton-mile, and the favourable impact of the change in FX. Freight revenue per revenue ton-mile increased due to higher freight rates.

Energy, Chemicals and Plastics

	2020 vs. 2019						2019 vs. 2018			
	2020	2019	2018	Total Change	% Change	FX Adjusted % Change ⁽¹⁾	2019	Total Change	% Change	FX Adjusted % Change ⁽¹⁾
For the year ended December 31										
Freight revenues (in millions)	\$ 1,519	\$ 1,534	\$ 1,243	\$ (15)	(1)	(1)	\$ 291	23	22	
Carloads (in thousands)	308.8	358.1	334.6	(49.3)	(14)	N/A	23.5	7	N/A	
Revenue ton-miles (in millions)	24,172	29,356	27,830	(5,184)	(18)	N/A	1,526	5	N/A	
Freight revenue per carload (in dollars)	\$ 4,919	\$ 4,284	\$ 3,715	\$ 635	15	15	\$ 569	15	14	
Freight revenue per revenue ton-mile (in cents)	6.28	5.23	4.47	1.05	20	20	0.76	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 7. Management's Discussion and Analysis of Financial Condition and Results of Operations.

Energy, chemicals and plastics revenue was \$1,519 million in 2020, a decrease of \$15 million, or 1%, from \$1,534 million in 2019. This decrease was primarily due to lower volumes of crude, liquefied petroleum gas ("LPG"), and biofuels as a result of the COVID-19 pandemic and lower fuel surcharge revenue as a result of lower fuel prices. The decrease was partially offset by increased freight revenue per revenue ton-mile and higher volumes of plastics. Freight revenue per revenue ton-mile increased primarily due to higher liquidated damages, including customer volume commitments, and higher freight rates. RTMs decreased more than carloads due to moving lower volumes of crude, which has a longer length of haul.

Energy, chemicals and plastics revenue was \$1,534 million in 2019, an increase of \$291 million, or 23%, from \$1,243 million in 2018. This increase was primarily due to increased freight revenue per revenue ton-mile, higher volumes of crude, LPG, fuel oil, and other refined products, and the favourable impact of the change in FX. Freight revenue per revenue ton-mile increased primarily due to liquidated damages, including customer volume commitments, and higher freight rates. Carloads increased more than RTMs due to moving proportionately less long haul crude to Kansas City, Missouri, and proportionately more short haul crude to Chicago, Illinois and Noyes, Minnesota.

Metals, Minerals and Consumer Products

	2020 vs. 2019						2019 vs. 2018			
	2020	2019	2018	Total Change	% Change	FX Adjusted % Change ⁽¹⁾	2019	Total Change	% Change	FX Adjusted % Change ⁽¹⁾
For the year ended December 31										
Freight revenues (in millions)	\$ 629	\$ 752	\$ 797	\$ (123)	(16)	(17)	\$ (45)	(6)	(8)	
Carloads (in thousands)	207.3	234.3	252.2	(27.0)	(12)	N/A	(17.9)	(7)	N/A	
Revenue ton-miles (in millions)	9,325	10,684	11,858	(1,359)	(13)	N/A	(1,174)	(10)	N/A	
Freight revenue per carload (in dollars)	\$ 3,034	\$ 3,210	\$ 3,161	\$ (176)	(5)	(6)	\$ 49	2	—	
Freight revenue per revenue ton-mile (in cents)	6.75	7.04	6.72	(0.29)	(4)	(5)	0.32	5	3	

⁽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 7. Management's Discussion and Analysis of Financial Condition and Results of Operations.

Metals, minerals and consumer products revenue was \$629 million in 2020, a decrease of \$123 million, or 16%, from \$752 million in 2019. This decrease was primarily due to moving lower volumes of frac sand as a result of the COVID-19 pandemic and decreased freight revenue per revenue ton-mile. This decrease was partially offset by the favourable impact of the change in FX. Freight revenue per revenue ton-mile decreased due to lower fuel surcharge revenue as a result of lower fuel prices.

Metals, minerals and consumer products revenue was \$752 million in 2019, a decrease of \$45 million, or 6%, from \$797 million in 2018. This decrease was primarily due to lower volumes of frac sand and steel. This decrease was partially offset by increased freight revenue per revenue ton-mile, and the favourable impact of the change in FX. Freight revenue per revenue ton-mile increased due to higher freight rates. Carloads decreased less than RTMs due to increased volumes of short haul metallic ore.

Automotive

For the year ended December 31	2020 vs. 2019						2019 vs. 2018						
	2020		2019		2018		Total Change	% Change	FX Adjusted % Change ⁽¹⁾	2019		2018	
	\$	324	\$	352	\$	322	(28)	(8)	(9)	\$	30	%	9
Freight revenues (in millions)	\$	324	\$	352	\$	322	(28)	(8)	(9)	\$	30	%	9
Carloads (in thousands)		106.1		114.4		108.3	(8.3)	(7)	N/A		6.1	%	6
Revenue ton-miles (in millions)		1,321		1,427		1,347	(106)	(7)	N/A		80	%	6
Freight revenue per carload (in dollars)	\$	3,054	\$	3,077	\$	2,975	(23)	(1)	(2)	\$	102	%	3
Freight revenue per revenue ton-mile (in cents)		24.53		24.67		23.92	(0.14)	(1)	(1)		0.75	%	1

⁽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 7. Management's Discussion and Analysis of Financial Condition and Results of Operations.

Automotive revenue was \$324 million in 2020, a decrease of \$28 million, or 8%, from \$352 million in 2019. This decrease was primarily due to lower volumes caused by manufacturing plant shutdowns in the second quarter of 2020 across North America as a result of the COVID-19 pandemic, and decreased freight revenue per revenue-ton mile. Freight revenue per revenue ton-mile decreased due to lower fuel surcharge revenue as a result of lower fuel prices. This decrease was partially offset by the onboarding of customers moving to and from Vancouver, higher freight rates, and the favourable impact of the change in FX.

Automotive revenue was \$352 million in 2019, an increase of \$30 million, or 9% from \$322 million in 2018. This increase was primarily due to higher volumes from Vancouver to eastern Canada, higher volumes from the U.S. to CP's new Vancouver Automotive Compound, increased freight revenue per revenue ton-mile, and the favourable impact of the change in FX. Freight revenue per revenue ton-mile increased due to higher freight rates.

Intermodal

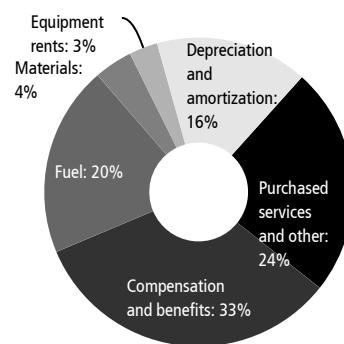
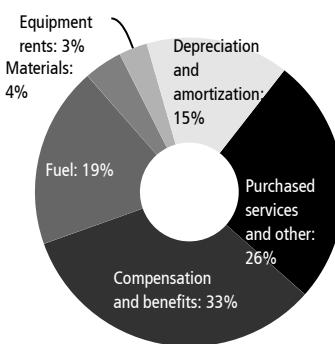
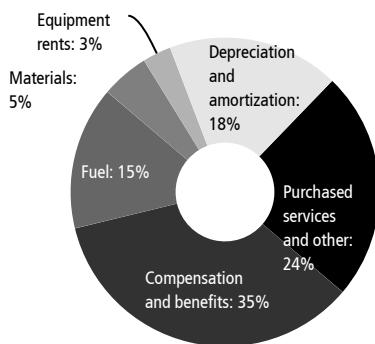
For the year ended December 31	2020 vs. 2019						2019 vs. 2018						
	2020		2019		2018		Total Change	% Change	FX Adjusted % Change ⁽¹⁾	2019		2018	
	\$	1,563	\$	1,593	\$	1,538	(30)	(2)	(2)	\$	55	%	4
Freight revenues (in millions)	\$	1,563	\$	1,593	\$	1,538	(30)	(2)	(2)	\$	55	%	4
Carloads (in thousands)		1,049.6		1,046.1		1,025.9	3.5	—	N/A		20.2	%	2
Revenue ton-miles (in millions)		27,858		28,033		26,688	(175)	(1)	N/A		1,345	%	5
Freight revenue per carload (in dollars)	\$	1,489	\$	1,523	\$	1,499	(34)	(2)	(2)	\$	24	%	2
Freight revenue per revenue ton-mile (in cents)		5.61		5.68		5.76	(0.07)	(1)	(2)		(0.08)	%	(2)

⁽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 7. Management's Discussion and Analysis of Financial Condition and Results of Operations.

Intermodal revenue was \$1,563 million in 2020, a decrease of \$30 million, or 2%, from \$1,593 million in 2019. This decrease was primarily due to decreased freight revenue per revenue ton-mile and lower volumes of international intermodal driven by the completion of a customer contract. This decrease was partially offset by the onboarding of a new international intermodal customer, higher freight rates, and the favourable impact of the change in FX. Freight revenue per revenue ton-mile decreased due to lower fuel surcharge revenues as a result of lower fuel prices.

Intermodal revenue was \$1,593 million in 2019, an increase of \$55 million, or 4%, from \$1,538 million in 2018. This increase was primarily due to higher international volumes through the Port of Vancouver, the onboarding of a new domestic retail customer, and the favourable impact of the change in FX. This increase was partially offset by a decrease in freight revenue per revenue ton-mile. RTMs increased more than carloads due to discontinuing expressway service in the second quarter of 2018, which had a shorter length of haul. Freight revenue per revenue ton-mile decreased due to lower fuel surcharge revenue as a result of lower fuel prices.

Operating Expenses



2020 Operating Expenses

2019 Operating Expenses

2018 Operating Expenses

For the year ended December 31 (in millions of Canadian dollars)				2020 vs. 2019			2019 vs. 2018		
	2020	2019	2018	Total Change	% Change	FX Adjusted % Change ⁽¹⁾	Total Change	% Change	FX Adjusted % Change ⁽¹⁾
Compensation and benefits	\$ 1,560	\$ 1,540	\$ 1,468	\$ 20	1	1	\$ 72	5	4
Fuel	652	882	918	(230)	(26)	(27)	(36)	(4)	(6)
Materials	216	210	201	6	3	3	9	4	4
Equipment rents	142	137	130	5	4	2	7	5	3
Depreciation and amortization	779	706	696	73	10	10	10	1	1
Purchased services and other	1,050	1,193	1,072	(143)	(12)	(12)	121	11	10
Total operating expenses	\$ 4,399	\$ 4,668	\$ 4,485	\$ (269)	(6)	(6)	\$ 183	4	3

⁽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 7. Management's Discussion and Analysis of Financial Condition and Results of Operations.

Operating expenses were \$4,399 million in 2020, a decrease of \$269 million, or 6%, from \$4,668 million in 2019. This decrease was primarily due to:

- the favourable impact of \$195 million from lower fuel prices;
- efficiencies generated from improved operating performance and asset utilization;
- a gain of \$68 million as a result of the remeasurement to fair value of the previously held equity investment in DRTP;
- reduced variable expenses from lower volumes;
- the impact of harsher winter operating conditions in 2019; and
- lower casualty costs incurred in 2020.

This decrease was partially offset by:

- higher depreciation and amortization of \$71 million (excluding FX);
- cost inflation;
- higher stock-based compensation of \$37 million primarily driven by an increase in stock price; and
- the unfavourable impact of the change in FX of \$23 million.

Operating expenses were \$4,668 million in 2019, an increase of \$183 million, or 4%, from \$4,485 million in 2018. This increase was primarily due to:

- increased operating expense associated with higher casualty costs incurred in 2019 of \$76 million (excluding FX);
- higher stock-based compensation of \$58 million primarily driven by an increase in stock price;
- cost inflation;
- the unfavourable impact of the change in FX of \$48 million;
- increased weather related costs as a result of harsh winter operating conditions in the first quarter of 2019; and
- increased variable expenses from higher volumes.

This increase was partially offset by the favourable impact from changes in fuel prices of \$77 million and the efficiencies generated from improved operating performance and asset utilization.

Compensation and Benefits

Compensation and benefits expense includes employee wages, salaries, fringe benefits, and stock-based compensation. Compensation and benefits expense was \$1,560 million in 2020, an increase of \$20 million, or 1%, from \$1,540 million in 2019. This increase was primarily due to:

- the impact of wage and benefit inflation;
- increased stock-based compensation of \$37 million primarily driven by the impact of changes in share price;
- higher defined benefit ("DB") pension and post-retirement benefits current service cost of \$33 million;
- a bonus paid to frontline employees of \$17 million; and
- unfavourable impact of the change in FX of \$5 million.

This increase was partially offset by:

- labour efficiencies generated from improved operating performance and asset utilization;
- reduced training costs;
- lower volume variable expense as a result of decreased workload as measured by GTMs; and
- the impact of weather related costs as a result of harsh winter operating conditions in the first quarter of 2019.

Compensation and benefits expense was \$1,540 million in 2019, an increase of \$72 million, or 5% from \$1,468 million in 2018. This increase was primarily due to:

- higher stock-based compensation of \$58 million primarily driven by an increase in stock price;
- the impact of wage and benefit inflation;
- the impact of harsher winter operating conditions driven by operational inefficiencies and increased track labour and overtime;
- the unfavourable impact of the change in FX of \$11 million; and
- higher volume variable expenses as a result of an increase in workload as measured by GTMs.

This increase was partially offset by:

- lower incentive compensation;
- lower DB pension and post-retirement benefits current service costs of \$14 million; and
- labour efficiencies.

Fuel

Fuel expense consists mainly of fuel used by locomotives and includes provincial, state, and federal fuel taxes. Fuel expense was \$652 million in 2020, a decrease of \$230 million, or 26%, from \$882 million in 2019. This decrease was primarily due to:

- the favourable impact of lower fuel prices of \$195 million;
- a decrease in workload, as measured by GTMs; and
- an improvement in fuel efficiency of 1% from improved winter operating conditions in the first quarter of 2020.

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

Fuel expense was \$882 million in 2019, a decrease of \$36 million, or 4%, from \$918 million in 2018. This decrease was primarily due to the favourable impact from lower fuel prices of \$77 million.

This decrease was partially offset by an increase in workload, as measured by GTMs, and the unfavourable impact of the change in FX of \$18 million.

Materials

Materials expense includes the cost of material used for maintenance of track, locomotives, freight cars, and buildings as well as software sustainment. Materials expense was \$216 million in 2020, an increase of \$6 million, or 3%, from \$210 million in 2019. This increase was primarily due to higher spending on locomotive maintenance and overhauls, and track maintenance.

Materials expense was \$210 million in 2019, an increase of \$9 million, or 4%, from \$201 million in 2018. This increase was primarily due to higher locomotive maintenance and higher non-locomotive fuel costs.

Equipment Rents

Equipment rents expense includes the cost associated with using other companies' 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 \$142 million in 2020, an increase of \$5 million, or 4%, from \$137 million in 2019. This increase was primarily due to lower receipts for CP freight cars used by other railways and the unfavourable impact of the change in FX of \$2 million, partially offset by lower usage of pooled freight cars as a result of lower volumes.

Equipment rents expense was \$137 million in 2019, an increase of \$7 million, or 5%, from \$130 million in 2018. This increase was primarily due to greater usage of pooled freight cars and the unfavourable impact of the change in FX of \$3 million.

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 expense was \$779 million for 2020, an increase of \$73 million, or 10%, from \$706 million in 2019. This increase was primarily due to:

- a higher asset base, as a result of the capital program spending in 2020;
- the impact of depreciation studies and other adjustments made in 2019; and
- the unfavourable impact of the change in FX of \$2 million.

Depreciation and amortization expense was \$706 million for 2019, an increase of \$10 million, or 1%, from \$696 million in 2018. This increase was primarily due to a higher asset base, as a result of the capital program spending in 2019, and the unfavourable impact of the change in FX of \$4 million, partially offset by the impact of depreciation studies and other adjustments.

Purchased Services and Other

For the year ended December 31 (in millions of Canadian dollars)				2020 vs. 2019		2019 vs. 2018	
	2020	2019	2018	Total Change	% Change	Total Change	% Change
Support and facilities	\$ 271	\$ 278	\$ 264	\$ (7)	(3)	\$ 14	5
Track and operations	282	278	268	4	1	10	4
Intermodal	209	222	221	(13)	(6)	1	—
Equipment	113	125	143	(12)	(10)	(18)	(13)
Casualty	116	149	73	(33)	(22)	76	104
Property taxes	126	133	124	(7)	(5)	9	7
Other	(57)	29	20	(86)	(297)	9	45
Land sales	(10)	(21)	(41)	11	(52)	20	(49)
Total Purchased services and other	\$ 1,050	\$ 1,193	\$ 1,072	\$ (143)	(12)	\$ 121	11

Purchased services and other expense encompasses a wide range of third-party costs, including contractor and consulting fees, locomotive and freight car repairs performed by third parties, property and other taxes, intermodal pickup and delivery services, casualty expense, expenses for joint facilities, and gains on land sales. Purchased services and other expense was \$1,050 million in 2020, a decrease of \$143 million, or 12%, from \$1,193 million in 2019. This decrease was primarily due to:

- a gain of \$68 million as a result of the remeasurement to fair value of the previously held equity investment in DRTP, reported in Other;
- lower expenses primarily due to reduced number and severity of casualty incidents, reported in Casualty;
- reduced business travel and event cost due to COVID-19, reported in primarily Support and facilities and Track and operations;
- a decrease in charges associated with contingencies of \$10 million, reported in Other; and
- reduced variable expenses from lower volumes, reported in Intermodal and Equipment.

This decrease was partially offset by lower gains on land sales of \$11 million in 2020, reported in Land sales and the unfavourable impact of the change in FX of \$6 million.

Purchased services and other expense was \$1,193 million in 2019, an increase of \$121 million, or 11%, from \$1,072 million in 2018. This increase was primarily due to:

- an increase in number and severity of casualty incidents of \$73 million (excluding FX), which were the result of difficult operating conditions due to weather in the first half of 2019, reported in Casualty;
- lower gains on land sales of \$20 million mainly as a result of the sale of the Bass Lake railway line in 2018;
- the unfavourable impact of the change in FX of \$11 million;
- an increase in legal fees, reported in Support and facilities;

- higher snow removal and other weather related costs; and
- higher property taxes due to higher tax rates.

This increase was partially offset by:

- a decrease in charges associated with contingencies of \$10 million, reported in Other;
- a decrease in costs for locomotive warranty service agreements due to the insourcing of maintenance of certain locomotives in the company's fleet, reported in Equipment; and
- costs related to labour disruptions in the second quarter of 2018, reported in Track and operations.

Other Income Statement Items

Other (Income) Expense

Other (income) 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 income was \$7 million in 2020, a decrease of \$82 million, or 92%, from \$89 million in the same period of 2019. This decrease was primarily due to a lower FX translation gain on U.S. dollar-denominated debt and lease liabilities of \$80 million.

Other income was \$89 million in 2019, a change of \$263 million, or 151%, compared to an expense of \$174 million in 2018. This change was primarily due to an FX translation gain on U.S. dollar-denominated debt and lease liabilities of \$94 million, compared to an FX translation loss on U.S. dollar-denominated debt of \$168 million in 2018.

FX translation gains and losses on debt and lease liabilities are discussed further in Non-GAAP Measures of this Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations.

Other Components of Net Periodic Benefit Recovery

Other components of net periodic benefit recovery were \$342 million in 2020, a decrease of \$39 million, or 10%, from \$381 million in 2019. This decrease was primarily due to an increase in the recognized net actuarial loss resulting from a reduction in discount rate.

Other components of net periodic benefit recovery were \$381 million in 2019, a decrease of \$3 million or 1%, from \$384 million in 2018. This decrease was primarily due to higher interest cost on the benefit obligation.

Net Interest Expense

Net interest expense includes interest on long-term debt and finance leases. Net interest expense was \$458 million in 2020, an increase of \$10 million, or 2%, from \$448 million in 2019. This increase was primarily due to the unfavourable impacts of an increase in debt levels of \$34 million and the change in FX of \$4 million. This increase was partially offset by a reduction in interest related to long-term debt of \$29 million as the result of a lower effective interest rate following the Company's debt refinancing completed in 2019 and 2020.

Net interest expense was \$448 million in 2019, a decrease of \$5 million, or 1%, from \$453 million in 2018. This was primarily due to a net reduction in interest related to long-term debt of \$21 million as the result of a lower effective interest rate following the Company's debt refinancing completed in 2018 and 2019, partially offset by the unfavourable impact of the change in FX of \$10 million and an increase in commercial paper interest of \$6 million.

Income Tax Expense

Income tax expense was \$758 million in 2020, an increase of \$52 million, or 7%, from \$706 million in 2019. The increase was primarily due to higher taxable earnings and lower net income tax recoveries in 2020. In 2020, a tax filing election lowered the North Dakota rate resulting in net income tax recoveries of \$29 million compared to 2019 when net income tax recoveries were \$88 million as a result of an Alberta corporate tax rate decrease, partially offset by a 2019 tax expense for an unrecognized tax benefit of \$24 million.

Income tax expense was \$706 million in 2019, an increase of \$69 million, or 11%, from \$637 million in 2018. The increase was due to:

- higher taxable earnings;
- an increase in unrecognized tax benefits of \$24 million; and
- net income tax recoveries in 2018 of \$21 million as a result of the Iowa and Missouri corporate tax rate decreases.

This increase was partially offset by net income tax recoveries in 2019 of \$88 million as a result of an Alberta corporate tax rate decrease.

The effective income tax rate for 2020 was 23.66% on reported income and 24.61% on Adjusted income. The effective income tax rate for 2019 was 22.43% on reported income and 24.96% on Adjusted income. The effective income tax rate for 2018 was 24.64% on reported income and 24.55% on

Adjusted income. Adjusted income is a Non-GAAP measure, which is discussed further in Non-GAAP Measures of this Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations.

The Company expects a 2021 effective tax rate of 24.60%. The Company's 2021 outlook for its effective 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. These assumptions are discussed further in Item 1A. Risk Factors.

Liquidity and Capital Resources

The Company believes adequate amounts of Cash and cash equivalents are available in the normal course of business to provide for ongoing operations, including the obligations identified in the tables in Contractual Commitments of this Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations. The Company is not aware of any trends or expected fluctuations in the Company's liquidity that would create any deficiencies. The Company's primary sources of liquidity include its Cash and cash equivalents, its commercial paper program, its bilateral letter of credit facilities, and its revolving credit facility.

As at December 31, 2020, the Company had \$147 million of Cash and cash equivalents compared to \$133 million at December 31, 2019.

As at December 31, 2020, the Company's revolving credit facility was undrawn (December 31, 2019 – undrawn), from a total available amount of U.S. \$1.3 billion. The agreement requires the Company to maintain a financial covenant in conjunction with the facility. As at December 31, 2020, 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 December 31, 2020, total commercial paper borrowings were U.S. \$644 million (December 31, 2019 – \$397 million).

As at December 31, 2020, under its bilateral letter of credit facilities, the Company had letters of credit drawn of \$59 million from a total available amount of \$300 million (December 31, 2019 - \$80 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 December 31, 2020, the Company did not have any collateral posted on its bilateral letter of credit facilities (December 31, 2019 – \$nil).

The following discussion of operating, investing, and financing activities describes the Company's indicators of liquidity and capital resources.

Operating Activities

Cash provided by operating activities was \$2,802 million in 2020, a decrease of \$188 million, or 6%, compared to \$2,990 million in 2019. This decrease was primarily due to lower receipts from customers in advance of performing services, compared to 2019.

Cash provided by operating activities was \$2,990 million in 2019, an increase of \$278 million, or 10%, compared to \$2,712 million in 2018. This increase was primarily due to advance receipts of consideration for service under freight contracts as well as higher cash generating income, compared to 2018.

Investing Activities

Cash used in investing activities was \$2,030 million in 2020, an increase of \$227 million, or 13%, from \$1,803 million in 2019. This increase was primarily due to the acquisition of DRTP in 2020, compared to the acquisition of CMQ in 2019.

Cash used in investing activities was \$1,803 million in 2019, an increase of \$345 million, or 24%, from \$1,458 million in 2018. This increase was primarily due to:

- the acquisition of CMQ;
- higher additions to properties; and
- lower proceeds from the sale of properties and other assets.

Capital Programs

For the year ended December 31 (in millions of Canadian dollars, except for track miles and crossties)	2020	2019	2018
Additions to capital			
Track and roadway	\$ 1,161	\$ 1,004	\$ 965
Rolling stock ⁽¹⁾	253	393	318
Information systems software ⁽²⁾	45	55	53
Buildings ⁽³⁾	103	58	54
Other ⁽³⁾	126	154	184
Total – accrued additions to capital	1,688	1,664	1,574
Less:			
Non-cash transactions	17	17	23
Cash invested in additions to properties (per Consolidated Statements of Cash Flows)	\$ 1,671	\$ 1,647	\$ 1,551
Track installation capital programs			
Track miles of rail laid (miles)	301	246	281
Track miles of rail capacity expansion (miles)	28	11	4
Crossties installed (thousands)	1,417	1,122	1,015

⁽¹⁾ Previously reported as Rolling Stock and containers. Containers of approximately \$3 million in 2020 (2019 - \$33 million; 2018 - \$83 million) included in Other.

⁽²⁾ Previously reported as Information Systems including hardware and software. Hardware of approximately \$17 million in 2020 (2019 - \$15 million; 2018 - \$33 million) included in Other.

⁽³⁾ Previously reported as Buildings and other, now separated.

Track and roadway expenditures include the replacement and enhancement of the Company's track infrastructure. Of the \$1,161 million additions in 2020 (2019 - \$1,004 million), approximately \$1,008 million (2019 - \$918 million) was invested in the renewal of depleted assets, namely rail, ties, ballast, signals, and bridges. Approximately \$25 million (2019 - \$27 million) was spent on PTC compliance requirements and \$128 million (2019 - \$59 million) was invested in network improvements and growth initiatives.

Rolling stock investments encompass locomotives and railcars. In 2020, expenditures on locomotives were approximately \$126 million (2019 - \$174 million) and were focused on the continued re-investment in CP's existing locomotive fleet. Railcar investment of approximately \$127 million (2019 - \$219 million) was largely focused on renewal of depleted assets, including the acquisition of covered hoppers for grain transportation.

In 2020, CP invested approximately \$45 million (2019 - \$55 million) in information systems software primarily focused on rationalizing and enhancing business systems and providing real-time data. Investments in buildings were approximately \$103 million (2019 - \$58 million) included items such as facility upgrades, renovations and shop equipment. Other items were \$126 million (2019 - \$154 million) and included investments in modernizing core information systems hardware, containers, and vehicles.

For 2021, CP expects to invest approximately \$1.55 billion in its capital programs, which will be financed with cash generated from operations. Approximately 60% to 65% of the planned capital programs is for track and roadway. Approximately 20% is expected to be allocated to rolling stock, including railcars and locomotive improvements. Approximately 5% is expected to be allocated to information services, and 10% to 15% is expected to be allocated to buildings and other.

Free Cash

CP generated positive Free cash of \$1,157 million in 2020, a decrease of \$200 million, or 15%, from \$1,357 million in 2019. This decrease was primarily due to a decrease in cash provided by operating activities.

CP generated positive Free cash of \$1,357 million in 2019, an increase of \$68 million, or 5%, from \$1,289 million in 2018. This increase was primarily due to an increase in cash provided by operating activities, partially offset by higher additions to properties and lower proceeds from the sale of properties and other assets during 2019.

Free cash is affected by seasonal fluctuations and by other factors including the size of the Company's capital programs. The 2020 capital programs are discussed above. Free cash is defined and reconciled in Non-GAAP Measures of this Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations.

Financing Activities

Cash used in financing activities was \$764 million in 2020, a decrease of \$347 million, or 31%, from \$1,111 million in 2019. This decrease was primarily due to the issuances of U.S. \$500 million 2.050% notes due March 5, 2030 and \$300 million 3.050% notes due March 9, 2050 in 2020, compared to the issuance of \$400 million 3.150% notes due March 13, 2029 in 2019, as well as the principal repayment of U.S. \$350 million of the Company's 7.250% notes at maturity in May 2019. This was partially offset by higher payments to buy back shares under the Company's share repurchase program, lower net issuances of commercial paper during 2020, and higher dividends paid during 2020.

Cash used in financing activities was \$1,111 million in 2019, a decrease of \$431 million, or 28%, from \$1,542 million in 2018. This decrease was primarily due to the net issuance of commercial paper in 2019 and a lower principal repayment of U.S. \$350 million of the Company's 7.250% notes maturing May 2019, compared to the principal repayments in 2018 of U.S. \$275 million of the Company's 6.500% notes maturing May 2018 and \$375 million of the Company's 6.250% medium term notes maturing June 2018. This was partially offset by the issuance of \$400 million 3.150% notes due March 13, 2029 in 2019 compared to the issuance of U.S. \$500 million 4.000% notes due June 1, 2028 in 2018, and higher dividends paid during 2019.

