

2021

ANNUAL
REPORT



FINANCIAL HIGHLIGHTS

Norfolk Southern Corporation & Subsidiaries

DESCRIPTION OF BUSINESS

Norfolk Southern Corporation (NYSE: NSC) is one of the nation's premier transportation companies, moving the goods and materials that drive the U.S. economy. Its Norfolk Southern Railway Company subsidiary connects customers to markets and communities to economic opportunity with safe, reliable, and cost-effective shipping solutions. The company operates approximately 19,300 route miles across a service territory that includes 22 states and the District of Columbia, every major container port in the eastern United States, and a majority of the U.S. population and manufacturing base. In addition to operating the most extensive intermodal network in the East, the company is a major transporter of industrial products, automobiles, automotive parts, and coal.

FOR THE YEAR

(numbers in millions, except per-share amounts)

	2021	2020	2019
Railway operating revenues	\$ 11,142	\$ 9,789	\$ 11,296
Income from railway operations ¹	\$ 4,447	\$ 3,486	\$ 3,989
Net income ¹	\$ 3,005	\$ 2,375	\$ 2,722
Per share – diluted ¹	\$ 12.11	\$ 9.25	\$ 10.25
Dividends per share	\$ 4.16	\$ 3.76	\$ 3.60
Dividend payout ratio ¹	34%	40%	35%
Net cash provided by operating activities	\$ 4,255	\$ 3,637	\$ 3,892
Property additions	\$ 1,470	\$ 1,494	\$ 2,019
Free cash flow ²	\$ 2,785	\$ 2,143	\$ 1,873

AT YEAR-END

Total assets	\$ 38,493	\$ 37,962	\$ 37,923
Total debt	\$ 13,840	\$ 12,681	\$ 12,196
Stockholders' equity	\$ 13,641	\$ 14,791	\$ 15,184
Shares outstanding	240.2	252.1	257.9

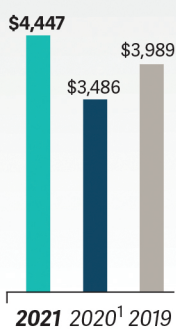
FINANCIAL RATIOS

Operating ratio ¹	60.1%	64.4%	64.7%
Debt-to-total capitalization ratio	50.4%	46.2%	44.5%

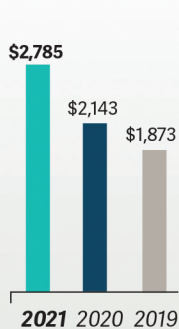
RAILWAY OPERATING REVENUES (in millions)



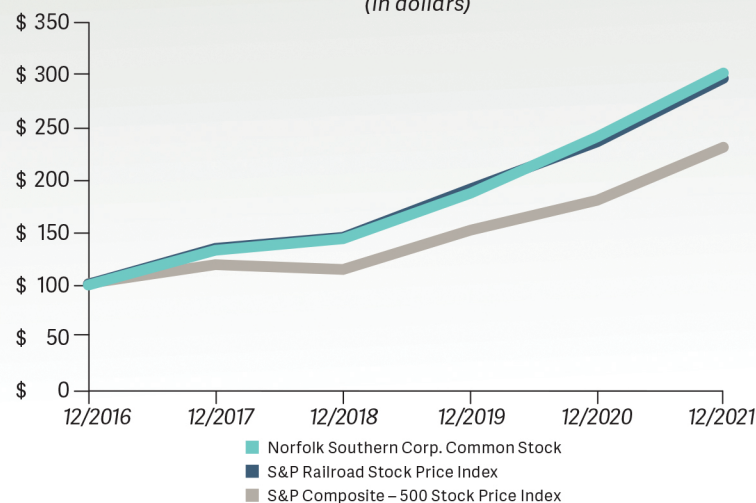
INCOME FROM RAILWAY OPERATIONS (in millions)



FREE CASH FLOW² (in millions)



TOTAL STOCKHOLDER RETURNS³ (in dollars)



¹ Our 2020 financial results included a loss on asset disposal of \$385M related to locomotives sold and a \$99M impairment charge related to an equity method investment. For purposes of period-over-period comparability, 2020 results for income from railway operations, net income, net income per share – diluted, dividend payout ratio, and operating ratio have been adjusted to exclude these charges, and are considered non-GAAP financial measures. The 2020 dividend payout ratio is dividends paid (\$960M) as a percentage of adjusted net income (\$2,375M), as compared to a 48% dividend payout ratio using net income under GAAP (\$2,013M). For more information, see the "Non-GAAP Reconciliation for 2020" on page K19 of our Annual Report on Form 10-K.

² Free cash flow is considered a non-GAAP financial measure and is a measure of cash available for other investing and financing activities, including payment of dividends, repurchases of common stock, and repayments of debt. Management believes that this non-GAAP financial measure provides useful supplemental information to investors regarding our ability to generate cash flows after taking into consideration cash necessary to cover operations and maintain and grow our capital base. Net cash provided by operating activities is a GAAP measure. Free cash flow (\$2,785M) is net cash provided by operating activities (\$4,255M) reduced by payments for property additions (\$1,470M).

³ This graph compares the cumulative stockholder returns on Norfolk Southern Corporation common stock with the other identified indices. It assumes an investment of \$100 in NSC common stock and each index on Dec. 31, 2016, and that all dividends were reinvested over the five-year period, ending Dec. 31, 2021. Data furnished by Bloomberg Financial Markets.

DEAR FELLOW SHAREHOLDERS

As 2021 came to a close, we concluded our three-year strategic plan to transform the company into a more innovative and efficient railroad. As part of this strategy, we deployed our own brand of precision scheduled railroading principles through our TOP21 operating plan. With tremendous dedication from the entire team, we delivered on our commitments in spite of significant headwinds associated with a freight recession and a global pandemic.



Over the last three years, Norfolk Southern has reduced our operating ratio by 530 basis points and achieved a company record of 60.1%. We've reached record productivity levels across our operations, improving average train weight and length 21% and 20%, respectively. Since beginning the strategic plan, earnings per share grew 27%, and we returned nearly \$10 billion to shareholders in the form of dividends and share repurchases. During this time, our company led the industry in total shareholder returns with growth of 110%.

We achieved strong financial results in 2021. Our company grew revenue 14%, outpacing a 6% increase in adjusted operating expenses driven largely by rising fuel costs.¹ We achieved net income of \$3 billion, a 27% increase, while earnings per share increased 31%, compared to the adjusted prior year amounts.¹ In addition, we accomplished record highs in operating income and free cash flow.²

Each of our markets experienced volume and revenue growth in 2021, reflecting a resurgent economy and strong demand for our service product. Both our merchandise and intermodal markets grew by over half a billion dollars in 2021, as markets benefitted from higher demand, elevated consumer activity, and favorable pricing conditions. Coal revenue was bolstered by higher export prices and growth in steel production.

While our focus on productivity and revenue growth produced record financial results, our service – impacted by labor shortages across key areas of our network – was not where it needed to be. Accordingly, we have increased our hiring and retention efforts, and begun development of a new operating plan that is fully aligned around a return to the service levels our customers expect.

¹ See Footnote 1 on the Financial Highlights page of this report regarding these non-GAAP financial measures.

² See Footnote 2 on the Financial Highlights page of this report regarding this non-GAAP financial measure.

SETTING THE BAR ON SUSTAINABILITY

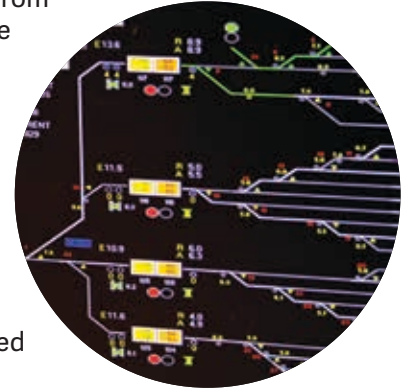
Helping shippers reduce their carbon footprint is one of our industry's competitive advantages, and Norfolk Southern made substantial sustainability gains in 2021.

We set a science-based target to reduce our carbon emissions, aligning our commitment to combat climate change with the Paris Climate Accords. Consistent with our goal, we also became the first North American Class I railroad to issue green bonds to finance projects that generate environmental benefits.

Sustainable business practices are increasingly important to our customers as well, and many have set their own public goals for carbon reduction. Norfolk Southern is partnering with these companies to deliver results. By choosing rail, our customers avoid 15 million metric tons of carbon emissions annually.

INCREASING VALUE WITH THE DIGITAL RAILROAD OF THE FUTURE

We continue to deploy innovative technology solutions to improve safety and efficiency, reduce our environmental impact, and make it easier to do business with Norfolk Southern. From artificial intelligence to automated inspections to mobile applications, we are leading the charge to build the digital railroad of the future.



In 2021, we developed new resources to deliver value to our customers and the marketplace, including our first-in-class industrial site search engine, NSites. This one-stop digital tool allows users to create customized searches for some 800 rail-served industrial sites and 250 rail-truck transload facilities across our system. As manufacturers expressed a desire to redesign their supply chains with supply certainty and inventory closer to their customers, the Norfolk Southern team responded quickly with a solution to meet their unique business needs.

OPENING OUR NEW CORPORATE HEADQUARTERS IN ATLANTA

In November, we celebrated the ribbon-cutting of 650 WPT, our new home in Midtown on West Peachtree Street.

Located in the heart of Atlanta's Tech Square, the campus is ideally suited for Norfolk Southern's innovative and collaborative team. We brought our company's leaders – including operations, marketing, finance, and technology – together in one location to drive productivity and efficiency across our organization. The design, location, and accommodations of 650 WPT promote the health and well-being of our employees, underscoring our commitment to a safe and inclusive work environment.



ENSURING A SAFE, INCLUSIVE, AND ACCOUNTABLE EMPLOYEE EXPERIENCE

For Norfolk Southern to reach its full potential, our people must be able to thrive. With that in mind, we're building a best-in-class employee experience. From expanded leadership development programs to ambitious Diversity, Equity, and Inclusion initiatives, our team is working to align, engage, and develop our workforce.

We've taken multiple steps to bring DEI into every aspect of our company and operations, building a representative and inclusive culture. To further drive accountability within our organization, we expanded our Inclusion Leadership Council, which includes senior leaders from every department.

The Norfolk Southern team showed impressive resilience throughout the year, and produced record results despite significant challenges and uncertainty. Moving forward, our company has an optimistic and confident outlook.

BUILDING LASTING RELATIONSHIPS IN OUR COMMUNITIES

With operations across 22 states and Washington, D.C., Norfolk Southern has a tremendous opportunity to make a positive impact. Through our corporate giving strategy, we're intent on cultivating lasting relationships that go beyond charitable contributions to build genuine connections through service.

In 2021, in conjunction with our move from Norfolk to Atlanta, we made a \$5 million investment in the Hampton Roads, Virginia, community to provide local nonprofits access to \$1 million in grants over the next five years. We wanted to send a clear message that our presence in Virginia will remain strong, and is important to our company.

In our new corporate hometown, we partnered with the Atlanta History Center to donate the comprehensive historical archives of our predecessor company Southern Railway. Our company played a major role in the growth of Atlanta, and we're making this rich history accessible to scholars, students, and railfans. Norfolk Southern is providing \$500,000 to support the collection in perpetuity and create paid internship opportunities for underrepresented communities for five years.



“
Norfolk Southern has a tremendous opportunity to make a positive impact.
”



DELIVERING A SMOOTH TRANSITION IN LEADERSHIP

During my time as chairman and CEO of Norfolk Southern, I am proud of what we've accomplished. We've delivered industry-leading shareholder returns over the course of our latest strategic plan, become a more efficient, sustainable, and technologically innovative railroad, and brought company leadership together in a new, state-of-the-art Atlanta headquarters.

We are in a rock-solid position for continued success. Alan Shaw, who was named company president in December 2021, is the right leader for the next chapter in our ongoing story of transformation. He is a veteran railroader who understands every aspect of our business, and will lead continued improvement in service and efficiency. Alan has unparalleled knowledge of our customers and the markets we serve, as well as the vision to grow shareholder value in our competitive, rapidly evolving industry.

“
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success.”



Effective May 1, Alan will assume the role of CEO and join Norfolk Southern's board. At that time, Amy E. Miles – a director since 2014 – will become the non-executive chair of your board of directors. In the months ahead, we will continue working together to complete a smooth transition and are confident that all Norfolk Southern stakeholders will be in good hands with our new leadership.

Thank you for your investment in Norfolk Southern.

Sincerely,

BOARD OF DIRECTORS



THOMAS D. BELL JR.

Director Since 2010

COMMITTEES:
compensation, finance and risk management

CAREER HIGHLIGHTS:
Bell is the chairman of Mesa Capital Partners LLC, a real-estate investment company. From 2002 to 2009, Bell served as chairman and CEO of Cousins Properties, a publicly traded real-estate investment trust that invests in office buildings throughout the South. He is a director of Southern Company Gas, formerly AGL Resources, and was a director of Regal Entertainment Group Inc. until its acquisition in March 2018.

EXPERTISE:
CEO/senior officer; environmental and safety; governance/board; governmental and stakeholder relations; human resources and compensation; marketing; strategic planning



MITCHELL E. DANIELS JR.

Director Since 2016

COMMITTEES:
compensation, executive, governance and nominating (chair)

CAREER HIGHLIGHTS:
Daniels has been president of Purdue University since 2013 and served as governor of Indiana from 2005 to 2013. From 1990 to 2000, Daniels worked for Eli Lilly and Company, holding the executive positions of president of North American pharmaceutical operations and senior vice president of corporate strategy and policy. He is a director of Cerner Corporation.

EXPERTISE:
CEO/senior officer; finance and accounting; governance/board; governmental and stakeholder relations; strategic planning



MARCELA E. DONADIO

Director Since 2016

COMMITTEES:
audit, finance and risk management

CAREER HIGHLIGHTS:
Donadio is a certified public accountant with over 37 years of audit and public accounting experience. She retired in 2014 as a partner of Ernst & Young LLP, a multinational professional services firm. From 2007 until her retirement, Donadio was Americas Oil & Gas sector leader, with responsibility for one of Ernst & Young's significant industry groups, helping set firm strategy for oil and gas industry clients in the United States and throughout the Americas. Donadio serves as lead independent director of Marathon Oil Corporation and as a director of NOV Inc. She has been a director of Freeport-McMoRan since August 2021.

EXPERTISE:
CEO/senior officer; finance and accounting; governance/board; human resources and compensation; strategic planning



JOHN C. HUFFARD JR.

Director Since 2020

COMMITTEES:
compensation, finance and risk management

CAREER HIGHLIGHTS:
Huffard is a co-founder of Tenable Network Security Inc. and Tenable Holdings Inc., a cybersecurity software company. From 2002 to 2018, he served as president and chief operating officer and as a director of Tenable Network Security Inc. He was responsible for driving Tenable's global corporate strategy and business operations and was instrumental in the venture funding and IPO process. From 2018 to 2019, Huffard focused exclusively on business operations as chief operating officer of Tenable Holdings. He has been a director of Tenable Holdings since 2016.

EXPERTISE:
CEO/senior officer; finance and accounting; governance/board; human resources and compensation; information technology

All directors are subject to re-election each year. Information as of Feb. 1, 2022.





CHRISTOPHER T. JONES

Director Since 2020

COMMITTEES:

audit, governance and nominating, safety

CAREER HIGHLIGHTS:

Jones served as corporate vice president and president of the technology services sector of Northrop Grumman Corporation, a global aerospace and defense technology company, from January 2013 through December 2019. He served as vice president and general manager of Northrop Grumman's integrated logistics and modernization division from 2010 through 2012. Jones was a maintenance officer in the Connecticut Air National Guard from 1997 to 2011.

EXPERTISE:

CEO/senior officer; finance and accounting; governmental and stakeholder relations; information technology; strategic planning



THOMAS C. KELLEHER

Director Since 2019

COMMITTEES:

audit, executive, finance and risk management (chair)

CAREER HIGHLIGHTS:

Kelleher served as president of Morgan Stanley, a leading global financial services firm, from 2016 until his retirement in June 2019. He served as chairman and chief executive officer of Morgan Stanley Bank N.A. until June 2019. In addition, he was president of Morgan Stanley Institutional Securities from 2010 to 2016; CEO of Morgan Stanley International from 2011 to 2016; chief financial officer and co-head of corporate strategy from 2007 to early 2010; and head of global capital markets for Morgan Stanley from 2006 to 2007.

EXPERTISE:

CEO/senior officer; finance and accounting; governance/board; governmental and stakeholder relations; human resources and compensation; strategic planning



STEVEN F. LEER

Director Since 1999

COMMITTEES:

compensation, executive, governance and nominating

CAREER HIGHLIGHTS:

Leer served as the chief executive officer of Arch Coal Inc., a company engaged in coal mining and related businesses, from 1992 through 2012. He was chairman of its board from 2006 through 2012 and its executive chairman from 2012 through 2014. He served as senior advisor to the president and CEO of Arch Coal from 2014 through May 2015. Leer was a director of Cenovus Energy Inc. until Jan. 1, 2021. He is a director of Parsons Corporation and served as the non-executive chairman of USG Corporation until April 2019.

EXPERTISE:

CEO/senior officer; environmental and safety; governance/board; governmental and stakeholder relations; human resources and compensation; marketing; strategic planning; transportation



MICHAEL D. LOCKHART

Director Since 2008

COMMITTEES:

audit, executive, finance and risk management, safety (chair)

CAREER HIGHLIGHTS:

Lockhart served as chairman of the board, president, and chief executive officer of Armstrong World Industries Inc., and its predecessor, Armstrong Holdings Inc., a leading global producer of flooring products and ceiling systems, from 2000 until his retirement in February 2010. He served as chairman and chief executive officer of General Signal Corporation, a diversified manufacturer, from September 1995 until it was acquired in 1998.

EXPERTISE:

CEO/senior officer; environmental and safety; finance and accounting; governance/board; marketing; strategic planning; transportation



AMY E. MILES

Director Since 2014

COMMITTEES:

audit (chair), executive, governance and nominating

CAREER HIGHLIGHTS:

Miles has been a director since 2014 and will be non-executive chair of Norfolk Southern's board effective May 1, 2022. She served as chief executive officer of Regal Entertainment Group Inc., a leading motion picture exhibitor, from 2009 until its acquisition in March 2018. During that time, Miles served as a director of Regal and was named chair of its board in 2015. From 2002 to 2009, she served as Regal Entertainment's executive vice president, chief financial officer, and treasurer. Miles has been a director of The Gap Inc. since April 2020 and Amgen Inc. since July 2020.

EXPERTISE:

CEO/senior officer; finance and accounting; governance/board; information technology; marketing; strategic planning



CLAUDE MONGEAU

Director Since 2019

COMMITTEES:
compensation, finance and risk management, safety

CAREER HIGHLIGHTS:
Mongeau served as president and chief executive officer of Canadian National Railway Company, known as CN, a North American railroad and transportation company, from January 2010 to June 2016 and as a director from October 2009 to June 2016. During his 22-year career at CN, he also served as executive vice president and chief financial officer, vice president strategic and financial planning, and assistant vice president corporate development. Mongeau is a director of Cenovus Energy and Toronto-Dominion Bank. He was a director of Telus from 2017 to 2019.

EXPERTISE:
CEO/senior officer; environmental and safety; finance and accounting; governance/board; governmental and stakeholder relations; human resources and compensation; marketing; strategic planning; transportation



JENNIFER F. SCANLON

Director Since 2018

COMMITTEES:
compensation, governance and nominating, safety

CAREER HIGHLIGHTS:
Scanlon has been president and chief executive officer and director of UL, a global science safety organization, since Sept. 30, 2019. She is the first woman to lead the organization. She previously served as president and chief executive officer of USG Corporation from 2016 until its acquisition in April 2019. During that time, she served as a director of USG. Scanlon previously served as president of USG's international business, president of its L&W Supply Corporation, and chief information officer and chairman of the board for USG Boral Building Products.

EXPERTISE:
CEO/senior officer; environmental and safety; governance/board; information technology; marketing; strategic planning; transportation



JAMES A. SQUIRES

Director Since 2014

COMMITTEES:
executive (chair)

CAREER HIGHLIGHTS:
Squires has been chief executive officer of Norfolk Southern since June 2015 and will be chairman of the company's board until his retirement on May 1, 2022. Squires served as Norfolk Southern's president from 2013 until December 2021 and previously served as executive vice president administration, executive vice president finance and chief financial officer, senior vice president finance, senior vice president law, and vice president law.

EXPERTISE:
CEO/senior officer; finance and accounting; governance/board; governmental and stakeholder relations; human resources and compensation; marketing; strategic planning; transportation



JOHN R. THOMPSON

Director Since 2013

COMMITTEES:
compensation (chair), executive, governance and nominating

CAREER HIGHLIGHTS:
Thompson served as a government relations consultant for Best Buy Co. Inc., a multinational consumer electronics corporation, from October 2012 to April 2016. He served as senior vice president and general manager of BestBuy.com LLC, a subsidiary of Best Buy, from 2002 through 2012. Thompson was formerly a director of Belk Inc. and Wendy's International Inc.

EXPERTISE:
CEO/senior officer; finance and accounting; governance/board; governmental and stakeholder relations; human resources and compensation; information technology; marketing; strategic planning





EQUAL EMPLOYMENT OPPORTUNITY POLICY

Norfolk Southern Corporation's policy is to comply with all applicable laws, regulations, and executive orders concerning equal opportunity and nondiscrimination. The company's policy is to offer employment, training, remuneration, advancement, and all other privileges of employment on the basis of qualification and performance regardless of race, religion, color, national origin, gender, age, status as a covered veteran, sexual orientation, gender identity, the presence of a disability, genetic information, or any other legally protected status.

OFFICERS

James A. Squires
Chairman and Chief Executive Officer

Alan H. Shaw
President

Ann A. Adams
Executive Vice President
and Chief Transformation Officer

Claude E. Elkins
Executive Vice President
and Chief Marketing Officer

Mark R. George
Executive Vice President Finance
and Chief Financial Officer

Cynthia M. Sanborn
Executive Vice President
and Chief Operating Officer

Lorri J. Kleine
Senior Vice President Law
and Chief Legal Officer

Clyde H. Allison Jr.
Vice President and Controller

Edward F. Boyle Jr.
Vice President Engineering

Hunsdon Cary IV
Vice President Transportation

Michael F. Cox
Vice President Taxation

Fredric M. Ehlers
Vice President Information Technology
and Chief Information Officer

John H. Friedmann
Vice President Network Planning
and Optimization

John S. Hatfield
Vice President Corporate Communications

Jeffrey S. Heller
Vice President Intermodal and Automotive

James L. Kitchin
Vice President Industrial Products

Michael R. McClellan
Vice President Strategic Planning

Jason M. Morris
Vice President Labor Relations

Christopher R. Neikirk
Vice President and Treasurer

Barbara N. Paul
Vice President Human Resources

Thomas W. Schnautz
Vice President Advanced Train Control

Kathleen C. Smith
Vice President Business Development
and Real Estate

Susan S. Stuart
Vice President Audit and Compliance

Frank J. Voyack
Vice President Government Relations

Jason A. Zampi
Vice President Financial Planning and Analysis

Denise W. Hutson
Corporate Secretary

UNITED STATES SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549
FORM 10-K

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
for the fiscal year ended **DECEMBER 31, 2021**

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
for the transition period from _____ to _____

Commission File Number 1-8339



NORFOLK SOUTHERN CORPORATION
(Exact name of registrant as specified in its charter)

Virginia
(State or other jurisdiction of incorporation or organization)

52-1188014
(I.R.S Employer Identification No.)

650 West Peachtree Street NW
Atlanta, Georgia
(Address of principal executive offices)

30308-1925
(Zip Code)

(855) 667-3655
(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Norfolk Southern Corporation Common Stock (Par Value \$1.00)	NSC	New York Stock Exchange

Securities registered pursuant to Section 12(g) of the Act: NONE

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Act. Yes No

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files).
Yes No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer", "accelerated filer", "smaller reporting company", and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer Accelerated filer Non-accelerated filer Smaller reporting company Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report.

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). Yes No

The aggregate market value of the voting common equity held by non-affiliates at June 30, 2021 was \$65,486,012,788 (based on the closing price as quoted on the New York Stock Exchange on June 30, 2021).

The number of shares outstanding of each of the registrant's classes of common stock, at January 31, 2022: 239,777,444 (excluding 20,320,777 shares held by the registrant's consolidated subsidiaries).

DOCUMENTS INCORPORATED BY REFERENCE: Portions of the Registrant's definitive proxy statement to be filed electronically pursuant to Regulation 14A not later than 120 days after the end of the fiscal year, are incorporated herein by reference in Part III.

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PART I

NORFOLK SOUTHERN CORPORATION AND SUBSIDIARIES

Item 1. Business and Item 2. Properties

GENERAL – Norfolk Southern Corporation (Norfolk Southern) is an Atlanta, Georgia-based company that owns a major freight railroad, Norfolk Southern Railway Company (NSR). We were incorporated on July 23, 1980, under the laws of the Commonwealth of Virginia. Our common stock (Common Stock) is listed on the New York Stock Exchange (NYSE) under the symbol “NSC.”

Unless indicated otherwise, Norfolk Southern Corporation and its subsidiaries, including NSR, are referred to collectively as NS, we, us, and our.

We are primarily engaged in the rail transportation of raw materials, intermediate products, and finished goods primarily in the Southeast, East, and Midwest and, via interchange with rail carriers, to and from the rest of the United States (U.S.). We also transport overseas freight through several Atlantic and Gulf Coast ports. We offer the most extensive intermodal network in the eastern half of the U.S.

We make available free of charge through our website, www.norfolksouthern.com, our annual report 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 material is electronically filed with or furnished to the U.S. Securities and Exchange Commission (SEC). In addition, the following documents are available on our website and in print to any shareholder who requests them:

- Corporate Governance Guidelines
- Charters of the Committees of the Board of Directors
- The Thoroughbred Code of Ethics
- Code of Ethical Conduct for Senior Financial Officers
- Categorical Independence Standards for Directors
- Norfolk Southern Corporation Bylaws

RAILROAD OPERATIONS – At December 31, 2021, we operated approximately 19,300 route miles in 22 states and the District of Columbia.

Our system reaches many manufacturing plants, electric generating facilities, mines, distribution centers, transload facilities, and other businesses located in our service area.



Corridors with heaviest freight volume:

- New York City area to Chicago (via Allentown and Pittsburgh)
- Chicago to Macon (via Cincinnati, Chattanooga, and Atlanta)
- Central Ohio to Norfolk (via Columbus and Roanoke)
- Birmingham to Meridian
- Cleveland to Kansas City
- Memphis to Chattanooga

The miles operated, which include major leased lines between Cincinnati and Chattanooga, and an exclusive operating agreement for trackage rights over property owned by North Carolina Railroad Company, were as follows:

Mileage Operated at December 31, 2021					
	Route Miles	Second and Other Main Track	Passing Track, Crossovers and Turnouts	Way and Yard Switching	Total
Owned	14,522	2,677	1,985	8,202	27,386
Operated under lease, contract or trackage rights	4,797	1,889	405	839	7,930
Total	19,319	4,566	2,390	9,041	35,316

We operate freight service over lines with significant ongoing Amtrak and commuter passenger operations and conduct freight operations over trackage owned or leased by Amtrak, New Jersey Transit, Southeastern Pennsylvania Transportation Authority, Metro-North Commuter Railroad Company, Maryland Department of Transportation, and Michigan Department of Transportation.

The following table sets forth certain statistics relating to our operations for the past five years:

	Years ended December 31,				
	2021	2020	2019	2018	2017
Revenue ton miles (billions)	178	164	194	207	201
Revenue per thousand revenue ton miles	\$ 62.56	\$ 59.67	\$ 58.21	\$ 55.25	\$ 52.38
Revenue ton miles (thousands) per railroad employee	9,694	8,191	7,939	7,822	7,474
Ratio of railway operating expenses to railway operating revenues (railway operating ratio)	60.1%	69.3%	64.7%	65.4%	66.6%

RAILWAY OPERATING REVENUES – Total railway operating revenues were \$11.1 billion in 2021.

Following is an overview of our three commodity groups. See the discussion of merchandise revenues by major commodity group, intermodal revenues, and coal revenues and tonnage in Item 7 “Management’s Discussion and Analysis of Financial Condition and Results of Operations.”

MERCHANDISE – Our merchandise commodity group is composed of four groupings:

- Agriculture, forest and consumer products includes soybeans, wheat, corn, fertilizer, livestock and poultry feed, food products, food oils, flour, sweeteners, ethanol, lumber and wood products, pulp board and paper products, wood fibers, wood pulp, scrap paper, beverages, canned goods, and consumer products.
- Chemicals includes sulfur and related chemicals, petroleum products (including crude oil), chlorine and bleaching compounds, plastics, rubber, industrial chemicals, chemical wastes and sand.
- Metals and construction includes steel, aluminum products, machinery, scrap metals, cement, aggregates, minerals, clay, transportation equipment, and items for the U.S. military.
- Automotive includes finished motor vehicles and automotive parts.

In 2021, we handled 2.3 million merchandise carloads, which accounted for 60% of our total railway operating revenues.

INTERMODAL – Our intermodal commodity group consists of shipments moving in domestic and international containers and trailers. These shipments are handled on behalf of intermodal marketing companies, international steamship lines, premium customers and asset owning companies. In 2021, we handled 4.1 million intermodal units, which accounted for 28% of our total railway operating revenues.

COAL – Coal revenues accounted for 12% of our total railway operating revenues in 2021. We handled 73 million tons, or 0.7 million carloads, most of which originated on our lines from major eastern coal basins, with the balance from major western coal basins received via the Memphis and Chicago gateways. Our coal franchise supports the electric generation market, serving approximately 50 coal-fired power plants, as well as the export, domestic metallurgical and industrial markets, primarily through direct rail and river, lake, and coastal facilities, including various terminals on the Ohio River, Lamberts Point in Norfolk, Virginia, the Port of Baltimore, and Lake Erie.

FREIGHT RATES – Our predominant pricing mechanisms, private contracts and exempt price quotes, are not subject to regulation. In general, market forces are the primary determinant of rail service prices.

RAILWAY PROPERTY

Our railroad infrastructure makes us capital intensive with net properties of approximately \$32 billion on a historical cost basis.

Property Additions – Property additions for the past five years were as follows:

	<u>2021</u>	<u>2020</u>	<u>2019</u>	<u>2018</u>	<u>2017</u>
	<i>(\$ in millions)</i>				
Road and other property	\$ 1,041	\$ 1,046	\$ 1,371	\$ 1,276	\$ 1,210
Equipment	429	448	648	675	513
Total	<u>\$ 1,470</u>	<u>\$ 1,494</u>	<u>\$ 2,019</u>	<u>\$ 1,951</u>	<u>\$ 1,723</u>

Our capital spending and replacement programs are and have been designed to assure the ability to provide safe, efficient, and reliable rail transportation services.

Equipment – At December 31, 2021, we owned or leased the following units of equipment:

	<u>Owned</u>	<u>Leased</u>	<u>Total</u>	<u>Capacity of Equipment</u>
Locomotives:				(Horsepower)
Multiple purpose	3,068	—	3,068	11,940,400
Auxiliary units	138	—	138	—
Switching	4	—	4	4,400
Total locomotives	<u>3,210</u>	<u>—</u>	<u>3,210</u>	<u>11,944,800</u>
Freight cars:				(Tons)
Gondola	17,781	2,643	20,424	2,282,819
Hopper	8,113	—	8,113	925,510
Covered hopper	5,664	—	5,664	629,896
Box	2,684	706	3,390	308,515
Flat	1,428	136	1,564	131,168
Other	1,558	—	1,558	69,649
Total freight cars	<u>37,228</u>	<u>3,485</u>	<u>40,713</u>	<u>4,347,557</u>
Other:				
Chassis	33,751	880	34,631	
Containers	18,310	—	18,310	
Work equipment	5,502	243	5,745	
Vehicles	2,833	19	2,852	
Miscellaneous	2,245	—	2,245	
Total other	<u>62,641</u>	<u>1,142</u>	<u>63,783</u>	

The following table indicates the number and year built for locomotives and freight cars owned at December 31, 2021:

	<u>2021</u>	<u>2020</u>	<u>2019</u>	<u>2018</u>	<u>2017</u>	<u>2012- 2016</u>	<u>2007- 2011</u>	<u>2006 & Before</u>	<u>Total</u>
Locomotives:									
No. of units	—	10	35	15	55	266	259	2,570	3,210
% of fleet	—	—	1%	1%	2%	8%	8%	80%	100%
Freight cars:									
No. of units	—	—	200	—	470	5,745	8,041	22,772	37,228
% of fleet	—	—	1%	—	1%	15%	22%	61%	100%

The following table shows the average age of our owned locomotive and freight car fleets at December 31, 2021 and information regarding 2021 retirements:

	<u>Locomotives</u>	<u>Freight Cars</u>
Average age – in service	26.7 years	25.7 years
Retirements	2 units	2,308 units
Average age – retired	31.5 years	42.2 years

Track Maintenance – Of the 35,300 total miles of track on which we operate, we are responsible for maintaining 28,700 miles, with the remainder being operated under trackage rights from other parties responsible for maintenance.

Over 84% of the main line trackage (including first, second, third, and branch main tracks, all excluding rail operated pursuant to trackage rights) has rail ranging from 131 to 155 pounds per yard with the standard installation currently at 136 pounds per yard. Approximately 41% of our lines, excluding rail operated pursuant to trackage rights, carried 20 million or more gross tons per track mile during 2021.

The following table summarizes several measurements regarding our track roadway additions and replacements during the past five years:

	<u>2021</u>	<u>2020</u>	<u>2019</u>	<u>2018</u>	<u>2017</u>
Track miles of rail installed	458	418	449	416	466
Miles of track surfaced	4,225	4,785	5,012	4,594	5,368
Crossties installed (millions)	2.0	1.8	2.4	2.2	2.5

Traffic Control – Of the 16,200 route miles we dispatch, 11,300 miles are signalized, including 8,500 miles of centralized traffic control (CTC) and 2,800 miles of automatic block signals. Of the 8,500 miles of CTC, 7,600 miles are controlled by data radio originating at 355 base station radio sites.

ENVIRONMENTAL MATTERS – Compliance with federal, state, and local laws and regulations relating to the protection of the environment is one of our principal goals. To date, such compliance has not had a material effect on our financial position, results of operations, liquidity, or competitive position. See Note 17 to the Consolidated Financial Statements.

HUMAN CAPITAL MANAGEMENT

Workforce – We employed an average of 18,500 employees during 2021, and 18,100 employees at the end of 2021. Approximately 80% of our railroad employees – referred to as “craft” employees – are covered by collective bargaining agreements with various labor unions. See the discussion of “Labor Agreements” in Item 7 “Management’s Discussion and Analysis of Financial Condition and Results of Operations.” The remainder of our workforce is composed of management employees.

Craft Workforce Levels and Productivity – Maintaining appropriate headcount levels for our craft-employee workforce is critical to our on-time and consistent delivery of customers’ goods and operational efficiency goals. We manage this human capital metric through forecasting tools designed to ensure the optimal level of staffing to meet business demands while controlling costs. We measure and monitor employee productivity based on gross ton miles per train and engine employee.

Safety – We are dedicated to providing employees with a safe workplace and the knowledge and tools they need to work safely and return home safely every day. Our commitment to an injury-free workplace is illustrated by our “*I am Coming Home*” safety message, which is featured prominently in our yards, shops, and facilities and further reinforces the importance of working safely. We measure employee safety performance through internal metrics such as lost-time injuries and serious injuries per 200,000 employee-hours and metrics established by the Federal

Railroad Administration (FRA), such as FRA reportable injuries per 200,000 employee-hours. Given the importance of safety among our workforce and business, in 2020, our Board of Directors established a standing Safety Committee that, among other duties, reviews, monitors, and evaluates our compliance with our safety programs and practices.

Attracting and Retaining Management Employees – Our talent strategy for management employees is essential to attracting strong candidates in a competitive talent environment. We evaluate the effectiveness of that strategy by studying market trends, benchmarking the attractiveness of our employee value proposition, and analyzing retention data.

We also focus on driving employee engagement, which is key to increasing employee productivity, retention, and safety. We take a data-centric approach, including the use of quarterly surveys among management employees, to identify new initiatives that will help boost engagement and drive business results.

Employee Development and Training – We provide a range of developmental programs, opportunities, skills, and resources for our employees to work safely and be successful in their careers. We provide hands-on training and simulation training designed to improve training effectiveness and safety outcomes.

We also use modern learning and performance technologies to offer robust professional growth opportunities. Through on-demand digital course offerings, custom-built learning paths, and performance-management tools, our platforms deliver a contemporary, convenient, and inclusive approach to professional development.

Diversity, Equity and Inclusion – As a leading transportation service company, we understand that competing in the global marketplace requires recruiting the most qualified, talented, and diverse people. We strive to create a diverse, equitable, and inclusive workplace where a wide range of perspectives and experiences are represented, valued, and empowered to thrive.

While our current workforce reflects a broad range of backgrounds and experiences, we continue to focus on building an even more diverse workforce, using technology-driven outreach and multiple recruiting relationships to maintain a robust pipeline of diverse talent.

To underscore our commitment to cultivating a workplace experience where the unique experiences, perspectives, and contributions of all our people are valued, our senior management team recently signed a pledge reaffirming our commitment to diversity, equity, and inclusion. To advance that commitment, senior leaders from across the company serve on an Inclusion Leadership Council, which is accountable for setting our enterprise inclusion strategy and articulating measurable goals and actions needed to achieve them.

GOVERNMENT REGULATION – In addition to environmental, safety, securities, and other regulations generally applicable to all business, our railroads are subject to regulation by the U.S. Surface Transportation Board (STB). The STB has jurisdiction to varying extents over rates, routes, customer access provisions, fuel surcharges, conditions of service, and the extension or abandonment of rail lines. The STB has jurisdiction to determine whether we are “revenue adequate” on an annual basis based on the results of the prior year. A railroad is “revenue adequate” on an annual basis under the applicable law when its return on net investment exceeds the rail industry’s composite cost of capital. This determination is made pursuant to a statutory requirement. The STB also has jurisdiction over the consolidation, merger, or acquisition of control of and by rail common carriers.