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 mid-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 December 31, 2020, 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, 2019.

Credit ratings as at December 31, 2020⁽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	Baa1	stable
Commercial paper program		
Standard & Poor's		N/A
Moody's		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 was 4.0 in 2020, compared with 3.6 in 2019 and 4.5 in 2018. The increase in the ratio from 2019 to 2020 was primarily due to higher debt. The decrease in the ratio from 2018 to 2019 was due to higher Net income, partially offset by higher debt.

The Adjusted net debt to Adjusted earnings before interest, tax, depreciation, and amortization ("EBITDA") ratio was 2.5 in 2020, compared with 2.4 in 2019 and 2.6 in 2018. The increase in the ratio from 2019 to 2020 was primarily due to a higher debt balance, partially offset by an increase in Adjusted EBITDA. The decrease from 2018 to 2019 was primarily due to an increase in Adjusted EBITDA. Adjusted net debt to Adjusted EBITDA ratio is defined and reconciled in Non-GAAP Measures of this Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations. 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 changes in income tax rates and a change to an uncertain tax item. 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 7. Management's Discussion and Analysis of Financial Condition and Results of Operations for further discussion.

Dividend Payout Ratio

The dividend payout ratio was 19.8% in 2020, compared with 17.9% in 2019 and 18.5% in 2018. The increase in the ratio from 2019 to 2020 was due to higher dividends declared per share, partially offset by higher diluted EPS. The decrease in the ratio from 2018 to 2019 was due to higher diluted EPS, partially offset by higher dividends declared per share.

The Adjusted dividend payout ratio was 20.1% in 2020, compared with 19.1% in 2019 and 17.3% in 2018. These increases were due to higher dividends declared per share, partially offset by higher Adjusted diluted EPS. Adjusted dividend payout ratio is defined and reconciled in Non-GAAP Measures of this Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations. Over the long term, CP targets an Adjusted dividend payout ratio of 25.0% to 30.0%.

Although CP has provided a target Non-GAAP measure (Adjusted dividend payout ratio), management is unable to reconcile, without unreasonable efforts, the target Adjusted dividend payout ratio to the most comparable GAAP measure (Dividend payout 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 changes in income tax rates and a change to an uncertain tax item. These or other similar, large unforeseen transactions affect Diluted EPS but may be excluded from CP's Adjusted diluted EPS. 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 diluted EPS. In particular, CP excludes the FX impact of translating the Company's debt and lease liabilities from Adjusted diluted EPS. Please see Forward-Looking Statements in this Item 7. 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 Canadian Pacific Railway Limited ("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 December 31, 2020, CPRC has \$7,448 million principal amount of debt securities outstanding due through 2115, and \$45 million in perpetual 4% consolidated debenture stock, for all of which CPRL is the guarantor.

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 annual 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 year ended December 31, 2020	For the year ended December 31, 2019
Total revenues	\$ 5,797	\$ 5,662
Total operating expenses	3,263	3,446
Operating Income ⁽¹⁾	2,534	2,216
Less: Other ⁽²⁾	127	(13)
Income before income tax expense	2,407	2,229
Net Income	\$ 1,792	\$ 1,704

⁽¹⁾ Includes net lease costs incurred from non-guarantor subsidiaries for the year ended December 31, 2020 and 2019 of \$435 million and \$320 million, respectively.

⁽²⁾ Includes Other income, 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 December 31, 2020	As at December 31, 2019
Assets		
Current Assets	\$ 907	\$ 842
Properties	10,865	10,287
Other non-current assets	1,151	1,208
Liabilities		
Current liabilities	\$ 2,290	\$ 1,833
Long-term debt	8,585	8,145
Other non-current liabilities	2,981	2,711

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 year ended December 31, 2020	For the year ended December 31, 2019
Dividend income from non-guarantor subsidiaries	\$ 163	\$ 158
Capital contributions to non-guarantor subsidiaries	—	(125)
Return of capital from non-guarantor subsidiaries	198	1,345

Balances with Non-Guarantor Subsidiaries

(in millions of Canadian dollars)	CPRC (Subsidiary Issuer) and CPRL (Parent Guarantor)	
	As at December 31, 2020	As at December 31, 2019
Assets		
Accounts Receivable, intercompany	\$ 327	\$ 318
Short-term advances to affiliates	20	14
Long-term advances to affiliates	9	7
Liabilities		
Accounts payable, intercompany	\$ 179	\$ 249
Short-term advances from affiliates	3,658	3,700
Long-term advances from affiliates	82	84

Share Capital

At February 17, 2021, the latest practicable date prior to the date of this Annual Report on Form 10-K, there were 133,297,236 Common Shares and no preferred shares issued and outstanding, which consists of 13,779 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. Each option granted can be exercised for one Common Share. At February 17, 2021, 1,521,584 options were outstanding under the MSOIP and stand-alone option agreements entered into with Mr. Keith Creel. There are 733,836 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 340,000 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. These Non-GAAP measures are presented in Item 6. Selected Financial Data and discussed further in other sections of this Item 7. 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. 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, the FX impact of translating the Company's debt and lease liabilities (including borrowings under the credit facility), discrete tax items, changes in income tax rates, changes to an uncertain tax item, and certain items outside the control of management. 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 2020, there were two significant items included in Net income as follows:

- in the fourth quarter, 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 22 cents; and
- during the course of the year, a net non-cash gain of \$14 million (\$12 million after deferred tax) due to FX translation of debt and lease liabilities that favourably impacted Diluted EPS by 9 cents as follows:
 - in the fourth quarter, a \$103 million gain (\$90 million after deferred tax) that favourably impacted Diluted EPS by 67 cents;

- in the third quarter, a \$40 million gain (\$38 million after deferred tax) that favourably impacted Diluted EPS by 29 cents;
- in the second quarter, an \$86 million gain (\$82 million after deferred tax) that favourably impacted Diluted EPS by 59 cents; and
- in the first quarter, a \$215 million loss (\$198 million after deferred tax) that unfavourably impacted Diluted EPS by \$1.44.

In 2019, there were three significant items included in Net income as follows:

- in the fourth quarter, a deferred tax expense of \$24 million as a result of a provision for an uncertain tax item of a prior period that unfavourably impacted Diluted EPS by 17 cents;
- in the second quarter, a deferred tax recovery of \$88 million due to the change in the Alberta provincial corporate income tax rate that favourably impacted Diluted EPS by 63 cents;
- during the course of the year, a net non-cash gain of \$94 million (\$86 million after deferred tax) due to FX translation of debt and lease liabilities that favourably impacted Diluted EPS by 62 cents as follows:
 - in the fourth quarter, a \$37 million gain (\$32 million after deferred tax) that favourably impacted Diluted EPS by 22 cents;
 - in the third quarter, a \$25 million loss (\$22 million after deferred tax) that unfavourably impacted Diluted EPS by 15 cents;
 - in the second quarter, a \$37 million gain (\$34 million after deferred tax) that favourably impacted Diluted EPS by 24 cents; and
 - in the first quarter, a \$45 million gain (\$42 million after deferred tax) that favourably impacted Diluted EPS by 30 cents.

In 2018, there were two significant items included in Net income as follows:

- in the second quarter, a deferred tax recovery of \$21 million due to reductions in the Missouri and Iowa state tax rates that favourably impacted Diluted EPS by 15 cents; and
- during the course of the year, a net non-cash loss of \$168 million (\$150 million after deferred tax) due to FX translation of debt that unfavourably impacted Diluted EPS by \$1.05 as follows:
 - in the fourth quarter, a \$113 million loss (\$103 million after deferred tax) that unfavourably impacted Diluted EPS by 72 cents;
 - in the third quarter, a \$38 million gain (\$33 million after deferred tax) that favourably impacted Diluted EPS by 23 cents;
 - in the second quarter, a \$44 million loss (\$38 million after deferred tax) that unfavourably impacted Diluted EPS by 27 cents; and
 - in the first quarter, a \$49 million loss (\$42 million after deferred tax) that unfavourably impacted Diluted EPS by 29 cents.

In 2017, there were five significant items included in Net income as follows:

- in the second quarter, a charge on hedge roll and de-designation of \$13 million (\$10 million after deferred tax) that unfavourably impacted Diluted EPS by 7 cents;
- in the second quarter, an insurance recovery of a legal settlement of \$10 million (\$7 million after current tax) that favourably impacted Diluted EPS by 5 cents;
- in the first quarter, a management transition recovery of \$51 million related to the retirement of Mr. E. Hunter Harrison as CEO of CP (\$39 million after deferred tax) that favourably impacted Diluted EPS by 27 cents;
- during the course of the year, a net deferred tax recovery of \$541 million as a result of changes in income tax rates as follows:
 - in the fourth quarter, a deferred tax recovery of \$527 million, primarily due to the U.S. tax reform, that favourably impacted Diluted EPS by \$3.63;
 - in the third quarter, a deferred tax expense of \$3 million as a result of the change in the Illinois state corporate income tax rate change that unfavourably impacted Diluted EPS by 2 cents;
 - in the second quarter, a deferred tax recovery of \$17 million as a result of the change in the Saskatchewan provincial corporate income tax rate that favourably impacted Diluted EPS by 12 cents; and
- during the course of the year, a net non-cash gain of \$186 million (\$162 million after deferred tax) due to FX translation of debt that favourably impacted Diluted EPS by \$1.10 as follows:
 - in the fourth quarter, a \$14 million loss (\$12 million after deferred tax) that unfavourably impacted Diluted EPS by 8 cents;
 - in the third quarter, a \$105 million gain (\$91 million after deferred tax) that favourably impacted Diluted EPS by 62 cents;
 - in the second quarter, a \$67 million gain (\$59 million after deferred tax) that favourably impacted Diluted EPS by 40 cents; and
 - in the first quarter, a \$28 million gain (\$24 million after deferred tax) that favourably impacted Diluted EPS by 16 cents.

In 2016, there were two significant items included in Net income as follows:

- in the third quarter, a \$25 million expense (\$18 million after current tax) related to a legal settlement that unfavourably impacted Diluted EPS by 12 cents; and
- during the course of the year, a net non-cash gain of \$79 million (\$68 million after deferred tax) due to FX translation of debt that favourably impacted Diluted EPS by 46 cents as follows:
 - in the fourth quarter, a \$74 million loss (\$64 million after deferred tax) that unfavourably impacted Diluted EPS by 43 cents;
 - in the third quarter, a \$46 million loss (\$40 million after deferred tax) that unfavourably impacted Diluted EPS by 27 cents;
 - in the second quarter, an \$18 million gain (\$16 million after deferred tax) that favourably impacted Diluted EPS by 10 cents; and
 - in the first quarter, a \$181 million gain (\$156 million after deferred tax) that favourably impacted Diluted EPS by \$1.01.

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 Item 6. Selected Financial Data and discussed further in other sections of this Item 7. 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.

(in millions of Canadian dollars)	For the year ended December 31				
	2020	2019	2018	2017	2016
Net income as reported	\$ 2,444	\$ 2,440	\$ 1,951	\$ 2,405	\$ 1,599
Less significant items (pre-tax):					
Legal settlement charge	—	—	—	—	(25)
Insurance recovery of legal settlement	—	—	—	10	—
Charge on hedge roll and de-designation	—	—	—	(13)	—
Management transition recovery	—	—	—	51	—
Impact of FX translation gain (loss) on debt and lease liabilities	14	94	(168)	186	79
Add:					
Tax effect of adjustments ⁽¹⁾	2	8	(18)	36	4
Income tax rate changes	(29)	(88)	(21)	(541)	—
Provision for uncertain tax item	—	24	—	—	—
Adjusted income	\$ 2,403	\$ 2,290	\$ 2,080	\$ 1,666	\$ 1,549

⁽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 13.58%, 8.55%, 10.64%, 15.27% and 7.17% for the years presented, 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.

	For the year ended December 31				
	2020	2019	2018	2017	2016
Diluted earnings per share as reported	\$ 17.97	\$ 17.52	\$ 13.61	\$ 16.44	\$ 10.63
Less significant items (pre-tax):					
Legal settlement charge	—	—	—	—	(0.17)
Insurance recovery of legal settlement	—	—	—	0.07	—
Charge on hedge roll and de-designation	—	—	—	(0.09)	—
Management transition recovery	—	—	—	0.35	—
Impact of FX translation gain (loss) on debt and lease liabilities	0.10	0.67	(1.17)	1.27	0.53
Add:					
Tax effect of adjustments ⁽¹⁾	0.01	0.05	(0.12)	0.25	0.02
Income tax rate changes	(0.21)	(0.63)	(0.15)	(3.70)	—
Provision for uncertain tax item	—	0.17	—	—	—
Adjusted diluted earnings per share	\$ 17.67	\$ 16.44	\$ 14.51	\$ 11.39	\$ 10.29

⁽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 13.58%, 8.55%, 10.64%, 15.27% and 7.17% for the years presented, 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.

(in millions of Canadian dollars)	For the year ended December 31				
	2020	2019	2018	2017	2016
Operating income as reported	\$ 3,311	\$ 3,124	\$ 2,831	\$ 2,519	\$ 2,411
Less significant item:					
Management transition recovery	—	—	—	51	—
Adjusted operating income	\$ 3,311	\$ 3,124	\$ 2,831	\$ 2,468	\$ 2,411

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

	For the year ended December 31				
	2020	2019	2018	2017	2016
Operating ratio as reported	57.1 %	59.9 %	61.3 %	61.6 %	61.3 %
Less significant item:					
Management transition recovery	—	—	—	(0.8)	—
Adjusted operating ratio	57.1 %	59.9 %	61.3 %	62.4 %	61.3 %

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 rolling 12-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 Item 6. Selected Financial Data and discussed further in Results of Operations of this Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations.

Beginning in the first quarter of 2020, CP aligned the reconciliation sequence for Adjusted ROIC to start with Net income, with no change to the calculated Adjusted return.

Calculation of Return on average shareholders' equity

(in millions of Canadian dollars, except for percentages)	For the year ended December 31				
	2020	2019	2018	2017	2016
Net income as reported	\$ 2,444	\$ 2,440	\$ 1,951	\$ 2,405	\$ 1,599
Average shareholders' equity	\$ 7,194	\$ 6,853	\$ 6,537	\$ 5,539	\$ 4,711
Return on average shareholders' equity	34.0%	35.6%	29.8%	43.4%	33.9%

Reconciliation of Net Income to Adjusted Return

(in millions of Canadian dollars)	For the year ended December 31				
	2020	2019	2018	2017	2016
Net income as reported	\$ 2,444	\$ 2,440	\$ 1,951	\$ 2,405	\$ 1,599
Add:					
Net interest expense	458	448	453	473	471
Tax on interest ⁽¹⁾	(113)	(112)	(112)	(126)	(124)
Significant items (pre-tax):					
Legal settlement charge	—	—	—	—	25
Insurance recovery of legal settlement	—	—	—	(10)	—
Charge on hedge roll and de-designation	—	—	—	13	—
Management transition recovery	—	—	—	(51)	—
Impact of FX translation (gain) loss on debt and lease liabilities	(14)	(94)	168	(186)	(79)
Tax on significant items ⁽²⁾	2	8	(18)	36	4
Income tax rate changes	(29)	(88)	(21)	(541)	—
Provision for uncertain tax item	—	24	—	—	—
Adjusted return	\$ 2,748	\$ 2,626	\$ 2,421	\$ 2,013	\$ 1,896

⁽¹⁾ Tax was calculated at the adjusted annualized effective tax rate of 24.61%, 24.96%, 24.55%, 26.42%, and 26.20% for each of the above items for the years presented, respectively.

⁽²⁾ Tax was calculated as the pre-tax effect of the adjustments multiplied by the applicable tax rate of 13.58%, 8.55%, 10.64%, 15.27%, and 7.17% for each of the above items for the years presented, 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 year ended December 31				
	2020	2019	2018	2017	2016
Average shareholders' equity	\$ 7,194	\$ 6,853	\$ 6,537	\$ 5,539	\$ 4,711
Average Long-term debt, including long-term debt maturing within one year					
Average Long-term debt, including long-term debt maturing within one year	9,264	8,726	8,427	8,422	8,821
Average shareholders' equity plus Average Long-term debt, including long-term debt maturing within one year	\$ 16,458	\$ 15,579	\$ 14,964	\$ 13,961	\$ 13,532
Less:					
Significant items (pre-tax):					
Legal settlement charge	—	—	—	—	(13)
Insurance recovery of legal settlement	—	—	—	5	—
Charge on hedge roll and de-designation	—	—	—	(7)	—
Management transition recovery	—	—	—	26	—
Tax on significant items ⁽¹⁾	—	—	—	(5)	4
Income tax rate changes	15	44	11	270	—
Provision for uncertain tax item	—	(12)	—	—	—
Adjusted average invested capital	\$ 16,443	\$ 15,547	\$ 14,953	\$ 13,672	\$ 13,541

⁽¹⁾ Tax was calculated as the pre-tax effect of the adjustments multiplied by the applicable tax rate of 15.27% and 7.17% for 2017 and 2016, respectively. The applicable tax rates reflect the taxable jurisdictions and nature, being on account of capital or income, of the significant items.

Calculation of Adjusted ROIC

(in millions of Canadian dollars, except for percentages)	For the year ended December 31				
	2020	2019	2018	2017	2016
Adjusted return	\$ 2,748	\$ 2,626	\$ 2,421	\$ 2,013	\$ 1,896
Adjusted average invested capital	\$ 16,443	\$ 15,547	\$ 14,953	\$ 13,672	\$ 13,541
Adjusted ROIC	16.7%	16.9%	16.2%	14.7%	14.0%

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, and the acquisitions of CMQ and DRTP. 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 acquisitions of CMQ and DRTP are not indicative of investment trends and have 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 Item 6. Selected Financial Data and discussed further in Liquidity and Capital Resources of this Item 7. 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 year ended December 31				
	2020	2019	2018	2017	2016
Cash provided by operating activities	\$ 2,802	\$ 2,990	\$ 2,712	\$ 2,182	\$ 2,089
Cash used in investing activities	(2,030)	(1,803)	(1,458)	(1,295)	(1,069)
Effect of foreign currency fluctuations on U.S. dollar-denominated cash and cash equivalents	6	(4)	11	(13)	(13)
Less:					
Settlement of forward starting swaps on debt issuance	—	—	(24)	—	—
Investment in Central Maine & Québec Railway	19	(174)	—	—	—
Investment in Detroit River Tunnel Partnership	(398)	—	—	—	—
Free cash	\$ 1,157	\$ 1,357	\$ 1,289	\$ 874	\$ 1,007

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 7. Management's Discussion and Analysis of Financial Condition and Results of Operations.

(in millions of Canadian dollars)	Reported 2020	Reported 2019			Reported 2018			2020 vs. 2019			2019 vs. 2018		
		Variance due to FX	FX Adjusted 2019	FX Adj. % Change	Variance due to FX	FX Adjusted 2018	FX Adj. % Change						
Freight revenues by line of business													
Grain	\$ 1,829	\$ 1,684	\$ 1,566	\$ 8	\$ 1,692	\$ 8	\$ 19	\$ 1,585	\$ 6				
Coal	566	682	673	1	683	(17)	2	675	1				
Potash	493	462	486	2	464	6	6	492	(6)				
Fertilizers and sulphur	290	250	243	2	252	15	4	247	1				
Forest products	328	304	284	3	307	7	5	289	5				
Energy, chemicals and plastics	1,519	1,534	1,243	3	1,537	(1)	17	1,260	22				
Metals, minerals, and consumer products	629	752	797	7	759	(17)	16	813	(8)				
Automotive	324	352	322	3	355	(9)	7	329	7				
Intermodal	1,563	1,593	1,538	4	1,597	(2)	10	1,548	3				
Freight revenues	7,541	7,613	7,152	33	7,646	(1)	86	7,238	5				
Non-freight revenues	169	179	164	—	179	(6)	1	165	8				
Total revenues	\$ 7,710	\$ 7,792	\$ 7,316	\$ 33	\$ 7,825	(1)	\$ 87	\$ 7,403	5				

FX adjusted % changes in operating expenses are discussed in Operating Expenses of this Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations.

(in millions of Canadian dollars)	Reported 2020	Reported 2019			Reported 2018			2020 vs. 2019			2019 vs. 2018		
		Variance due to FX	FX Adjusted 2019	FX Adj. % Change	Variance due to FX	FX Adjusted 2018	FX Adj. % Change						
Operating expenses													
Compensation and benefits	\$ 1,560	\$ 1,540	\$ 1,468	\$ 5	\$ 1,545	\$ 1	\$ 11	\$ 1,479	\$ 4				
Fuel	652	882	918	8	890	(27)	18	936	(6)				
Materials	216	210	201	—	210	3	1	202	4				
Equipment rents	142	137	130	2	139	2	3	133	3				
Depreciation and amortization	779	706	696	2	708	10	4	700	1				
Purchased services and other	1,050	1,193	1,072	6	1,199	(12)	11	1,083	10				
Total operating expenses	\$ 4,399	\$ 4,668	\$ 4,485	\$ 23	\$ 4,691	(6)	\$ 48	\$ 4,533	3				

Dividend Payout Ratio and Adjusted Dividend Payout Ratio

Dividend payout ratio is calculated as dividends declared per share divided by Diluted EPS. Adjusted dividend payout ratio is calculated as dividends declared per share divided by Adjusted diluted EPS, as defined above. These ratios are measures of shareholder return and provide information on the Company's ability to declare dividends on an ongoing basis. Dividend payout ratio and Adjusted dividend payout ratio are presented in Item 6. Selected Financial Data and discussed further in Liquidity and Capital Resources of this Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations.

Calculation of Dividend Payout Ratio

(in dollars, except for percentages)	For the year ended December 31				
	2020	2019	2018	2017	2016
Dividends declared per share	\$ 3.5600	\$ 3.1400	\$ 2.5125	\$ 2.1875	\$ 1.8500
Diluted EPS	17.97	17.52	13.61	16.44	10.63
Dividend payout ratio	19.8%	17.9%	18.5%	13.3%	17.4%

Calculation of Adjusted Dividend Payout Ratio

(in dollars, except for percentages)	For the year ended December 31				
	2020	2019	2018	2017	2016
Dividends declared per share	\$ 3.5600	\$ 3.1400	\$ 2.5125	\$ 2.1875	\$ 1.8500
Adjusted diluted EPS	17.67	16.44	14.51	11.39	10.29
Adjusted dividend payout ratio	20.1%	19.1%	17.3%	19.2%	18.0%

Adjusted Net Debt to 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. 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 Item 6. Selected Financial Data and discussed further in Liquidity and Capital Resources of this Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations.

Calculation of Long-term Debt to Net Income Ratio

(in millions of Canadian dollars, except for ratios)	2020	2019	2018	2017	2016
Long-term debt including long-term debt maturing within one year as at December 31	\$ 9,771	\$ 8,757	\$ 8,696	\$ 8,159	\$ 8,684
Net income for the year ended December 31	2,444	2,440	1,951	2,405	1,599
Long-term debt to Net income ratio	4.0	3.6	4.5	3.4	5.4

Reconciliation of Long-term Debt to 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.

(in millions of Canadian dollars)	2020	2019	2018	2017	2016
Long-term debt including long-term debt maturing within one year as at December 31	\$ 9,771	\$ 8,757	\$ 8,696	\$ 8,159	\$ 8,684
Add:					
Pension plans deficit ⁽¹⁾	328	294	266	278	273
Operating lease liabilities	311	354	387	281	361
Less:					
Cash and cash equivalents	147	133	61	338	164
Adjusted net debt as at December 31	\$ 10,263	\$ 9,272	\$ 9,288	\$ 8,380	\$ 9,154

⁽¹⁾ 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

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 (income) expense. Adjusted EBITDA is calculated as Adjusted EBIT plus operating lease expense and Depreciation and amortization, less Other components of net periodic benefit recovery.

(in millions of Canadian dollars)	For the year ended December 31				
	2020	2019	2018	2017	2016
Net income as reported	\$ 2,444	\$ 2,440	\$ 1,951	\$ 2,405	\$ 1,599
Add:					
Net interest expense	458	448	453	473	471
Income tax expense	758	706	637	93	553
EBIT	3,660	3,594	3,041	2,971	2,623
Less significant items (pre-tax):					
Legal settlement charge	—	—	—	—	(25)
Insurance recovery of legal settlement	—	—	—	10	—
Charge on hedge roll and de-designation	—	—	—	(13)	—
Management transition recovery	—	—	—	51	—
Impact of FX translation gain (loss) on debt and lease liabilities	14	94	(168)	186	79
Adjusted EBIT	3,646	3,500	3,209	2,737	2,569
Add:					
Operating lease expense	78	83	97	104	111
Depreciation and amortization	779	706	696	661	640
Less:					
Other components of net periodic benefit recovery	342	381	384	274	167
Adjusted EBITDA	\$ 4,161	\$ 3,908	\$ 3,618	\$ 3,228	\$ 3,153

Calculation of Adjusted Net Debt to Adjusted EBITDA Ratio

(in millions of Canadian dollars, except for ratios)	2020	2019	2018	2017	2016
Adjusted net debt as at December 31	\$ 10,263	\$ 9,272	\$ 9,288	\$ 8,380	\$ 9,154
Adjusted EBITDA for the year ended December 31	4,161	3,908	3,618	3,228	3,153
Adjusted net debt to Adjusted EBITDA ratio	2.5	2.4	2.6	2.6	2.9

Off-Balance Sheet Arrangements

Guarantees

Refer to Item 8. Financial Statements and Supplementary Data, Note 26 Guarantees for details.

Contractual Commitments

The accompanying table indicates the Company's obligations and commitments to make future payments for contracts such as debt, leases, and commercial arrangements as at December 31, 2020.

Payments due by period (in millions of Canadian dollars)	Total	2021	2022 & 2023	2024 & 2025	Thereafter
Interest on long-term debt and finance leases	\$ 10,883	\$ 441	\$ 762	\$ 693	\$ 8,987
Long-term debt	9,717	1,178	946	974	6,619
Finance leases	143	8	111	14	10
Operating leases ⁽¹⁾	347	71	112	76	88
Supplier purchase	1,743	528	930	97	188
Other long-term liabilities ⁽²⁾	494	54	102	98	240
Total contractual commitments	\$ 23,327	\$ 2,280	\$ 2,963	\$ 1,952	\$ 16,132

⁽¹⁾ Residual value guarantees on certain leased equipment with a maximum exposure of \$1 million are not included in the minimum payments shown above, as management believes that CP will not be required to make payments under these residual guarantees.

⁽²⁾ Includes expected cash payments for environmental remediation, post-retirement benefits, workers' compensation benefits, long-term disability benefits, pension benefit payments for the Company's non-registered supplemental pension plan, and certain other long-term liabilities. Projected payments for post-retirement benefits, workers' compensation benefits, and long-term disability benefits include the anticipated payments for years 2021 to 2030. Pension contributions for the Company's registered pension plans are not included due to the volatility in calculating them. Pension payments are discussed further in Critical Accounting Estimates of this Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations.

Certain Other Financial Commitments

In addition to the financial commitments mentioned above, the Company is party to certain other financial commitments discussed below.

Letters of Credit

Letters of credit are obtained mainly to provide security to third parties under the terms of various agreements, including the supplemental pension plan. CP is liable for these contractual amounts in the case of non-performance under these agreements. Letters of credit are accommodated through a revolving credit facility and the Company's bilateral letter of credit facilities.

Capital Commitments

The Company remains committed to maintaining the current high level of quality of our capital assets in pursuing sustainable growth. As part of this commitment, CP has entered into contracts with suppliers to make various capital purchases related to track and rolling stock programs. Payments for these commitments are due in 2021 through 2032. These expenditures are expected to be financed by cash generated from operations or by issuing new debt.

The accompanying table indicates the Company's commitments to make future payments for letters of credit and capital expenditures as at December 31, 2020.

Payments due by period (in millions of Canadian dollars)	Total	2021	2022 & 2023	2024 & 2025	Thereafter
Letters of credit	\$ 59	\$ 59	\$ —	\$ —	\$ —
Capital commitments	547	369	79	41	58
Total certain other financial commitments	\$ 606	\$ 428	\$ 79	\$ 41	\$ 58

Critical Accounting Estimates

To prepare the 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.

The development, selection and disclosure of these estimates, and this Management's Discussion and Analysis of Financial Condition and Results of Operations, have been reviewed by the Board of Directors' Audit and Finance Committee, which is composed entirely of independent directors.