The relaxation of economic regulation of railroads, following the Staggers Rail Act of 1980, included exemption from STB regulation of the rates and most service terms for intermodal business (trailer-on-flat-car, container-on-flat-car), rail boxcar shipments, lumber, manufactured steel, automobiles, and certain bulk commodities such as sand, gravel, pulpwood, and wood chips for paper manufacturing. Further, all shipments that we have under contract are effectively removed from commercial regulation for the duration of the contract. Approximately 90% of our revenues comes from either exempt shipments or shipments moving under transportation contracts; the remainder comes from shipments moving under public tariff rates.

Efforts have been made over the past several years to increase federal economic regulation of the rail industry, and such efforts are expected to continue in 2022. The Staggers Rail Act of 1980 substantially balanced the interests of shippers and rail carriers, and encouraged and enabled rail carriers to innovate, invest in their infrastructure, and compete for business, thereby contributing to the economic health of the nation and to the revitalization of the industry. Accordingly, we will continue to oppose efforts to reimpose increased economic regulation.

Government regulations are further discussed within Item 1A “Risk Factors” and the safety and security of our railroads are discussed within the “Security of Operations” section contained herein.

COMPETITION – There is continuing strong competition among rail, water, and highway carriers. Price is usually only one factor of importance as shippers and receivers choose a transport mode and specific hauling company. Inventory carrying costs, service reliability, ease of handling, and the desire to avoid loss and damage during transit are also important considerations, especially for higher-valued finished goods, machinery, and consumer products. Even for raw materials, semi-finished goods, and work-in-progress, users are increasingly sensitive to transport arrangements that minimize problems at successive production stages.

Our primary rail competitor is CSX Corporation (CSX); both we and CSX operate throughout much of the same territory. Other railroads also operate in parts of the territory. We also compete with motor carriers, water carriers, and with shippers who have the additional options of handling their own goods in private carriage, sourcing products from different geographic areas, and using substitute products.

Certain marketing strategies to expand reach and shipping options among railroads and between railroads and motor carriers enable railroads to compete more effectively in specific markets.

SECURITY OF OPERATIONS – We continue to enhance the security of our rail system. Our comprehensive security plan is modeled on and was developed in conjunction with the security plan prepared by the Association of American Railroads (AAR) post September 11, 2001. The AAR Security Plan defines four Alert Levels and details the actions and countermeasures that are being applied across the railroad industry to mitigate the risk of terrorist, violent extremist or seriously disruptive cyber-attack increases or decreases. The Alert Level actions include countermeasures that will be applied in three general areas: (1) operations (including transportation, engineering, and mechanical); (2) information technology and communications; and, (3) railroad police. All of our Operations Division employees are advised by their supervisors or train dispatchers, as appropriate, of any change in Alert Level and any additional responsibilities they may incur due to such change.

Our security plan also complies with U.S. Department of Transportation (DOT) security regulations pertaining to training and security plans with respect to the transportation of hazardous materials. As part of the plan, security awareness training is given to all railroad employees who directly affect hazardous material transportation safety, and is integrated into hazardous material training programs. Additionally, location-specific security plans are in place for rail corridors in certain metropolitan areas referred to as High Threat Urban Areas (HTUA). Particular attention is aimed at reducing risk in a HTUA by: (1) the establishment of secure storage areas for rail cars carrying toxic-by-inhalation (TIH) materials; (2) the expedited movement of trains transporting rail cars carrying TIH materials; (3) reducing the number of unattended loaded tank cars carrying TIH materials; and (4) cooperation with federal, state, local, and tribal governments to identify those locations where security risks are the highest.

We also operate five facilities that are under U.S. Coast Guard (USCG) Maritime Security Regulations. With respect to these facilities, each facility’s security plan has been approved by the applicable Captain of the Port and remains subject to inspection by the USCG.

Additionally, we continue to engage in close and regular coordination with numerous federal and state agencies, including the U.S. Department of Homeland Security (DHS), the Transportation Security Administration, the Federal Bureau of Investigation, the FRA, the USCG, U.S. Customs and Border Protection, the Department of Defense, and various state Homeland Security offices.

In 2021, through the Norfolk Southern Operation Awareness and Response Program as well as participation in the Transportation Community Awareness and Emergency Response Program, we provided rail accident response

training to approximately 3,500 emergency responders, such as local police and fire personnel, utilizing a combination of online training and face-to-face training sessions. In addition, 2021 saw the return of the Safety Train Tour; we conducted an abbreviated Six-Stop Safety Train Tour that provided hands-on training to approximately 700 first responders.

We also continually evaluate ourselves for appropriate business continuity and disaster recovery planning, with test scenarios that include cybersecurity attacks. Our risk-based information security program helps ensure our defenses and resources are aligned to address the most likely and most damaging potential attacks, to provide support for our organizational mission and operational objectives, and to keep us in the best position to detect, mitigate, and recover from a wide variety of potential attacks in a timely fashion.

Item 1A. Risk Factors

The risks set forth in the following risk factors could have a materially adverse effect on our financial position, results of operations, or liquidity in a particular year or quarter, and could cause those results to differ materially from those expressed or implied in our 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.”

REGULATORY AND LEGISLATIVE RISKS

Significant governmental legislation, regulation, and Executive Orders over commercial, tax, operating and environmental matters could affect us, our customers, and the markets we serve. Congress can enact laws that could increase economic regulation of the industry. Similarly, regulations promulgated by agencies and the issuance of Executive Orders can affect us, our customers, and the markets we serve. Railroads presently are subject to commercial regulation by the STB, which has jurisdiction to varying extents over rates, routes, customer access provisions, fuel surcharges, conditions of service, and the extension or abandonment of rail lines. The STB also has jurisdiction over the consolidation, merger, or acquisition of control of and by rail common carriers. Additional economic regulation of the rail industry by Congress or the STB, whether under new or existing laws, could have a significant negative impact on our ability to negotiate prices for rail services, on railway operating revenues, and on the efficiency of our operations. Such additional industry regulation, as well as enactment of any new tax laws, could also negatively impact cash flows from operating activities and, therefore, could result in reduced capital spending on our rail network or abandonment of lines.

Railroads are also subject to the enactment of laws by Congress and regulation by the DOT and the DHS, which regulate most aspects of our operations related to safety and security. The Rail Safety Improvement Act of 2008, the Surface Transportation Extension Act of 2015, and the implementing regulations promulgated by the FRA required us (and each other Class I railroad) to implement an interoperable positive train control system (PTC) on main lines over which five million or more gross tons of annual traffic and certain hazardous materials are transported, and on any main lines over which intercity or commuter rail passenger transportation is regularly provided. We completed our PTC implementation prior to the December 31, 2020 deadline. PTC is designed to prevent train-to-train collisions, speed-related derailments, and certain other accidents caused by human error, but it will not prevent all types of train accidents or incidents. The PTC system will continue to result in additional operating costs and capital expenditures, and may result in increased claims and litigation costs.

Our operations are subject to extensive federal and state environmental laws and regulations concerning, among other things: emissions to the air; discharges to waterways or groundwater supplies; handling, storage, transportation, and disposal of waste and other materials; and, the cleanup of hazardous material or petroleum releases. The risk of incurring environmental liability, for acts and omissions, past, present, and future, is inherent in the railroad business. This risk includes property owned by us, whether currently or in the past, that is or has been subject to a variety of uses, including our railroad operations and other industrial activity by past owners or our past and present tenants.

Environmental problems that are latent or undisclosed may exist on these properties, and we could incur environmental liabilities or costs, the amount and materiality of which cannot be estimated reliably at this time, with

respect to one or more of these properties. Moreover, lawsuits and claims involving other unidentified environmental sites and matters are likely to arise from time to time.

OPERATIONAL RISKS

Pandemics, epidemics or endemic diseases could further impact us, our customers, our supply chain and our operations. The magnitude and duration of a pandemic, epidemic or endemic disease, and its impact on our customers and general economic conditions will influence the demand for our services and affect our revenues. In addition, such outbreaks could affect our operations and business continuity if a significant number of our essential employees, overall or in a key location, are quarantined from contraction of or exposure to the disease or if governmental orders prevent our employees or critical suppliers (including individuals that have not received mandated vaccinations) from working. Our compliance with vaccine mandates could lead to employee absences, resignations, labor disputes or work stoppages. The COVID-19 pandemic negatively impacted the economy and continues to generate economic uncertainty. Future pandemics, epidemics or endemic diseases may cause similar consequences. To the extent such diseases adversely affects our business and financial results, they may also have the effect of heightening many of the other risks described in the risk factors included herein, or may affect our operating and financial results in a manner that is not presently known to us.

A significant cybersecurity incident or other disruption to our technology infrastructure could disrupt our business operations. We rely on information technology, and improvements in that technology, in all aspects of our business. If we experience significant disruption or failure of one or more of information technology systems operated by us or under control of third parties, including computer hardware, software, and communications equipment, we could experience a service interruption or other operational difficulties. Although we maintain comprehensive security programs designed to protect our information technology systems, we are continually targeted by threat actors attempting to access our networks. While we have experienced cybersecurity events that have had minimal impact, future events may result in more significant impacts to business operations. These potentially impactful events could include unauthorized access to our systems, viruses, ransomware, and/or compromise, acquisition, or destruction of our data. We also could be impacted by cybersecurity events targeting third parties that we rely on for business operations, including third party vendors that have access to our systems or data and third parties in our supply chain. Such a direct or indirect cybersecurity incident could interrupt our service, cause safety failures or operational difficulties, decrease revenues, increase operating costs, impact our efficiency, damage our corporate reputation, and/or expose us to litigation or government investigations, which could result in penalties, fines or judgments. In addition, our failure to comply with privacy-related or data protection laws and regulations could result in government investigations and proceedings against us, or litigation, resulting in adverse reputational impacts, penalties, and legal liability.

Our business may be seriously harmed if we fail to develop, implement, maintain, upgrade, enhance, protect and integrate our information technology systems. If we do not have sufficient capital to develop, acquire or implement new technology, we may suffer a competitive disadvantage within the rail industry and with companies providing alternative modes of transportation service.

As a common carrier by rail, we must offer to transport hazardous materials, regardless of risk.

Transportation of certain hazardous materials could create catastrophic losses in terms of personal injury and property (including environmental) damage and compromise critical parts of our rail network. The costs of a catastrophic rail accident involving hazardous materials could exceed our insurance coverage. We have obtained insurance for potential losses for third-party liability and first-party property damages (see Note 17 to the Consolidated Financial Statements); however, insurance is available from a limited number of insurers and may not continue to be available or, if available, may not be obtainable on terms acceptable to us.

We face competition from other transportation providers. We are subject to competition from motor carriers, railroads and, to a lesser extent, ships, barges, and pipelines, on the basis of transit time, pricing, and quality and reliability of service. While we have used primarily internal resources to build or acquire and maintain our rail system, trucks and barges have been able to use public rights-of-way maintained by public entities. Any future improvements, expenditures, legislation, or regulation materially increasing the quality or reducing the cost of alternative modes of transportation in the regions in which we operate (such as granting materially greater latitude

for motor carriers with respect to size or weight limitations or adoption of autonomous commercial vehicles) could have a material adverse effect on our ability to compete with other modes of transportation.

Capacity constraints could negatively impact our service and operating efficiency. We could experience capacity constraints on our rail network related to increased demand for rail services, locomotive or employee shortages, severe weather, congestion on other railroads, including passenger activities, or impacts from changes to our network structure or composition. Such constraints could result in operational inefficiencies or adversely affect our operations.

Significant increases in demand for rail services could result in the unavailability of qualified personnel and resources like locomotives. Changes in workforce demographics, training requirements, and availability of qualified personnel, particularly for engineers and conductors, could have a negative impact on our ability to meet short-term demand for rail service. Unpredicted increases in demand for rail services may exacerbate such risks and could negatively impact our operational efficiency.

Constraints on the supply chain or the operations of carriers with which we interchange may adversely affect our operations. Our ability to provide rail service to customers in the U.S. and Canada depends in large part upon a functioning global supply chain and our ability to maintain collaborative relationships with connecting carriers (including shortlines and regional railroads) with respect to, among other matters, freight rates, revenue division, car supply and locomotive availability, data exchange and communications, reciprocal switching, interchange, and trackage rights. Deterioration in the supply chain or operations of or service provided by connecting carriers, or in our relationship with those connecting carriers, could result in our inability to meet our customers' demands or require us to use alternate train routes, which could result in significant additional costs and network inefficiencies. Additionally, any significant consolidations, mergers or operational changes among other railroads may significantly redefine our market access and reach.

The vast majority of our employees belong to labor unions, and labor agreements, strikes, or work stoppages could adversely affect our operations. Approximately 80% of our railroad employees are covered by collective bargaining agreements with various labor unions. If our craft employees were to engage in a strike, work stoppage, or other slowdown, we could experience a significant disruption of our operations. Additionally, future national labor agreements, or renegotiation of labor agreements or provisions of labor agreements, could significantly increase our costs for health care, wages, and other benefits.

We may be affected by terrorism or war. Any terrorist attack, or other similar event, any government response thereto, and war or risk of war could cause significant business interruption. Because we play a critical role in the nation's transportation system, we could become the target of such an attack or have a significant role in the government's preemptive approach or response to an attack or war.

Although we currently maintain insurance coverage for third-party liability arising out of war and acts of terrorism, we maintain only limited insurance coverage for first-party property damage and damage to property in our care, custody, or control caused by certain acts of terrorism. In addition, premiums for some or all of our current insurance programs covering these losses could increase dramatically, or insurance coverage for certain losses could be unavailable to us in the future.

We may be affected by supply constraints resulting from disruptions in the fuel markets or the nature of some of our supplier markets. We consumed over 380 million gallons of diesel fuel in 2021. Fuel availability could be affected by any limitation in the fuel supply or by any imposition of mandatory allocation or rationing regulations. A severe fuel supply shortage arising from production curtailments, 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 impact us as well as our customers and other transportation companies.

Due to the capital-intensive nature, as well as the industry-specific requirements of the rail industry, high barriers of entry exist for potential new suppliers of core railroad items, such as locomotives and rolling stock equipment. Additionally, we compete with other industries for available capacity and raw materials used in the production of

locomotives and certain track and rolling stock materials. Changes in the competitive landscapes of these limited supplier markets could result in increased prices or significant shortages of materials.

LITIGATION RISKS

We may be subject to various claims and lawsuits that could result in significant expenditures. The nature of our business exposes us to the potential for various claims and litigation related to labor and employment, personal injury, commercial disputes, freight loss and other property damage, and other matters. Job-related personal injury and occupational claims are subject to the Federal Employer's Liability Act (FELA), which is applicable only to railroads. FELA's fault-based tort system produces results that are unpredictable and inconsistent as compared with a no-fault worker's compensation system. The variability inherent in this system could result in actual costs being different from the liability recorded.

A catastrophic rail accident, whether on our lines or another carrier's, involving any or all of release of hazardous materials, freight loss, property damage, personal injury, and environmental liability could compromise critical parts of our rail network. Losses associated with such an accident involving us could exceed our insurance coverage, resulting in a material adverse effect on our liquidity. Any material changes to current litigation trends could also have a material adverse effect on our liquidity to the extent not covered by insurance.

We have obtained insurance for potential losses for third-party liability and first-party property damages (see Note 17 to the Consolidated Financial Statements); however, insurance is available from a limited number of insurers and may not continue to be available or, if available, may not be obtainable on terms acceptable to us.

CLIMATE CHANGE RISKS

Severe weather and disasters have caused, and could again cause, significant business interruptions and expenditures. Severe weather conditions and other natural phenomena resulting from changing weather patterns and rising sea levels or other causes, including hurricanes, floods, fires, landslides, extreme temperatures, significant precipitation, and earthquakes, have caused, and may again cause damage to our network, our workforce to be unavailable and us to be unable to use our equipment. Additionally, shifts in weather patterns caused by climate change are expected to increase the frequency, severity or duration of certain adverse weather conditions, which could cause more significant business interruptions that result in increased costs, increased liabilities, and decreased revenues.

Concern over climate change has led to significant federal, state, and international legislative and regulatory efforts to limit greenhouse gas (GHG) emissions. Restrictions, caps, taxes, or other controls on GHG emissions, including diesel exhaust, could significantly increase our operating costs and decrease the amount of traffic we handle.

In addition, legislation and regulation related to GHG emissions could negatively affect the markets we serve and our customers. Even without legislation or regulation, government incentives and adverse publicity relating to GHG emissions could negatively affect the markets for certain of the commodities we carry and our customers that (1) use commodities we carry to produce energy, including coal, (2) use significant amounts of energy in producing or delivering the commodities we carry, or (3) manufacture or produce goods that consume significant amounts of energy associated with GHG emissions.

MACROECONOMIC AND MARKET RISKS

We may be affected by general economic conditions. Negative changes in domestic and global economic conditions, including reduced import and export volumes, could affect the producers and consumers of the commodities we carry. Economic conditions could also result in bankruptcies of one or more large customers.

We may be affected by energy prices. Volatility in energy prices could have a significant effect on a variety of items including, but not limited to: the economy; demand for transportation services; business related to the energy sector, including crude oil, natural gas, and coal; fuel prices; and, fuel surcharges.

The state of capital markets could adversely affect our liquidity. We rely on the capital markets to provide some of our capital requirements, including the issuance of debt instruments and the sale of certain receivables. Significant instability or disruptions of the capital markets, including the credit markets, or deterioration of our financial position due to internal or external factors could restrict or eliminate our 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 our financial position, alone or in combination, could also result in a reduction of our credit rating to below investment grade, which could prohibit or restrict us from accessing external sources of short- and long-term debt financing and/or significantly increase the associated costs.

Item 1B. Unresolved Staff Comments

None.

Item 3. Legal Proceedings

In 2007, various antitrust class actions filed against us and other Class I railroads in various Federal district courts regarding fuel surcharges were consolidated in the District of Columbia by the Judicial Panel on Multidistrict Litigation. In 2012, the court certified the case as a class action. The defendant railroads appealed this certification, and the Court of Appeals for the District of Columbia vacated the District Court's decision and remanded the case for further consideration. On October 10, 2017, the District Court denied class certification. The decision was upheld by the Court of Appeals on August 16, 2019. Since that decision, various individual cases have been filed in multiple jurisdictions and also consolidated in the District of Columbia. We believe the allegations in the complaints are without merit and intend to vigorously defend the cases. We do not believe the outcome of these proceedings will have a material effect on our financial position, results of operations, or liquidity.

In 2018, a lawsuit was filed against one of our subsidiaries by the minority owner in a jointly-owned terminal railroad company in which our subsidiary has the majority ownership. The lawsuit alleged violations of various state laws and federal antitrust laws. It is reasonably possible that we could incur a loss in the case; however, we intend to vigorously defend the case and believe that we will prevail. The potential range of loss cannot be estimated at this time.

Item 4. Mine Safety Disclosures

Not applicable.

Information About Our Executive Officers

Our executive officers generally are elected and designated annually by the Board of Directors (Board) at its first meeting held after the annual meeting of stockholders, and they hold office until their successors are elected. Executive officers also may be elected and designated throughout the year as the Board considers appropriate. 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. The following table sets forth certain information, at February 1, 2022, relating to our officers.