Environmental Liabilities

Environmental remediation accruals cover site-specific remediation programs. CP estimates of the probable costs to be incurred in the remediation of properties contaminated by past railway activities reflect the nature of contamination at individual sites according to typical activities and scale of operations conducted. The Company screens and classifies sites according to typical activities and scale of operations conducted. CP has developed remediation strategies for each property based on the nature and extent of the contamination, as well as the location of the property and surrounding areas that may be adversely affected by the presence of contaminants. CP also considers available technologies, treatment and disposal facilities and the acceptability of site-specific plans based on the local regulatory environment. Site-specific plans range from containment and risk management of the contaminants through to the removal and treatment of the contaminants and affected soils and groundwater. The details of the estimates reflect the environmental liability at each property. The Company is committed to fully meeting regulatory and legal obligations with respect to environmental matters.

Some sites include remediation activities that are projected beyond the 10-year period, which CP is unable to reasonably estimate and determine. Therefore, CP's accruals of the environmental liabilities is based on an estimate of costs for a rolling 10-year period covered by the environmental program. Payments are expected to be made over 10 years to 2030. A limited portion of the environmental accruals, the stable Perpetual Care for the environmental program, are fixed and reliably determined. This portion of the environmental liabilities is discounted using a risk-free rate, adjusted by inflation and productivity improvements.

Provisions for environmental remediation costs are recorded in "Other long-term liabilities" (refer to Item 8. Financial Statements and Supplementary Data, Note 18 Other long-term liabilities), except for the current portion which is recorded in "Accounts payable and accrued liabilities" (refer to Item 8. Financial Statements and Supplementary Data, Note 15 Accounts payable and accrued liabilities). The accruals for environmental remediation represent CP's best estimate of its probable future obligations and include both asserted and unasserted claims, without reduction for anticipated recoveries from third parties. Although the recorded accruals include CP's best estimate of all probable costs, CP's total environmental remediation costs cannot be predicted with certainty. Accruals for environmental remediation may change from time to time as new information about previously untested sites becomes known, environmental laws and regulations evolve and advances are made in environmental remediation technology. The accruals may also vary as the courts decide legal proceedings against outside parties responsible for contamination. These potential charges, which cannot be quantified at this time, are not expected to be material to the Company's financial position, but may materially affect income in the period in which a charge is recognized.

The environmental liabilities are also sensitive to the increase in cost of materials which would be reflected as increases to "Other long-term liabilities" and "Accounts payable and accrued liabilities" on the Company's Consolidated Balance Sheets and to "Purchased services and other" within Operating expenses on the Company's Consolidated Statements of Income. CP's cash payments for environmental initiatives are estimated to be approximately \$9 million in 2021, \$10 million in 2022, \$9 million in 2023 and a total of approximately \$53 million over the remaining years through 2030. All payments will be funded from general operations.

Pensions and Other Benefits

CP has defined benefit and defined contribution pension plans. Other benefits include post-retirement medical and life insurance for pensioners, and some post-employment workers' compensation and long-term disability benefits in Canada. Workers' compensation and long-term disability benefits are discussed in the Personal Injury and Other Claims Liabilities section below. Pension and post-retirement benefits liabilities are subject to various external influences and uncertainties.

Information concerning the measurement of costs for pensions and other benefits is discussed in Item 8. Financial Statements and Supplementary Data, Note 1 Summary of significant accounting policies and Note 22 Pensions and other benefits.

Net Periodic Benefit Costs

The Company reports the current service cost component of net periodic benefit cost in "Compensation and benefits" for pensions and post-retirement benefits and in "Purchased services and other" for self-insured workers' compensation and long-term disability benefits on the Company's Consolidated Statements of Income. The Other components of net periodic benefit recovery are reported as a separate line item outside of Operating income on the Company's Consolidated Statements of Income. Components of the net periodic benefit costs (credits) are as follows:

(in millions of Canadian dollars)	2020			2019		
	Current service cost	Other components	Total	Current service cost	Other components	Total
Defined benefit pensions	\$ 140 \$	(363) \$	(223) \$	107 \$	(414) \$	(307)
Defined contribution pensions	12	—	12	11	—	11
Post-retirement benefits	4	17	21	4	16	20
Self-insured workers' compensation and long-term disability benefits	8	4	12	7	17	24
All plans	\$ 164 \$	(342) \$	(178) \$	129 \$	(381) \$	(252)

CP estimates net periodic benefit credits for defined benefit pensions to be approximately \$230 million in 2021 (\$171 million in current service cost and \$401 million in other components of net periodic recovery), and net periodic benefit costs for defined contribution pensions to be approximately \$12 million in 2021. Net periodic benefit costs for post-retirement benefits in 2021 are not expected to differ materially from the 2020 costs. Total net periodic benefit credits for all plans are estimated to be approximately \$185 million in 2021 (2020 – \$178 million), comprising \$196 million (2020 – \$164 million) in current service cost and \$381 million (2020 – \$342 million) in other components of net periodic recovery. The expected rate of return on the market-related asset value used to compute the net periodic benefit credit was 7.50% in 2019 and 7.25% in 2020. For computing the net periodic benefit credit in 2021, the Company is reducing this rate to 6.90% to reflect CP's current view of future long-term investment returns. Net periodic benefit costs and credits are discussed further in Item 8. Financial Statements and Supplementary Data, Note 22 Pensions and other benefits.

Pension Plan Contributions

The Company made contributions of \$27 million to the defined benefit pension plans in 2020, compared with \$53 million in 2019. The Company's main Canadian defined benefit pension plan accounts for nearly all of CP's pension obligation and can produce significant volatility in pension funding requirements, given the pension fund's size, the many factors that drive the pension plan's funded status, and Canadian statutory pension funding requirements. The Company made voluntary prepayments of \$600 million in 2011, \$650 million in 2010, and \$500 million in 2009 to the Company's main Canadian defined benefit pension plan. CP has applied \$1,324 million of these voluntary prepayments to reduce its pension funding requirements in 2012–2020, leaving \$426 million of the voluntary prepayments still available at December 31, 2020 to reduce CP's pension funding requirements in 2021 and future years. CP continues to have significant flexibility with respect to the rate at which the remaining voluntary prepayments are applied to reduce future years' pension contribution requirements, which allows CP to manage the volatility of future pension funding requirements. At this time, CP estimates it will not apply any of the remaining voluntary prepayments against its 2021 pension funding requirements.

CP estimates its aggregate pension contributions, including its defined benefit and defined contribution plans, to be in the range of \$30 million to \$40 million in 2021, and in the range of \$30 million to \$50 million per year from 2022 to 2024. These estimates reflect the Company's current intentions with respect to the rate at which CP will apply the remaining voluntary prepayments against contribution requirements in the next few years.

Future pension contributions will be highly dependent on the Company's actual experience with such variables as investment returns, interest rate fluctuations, and demographic changes, on the rate at which previous years' voluntary prepayments are applied against pension contribution requirements, and on any changes in the regulatory environment. CP will continue to make contributions to the pension plans that, at a minimum, meet pension legislative requirements.

Pension Plan Risks

Fluctuations in the liability and net periodic benefit costs for pensions result from favourable or unfavourable investment returns and changes in long-term interest rates. The impact of favourable or unfavourable investment returns is moderated by the use of a market-related asset value for the main Canadian defined benefit pension plan's public equity securities and absolute return strategies. The impact of changes in long-term interest rates on pension obligations is partially offset by their impact on the pension funds' investments in fixed income assets.

The plans' investment policy provides a target allocation of approximately 45% of the plans' assets to be invested in public equity securities. As a result, stock market performance is a key driver in determining the pension funds' asset performance. If the rate of investment return on the plans' public equity securities in 2020 had been 10% higher (or lower) than the actual 2020 rate of investment return on such securities, 2021 net periodic benefit costs for pensions would be lower (or higher) by approximately \$24 million.

Changes in bond yields can result in changes to discount rates and to changes in the value of fixed income assets. If the discount rate as at December 31, 2020 had been higher (or lower) by 0.1% with no related changes in the value of the pension funds' investment in fixed income assets, 2021 net periodic benefit costs for pensions would be lower (or higher) by approximately \$15 million and 2021 current service costs for pensions would be lower (or higher) by approximately \$6 million. However, a change in bond yields would also lead to a change in the value of the pension funds' investment in fixed income assets, and this change would partially offset the impact on net periodic benefit costs noted above.

The Company estimates that an increase in the discount rate of 0.1% would decrease the defined benefit pension plans' projected benefit obligations by approximately \$203 million, and that a decrease in the discount rate of 0.1% would increase the defined benefit pension plans' projected benefit obligations by approximately \$212 million. Similarly, for every 0.1% the actual return on assets varies above (or below) the estimated return for the year, the value of the defined benefit pension plans' assets would increase (or decrease) by approximately \$14 million.

Adverse experience with respect to these factors could eventually increase funding and pension expense significantly, while favourable experience with respect to these factors could eventually decrease funding and pension expense significantly.

Fluctuations in the post-retirement benefit obligation also can result from changes in the discount rate used. A 0.1% increase (decrease) in the discount rate would decrease (increase) the obligation by approximately \$6 million.

CP reviews its pensioner mortality experience to ensure that the mortality assumption continues to be appropriate, or to determine what changes to the assumption are needed.

Property, Plant and Equipment

The Company follows the group depreciation method under which a single depreciation rate is applied to the total cost in a particular class of property, despite differences in the service life or salvage value of individual properties within the same class. CP performs depreciation studies of each property asset class approximately every three years to update depreciation rates. The studies are conducted with assistance from third-party specialists and analyzed and reviewed by the Company's management. Depreciation studies for U.S. assets are reviewed and approved by the Surface Transportation Board ("STB"). Depreciation studies for Canadian assets are provided to the Canadian Transportation Agency (the "Agency"), but the Agency does not approve depreciation rates. In determining appropriate depreciation rates, management is required to make judgments and assumptions about a variety of key factors that are subject to future variability due to inherent uncertainties. These include the following:

Key Assumptions	Assessments
• Whole and remaining asset lives	<ul style="list-style-type: none"> • Statistical analysis of historical retirement patterns; • Evaluation of management strategy and its impact on operations and the future use of specific property assets; • Assessment of technological advances; • Engineering estimates of changes in current operations and analysis of historic, current and projected future usage; • Additional factors considered for track assets: density of traffic and whether rail is new or has been re-laid in a subsequent position; • Assessment of policies and practices for the management of assets including maintenance; and • Comparison with industry data.
• Salvage values	<ul style="list-style-type: none"> • Analysis of historical, current and estimated future salvage values.

CP depreciates the cost of properties, net of salvage, on a straight-line basis over the estimated useful life of the class of property. The estimates of economic lives are uncertain and can vary due to changes in any of the assessed factors noted in the table above for whole and remaining asset lives. Additionally, the depreciation rates are updated to reflect the change in residual values of the assets in the class.

It is anticipated that there will be changes in the estimates of weighted-average useful lives and net salvage for each property asset class as assets are acquired, used and retired. Substantial changes in either the useful lives of properties or the salvage assumptions could result in significant changes to depreciation expense. For example, if the estimated average life of track assets, including rail, ties, ballast and other track material, increased (or decreased) by one year, annual depreciation expense would decrease (or increase) by approximately \$18 million.

Due to the capital intensive nature of the railway industry, depreciation represents a significant part of operating expenses. The estimated useful lives of properties have a direct impact on the amount of depreciation recorded as a component of "Properties" on the Company's Consolidated Balance Sheets. At December 31, 2020 and 2019, accumulated depreciation was \$8,629 million and \$8,099 million, respectively.

Deferred Income Taxes

CP accounts for deferred income taxes based on the liability method. This method focuses on the Company's balance sheet and the temporary differences otherwise calculated from the comparison of book versus tax values. The provision for deferred income taxes arises from temporary differences in the carrying values of assets and liabilities for financial statement and income tax purposes and the effect of loss carry forwards. It is assumed that such temporary differences will be settled in the deferred income tax assets and liabilities at the balance sheet date.

In determining deferred income taxes, the Company makes estimates and assumptions regarding deferred tax matters, including estimating the timing of the realization and settlement of deferred income tax assets (including the benefit of tax losses) and liabilities, and estimating unrecognized tax benefits for uncertain tax positions. Deferred income taxes are calculated using enacted federal, provincial, and state future income tax rates, which may differ in future periods.

Deferred income tax expense is included in "Income tax expense" on the Company's Consolidated Statements of Income. Additional disclosures are provided in Item 8. Financial Statements and Supplementary Data, Note 6 Income taxes.

Personal Injury and Other Claims Liabilities

CP estimates the potential liability arising from incidents, claims and pending litigations relating to personal injury claims by employees, third-party claims, certain occupation-related claims and property damage claims.

Personal Injury

In Canada, employee occupational injuries are governed by provincial workers' compensation legislation. Occupational injury claims in the provinces of Québec, Ontario, Manitoba and B.C. are self-insured and administered through each Worker's Compensation Board ("WCB"). The future costs related to occupation-related injuries are actuarially determined based on past experience and assumptions associated with the injury, compensation, income replacement, health care and administrative costs. In the four provinces where the Company is self-insured, a discount rate is applied to the future estimated costs based on market rates for investment grade corporate bonds to determine the liability. An actuarial study is performed on an annual basis. In the provinces of Saskatchewan and Alberta, the Company is assessed an annual WCB contribution on a premium basis and this amount is not subject to estimation by management. At December 31, 2020 and 2019, respectively, the WCB liability was \$84 million and \$85 million in "Pension and other benefit liabilities"; \$11 million and \$11 million in "Accounts payable and accrued liabilities", offset by deposits paid to WCB of \$1 million and \$1 million in "Other assets" on the Company's Consolidated Balance Sheets.

U.S. railway employees are covered by federal law under the Federal Employers' Liability Act ("FELA") rather than workers' compensation programs. Accruals are set for individual cases based on facts, legal opinion and statistical analysis. U.S. accruals are also set and include alleged occupational exposure or injury.

Other Claims

A provision for litigation matters, equipment damages or other claims will be accrued according to applicable accounting standards and any such accrual will be based on an ongoing assessment of the strengths and weaknesses of the litigation or claim and its likelihood of success, together with an evaluation of the damages or other monetary relief sought. CP accrues for probable claims when the facts of an incident become known and investigation results provide a reasonable basis for estimating the liability. The lower end of the range is accrued if the facts and circumstances permit only a range of reasonable estimates and no single amount in that range is a better estimate than any other. Facts and circumstances related to asserted claims can change, and a process is in place to monitor accruals for changes in accounting estimates.

Forward-Looking Statements

This Management's Discussion and Analysis of Financial Condition and Results of Operations and Annual Report on Form 10-K 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 Annual Report on Form 10-K includes forward-looking statements relating, but not limited to statements concerning the Company's defined benefit pension expectations for 2021 and through 2024, our expectations for 2021 financial and operational performance, including our full-year guidance for expected RTM and adjusted diluted EPS growth, planned capital expenditures (including how such capital expenditures are expected to be financed), 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, and statements regarding future payments including income taxes and pension contributions. The purpose of the 2021 Adjusted diluted EPS growth projection is to assist readers in understanding our expected and targeted financial results, and this information may not be appropriate for other purposes.

The forward-looking statements contained in this Management's Discussion and Analysis of Financial Condition and Results of Operations and Annual Report on Form 10-K 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: 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.

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 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 Annual Report on Form 10-K. These more specific factors are identified and discussed in Item 1A. Risk Factors. 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 Annual Report on Form 10-K 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 7A. 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. 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. In 2021, 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 \$27 million (2019 – approximately \$30 million), negatively (or positively) impacts Operating expenses by approximately \$14 million (2019 – approximately \$15 million), and negatively (or positively) impacts Net interest expense by approximately \$3 million (2019 – approximately \$3 million) on an annualized basis.

CP uses U.S. dollar-denominated debt to hedge its net investment in U.S. operations. As at December 31, 2020, the net investment in U.S. operations is less than the total U.S. denominated debt. Consequently, FX translation on the Company's undesignated debt and lease liabilities causes additional impacts on earnings in Other income.

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.

Share Price Impact on Stock-Based Compensation

Based on information available at December 31, 2020 and expectations for 2021 grants, for every \$1.00 change in share price, stock-based compensation expense has a corresponding change of approximately \$0.4 million to \$0.6 million (2019 – approximately \$0.4 million to \$0.6 million). This excludes the impact of changes in share price relative to the S&P/TSX 60 Index, the S&P/TSX Capped Industrial Index, the S&P 1500 Road and Rail 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 8. Financial Statements and Supplementary Data, Note 23 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. 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 forwards 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.

As at December 31, 2020, CP did not have any floating rate debt obligations outstanding, and therefore fluctuations in interest rates would not have an impact on the Company's financial condition, results of operations, or liquidity.

The fair value of the Company's fixed rate debt may fluctuate with changes in market interest rates. A hypothetical one percent decrease in interest rates as of December 31, 2020 would result in an increase of approximately \$1.5 billion to the fair value of our debt as at December 31, 2020 (December 31, 2019 - approximately \$1.2 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 8. Financial Statements and Supplementary Data, Note 17 Financial instruments.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

	Page
Report of Independent Registered Public Accounting Firm	101
Consolidated Statements of Income For the Year Ended December 31, 2020, 2019, and 2018	103
Consolidated Statements of Comprehensive Income For the Year Ended December 31, 2020, 2019, and 2018	104
Consolidated Balance Sheets As at December 31, 2020 and 2019	105
Consolidated Statements of Cash Flows For the Year Ended December 31, 2020, 2019, and 2018	106
Consolidated Statements of Changes in Shareholders' Equity For the Year Ended December 31, 2020, 2019, and 2018	107
Notes to Consolidated Financial Statements	108

Report of Independent Registered Public Accounting Firm

To the Shareholders and the Board of Directors of Canadian Pacific Railway Limited

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Canadian Pacific Railway Limited and subsidiaries (the "Company") as of December 31, 2020 and 2019, the related consolidated statements of income, comprehensive income, cash flows, and changes in shareholders' equity, for each of the three years in the period ended December 31, 2020, and the related notes and the financial statement schedule listed in the Index at Item 8 (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2020 and 2019, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2020, in conformity with accounting principles generally accepted in the United States of America ("US GAAP").

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2020, based on criteria established in *Internal Control — Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated February 18, 2021, expressed an unqualified opinion on the Company's internal control over financial reporting.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matters

The critical audit matters communicated below are matters arising from the current period audit of the financial statements that were communicated or required to be communicated to the audit committee and that (1) relate to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the financial statements, taken as a whole, and we are not, by communicating the critical audit matters below, providing separate opinions on the critical audit matters or on the accounts or disclosures to which they relate.

Properties – Direct Costs that are Capitalized to Self-constructed Assets – Refer to Notes 1, 12 and 19 to the Financial Statements

Critical Audit Matter Description

The Company recognizes direct costs as capitalized additions to self-constructed assets, within properties, based on expenditures necessary to make an asset ready for its intended use. The capitalization of self-constructed assets requires management to make significant estimates and assumptions related to the capitalization of direct cost additions to self-constructed assets based on whether the expenditures meet capitalization criteria under US GAAP.

We identified the capitalization of direct cost additions to self-constructed assets as a critical audit matter because the judgments and assumptions management makes could have a significant impact on the capitalization of direct cost additions. As such auditing the capitalization of direct cost additions involves a high degree of auditor judgment.

How the Critical Audit Matter was Addressed in the Audit

Our audit procedures related to the capitalization of direct cost additions to self-constructed assets included the following, among others:

- Evaluated the effectiveness of controls over self-constructed assets, including those over the capitalization of direct cost additions to self-constructed assets.
- Selected a sample of direct costs and obtained evidence to support the capitalized additions to self-constructed assets and assessed whether these expenditures met the capitalization criteria under US GAAP.

Defined Benefit Pension – Refer to Notes 1 and 22 to the Financial Statements

Critical Audit Matter Description

The Company's accounting of its defined benefit pension plans involves the measurement of the projected benefit obligation and fair value of fund assets. The measurement of the projected-benefit obligation requires management to make significant estimates and assumptions in the determination of the discount rate, which is based on blended market interest rates of high-quality corporate debt instruments with matching cash flows. The measurement of the fair value of fund assets requires management to make significant estimates and assumptions in the determination of the expected return on fund assets, which is calculated using the market-related value of assets.

We identified the determination of the discount rate (for the projected benefit obligation), and the determination of the expected return on fund assets (for the determination of the net period benefit cost) as the critical audit matters because of the significant estimates and assumptions management makes could have a significant impact on the projected benefit obligation and the fair value of fund assets. As such auditing the determination of the discount rate and the expected return on fund assets involves a high degree of auditor judgment as the estimates and assumptions made by management contains significant measurement uncertainty and resulted in an increased extent of effort, which included the need to involve an actuarial specialist.

How the Critical Audit Matter was Addressed in the Audit

Our audit procedures related to the determination of the discount rate (for the projected benefit obligation), and the expected return on fund assets (for the determination of the fair value of fund assets) included the following, among others:

- Evaluated the effectiveness of controls over defined benefit pension plans, including those over the determination of the discount rate and the expected return on fund assets.
- With the assistance of an actuarial specialist, we evaluated the reasonableness of the discount rate by:
 - Assessing the methodology used in management's determination of the discount rate,
 - Testing the underlying source information, and
 - Developing a range of independent estimates and comparing those to the discount rate selected by management.
- With the assistance of an actuarial specialist, we evaluated the reasonableness of the expected return on fund assets by:
 - Assessing the methodology used in management's determination of the expected return on fund assets,
 - Testing the underlying source information, and
 - Comparing management's assumptions to historical data and available market trends.
- Evaluated management's ability to accurately forecast the discount rate and expected return on fund assets by comparing actual results to management's historical forecasts.

/s/ Deloitte LLP

Chartered Professional Accountants
Calgary, Canada
February 18, 2021

We have served as the Company's auditor since 2011.

CONSOLIDATED STATEMENTS OF INCOME

Year ended December 31 (in millions of Canadian dollars, except share and per share data)	2020	2019	2018
Revenues (Note 3)			
Freight	\$ 7,541	\$ 7,613	\$ 7,152
Non-freight	169	179	164
Total revenues	7,710	7,792	7,316
Operating expenses			
Compensation and benefits (Note 22, 23)	1,560	1,540	1,468
Fuel	652	882	918
Materials	216	210	201
Equipment rents	142	137	130
Depreciation and amortization	779	706	696
Purchased services and other (Note 10)	1,050	1,193	1,072
Total operating expenses	4,399	4,668	4,485
Operating income	3,311	3,124	2,831
Less:			
Other (income) expense (Note 4)	(7)	(89)	174
Other components of net periodic benefit recovery (Note 22)	(342)	(381)	(384)
Net interest expense (Note 5)	458	448	453
Income before income tax expense	3,202	3,146	2,588
Income tax expense (Note 6)	758	706	637
Net income	\$ 2,444	\$ 2,440	\$ 1,951
Earnings per share (Note 7)			
Basic earnings per share	\$ 18.05	\$ 17.58	\$ 13.65
Diluted earnings per share	\$ 17.97	\$ 17.52	\$ 13.61
Weighted-average number of shares (millions) (Note 7)			
Basic	135.5	138.8	142.9
Diluted	136.0	139.3	143.3

See Notes to Consolidated Financial Statements.

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

Year ended December 31 (in millions of Canadian dollars)	2020	2019	2018
Net income	\$ 2,444	\$ 2,440	\$ 1,951
Net gain (loss) in foreign currency translation adjustments, net of hedging activities	18	37	(60)
Change in derivatives designated as cash flow hedges	9	10	38
Change in pension and post-retirement defined benefit plans	(407)	(661)	(449)
Other comprehensive loss before income taxes	(380)	(614)	(471)
Income tax recovery on above items	88	135	169
Other comprehensive loss (Note 8)	(292)	(479)	(302)
Comprehensive income	\$ 2,152	\$ 1,961	\$ 1,649

See Notes to Consolidated Financial Statements.

CONSOLIDATED BALANCE SHEETS

As at December 31 (in millions of Canadian dollars, except Common Shares)

	2020	2019
Assets		
Current assets		
Cash and cash equivalents	\$ 147	\$ 133
Accounts receivable, net (Note 9)	825	805
Materials and supplies	208	182
Other current assets	141	90
	1,321	1,210
Investments (Note 11)	199	341
Properties (Note 12, 19)	20,422	19,156
Goodwill and intangible assets (Note 10, 13)	366	206
Pension asset (Note 22)	894	1,003
Other assets (Note 14, 19)	438	451
Total assets	\$ 23,640	\$ 22,367
Liabilities and shareholders' equity		
Current liabilities		
Accounts payable and accrued liabilities (Note 15, 19)	\$ 1,467	\$ 1,693
Long-term debt maturing within one year (Note 16, 17, 19)	1,186	599
	2,653	2,292
Pension and other benefit liabilities (Note 22)	832	785
Other long-term liabilities (Note 18, 19)	585	562
Long-term debt (Note 16, 17, 19)	8,585	8,158
Deferred income taxes (Note 6)	3,666	3,501
Total liabilities	16,321	15,298
Shareholders' equity		
Share capital (Note 20)		
Authorized unlimited Common Shares without par value. Issued and outstanding are 133.3 million and 137.0 million as at December 31, 2020 and 2019, respectively.	1,983	1,993
Authorized unlimited number of first and second preferred shares; none outstanding.		
Additional paid-in capital	55	48
Accumulated other comprehensive loss (Note 8)	(2,814)	(2,522)
Retained earnings	8,095	7,550
	7,319	7,069
Total liabilities and shareholders' equity	\$ 23,640	\$ 22,367

See Commitments and contingencies (Note 25).

See Notes to Consolidated Financial Statements.

Approved on behalf of the Board:*/s/ ISABELLE COURVILLE***Isabelle Courville, Director,
Chair of the Board***/s/ JANE L. PEVERETT***Jane L. Peverett, Director,
Chair of the Audit and Finance Committee**

CONSOLIDATED STATEMENTS OF CASH FLOWS

Year ended December 31 (in millions of Canadian dollars)	2020	2019	2018
Operating activities			
Net income	\$ 2,444	\$ 2,440	\$ 1,951
Reconciliation of net income to cash provided by operating activities:			
Depreciation and amortization	779	706	696
Deferred income tax expense (Note 6)	221	181	256
Pension recovery and funding (Note 22)	(250)	(360)	(321)
Foreign exchange (gain) loss on debt and lease liabilities (Note 4)	(14)	(94)	168
Settlement of forward starting swaps on debt issuance (Note 17)	—	—	(24)
Other operating activities, net	11	143	(79)
Change in non-cash working capital balances related to operations (Note 21)	(389)	(26)	65
Cash provided by operating activities	2,802	2,990	2,712
Investing activities			
Additions to properties	(1,671)	(1,647)	(1,551)
Investment in Detroit River Tunnel Partnership (Note 10)	(398)	—	—
Investment in Central Maine & Québec Railway (Note 10)	19	(174)	—
Proceeds from sale of properties and other assets	22	26	78
Other	(2)	(8)	15
Cash used in investing activities	(2,030)	(1,803)	(1,458)
Financing activities			
Dividends paid	(467)	(412)	(348)
Issuance of CP Common Shares (Note 23)	52	26	24
Purchase of CP Common shares (Note 20)	(1,509)	(1,134)	(1,103)
Issuance of long-term debt, excluding commercial paper (Note 16)	958	397	638
Repayment of long-term debt, excluding commercial paper (Note 16)	(84)	(500)	(753)
Net issuance of commercial paper (Note 16)	270	524	—
Net increase in short-term borrowings (Note 16)	5	—	—
Other	11	(12)	—
Cash used in financing activities	(764)	(1,111)	(1,542)
Effect of foreign currency fluctuations on U.S. dollar-denominated cash and cash equivalents	6	(4)	11
Cash position			
Increase (decrease) in cash and cash equivalents	14	72	(277)
Cash and cash equivalents at beginning of year	133	61	338
Cash and cash equivalents at end of year	\$ 147	\$ 133	\$ 61
Supplemental disclosures of cash flow information:			
Income taxes paid	\$ 582	\$ 506	\$ 318
Interest paid	\$ 443	\$ 444	\$ 463

See Notes to Consolidated Financial Statements.

CONSOLIDATED STATEMENTS OF CHANGES IN SHAREHOLDERS' EQUITY

(in millions of Canadian dollars, except per share data)	Share capital	Additional paid-in capital	Accumulated other comprehensive loss	Retained earnings	Total shareholders' equity
Balance at December 31, 2017	\$ 2,032	\$ 43	\$ (1,741)	\$ 6,103	\$ 6,437
Net income	—	—	—	1,951	1,951
Other comprehensive loss (Note 8)	—	—	(302)	—	(302)
Dividends declared (\$2.5125 per share)	—	—	—	(358)	(358)
Effect of stock-based compensation expense	—	11	—	—	11
CP Common Shares repurchased (Note 20)	(66)	—	—	(1,061)	(1,127)
Shares issued under stock option plan (Note 20)	36	(12)	—	—	24
Balance at December 31, 2018	2,002	42	(2,043)	6,635	6,636
Impact of accounting change	—	—	—	(5)	(5)
Balance at January 1, 2019, as restated	2,002	42	(2,043)	6,630	6,631
Net income	—	—	—	2,440	2,440
Other comprehensive loss (Note 8)	—	—	(479)	—	(479)
Dividends declared (\$3.1400 per share)	—	—	—	(434)	(434)
Effect of stock-based compensation expense	—	15	—	—	15
CP Common Shares repurchased (Note 20)	(54)	—	—	(1,086)	(1,140)
Shares issued under stock option plan (Note 20)	45	(9)	—	—	36
Balance at December 31, 2019	1,993	48	(2,522)	7,550	7,069
Impact of accounting change (Note 2)	—	—	—	(1)	(1)
Balance at January 1, 2020, as restated	1,993	48	(2,522)	7,549	7,068
Net income	—	—	—	2,444	2,444
Other comprehensive loss (Note 8)	—	—	(292)	—	(292)
Dividends declared (\$3.5600 per share)	—	—	—	(479)	(479)
Effect of stock-based compensation expense	—	17	—	—	17
CP Common Shares repurchased (Note 20)	(58)	—	—	(1,419)	(1,477)
Shares issued under stock option plan (Note 20)	48	(10)	—	—	38
Balance at December 31, 2020	\$ 1,983	\$ 55	\$ (2,814)	\$ 8,095	\$ 7,319

See Notes to Consolidated Financial Statements.

CANADIAN PACIFIC RAILWAY LIMITED

Notes to Consolidated Financial Statements

December 31, 2020

Canadian Pacific Railway Limited ("CPRL"), through its subsidiaries (collectively referred to as "CP" or "the Company"), operates a transcontinental railway in Canada and the United States ("U.S."). CP provides rail and intermodal transportation services over a network of approximately 13,000 miles, serving the principal business centres of Canada from Montréal, Québec, to Vancouver, British Columbia, and the U.S. Northeast and Midwest regions. CP's railway network feeds directly into the U.S. heartland from the East and West coasts. Agreements with other carriers extend the Company's market reach in Canada, throughout the U.S. and into Mexico. CP transports bulk commodities, merchandise freight and intermodal traffic. Bulk commodities include grain, coal, fertilizers and sulphur. Merchandise freight consists of finished vehicles and automotive parts, as well as forest, industrial and consumer products. Intermodal traffic consists largely of retail goods in overseas containers that can be transported by train, ship and truck, and in domestic containers and trailers that can be moved by train and truck.

1. Summary of significant accounting policies

Accounting principles generally accepted in the United States of America ("GAAP")

These Consolidated Financial Statements are expressed in Canadian dollars and have been prepared in accordance with GAAP.

Principles of consolidation

These Consolidated Financial Statements include the accounts of CP and all its subsidiaries. The Company's investments in which it has significant influence are accounted for using the equity method. Distributions received from equity method investees are classified using the nature of the distribution approach for cash flow presentation purposes, whereby distributions received are classified based on the nature of the activity or activities of the investee that generated the distribution as either a return on investment (classified as a cash inflow from operating activities) or a return of investment (classified as a cash inflow from investing activities). All intercompany accounts and transactions have been eliminated.

Use of estimates

The preparation of these Consolidated Financial Statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of revenues and expenses during the year, the reported amounts of assets and liabilities, and the disclosure of contingent assets and liabilities at the date of the financial statements. Management regularly reviews its estimates, including those related to environmental liabilities, pensions and other benefits, depreciable lives of properties, deferred income tax assets and liabilities, as well as legal and personal injury liabilities based upon currently available information. Actual results could differ from these estimates.

Revenue recognition

Revenue is recognized when obligations under the terms of a contract with a customer are satisfied. Revenue is measured as the amount of consideration the Company expects to receive in exchange for providing services. Government imposed taxes that the Company collects concurrent with revenue generating activities are excluded from revenue. In the normal course of business, the Company does not generate any material revenue through acting as an agent for other entities.

The Company provides rail freight transportation services to a wide variety of customers and transports bulk commodities, merchandise freight and intermodal traffic. The Company signs master service agreements with customers that dictate future services the Company is to perform for a customer at the time a bill of lading or service request is received. Each bill of lading or service request represents a separate distinct performance obligation that the Company is obligated to satisfy. The transaction price is generally in the form of a fixed fee determined at the inception of the bill of lading or service request. The Company allocates the transaction price to each distinct performance obligation based on the estimated standalone selling price for each performance obligation. As each bill of lading or service request represents a separate distinct performance obligation, the estimated standalone selling price is assessed at an observable price which is fair market value. Certain customer agreements include variable consideration in the form of rebates, discounts, or incentives. The expected value method is used to estimate variable consideration and is allocated to the applicable performance obligation and is recognized when the related performance obligation is satisfied. Additionally, the Company offers published rates for services through public tariff agreements in which a customer can request service, triggering a performance obligation the Company must satisfy. Railway freight revenues are recognized over time as services are provided based on the percentage of completed service method. Volume rebates to customers are accrued as a reduction of freight revenues based on estimated volumes and contract terms as freight service is provided. Freight revenues also include certain ancillary and other services provided in association with the performance of rail freight movements. Revenues from these activities are not material and therefore have been aggregated with the freight revenues from customer contracts with which they are associated.

Non-freight revenues, including revenues earned from passenger service operators, switching fees, and revenues from logistics services, are recognized at the point in time the services are provided or when the performance obligations are satisfied. Non-freight revenues also include leasing revenues.

Payment by customers is due upon satisfaction of performance obligations. Payment terms are such that amounts outstanding at the period end are expected to be collected within one reporting period. The Company invoices customers at the time the bill of lading or service request is processed and therefore the Company has no material unbilled receivables and no contract assets. All performance obligations not fully satisfied at period end are expected to be satisfied within the reporting period immediately following. Contracted customer incentives are amortized to income over the term of the related revenue contract.

Income taxes

The Company follows the liability method of accounting for income taxes. Deferred income tax assets and liabilities are determined based on differences between the financial reporting and tax bases of assets and liabilities using enacted tax rates and laws that will be in effect when the differences are expected to reverse.

The effect of a change in income tax rates on deferred income tax assets and liabilities is recognized in income in the period during which the change occurs.

When appropriate, the Company records a valuation allowance against deferred tax assets to reflect that these tax assets may not be realized. In determining whether a valuation allowance is appropriate, CP considers whether it is more likely than not that all or some portion of CP's deferred tax assets will not be realized, based on management's judgment using available evidence about future events.

At times, tax benefit claims may be challenged by a tax authority. Tax benefits are recognized only for tax positions that are more likely than not sustainable upon examination by tax authorities. The amount recognized is measured as the largest amount of benefit that is greater than 50% likely to be realized upon settlement. A liability for "unrecognized tax benefits" is recorded for any tax benefits claimed in CP's tax returns that do not meet these recognition and measurement standards.

Investment and other similar tax credits are deferred on the Company's Consolidated Balance Sheets and amortized to "Income tax expense" as the related asset is recognized in income. Income tax recovery or expense on items in "Accumulated other comprehensive loss" are recognized in "Income tax expense" as the related item is recognized in income.

Earnings per share

Basic earnings per share are calculated using the weighted-average number of the Company's Common Shares ("Common Shares") outstanding during the year. Diluted earnings per share are calculated using the treasury stock method for determining the dilutive effect of options.

Foreign currency translation

Assets and liabilities denominated in foreign currencies, other than those held through foreign subsidiaries, are translated into Canadian dollars at the year-end exchange rate for monetary items and at the historical exchange rates for non-monetary items. Foreign currency revenues and expenses are translated at the exchange rates in effect on the dates of the related transactions. Foreign exchange ("FX") gains and losses, other than those arising from the translation of the Company's net investment in foreign subsidiaries, are included in income.

The accounts of the Company's foreign subsidiaries are translated into Canadian dollars using the year-end exchange rate for assets and liabilities and the average exchange rates during the year for revenues, expenses, gains, and losses. FX gains and losses arising from the translation of the foreign subsidiaries' assets and liabilities are included in "Other comprehensive loss". A portion of U.S. dollar-denominated long-term debt has been designated as a hedge of the net investment in foreign subsidiaries. As a result, unrealized FX gains and losses on U.S. dollar-denominated long-term debt, designated as a hedge, are offset against FX gains and losses arising from the translation of foreign subsidiaries' accounts in "Other comprehensive loss".

Cash and cash equivalents

Cash and cash equivalents include highly liquid short-term investments that are readily convertible to cash with original maturities of three months or less, but excludes cash and cash equivalents subject to restrictions.

Accounts receivable

Accounts receivable from customers are recognized initially at fair value and subsequently measured at amortized cost less allowance for expected credit losses. Losses on accounts receivable are estimated based on historical credit loss experience of receivables with similar risk characteristics. Historical loss experience is adjusted to reflect any management expectations that current or future conditions will differ from conditions that existed for the period over which historical information is evaluated.

To determine expected credit losses, receivables are disaggregated by credit characteristics, type of customer service, customer line of business, and receivable aging. Receivables are considered to be in default and are written off against the allowance for credit losses when it is probable that all remaining contractual payments due will not be collected in accordance with the terms of the customer contracts. Subsequent recoveries of amounts previously written off are credited to earnings in the period recovered.

Materials and supplies

Materials and supplies are carried at the lower of average cost or market value and consist primarily of fuel and parts used in the repair and maintenance of track structures, equipment, locomotives and freight cars.

Properties

Fixed asset additions and major renewals are recorded at cost, including direct costs, attributable indirect costs and carrying costs, less accumulated depreciation and any impairment. When there is a legal obligation associated with the retirement of property, a liability, when reliably estimable, is initially recognized at its fair value and a corresponding asset retirement cost is added to the gross book value of the related asset and amortized to expense over the estimated term to retirement. The Company reviews the carrying amounts of its properties whenever changes in circumstances indicate that such carrying amounts may not be recoverable based on future undiscounted cash flows. When such properties are determined to be impaired, recorded asset values are revised to their fair value and an impairment loss is recognized.

The Company recognizes expenditures as additions to properties or operating expenses based on whether the expenditures increase the output or service capacity, lower the associated operating costs or extend the useful life of the properties and whether the expenditures exceed minimum physical and financial thresholds.

Much of the additions to properties, both new and replacement properties, are self-constructed. These are initially recorded at cost, including direct costs and attributable indirect costs, overheads and carrying costs. Direct costs include, among other things, labour costs, purchased services, equipment costs and material costs. Attributable indirect costs and overheads include incremental long-term variable costs resulting from the execution of capital projects. Indirect costs mainly include work trains, material distribution, highway vehicles and work equipment. Overheads primarily include a portion of the engineering department's costs, which plans, designs and administers these capital projects. These costs are allocated to projects by applying a measure consistent with the nature of the cost, based on cost studies. For replacement properties, the project costs are allocated to dismantling and installation based on cost studies. Dismantling work, which is expensed, is performed concurrently with the installation.

Ballast programs including undercutting, shoulder ballasting and renewal programs that form part of the annual track program are capitalized as this work, and the related added ballast material, significantly improves drainage, which in turn extends the life of ties and other track materials. These costs are tracked separately from the underlying assets and depreciated over the period to the next estimated similar ballast program. Spot replacement of ballast is considered a repair which is expensed as incurred.

The costs of large refurbishments are capitalized and locomotive overhauls are expensed as incurred, except where overhauls represent a betterment of the locomotive in which case costs are capitalized.

The Company capitalizes development costs for major new computer systems.

The Company follows group depreciation, which groups assets which are similar in nature and have similar economic lives. The property groups are depreciated on a straight-line basis reflecting their expected economic lives determined by depreciation studies. Depreciation studies are regular reviews of asset service lives, salvage values, accumulated depreciation and other related factors. Depreciation rates are established through these studies. Actual use and retirement of assets may vary from current estimates, and would be identified in the next study. These changes in expected economic lives would impact the amount of depreciation expense recognized in future periods. All track assets are depreciated using a straight-line method which recognizes the value of the asset consumed as a percentage of the whole life of the asset.

When depreciable property is retired or otherwise disposed of in the normal course of business, the book value, less net salvage proceeds, is charged to accumulated depreciation and if different than the assumptions under the depreciation study could potentially result in adjusted depreciation expense over a period of years. However, when removal costs exceed the salvage value on assets and the Company has no legal obligation to remove the assets, the removal costs incurred are charged to income in the period in which the assets are removed and are not charged to accumulated depreciation.

For certain asset classes, the historical cost of the asset is separately recorded in the Company's property records. This amount is retired from the property records upon retirement of the asset. For assets for which the historical cost cannot be separately identified the amount of the gross book value to be retired is estimated using either an indexation methodology, whereby the current replacement cost of the asset is indexed to the estimated year of installation for the asset, or a first-in, first-out approach, or statistical analysis is used to determine the age of the retired asset. CP uses indices that closely correlate to the principal costs of the assets.

There are a number of estimates inherent in the depreciation and retirement processes and as it is not possible to precisely estimate each of these variables until a group of property is completely retired, CP regularly monitors the estimated service lives of assets and the associated accumulated depreciation for each asset class to ensure depreciation rates are appropriate. If the recorded amounts of accumulated depreciation are greater or less than the amounts indicated by the depreciation studies, then the excess or deficit is amortized as a component of depreciation expense over the remaining service lives of the applicable asset classes.

For the sale or retirement of larger groups of depreciable assets that are unusual and were not considered in the Company's depreciation studies, CP records a gain or loss for the difference between net proceeds and net book value of the assets sold or retired. The accumulated depreciation to be retired includes asset-specific accumulated depreciation, when known, and an appropriate portion of the accumulated depreciation recorded for the relevant asset class as a whole, calculated using a cost-based allocation.

Rewards to the estimated useful lives and net salvage projections constitute a change in accounting estimate and are addressed prospectively by amending depreciation rates.

Equipment under finance lease is included in Properties and depreciated over the period of expected use.

Leases

The Company has leases for rolling stock, buildings, vehicles, railway equipment, roadway machines, and information systems hardware. CP has entered into rolling stock and roadway machine leases that are fully variable or contain both fixed and variable components. Variable components are dependent on the hours and miles that the underlying equipment has been used. Fixed term, short-term, and variable operating lease costs are recorded in "Equipment rents" and "Purchased services and other" on the Company's Consolidated Statements of Income. Components of finance lease costs are recorded in "Depreciation and amortization" and "Net interest expense" on the Company's Consolidated Statements of Income.

The Company determines lease existence and classification at the lease inception date. Leases are identified when an agreement conveys the right to control identified property for a period of time in exchange for consideration. The Company recognizes both an operating lease liability and right-of-use ("ROU") asset for operating leases with fixed terms and in-substance fixed terms. ROU assets represent our right to use an underlying asset for the lease term and lease liabilities represent our obligation to make lease payments arising from the lease. Operating and finance lease ROU assets and liabilities are recognized at the lease commencement date based on the present value of lease payments over the lease term. Lease payments include fixed and variable payments that are based on an index or a rate. If the Company's leases do not provide a readily determinable implicit interest rate, the Company uses internal incremental secured borrowing rates for comparable tenor in the same currency at the commencement date in determining the present value of lease payments. Operating and finance lease ROU assets also include lease prepayments and initial direct costs, but are reduced by lease incentives. The lease term may include periods associated with options to extend or exclude periods associated with options to terminate the lease when it is reasonably certain that the Company will exercise these options.

The Company has short-term operating leases with terms of 12 months or less, some of which include options to purchase that the Company is not reasonably certain to exercise. The Company has elected to apply the recognition exemption and, as such, accounts for leases with a term of 12 months or less off-balance sheet. Therefore, lease payments on these short-term operating leases are not included in operating lease ROU assets and liabilities, but are recognized as an expense in the Company's Consolidated Statements of Income on a straight-line basis over the term of the lease. Further, the Company has elected to combine lease and non-lease components for all leases, except for leases of roadway machines and information systems hardware.

Assets held for sale

Assets to be disposed that meet the held for sale criteria are reported in "Other assets" at the lower of their carrying amount and fair value, less costs to sell, and are no longer depreciated.

Goodwill and intangible assets

Goodwill represents the excess of the purchase price over the fair value of identifiable net assets upon acquisition of a business. Goodwill is assigned to the reporting units that are expected to benefit from the business acquisition which, after integration of operations with the railway network, may be different than the acquired business.

The carrying value of goodwill, which is not amortized, is assessed for impairment annually in the fourth quarter of each year as at October 1st, or more frequently as economic events dictate. The Company has the option of performing an assessment of certain qualitative factors to determine if it is more likely than not that the fair value of a reporting unit is less than its carrying value or proceeding directly to a quantitative impairment test. Qualitative factors include but are not limited to, economic, market and industry conditions, cost factors and overall financial performance of the reporting unit. If the assessment of qualitative factors indicates that the carrying value is less than the fair value, then performing the quantitative goodwill impairment test is unnecessary. The quantitative assessment compares the fair value of the reporting unit to its carrying value, including goodwill. If the fair value of the reporting unit is less than its carrying value, goodwill is impaired. The impairment charge that would be recognized is the excess of the carrying value over the fair value of the reporting unit, limited to the total amount of goodwill allocated to the reporting unit.

Intangible assets with finite lives are amortized on a straight-line basis over the estimated useful lives of the respective assets. Favourable leases, customer relationships and interline contracts have amortization periods ranging from 15 to 20 years. When there is a change in the estimated useful life of an intangible asset with a finite life, amortization is adjusted prospectively.

Pensions and other benefits

Pension costs are actuarially determined using the projected-benefit method pro-rated over the credited service periods of employees. This method incorporates management's best estimates of expected plan investment performance, salary escalation and retirement ages of employees. The expected return on fund assets is calculated using market-related asset values developed from a five-year average of market values for the fund's public equity securities and absolute return strategies (with each prior year's market value adjusted to the current date for assumed investment income during the intervening period) plus the market value of the fund's fixed income, real estate, infrastructure and private debt securities, subject to the market-related asset value not being greater than 120% of the market value nor being less than 80% of the market value. The discount rate used to determine the projected-benefit obligation is based on blended market interest rates on high-quality debt instruments with matching cash flows. Unrecognized actuarial gains and losses in excess of 10% of the greater of the benefit obligation and the market-related value of plan assets are amortized over the expected average remaining service period of active employees expected to receive benefits under the plan (approximately 12 years). Prior service costs arising from collectively bargained amendments to pension plan benefit provisions are amortized over the term of the applicable union agreement. Prior service costs arising from all other sources are amortized over the expected average remaining service period of active employees who are expected to receive benefits under the plan at the date of amendment.

Costs for post-retirement and post-employment benefits other than pensions, including post-retirement health care and life insurance and some workers' compensation and long-term disability benefits in Canada, are actuarially determined on a basis similar to pension costs.

The over or under funded status of defined benefit pension and other post-retirement benefit plans are measured as the difference between the fair value of the plan assets and the benefit obligation, and are recognized on the balance sheets. In addition, any unrecognized actuarial gains and losses and prior service costs and credits that arise during the period are recognized as a component of "Other comprehensive loss", net of tax.

Gains and losses on post-employment benefits that do not vest or accumulate, including some workers' compensation and long-term disability benefits in Canada, are included immediately on the Company's Consolidated Statements of Income as "Other components of net periodic benefit cost or recovery".

The current service cost component of net periodic benefit cost is reported in "Compensation and benefits" for pensions and post-retirement benefits, and in "Purchased services and other" for self-insured workers' compensation and long-term disability benefits on the Company's Consolidated Statements of Income. Other components of net periodic benefit cost or recovery are reported in "Other components of net periodic benefit cost or recovery" outside of Operating income on the Company's Consolidated Statements of Income.

Capitalization of pension costs, when applicable, is restricted to the current service cost component of net periodic benefit cost.

Financial instruments

Financial instruments are contracts that give rise to a financial asset of one party and a financial liability or equity instrument of another party. Financial instruments are recognized initially at fair value, which is the amount of consideration that would be agreed upon in an arm's-length transaction between willing parties.

Subsequent measurement depends on how the financial instruments have been classified. Accounts receivable and other investments, classified as loans and receivables, are measured at amortized cost, using the effective interest method. Cash and cash equivalents and derivatives are classified as held for trading and are measured at fair value. Accounts payable, accrued liabilities, short-term borrowings, other long-term liabilities, and long-term debt are also measured at amortized cost.

Derivative financial instruments

Derivative financial and commodity instruments may be used from time to time by the Company to manage its exposure to risks relating to foreign currency exchange rates, stock-based compensation, interest rates, and fuel prices. When CP utilizes derivative instruments in hedging relationships, CP identifies, designates, and documents those hedging transactions and regularly tests the transactions to demonstrate effectiveness in order to continue hedge accounting.

All derivative instruments are classified as held for trading and recorded at fair value. Any change in the fair value of derivatives that are not designated as hedges is recognized in the period in which the change occurs in the Company's Consolidated Statements of Income in the line item to which the derivative instrument is related.

For fair value hedges, the periodic changes in value are recognized in income, on the same line as the changes in value of the hedged items are also recorded. For an effective cash flow hedge, the entire change in value of the hedging instrument is recognized in "Other comprehensive loss". The change in value of the effective cash flow hedge remains in "Accumulated other comprehensive loss" until the related hedged item settles, at which time amounts recognized in "Accumulated other comprehensive loss" are reclassified to the same income or balance sheet account that records the hedged item.

Cash flows relating to derivative instruments designated as hedges are included in the same line as the related hedged items on the Company's Consolidated Statements of Cash Flows.

Environmental remediation

Environmental remediation accruals, recorded on an undiscounted basis unless a reliably determinable estimate as to amount and timing of costs can be established, cover site-specific remediation programs. The accruals are recorded when the costs to remediate are probable and reasonably estimable. Certain future costs to monitor sites are discounted at an adjusted risk-free rate. Provisions for environmental remediation costs are recorded in "Other long-term liabilities", except for the current portion, which is recorded in "Accounts payable and accrued liabilities".

Stock-based compensation

CP follows the fair value based approach to account for stock options. Compensation expense and an increase in "Additional paid-in capital" are recognized for stock options over their vesting period or over the period from the grant date to the date employees become eligible to retire, when this is shorter than the vesting period, based on their fair values on the grant date as determined using the Black-Scholes option-pricing model. Forfeitures are estimated at issuance and monitored on a periodic basis. Any consideration paid by employees on exercise of stock options is credited to "Share capital" when the option is exercised and the recorded fair value of the option is removed from "Additional paid-in capital" and credited to "Share capital".

Compensation expense is also recognized for performance share units ("PSUs"), performance deferred share units ("PDSUs"), deferred share units ("DSUs"), and restricted share units ("RSUs") that settle in cash using the fair value method. Compensation expense is recognized over the vesting period or over the period from the grant date to the date employees become eligible to retire, when this is shorter than the vesting period where applicable. Forfeitures are estimated at issuance and monitored on a periodic basis.

The employee share purchase plan gives rise to compensation expense that is recognized using the issue price by amortizing the cost over the vesting period.

2. Accounting changes

Implemented in 2020

Financial Instruments - Credit Losses

On January 1, 2020, the Company adopted the new Accounting Standards Update ("ASU") 2016-13, issued by the Financial Accounting Standards Board ("FASB"), and all related amendments under FASB Accounting Standards Codification ("ASC") Topic 326, Financial Instruments - Credit Losses. Using a modified retrospective approach, the Company recognized a cumulative-effect adjustment to its opening retained earnings balance in the period of adoption. Accordingly, comparative financial information has not been restated and continues to be reported under the accounting standards in effect for those periods.

The impact of the adoption of ASC 326 as at January 1, 2020 was an increase in the allowance for credit losses of \$1 million, with the offsets to "Deferred income taxes" and "Retained earnings" on the Company's Consolidated Balance Sheet. See Note 9 for further discussion of the current period credit loss.

Simplification of Financial Disclosures about Guarantors

During the second quarter of 2020, the Company early adopted the Securities and Exchange Commission amendments to the financial disclosure requirements for guarantors and issuers of guaranteed securities, as specified in Rule 3-10 of Regulation S-X. The amendments simplify disclosure requirements by replacing condensed consolidating financial information ("CCFI") with summarized financial information and expanded qualitative non-financial disclosures about the guarantees, issuers, and guarantors. This disclosure can be found in Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations, Liquidity and Capital Resources.

3. Revenues

The following table disaggregates the Company's revenues from contracts with customers by major source:

(in millions of Canadian dollars)	2020	2019	2018
Freight			
Grain	\$ 1,829	\$ 1,684	\$ 1,566
Coal	566	682	673
Potash	493	462	486
Fertilizers and sulphur	290	250	243
Forest products	328	304	284
Energy, chemicals and plastics	1,519	1,534	1,243
Metals, minerals and consumer products	629	752	797
Automotive	324	352	322
Intermodal	1,563	1,593	1,538
Total freight revenues	7,541	7,613	7,152
Non-freight excluding leasing revenues	107	116	102
Revenues from contracts with customers	7,648	7,729	7,254
Leasing revenues	62	63	62
Total revenues	\$ 7,710	\$ 7,792	\$ 7,316

Contract liabilities

Contract liabilities represent payments received for performance obligations not yet satisfied and relate to deferred revenue and are presented as components of "Accounts payable and accrued liabilities" and "Other long-term liabilities" on the Company's Consolidated Balance Sheets.

The following table summarizes the changes in contract liabilities for the years ended December 31, 2020 and 2019:

(in millions of Canadian dollars)	2020	2019
Opening balance	\$ 146	\$ 2
Revenue recognized that was included in the contract liability balance at the beginning of the period	(100)	(2)
Increase due to consideration received, net of revenue recognized during the period	15	146
Closing balance	\$ 61	\$ 146

4. Other (income) expense

(in millions of Canadian dollars)	2020	2019	2018
Foreign exchange (gain) loss on debt and lease liabilities	\$ (14)	\$ (94)	\$ 168
Other foreign exchange (gains) losses	(1)	(4)	3
Other	8	9	3
Other (income) expense	\$ (7)	\$ (89)	\$ 174

5. Net interest expense

(in millions of Canadian dollars)	2020	2019	2018
Interest cost	\$ 478	\$ 471	\$ 475
Interest capitalized to Properties	(16)	(17)	(20)
Interest expense	462	454	455
Interest income	(4)	(6)	(2)
Net interest expense	\$ 458	\$ 448	\$ 453

Interest expense includes interest on finance leases of \$11 million for the year ended December 31, 2020 (2019 – \$11 million; 2018 – \$11 million).

6. Income taxes

The following is a summary of the major components of the Company's income tax expense:

(in millions of Canadian dollars)	2020	2019	2018
Current income tax expense	\$ 537	\$ 525	\$ 381
Deferred income tax expense			
Origination and reversal of temporary differences	277	316	214
Effect of tax rate decrease	(32)	(95)	(21)
Effect of hedge of net investment in foreign subsidiaries	(18)	(38)	64
Other	(6)	(2)	(1)
Total deferred income tax expense	221	181	256
Total income taxes	\$ 758	\$ 706	\$ 637
Income before income tax expense			
Canada	\$ 2,518	\$ 2,392	\$ 1,788
Foreign	684	754	800
Total income before income tax expense	\$ 3,202	\$ 3,146	\$ 2,588
Income tax expense			
Current			
Canada	\$ 412	\$ 410	\$ 336
Foreign	125	115	45
Total current income tax expense	537	525	381
Deferred			
Canada	231	141	174
Foreign	(10)	40	82
Total deferred income tax expense	221	181	256
Total income taxes	\$ 758	\$ 706	\$ 637

The provision for deferred income taxes arises from temporary differences in the carrying values of assets and liabilities for financial statement and income tax purposes and the effect of loss carry forwards. The items comprising the deferred income tax assets and liabilities are as follows:

(in millions of Canadian dollars)	2020	2019
Deferred income tax assets		
Amount related to tax losses carried forward	\$ 17	\$ 6
Liabilities carrying value in excess of tax basis	131	139
Unrealized foreign exchange losses	4	26
Environmental remediation costs	22	22
Other	4	4
Total net deferred income tax assets	178	197
Deferred income tax liabilities		
Properties carrying value in excess of tax basis	3,708	3,524
Pensions carrying value in excess of tax basis	43	83
Other	93	91
Total deferred income tax liabilities	3,844	3,698
Total net deferred income tax liabilities	\$ 3,666	\$ 3,501

The Company's consolidated effective income tax rate differs from the expected Canadian statutory tax rates. Expected income tax expense at statutory rates is reconciled to income tax expense as follows:

(in millions of Canadian dollars, except percentage)	2020	2019	2018
Statutory federal and provincial income tax rate (Canada)	26.31 %	26.77 %	26.86 %
Expected income tax expense at Canadian enacted statutory tax rates	\$ 842	\$ 842	\$ 695
(Decrease) increase in taxes resulting from:			
(Gains) losses not subject to tax	(23)	(19)	8
Canadian tax rate differentials	(3)	—	—
Foreign tax rate differentials	(32)	(33)	(55)
Effect of tax rate decrease	(32)	(95)	(21)
Valuation allowance	—	(5)	5
Unrecognized tax benefits	(7)	33	—
Other	13	(17)	5
Income tax expense	\$ 758	\$ 706	\$ 637

In 2020, the Company revalued its deferred income tax balances as a result of a tax filing election for the state of North Dakota resulting in a lower corporate income tax rate and a net recovery of \$29 million.