Name, Age, Present Position	Business Experience During Past Five Years
James A. Squires, 60, Chairman and Chief Executive Officer	Present position since October 1, 2015.
Alan H. Shaw, 54, President	Present position since December 1, 2021. Served as Executive Vice President and Chief Marketing Officer from May 16, 2015 to December 1, 2021.
Ann A. Adams, 51, Executive Vice President and Chief Transformation Officer	Present position since April 1, 2019. Served as Vice President Human Resources from April 1, 2016 to April 1, 2019.
Claude E. Elkins, Jr., 56, Executive Vice President and Chief Marketing Officer	Present position since December 1, 2021. Served as Vice President Industrial Products from April 1, 2018 to December 1, 2021. Served as Group Vice President Chemicals from March 1, 2016 to April 1, 2018.
Mark R. George, 54, Executive Vice President Finance and Chief Financial Officer	Present position since November 1, 2019. Prior to joining Norfolk Southern, served as Vice President, Finance and Chief Financial Officer at segments of United Technologies Corporation. The positions were Vice President Finance, Strategy, IT and Chief Financial Officer at Otis Elevator Company from October 2015 to May 2019, and Vice President Finance and Chief Financial Officer at Carrier Corporation from June 2019 until joining Norfolk Southern.
Cynthia M. Sanborn, 57, Executive Vice President and Chief Operating Officer	Present position since September 1, 2020. Prior to joining Norfolk Southern, served as served as Vice President Network Planning & Operations at Union Pacific from May 2019 to September 2020 and as Regional Vice President – Western Region from February 2018 to May 2019. Previously served as Executive Vice President and Chief Operating Officer at CSX from September 2015 to November 2017.
Lorri J. Kleine, 57, Senior Vice President Law and Chief Legal Officer	Present position since January 10, 2022. Served as Vice President Law from March 1, 2020 to January 10, 2022. Served as Senior General Counsel from August 1, 2019 to March 1, 2020. Served as General Counsel from December 1, 2016 to August 1, 2019.
Clyde H. Allison, Jr., 58, Vice President and Controller	Present position since June 1, 2020. Served as Vice President and Treasurer from February 1, 2017 to June 1, 2020.

PART II

NORFOLK SOUTHERN CORPORATION AND SUBSIDIARIES

Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities

STOCK INFORMATION

Common Stock is owned by 20,616 stockholders of record as of December 31, 2021, and is traded on the New York Stock Exchange under the symbol "NSC."

ISSUER PURCHASES OF EQUITY SECURITIES

<u>Period</u>	<u>Total Number of Shares (or Units) Purchased⁽¹⁾</u>	<u>Average Price Paid per Share (or Unit)</u>	<u>Total Number of Shares (or Units) Purchased as Part of Publicly Announced Plans or Programs⁽²⁾</u>	<u>Maximum Number (or Approximate Dollar Value) of Shares (or Units) that may yet be Purchased under the Plans or Programs⁽²⁾</u>
October 1-31, 2021	861,374	\$ 268.13	861,374	10,467,071
November 1-30, 2021	269	282.17	—	10,467,071
December 1-31, 2021	2,427,166	287.85	2,426,998	8,040,073
Total	<u>3,288,809</u>		<u>3,288,372</u>	

⁽¹⁾ Of this amount, 437 represent shares tendered by employees in connection with the exercise of stock options under the stockholder-approved Long-Term Incentive Plan (LTIP).

⁽²⁾ On September 26, 2017, our Board of Directors authorized the repurchase of up to an additional 50 million shares of Common Stock through December 31, 2022. As of December 31, 2021, 8.0 million shares remain authorized for repurchase.

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

Norfolk Southern Corporation and Subsidiaries

The following discussion and analysis should be read in conjunction with the Consolidated Financial Statements and Notes.

OVERVIEW

We are one of the nation’s premier transportation companies, moving goods and materials that help drive the U.S. economy. We connect customers to markets and communities to economic opportunity with safe, reliable, and cost-effective shipping solutions. Our Norfolk Southern Railway Company subsidiary operates in 22 states and the District of Columbia. We are a major transporter of industrial products, including agriculture, forest and consumer products, chemicals, and metals and construction materials. In addition, in the East we serve every major container port and operate the most extensive intermodal network. We are also a principal carrier of coal, automobiles, and automotive parts.

During 2021, revenue growth and the absence of two prior-year charges resulted in substantial increases in operating income, net income and earnings per share. Our current year results compare favorably to the prior year, during which there was a pandemic-induced decline in demand which resulted in reduced earnings.

The COVID-19 pandemic continues to impact the U.S. and global economies and has resulted in ongoing supply chain challenges. We are monitoring and reacting to the evolving nature of the pandemic, governmental responses, and their impacts on our business, including employee availability. We remain committed to protecting our employees, operating safely, and providing excellent transportation service products for our customers.

SUMMARIZED RESULTS OF OPERATIONS

	2021	2020	2019	2021 vs. 2020	2020 vs. 2019
	<i>(\$ in millions, except per share amounts)</i>			<i>(% change)</i>	
Income from railway operations	\$ 4,447	\$ 3,002	\$ 3,989	48%	(25%)
Net income	\$ 3,005	\$ 2,013	\$ 2,722	49%	(26%)
Diluted earnings per share	\$ 12.11	\$ 7.84	\$ 10.25	54%	(24%)
Railway operating ratio (percent)	60.1	69.3	64.7	(13%)	7%

Income from railway operations increased in 2021 compared to 2020, the result of a 14% increase in railway operating revenues and a 1% reduction in railway operating expenses. Revenue growth was driven by increased average revenue per unit and higher volumes, the result of improved customer demand. The decline in railway operating expenses was largely due to the absence of two charges, as 2020 results were adversely impacted by a \$385 million loss on asset disposal related to locomotives and a \$99 million impairment charge related to an equity method investment. For more information on these charges, see Notes 7 and 6, respectively. Higher fuel costs, purchased services, and compensation and benefits expense mostly offset the reduction associated with these charges. Additionally, gains on the sale of operating properties increased compared to the prior year. The 48% increase in income from railway operations drove comparable increases in net income and diluted earnings per share. Our railway operating ratio (a measure of the amount of operating revenues consumed by operating expenses) decreased to 60.1 percent.

Income from railway operations declined in 2020 compared to 2019 as railway operating revenues fell 13% which exceeded a 7% reduction in operating expenses. Railway operating revenues declined as lower customer demand resulted in reduced volume. Additionally, negative mix and lower fuel surcharge revenue, partially offset by increased pricing, led to lower average revenue per unit. Railway operating expenses decreased due to declines in

fuel price and consumption, reduced employment levels, lower volumes and operational efficiency improvements. These decreases in expenses were partially offset by the impact of the aforementioned charges.

The following tables adjust our 2020 U.S. Generally Accepted Accounting Principles (GAAP) financial results to exclude the effects of the loss on asset disposal and investment impairment. The income tax effects on these non-GAAP adjustments were calculated based on the applicable tax rates to which the non-GAAP adjustments relate. We use these non-GAAP financial measures internally and believe this information provides useful supplemental information to investors to facilitate making period-to-period comparisons by excluding the 2020 charges. While we believe that these non-GAAP financial measures are useful in evaluating our business, this information should be considered as supplemental in nature and is not meant to be considered in isolation from, or as a substitute for, the related financial information prepared in accordance with GAAP. In addition, these non-GAAP financial measures may not be the same as similar measures presented by other companies.

Non-GAAP Reconciliation for 2020						
	Reported (GAAP)	Loss on Asset Disposal	Investment Impairment	Adjusted (non-GAAP)		
	<i>(\$ in millions, except per share amounts)</i>					
Railway operating expenses	\$ 6,787	\$ (385)	\$ (99)	\$ 6,303		
Income from railway operations	\$ 3,002	\$ 385	\$ 99	\$ 3,486		
Income before income taxes	\$ 2,530	\$ 385	\$ 99	\$ 3,014		
Income taxes	\$ 517	\$ 97	\$ 25	\$ 639		
Net income	\$ 2,013	\$ 288	\$ 74	\$ 2,375		
Diluted earnings per share	\$ 7.84	\$ 1.12	\$ 0.29	\$ 9.25		
Railway operating ratio (percent)	69.3	(3.9)	(1.0)	64.4		

In the table below, references to 2020 results and related comparisons use the adjusted, non-GAAP results from the table above.

	2021	Adjusted 2020 (non-GAAP)	2019	2021 vs. Adjusted 2020 (non-GAAP)	Adjusted 2020 (non-GAAP) vs. 2019
	<i>(\$ in millions, except per share amounts)</i>			<i>(% change)</i>	
Railway operating expenses	\$ 6,695	\$ 6,303	\$ 7,307	6%	(14%)
Income from railway operations	\$ 4,447	\$ 3,486	\$ 3,989	28%	(13%)
Income before income taxes	\$ 3,878	\$ 3,014	\$ 3,491	29%	(14%)
Income taxes	\$ 873	\$ 639	\$ 769	37%	(17%)
Net income	\$ 3,005	\$ 2,375	\$ 2,722	27%	(13%)
Diluted earnings per share	\$ 12.11	\$ 9.25	\$ 10.25	31%	(10%)
Railway operating ratio (percent)	60.1	64.4	64.7	(7%)	—%

DETAILED RESULTS OF OPERATIONS

Railway Operating Revenues

The following tables present a three-year comparison of revenues, volumes (units), and average revenue per unit by commodity group.

	2021	Revenues 2020	2019	2021 vs. 2020	2020 vs. 2019
		(\$ in millions)		(% change)	
Merchandise:					
Agriculture, forest and consumer products	\$ 2,251	\$ 2,116	\$ 2,256	6%	(6%)
Chemicals	1,951	1,809	2,092	8%	(14%)
Metals and construction	1,562	1,333	1,461	17%	(9%)
Automotive	905	830	994	9%	(16%)
Merchandise	6,669	6,088	6,803	10%	(11%)
Intermodal	3,163	2,654	2,824	19%	(6%)
Coal	1,310	1,047	1,669	25%	(37%)
Total	\$ 11,142	\$ 9,789	\$ 11,296	14%	(13%)

	2021	Units 2020	2019	2021 vs. 2020	2020 vs. 2019
		(in thousands)		(% change)	
Merchandise:					
Agriculture, forest and consumer products	725.5	704.4	763.7	3%	(8%)
Chemicals	529.7	482.0	588.9	10%	(18%)
Metals and construction	669.0	601.2	685.1	11%	(12%)
Automotive	345.4	329.7	394.7	5%	(16%)
Merchandise	2,269.6	2,117.3	2,432.4	7%	(13%)
Intermodal	4,104.1	3,992.1	4,207.2	3%	(5%)
Coal	658.0	574.1	914.0	15%	(37%)
Total	7,031.7	6,683.5	7,553.6	5%	(12%)

	2021	Revenue per Unit 2020	2019	2021 vs. 2020	2020 vs. 2019
		(\$ per unit)		(% change)	
Merchandise:					
Agriculture, forest and consumer products	\$ 3,102	\$ 3,004	\$ 2,953	3%	2%
Chemicals	3,684	3,753	3,553	(2%)	6%
Metals and construction	2,334	2,216	2,133	5%	4%
Automotive	2,621	2,518	2,517	4%	—%
Merchandise	2,938	2,875	2,797	2%	3%
Intermodal	771	665	671	16%	(1%)
Coal	1,991	1,824	1,826	9%	—%
Total	1,584	1,465	1,495	8%	(2%)

Revenues increased \$1.4 billion in 2021 and decreased \$1.5 billion in 2020 compared to the prior years. Higher revenue for 2021 was the result of increased average revenue per unit, driven by pricing gains, higher fuel surcharge revenue, increased intermodal storage service charges and improved mix, as well as volume growth. In 2020, lower revenue was the result of decreased volumes and lower fuel surcharge revenue, partially offset by pricing gains.

The table below reflects the components of the revenue change by major commodity group.

	2021 vs. 2020			2020 vs. 2019		
	Increase (Decrease)			Increase (Decrease)		
	<i>(\$ in millions)</i>					
	Merchandise	Intermodal	Coal	Merchandise	Intermodal	Coal
Volume	\$ 438	\$ 75	\$ 153	\$ (881)	\$ (144)	\$ (621)
Fuel surcharge revenue	91	178	4	(92)	(124)	(13)
Rate, mix and other	52	256	106	258	98	12
Total	<u>\$ 581</u>	<u>\$ 509</u>	<u>\$ 263</u>	<u>\$ (715)</u>	<u>\$ (170)</u>	<u>\$ (622)</u>

Approximately 90% of our revenue base is covered by contracts that include negotiated fuel surcharges. These revenues totaled \$622 million, \$349 million, and \$578 million in 2021, 2020, and 2019, respectively.

MERCHANDISE revenues increased in 2021 but decreased in 2020 compared with the prior years. In 2021, revenues rose due to increased volume and higher average revenue per unit driven by increased fuel surcharge revenue and pricing. Volumes increased in all merchandise commodity groups, reflecting continued economic recovery following the onset of the COVID-19 pandemic. In 2020, revenues decreased due to volume declines in all commodity groups which were partially offset by higher average revenue per unit, driven by pricing gains.

For 2022, merchandise revenues are expected to increase, the result of higher revenue per unit, driven by pricing gains and increased fuel surcharge revenue, and higher volumes.

Agriculture, forest and consumer products revenues increased in 2021 but decreased in 2020 compared with the prior years. In 2021, the rise was the result of higher volume across almost all markets as the economy has improved since the early months of the pandemic in 2020 and increased average revenue per unit, the result of pricing gains and higher fuel surcharge revenue. Gains in ethanol, pulpboard, beverages, lumber and wood, and woodchips more than offset declines in soybeans and pulp. In 2020, the decline was the result of reduced volume partially offset by higher average revenue per unit, driven by pricing gains partially offset by lower fuel surcharge revenue. Volume declined due to the impact of COVID-19 on the demand for ethanol, corn, food service products, and building, industrial and commercial products.

In 2022, agriculture, forest and consumer products revenues are expected to rise, a result of increased volume and average revenue per unit increases resulting from pricing gains. We expect volumes to increase in most markets led by corn, soybeans, pulpboard, and feed.

Chemicals revenues rose in 2021 and fell in 2020 compared with the prior years. In 2021, the increase was the result of volume growth partially offset by lower average revenue per unit, driven by mix of traffic. The increase in volume was due to economic and production recovery since the beginning of the pandemic, despite ongoing challenges in the energy markets. The markets with the largest gains were solid waste, industrial chemicals, sand, natural gas liquids, and plastics. In 2020, the decrease was the result of volume declines partially offset by higher average revenue per unit, due to pricing gains. Volume declined due to the impact from COVID-19 and ongoing disruptions in the energy markets. The onset of the pandemic created an overabundance of products in the market

as companies reduced stockpiles before requiring more products. Oil and petroleum shipments were negatively impacted due to reductions in gasoline/jet fuel demand and travel.

For 2022, chemicals revenues are anticipated to increase, a result of higher average revenue per unit, driven by pricing gains, and increased volume. We expect carload increases in plastics, solid waste, and petroleum products to be partially offset by reduced volumes of inorganic chemicals.

Metals and construction revenues were higher in 2021 but declined in 2020 compared with the prior years. In 2021, revenue growth was driven by increased volumes and higher average revenue per unit, the result of pricing gains and higher fuel surcharge revenue. Volume increased across almost all markets due to economic improvement since the beginning of the pandemic. The markets serving the metal production industry, including coil steel, scrap metal, and iron and steel, experienced the largest gains. In 2020, volume declines were partially offset by higher average revenue per unit, the result of pricing gains. Volume declines were largely the result of weakened demand due to reductions in metal and domestic vehicle production. The onset of the pandemic caused industries to suspend production which heavily impacted customers' needs for materials and shipping of finished and semi-finished goods. These declines were partially offset by increased demand for cement.

For 2022, metals and construction revenues are expected to rise, a result of higher average revenue per unit, driven by pricing gains, and increased volume. As the economic recovery continues, volume growth is expected in almost all markets led by aggregates, coil steel, scrap metal, and construction.

Automotive revenues rose in 2021 but were lower in 2020 compared with the prior years. The increase in revenues in 2021 were driven by volume growth and higher average revenue per unit, driven by an increase in fuel surcharge revenue and pricing gains. Automotive volumes were higher due primarily to increased retail demand and the impact of prior-year pandemic-induced production shutdowns. This was partially offset by the impact of the microchip shortage on production. In 2020, revenue declines were driven by lower volume and fuel surcharge revenue, partially offset by pricing gains. The volume decline was mostly the result of unplanned automotive plant shutdowns in the first half of the year, primarily due to the COVID-19 pandemic, which was partially offset by increased demand in the second half of the year.

In 2022, automotive revenues are expected to increase as a result of higher volume, as inventories replenish, and increased average revenue per unit driven by pricing gains.

INTERMODAL revenues increased in 2021 but decreased in 2020 compared with the prior years. The rise in 2021 was primarily the result of higher average revenue per unit driven by increased storage service charges, higher fuel surcharge revenue and pricing gains. The decline in 2020 was driven by lower volume and fuel surcharge revenue, which were partially offset by pricing gains and favorable mix.

For 2022, we expect intermodal revenues to rise, the result of increased volume, higher fuel surcharge revenue and pricing gains, partially offset by lower storage service charges.

Intermodal units by market were as follows:

	<u>2021</u>	<u>2020</u>	<u>2019</u>	<u>2021</u> <u>vs. 2020</u>	<u>2020</u> <u>vs. 2019</u>
	<i>(units in thousands)</i>			<i>(% change)</i>	
Domestic	2,630.6	2,568.7	2,593.5	2%	(1%)
International	1,473.5	1,423.4	1,613.7	4%	(12%)
Total	<u>4,104.1</u>	<u>3,992.1</u>	<u>4,207.2</u>	3%	(5%)

Domestic volume increased in 2021 but decreased in 2020 compared with the prior years. Volume rose due to strong consumer demand which was partially offset by overall supply chain congestion, including chassis availability issues. In 2020, volume declined due to supply chain disruptions related to the onset of the pandemic and strong over-the-road competition in the first half of the year. Inventory replenishment and a strong peak season in the second half of the year assisted in dampening the overall volume decline.

For 2022, we expect higher domestic volume driven by new business and growth from existing customers.

International volume rose in 2021 but fell in 2020. The increase in 2021 was the result of continued strong import demand despite being limited by various supply chain constraints, including chassis availability issues. The decline in 2020 resulted from supply chain disruptions due to the onset of the pandemic.

For 2022, we expect international volume growth due to increased demand and supply chain recovery.

COAL revenues increased in 2021 but decreased in 2020 compared with the prior years. The increase in 2021 was due to increased volumes and higher average revenue per unit driven by pricing gains and positive mix. The decrease in 2020 was a result of significant volume declines.

For 2022, we expect coal revenues to decline due to lower average revenue per unit and decreased volume driven by coal supply challenges.

As shown in the following table, total tonnage increased in 2021 but decreased in 2020.

	2021	2020	2019	2021 vs. 2020	2020 vs. 2019
	<i>(tons in thousands)</i>			<i>(% change)</i>	
Utility	33,169	32,479	60,278	2%	(46%)
Export	24,886	18,900	23,324	32%	(19%)
Domestic metallurgical	11,804	9,441	13,562	25%	(30%)
Industrial	3,595	3,566	4,655	1%	(23%)
Total	73,454	64,386	101,819	14%	(37%)

Utility coal tonnage increased in 2021 but decreased in 2020 compared with the prior years. The increase in 2021 was due to higher natural gas prices and increased demand from coal-sourced electrical generation. The decline in 2020 was due to low natural gas prices, diminished industrial and commercial electricity demand, and high stockpiles.

For 2022, utility coal tonnage is expected to decline due to higher coal prices, lower natural gas prices, uncertainty regarding coal production and impacts of weather on demand.

Export coal tonnage increased in 2021 but decreased in 2020 compared with the prior years. The increase in 2021 was a result of strong seaborne pricing, improved global economic conditions, and greater global demand. The decline in 2020 was a result of weak seaborne pricing, COVID-19-related global disruptions, and import restrictions.

For 2022, export coal tonnage is expected to decrease due to uncertainty regarding the global coal market and tight coal supply availability.

Domestic metallurgical coal tonnage increased in 2021 but decreased in 2020 compared with the prior years. The increase in 2021 was the result of strong recovery in the steel market. The decrease in 2020 was a reflection of reduced domestic steel demand which led to idled customer facilities and lower production.

For 2022, domestic metallurgical coal tonnage is expected to decrease due to customer sourcing challenges and tight coal supply availability.

Industrial coal tonnage increased in 2021 but decreased in 2020 compared with the prior years. The increase in 2021 was a result of improved demand. The decrease in 2020 was driven by pressure from natural gas conversions and customer sourcing changes.

For 2022, industrial coal tonnage is expected to decrease due to continued natural gas conversions and coal supply sourcing challenges.

Railway Operating Expenses

Railway operating expenses summarized by major classifications were as follows:

	<u>2021</u>	<u>2020</u>	<u>2019</u>	<u>2021</u> <u>vs. 2020</u>	<u>2020</u> <u>vs. 2019</u>
	<i>(\$ in millions)</i>			<i>(% change)</i>	
Compensation and benefits	\$ 2,442	\$ 2,373	\$ 2,751	3%	(14%)
Purchased services and rents	1,726	1,687	1,725	2%	(2%)
Fuel	799	535	953	49%	(44%)
Depreciation	1,181	1,154	1,138	2%	1%
Materials and other	547	653	740	(16%)	(12%)
Loss on asset disposal	—	385	—		
	<u>\$ 6,695</u>	<u>\$ 6,787</u>	<u>\$ 7,307</u>	(1%)	(7%)

In 2021, expenses declined primarily as a result of the absence of the 2020 loss on asset disposal and the equity method investment impairment charge, which is included in purchased services and rents. This was partially offset by higher fuel costs, increased other purchased services, and higher compensation and benefits expense. In 2020, expenses fell as our strategic initiatives to improve productivity and asset utilization resulted in lower compensation and benefits expense, declines in fuel consumption, reduced purchased services, and lower materials expense. Fuel expense also declined due to lower prices. These expense reductions were partially offset by the loss on asset disposal and impairment charge previously discussed.

Compensation and benefits increased in 2021, reflecting changes in:

- incentive and stock-based compensation (up \$128 million),
- overtime and reworks (up \$47 million),
- increased pay rates (up \$41 million),
- health and welfare benefits for craft employees (down \$19 million),
- employment levels (down \$154 million), and
- other (up \$26 million).

In 2020, compensation and benefits decreased, a result of changes in:

- employment levels (down \$309 million),
- health and welfare benefits for craft employees (down \$77 million),
- overtime and recrews (down \$54 million),
- incentive and stock-based compensation (down \$38 million),
- increased pay rates (up \$50 million),
- lower capitalized labor (additional expense of \$51 million), and
- other (down \$1 million).

Our employment averaged 18,500 in 2021, compared with 20,200 in 2020, and 24,600 in 2019.

Purchased services and rents includes the costs of services purchased from external vendors and contractors, including the net costs of operating joint (or leased) facilities with other railroads and the net cost of equipment rentals.

	<u>2021</u>	<u>2020</u>	<u>2019</u>	<u>2021</u> <u>vs. 2020</u>	<u>2020</u> <u>vs. 2019</u>
	<i>(\$ in millions)</i>			<i>(% change)</i>	
Purchased services	\$ 1,409	\$ 1,387	\$ 1,434	2%	(3%)
Equipment rents	317	300	291	6%	3%
Total	<u>\$ 1,726</u>	<u>\$ 1,687</u>	<u>\$ 1,725</u>	2%	(2%)

The increase in purchased services in 2021 was due to increased technology costs, higher intermodal-related expenses, and increased Conrail costs. This was partially offset by the absence of a prior year \$99 million impairment related to an equity method investment. The decrease in purchased services in 2020 resulted from volume-related declines and strategic initiatives to improve productivity and asset utilization, partially offset by the impairment of an equity method investment.

Equipment rents, which includes our cost of using equipment (mostly freight cars) owned by other railroads or private owners less the rent paid to us for the use of our equipment, increased in both periods. In 2021, equipment rents were higher for general-use equipment due to decreased network velocity and increased volume. These increases were partially offset by lower intermodal costs and higher equity in TTX earnings. In 2020, the increase was primarily the result of lower equity in TTX earnings and increased automotive equipment expenses partially offset by decreased intermodal equipment expenses.

Fuel expense, which includes the cost of locomotive fuel as well as other fuel used in railway operations, increased in 2021 but decreased in 2020 compared with the prior years. The increase in 2021 was primarily due to locomotive fuel prices (up 43%), which increased expenses \$224 million. Additionally, locomotive fuel consumption increased 4%. The decline in 2020 was primarily due to locomotive fuel prices (down 32%), which decreased expenses \$235 million. We consumed 384 million gallons of diesel fuel in 2021, compared with 368 million gallons in 2020 and 451 million gallons in 2019.

Depreciation expense increased in both periods, a reflection of reinvestment in our infrastructure, rolling stock, and technology.

Materials and other expenses decreased in both periods as shown in the following table.

	<u>2021</u>	<u>2020</u>	<u>2019</u>	<u>2021</u> <u>vs. 2020</u>	<u>2020</u> <u>vs. 2019</u>
	<i>(\$ in millions)</i>			<i>(% change)</i>	
Materials	\$ 250	\$ 274	\$ 327	(9%)	(16%)
Claims	165	179	193	(8%)	(7%)
Other	132	200	220	(34%)	(9%)
Total	<u>\$ 547</u>	<u>\$ 653</u>	<u>\$ 740</u>	(16%)	(12%)

Materials expense decreased in both periods due primarily to lower maintenance requirements as a result of fewer locomotives and freight cars in service.

Claims expense includes costs related to personal injury, property damage, and environmental matters. The decrease in 2021 was primarily the result of lower costs associated with derailments and personal injuries. In 2020, claims expense declined, the result of lower costs related to environmental remediation matters that were partially offset by increased derailment costs.

Other expense decreased in 2021, primarily due to higher gains from sales of operating property. Gains from operating property sales amounted to \$82 million, \$26 million, and \$64 million in 2021, 2020, and 2019, respectively. In 2020, other expense decreased largely due to the absence of the 2019 write-off of a \$32 million receivable as a result of a legal dispute. Additionally, 2020 benefited from reduced travel expenses resulting from the COVID-19 pandemic. These reductions were partially offset by lower gains from sales of operating property.

Loss on asset disposal

During 2020, we recorded a \$385 million charge related to the disposal of 703 locomotives. For more information on the impact of the charge, see Note 7.

Other income – net

Other income – net decreased in 2021 but increased in 2020. Other income fell in 2021 due to lower net returns on corporate-owned life insurance (COLI) and lower gains on sales of non-operating property. The increase in 2020 was driven by the absence of a prior year \$49 million impairment loss related to natural resource assets, lower pension and postretirement benefit expenses, and higher returns on COLI investments, which more than offset the absence of coal royalties and lower gains on sales of non-operating property.

Income taxes

The effective income tax rate was 22.5% in 2021, compared with 20.4% in 2020 and 22.0% in 2019. All three years benefited from favorable tax benefits associated with stock-based compensation and COLI returns. The current year benefited from a reduction in deferred taxes associated with state tax law changes, while 2020 benefited from a reduction of taxes upon the resolution of our 2012 amended return (see Note 4).

For 2022, we expect an effective income tax rate between 23% and 24%.

FINANCIAL CONDITION, LIQUIDITY, AND CAPITAL RESOURCES

Cash provided by operating activities, our principal source of liquidity, was \$4.3 billion in 2021, \$3.6 billion in 2020, and \$3.9 billion in 2019. The increase in 2021 was primarily the result of improved operating results. The decline in 2020 reflected a decrease in income from railway operations offset in part by lower income tax payments. We had negative working capital of \$354 million at December 31, 2021 and working capital of \$158 million at December 31, 2020. Cash and cash equivalents totaled \$839 million and \$1.1 billion at December 31, 2021, and 2020, respectively. We expect cash on hand combined with cash provided by operating activities will be sufficient to meet our ongoing obligations. In addition, we believe our currently-available borrowing capacity, access to additional financing, and ability to reduce property additions and shareholder distributions, including share repurchases, provide additional flexibility to meet our ongoing obligations. Nonetheless, we continue to monitor the ongoing impacts of the COVID-19 pandemic, which could lead to a reduction in cash flows from operations.

Contractual obligations at December 31, 2021, including those that may have material cash requirements, include interest on fixed-rate long-term debt, long-term debt (Note 9), unconditional purchase obligations (Note 17), long-term advances from Conrail Inc. (Conrail) (Note 6), operating leases (Note 10), agreements with Consolidated Rail Corporation (CRC) (Note 6), and unrecognized tax benefits (Note 4).

	Total	2022	2023 - 2024	2025 - 2026	2027 and Subsequent	Other
	<i>(\$ in millions)</i>					
Interest on fixed-rate long-term debt	\$ 16,014	\$ 593	\$ 1,136	\$ 1,063	\$ 13,222	—
Long-term debt principal	14,816	553	1,006	1,156	12,101	—
Unconditional purchase obligations	916	586	159	75	96	—
Long-term advances from Conrail	534	—	—	—	534	—
Operating leases	470	92	156	124	98	—
Agreements with CRC	103	42	61	—	—	—
Unrecognized tax benefits*	21	—	—	—	—	21
Total	\$ 32,874	\$ 1,866	\$ 2,518	\$ 2,418	\$ 26,051	\$ 21

* This amount is shown in the Other column because the year of settlement cannot be reasonably estimated.

Off balance sheet arrangements consist primarily of unrecognized obligations, including unconditional purchase obligations and future interest payments on fixed-rate long-term debt, which are included in the table above.

Cash used in investing activities was \$1.2 billion in both 2021 and 2020, and \$1.8 billion in 2019. In 2021, lower proceeds from property sales were mostly offset by reduced COLI policy loan repayments and lower property additions. In 2020, the decrease was primarily driven by lower property additions.

Capital spending and track and equipment statistics can be found within the “Railway Property” section of Part I of this report on Form 10-K. For 2022, we expect property additions will be between \$1.8 billion and \$1.9 billion.

Cash used in financing activities was \$3.3 billion in 2021, compared with \$1.9 billion in 2020, and \$2.0 billion in 2019. The increase in 2021 reflects higher repurchases of Common Stock and debt repayments, partially offset by increased proceeds from borrowings. In 2020, the change reflects lower repurchases of Common Stock and debt repayments, partially offset by reduced proceeds from borrowings.

Share repurchases of \$3.4 billion in 2021, \$1.4 billion in 2020, and \$2.1 billion in 2019 resulted in the retirement of 12.7 million, 7.4 million, and 11.3 million shares, respectively. As of December 31, 2021, 8.0 million shares remain authorized by our Board of Directors for repurchase. The timing and volume of future share repurchases

will be guided by our assessment of market conditions and other pertinent factors. Repurchases may be executed in the open market, through derivatives, accelerated repurchase and other negotiated transactions and through plans designed to comply with Rule 10b5-1(c) under the Securities and Exchange Act of 1934. Any near-term purchases under the program are expected to be made with internally generated cash, cash on hand, or proceeds from borrowings.

In August 2021, we issued \$600 million of 2.90% senior notes due 2051.

In May 2021, we issued \$500 million of 2.30% senior notes due 2031 and \$600 million of 4.10% senior notes due 2121. The net proceeds of the 2.30% senior notes due 2031 will be used to finance or refinance, in whole or in part, new or existing eligible projects with environmental benefits, as outlined in our Green Financing Framework.

In May 2021, we renewed, amended and restated our accounts receivable securitization program with a maximum borrowing capacity of \$400 million. The term expires in May 2022. We had no amounts outstanding under this program and our available borrowing capacity was \$400 million at both December 31, 2021 and December 31, 2020.

We also have in place and available an \$800 million credit agreement expiring in March 2025, which provides for borrowings at prevailing rates and includes covenants. We had no amounts outstanding under this facility at December 31, 2021 or December 31, 2020. In addition, we have investments in general purpose COLI policies and had the ability to borrow against these policies up to \$715 million and \$750 million at December 31, 2021 and December 31, 2020, respectively.

We discuss our credit agreement and our accounts receivable securitization program in Note 9, and we have authority from our Board of Directors to issue an additional \$3.0 billion of debt or equity securities through public or private sale, all of which provide for access to additional liquidity should the need arise. Our debt-to-total capitalization ratio was 50.4% at December 31, 2021, compared with 46.2% at December 31, 2020.

Upcoming annual debt maturities are disclosed in Note 9. Overall, our goal is to maintain a capital structure with appropriate leverage to support our business strategy and provide flexibility through business cycles.

CRITICAL ACCOUNTING ESTIMATES

The preparation of financial statements in accordance with GAAP requires us 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 financial statements, and the reported amounts of revenues and expenses during the reporting period. These estimates and assumptions may require judgment about matters that are inherently uncertain, and future events are likely to occur that may require us to make changes to these estimates and assumptions. Accordingly, we regularly review these estimates and assumptions based on historical experience, changes in the business environment, and other factors we believe to be reasonable under the circumstances. The following critical accounting estimates are a subset of our significant accounting policies described in Note 1.

Pensions and Other Postretirement Benefits

Accounting for pensions and other postretirement benefit plans requires us to make several estimates and assumptions (Note 12). These include the expected rate of return from investment of the plans' assets and the expected retirement age of employees as well as their projected earnings and mortality. In addition, the amounts recorded are affected by changes in the interest rate environment because the associated liabilities are discounted to their present value. We make these estimates based on our historical experience and other information we deem pertinent under the circumstances (for example, expectations of future stock market performance). We utilize an independent actuarial consulting firm's studies to assist us in selecting appropriate actuarial assumptions and valuing related liabilities.

For 2021, we assumed a long-term investment rate of return of 8.0%, which was supported by our long-term total rate of return on pension plan assets since inception, as well as our expectation of future returns. A one-percentage point change to this rate of return assumption would result in a \$27 million change in annual pension expense. We review assumptions related to our defined benefit plans annually, and while changes are likely to occur in assumptions concerning retirement age, projected earnings, and mortality, they are not expected to have a material effect on our net pension expense or net pension liability in the future. The net pension liability is recorded at net present value using discount rates that are based on the current interest rate environment in light of the timing of expected benefit payments. We utilize analyses in which the projected annual cash flows from the pension and postretirement benefit plans are matched with yield curves based on an appropriate universe of high-quality corporate bonds. We use the results of the yield curve analyses to select the discount rates that match the payment streams of the benefits in these plans. A one-percentage point change to this discount rate assumption would result in a \$20 million change in annual pension expense.

Properties and Depreciation

Most of our assets are long-lived railway properties (Note 7). “Properties” are stated principally at cost and are depreciated using the group method whereby assets with similar characteristics, use, and expected lives are grouped together in asset classes and depreciated using a composite depreciation rate. See Note 1 for a more detailed discussion of assumptions and estimates.

Expenditures, including those on leased assets, that extend an asset’s useful life or increase its utility are capitalized. Expenditures capitalized include those that are directly related to a capital project and may include materials, labor, and other direct costs, in addition to an allocable portion of indirect costs that relate to a capital project. A significant portion of our annual capital spending relates to self-constructed assets. Costs related to repairs and maintenance activities that, in our judgment, do not extend an asset’s useful life or increase its utility are expensed when such repairs are performed.

Depreciation expense for 2021 totaled \$1.2 billion. Our composite depreciation rates for 2021 are disclosed in Note 7; a one-year increase (or decrease) in the estimated average useful lives of depreciable assets would have resulted in an approximate \$45 million decrease (or increase) to annual depreciation expense.

Personal Injury

Claims expense, included in “Materials and other” in the Consolidated Statements of Income, includes our estimate of costs for personal injuries.

To aid in valuing our personal injury liability and determining the amount to accrue with respect to such claims during the year, we utilize studies prepared by an independent actuarial consulting firm. The actuarial firm studies our historical patterns of reserving for claims and subsequent settlements, taking into account relevant outside influences. We adjust the liability quarterly based upon our assessment and the results of the study. The accuracy of our estimate of the liability is subject to inherent limitation given the difficulty of predicting future events and, as such, the ultimate loss sustained may vary from the estimated liability recorded.

See Note 17 for a more detailed discussion of the assumptions and estimates we use for personal injury.

Income Taxes

Our net deferred tax liability totaled \$7.2 billion at December 31, 2021 (Note 4). This liability is estimated based on the expected future tax consequences of items recognized in the financial statements. After application of the federal statutory tax rate to book income, judgment is required with respect to the timing and deductibility of expenses in our income tax returns. For state income and other taxes, judgment is also required with respect to the apportionment among the various jurisdictions. A valuation allowance is recorded if we expect that it is more likely than not that deferred tax assets will not be realized. We have a \$60 million valuation allowance on \$461 million of

deferred tax assets as of December 31, 2021, reflecting the expectation that substantially all of these assets will be realized.

OTHER MATTERS

Labor Agreements

Approximately 80% of our railroad employees are covered by collective bargaining agreements with various labor unions. Pursuant to the Railway Labor Act, these agreements remain in effect until new agreements are reached, or until the bargaining procedures mandated by the Railway Labor Act are completed. We largely bargain nationally in concert with other major railroads, represented by the National Carriers Conference Committee. Moratorium provisions in the labor agreements govern when the railroads and unions may propose changes to the agreements. The current round of bargaining commenced on November 1, 2019 with both management and the unions serving their formal proposals for changes to the collective bargaining agreements and negotiations are ongoing.

Market Risks

At December 31, 2021, we had no outstanding debt subject to interest rate fluctuations. Market risk for fixed-rate debt is estimated as the potential increase in fair value resulting from a one-percentage point decrease in interest rates as of December 31, 2021 and amounts to an increase of approximately \$1.9 billion to the fair value of our debt at December 31, 2021. We consider it unlikely that interest rate fluctuations applicable to these instruments will result in a material adverse effect on our financial position, results of operations, or liquidity.

New Accounting Pronouncements

For a detailed discussion of new accounting pronouncements, see Note 1.