In 2019, the Company revalued its deferred income tax balances as a result of a corporate income tax rate decrease in the province of Alberta, resulting in a net recovery of \$88 million.

In 2018, the Company revalued its deferred income tax balances as a result of corporate income tax rate decreases in the states of Iowa and Missouri, resulting in a net recovery of \$21 million.

The Company has not provided a deferred liability for the income taxes, if any, which might become payable on any temporary difference associated with its foreign investments because the Company intends to indefinitely reinvest in its foreign investments and has no intention to realize this difference by a sale of its interest in foreign investments. It is not practical to calculate the amount of the deferred tax liability.

It is more likely than not that the Company will realize the majority of its deferred income tax assets from the generation of future taxable income, as the payments for provisions, reserves and accruals are made and losses and tax credits carried forward are utilized.

At December 31, 2020, the Company had tax effected operating losses carried forward of \$15 million (2019 – \$4 million), which have been recognized as a deferred tax asset. The losses carried forward will begin to expire in 2031. The Company expects to fully utilize these tax effected operating losses before their expiry. The Company did not have any minimum tax credits or investment tax credits carried forward.

At December 31, 2020, the Company had \$2 million (2019 – \$2 million) in tax effected capital losses carried forward recognized as a deferred tax asset. The Company has no unrecognized tax benefits from capital losses at December 31, 2020 and 2019.

The following table provides a reconciliation of uncertain tax positions in relation to unrecognized tax benefits for Canada and the U.S. for the year ended December 31:

(in millions of Canadian dollars)	2020	2019	2018
Unrecognized tax benefits at January 1	\$ 52	\$ 13	\$ 13
Increase in unrecognized:			
Tax benefits related to the current year	—	9	1
Tax benefits related to prior years	10	34	—
Dispositions:			
Gross uncertain tax benefits related to prior years	(9)	—	(1)
Settlements with taxing authorities	2	(4)	—
Unrecognized tax benefits at December 31	\$ 55	\$ 52	\$ 13

If these uncertain tax positions were recognized, all of the amount of unrecognized tax positions as at December 31, 2020 would impact the Company's effective tax rate.

During the fourth quarter of 2019, a tax authority proposed an adjustment for a prior tax year without assessing taxes. Although the Company had commenced action to have the proposal removed, an increase in uncertain tax position was recorded on deferred income tax liability and expense in the amount of \$24 million. While the proposed adjustment was withdrawn during 2020, the ultimate resolution of this matter may give rise to further favourable or unfavourable adjustments to deferred tax, the timing and amount of which are not determinable at this time.

The Company recognizes accrued interest and penalties related to unrecognized tax benefits as a component of "Income tax expense" in the Company's Consolidated Statements of Income. The net amount of accrued interest and penalties in 2020 was a \$1 million recovery (2019 – \$1 million recovery; 2018 – \$nil). The total amount of accrued interest and penalties associated with unrecognized tax benefits at December 31, 2020 was \$9 million (2019 – \$10 million; 2018 – \$11 million).

The Company and its subsidiaries are subject to either Canadian federal and provincial income tax, U.S. federal, state and local income tax, or the relevant income tax in other international jurisdictions. The Company has substantially concluded all Canadian federal and provincial income tax matters for the years through 2014. The federal and provincial income tax returns filed for 2015 and subsequent years remain subject to examination by the Canadian taxation authorities. The Internal Revenue Service ("IRS") audit for 2012 and 2013 has been settled. The income tax returns for 2016 and subsequent years continue to remain subject to examination by the IRS and U.S. state tax jurisdictions. The Company believes that it has recorded sufficient income tax reserves at December 31, 2020 with respect to these income tax examinations.

7. Earnings per share

Basic earnings per share has been calculated using Net income for the year divided by the weighted-average number of shares outstanding during the year.

Diluted earnings per share has been calculated using the treasury stock method which assumes that any proceeds received from the exercise of in-the-money options would be used to purchase CP Common Shares at the average market price for the period. For purposes of this calculation, at December 31, 2020, there were 1.4 million dilutive options outstanding (2019 – 1.6 million; 2018 – 1.3 million).

The number of shares used in the earnings per share calculations are reconciled as follows:

(in millions of Canadian dollars, except per share data)	2020	2019	2018
Net income	\$ 2,444	\$ 2,440	\$ 1,951
Weighted-average basic shares outstanding (millions)	135.5	138.8	142.9
Dilutive effect of stock options (millions)	0.5	0.5	0.4
Weighted-average diluted shares outstanding (millions)	136.0	139.3	143.3
Earnings per share – basic	\$ 18.05	\$ 17.58	\$ 13.65
Earnings per share – diluted	\$ 17.97	\$ 17.52	\$ 13.61

In 2020, there were no options excluded from the computation of diluted earnings per share (2019 – nil; 2018 – 0.2 million).

8. Other comprehensive loss and accumulated other comprehensive loss

The components of Other comprehensive loss and the related tax effects are as follows:

(in millions of Canadian dollars)	Before tax amount	Income tax (expense) recovery	Net of tax amount
For the year ended December 31, 2020			
Unrealized foreign exchange (loss) gain on:			
Translation of the net investment in U.S. subsidiaries	\$ (118)	\$ —	\$ (118)
Translation of the U.S. dollar-denominated long-term debt designated as a hedge of the net investment in U.S. subsidiaries (Note 17)	136	(18)	118
Realized loss on derivatives designated as cash flow hedges recognized in income	9	(3)	6
Change in pension and other benefits actuarial gains and losses	(403)	108	(295)
Change in prior service pension and other benefit costs	(4)	1	(3)
Other comprehensive loss	\$ (380)	\$ 88	\$ (292)
For the year ended December 31, 2019			
Unrealized foreign exchange (loss) gain on:			
Translation of the net investment in U.S. subsidiaries	\$ (251)	\$ —	\$ (251)
Translation of the U.S. dollar-denominated long-term debt designated as a hedge of the net investment in U.S. subsidiaries (Note 17)	288	(38)	250
Realized loss on derivatives designated as cash flow hedges recognized in income	10	(2)	8
Change in pension and other benefits actuarial gains and losses	(661)	175	(486)
Other comprehensive loss	\$ (614)	\$ 135	\$ (479)
For the year ended December 31, 2018			
Unrealized foreign exchange gain (loss) on:			
Translation of the net investment in U.S. subsidiaries	\$ 419	\$ —	\$ 419
Translation of the U.S. dollar-denominated long-term debt designated as a hedge of the net investment in U.S. subsidiaries (Note 17)	(479)	64	(415)
Change in derivatives designated as cash flow hedges:			
Realized loss on cash flow hedges recognized in income	10	(3)	7
Unrealized gain on cash flow hedges and other	28	(8)	20
Change in pension and other benefits actuarial gains and losses	(447)	115	(332)
Change in prior service pension and other benefit costs	(2)	1	(1)
Other comprehensive loss	\$ (471)	\$ 169	\$ (302)

The components of Accumulated other comprehensive loss, net of tax, are as follows:

(in millions of Canadian dollars)	2020	2019
Unrealized foreign exchange gain on translation of the net investment in U.S. subsidiaries	\$ 493	\$ 611
Unrealized foreign exchange loss on translation of the U.S. dollar-denominated long-term debt designated as a hedge of the net investment in U.S. subsidiaries	(381)	(499)
Net deferred losses on derivatives and other	(48)	(54)
Amounts for defined benefit pension and other post-retirement plans not recognized in income (Note 22)	(2,878)	(2,580)
Accumulated other comprehensive loss	\$ (2,814)	\$ (2,522)

Changes in Accumulated other comprehensive loss by component are as follows:

(in millions of Canadian dollars)	Foreign currency net of hedging activities ⁽¹⁾	Derivatives and other ⁽¹⁾	Pension and post-retirement defined benefit plans ⁽¹⁾	Total ⁽¹⁾
Opening balance, January 1, 2020	\$ 112	\$ (54)	\$ (2,580)	\$ (2,522)
Other comprehensive loss before reclassifications	—	(2)	(430)	(432)
Amounts reclassified from accumulated other comprehensive loss	—	8	132	140
Net other comprehensive income (loss)	—	6	(298)	(292)
Closing balance, December 31, 2020	\$ 112	\$ (48)	\$ (2,878)	\$ (2,814)
Opening balance, January 1, 2019	\$ 113	\$ (62)	\$ (2,094)	\$ (2,043)
Other comprehensive loss before reclassifications	(1)	—	(550)	(551)
Amounts reclassified from accumulated other comprehensive loss	—	8	64	72
Net other comprehensive (loss) income	(1)	8	(486)	(479)
Closing balance, December 31, 2019	\$ 112	\$ (54)	\$ (2,580)	\$ (2,522)

⁽¹⁾ Amounts are presented net of tax.

Amounts in Pension and post-retirement defined benefit plans reclassified from Accumulated other comprehensive loss are as follows:

(in millions of Canadian dollars)	2020	2019
Amortization of prior service costs ⁽¹⁾	\$ (1)	—
Recognition of net actuarial loss ⁽¹⁾	180	84
Total before income tax	179	84
Income tax recovery	(47)	(20)
Total net of income tax	\$ 132	\$ 64

⁽¹⁾ Impacts "Other components of net periodic benefit recovery" on the Consolidated Statements of Income.

9. Accounts receivable, net

(in millions of Canadian dollars)	As at December 31, 2020			As at December 31, 2019 ⁽¹⁾		
	Freight	Non-Freight	Total	Freight	Non-Freight	Total
Total accounts receivable	\$ 662	\$ 203	\$ 865	\$ 637	\$ 210	\$ 847
Allowance for credit losses	(25)	(15)	(40)	(26)	(16)	(42)
Total accounts receivable, net	\$ 637	\$ 188	\$ 825	\$ 611	\$ 194	\$ 805

⁽¹⁾ Prior year amounts have not been adjusted under the modified retrospective method (Note 2).

(in millions of Canadian dollars)	For the twelve months ended December 31, 2020		
	Freight	Non-Freight	Total
Allowance for credit losses, opening balance ⁽¹⁾	\$ (27)	\$ (16)	\$ (43)
Current period credit loss provision, net	2	1	3
Allowance for credit losses, closing balance	\$ (25)	\$ (15)	\$ (40)

⁽¹⁾ Opening balance at January 1, 2020 was restated as described in Note 2.

10. Business combinations

D RTP

On December 22, 2020, CP completed its acquisition of the 83.5% ownership of the Detroit River Tunnel Partnership ("DRTP") held by OMERS Infrastructure Management Inc. ("OMERS") for cash, net of cash acquired, of \$398 million. The purchase price is subject to customary closing adjustments, including any final adjustment for closing working capital and certain closing costs. With this acquisition CP obtained 100% ownership of DRTP. The acquisition of DRTP will reduce CP's operating costs related to movements through the tunnel which amounted to approximately \$34 million in 2020, and better integrate the eastern part of the network. DRTP owns a 1.6-mile rail tunnel linking Windsor, Ontario, and Detroit, Michigan and additional, separate lands in both cities. The acquisition was funded with cash from operations and CP's commercial paper program.

The acquisition of DRTP has been accounted for as a business combination under the acquisition method of accounting. The acquired assets and assumed liabilities are recorded at their estimated fair values at the date of acquisition. The fair values were estimated by applying an income approach using the discounted cash flow method of future cash flows, appraised land values reflecting a corridor enhancement factor where appropriate, and depreciated replacement cost for depreciable assets including the tunnel, track, signaling systems, and other railway related infrastructure assets.

Prior to the close of the transaction, CP owned a 16.5% interest in DRTP, which was accounted for as an equity method investment. The previously held equity investment was remeasured to fair value which was determined from the negotiated purchase price that reflected a market value established in a competitive bid process. As a result of the acquisition, the Company recognized a before-tax gain of \$68 million on the remeasurement to fair value of its equity interest within "Purchased services and other", calculated as the difference between the fair value of CP's 16.5% interest in DRTP of \$81 million and the book value of the interest of \$13 million.

The purchase price allocation was prepared on a preliminary basis and is subject to change as additional information becomes available concerning the fair value and tax bases of the net assets acquired. Any adjustments to the purchase price allocation will be made as soon as practicable but no later than one year from the date of acquisition.

The following summarizes the estimated fair values of the acquired assets and liabilities of DRTP:

(in millions of Canadian dollars)	December 22, 2020	
Fair value of net assets acquired:		
Accounts receivable, net	\$	5
Properties		436
Intangible assets (Note 13)		4
Accounts payable and accrued liabilities	(1)	
Deferred taxes	(55)	
Total identifiable assets and liabilities	\$	389
Goodwill (Note 13)		90
	\$	479
Consideration:		
Cash, net of cash acquired	\$	398
Fair value of previously held equity method investment		81
Total consideration	\$	479

The goodwill of \$90 million relates primarily to the contract that DRTP has for CP's use of the tunnel and deferred taxes recognized as a result of the purchase price allocation. The goodwill recognized is not deductible for tax purposes.

Prior to the acquisition of DRTP, CP had pre-existing agreements to use the tunnel and to operate and manage the tunnel on behalf of DRTP. On acquisition, no gain or loss was recognized in respect of the effective settlement of these pre-existing relationships as they were determined to be at fair market value based on an assessment of current market conditions and market participants.

Acquired cash and cash equivalents of \$6 million is presented as a reduction of cash used in investing activities in the Company's Consolidated Statements of Cash Flows.

CP has not provided pro forma information relating to the pre-acquisition period as it is not material.

CMQ

On December 30, 2019, CP purchased 100% of Central Maine & Québec Railway Canada Inc. ("CMQ Canada") and Central Maine & Québec Railway U.S. Inc. ("CMQ U.S.") (together "CMQ") for cash consideration of \$174 million. CMQ owns 237 miles of rail lines in Québec and 244 miles of rail lines in Maine and Vermont.

CMQ U.S.

The acquisition of CMQ U.S. was subject to approval from the United States Surface Transportation Board ("STB"). From the December 30, 2019 date of purchase, all purchased shares of CMQ U.S. were held in an independent voting trust (the "Trust") pending the STB's approval of CP's application for control of CMQ U.S. Approval was granted with an effective date of June 3, 2020. Between December 30, 2019 and June 3, 2020, CP accounted for its acquisition of CMQ U.S. as an equity method investment. During this time, CP paid additional consideration for CMQ of \$3 million, representing changes from the finalization of previously estimated closing date working capital.

On June 3, 2020 the Trust was dissolved and CP assumed control of CMQ U.S. At this time, CP accounted for its acquisition in CMQ U.S. as a business combination using the acquisition method of accounting. Accordingly, the acquired tangible and intangible assets and assumed liabilities were recorded at their estimated fair values as at June 3, 2020 and results from operations and cash flows were consolidated prospectively. There was no material change in the acquisition-date fair value of the equity interest held by the Company in CMQ U.S. immediately before the acquisition date. Fair values were determined primarily through the use of an income approach.

After a measurement period adjustment of \$1 million to increase Other long-term liabilities and goodwill resulting from the finalization of acquisition date deferred tax, the final allocation of total consideration to the fair values of the acquired assets and liabilities of CMQ U.S. is summarized as follows:

(in millions of Canadian dollars)	June 3, 2020
Fair value of net assets acquired:	
Cash and cash equivalents	\$ 22
Accounts receivable, net	2
Properties	54
Intangible assets (Note 13)	27
Accounts payable and accrued liabilities	(13)
Other long-term liabilities	(6)
Total identifiable assets and liabilities	\$ 86
Goodwill (Note 13)	52
	\$ 138
Consideration:	
Fair value of previously held equity method investment	\$ 138

Goodwill of \$52 million relates primarily to expected operating business synergies between the Company and CMQ U.S. The factors that contribute to the goodwill are revenue growth from customers which are currently not served by CP, access to new routes, and an assembled workforce. Goodwill recognized is not deductible for tax purposes.

Intangible assets of \$27 million reflect customer lists acquired in the purchase of CMQ U.S., and have amortization periods of 20 years.

Acquired cash and cash equivalents of \$22 million is presented as a reduction of cash used in investing activities on the Company's Consolidated Statement of Cash Flows, and is presented net of finalized closing working capital adjustments for CMQ of \$3 million as described above.

CP has not provided pro forma information relating to the pre-acquisition period as it is not material.

CMQ Canada

The acquisition of CMQ Canada was accounted for as a business combination under the acquisition method of accounting. The acquired tangible and intangible assets and assumed liabilities are recorded at their estimated fair values at the date of acquisition.

There have been no adjustments to the preliminary purchase price allocation. The final purchase price and allocation of the total consideration to the fair values of assets and liabilities acquired for CMQ Canada is summarized as follows:

(in millions of Canadian dollars)	December 30, 2019	
Fair value of net assets acquired:		
Accounts receivable, net	\$	7
Properties		42
Intangible assets (Note 13)		5
Accounts payable and accrued liabilities		(2)
Long-term debt maturing within one year (Note 16)		(11)
Other long-term liabilities		(4)
Total identifiable assets and liabilities		37
Goodwill (Note 13)		10
	\$	47
Consideration:		
Cash, net of cash acquired	\$	47

The goodwill of \$10 million relates primarily to expected operating business synergies. The factors that contribute to the goodwill are revenue growth from customers which are currently not served by CP, access to new routes and an assembled workforce. The goodwill recognized is not deductible for tax purposes.

CP has not provided pro forma information relating to the pre-acquisition period as it is not material.

11. Investments

(in millions of Canadian dollars)	2020	2019
Investment in CMQ U.S. accounted for on an equity basis (Note 10)	\$ —	\$ 127
Other rail investments accounted for on an equity basis	150	166
Other investments	49	48
Total investments	\$ 199	\$ 341

12. Properties

(in millions of Canadian dollars except percentages)	2020		2020		2019		
	Weighted-average annual depreciation rate	Cost	Accumulated depreciation	Net book value	Cost	Accumulated depreciation	Net book value
Track and roadway	2.8 %	\$ 20,676	\$ 5,859	\$ 14,817	\$ 19,299	\$ 5,522	\$ 13,777
Buildings	2.9 %	937	259	678	833	237	596
Rolling stock	2.8 %	4,702	1,498	3,204	4,529	1,445	3,084
Information systems software ⁽¹⁾	9.3 %	569	253	316	527	215	312
Other	5.2 %	2,167	760	1,407	2,067	680	1,387
Total		\$ 29,051	\$ 8,629	\$ 20,422	\$ 27,255	\$ 8,099	\$ 19,156

⁽¹⁾ During 2020, CP capitalized costs attributable to the design and development of internal-use software in the amount of \$45 million (2019 – \$55 million; 2018 – \$53 million). Current year depreciation expense related to internal use software was \$42 million (2019 – \$44 million; 2018 – \$49 million).

Finance leases included in properties

(in millions of Canadian dollars)	2020			2019		
	Cost	Accumulated depreciation	Net book value	Cost	Accumulated depreciation	Net book value
Rolling stock	302	138	164	303	130	173
Other	8	1	7	4	—	4
Total assets held under finance lease	\$ 310	\$ 139	\$ 171	\$ 307	\$ 130	\$ 177

13. Goodwill and intangible assets

(in millions of Canadian dollars)	Goodwill		Intangible assets			Net carrying amount	Total goodwill and intangible assets
	Net carrying amount	Cost	Accumulated amortization	—	—		
Balance at December 31, 2018	\$ 194	\$ 22	\$ (14)	\$ 8	\$ 202		
Additions (Note 10)	10	5	—	5	15		
Amortization	—	—	(1)	(1)	(1)		
Foreign exchange impact	(10)	—	—	—	(10)		
Balance at December 31, 2019	194	27	(15)	12	206		
Additions (Note 10)	142	31	—	31	173		
Amortization	—	—	(3)	(3)	(3)		
Foreign exchange impact	(7)	(3)	—	(3)	(10)		
Balance at December 31, 2020	\$ 329	\$ 55	\$ (18)	\$ 37	\$ 366		

14. Other assets

(in millions of Canadian dollars)	2020	2019
Operating lease ROU assets (Note 19)	\$ 316	\$ 358
Contracted customer incentives	60	32
Long-term materials	37	41
Other	25	20
Total other assets	\$ 438	\$ 451

15. Accounts payable and accrued liabilities

(in millions of Canadian dollars)	2020	2019
Trade payables	\$ 401	453
Accrued charges	294	348
Accrued interest	134	131
Dividends payable	127	114
Stock-based compensation liabilities	121	85
Income and other taxes payable	115	139
Payroll-related accruals	68	78
Operating lease liabilities (Note 19)	63	69
Accrued vacation	59	60
Personal injury and other claims provision	37	55
Deferred revenue (Note 3)	27	142
Deferred real estate lease and license revenue ⁽¹⁾	11	10
Provision for environmental remediation (Note 18)	9	7
Other ⁽¹⁾	1	2
Total accounts payable and accrued liabilities	\$ 1,467	1,693

⁽¹⁾ 2019 comparative figures have been reclassified to conform with current presentation.

16. Debt

Long-term debt includes debt instruments and finance lease obligations. The following table outlines the Company's outstanding long-term debt as at December 31, 2020:

(in millions of Canadian dollars except percentages)		Maturity	Currency in which payable	2020	2019
9.450%	30-year Debentures	(A)	Aug 2021	U.S.\$ 318	325
5.100%	10-year Medium Term Notes	(A)	Jan 2022	CDN\$ 125	125
4.500%	10-year Notes	(A)	Jan 2022	U.S.\$ 318	324
4.450%	12.5-year Notes	(A)	Mar 2023	U.S.\$ 445	454
2.900%	10-year Notes	(A)	Feb 2025	U.S.\$ 891	909
3.700%	10.5-year Notes	(A)	Feb 2026	U.S.\$ 318	324
4.000%	10-year Notes	(A)	Jun 2028	U.S.\$ 636	649
3.150%	10-year Notes	(A)	Mar 2029	CDN\$ 399	399
2.050%	10-year Notes	(A)	Mar 2030	U.S.\$ 636	—
7.125%	30-year Debentures	(A)	Oct 2031	U.S.\$ 446	454
5.750%	30-year Debentures	(A)	Mar 2033	U.S.\$ 312	318
4.800%	20-year Notes	(A)	Sep 2035	U.S.\$ 381	388
5.950%	30-year Notes	(A)	May 2037	U.S.\$ 567	578
6.450%	30-year Notes	(A)	Nov 2039	CDN\$ 400	400
5.750%	30-year Notes	(A)	Jan 2042	U.S.\$ 313	319
4.800%	30-year Notes	(A)	Aug 2045	U.S.\$ 698	712
3.050%	30-year Notes	(A)	Mar 2050	CDN\$ 298	—
6.125%	100-year Notes	(A)	Sep 2115	U.S.\$ 1,146	1,169
8.000%	5-year Promissory Notes	(B)	up to Jun 2020	U.S.\$ —	11
5.41%	Senior Secured Notes	(C)	Mar 2024	U.S.\$ 89	100
6.91%	Secured Equipment Notes	(D)	Oct 2024	CDN\$ 75	91
7.49%	Equipment Trust Certificates	(E)	Jan 2021	U.S.\$ 14	55
Obligations under finance leases					
1.99% -2.97%	(F)	2021 - 2023	CDN\$/U.S.\$	4	3
6.99%	(F)	Mar 2022	U.S.\$	97	99
6.57%	(F)	Dec 2026	U.S.\$	38	45
12.77%	(F)	Jan 2031	CDN\$	4	4
Commercial Paper		up to Feb 2021	U.S.\$	820	516
				9,788	8,771
Perpetual 4% Consolidated Debenture Stock	(G)		U.S.\$	39	39
Perpetual 4% Consolidated Debenture Stock	(G)		G.B.P	6	6
				9,833	8,816
Unamortized fees on long-term debt				(62)	(59)
				9,771	8,757
Less: Long-term debt maturing within one year				1,186	599
			\$	8,585	8,158

At December 31, 2020, the gross amount of long-term debt denominated in U.S. dollars was U.S. \$6,713 million (2019 – U.S. \$6,016 million).

Annual maturities and principal repayment requirements, excluding those pertaining to finance leases, for each of the five years following 2020 are (in millions): 2021 – \$1,178; 2022 – \$471; 2023 – \$475; 2024 – \$83; 2025 – \$891.

Fees on long-term debt are amortized to income over the term of the related debt.

A. These debentures and notes are presented net of unamortized discounts, pay interest semi-annually, and are unsecured but carry a negative pledge.

In 2020, the Company issued U.S. \$500 million 2.050% 10-year Notes due March 5, 2030 for net proceeds of U.S. \$495 million (\$662 million) and \$300 million 3.050% 30-year Notes due March 9, 2050 for net proceeds of \$296 million.

In 2019, the Company repaid U.S. \$350 million 7.250% 10-year Notes at maturity for a total of U.S. \$350 million (\$471 million). The Company also issued \$400 million 3.150% 10-year Notes due March 13, 2029 for net proceeds of \$397 million.

B. On December 30, 2019, through its business combination with CMQ Canada, the Company assumed CMQ Canada's obligations under the 8.00% 5-year Promissory Notes totalling U.S. \$8 million (\$11 million) owing to CMQ U.S (see Note 10). In 2020, these notes were settled.

C. The 5.41% Senior Secured Notes are collateralized by specific locomotive units with a carrying value of \$97 million at December 31, 2020. The Company pays equal blended semi-annual payments of principal and interest. Final repayment of the remaining principal of U.S. \$44 million is due in March 2024.

D. The 6.91% Secured Equipment Notes are full recourse obligations of the Company collateralized by a first charge on specific locomotive units with a carrying value of \$54 million at December 31, 2020. The Company pays equal blended semi-annual payments of principal and interest. Final repayment of the remaining principal of \$11 million is due in October 2024.

E. The 7.49% Equipment Trust Certificates are secured by specific locomotive units with a carrying value of \$91 million at December 31, 2020. The Company makes semi-annual payments that vary in amount and are interest-only payments or blended principal and interest payments. Final repayment of the remaining principal of U.S. \$11 million is due in January 2021.

F. The carrying value of the assets collateralizing finance lease obligations was \$171 million at December 31, 2020.

G. The Consolidated Debenture Stock, authorized by an *Act of Parliament of 1889*, constitutes a first charge upon and over the whole of the undertaking, railways, works, rolling stock, plant, property and effects of the Company, with certain exceptions.

Credit facility

CP has a revolving credit facility (the "facility") agreement with 14 highly rated financial institutions for a commitment amount of U.S. \$1.3 billion, which consists of a U.S. \$1.0 billion tranche maturing September 27, 2024 and a U.S. \$300 million tranche maturing September 27, 2021. The facility can accommodate draws of cash and/or letters of credit at market competitive pricing. The agreement requires the Company to maintain a financial covenant in conjunction with the facility. As at December 31, 2020 and 2019, the Company was in compliance with all terms and conditions of the credit facility arrangements and satisfied the financial covenant. During the year ended December 31, 2020, the Company drew and fully repaid U.S. \$100 million from the U.S. \$300 million tranche of its revolving credit facility. As at December 31, 2020 and 2019, the facility was undrawn.

The Company also has a commercial paper program which 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 December 31, 2020, the Company had total commercial paper borrowings of U.S. \$644 million (\$820 million), included in "Long-term debt maturing within one year" on the Company's Consolidated Balance Sheets (December 31, 2019 – \$516 million). The weighted-average interest rate on these borrowings was 0.27% (December 31, 2019 - 2.03%). The Company presents issuances and repayments of commercial paper, all of which have a maturity of less than 90 days, in the Company's Consolidated Statements of Cash Flows on a net basis.

CP has bilateral letter of credit facilities with six highly rated financial institutions to support its requirement to post letters of credit in the ordinary course of business. Under these agreements, 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. These agreements permit CP to withdraw amounts posted as collateral at any time; therefore, the amounts posted as collateral are presented as "Cash and cash equivalents" on the Company's Consolidated Balance Sheets. As at December 31, 2020 and 2019, the Company did not have any collateral posted on its bilateral letter of credit facilities but had letters of credit drawn of \$59 million (December 31, 2019 – \$80 million) from a total available amount of \$300 million (December 31, 2019 – \$300 million).

17. Financial instruments

A. Fair values of financial instruments

The Company categorizes its financial assets and liabilities measured at fair value into a three-level hierarchy established by GAAP that prioritizes those inputs to valuation techniques used to measure fair value based on the degree to which they are observable. The three levels of the fair value hierarchy are as follows: Level 1 inputs are quoted prices in active markets for identical assets and liabilities; Level 2 inputs, other than quoted prices included within Level 1, are observable for the asset or liability either directly or indirectly; and Level 3 inputs are not observable in the market.