Inflation

In preparing financial statements, GAAP requires the use of historical cost that disregards the effects of inflation on the replacement cost of property. As a capital-intensive company, we have most of our capital invested in long-lived assets. The replacement cost of these assets, as well as the related depreciation expense, would be substantially greater than the amounts reported on the basis of historical cost.

FORWARD-LOOKING STATEMENTS

Certain statements in Management's Discussion and Analysis of Financial Condition and Results of Operations are "forward-looking statements" within the meaning of the "safe harbor" provisions of the Private Securities Litigation Reform Act of 1995, as amended. These statements relate to future events or our future financial performance and involve known and unknown risks, uncertainties, and other factors that may cause our actual results, levels of activity, performance, or our achievements or those of our industry to be materially different from those expressed or implied by any forward-looking statements. In some cases, forward-looking statements can be identified by terminology such as "may," "will," "could," "would," "should," "expect," "plan," "anticipate," "intend," "believe," "estimate," "project," "consider," "predict," "potential," "feel," or other comparable terminology. We have based these forward-looking statements on our current expectations, assumptions, estimates, beliefs, and projections. While we believe these expectations, assumptions, estimates, beliefs, and projections are reasonable, such forward-looking statements are only predictions and involve known and unknown risks and uncertainties, many of which involve factors or circumstances that are beyond our control. These and other important factors, including those discussed in Item 1A "Risk Factors," may cause actual results, performance, or achievements to differ materially from those expressed or implied by these forward-looking statements. The forward-looking statements herein are made only as of the date they were first issued, and unless otherwise required by applicable securities laws, we disclaim any intention or obligation to update or revise any forward-looking statements, whether as a result of new information, future events, or otherwise.

Additional Information

Investors and others should note that we routinely use the Investor Relations, Performance Metrics and Sustainability sections of our website (www.norfolksouthern.com/content/nscorp/en/investor-relations.html, <http://www.nscorp.com/content/nscorp/en/investor-relations/performance-metrics.html>, & www.nscorp.com/content/nscorp/en/about-ns/sustainability.html) to post presentations to investors and other important information, including information that may be deemed material to investors. Information about us, including information that may be deemed material, may also be announced by posts on our social media channels, including Twitter (www.twitter.com/nscorp) and LinkedIn (www.linkedin.com/company/norfolk-southern). We may also use our website and social media channels for the purpose of complying with our disclosure obligations under Regulation FD. As a result, we encourage investors, the media, and others interested in Norfolk Southern to review the information posted on our website and social media channels. The information posted on our website and social media channels is not incorporated by reference in this Annual Report on Form 10-K.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

The information required by this item is included in Item 7 “Management’s Discussion and Analysis of Financial Condition and Results of Operations” under the heading “Market Risks.”

Item 8. Financial Statements and Supplementary Data

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Report of Management

February 4, 2022

To the Stockholders
Norfolk Southern Corporation:

Management is responsible for establishing and maintaining adequate internal control over financial reporting. In order to ensure that Norfolk Southern's internal control over financial reporting is effective, management regularly assesses such controls and did so most recently as of December 31, 2021. This assessment was based on criteria for effective internal control over financial reporting described in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on this assessment, management has concluded that we maintained effective internal control over financial reporting as of December 31, 2021.

KPMG LLP, independent registered public accounting firm, has audited our financial statements and issued an attestation report on our internal control over financial reporting as of December 31, 2021.

/s/ James A. Squires

James A. Squires
Chairman and
Chief Executive Officer

/s/ Mark R. George

Mark R. George
Executive Vice President Finance
and Chief Financial Officer

/s/ Clyde H. Allison, Jr.

Clyde H. Allison, Jr.
Vice President and
Controller

Report of Independent Registered Public Accounting Firm

To the Stockholders and Board of Directors
Norfolk Southern Corporation:

Opinion on Internal Control Over Financial Reporting

We have audited Norfolk Southern Corporation and subsidiaries' (the Company) internal control over financial reporting as of December 31, 2021, based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission. In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2021, based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated balance sheets of the Company as of December 31, 2021 and 2020, the related consolidated statements of income, comprehensive income, cash flows, and changes in stockholders' equity for each of the years in the three-year period ended December 31, 2021, and the related notes and financial statement schedule of valuation and qualifying accounts as listed in Item 15(A)2 (collectively, the consolidated financial statements), and our report dated February 4, 2022 expressed an unqualified opinion on those consolidated 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 Annual 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 of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audit also included 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/ KPMG LLP
KPMG LLP

Atlanta, Georgia
February 4, 2022

Report of Independent Registered Public Accounting Firm

To the Stockholders and Board of Directors
Norfolk Southern Corporation:

Opinion on the Consolidated Financial Statements

We have audited the accompanying consolidated balance sheets of Norfolk Southern Corporation and subsidiaries (the Company) as of December 31, 2021 and 2020, the related consolidated statements of income, comprehensive income, cash flows, and changes in stockholders' equity for each of the years in the three-year period ended December 31, 2021, and the related notes and financial statement schedule of valuation and qualifying accounts as listed in Item 15(A)2 (collectively, the consolidated financial statements). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2021 and 2020, and the results of its operations and its cash flows for each of the years in the three-year period ended December 31, 2021, in conformity with U.S. generally accepted accounting principles.

We also have 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, 2021, 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 4, 2022 expressed an unqualified opinion on the effectiveness of the Company's internal control over financial reporting.

Basis for Opinion

These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated 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 consolidated 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 consolidated 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 consolidated 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 consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matter

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

Sufficiency of audit evidence related to the capitalization of property expenditures

As discussed in Note 1 to the consolidated financial statements, expenditures that extend an asset's useful life or increase its utility are capitalized. The Company has recorded \$31,653 million in net book value of properties at December 31, 2021 and has recorded \$1,470 million in property additions for the year ended December 31, 2021. Expenditures capitalized include those that are directly related to a capital project and may include materials, labor and other direct costs, in addition to an allocable portion of indirect costs that relate to a capital project. A significant portion of the Company's annual capital spending relates to self-constructed assets. Costs related to repair and maintenance activities, that in the Company's judgment, do not extend an asset's useful life or increase its utility are expensed when such repairs are performed.

We identified the evaluation of the sufficiency of audit evidence related to capitalization of property expenditures as a critical audit matter. Subjective auditor judgment was required in determining procedures and evaluating audit results related to the capitalization of purchased services and compensation due to their usage for both self-constructed assets and repairs and maintenance.

The following are the primary procedures we performed to address this critical audit matter. We applied auditor judgment to determine the nature and extent of procedures to be performed over capitalized property expenditures. We evaluated the design and tested the operating effectiveness of certain internal controls over the Company's process to capitalize property expenditures, including controls over the determination of whether purchased services and compensation expenditures extend an asset's useful life or increase its utility. For a sample of property addition expenditures, we inquired and inspected support to evaluate that the expenditure extended an asset's useful life or increased its utility. We evaluated the sufficiency of audit evidence obtained by assessing the results of the procedures performed, including the appropriateness of the nature of such evidence.

/s/ KPMG LLP
KPMG LLP

We have served as the Company's auditor since 1982.

Atlanta, Georgia
February 4, 2022

Norfolk Southern Corporation and Subsidiaries
Consolidated Statements of Income

	Years ended December 31,		
	2021	2020	2019
	<i>(\$ in millions, except per share amounts)</i>		
Railway operating revenues	\$ 11,142	\$ 9,789	\$ 11,296
Railway operating expenses			
Compensation and benefits	2,442	2,373	2,751
Purchased services and rents	1,726	1,687	1,725
Fuel	799	535	953
Depreciation	1,181	1,154	1,138
Materials and other	547	653	740
Loss on asset disposal	—	385	—
	<hr/>	<hr/>	<hr/>
Total railway operating expenses	6,695	6,787	7,307
	<hr/>	<hr/>	<hr/>
Income from railway operations	4,447	3,002	3,989
Other income – net	77	153	106
Interest expense on debt	646	625	604
	<hr/>	<hr/>	<hr/>
Income before income taxes	3,878	2,530	3,491
Income taxes	873	517	769
	<hr/>	<hr/>	<hr/>
Net income	<u>\$ 3,005</u>	<u>\$ 2,013</u>	<u>\$ 2,722</u>
Earnings per share			
Basic	\$ 12.16	\$ 7.88	\$ 10.32
Diluted	12.11	7.84	10.25

See accompanying notes to consolidated financial statements.

Norfolk Southern Corporation and Subsidiaries
Consolidated Statements of Comprehensive Income

	Years ended December 31,		
	2021	2020	2019
	<i>(\$ in millions)</i>		
Net income	\$ 3,005	\$ 2,013	\$ 2,722
Other comprehensive income (loss), before tax:			
Pension and other postretirement benefits	226	(140)	101
Other comprehensive income (loss) of equity investees	24	2	(4)
Other comprehensive income (loss), before tax	250	(138)	97
Income tax benefit (expense) related to items of other comprehensive income (loss)	(58)	35	(25)
Other comprehensive income (loss), net of tax	192	(103)	72
Total comprehensive income	\$ 3,197	\$ 1,910	\$ 2,794

See accompanying notes to consolidated financial statements.

Norfolk Southern Corporation and Subsidiaries
Consolidated Balance Sheets

At December 31,

2021 2020

(\$ in millions)

Assets

Current assets:

Cash and cash equivalents	\$	839	\$	1,115
Accounts receivable – net		976		848
Materials and supplies		218		221
Other current assets		134		134
Total current assets		2,167		2,318

Investments

3,707 3,590

Properties less accumulated depreciation of \$12,031 and
\$11,985, respectively

31,653 31,345

Other assets

966 709

Total assets

\$ 38,493 \$ 37,962

Liabilities and stockholders' equity

Current liabilities:

Accounts payable	\$	1,351	\$	1,016
Income and other taxes		305		263
Other current liabilities		312		302
Current maturities of long-term debt		553		579
Total current liabilities		2,521		2,160

Long-term debt

13,287 12,102

Other liabilities

1,879 1,987

Deferred income taxes

7,165 6,922

Total liabilities

24,852 23,171

Stockholders' equity:

Common Stock \$1.00 per share par value, 1,350,000,000 shares
authorized; outstanding 240,162,790 and 252,095,082 shares,
respectively, net of treasury shares

242 254

Additional paid-in capital

2,215 2,248

Accumulated other comprehensive loss

(402) (594)

Retained income

11,586 12,883

Total stockholders' equity

13,641 14,791

Total liabilities and stockholders' equity

\$ 38,493 \$ 37,962

See accompanying notes to consolidated financial statements.

Norfolk Southern Corporation and Subsidiaries
Consolidated Statements of Cash Flows

	Years ended December 31,		
	2021	2020	2019
	<i>(\$ in millions)</i>		
Cash flows from operating activities			
Net income	\$ 3,005	\$ 2,013	\$ 2,722
Reconciliation of net income to net cash provided by operating activities:			
Depreciation	1,181	1,154	1,139
Deferred income taxes	184	142	330
Gains and losses on properties	(86)	(39)	(42)
Loss on asset disposal	—	385	—
Impairment of investment	—	99	—
Changes in assets and liabilities affecting operations:			
Accounts receivable	(133)	71	87
Materials and supplies	3	23	(37)
Other current assets	(6)	3	(4)
Current liabilities other than debt	283	34	(185)
Other – net	(176)	(248)	(118)
Net cash provided by operating activities	<u>4,255</u>	<u>3,637</u>	<u>3,892</u>
Cash flows from investing activities			
Property additions	(1,470)	(1,494)	(2,019)
Property sales and other transactions	159	333	377
Investment purchases	(10)	(13)	(18)
Investment sales and other transactions	99	(1)	(104)
Net cash used in investing activities	<u>(1,222)</u>	<u>(1,175)</u>	<u>(1,764)</u>
Cash flows from financing activities			
Dividends	(1,028)	(960)	(949)
Common Stock transactions	17	69	27
Purchase and retirement of Common Stock	(3,390)	(1,439)	(2,099)
Proceeds from borrowings – net of issuance costs	1,676	784	2,192
Debt repayments	(584)	(381)	(1,188)
Other	—	—	23
Net cash used in financing activities	<u>(3,309)</u>	<u>(1,927)</u>	<u>(1,994)</u>
Net increase (decrease) in cash and cash equivalents	(276)	535	134
Cash and cash equivalents			
At beginning of year	1,115	580	446
At end of year	<u>\$ 839</u>	<u>\$ 1,115</u>	<u>\$ 580</u>
Supplemental disclosures of cash flow information			
Cash paid during the year for:			
Interest (net of amounts capitalized)	\$ 579	\$ 577	\$ 555
Income taxes (net of refunds)	654	311	543

See accompanying notes to consolidated financial statements.

Norfolk Southern Corporation and Subsidiaries
Consolidated Statements of Changes in Stockholders' Equity

	<u>Common Stock</u>	<u>Additional Paid-in Capital</u>	<u>Accum. Other Comprehensive Loss</u>	<u>Retained Income</u>	<u>Total</u>
	<i>(\$ in millions, except per share amounts)</i>				
Balance at December 31, 2018	\$ 269	\$ 2,216	\$ (563)	\$ 13,440	\$ 15,362
Comprehensive income:					
Net income				2,722	2,722
Other comprehensive income			72		72
Total comprehensive income					<u>2,794</u>
Dividends on Common Stock, \$3.60 per share				(949)	(949)
Share repurchases	(11)	(88)		(2,000)	(2,099)
Stock-based compensation	1	81		(6)	76
	<u>259</u>	<u>2,209</u>	<u>(491)</u>	<u>13,207</u>	<u>15,184</u>
Balance at December 31, 2019					
Comprehensive income:					
Net income				2,013	2,013
Other comprehensive loss			(103)		(103)
Total comprehensive income					<u>1,910</u>
Dividends on Common Stock, \$3.76 per share				(960)	(960)
Share repurchases	(7)	(59)		(1,373)	(1,439)
Stock-based compensation	2	98		(4)	96
	<u>254</u>	<u>2,248</u>	<u>(594)</u>	<u>12,883</u>	<u>14,791</u>
Balance at December 31, 2020					
Comprehensive income:					
Net income				3,005	3,005
Other comprehensive income			192		192
Total comprehensive income					<u>3,197</u>
Dividends on Common Stock, \$4.16 per share				(1,028)	(1,028)
Share repurchases	(13)	(106)		(3,271)	(3,390)
Stock-based compensation	1	73		(3)	71
	<u>242</u>	<u>2,215</u>	<u>(402)</u>	<u>11,586</u>	<u>13,641</u>
Balance at December 31, 2021					

See accompanying notes to consolidated financial statements.

Norfolk Southern Corporation and Subsidiaries

Notes to Consolidated Financial Statements

The following Notes are an integral part of the Consolidated Financial Statements.

1. Summary of Significant Accounting Policies

Description of Business

Norfolk Southern Corporation is a Georgia-based holding company engaged principally in the rail transportation business, operating 19,300 route miles primarily in the Southeast, East, and Midwest. These consolidated financial statements include Norfolk Southern and its majority-owned and controlled subsidiaries (collectively, NS, we, us, and our). Norfolk Southern's major subsidiary is NSR. All significant intercompany balances and transactions have been eliminated in consolidation.

NSR and its railroad subsidiaries transport raw materials, intermediate products, and finished goods classified in the following commodity groups (percent of total railway operating revenues in 2021): intermodal (28%); agriculture, forest and consumer products (20%); chemicals (18%); metals and construction (14%); coal (12%); and automotive (8%). Although most of our customers are domestic, ultimate points of origination or destination for some of the products transported (particularly coal bound for export and some intermodal shipments) may be outside the U.S. Approximately 80% of our railroad employees are covered by collective bargaining agreements with various labor unions.

Use of Estimates

The preparation of financial statements in accordance with GAAP requires us 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 financial statements, and the reported amounts of revenues and expenses during the reporting period. We periodically review our estimates, including those related to the recoverability and useful lives of assets, as well as liabilities for litigation, environmental remediation, casualty claims, income taxes and pension and other postretirement benefits. Changes in facts and circumstances may result in revised estimates.

Revenue Recognition

Transportation revenues are recognized proportionally as a shipment moves from origin to destination, and related expenses are recognized as incurred. Certain of our contract refunds (which are primarily volume-based incentives) are recorded as a reduction to revenues on the basis of our best estimate of projected liability, which is based on historical activity, current shipment counts and expectation of future activity. Certain ancillary services, such as switching, demurrage and other incidental activities, may be provided to customers under their transportation contracts. These are distinct performance obligations that are recognized at a point in time when the services are performed or as contractual obligations are met.

Cash Equivalents

"Cash equivalents" are highly liquid investments purchased three months or less from maturity.

Allowance for Doubtful Accounts

Our allowance for doubtful accounts was \$8 million and \$6 million at December 31, 2021 and 2020, respectively. To determine our allowance for doubtful accounts, we evaluate historical loss experience (which has not been significant), the characteristics of current accounts, and general economic conditions and trends.

Materials and Supplies

“Materials and supplies,” consisting mainly of items for maintenance of property and equipment, are stated at the lower of average cost or net realizable value. The cost of materials and supplies expected to be used in property additions or improvements is included in “Properties.”

Investments

Investments in entities over which we have the ability to exercise significant influence but do not control the entity are accounted for using the equity method, whereby the investment is carried at the cost of the acquisition plus our equity in undistributed earnings or losses since acquisition.

Properties

“Properties” are stated principally at cost and are depreciated using the group method whereby assets with similar characteristics, use, and expected lives are grouped together in asset classes and depreciated using a composite depreciation rate. This methodology treats each asset class as a pool of resources, not as singular items. We use approximately 75 depreciable asset classes.

Depreciation expense is based on our assumptions concerning expected service lives of our properties as well as the expected net salvage that will be received upon their retirement. In developing these assumptions, we utilize periodic depreciation studies that are performed by an independent outside firm of consulting engineers and approved by the STB. Our depreciation studies are conducted about every three years for equipment and every six years for track assets and other roadway property. The frequency of these studies is consistent with guidelines established by the STB. We adjust our rates based on the results of these studies and implement the changes prospectively. The studies may also indicate that the recorded amount of accumulated depreciation is deficient (or in excess) of the amount indicated by the study. Any such deficiency (or excess) is amortized as a component of depreciation expense over the remaining service lives of the affected class of property, as determined by the study.

Key factors that are considered in developing average service life and salvage estimates include:

- statistical analysis of historical retirement data and surviving asset records,
- review of historical salvage received and current market rates,
- review of our operations including expected changes in technology, customer demand, maintenance practices and asset management strategies,
- review of accounting policies and assumptions, and
- industry review and analysis.

The composite depreciation rate for rail in high density corridors is derived based on consideration of annual gross tons as compared to the total or ultimate capacity of rail in these corridors. Our experience has shown that traffic density is a leading factor in the determination of the expected service life of rail in high density corridors. In developing the respective depreciation rate, consideration is also given to several rail characteristics including age, weight, condition (new or second-hand) and type (curved or straight).