The Company's short-term financial instruments include cash and cash equivalents, accounts receivable, accounts payable and accrued liabilities, and short-term borrowings including commercial paper. The carrying value of short-term financial instruments approximate their fair values.

The carrying value of the Company's long-term debt does not approximate its fair value. The estimated fair value has been determined based on market information where available, or by discounting future payments of principal and interest at estimated interest rates expected to be available to the Company at period end. All measurements are classified as Level 2. The Company's long-term debt, including current maturities, with a carrying value of \$8,951 million at December 31, 2020 (December 31, 2019 - \$8,241 million), had a fair value of \$11,597 million (December 31, 2019 - \$10,149 million).

B. Financial risk management

Derivative financial instruments

Derivative financial instruments may be used to selectively reduce volatility associated with fluctuations in interest rates, FX rates, the price of fuel, and stock-based compensation expense. Where derivatives are designated as hedging instruments, the relationship between the hedging instruments and their associated hedged items is documented, as well as the risk management objective and strategy for the use of the hedging instruments. This documentation includes linking the derivatives that are designated as fair value or cash flow hedges to specific assets or liabilities on the Company's Consolidated Balance Sheets, commitments, or forecasted transactions. At the time a derivative contract is entered into and at least quarterly thereafter, an assessment is made as to whether the derivative item is effective in offsetting the changes in fair value or cash flows of the hedged items. The derivative qualifies for hedge accounting treatment if it is effective in substantially mitigating the risk it was designed to address.

It is not the Company's intent to use financial derivatives or commodity instruments for trading or speculative purposes.

Credit risk management

Credit risk refers to the possibility that a customer or counterparty will fail to fulfill its obligations under a contract and as a result create a financial loss for the Company.

The railway industry predominantly serves financially established customers, and the Company has experienced limited financial losses with respect to credit risk. The credit worthiness of customers is assessed using credit scores supplied by a third party and through direct monitoring of their financial well-being on a continual basis. The Company establishes guidelines for customer credit limits and should thresholds in these areas be reached, appropriate precautions are taken to improve collectability.

Counterparties to financial instruments expose the Company to credit losses in the event of non-performance. Counterparties for derivative and cash transactions are limited to high credit quality financial institutions, which are monitored on an ongoing basis. Counterparty credit assessments are based on the financial health of the institutions and their credit ratings from external agencies. The Company does not anticipate non-performance that would materially impact the Company's financial statements. In addition, the Company believes there are no significant concentrations of credit risk.

FX management

The Company conducts business transactions and owns assets in both Canada and the United States. As a result, the Company is exposed to fluctuations in the value of financial commitments, assets, liabilities, income, or cash flows due to changes in FX rates. The Company may enter into FX risk management transactions primarily to manage fluctuations in the exchange rate between Canadian and U.S. currencies. FX exposure is primarily mitigated through natural offsets created by revenues, expenditures, and balance sheet positions incurred in the same currency. Where appropriate, the Company may negotiate with customers and suppliers to reduce the net exposure.

Net investment hedge

The FX gains and losses on long-term debt are mainly unrealized and can only be realized when U.S. dollar-denominated long-term debt matures or is settled. The Company also has long-term FX exposure on its investment in foreign subsidiaries with a U.S. dollar functional currency. The majority of the Company's U.S. dollar-denominated long-term debt has been designated as a hedge of the net investment in these foreign subsidiaries. This designation has the effect of mitigating volatility on Net income by offsetting long-term FX gains and losses on U.S. dollar-denominated long-term debt and gains and losses on its net investment. The effect of the net investment hedge recognized in "Other comprehensive loss" in 2020 was an FX gain of \$136 million, the majority of which was unrealized (2019 – unrealized gain of \$288 million; 2018 – unrealized loss of \$479 million) (see Note 8).

Interest rate management

The Company is exposed to interest rate risk, which is the risk that the fair value or future cash flows of a financial instrument will vary as a result of changes in market interest rates. In order to manage funding needs or capital structure goals, the Company enters into debt or finance lease agreements that are subject to either fixed market interest rates set at the time of issue or floating rates determined by ongoing market conditions. Debt subject to variable interest rates exposes the Company to variability in interest expense, while debt subject to fixed interest rates exposes the Company to variability in the fair value of debt.

To manage interest rate exposure, the Company accesses diverse sources of financing and manages borrowings in line with a targeted range of capital structure, debt ratings, liquidity needs, maturity schedule, and currency and interest rate profiles. In anticipation of future debt issuances, the Company may enter into forward rate agreements, that are designated as cash flow hedges, to substantially lock in all or a portion of the effective future interest expense. The Company may also enter into swap agreements, designated as fair value hedges, to manage the mix of fixed and floating rate debt.

Forward starting swaps

During the second quarter of 2018, the Company settled a notional amount of U.S. \$500 million of forward starting swaps related to the U.S. \$500 million 4.000% 10-year Notes issued in the same period. The fair value of these derivative instruments at the time of settlement was a loss of U.S. \$19 million (\$24 million). The Company no longer has any active forward starting swaps.

For the year ended December 31, 2020, a net loss of \$9 million related to previously settled forward starting swap hedges has been amortized to "Net interest expense" (2019 – loss of \$9 million; 2018 – loss of \$10 million). The Company expects that during the next 12 months, \$9 million of net losses will be amortized to "Net interest expense".

Treasury rate locks

At December 31, 2020, the Company had net unamortized losses related to interest rate locks, which are accounted for as cash flow hedges, settled in previous years totalling \$17 million (December 31, 2019 – \$18 million). This amount is composed of various unamortized gains and losses related to specific debts which are reflected in "Accumulated other comprehensive loss" and are amortized to "Net interest expense" in the period that interest on the related debt is charged. The amortization of these gains and losses resulted in a \$1 million increase to "Net interest expense" and "Other comprehensive loss" in 2020 (2019 – \$1 million; 2018 – \$1 million). The Company expects that during the next 12 months, a net loss of \$1 million related to these previously settled derivatives will be reclassified to "Net interest expense".

18. Other long-term liabilities

(in millions of Canadian dollars)	2020	2019
Operating lease liabilities, net of current portion (Note 19)	\$ 248	\$ 285
Stock-based compensation liabilities, net of current portion	146	111
Provision for environmental remediation, net of current portion ⁽¹⁾	71	70
Deferred revenue, net of current portion (Note 3) ⁽²⁾	34	4
Deferred real estate lease and license revenue, net of current portion ⁽³⁾	18	20
Deferred gains on sale leaseback transactions ⁽³⁾	5	6
Other, net of current portion ⁽²⁾	63	66
Total other long-term liabilities	\$ 585	\$ 562

⁽¹⁾ As at December 31, 2020, the aggregate provision for environmental remediation, including the current portion was \$80 million (2019 – \$77 million).

⁽²⁾ 2019 comparative figures have been reclassified to conform with current presentation.

⁽³⁾ The deferred real estate lease and license revenue and deferred gains on sale leaseback transactions are being amortized to income on a straight-line basis over the related lease terms.

Environmental remediation accruals

Environmental remediation accruals cover site-specific remediation programs. The estimate of the probable costs to be incurred in the remediation of properties contaminated by past railway activities reflects the nature of contamination at individual sites according to typical activities and scale of operations conducted. CP has developed remediation strategies for each property based on the nature and extent of the contamination, as well as the location of the property and surrounding areas that may be adversely affected by the presence of contaminants, considering available technologies, treatment and disposal facilities and the acceptability of site-specific plans based on the local regulatory environment. Site-specific plans range from containment and risk management of the contaminants through to the removal and treatment of the contaminants and affected soils and groundwater. The details of the estimates reflect the environmental liability at each property. Provisions for environmental remediation costs are recorded in "Other long-term liabilities", except for the current portion which is recorded in "Accounts payable and accrued liabilities" (see Note 15). Payments are expected to be made over 10 years to 2030.

The accruals for environmental remediation represent CP's best estimate of its probable future obligation and include both asserted and unasserted claims, without reduction for anticipated recoveries from third parties. Although the recorded accruals include CP's best estimate of all probable costs, CP's total environmental remediation costs cannot be predicted with certainty. Accruals for environmental remediation may change from time to time as new information about previously untested sites becomes known, environmental laws and regulations evolve and advances are made in environmental remediation technology. The accruals may also vary as the courts decide legal proceedings against outside parties responsible for contamination. These potential charges, which cannot be quantified at this time, may materially affect income in the particular period in which a charge is recognized. Costs related to existing, but as yet unknown, or future contamination will be accrued in the period in which they become probable and reasonably estimable. Changes to costs are reflected as changes to "Other long-term liabilities" or "Accounts payable and accrued liabilities" on the Company's Consolidated Balance Sheets and to "Purchased services and other" within operating expenses on the Company's Consolidated Statements of Income. The amount charged to income in 2020 was \$10 million (2019 – \$6 million; 2018 – \$6 million).

19. Leases

The Company's leases have remaining terms of less than one year to 14 years, some include options to extend up to an additional 10 years, and some include options to terminate within one year.

Residual value guarantees are provided on certain vehicle operating leases. Cumulatively, these guarantees are limited to \$1 million and are not included in lease liabilities as it is not currently probable that any amounts will be owed.

Components of lease expense for the year ended December 31 are as follows:

(in millions of Canadian dollars)	2020	2019
Operating lease cost	\$ 83	\$ 89
Short-term lease cost	10	10
Variable lease cost	13	13
Sublease income	(3)	(3)
Finance Lease Cost		
Amortization of right-of-use assets	9	9
Interest on lease liabilities	11	11
Total lease costs	\$ 123	\$ 129

Supplemental balance sheet information related to leases is as follows:

(in millions of Canadian dollars)	Classification	2020	2019
Assets			
Operating	Other assets	\$ 316	\$ 358
Finance	Properties, net book value	171	177
Liabilities			
Current			
Operating	Accounts payable and accrued liabilities	63	69
Finance	Long-term debt maturing within one year	8	7
Long-term			
Operating	Other long-term liabilities	248	285
Finance	Long-term debt	135	144

The following table provides the Company's weighted-average remaining lease terms and discount rates:

	2020	2019
Weighted-Average Remaining Lease Term		
Operating leases	7 years	7 years
Finance leases	3 years	4 years
Weighted-Average Discount Rate		
Operating leases	3.32 %	3.45 %
Finance leases	7.06 %	7.07 %

Supplemental information related to leases is as follows:

(in millions of Canadian dollars)	2020	2019
Cash paid for amounts included in measurement of lease liabilities		
Operating cash outflows from operating leases	\$ 74	\$ 82
Operating cash outflows from finance leases	10	10
Financing cash outflows from finance leases	8	6
Right-of-use assets obtained in exchange for lease liabilities		
Operating leases	34	38
Finance leases	4	4

The following table provides the maturities of lease liabilities for the next five years and thereafter as at December 31, 2020:

(in millions of Canadian dollars)	Finance Leases	Operating Leases
2021	\$ 11	\$ 71
2022	107	59
2023	9	53
2024	8	42
2025	8	34
Thereafter	12	88
Total lease payments	155	347
Imputed interest	(12)	(36)
Present value of lease payments	\$ 143	\$ 311

20. Shareholders' equity

Authorized and issued share capital

The Company is authorized to issue an unlimited number of Common Shares, an unlimited number of First Preferred Shares, and an unlimited number of Second Preferred Shares. At December 31, 2020, no First or Second Preferred Shares had been issued.

The following table summarizes information related to Common Share balances as at December 31:

(number of shares in millions)	2020	2019	2018
Share capital, January 1	137.0	140.5	144.9
CP Common Shares repurchased	(4.0)	(3.8)	(4.6)
Shares issued under stock option plan	0.3	0.3	0.2
Share capital, December 31	133.3	137.0	140.5

The change in the "Share capital" balance includes \$10 million of stock-based compensation transferred from "Additional paid-in capital" (2019 – \$7 million; 2018 – \$12 million).

Share repurchases

On December 17, 2019, the Company announced a normal course issuer bid ("NCIB"), commencing December 20, 2019, to purchase up to 4.80 million Common Shares in the open market for cancellation on or before December 19, 2020. Upon expiry of this NCIB, the Company had purchased 4.27 million Common Shares for \$1,577 million.

On October 19, 2018, the Company announced a NCIB, commencing October 24, 2018, to purchase up to 5.68 million Common Shares for cancellation on or before October 23, 2019. The Company completed this NCIB on October 23, 2019.

On May 10, 2017, the Company announced a NCIB, commencing May 15, 2017, to purchase up to 4.38 million Common Shares in the open market for cancellation on or before May 14, 2018. The Company completed this NCIB on May 10, 2018.

All purchases were made in accordance with the respective NCIB at prevailing market prices plus brokerage fees, or such other prices that were permitted by the Toronto Stock Exchange ("TSX"), with consideration allocated to "Share capital" up to the average carrying amount of the shares and any excess allocated to "Retained earnings".

The following table provides activities under the share repurchase programs for each of the years ended December 31:

	2020	2019	2018
Number of Common Shares repurchased ⁽¹⁾	3,973,076	3,794,149	4,683,162
Weighted-average price per share ⁽²⁾	\$ 371.74	\$ 300.65	\$ 240.68
Amount of repurchase (in millions) ⁽²⁾	\$ 1,477	\$ 1,141	\$ 1,127

⁽¹⁾ Includes shares repurchased but not yet cancelled at year end.

⁽²⁾ Includes brokerage fees.

On January 27, 2021, the Company announced that the TSX has accepted its notice to implement a new NCIB, commencing January 29, 2021, to purchase up to approximately 3.33 million Common Shares for cancellation on or before January 28, 2022.

21. Change in non-cash working capital balances related to operations

(in millions of Canadian dollars)	2020	2019	2018
(Use) source of cash:			
Accounts receivable, net	\$ (61)	\$ 27	\$ (107)
Materials and supplies	(15)	(8)	(11)
Other current assets	(5)	(24)	30
Accounts payable and accrued liabilities	(308)	(21)	153
Change in non-cash working capital	\$ (389)	\$ (26)	\$ 65

22. Pensions and other benefits

The Company has both defined benefit ("DB") and defined contribution ("DC") pension plans. At December 31, 2020, the Canadian pension plans represent nearly all of total combined pension plan assets and nearly all of total combined pension plan obligations.

The DB plans provide for pensions based principally on years of service and compensation rates near retirement. Pensions for Canadian pensioners are partially indexed to inflation. Annual employer contributions to the DB plans, which are actuarially determined, are made on the basis of being not less than the minimum amounts required by federal pension supervisory authorities.

The Company has other benefit plans including post-retirement health and life insurance for pensioners, and post-employment long-term disability and workers' compensation benefits, which are based on Company-specific claims. At December 31, 2020, the Canadian other benefits plans represent nearly all of total combined other plan obligations.

The Audit and Finance Committee of the Board of Directors has approved an investment policy that establishes long-term asset mix targets which take into account the Company's expected risk tolerances. Pension plan assets are managed by a suite of independent investment managers, with the allocation by manager reflecting these asset mix targets. Most of the assets are actively managed with the objective of outperforming applicable benchmarks. In accordance with the investment policy, derivative instruments may be used by investment managers to hedge or adjust existing or anticipated exposures.

To develop the expected long-term rate of return assumption used in the calculation of net periodic benefit cost applicable to the market-related value of plan assets, the Company considers the expected composition of the plans' assets, past experience, and future estimates of long-term investment returns. Future estimates of investment returns reflect the long-term return expectation for fixed income, public equity, real estate, infrastructure, private debt, and absolute return investments, and the expected added value (relative to applicable benchmark indices) from active management of pension fund assets.

The Company has elected to use a market-related value of assets for the purpose of calculating net periodic benefit cost, developed from a five year average of market values for the plans' public equity and absolute return investments (with each prior year's market value adjusted to the current date for assumed investment income during the intervening period) plus the market value of the plans' fixed income, real estate, infrastructure, and private debt securities.

The benefit obligation is discounted using a discount rate that is a blended yield to maturity for a hypothetical portfolio of high-quality debt instruments with cash flows matching projected benefit payments. The discount rate is determined by management.

Net periodic benefit cost

The elements of net periodic benefit cost for DB pension plans and other benefits recognized in the year include the following components:

(in millions of Canadian dollars)	Pensions			Other benefits		
	2020	2019	2018	2020	2019	2018
Current service cost (benefits earned by employees)	\$ 140	\$ 107	\$ 120	\$ 12	\$ 11	\$ 12
Other components of net periodic benefit cost (recovery):						
Interest cost on benefit obligation	406	450	438	17	20	19
Expected return on fund assets	(945)	(947)	(955)	—	—	—
Recognized net actuarial loss	177	84	114	4	12	2
Amortization of prior service costs	(1)	(1)	(2)	—	1	—
Total other components of net periodic benefit (recovery) cost	(363)	(414)	(405)	21	33	21
Net periodic benefit (recovery) cost	\$ (223)	\$ (307)	\$ (285)	\$ 33	\$ 44	\$ 33

Projected benefit obligation, fund assets, and funded status

Information about the Company's DB pension plans and other benefits, in aggregate, is as follows:

(in millions of Canadian dollars)	Pensions		Other benefits	
	2020	2019	2020	2019
Change in projected benefit obligation:				
Benefit obligation at January 1	\$ 12,610	\$ 11,372	\$ 541	\$ 501
Current service cost	140	107	12	11
Interest cost	406	450	17	20
Employee contributions	42	41	—	—
Benefits paid	(653)	(646)	(34)	(34)
Foreign currency changes	(5)	(10)	—	—
Plan amendments and other	3	—	—	—
Actuarial loss	1,256	1,296	17	43
Projected benefit obligation at December 31	\$ 13,799	\$ 12,610	\$ 553	\$ 541

The net actuarial losses for Pensions and Other benefits in 2020 were primarily due to the decrease in discount rate from 3.25% to 2.58%. The net actuarial losses for Pensions and Other benefits in 2019 were primarily due to the decrease in discount rate from 4.01% to 3.25%.

(in millions of Canadian dollars)	Pensions		Other benefits	
	2020	2019	2020	2019
Change in fund assets:				
Fair value of fund assets at January 1	\$ 13,319	\$ 12,349	\$ 5	\$ 4
Actual return on fund assets	1,634	1,528	—	1
Employer contributions	27	53	34	34
Employee contributions	42	41	—	—
Benefits paid	(653)	(646)	(34)	(34)
Foreign currency changes	(4)	(6)	—	—
Fair value of fund assets at December 31	\$ 14,365	\$ 13,319	\$ 5	\$ 5
Funded status – plan surplus (deficit)	\$ 566	\$ 709	(548)	(536)

The table below shows the aggregate pension projected benefit obligation and aggregate fair value of plan assets for pension plans with fair value of plan assets in excess of projected benefit obligations (i.e. surplus), and for pension plans with projected benefit obligations in excess of fair value of plan assets (i.e. deficit):

(in millions of Canadian dollars)	2020		2019	
	Pension plans in surplus	Pension plans in deficit	Pension plans in surplus	Pension plans in deficit
Projected benefit obligation at December 31	\$ (13,220)	\$ (579)	\$ (12,076)	\$ (534)
Fair value of fund assets at December 31	14,114	251	13,079	240
Funded Status	\$ 894	\$ (328)	\$ 1,003	\$ (294)

The DB pension plans' accumulated benefit obligation as at December 31, 2020 was \$13,528 million (2019 – \$12,201 million). The accumulated benefit obligation is calculated on a basis similar to the projected benefit obligation, except no future salary increases are assumed in the projection of future benefits. For pension plans with accumulated benefit obligations in excess of fair value of plan assets (i.e. deficit), the aggregate pension accumulated benefit obligation as at December 31, 2020 was \$443 million (2019 – \$419 million) and the aggregate fair value of plan assets as at December 31, 2020 was \$187 million (2019 – \$186 million).

All Other benefits plans were in a deficit position at December 31, 2020 and 2019.

Pension asset and liabilities in the Company's Consolidated Balance Sheets

Amounts recognized in the Company's Consolidated Balance Sheets are as follows:

(in millions of Canadian dollars)	Pensions		Other benefits	
	2020	2019	2020	2019
Pension asset	\$ 894	\$ 1,003	—	—
Accounts payable and accrued liabilities	(11)	(11)	(33)	(34)
Pension and other benefit liabilities	(317)	(283)	(515)	(502)
Total amount recognized	\$ 566	\$ 709	\$ (548)	\$ (536)

The measurement date used to determine the plan assets and the accrued benefit obligation is December 31. The most recent actuarial valuation for pension funding purposes for the Company's main Canadian pension plan was performed as at January 1, 2020. During 2021, the Company expects to file with the pension regulator a new valuation performed as at January 1, 2021.

Accumulated other comprehensive loss

Amounts recognized in accumulated other comprehensive loss are as follows:

(in millions of Canadian dollars)	Pensions		Other benefits	
	2020	2019	2020	2019
Net actuarial loss:				
Other than deferred investment gains	\$ 3,960	\$ 3,434	\$ 104	\$ 91
Deferred investment gains	(95)	41	—	—
Prior service cost	5	1	1	1
Deferred income tax	(1,070)	(964)	(27)	(24)
Total (Note 8)	\$ 2,800	\$ 2,512	\$ 78	\$ 68

Actuarial assumptions

Weighted-average actuarial assumptions used were approximately:

(percentages)	2020	2019	2018
Benefit obligation at December 31:			
Discount rate	2.58	3.25	4.01
Projected future salary increases	2.75	2.75	2.75
Health care cost trend rate	5.00 ⁽¹⁾	5.50 ⁽¹⁾	6.00 ⁽¹⁾
Benefit cost for year ended December 31:			
Discount rate	3.25	4.01	3.80
Expected rate of return on fund assets ⁽³⁾	7.25	7.50	7.75
Projected future salary increases	2.75	2.75	2.75
Health care cost trend rate	5.50 ⁽¹⁾	6.00 ⁽¹⁾	7.00 ⁽²⁾

⁽¹⁾ The health care cost trend rate was assumed to be 6.00% in 2019 and 5.50% in 2020 and is assumed to be 5.00% per year in 2021 and thereafter.

⁽²⁾ The health care cost trend rate was previously assumed to be 7.00% in 2018, and then decreasing by 0.50% per year to an ultimate rate of 5.00% per year in 2022 and thereafter.

⁽³⁾ The expected rate of return on fund assets that will be used to compute the 2021 net periodic benefit credit is 6.90%.

Plan assets

Plan assets are recorded at fair value. The major asset categories are public equity securities, fixed income securities, real estate, infrastructure, absolute return investments, and private debt. The fair values of the public equity and fixed income securities are primarily based on quoted market prices. Real estate and infrastructure values are based on the value of each fund's assets as calculated by the fund manager, generally using third party appraisals or discounted cash flow analysis and taking into account current market conditions and recent sales transactions where practical and appropriate. Private debt values are

based on the value of each fund's assets as calculated by the fund manager taking into account current market conditions and reviewed annually by external parties. Absolute return investments are a portfolio of units of externally managed hedge funds and are valued by the fund administrators.

The Company's pension plan asset allocation, the weighted-average asset allocation targets, and the weighted average policy range for each major asset class at year end were as follows:

Asset allocation (percentage)	Asset allocation target	Policy range	Percentage of plan assets at December 31	
			2020	2019
Cash and cash equivalents	1.2	0 – 10	2.0	0.9
Fixed income	24.1	20 – 40	28.1	24.6
Public equity	45.1	35 – 55	49.3	54.5
Real estate and infrastructure	9.8	4 – 13	6.3	6.8
Private debt	9.8	4 – 13	3.3	2.4
Absolute return	10.0	4 – 13	11.0	10.8
Total	100.0		100.0	100.0

Summary of the assets of the Company's DB pension plans

The following is a summary of the assets of the Company's DB pension plans at December 31, 2020 and 2019. As of December 31, 2020 and 2019, there were no plan assets classified as Level 3 valued investments.

Assets Measured at Fair Value					
(in millions of Canadian dollars)		Quoted prices in active markets for identical assets (Level 1)	Significant other observable inputs (Level 2)	Investments measured at NAV ⁽¹⁾	Total Plan Assets
December 31, 2020					
Cash and cash equivalents	\$ 219	\$ —	\$ —	\$ —	\$ 219
Fixed income					
Government bonds ⁽²⁾	284	1,699	—	—	1,983
Corporate bonds ⁽²⁾	691	1,144	—	—	1,835
Mortgages ⁽³⁾	220	5	—	—	225
Public equities					
Canada	1,183	—	—	—	1,183
U.S. and international	5,871	28	—	—	5,899
Real estate ⁽⁴⁾	—	—	—	704	704
Infrastructure ⁽⁵⁾	—	—	—	199	199
Private debt ⁽⁶⁾	—	—	—	465	465
Derivative instruments ⁽⁷⁾	—	71	—	—	71
Absolute return ⁽⁸⁾					
Funds of hedge funds	—	—	—	1,560	1,560
Multi-strategy funds	—	—	—	22	22
	\$ 8,468	\$ 2,947	\$ 2,950	\$ 14,365	
December 31, 2019					
Cash and cash equivalents	\$ 112	\$ —	\$ —	\$ —	\$ 112
Fixed income					
Government bonds ⁽²⁾	233	1,857	—	—	2,090
Corporate bonds ⁽²⁾	273	819	—	—	1,092
Mortgages ⁽³⁾	159	5	—	—	164
Public equities					
Canada	1,351	—	—	—	1,351
U.S. and international	5,883	22	—	—	5,905
Real estate ⁽⁴⁾	—	—	—	724	724
Infrastructure ⁽⁵⁾	—	—	—	187	187
Private debt ⁽⁶⁾	—	—	—	313	313
Derivative instruments ⁽⁷⁾	—	(59)	—	—	(59)
Absolute return ⁽⁸⁾					
Funds of hedge funds	—	—	—	1,418	1,418
Multi-strategy funds	—	—	—	22	22
	\$ 8,011	\$ 2,644	\$ 2,664	\$ 13,319	

(1) Investments measured at net asset value ("NAV"):

Amounts are comprised of certain investments measured using NAV (or its equivalent) as a practical expedient. These investments have not been classified in the fair value hierarchy.

(2) Government & Corporate Bonds:

Fair values for bonds are based on market prices supplied by independent sources as of the last trading day.

(3) Mortgages:

The fair values of mortgages are based on current market yields of financial instruments of similar maturity, coupon and risk factors.

(4) Real estate:

Real estate fund values are based on the NAV of the funds that invest directly in real estate investments. The values of the investments have been estimated using the capital accounts representing the plan's ownership interest in the funds. Of the total, \$580 million is subject to redemption frequencies ranging from monthly to annually and a redemption notice period of 90 days (2019 – \$606 million). The remaining \$124 million is not subject to redemption and is normally returned through distributions as a result of the liquidation of the underlying real estate investments (2019 – \$118 million). As at December 31, 2020, there are \$32 million of unfunded commitments for real estate investments (December 31, 2019 – \$35 million).

(5) Infrastructure:

Infrastructure fund values are based on the NAV of the funds that invest directly in infrastructure investments. The values of the investments have been estimated using the capital accounts representing the plans' ownership interest in the funds. Of the total, \$112 million is subject to redemption frequencies ranging from monthly to annually and a redemption notice period of 90 days (2019 – \$119 million). The remaining \$87 million is not subject to redemption and is normally returned through distributions as a result of the liquidation of the underlying infrastructure investments (2019 – \$68 million). As at December 31, 2020, there are \$491 million of unfunded commitments for infrastructure investments (December 31, 2019 – \$286 million).

(6) Private debt:

Private debt fund values are based on the NAV of the funds that invest directly in private debt investments. The values of the investments have been estimated using the capital accounts representing the plans' ownership interest in the funds. Of the total, \$154 million is subject to redemption frequencies ranging from monthly to annually and a redemption notice period of 90 days (2019 – \$154 million). The remaining \$311 million is not subject to redemption and is normally returned through distributions as a result of the repayment of the underlying loans (2019 - \$159 million). As at December 31, 2020, there are \$533 million of unfunded commitments for private debt investments (December 31, 2019 – \$392 million).

(7) Derivatives:

The investment managers may utilize the following derivative instruments: equity futures to replicate equity index returns (Level 2); currency forwards to partially hedge foreign currency exposures (Level 2); bond forwards to reduce asset/liability interest rate risk exposures (Level 2); interest rate swaps to manage duration and interest rate risk (Level 2); credit default swaps to manage credit risk (Level 2); and options to manage interest rate risk and volatility (Level 2). The Company may utilize derivatives directly, but only for the purpose of hedging foreign currency exposures. As at December 31, 2020, there are currency forwards with a notional value of \$1,041 million (December 31, 2019 – \$334 million) and a fair value of \$73 million (December 31, 2019 – \$13 million). The fixed income investment manager utilizes a portfolio of bond forwards for the purpose of reducing asset/liability interest rate exposure. As at December 31, 2020, there are bond forwards with a notional value of \$3,540 million (December 31, 2019 – \$3,269 million) and a negative fair value of \$2 million (December 31, 2019 – \$(72) million).

(8) Absolute return:

The value of absolute return fund investments is based on the NAV reported by the fund administrators. The funds have different redemption policies with redemption notice periods varying from 60 to 95 days and frequencies ranging from monthly to triennially.

Additional plan assets information

The Company's primary investment objective for pension plan assets is to achieve a long-term return, net of all fees and expenses, that is sufficient for the plan's assets to satisfy the current and future obligations to plan beneficiaries, while minimizing the financial impact on the Company. In identifying the asset allocation ranges, consideration was given to the long-term nature of the underlying plan liabilities, the solvency and going-concern financial position of the plan, long-term return expectations, and the risks associated with key asset classes as well as the relationships of returns on key asset classes with each other, inflation, and interest rates. When advantageous and with due consideration, derivative instruments may be utilized by investment managers, provided the total value of the underlying assets represented by financial derivatives (excluding currency forwards, liability hedging derivatives in fixed income portfolios, and derivatives held by absolute return funds) is limited to 30% of the market value of the fund.

The funded status of the plans is exposed to fluctuations in interest rates, which affects the relative values of the plans' liabilities and assets. In order to mitigate interest rate risk, the Company's main Canadian defined benefit pension plan utilizes a liability driven investment strategy in its fixed income portfolio, which uses a combination of long duration bonds and derivatives to hedge interest rate risk, managed by the investment manager. At December 31, 2020, the plan's solvency funded position was 47% hedged against interest rate risk (2019 – 45%).

When investing in foreign securities, the plans are exposed to foreign currency risk; the effect of which is included in the valuation of the foreign securities. At December 31, 2020, the plans were 33% exposed to the U.S. dollar net of currency forwards (40% excluding the currency forwards), 6% exposed to the Euro, and 14% exposed to various other currencies. At December 31, 2019, the plans were 39% exposed to the U.S. dollar net of currency forwards (41% excluding the currency forwards), 6% exposed to the Euro, and 14% exposed to various other currencies.

At December 31, 2020, fund assets included 109,008 of the Common Shares of the Company (2019 – 119,758) at a market value of \$48 million (2019 – \$40 million).

Estimated future benefit payments

The estimated future DB pension and other benefit payments to be paid by the plans for each of the next five years and the subsequent five-year period are as follows:

(in millions of Canadian dollars)	Pensions	Other benefits
2021	\$ 632	33
2022	629	31
2023	631	31
2024	633	30
2025	635	30
2026-2030	3,203	142

The benefit payments from the Canadian registered and U.S. qualified DB pension plans are payable from their respective pension funds. Benefit payments from the supplemental pension plan and from the other benefits plans are payable directly from the Company.

Defined contribution plan

Canadian non-unionized employees hired prior to July 1, 2010 had the option to participate in the Canadian DC plan. All Canadian non-unionized employees hired after such date must participate in this plan. Employee contributions are based on a percentage of salary. The Company matches employee contributions to a maximum percentage each year.

Effective July 1, 2010, a new U.S. DC plan was established. All U.S. non-unionized employees hired after such date must participate in this plan. Employees do not contribute to the plan. The Company annually contributes a percentage of salary.

The DC plans provide a pension based on total employee, where appropriate, and employer contributions plus investment income earned on those contributions.

In 2020, the net cost of the DC plans, which generally equals the employer's required contribution, was \$12 million (2019 – \$11 million; 2018 – \$10 million).

Contributions to multi-employer plans

Some of the Company's unionized employees in the U.S. are members of a U.S. national multi-employer benefit plan. Contributions made by the Company to this plan in 2020 in respect of post-retirement medical benefits were \$3 million (2019 – \$3 million; 2018 – \$3 million).

23. Stock-based compensation

At December 31, 2020, the Company had several stock-based compensation plans including stock option plans, various cash-settled liability plans, and an employee share purchase plan. These plans resulted in an expense of \$170 million in 2020 (2019 – \$133 million; 2018 – \$75 million).

A. Stock option plan

The following table summarizes the Company's stock option plan as at December 31, 2020:

	Options outstanding		Non-vested options	
	Number of options	Weighted-average exercise price	Number of options	Weighted-average grant date fair value
Outstanding, January 1, 2020	1,416,346	\$ 199.12	761,784	\$ 53.54
Granted	217,240	\$ 344.04	217,240	\$ 69.00
Exercised	(232,034)	\$ 162.87	N/A	N/A
Vested	N/A	N/A	(188,108)	\$ 50.91
Forfeited	(13,839)	\$ 271.75	(13,839)	\$ 58.29
Expired	(347)	\$ 168.84	N/A	N/A
Outstanding, December 31, 2020	1,387,366	\$ 225.20	777,077	\$ 58.40
Vested or expected to vest at December 31, 2020 ⁽¹⁾	1,366,649	\$ 223.98	N/A	N/A
Exercisable, December 31, 2020	610,289	\$ 177.65	N/A	N/A

⁽¹⁾ As at December 31, 2020, the weighted-average remaining term of vested or expected to vest options was 4.5 years with an aggregate intrinsic value of \$297 million.

The following table provides the number of stock options outstanding and exercisable as at December 31, 2020 by range of exercise price and their related intrinsic aggregate value, and for options outstanding, the weighted-average years to expiration. The table also provides the aggregate intrinsic value for in-the-money stock options, which represents the amount that would have been received by option holders had they exercised their options on December 31, 2020 at the Company's closing stock price of \$441.53.

Range of exercise prices	Options outstanding			Options exercisable		
	Number of options	Weighted-average years to expiration	Weighted-average exercise price	Aggregate intrinsic value (millions)	Number of options	Weighted-average exercise price
\$65.06 - \$188.78	342,773	3.4	\$ 141.26	\$ 103	342,773	\$ 141.26
\$188.79 - \$214.58	327,811	3.1	\$ 196.82	\$ 80	109,375	\$ 203.83
\$214.59 - \$261.88	394,953	4.4	\$ 244.17	\$ 78	134,845	\$ 232.54
\$261.89 - \$411.37	321,829	5.8	\$ 320.21	\$ 39	23,296	\$ 272.56
Total ⁽¹⁾	1,387,366	4.2	\$ 225.20	\$ 300	610,289	\$ 177.65
						161

⁽¹⁾ As at December 31, 2020, the total number of in-the-money stock options outstanding was 1,387,366 with a weighted-average exercise price of \$225.20. The weighted-average years to expiration of exercisable stock options is 3.6 years.

Pursuant to the employee plan, options may be exercised upon vesting, which is between 12 months and 48 months after the grant date, and will expire after seven years. Certain stock options granted in 2019 and 2018 vest upon the achievement of specific performance criteria. Under the fair value method, the fair value of the stock options at grant date was approximately \$15 million for options issued in 2020 (2019 – \$14 million; 2018 – \$16 million). The weighted-average fair value assumptions were approximately:

	2020	2019	2018
Expected option life (years) ⁽¹⁾	4.75	5.00	5.00
Risk-free interest rate ⁽²⁾	1.28%	2.22%	2.22%
Expected stock price volatility ⁽³⁾	23.14%	25.04%	24.81%
Expected annual dividends per share ⁽⁴⁾	\$ 3.3200	\$ 2.6191	\$ 2.3854
Expected forfeiture rate ⁽⁵⁾	4.41%	6.05%	4.70%
Weighted-average grant date fair value of options granted during the year	\$ 69.00	\$ 63.69	\$ 55.63

⁽¹⁾ Represents the period of time that awards are expected to be outstanding. Historical data on exercise behaviour or, when available, specific expectations regarding future exercise behaviour were used to estimate the expected life of the option.

⁽²⁾ Based on the implied yield available on zero-coupon government issues with an equivalent term commensurate with the expected term of the option.

⁽³⁾ Based on the historical volatility of the Company's stock price over a period commensurate with the expected term of the option.

⁽⁴⁾ Determined by the current annual dividend at the time of grant. The Company does not employ different dividend yields throughout the contractual term of the option. On July 21, 2020, the Company announced an increase in its quarterly dividend to \$0.9500 per share, representing \$3.8000 on an annual basis.

⁽⁵⁾ The Company estimates forfeitures based on past experience. The rate is monitored on a periodic basis.

In 2020, the expense for stock options (regular and performance) was \$16 million (2019 – \$14 million; 2018 – \$10 million). At December 31, 2020, there was \$12 million of total unrecognized compensation related to stock options which is expected to be recognized over a weighted-average period of approximately 1.1 years.

The total fair value of shares vested for the stock option plan during 2020 was \$10 million (2019 – \$8 million; 2018 – \$11 million).

The following table provides information related to all options exercised in the stock option plan during the years ended December 31:

(in millions of Canadian dollars)	2020	2019	2018
Total intrinsic value	\$ 52	\$ 63	\$ 17
Cash received by the Company upon exercise of options	52	26	24

B. Other share-based plans

Performance share unit plans

During 2020, the Company issued 97,998 PSUs with a grant date fair value of approximately \$34 million and 10,029 PDSUs with a grant date fair value, including value of expected future matching units, of approximately \$4 million. PSUs and PDSUs attract dividend equivalents in the form of additional units, based on dividends paid on the Company's Common Shares, and vest approximately three years after the grant date contingent upon CP's performance ("performance factor"). The fair value of these PSUs and PDSUs is measured periodically until settlement using closing share price on the date of measurement. The fair value of units that are probable of vesting based on forecasted performance factors over the three-year performance period is recognized as expense in the Consolidated Statements of Income. Vested PSUs are settled in cash. Vested PDSUs are settled in cash pursuant to the DSU plan and are eligible for a 25% match if the holder has not exceeded their share ownership requirements, and are paid out only when the holder ceases their employment with CP.

The performance period for PSUs and PDSUs issued in 2020 is January 1, 2020 to December 31, 2022, and the performance factors are Return on Invested Capital ("ROIC"), Total Shareholder Return ("TSR") compared to the S&P/TSX 60 Index, and TSR compared to Class I railways.

The performance period for 133,681 PSUs issued in 2019 is January 1, 2019 to December 31, 2021, and the performance factors for these PSUs are ROIC, TSR compared to the S&P/TSX 60 Index, and TSR compared to Class I railways. The performance factors for the remaining 579 PSUs are annual revenue for the fiscal year 2020, diluted earnings per share for the fiscal year 2020, and share price appreciation.

The performance period for 125,280 PSUs issued in 2018 is January 1, 2018 to December 31, 2020, and the performance factors for these PSUs were ROIC, TSR compared to the S&P/TSX Capped Industrial Index, and TSR compared to the S&P 1500 Road and Rail Index. The resulting estimated payout on these awards was 200% on 113,769 total outstanding awards representing a total fair value of \$98 million at December 31, 2020, calculated using the Company's average share price of the last 30 trading days preceding December 31, 2020. The performance factors for the remaining 36,975 PSUs were annual revenue for the fiscal year 2020, diluted earnings per share for the fiscal year 2020, and share price appreciation.

The performance period for PSUs issued in 2017 was January 1, 2017 to December 31, 2019, and the performance factors for these PSUs were ROIC, TSR compared to the S&P/TSX Capped Industrial Index, and TSR compared to the S&P 1500 Road and Rail Index. The resulting payout was 193% of the outstanding units multiplied by the Company's average share price calculated using the last 30 trading days preceding December 31, 2019. In the first quarter of 2020, payouts occurred on the total outstanding awards, including dividends reinvested, totalling \$76 million on 121,225 outstanding awards.

The following table summarizes information related to the Company's PSUs and PDSUs as at December 31:

	2020	2019
Outstanding, January 1	403,136	395,048
Granted	108,027	134,260
Units, in lieu of dividends	3,843	4,032
Settled	(121,225)	(117,228)
Forfeited	(11,912)	(12,976)
Outstanding, December 31	381,869	403,136

In 2020, the expense for PSUs and PDSUs was \$121 million (2019 – \$89 million; 2018 – \$54 million). At December 31, 2020, there was \$51 million of total unrecognized compensation related to these awards which is expected to be recognized over a weighted-average period of approximately 1.4 years.

Deferred share unit plan

The Company established the DSU plan as a means to compensate and assist in attaining share ownership targets set for certain key employees and Directors. A DSU entitles the holder to receive, upon redemption, a cash payment equivalent to the Company's average share price using the 10 trading days prior to redemption. DSUs vest over various periods of up to 36 months and are only redeemable for a specified period after employment is terminated.

Senior managers may elect to receive DSUs in lieu of annual bonus cash payments in the bonus deferral program. In addition, senior managers will be granted a 25% company match of DSUs when deferring cash to DSUs to meet ownership targets. The election to receive eligible payments in DSUs is no longer available to a participant when the value of the participant's DSUs is sufficient to meet the Company's stock ownership guidelines. Senior managers have five years to meet their ownership targets.

The expense for DSUs is recognized over the vesting period for both the initial subscription price and the change in value between reporting periods.

The following table summarizes information related to the DSUs as at December 31:

	2020	2019
Outstanding, January 1	161,219	152,760
Granted	19,041	19,912
Units, in lieu of dividends	1,511	1,608
Settled	(26,788)	(12,110)
Forfeited	(172)	(951)
Outstanding, December 31	154,811	161,219

During 2020, the Company granted 19,041 DSUs with a grant date fair value of approximately \$7 million. In 2020, the expense for DSUs was \$21 million (2019 – \$20 million expense; 2018 – \$4 million expense). At December 31, 2020, there was \$1 million of total unrecognized compensation related to DSUs which is expected to be recognized over a weighted-average period of approximately 1.3 years.

Summary of share-based liabilities paid

The following table summarizes the total share-based liabilities paid for each of the years ended December 31:

(in millions of Canadian dollars)	2020	2019	2018
Plan			
PSUs	\$ 76	\$ 54	\$ 30
DSUs	9	4	6
Other	1	—	1
Total	\$ 86	\$ 58	\$ 37

C. Employee share purchase plan

The Company has an employee share purchase plan whereby both employee and the Company contributions are used to purchase shares on the open market for employees. The Company's contributions are expensed over the one year vesting period. Under the plan, the Company matches \$1 for every \$3 contributed by employees up to a maximum employee contribution of 6% of annual salary.

The total number of shares purchased in 2020 on behalf of participants, including the Company's contributions, was 115,344 (2019 – 137,942; 2018 – 118,865). In 2020, the Company's contributions totalled \$9 million (2019 – \$8 million; 2018 – \$6 million) and the related expense was \$7 million (2019 – \$6 million; 2018 – \$5 million).

24. Variable interest entities

The Company leases equipment from certain trusts, which have been determined to be variable interest entities financed by a combination of debt and equity provided by unrelated third parties. The lease agreements, which are classified as operating leases, have fixed price purchase options which create the Company's variable interests and result in the trusts being considered variable interest entities.

Maintaining and operating the leased assets according to specific contractual obligations outlined in the terms of the lease agreements and industry standards is the Company's responsibility. The rigour of the contractual terms of the lease agreements and industry standards are such that the Company has limited discretion over the maintenance activities associated with these assets. As such, the Company concluded these terms do not provide the Company with the power to direct the activities of the variable interest entities in a way that has a significant impact on the entities' economic performance.

The financial exposure to the Company as a result of its involvement with the variable interest entities is equal to the fixed lease payments due to the trusts. In 2020, lease payments after tax were \$14 million. Future minimum lease payments, before tax, of \$126 million will be payable over the next 10 years. The Company does not guarantee the residual value of the assets to the lessor; however, it must deliver to the lessor the assets in good operating condition, subject to normal wear and tear, at the end of the lease term.

As the Company's actions and decisions do not significantly affect the variable interest entities' performance, and the Company's fixed price purchase option is not considered to be potentially significant to the variable interest entities, the Company is not considered to be the primary beneficiary, and does not consolidate these variable interest entities.

25. Commitments and contingencies

In the normal course of its operations, the Company becomes involved in various legal actions, including claims relating to injuries and damage to property. The Company maintains provisions it considers to be adequate for such actions. While the final outcome with respect to actions outstanding or pending at December 31, 2020 cannot be predicted with certainty, it is the opinion of management that their resolution will not have a material adverse effect on the Company's business, financial position, or results of operations. However, an unexpected adverse resolution of one or more of these legal actions could have a material adverse effect on the Company's business, financial position, results of operations, or liquidity in a particular quarter or fiscal year.

Commitments

At December 31, 2020, the Company had committed to total future capital expenditures amounting to \$547 million and operating expenditures relating to supplier purchase obligations, such as bulk fuel purchase agreements, locomotive maintenance and overhaul agreements, as well as agreements to purchase other goods and services amounting to approximately \$1.7 billion for the years 2021–2032, of which CP estimates approximately \$1.6 billion will be incurred in the next five years.

Commitments related to leases, including minimum annual payments for the next five years and thereafter, are included in Note 19.

Legal proceedings related to Lac-Mégantic rail accident

On July 6, 2013, a train carrying petroleum crude oil operated by Montréal Maine and Atlantic Railway ("MMAR") or a subsidiary, Montréal Maine & Atlantic Canada Co. ("MMAC" and collectively the "MMA Group"), derailed in Lac-Mégantic, Québec. The derailment occurred on a section of railway owned and operated by the MMA Group and while the MMA Group exclusively controlled the train.

Following the derailment, MMAC sought court protection in Canada under the *Companies' Creditors Arrangement Act* and MMAR filed for bankruptcy in the U.S. Plans of arrangement were approved in both Canada and the U.S. (the "Plans"), providing for the distribution of approximately \$440 million amongst those claiming derailment damages.

A number of legal proceedings, set out below, were commenced in Canada and the U.S. against CP and others:

- (1) Québec's Minister of Sustainable Development, Environment, Wildlife and Parks ordered various parties, including CP, to remediate the derailment site (the "Cleanup Order") and served CP with a Notice of Claim for \$95 million for those costs. CP appealed the Cleanup Order and contested the Notice

of Claim with the Administrative Tribunal of Québec. These proceedings are stayed pending determination of the Attorney General of Québec ("AGQ") action (paragraph 2 below).

- (2) The AGQ sued CP in the Québec Superior Court claiming \$409 million in damages, which was amended and reduced to \$315 million (the "AGQ Action"). The AGQ Action alleges that: (i) CP was responsible for the petroleum crude oil from its point of origin until its delivery to Irving Oil Ltd.; and (ii) CP is vicariously liable for the acts and omissions of the MMA Group.
- (3) A class action in the Québec Superior Court on behalf of persons and entities residing in, owning or leasing property in, operating a business in, or physically present in Lac-Mégantic at the time of the derailment was certified against CP on May 8, 2015 (the "Class Action"). Other defendants including MMAC and Mr. Thomas Harding ("Harding") were added to the Class Action on January 25, 2017. The Class Action seeks unquantified damages, including for wrongful death, personal injury, property damage, and economic loss.
- (4) Eight subrogated insurers sued CP in the Québec Superior Court claiming approximately \$16 million in damages, which was amended and reduced to approximately \$15 million (the "Promutuel Action"), and two additional subrogated insurers sued CP claiming approximately \$3 million in damages (the "Royal Action"). Both actions contain similar allegations as the AGQ Action. The actions do not identify the subrogated parties. As such, the extent of any overlap between the damages claimed in these actions and under the Plans is unclear. The Royal Action is stayed pending determination of the consolidated proceedings described below.

On December 11, 2017, the AGQ Action, the Class Action and the Promutuel Action were consolidated. These consolidated claims are currently scheduled for a joint liability trial commencing on or around September 13, 2021, followed by a damages trial, if necessary.

- (5) Forty-eight plaintiffs (all individual claims joined in one action) sued CP, MMAC, and Harding in the Québec Superior Court claiming approximately \$5 million in damages for economic loss and pain and suffering, and asserting similar allegations as in the Class Action and the AGQ Action. The majority of the plaintiffs opted-out of the Class Action and all but two are also plaintiffs in litigation against CP, described in paragraph 7 below. This action is stayed pending determination of the consolidated claims described above.
- (6) The MMAR U.S. bankruptcy estate representative commenced an action against CP in November 2014 in the Maine Bankruptcy Court claiming that CP failed to abide by certain regulations and seeking approximately U.S. \$30 million in damages for MMAR's loss in business value according to a recent report. This action asserts that CP knew or ought to have known that the shipper misclassified the petroleum crude oil and therefore should have refused to transport it.
- (7) The class and mass tort action commenced against CP in June 2015 in Texas (on behalf of Lac-Mégantic residents and wrongful death representatives) and the wrongful death and personal injury actions commenced against CP in June 2015 in Illinois and Maine, were all transferred and consolidated in Federal District Court in Maine (the "Maine Actions"). The Maine Actions allege that CP negligently misclassified and improperly packaged the petroleum crude oil. On CP's motion, the Maine Actions were dismissed. The plaintiffs are appealing the dismissal decision, which is pending.
- (8) The trustee for the wrongful death trust commenced Carmack Amendment claims against CP in North Dakota Federal Court, seeking to recover approximately U.S. \$6 million for damaged rail cars and lost crude and reimbursement for the settlement paid by the consignor and the consignee under the Plans (alleged to be U.S. \$110 million and U.S. \$60 million, respectively). The Court issued an Order on August 6, 2020 granting and denying in parts the parties' summary judgment motions which has been reviewed and confirmed following motions by the parties for clarification and reconsideration. This action is scheduled for trial on September 21, 2021.

At this stage of the proceedings, any potential responsibility and the quantum of potential losses cannot be determined. Nevertheless, CP denies liability and is vigorously defending these proceedings.

26. Guarantees

In the normal course of operating the railway, the Company enters into contractual arrangements that involve providing certain guarantees, which extend over the term of the contracts. These guarantees include, but are not limited to:

- guarantees to pay other parties in the event of the occurrence of specified events, including damage to equipment, in relation to assets used in the operation of the railway through operating leases, rental agreements, easements, trackage, and interline agreements; and
- indemnifications of certain tax-related payments incurred by lessors and lenders.

The maximum amount that could be payable under these guarantees, excluding residual value guarantees, cannot be reasonably estimated due to the nature of certain of these guarantees. All or a portion of amounts paid under guarantees to other parties in the event of the occurrence of specified events could be recoverable from other parties or through insurance. The Company has accrued for all guarantees that it expects to pay. At December 31, 2020, these accruals amounted to \$18 million (2019 – \$10 million), and are recorded in "Accounts payable and accrued liabilities".

Indemnifications

Pursuant to a trust and custodial services agreement with the trustee of the Canadian Pacific Railway Company Pension Plan, the Company has undertaken to indemnify and save harmless the trustee, to the extent not paid by the fund, from any and all taxes, claims, liabilities, damages, costs, and expenses arising out of the performance of the trustee's obligations under the agreement, except as a result of misconduct by the trustee. The indemnity includes liabilities, costs, or expenses relating to any legal reporting or notification obligations of the trustee with respect to the defined benefit and defined contribution options of the pension plans, or otherwise with respect to the assets of the pension plans that are not part of the fund. The indemnity survives the termination or expiry of the agreement with respect to claims and liabilities arising prior to the termination or expiry. At December 31, 2020, the Company had not recorded a liability associated with this indemnification as it does not expect to make any payments pertaining to it.

27. Segmented and geographic information

Operating segment

The Company operates in only one operating segment: rail transportation. Operating results by geographic areas, railway corridors, or other lower-level components or units of operation are not reviewed by the Company's chief operating decision-maker to make decisions about the allocation of resources to, or the assessment of performance of, such geographic areas, corridors, components, or units of operation.

In the years ended December 31, 2020, 2019, and 2018, no one customer comprised more than 10% of total revenues and accounts receivable.

Geographic information

All of the company's revenue and long-lived assets excluding financial instruments are held within Canada and the United States.

(in millions of Canadian dollars)	Canada	United States	Total
2020			
Revenues	\$ 5,829	\$ 1,881	\$ 7,710
Long-term assets excluding financial instruments and pension assets	14,258	7,165	21,423
2019			
Revenues	5,675	2,117	7,792
Long-term assets excluding financial instruments and pension assets	13,131	7,020	20,151
2018			
Revenues	5,232	2,084	7,316
Long-term assets excluding financial instruments and pension assets	12,133	6,759	18,892

28. Selected quarterly data (unaudited)

For the quarter ended (in millions of Canadian dollars, except per share data)	2020				2019			
	Dec. 31	Sep. 30	Jun. 30	Mar. 31	Dec. 31	Sep. 30	Jun. 30	Mar. 31
Total revenues	\$ 2,012	\$ 1,863	\$ 1,792	\$ 2,043	\$ 2,069	\$ 1,979	\$ 1,977	\$ 1,767
Operating income	928	779	770	834	890	869	822	543
Net income	802	598	635	409	664	618	724	434
Basic earnings per share ⁽¹⁾	\$ 5.97	\$ 4.42	\$ 4.68	\$ 2.99	\$ 4.84	\$ 4.47	\$ 5.19	\$ 3.10
Diluted earnings per share ⁽¹⁾	\$ 5.95	\$ 4.41	\$ 4.66	\$ 2.98	\$ 4.82	\$ 4.46	\$ 5.17	\$ 3.09

⁽¹⁾ Earnings per share for the four quarters combined may not equal earnings per share for the year due to rounding.

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

ITEM 9A. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

As of December 31, 2020, an evaluation was carried out under the supervision of and with the participation of CP's management, including 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 December 31, 2020, to ensure that information required to be disclosed by the Company in reports that they file or submit 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.

Management's Report on Internal Control over Financial Reporting

Management is responsible for the financial statements and for establishing and maintaining adequate internal control over financial reporting for the Company as defined in Rules 13a-15(f) and 15d-15(f) of the *Exchange Act*. The Corporation's internal control system was designed to provide reasonable assurance to the Corporation's management and Board of Directors regarding the preparation and fair presentation of published financial statements. Due to its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Management has assessed the effectiveness of the Company's internal control over financial reporting in accordance with the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission in *Internal Control – Integrated Framework (2013)*. Based on this assessment, management concluded that the Company maintained effective internal control over financial reporting as of December 31, 2020. All internal control systems, no matter how well designed, have inherent limitations. Therefore, even those systems determined to be effective can provide only reasonable assurance with respect to the reliability of financial reporting and preparation of financial statements in accordance with generally accepted accounting principles.

The effectiveness of the Company's internal control over financial reporting as of December 31, 2020 has been audited by Deloitte LLP, the Company's independent registered public accounting firm who audited the Company's Consolidated Financial Statements included in this Form 10-K, as stated in their report, which is included herein.

Changes in Internal Control over Financial Reporting

During the three months ended December 31, 2020, 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.

Report of Independent Registered Public Accounting Firm

To the Shareholders and the Board of Directors of Canadian Pacific Railway Limited

Opinion on Internal Control over Financial Reporting

We have audited the internal control over financial reporting of Canadian Pacific Railway Limited and subsidiaries (the "Company") as of December 31, 2020, based on criteria established in Internal Control — Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2020, based on criteria established in Internal Control — Integrated Framework (2013) issued by COSO.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated financial statements as of and for the year ended December 31, 2020, of the Company and our report dated February 18, 2021, expressed an unqualified opinion on those financial statements.

Basis for Opinion

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ Deloitte LLP

Chartered Professional Accountants
Calgary, Canada
February 18, 2021

ITEM 9B. OTHER INFORMATION

None.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

Directors of Registrant

The information required by this Item will be contained in the Company's Form 10-K/A, which will be filed no later than 120 days after December 31, 2020. This information will also be contained in the management proxy circular that we prepare in accordance with applicable Canadian corporate and securities law requirements.

Executive Officers of Registrant

The information regarding executive officers is included in Part I of this annual report under Information about our Executive Officers, following Item 4. Mine Safety Disclosures.

Compliance with Section 16(a) of the Exchange Act

The information required by this Item will be contained in the Company's Form 10-K/A, which will be filed no later than 120 days after December 31, 2020.

Code of Ethics for Chief Executive Officer and Senior Financial Officers

The information required by this Item will be contained in the Company's Form 10-K/A, which will be filed no later than 120 days after December 31, 2020.

ITEM 11. EXECUTIVE COMPENSATION

The information required by this Item will be contained in the Company's Form 10-K/A, which will be filed no later than 120 days after December 31, 2020. This information will also be contained in the management proxy circular that we prepare in accordance with applicable Canadian corporate and securities law requirements.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

The information required by this Item will be contained in the Company's Form 10-K/A, which will be filed no later than 120 days after December 31, 2020.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

The information required by this Item will be contained in the Company's Form 10-K/A, which will be filed no later than 120 days after December 31, 2020. This information will also be contained in the management proxy circular that we prepare in accordance with applicable Canadian corporate and securities law requirements.