We capitalize interest on major projects during the period of their construction. Expenditures, including those on leased assets, that extend an asset’s useful life or increase its utility are capitalized. Expenditures capitalized include those that are directly related to a capital project and may include materials, labor, and other direct costs, in addition to an allocable portion of indirect costs that relate to a capital project. A significant portion of our annual capital spending relates to self-constructed assets. Removal activities occur in conjunction with replacement and are estimated based on the average percentage of time employees replacing assets spend on removal functions. Costs related to repairs and maintenance activities that, in our judgment, do not extend an asset’s useful life or increase its utility are expensed when such repairs are performed.

When depreciable operating road and equipment assets are sold or retired in the ordinary course of business, the cost of the assets, net of sales proceeds or salvage, is charged to accumulated depreciation, and no gain or loss is recognized in earnings. Actual historical cost values are retired when available, such as with most equipment assets. The use of estimates in recording the retirement of certain roadway assets is necessary based on the impracticality of tracking individual asset costs. When retiring rail, ties and ballast, we use statistical curves that indicate the relative distribution of the age of the assets retired. The historical cost of other roadway assets is estimated using a combination of inflation indices specific to the rail industry and those published by the U.S. Bureau of Labor Statistics. The indices are applied to the replacement value based on the age of the retired assets. These indices are used because they closely correlate with the costs of roadway assets. Gains and losses on disposal of operating land are included in “Materials and other” expenses. Gains and losses on disposal of nonoperating land and nonrail assets are included in “Other income – net” since such income is not a product of our railroad operations.

A retirement is considered abnormal if it does not occur in the ordinary course of business, if it relates to disposition of a large segment of an asset class and if the retirement varies significantly from the retirement profile identified through our depreciation studies, which inherently consider the impact of normal retirements on expected service lives and depreciation rates. Gains or losses from abnormal retirements are recognized in income from railway operations.

We review the carrying amount of properties whenever events or changes in circumstances indicate that such carrying amount may not be recoverable based on future undiscounted cash flows. Assets that are deemed impaired as a result of such review are recorded at the lower of carrying amount or fair value.

New Accounting Pronouncements

In June 2016, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) 2016-13, “*Credit Losses - Measurement of Credit Losses on Financial Instruments*,” which replaced the current incurred loss impairment method with a method that reflects expected credit losses. Short-term and long-term financial assets, as defined by the standard, are impacted by immediate recognition of estimated credit losses in the financial statements, reflecting the net amount expected to be collected. Historically, losses associated from the inability to collect on accounts receivable have been insignificant, with little divergence in collection trends through varying economic cycles. We adopted the standard on January 1, 2020 and there was no material impact to the financial statements upon adoption.

In December 2019, the FASB issued ASU 2019-12, “*Simplifying the Accounting for Income Taxes*,” which added new guidance to simplify the accounting for income taxes, changed the accounting for certain income tax transactions, and made other minor changes. We adopted the standard on January 1, 2021 and there was no material impact to the financial statements upon adoption.

2. Railway Operating Revenues

The following table disaggregates our revenues by major commodity group:

	<u>2021</u>	<u>2020</u>	<u>2019</u>
	<i>(\$ in millions)</i>		
Merchandise:			
Agriculture, forest and consumer products	\$ 2,251	\$ 2,116	\$ 2,256
Chemicals	1,951	1,809	2,092
Metals and construction	1,562	1,333	1,461
Automotive	905	830	994
Merchandise	<u>6,669</u>	<u>6,088</u>	<u>6,803</u>
Intermodal	3,163	2,654	2,824
Coal	<u>1,310</u>	<u>1,047</u>	<u>1,669</u>
 Total	 <u>\$ 11,142</u>	 <u>\$ 9,789</u>	 <u>\$ 11,296</u>

We recognize the amount of revenues to which we expect to be entitled for the transfer of promised goods or services to customers. A performance obligation is created when a customer under a transportation contract or public tariff submits a bill of lading to us for the transport of goods. These performance obligations are satisfied as the shipments move from origin to destination. As such, transportation revenues are recognized proportionally as a shipment moves, and related expenses are recognized as incurred. These performance obligations are generally short-term in nature with transit days averaging approximately one week or less for each commodity group. The customer has an unconditional obligation to pay for the service once the service has been completed. Estimated revenues associated with in-process shipments at period-end are recorded based on the estimated percentage of service completed. We had no material remaining performance obligations at December 31, 2021 and 2020.

We may provide customers ancillary services, such as switching, demurrage and other incidental activities, under their transportation contracts. These are distinct performance obligations that are recognized at a point in time when the services are performed or as contractual obligations are met. These revenues are included within each of the commodity groups and represent approximately 7%, 5% and 5%, respectively, of total “Railway operating revenues” on the Consolidated Statements of Income for the years ended December 31, 2021, 2020 and 2019.

Revenues related to interline transportation services that involve another railroad are reported on a net basis. Therefore, the portion of the amount that relates to another party is not reflected in revenues.

Under the typical terms of our freight contracts, payment for services is due within fifteen days of billing the customer, thus there are no significant financing components. “Accounts receivable – net” on the Consolidated Balance Sheets includes both customer and non-customer receivables as follows:

	December 31,	
	2021	2020
	<i>(\$ in millions)</i>	
Customer	\$ 741	\$ 629
Non-customer	235	219
	<u>976</u>	<u>848</u>
Accounts receivable – net	<u>\$ 976</u>	<u>\$ 848</u>

Non-customer receivables include non-revenue-related amounts due from other railroads, governmental entities, and others. “Other assets” on the Consolidated Balance Sheets includes non-current customer receivables of \$23 million at both December 31, 2021 and 2020. We do not have any material contract assets or liabilities at December 31, 2021 and 2020.

3. Other Income – Net

	2021	2020	2019
	<i>(\$ in millions)</i>		
Pension and other postretirement benefits (Note 12)	\$ 102	\$ 91	\$ 63
COLI – net	17	85	69
Other	(42)	(23)	(26)
	<u>77</u>	<u>153</u>	<u>106</u>
Total	<u>\$ 77</u>	<u>\$ 153</u>	<u>\$ 106</u>

4. Income Taxes

	2021	2020	2019
	<i>(\$ in millions)</i>		
Current:			
Federal	\$ 553	\$ 307	\$ 356
State	136	68	83
Total current taxes	<u>689</u>	<u>375</u>	<u>439</u>
Deferred:			
Federal	186	111	280
State	(2)	31	50
Total deferred taxes	<u>184</u>	<u>142</u>	<u>330</u>
Income taxes	<u>\$ 873</u>	<u>\$ 517</u>	<u>\$ 769</u>

Reconciliation of Statutory Rate to Effective Rate

“Income taxes” on the Consolidated Statements of Income differs from the amounts computed by applying the statutory federal corporate tax rate as follows:

	2021		2020		2019	
	Amount	%	Amount	%	Amount	%
	<i>(\$ in millions)</i>					
Federal income tax at statutory rate	\$ 814	21.0	\$ 531	21.0	\$ 733	21.0
State income taxes, net of federal tax effect	109	2.8	85	3.3	110	3.1
Excess tax benefits on stock-based compensation	(25)	(0.6)	(39)	(1.5)	(29)	(0.8)
Other, net	(25)	(0.7)	(60)	(2.4)	(45)	(1.3)
Income taxes	<u>\$ 873</u>	<u>22.5</u>	<u>\$ 517</u>	<u>20.4</u>	<u>\$ 769</u>	<u>22.0</u>

Deferred Tax Assets and Liabilities

Certain items are reported in different periods for financial reporting and income tax purposes. Deferred tax assets and liabilities are recorded in recognition of these differences. The tax effects of temporary differences that give rise to significant portions of the deferred tax assets and deferred tax liabilities are as follows:

	December 31,	
	2021	2020
	<i>(\$ in millions)</i>	
Deferred tax assets:		
Compensation and benefits, including postretirement benefits	\$ 181	\$ 218
Accruals, including casualty and other claims	92	93
Other	188	198
Total gross deferred tax assets	<u>461</u>	<u>509</u>
Less valuation allowance	(60)	(57)
Net deferred tax assets	<u>401</u>	<u>452</u>
Deferred tax liabilities:		
Property	(7,016)	(6,820)
Other	(550)	(554)
Total deferred tax liabilities	<u>(7,566)</u>	<u>(7,374)</u>
Deferred income taxes	<u>\$ (7,165)</u>	<u>\$ (6,922)</u>

Except for amounts for which a valuation allowance has been provided, we believe that it is more likely than not that the results of future operations will generate sufficient taxable income to realize the deferred tax assets. The valuation allowance at the end of each year primarily relates to subsidiary state income tax net operating losses and state investment tax credits that may not be utilized prior to their expiration. The total valuation allowance increased by \$3 million in both 2021 and 2020, and \$4 million in 2019.

Uncertain Tax Positions

A reconciliation of the beginning and ending amount of unrecognized tax benefits is as follows:

	December 31,	
	2021	2020
	<i>(\$ in millions)</i>	
Balance at beginning of year	\$ 22	\$ 24
Additions based on tax positions related to the current year	3	4
Additions for tax positions of prior years	3	—
Settlements with taxing authorities	(5)	(4)
Lapse of statutes of limitations	(2)	(2)
	<u>21</u>	<u>22</u>
Balance at end of year	<u>\$ 21</u>	<u>\$ 22</u>

Included in the balance of unrecognized tax benefits at December 31, 2021 are potential benefits of \$17 million that would affect the effective tax rate if recognized. Unrecognized tax benefits are adjusted in the period in which new information about a tax position becomes available or the final outcome differs from the amount recorded.

The statute of limitations on Internal Revenue Service (IRS) examinations has expired for all years prior to 2018. The IRS accepted our 2012 amended income tax return. As a result, we received a refund of \$46 million and recognized a tax benefit of \$19 million in 2020. State income tax returns generally are subject to examination for a period of three to four years after filing the return. In addition, we are generally obligated to report changes in taxable income arising from federal income tax examinations to the states within a period of up to two years from the date the federal examination is final. We have various state income tax returns either under examination, administrative appeal, or litigation.

5. Fair Value Measurements

FASB Accounting Standards Codification (ASC) 820-10, “*Fair Value Measurements*,” established a framework for measuring fair value and a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value into three broad levels, as follows:

Level 1 Inputs to the valuation methodology are unadjusted quoted prices for identical assets or liabilities in active markets that we have the ability to access.

Level 2 Inputs to the valuation methodology include:

- quoted prices for similar assets or liabilities in active markets,
- quoted prices for identical or similar assets or liabilities in inactive markets,
- inputs other than quoted prices that are observable for the asset or liability, and
- inputs that are derived principally from or corroborated by observable market data by correlation or other means.

If the asset or liability has a specified (contractual) term, the Level 2 input must be observable for substantially the full term of the asset or liability.

Level 3 Inputs to the valuation methodology are unobservable and significant to the fair value measurement.

The asset or liability’s fair value measurement level within the hierarchy is based on the lowest level of any input that is significant to the fair value measurement.

Fair Values of Financial Instruments

The fair values of “Cash and cash equivalents,” “Accounts receivable – net,” and “Accounts payable” approximate carrying values because of the short maturity of these financial instruments. The carrying value of COLI is recorded at cash surrender value and, accordingly, approximates fair value. There are no other assets or liabilities measured at fair value on a recurring basis at December 31, 2021 or 2020. The carrying amounts and estimated fair values, based on Level 1 inputs, of long-term debt consist of the following at December 31:

	2021		2020	
	Carrying Amount	Fair Value	Carrying Amount	Fair Value
	<i>(\$ in millions)</i>			
Long-term debt, including current maturities	\$ (13,840)	\$ (17,033)	\$ (12,681)	\$ (16,664)

6. Investments

	December 31,	
	2021	2020
	<i>(\$ in millions)</i>	
Long-term investments:		
Equity method investments:		
Conrail	\$ 1,526	\$ 1,446
TTX Company	851	798
Other	420	418
Total equity method investments	<u>2,797</u>	<u>2,662</u>
COLI at net cash surrender value	885	902
Other investments	<u>25</u>	<u>26</u>
Total long-term investments	<u>\$ 3,707</u>	<u>\$ 3,590</u>

Investment in Conrail

Through a limited liability company, we and CSX jointly own Conrail, whose primary subsidiary is CRC. We have a 58% economic and 50% voting interest in the jointly-owned entity, and CSX has the remainder of the economic and voting interests. We are amortizing the excess of the purchase price over Conrail’s net equity using the principles of purchase accounting, based primarily on the estimated useful lives of Conrail’s depreciable property and equipment, including the related deferred tax effect of the differences in book and tax accounting bases for such assets, as all of the purchase price at acquisition was allocable to Conrail’s tangible assets and liabilities. At December 31, 2021, our investment in Conrail exceeds our share of Conrail’s underlying net equity by \$487 million.

CRC owns and operates certain properties (the Shared Assets Areas) for the joint and exclusive benefit of NSR and CSX Transportation, Inc. (CSXT). The costs of operating the Shared Assets Areas are borne by NSR and CSXT based on usage. In addition, NSR and CSXT pay CRC a fee for access to the Shared Assets Areas. “Purchased services and rents” and “Fuel” include expenses payable to CRC for operation of the Shared Assets Areas totaling \$147 million in 2021, \$129 million in 2020, and \$149 million in 2019. Future payments for access fees due to CRC under the Shared Assets Areas agreements are as follows: \$42 million in 2022, \$43 million in 2023, and \$18 million

in 2024. We provide certain general and administrative support functions to Conrail, the fees for which are billed in accordance with several service-provider arrangements and approximate \$6 million annually.

In 2020, we converted \$254 million of accounts payable into long-term advances from Conrail included in “Other liabilities.” “Accounts payable” includes \$112 million at December 31, 2021, and \$56 million at December 31, 2020, due to Conrail for the operation of the Shared Assets Areas. “Other liabilities” includes \$534 million at December 31, 2021 and 2020, respectively, for long-term advances from Conrail, maturing in 2050 that bear interest at an average rate of 1.31%.

Our equity in Conrail’s earnings, net of amortization, was \$56 million for 2021, \$58 million for 2020, and \$53 million for 2019. These amounts partially offset the costs of operating the Shared Assets Areas and are included in “Purchased services and rents.” Equity in Conrail’s earnings is included in the “Other – net” line item within operating activities in the Consolidated Statements of Cash Flows.

Investment in TTX

We and eight other North American railroads collectively own TTX Company (TTX), a railcar pooling company that provides its owner-railroads with standardized fleets of intermodal, automotive, and general use railcars at stated rates. We have a 19.65% ownership interest in TTX.

Expenses incurred for use of TTX equipment are included in “Purchased services and rents.” This amounted to \$246 million, \$250 million, and \$244 million, respectively, for the years ended December 31, 2021, 2020 and 2019. Our equity in TTX’s earnings partially offsets these costs and totaled \$53 million for 2021, \$48 million for 2020, and \$58 million for 2019. Equity in TTX’s earnings is included in the “Other – net” line item within operating activities in the Consolidated Statements of Cash Flows.

Impairment of Investment

In 2020, we recorded an other-than-temporary impairment of \$99 million related to the carrying value of an equity method investment. This non-cash impairment charge is recorded in “Purchased services and rents” on the 2020 Consolidated Statements of Income and had a \$74 million impact on net income.

7. Properties

December 31, 2021	<u>Cost</u>	<u>Accumulated Depreciation</u> <i>(\$ in millions)</i>	<u>Net Book Value</u>	<u>Depreciation Rate ⁽¹⁾</u>
Land	\$ 2,453	\$ —	\$ 2,453	—
Roadway:				
Rail and other track material	7,330	(1,907)	5,423	2.40%
Ties	5,779	(1,642)	4,137	3.44%
Ballast	3,041	(818)	2,223	2.79%
Construction in process	339	—	339	—
Other roadway	14,111	(3,733)	10,378	2.69%
Total roadway	<u>30,600</u>	<u>(8,100)</u>	<u>22,500</u>	
Equipment:				
Locomotives	5,695	(1,994)	3,701	3.87%
Freight cars	2,701	(1,009)	1,692	2.59%
Computers and software	893	(438)	455	10.34%
Construction in process	164	—	164	—
Other equipment	1,088	(420)	668	4.63%
Total equipment	<u>10,541</u>	<u>(3,861)</u>	<u>6,680</u>	
Other property	<u>90</u>	<u>(70)</u>	<u>20</u>	2.25%
Total properties	<u>\$ 43,684</u>	<u>\$ (12,031)</u>	<u>\$ 31,653</u>	

December 31, 2020	Cost	Accumulated Depreciation	Net Book Value	Depreciation Rate ⁽¹⁾
		<i>(\$ in millions)</i>		
Land	\$ 2,394	\$ —	\$ 2,394	—
Roadway:				
Rail and other track material	7,153	(1,892)	5,261	2.35%
Ties	5,685	(1,601)	4,084	3.41%
Ballast	2,973	(774)	2,199	2.76%
Construction in process	297	—	297	—
Other roadway	14,320	(3,926)	10,394	2.71%
Total roadway	<u>30,428</u>	<u>(8,193)</u>	<u>22,235</u>	
Equipment:				
Locomotives	5,478	(1,911)	3,567	3.56%
Freight cars	2,780	(1,023)	1,757	2.59%
Computers and software	732	(391)	341	9.86%
Construction in process	333	—	333	—
Other equipment	1,094	(399)	695	4.70%
Total equipment	<u>10,417</u>	<u>(3,724)</u>	<u>6,693</u>	
Other property	<u>91</u>	<u>(68)</u>	<u>23</u>	2.24%
Total properties	<u>\$ 43,330</u>	<u>\$ (11,985)</u>	<u>\$ 31,345</u>	

⁽¹⁾ Composite annual depreciation rate for the underlying assets, excluding the effects of the amortization of any deficiency (or excess) that resulted from our depreciation studies.

Loss on Asset Disposal

In 2020, we sold 703 locomotives deemed excess and no longer needed for railroad operations. We evaluated these locomotive retirements and concluded they were abnormal (see Note 1). Accordingly, we recorded a \$385 million loss to adjust their carrying amount to their estimated fair value, which resulted in a \$97 million tax benefit.

Capitalized Interest

Total interest cost incurred on debt was \$657 million, \$639 million, and \$620 million during 2021, 2020 and 2019, respectively, of which \$11 million, \$14 million, and \$16 million was capitalized during 2021, 2020 and 2019, respectively.

8. Current Liabilities

	December 31,	
	2021	2020
	<i>(\$ in millions)</i>	
Accounts payable:		
Accounts and wages payable	\$ 850	\$ 552
Casualty and other claims (Note 17)	166	182
Vacation liability	119	121
Due to Conrail (Note 6)	112	56
Other	104	105
	<u>1,351</u>	<u>1,016</u>
Total	<u>\$ 1,351</u>	<u>\$ 1,016</u>
Other current liabilities:		
Interest payable	\$ 150	\$ 141
Current operating lease liability (Note 10)	82	89
Pension benefit obligations (Note 12)	20	19
Other	60	53
	<u>312</u>	<u>302</u>
Total	<u>\$ 312</u>	<u>\$ 302</u>

9. Debt

Debt maturities are presented below:

	December 31,	
	2021	2020
	<i>(\$ in millions)</i>	
Notes and debentures, with weighted-average interest rates as of December 31, 2021:		
3.40% maturing to 2026	\$ 2,699	\$ 3,273
4.26% maturing 2027 to 2031	2,614	2,114
4.02% maturing 2037 to 2055	8,097	7,497
5.22% maturing 2097 to 2121	1,384	784
Finance leases	22	25
Discounts, premiums, and debt issuance costs	(976)	(1,012)
Total debt	<u>13,840</u>	<u>12,681</u>
Less current maturities	<u>(553)</u>	<u>(579)</u>
Long-term debt excluding current maturities	<u>\$ 13,287</u>	<u>\$ 12,102</u>

Long-term debt maturities subsequent to 2022 are as follows:

2023	\$ 603
2024	403
2025	554
2026	602
2027 and subsequent years	<u>11,125</u>
Total	<u>\$ 13,287</u>

In August 2021, we issued \$600 million of 2.90% senior notes due 2051, resulting in \$589 million in net proceeds.