ITEM 14. PRINCIPAL ACCOUNTING FEES AND SERVICES

The information required by this Item will be contained in the Company's Form 10-K/A, which will be filed no later than 120 days after December 31, 2020. This information will also be contained in the management proxy circular that we prepare in accordance with applicable Canadian corporate and securities law requirements.

PART IV

ITEM 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULE

The following documents are filed as part of this annual report:

(a) Financial Statements

The financial statements filed as part of this filing are listed on the Index to Consolidated Financial Statements in Item 8. Financial Statements and Supplementary Data.

(b) Financial Statement Schedule

Schedule II – Valuation and Qualifying Accounts

	Beginning balance at January 1 (in millions of Canadian dollars)	Additions charged to expenses	Payments and other reductions	Impact of FX	Ending balance at December 31
Accruals for personal injury and other claims provision⁽¹⁾					
2018	\$ 118 \$	93 \$	(60) \$	1 \$	152
2019	\$ 152 \$	142 \$	(152) \$	(1) \$	141
2020	\$ 141 \$	105 \$	(119) \$	(1) \$	126
Environmental liabilities					
2018	\$ 78 \$	6 \$	(7) \$	5 \$	82
2019	\$ 82 \$	6 \$	(8) \$	(3) \$	77
2020	\$ 77 \$	10 \$	(6) \$	(1) \$	80

⁽¹⁾ Includes WCB, FELA, occupational, damage, and other.

(c) Exhibits

Exhibits are listed in the exhibit index below. The exhibits include management contracts, compensatory plans and arrangements required to be filed as exhibits to the Form 10-K by Item 601 (10) (iii) of Regulation S-K.

Exhibit	Description
3	Articles of Incorporation and Bylaws:
3.1	Restated Certificate and Articles of Incorporation of Canadian Pacific Railway Limited (incorporated by reference to Exhibit 99.2 to Canadian Pacific Railway Limited's Form 6-K filed with the Securities and Exchange Commission on October 22, 2015, File No. 001-01342).
3.2	By-law No. 1, as amended, of Canadian Pacific Railway Limited (incorporated by reference to Exhibit 1 to Canadian Pacific Railway Limited's Form 6-K filed with the Securities and Exchange Commission on May 22, 2009, File No. 001-01342).
3.3	By-law No. 2 of Canadian Pacific Railway Limited (incorporated by reference to Exhibit 99.1 to Canadian Pacific Railway Limited's Form 6-K filed with the Securities and Exchange Commission on March 13, 2015, File No. 001-01342).
3.4	General By-law, as amended, of Canadian Pacific Railway Company, a wholly owned subsidiary of Canadian Pacific Railway Limited (incorporated by reference to Exhibit 2 to Canadian Pacific Railway Limited's Form 6-K filed with the Securities and Exchange Commission on May 22, 2009, File No. 001-01342).
4	Instruments Defining the Rights of Security Holders, Including Indentures:
4.1	Indenture dated as of May 8, 2007 between Canadian Pacific Railway Company and The Bank of New York Mellon (incorporated by reference to Exhibit 4.1 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).
4.2	First Supplemental Indenture dated as of May 8, 2007 between Canadian Pacific Railway Company and The Bank of New York Mellon (incorporated by reference to Exhibit 4.2 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).
4.3	Second Supplemental Indenture dated as of May 20, 2008 between Canadian Pacific Railway Company and The Bank of New York Mellon (incorporated by reference to Exhibit 4.3 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).

4.4	Third Supplemental Indenture dated as of May 15, 2009 between Canadian Pacific Railway Company and The Bank of New York Mellon (incorporated by reference to Exhibit 4.4 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).
4.5	Fourth Supplemental Indenture dated as of September 23, 2010 between Canadian Pacific Railway Company and The Bank of New York Mellon (incorporated by reference to Exhibit 4.5 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).
4.6	Fifth Supplemental Indenture dated as of December 1, 2011 between Canadian Pacific Railway Company and The Bank of New York Mellon (incorporated by reference to Exhibit 4.6 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).
4.7	Sixth Supplemental Indenture dated as of February 2, 2015 between Canadian Pacific Railway Company and The Bank of New York Mellon (incorporated by reference to Exhibit 4.7 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).
4.8	Seventh Supplemental Indenture dated as of August 3, 2015 between Canadian Pacific Railway Company and The Bank of New York Mellon (incorporated by reference to Exhibit 4.8 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).
4.9	Eighth Supplemental Indenture dated as of November 24, 2015 among Canadian Pacific Railway Limited, Canadian Pacific Railway Company and The Bank of New York Mellon (incorporated by reference to Exhibit 4.9 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).
4.10	Indenture dated as of October 30, 2001 between Canadian Pacific Railway Company and The Bank of New York Mellon (incorporated by reference to Exhibit 4.10 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).
4.11	First Supplemental Indenture dated as of April 23, 2004 between Canadian Pacific Railway Company and The Bank of New York Mellon (incorporated by reference to Exhibit 4.11 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).
4.12	Second Supplemental Indenture dated as of October 12, 2011 between Canadian Pacific Railway Limited and The Bank of New York Mellon (incorporated by reference to Exhibit 4.12 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).
4.13	Third Supplemental Indenture dated as of October 13, 2011 between Canadian Pacific Railway Company and The Bank of New York Mellon (incorporated by reference to Exhibit 4.13 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).
4.14	Fourth Supplemental Indenture dated as of November 24, 2015 among Canadian Pacific Railway Limited, Canadian Pacific Railway Company and The Bank of New York Mellon (incorporated by reference to Exhibit 4.14 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).
4.15	Indenture dated as of July 15, 1991 between Canadian Pacific Railway Company and Harris Trust and Savings Bank (incorporated by reference to Exhibit 4.15 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).
4.16	First Supplemental Indenture dated as of July 1, 1996 between Canadian Pacific Railway Company and Harris Trust and Savings Bank (incorporated by reference to Exhibit 4.16 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).
4.17	Second Supplemental Indenture dated as of November 24, 2015 among Canadian Pacific Railway Limited, Canadian Pacific Railway Company and The Bank of New York Mellon (as successor in interest to Harris Trust and Savings Bank) (incorporated by reference to Exhibit 4.17 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).
4.18	Indenture dated as of May 23, 2008 between Canadian Pacific Railway Company and Computershare Trust Company of Canada (incorporated by reference to Exhibit 4.18 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).
4.19	First Supplemental Indenture dated as of November 24, 2015 among Canadian Pacific Railway Limited, Canadian Pacific Railway Company and Computershare Trust Company of Canada (incorporated by reference to Exhibit 4.19 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).
4.20	Indenture dated as of September 11, 2015, from Canadian Pacific Railway Company to Wells Fargo Bank, National Association, as Trustee (incorporated by reference to Exhibit 99.1 to Canadian Pacific Railway Limited's Registration Statement on Form 6-K filed with the Securities and Exchange Commission on September 14, 2015, File No. 001-01342).
4.21	First Supplemental Indenture dated as of September 11, 2015 between Canadian Pacific Railway Company and The Bank of New York Mellon (incorporated by reference to Exhibit 4.21 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).
4.22	Second Supplemental Indenture dated as of November 24, 2015 among Canadian Pacific Railway Limited, Canadian Pacific Railway Company and The Bank of New York Mellon (incorporated by reference to Exhibit 4.22 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).

4.23	Guarantee of Canadian Pacific Railway Company's Perpetual 4% Consolidated Debenture Stock dated as of December 18, 2015, between Canadian Pacific Railway Limited and Canadian Pacific Railway Company (incorporated by reference to Exhibit 4.23 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).
4.24	Third Supplemental Indenture dated as of May 16, 2018 among Canadian Pacific Railway Limited, Canadian Pacific Railway Company and Wells Fargo Bank (incorporated by reference to Exhibit 4.2 to Canadian Pacific Railway Limited's Current Report on Form 8-K filed with the Securities and Exchange Commission on May 16, 2018, File No. 001-01342).
4.25	Officers' Certificate of Canadian Pacific Railway Company dated March 13, 2019 (incorporated by reference to Exhibit 4.1 to Canadian Pacific Railway Limited's Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission on April 24, 2019, File No. 001-01342).
4.26	Description of Securities – Equity Securities (incorporated by reference to Exhibit 4.26 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 20, 2020, File No. 001-01342).
4.27	Form of 2.050% Note due 2030 (incorporated by reference to Exhibit 4.1 to Canadian Pacific Railway Limited's Current Report on Form 8-K filed with the Securities and Exchange Commission on March 6, 2020, File No. 001-01342).
4.28	Fourth Supplemental Indenture, dated as of March 5, 2020, by and among Canadian Pacific Railway Company, as issuer, Canadian Pacific Railway Limited, as guarantor, and Wells Fargo Bank, National Association, as trustee (incorporated by reference to Exhibit 4.2 to Canadian Pacific Railway Limited's Current Report on Form 8-K filed with the Securities and Exchange Commission on March 6, 2020, File No. 001-01342).
4.29	Second Supplemental Indenture, dated as of March 9, 2020, by and among Canadian Pacific Railway Company, as issuer, Canadian Pacific Railway Limited, as guarantor, and Computershare Trust Company of Canada, as trustee (incorporated by reference to Exhibit 4.3 to Canadian Pacific Railway Limited's Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission on April 21, 2020, File No. 001-01342).
10	Material Contracts:
10.1*	Compensation letter dated February 14, 2017, between the Company and Nadeem Velani (incorporated by reference to Exhibit 10.1 Canadian Pacific Railway Limited's Current Report on Form 8-K filed with the Securities and Exchange Commission on February 21, 2017, File No. 001-01342).
10.2	Fourth Amending Agreement, dated as of June 23, 2017, amending the Credit Agreement, dated September 26, 2014, between Canadian Pacific Railway Company, as Borrower, Canadian Pacific Railway Limited, as Covenantor, Royal Bank of Canada, as Administrative Agent, and the various Lenders party thereto (incorporated by reference to Exhibit 10.1 Canadian Pacific Railway Limited's Current Report on Form 8-K filed with the Securities and Exchange Commission on June 27, 2017, File No. 001-01342).
10.3*	Amendment dated as of January 31, 2017 to the Executive Employment Agreement dated July 23, 2016 and effective as of July 1, 2017 between Keith Creel and Canadian Pacific Railway Company (incorporated by reference to Exhibit 10.1 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 16, 2017, File No. 001-01342).
10.4*	Offer of Employment Letter to Nadeem Velani dated October 18, 2016 (incorporated by reference to Exhibit 10.3 Canadian Pacific Railway Limited's Registration Statement on Form 8-K filed with the Securities and Exchange Commission on October 24, 2016, File No. 001-01342).
10.5*	Executive Employment Agreement, between the Canadian Pacific Railway Limited and Keith Creel effective July 1, 2017 (incorporated by reference to Exhibit 10.2 to Canadian Pacific Railway Limited's Registration Statement on Form 8-K filed with the Securities and Exchange Commission on July 26, 2016, File No. 001-01342).
10.6	Third Amending Agreement, dated as of June 28, 2016, amending the Credit Agreement, dated September 26, 2014, between Canadian Pacific Railway Company, as Borrower, Canadian Pacific Railway Limited, as Covenantor, Royal Bank of Canada, as Administrative Agent, and the various Lenders party thereto (incorporated by reference to Exhibit 10.1 to Canadian Pacific Railway Limited's Registration Statement on Form 8-K filed with the Securities and Exchange Commission on June 29, 2016, File No. 001-01342).
10.7*	CP 401(k) Savings Plan, as amended and restated effective October 27, 2014 (incorporated by reference to Exhibit 4.5 to Canadian Pacific Railway Limited's Registration Statement on Form S-8 filed with the Securities and Exchange Commission on December 21, 2015, File No. 333-208647).
10.8*	Stand-Alone Option Agreement dated February 4, 2013 between the Registrant and Keith Creel (incorporated by reference to Exhibit 4.2 to Canadian Pacific Railway Limited's Registration Statement on Form S-8 filed with the Securities and Exchange Commission on May 24, 2013, File No. 333-188827).
10.9*	Performance Share Unit Plan for Eligible Employees of Canadian Pacific Railway Limited, adopted with effect from February 17, 2009, as amended February 22, 2013, April 30, 2014 and February 18, 2015 (incorporated by reference to Exhibit 10.3 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).
10.10*	Canadian Pacific Railway Limited Amended and Restated Management Stock Option Incentive Plan, as amended and restated effective November 19, 2015 (incorporated by reference to Exhibit 10.4 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).

10.11*	Canadian Pacific Railway Limited Employee Share Purchase Plan (U.S.) dated July 1, 2006 ("ESPP (U.S.)"), and Amendment to the ESPP (U.S.) effective January 1, 2015, and Amendment to the ESPP (U.S.) January 1, 2016 (incorporated by reference to Exhibit 10.5 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).
10.12*	Directors' Stock Option Plan, effective October 1, 2001 (incorporated by reference to Exhibit 10.7 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).
10.13*	Directors' Deferred Share Unit Plan, as amended effective July 1, 2013 (incorporated by reference to Exhibit 10.8 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).
10.14*	Senior Executives' Deferred Share Unit Plan, effective as of January 1, 2001, as amended September 6, 2012 (incorporated by reference to Exhibit 10.9 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).
10.15*	Canadian Pacific Railway Limited Employee Share Purchase Plan (Canada) dated July 1, 2006 ("ESPP (Canada)"), and Amendment to the ESPP (Canada) effective January 1, 2013, and Amendment to the ESPP (Canada) effective November 5, 2013, and Amendment to the ESPP (Canada) effective July 17, 2014 (incorporated by reference to Exhibit 10.10 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).
10.16*	Canadian Pacific U.S. Salaried Retirement Income Plan, as restated effective January 1, 2015 (incorporated by reference to Exhibit 10.11 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).
10.17*	Canadian Pacific U.S. Supplemental Executive Retirement Plan, effective January 1, 2013 ("CPUSERP"), and First Amendment to the CPUSERP effective November 14, 2013, and Second Amendment to the CPUSERP effective January 1, 2014 (incorporated by reference to Exhibit 10.12 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).
10.18*	Restricted Share Unit Plan for Eligible Employees of Canadian Pacific Railway Limited, effective August 2, 2011, as amended February 21, 2013 (incorporated by reference to Exhibit 10.13 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).
10.19*	Short Term Incentive Plan for Non-Unionized Employees (Canada) and US Salaried Employees, effective January 1, 2014 (incorporated by reference to Exhibit 10.14 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).
10.20*	Canadian Pacific Railway Company Pension Plan (Pension Plan Rules), consolidated as at January 1, 2009 (incorporated by reference to Exhibit 10.15 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).
10.21*	Amendment Number 1, effective July 1, 2010, to the Defined Contribution Provisions (Appendix B) of the Canadian Pacific Railway Company Pension Plan (Pension Plan Rules), consolidated as at January 1, 2009 (incorporated by reference to Exhibit 10.16 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).
10.22*	Amendment Number 2, effective April 1, 2011, to the Defined Contribution Provisions (Appendix B) of the Canadian Pacific Railway Company Pension Plan (Pension Plan Rules), consolidated as at January 1, 2009 (incorporated by reference to Exhibit 10.17 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).
10.23*	Amendment Number 3, effective January 1, 2013, to the Defined Contribution Provisions (Appendix B) of the Canadian Pacific Railway Company Pension Plan (Pension Plan Rules), consolidated as at January 1, 2009 (incorporated by reference to Exhibit 10.18 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).
10.24*	Amendment Number 1 to the Canadian Pacific Railway Company Pension Plan (Pension Plan Rules), consolidated as at January 1, 2009, approved by the Board of Directors on December 16, 2009 (incorporated by reference to Exhibit 10.19 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).
10.25*	Amendment Number 2, effective January 1, 2010, to the Canadian Pacific Railway Company Pension Plan (Pension Plan Rules), consolidated as at January 1, 2009 (incorporated by reference to Exhibit 10.20 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).
10.26*	Amendment Number 3, effective January 1, 2010, to the Canadian Pacific Railway Company Pension Plan (Pension Plan Rules), consolidated as at January 1, 2009 (incorporated by reference to Exhibit 10.21 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).
10.27*	Amendment Number 4, effective January 1, 2011, to the Canadian Pacific Railway Company Pension Plan (Pension Plan Rules), consolidated as at January 1, 2009 (incorporated by reference to Exhibit 10.22 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).

10.28*	Amendment Number 5, effective January 1, 2011, to the Canadian Pacific Railway Company Pension Plan (Pension Plan Rules), consolidated as at January 1, 2009 (incorporated by reference to Exhibit 10.23 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).
10.29*	Amendment Number 6, effective October 1, 2012, to the Canadian Pacific Railway Company Pension Plan (Pension Plan Rules), consolidated as at January 1, 2009 (incorporated by reference to Exhibit 10.24 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).
10.30*	Amendment Number 7, effective January 1, 2013, to the Canadian Pacific Railway Company Pension Plan (Pension Plan Rules), consolidated as at January 1, 2009 (incorporated by reference to Exhibit 10.25 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).
10.31*	Amendment Number 8, effective January 1, 2013, to the Canadian Pacific Railway Company Pension Plan (Pension Plan Rules), consolidated as at January 1, 2009 (incorporated by reference to Exhibit 10.26 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).
10.32*	Amendment Number 9, effective January 1, 2013, to the Canadian Pacific Railway Company Pension Plan (Pension Plan Rules), consolidated as at January 1, 2009 (incorporated by reference to Exhibit 10.27 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).
10.33*	Amendment Number 10, effective January 1, 2013, to the Canadian Pacific Railway Company Pension Plan (Pension Plan Rules), consolidated as at January 1, 2009 (incorporated by reference to Exhibit 10.28 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).
10.34*	Amendment Number 11, effective January 1, 2013, to the Canadian Pacific Railway Company Pension Plan (Pension Plan Rules), consolidated as at January 1, 2009 (incorporated by reference to Exhibit 10.29 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).
10.35*	Amendment Number 12, effective January 1, 2015, to the Canadian Pacific Railway Company Pension Plan (Pension Plan Rules), consolidated as at January 1, 2009 (incorporated by reference to Exhibit 10.30 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).
10.36*	Amendment Number 13, effective January 1, 2015, to the Canadian Pacific Railway Company Pension Plan (Pension Plan Rules), consolidated as at January 1, 2009 (incorporated by reference to Exhibit 10.31 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).
10.37*	Canadian Pacific Railway Company Secondary Pension Plan (Pension Plan Rules), effective June 1, 2013 (incorporated by reference to Exhibit 10.32 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).
10.38*	Amendment Number 1, effective June 1, 2013, to the Canadian Pacific Railway Company Secondary Pension Plan (Pension Plan Rules), effective June 1, 2013 (incorporated by reference to Exhibit 10.33 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).
10.39*	Amendment Number 2, effective January 1, 2015, to the Canadian Pacific Railway Company Secondary Pension Plan (Pension Plan Rules) effective January 1, 2015 (incorporated by reference to Exhibit 10.34 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).
10.40*	Canadian Pacific Supplemental Executive Retirement Plan, effective January 1, 2011 (incorporated by reference to Exhibit 10.35 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).
10.41*	Executive Employment Agreement between Canadian Pacific Railway Company, Soo Line Railroad Company and Keith Creel, effective as of February 5, 2013 (incorporated by reference to Exhibit 10.38 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).
10.42*	Amendment dated August 10, 2015, to the Executive Employment Agreement between Canadian Pacific Railway Company, Soo Line Railroad Company and Keith Creel, effective as of February 5, 2013 (incorporated by reference to Exhibit 10.39 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).
10.43	Credit Agreement dated as of September 26, 2014 among Canadian Pacific Railway Company and CPR Securities Limited, as borrowers, Canadian Pacific Railway Limited, as covenantor, the Financial Institutions that are signatories to the Credit Agreement, as Lenders, the Royal Bank of Canada, as Administrative Agent, RBC Capital Markets, J.P. Morgan Securities LLC, TD Securities, Morgan Stanley MUFG Loan Partners, LLC and Citibank, N.A., Canadian Branch, as Co-Lead Arrangers, RBC Capital Markets and J.P. Morgan Securities LLC, as Joint Bookrunners, J.P. Morgan Chase Bank, N.A., as Syndication Agent, The Toronto-Dominion Bank, Morgan Stanley MUFG Loan Partners, LLC and Citibank, N.A., Canadian Branch, as Co-Documentation Agents (incorporated by reference to Exhibit 10.45 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).
10.44	First Amending Agreement dated as of June 15, 2015, to the Credit Agreement dated September 26, 2014, among Canadian Pacific Railway Company and CPR Securities Limited, as borrowers, Canadian Pacific Railway Limited, as covenantor, the signatories to this First Amending Agreement to the Credit Agreement, as Lenders, the Royal Bank of Canada, as Administrative Agent (incorporated by reference to Exhibit 10.46 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).

10.45	Second Amending Agreement dated as of September 17, 2015, to the Credit Agreement dated September 26, 2014, among Canadian Pacific Railway Company and CPR Securities Limited, as borrowers, Canadian Pacific Railway Limited, as covenantor, the signatories to the Second Amending Agreement to this Credit Agreement, as Lenders, the Royal Bank of Canada, as Administrative Agent (incorporated by reference to Exhibit 10.47 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).
10.46	Fifth Amending Agreement, dated as of June 8, 2018, amending the Credit Agreement, dated September 26, 2014, between Canadian Pacific Railway Company, as Borrower, Canadian Pacific Railway Limited, as Covenantor, Royal Bank of Canada, as Administrative Agent, and the various Lenders party thereto (incorporated by reference to Exhibit 10.1 to Canadian Pacific Railway Limited's Current Report on Form 8-K filed with the Securities and Exchange Commission on June 11, 2018, File No. 001-01342).
10.47*	Amendment dated as of January 1, 2019, to the Executive Employment Agreement between Canadian Pacific Railway Company and Keith Creel, dated July 23, 2016 and effective as of July 1, 2017 as amended as of January 31, 2017 (incorporated by reference to Exhibit 10.49 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 15, 2019, File No. 001-01342).
10.48	Amended and Restated Credit Agreement, dated as of September 27, 2019, between Canadian Pacific Railway Company, as Borrower, Canadian Pacific Railway Limited, as Covenantor, Royal Bank of Canada, as Administrative Agent, and the various Lenders party thereto (incorporated by reference to Exhibit 10.1 to Canadian Pacific Railway Limited's Current Report on Form 8-K filed with the Securities and Exchange Commission on October 1, 2019, File No. 001-01342).
10.49* **	Amendment Number 3, effective June 1, 2013, to the Canadian Pacific Railway Company Pension Plan (Pension Plan Rules) consolidated as at January 1, 2009.
10.50* **	Amendment Number 14, effective May 1, 2017, to the Canadian Pacific Railway Company Pension Plan (Pension Plan Rules) consolidated as at January 1, 2009.
10.51* **	Amendment Number 15, effective January 1, 2019, to the Canadian Pacific Railway Company Pension Plan (Pension Plan Rules) consolidated as at January 1, 2009.
10.52* **	Amendment Number 16, effective January 1, 2021, to the Canadian Pacific Railway Company Pension Plan (Pension Plan Rules) consolidated as at January 1, 2009.
10.53* **	Offer of Employment Letter to Jeffrey Ellis dated October 19, 2015.
10.54* **	Offer of Employment Letter to John Brooks dated March 1, 2019.
10.55* **	Offer of Employment Letter to Mark Redd dated August 13, 2019.
21.1**	Subsidiaries of the registrant
22.1**	List of Issuers and Guarantor Subsidiaries
23.1**	Consent of Independent Registered Public Accounting Firm
24.1**	Power of attorney (included on the signature pages of this Form 10-K)
31.1**	CEO Rule 13a-14(a) Certifications
31.2**	CFO Rule 13a-14(a) Certifications
32.1**	CEO Section 1350 Certifications
32.2**	CFO Section 1350 Certifications
101.INS**	Inline XBRL Instance Document
101.SCH**	Inline XBRL Taxonomy Extension Schema Document
101.CAL**	Inline XBRL Taxonomy Extension Calculation Linkbase Document
101.LAB**	Inline XBRL Taxonomy Extension Label Linkbase Document
101.DEF**	Inline XBRL Taxonomy Extension Definition Linkbase Document
101.PRE**	Inline XBRL Taxonomy Extension Presentation Linkbase Document
	The following financial information from Canadian Pacific Railway Limited's Annual Report on Form 10-K for the year ended December 31, 2020, formatted in Extensible Business Reporting Language (XBRL) includes: (i) the Consolidated Statements of Income for each of the three years ended December 31, 2020, 2019, and 2018; (ii) the Consolidated Statements of Comprehensive Income for each of the three years ended December 31, 2020, 2019, and 2018; (iii) the Consolidated Balance Sheets at December 31, 2020 and 2019; (iv) the Consolidated Statements of Cash Flows for each of the three years ended December 31, 2020, 2019, and 2018; (v) the Consolidated Statements of Changes in Shareholders' Equity for each of the three years ended December 31, 2020, 2019, and 2018; and (vi) the Notes to Consolidated Financial Statements.
104 **	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101)

* Management contract or compensatory arrangement

** Filed with this Annual Report on Form 10-K

ITEM 16. FORM 10-K SUMMARY

Not applicable.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the *Securities Exchange Act of 1934*, the Company has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

CANADIAN PACIFIC RAILWAY LIMITED

(Registrant)

By: /s/ KEITH CREEL

Keith Creel

Chief Executive Officer

Dated: February 18, 2021

POWER OF ATTORNEY

Each of the undersigned do hereby appoint each of Nadeem Velani and Jeffrey J. Ellis, his or her true and lawful attorney-in-fact and agent, to sign on his or her behalf the Company's Annual Report on Form 10-K, for the year ended December 31, 2020, and any and all amendments thereto, and to file the same, with all exhibits thereto, with the Securities and Exchange Commission.

Pursuant to the requirements of the *Securities Exchange Act of 1934*, this report has been signed below by the following persons on behalf of the Company and in the capacities indicated on February 18, 2021.

Signature

/s/ KEITH CREEL

Keith Creel

/s/ NADEEM VELANI

Nadeem Velani

/s/ ISABELLE COURVILLE

Isabelle Courville

/s/ JOHN R. BAIRD

John R. Baird

/s/ GILLIAN H. DENHAM

Gillian H. Denham

/s/ EDWARD R. HAMBERGER

Edward R. Hamberger

/s/ REBECCA MACDONALD

Rebecca MacDonald

/s/ EDWARD L. MONSER

Edward L. Monser

/s/ MATTHEW H. PAULL

Matthew H. Paull

/s/ JANE L. PEVERETT

Jane L. Peverett

/s/ ANDREA ROBERTSON

Andrea Robertson

/s/ GORDON T. TRAFTON

Gordon T. Trafton

Title

Chief Executive Officer and Director

(Principal Executive Officer)

Executive Vice-President and Chief Financial Officer

(Principal Financial Officer)

Chair of the Board of Directors

Director

Director

Director

Director

Director

Director

Director

Director

EXECUTIVE TEAM

Keith Creel

President and Chief Executive Officer

Nadeem Velani

Executive Vice-President and Chief Financial Officer

Mark Redd

Executive Vice-President Operations

John Brooks

Executive Vice-President and Chief Marketing Officer

Laird Pitz

Senior Vice-President and Chief Risk Officer

Jeffrey Ellis

Chief Legal Officer and Corporate Secretary

James Clements

Senior Vice-President Strategic Planning
and Technology Transformation

Mike Foran

Vice-President Market Strategy and Asset Management

Chad Rolstad

Vice-President Human Resources and Chief Culture Officer

Michael Redeker

Vice-President and Chief Information Officer

BOARD OF DIRECTORS

Isabelle Courville

Chair

Keith Creel

President and Chief Executive Officer

John R. Baird

Director

Jill Denham

Director

Edward R. Hamberger

Director

Rebecca MacDonald

Director

Edward Monser

Director

Matthew H. Paull

Director

Jane L. Peverett

Director

Andrea Robertson

Director

Gordon Trafton

Director

EXCHANGE LISTINGS

The common shares of Canadian Pacific Railway Limited are listed on the Toronto and New York stock exchanges under the symbol CP.

CONTACT US

Investor Relations

Email: investor@cpr.ca

Canadian Pacific Investor Relations
7550 Ogden Dale Road S.E.
Calgary, AB, Canada T2C 4X9

Shareholder Services

Email: shareholder@cpr.ca

Canadian Pacific Shareholder Services
Office of the Corporate Secretary
7550 Ogden Dale Road S.E.
Calgary, AB, Canada T2C 4X9

Transfer Agent and Registrar

Computershare Investor Services Inc. serves as transfer agent and registrar for the common shares in Canada. Computershare Trust Company, N.A. serves as co-transfer agent and co-registrar for the common shares in the U.S. Visit the Computershare website at: investorcentre.com/cp

Auditors

Deloitte LLP



CANADIAN PACIFIC

7550 Ogden Dale Road S.E.
Calgary, Alberta, Canada
T2C 4X9

cpr.ca