In May 2021, we issued \$500 million of 2.30% senior notes due 2031, resulting in \$495 million in net proceeds and \$600 million of 4.10% senior notes due 2121, resulting in \$592 million in net proceeds. The net proceeds of the 2.30% senior notes due 2031 will be used to finance or refinance, in whole or in part, new or existing eligible projects with environmental benefits as outlined in our Green Financing Framework.

In May 2021, we renewed, amended and restated our accounts receivable securitization program with a maximum borrowing capacity of \$400 million. The term expires in May 2022. We had no amounts outstanding under this program and our available borrowing capacity was \$400 million at both December 31, 2021 and December 31, 2020.

Credit Agreement and Debt Covenants

We also have in place and available an \$800 million credit agreement expiring in March 2025, which provides for borrowings at prevailing rates and includes covenants. We had no amounts outstanding under this facility at either December 31, 2021 or December 31, 2020, and we are in compliance with all of its covenants.

10. Leases

We are committed under long-term lease agreements for equipment, lines of road, and other property. We combine lease and non-lease components for new and reassessed leases. Some of these agreements are variable lease agreements that include usage-based payments. These agreements contain payment provisions that depend on an index or rate, initially measured using the index or rate at the lease commencement date, and are therefore not included in our future minimum lease payments. Our long-term lease agreements do not contain any material restrictive covenants.

Our equipment leases have remaining terms of less than 1 year to 5 years and our lines of road and land leases have remaining terms of less than 1 year to 136 years. Some of these leases include options to extend the leases for up to 99 years and some include options to terminate the leases within 30 days. Because we are not reasonably certain to exercise these renewal options, the options are not considered in determining the lease term, and associated payments are excluded from future minimum lease payments.

Leases with an initial term of twelve months or less are not recorded on the balance sheet. We recognize lease expense for these leases on a straight-line basis over the lease term.

Operating lease amounts included on the Consolidated Balance Sheets are as follows:

		December 31,	
		2021	2020
		<i>(\$ in millions)</i>	
Classification			
Assets			
ROU assets	Other assets	\$ 411	\$ 433
Liabilities			
Current lease liabilities	Other current liabilities	\$ 82	\$ 89
Non-current lease liabilities	Other liabilities	331	344
Total lease liabilities		\$ 413	\$ 433

The components of total lease expense, primarily included in “Purchased services and rents,” are as follows:

		2021	2020
		<i>(\$ in millions)</i>	
Operating lease expense		\$ 106	\$ 109
Variable lease expense		44	42
Short-term lease expense		9	9
Total lease expense		\$ 159	\$ 160

In March 2019, we entered into a non-cancellable lease for an office building. In 2021, the construction of the office building was completed and the lease commenced. The initial lease term is five years with options to renew, purchase, or sell the office building at the end of the lease term. The lease contains a residual value guarantee of up to eighty-three percent of the total construction cost of \$499 million.

Other information related to operating leases is as follows:

		December 31,	
		2021	2020
Weighted-average remaining lease term (years) on operating leases		7.49	8.18
Weighted-average discount rates on operating leases		3.04%	3.50%

As the rates implicit in most of our leases are not readily determinable, we use a collateralized incremental borrowing rate based on the information available at the lease commencement date in determining the present value of future payments. We use the portfolio approach and group leases into short-, medium-, and long-term categories, applying the corresponding incremental borrowing rates to these categories.

During 2021 and 2020, respectively, ROU assets obtained in exchange for new operating lease liabilities were \$57 million and \$22 million. Cash paid for amounts included in the measurement of lease liabilities was \$103 million and \$109 million in 2021 and 2020, respectively, and is included in operating cash flows.

Future minimum lease payments under non-cancellable operating leases are as follows:

	December 31, 2021
	<i>(\$ in millions)</i>
2022	\$ 92
2023	83
2024	73
2025	69
2026	55
2027 and subsequent years	98
Total lease payments	<u>470</u>
Less: Interest	<u>57</u>
Present value of lease liabilities	<u><u>\$ 413</u></u>
	December 31, 2020
	<i>(\$ in millions)</i>
2021	\$ 101
2022	76
2023	67
2024	58
2025	57
2026 and subsequent years	145
Total lease payments	<u>504</u>
Less: Interest	<u>71</u>
Present value of lease liabilities	<u><u>\$ 433</u></u>

11. Other Liabilities

	December 31,	
	2021	2020
	<i>(\$ in millions)</i>	
Long-term advances from Conrail (Note 6)	\$ 534	\$ 534
Net pension benefit obligations (Note 12)	338	340
Non-current operating lease liability (Note 10)	331	344
Net other postretirement benefit obligations (Note 12)	244	306
Casualty and other claims (Note 17)	170	169
Deferred compensation	109	107
Other	153	187
	<hr/>	<hr/>
Total	<u>\$ 1,879</u>	<u>\$ 1,987</u>

12. Pensions and Other Postretirement Benefits

We have both funded and unfunded defined benefit pension plans covering eligible employees. We also provide specified health care benefits to eligible retired employees; these plans can be amended or terminated at our option. Under our self-insured retiree health care plan, for those participants who are not Medicare-eligible, certain health care expenses are covered for retired employees and their dependents, reduced by any deductibles, coinsurance, and, in some cases, coverage provided under other group insurance policies. Eligible retired participants and their spouses who are Medicare-eligible are not covered under the self-insured retiree health care plan, but instead are provided with an employer-funded health reimbursement account which can be used for reimbursement of health insurance premiums or eligible out-of-pocket medical expenses.

Pension and Other Postretirement Benefit Obligations and Plan Assets

	Pension Benefits		Other Postretirement Benefits	
	2021	2020	2021	2020
	<i>(\$ in millions)</i>			
Change in benefit obligations:				
Benefit obligation at beginning of year	\$ 2,845	\$ 2,588	\$ 471	\$ 457
Service cost	43	40	6	6
Interest cost	55	74	7	12
Actuarial (gains) losses	(13)	294	(29)	35
Plan amendment	(2)	—	—	—
Benefits paid	(151)	(151)	(38)	(39)
Benefit obligation at end of year	<u>2,777</u>	<u>2,845</u>	<u>417</u>	<u>471</u>
Change in plan assets:				
Fair value of plan assets at beginning of year	2,675	2,462	165	170
Actual return on plan assets	317	345	29	21
Employer contributions	20	19	17	13
Benefits paid	(151)	(151)	(38)	(39)
Fair value of plan assets at end of year	<u>2,861</u>	<u>2,675</u>	<u>173</u>	<u>165</u>
Funded status at end of year	<u>\$ 84</u>	<u>\$ (170)</u>	<u>\$ (244)</u>	<u>\$ (306)</u>
Amounts recognized in the Consolidated Balance Sheets:				
Other assets	\$ 442	\$ 189	\$ —	\$ —
Other current liabilities	(20)	(19)	—	—
Other liabilities	(338)	(340)	(244)	(306)
Net amount recognized	<u>\$ 84</u>	<u>\$ (170)</u>	<u>\$ (244)</u>	<u>\$ (306)</u>
Amounts included in accumulated other comprehensive loss (before tax):				
Net loss	\$ 666	\$ 869	\$ 10	\$ 57
Prior service benefit	(2)	—	(202)	(228)

Our accumulated benefit obligation for our defined benefit pension plans is \$2.6 billion at both December 31, 2021 and 2020, respectively. Our unfunded pension plans, included above, which in all cases have no assets, had projected benefit obligations of \$358 million and \$359 million at December 31, 2021 and 2020, respectively, and had accumulated benefit obligations of \$332 million and \$330 million at December 31, 2021 and 2020, respectively.

Pension and Other Postretirement Benefit Cost Components

	2021	2020	2019
	<i>(\$ in millions)</i>		
Pension benefits:			
Service cost	\$ 43	\$ 40	\$ 35
Interest cost	55	74	93
Expected return on plan assets	(193)	(190)	(179)
Amortization of net losses	66	51	43
Amortization of prior service cost	—	1	1
	<u>—</u>	<u>1</u>	<u>1</u>
Net benefit	<u>\$ (29)</u>	<u>\$ (24)</u>	<u>\$ (7)</u>
Other postretirement benefits:			
Service cost	\$ 6	\$ 6	\$ 6
Interest cost	7	12	17
Expected return on plan assets	(12)	(14)	(14)
Amortization of net losses	1	—	—
Amortization of prior service benefit	(26)	(25)	(24)
	<u>(26)</u>	<u>(25)</u>	<u>(24)</u>
Net benefit	<u>\$ (24)</u>	<u>\$ (21)</u>	<u>\$ (15)</u>

Other Changes in Plan Assets and Benefit Obligations Recognized in Other Comprehensive Income

	2021	
	Pension Benefits	Other Postretirement Benefits
	<i>(\$ in millions)</i>	
Net gains arising during the year	\$ (137)	\$ (46)
Prior service effect of plan amendment	(2)	—
Amortization of net losses	(66)	(1)
Amortization of prior service benefit	—	26
	<u>—</u>	<u>26</u>
Total recognized in other comprehensive income	<u>\$ (205)</u>	<u>\$ (21)</u>
Total recognized in net periodic cost and other comprehensive income	<u>\$ (234)</u>	<u>\$ (45)</u>

Net gains arising during the year for both pension benefits and other postretirement benefits were due primarily to higher actual returns on plan assets and increases in discount rates.

The estimated net losses for the pension plans that will be amortized from accumulated other comprehensive loss into net periodic cost over the next year are \$48 million. The estimated net losses and prior service benefit for the other postretirement benefit plans that will be amortized from accumulated other comprehensive loss into net periodic benefit over the next year is \$25 million.

Pension and Other Postretirement Benefits Assumptions

Costs for pension and other postretirement benefits are determined based on actuarial valuations that reflect appropriate assumptions as of the measurement date, ordinarily the beginning of each year. The funded status of the plans is determined using appropriate assumptions as of each year end. A summary of the major assumptions follows:

	<u>2021</u>	<u>2020</u>	<u>2019</u>
Pension funded status:			
Discount rate	2.97%	2.67%	3.38%
Future salary increases	4.44%	4.21%	4.21%
Other postretirement benefits funded status:			
Discount rate	2.72%	2.27%	3.13%
Pension cost:			
Discount rate - service cost	3.14%	3.71%	4.55%
Discount rate - interest cost	1.95%	2.92%	3.99%
Return on assets in plans	8.00%	8.25%	8.25%
Future salary increases	4.44%	4.21%	4.21%
Other postretirement benefits cost:			
Discount rate - service cost	2.71%	3.41%	4.39%
Discount rate - interest cost	1.57%	2.69%	3.83%
Return on assets in plans	7.75%	8.00%	8.00%
Health care trend rate	6.00%	6.25%	6.50%

To determine the discount rates used to measure our benefit obligations, we utilize analyses in which the projected annual cash flows from the pension and other postretirement benefit plans were matched with yield curves based on an appropriate universe of high-quality corporate bonds. We use the results of the yield curve analyses to select the discount rates that match the payment streams of the benefits in these plans.

We use a spot rate approach to estimate the service cost and interest cost components of net periodic benefit cost for our pension and other postretirement benefit plans.

Health Care Cost Trend Assumptions

For measurement purposes at December 31, 2021, increases in the per capita cost of pre-Medicare covered health care benefits were assumed to be 6.50% for 2022. We assume the rate will ratably decrease to an ultimate rate of 5.0% for 2028 and remain at that level thereafter.

Assumed health care cost trend rates affect the amounts reported in the financial statements. To illustrate, a one-percentage point change in the assumed health care cost trend would have the following effects:

	One-percentage Point	
	Increase	Decrease
	<i>(\$ in millions)</i>	
Increase (decrease) in:		
Total service and interest cost components	\$ 1	\$ (1)
Postretirement benefit obligation	7	(7)

Asset Management

Eleven investment firms manage our defined benefit pension plan's assets under investment guidelines approved by our Benefits Investment Committee that is composed of members of our management. Investments are restricted to domestic and international equity securities, domestic and international fixed income securities, and unleveraged exchange-traded options and financial futures. Limitations restrict investment concentration and use of certain derivative investments. The target asset allocation for equity is 75% of the pension plan's assets. Fixed income investments must consist predominantly of securities rated investment grade or higher. Equity investments must be in liquid securities listed on national exchanges. No investment is permitted in our securities (except through commingled pension trust funds).

Our pension plan's weighted-average asset allocations, by asset category, were as follows:

	Percentage of Plan Assets at December 31,	
	2021	2020
Domestic equity securities	52%	52%
Debt securities	24%	22%
International equity securities	23%	24%
Cash and cash equivalents	1%	2%
Total	<u>100%</u>	<u>100%</u>

The other postretirement benefit plan assets consist primarily of trust-owned variable life insurance policies with an asset allocation at December 31, 2021 of 65% in equity securities and 35% in debt securities compared with 68% in equity securities and 32% in debt securities at December 31, 2020. The target asset allocation for equity is between 50% and 75% of the plan's assets.

The plans' assumed future returns are based principally on the asset allocations and historical returns for the plans' asset classes determined from both actual plan returns and, over longer time periods, expected market returns for those asset classes. For 2022, we assume an 8.00% return on pension plan assets.

Fair Value of Plan Assets

The following is a description of the valuation methodologies used for pension plan assets measured at fair value.

Common stock: Shares held by the plan at year end are valued at the official closing price as defined by the exchange or at the most recent trade price of the security at the close of the active market.

Common collective trusts: The readily determinable fair value is based on the published fair value per unit of the trusts. The common collective trusts hold equity securities, fixed income securities and cash and cash equivalents.

Fixed income securities: Valued based on quotes received from independent pricing services or at an estimated price at which a dealer would pay for the security at year end using observable market-based inputs.

Commingled funds: The readily determinable fair value is based on the published fair value per unit of the funds. The commingled funds hold equity securities.

Cash and cash equivalents: Short-term Treasury bills or notes are valued at an estimated price at which a dealer would pay for the security at year end using observable market-based inputs; money market funds are valued at the closing price reported on the active market on which the funds are traded.

The following table sets forth the pension plan's assets by valuation technique level, within the fair value hierarchy. There were no level 3 valued assets at December 31, 2021 or 2020.

	December 31, 2021		
	Level 1	Level 2	Total
	<i>(\$ in millions)</i>		
Common stock	\$ 1,383	\$ —	\$ 1,383
Common collective trusts:			
International equity securities	—	397	397
Debt securities	—	367	367
Domestic equity securities	—	189	189
Fixed income securities:			
Government and agencies securities	—	170	170
Corporate bonds	—	120	120
Mortgage and other asset-backed securities	—	33	33
Commingled funds	—	160	160
Cash and cash equivalents	42	—	42
Total investments	<u>\$ 1,425</u>	<u>\$ 1,436</u>	<u>\$ 2,861</u>

	December 31, 2020		
	Level 1	Level 2	Total
	<i>(\$ in millions)</i>		
Common stock	\$ 1,483	\$ —	\$ 1,483
Common collective trusts:			
International equity securities	—	399	399
Debt securities	—	297	297
Fixed income securities:			
Government and agencies securities	—	146	146
Corporate bonds	—	117	117
Mortgage and other asset-backed securities	—	24	24
Commingled funds	—	149	149
Cash and cash equivalents	60	—	60
	<u>60</u>	<u>—</u>	<u>60</u>
 Total investments	 <u>\$ 1,543</u>	 <u>\$ 1,132</u>	 <u>\$ 2,675</u>

The following is a description of the valuation methodologies used for other postretirement benefit plan assets measured at fair value.

Trust-owned life insurance: Valued at our share of the net assets of trust-owned life insurance issued by a major insurance company. The underlying investments of that trust consist of a U.S. stock account and a U.S. bond account but may retain cash at times as well. The U.S. stock account and U.S. bond account are valued based on readily determinable fair values.

The other postretirement benefit plan assets consisted of trust-owned life insurance with fair values of \$173 million and \$165 million at December 31, 2021 and 2020, respectively, and are valued under level 2 of the fair value hierarchy. There were no level 1 or level 3 valued assets.

Contributions and Estimated Future Benefit Payments

In 2022, we expect to contribute approximately \$20 million to our unfunded pension plans for payments to pensioners and approximately \$34 million to our other postretirement benefit plans for retiree health and death benefits. We do not expect to contribute to our funded pension plan in 2022.

Benefit payments, which reflect expected future service, as appropriate, are expected to be paid as follows:

	Pension Benefits	Other Postretirement Benefits
	<i>(\$ in millions)</i>	
2022	\$ 148	\$ 34
2023	148	32
2024	148	31
2025	147	30
2026	147	29
Years 2027 – 2031	738	134

Other Postretirement Coverage

Under collective bargaining agreements, Norfolk Southern and certain subsidiaries participate in a multi-employer benefit plan, which provides certain postretirement health care and life insurance benefits to eligible craft employees. Premiums under this plan are expensed as incurred and totaled \$21 million in 2021, \$22 million in 2020, and \$31 million in 2019.

Section 401(k) Plans

Norfolk Southern and certain subsidiaries provide Section 401(k) savings plans for employees. Under the plans, we match a portion of employee contributions, subject to applicable limitations. Our matching contributions, recorded as an expense, totaled \$23 million in 2021, \$21 million in 2020, and \$22 million in 2019.

13. Stock-Based Compensation

Under the stockholder-approved LTIP, the Compensation Committee (Committee), which is made up of nonemployee members of the Board, or the Chief Executive Officer (when delegated authority by such Committee), may grant stock options, stock appreciation rights (SARs), restricted stock units (RSUs), restricted shares, performance share units (PSUs), and performance shares, up to a maximum of 104,125,000 shares of our Common Stock, of which 8,609,075 remain available for future grants as of December 31, 2021.

The number of shares remaining for issuance under the LTIP is reduced (i) by 1 for each award granted as a stock option or stock-settled SAR, or (ii) by 1.61 for an award made in the form other than a stock option or stock-settled SAR. Under the Board-approved Thoroughbred Stock Option Plan (TSOP), the Committee may grant stock options up to a maximum of 6,000,000 shares of Common Stock. We use newly issued shares to satisfy any exercises and awards under the LTIP and the TSOP.

The LTIP also permits the payment, on a current or a deferred basis and in cash or in stock, of dividend equivalents on shares of Common Stock covered by stock options, RSUs, or PSUs in an amount commensurate with regular quarterly dividends paid on Common Stock. With respect to stock options, if employment of the participant is terminated for any reason, including retirement, disability, or death, we have no further obligation to make any dividend equivalent payments. Regarding RSUs, we have no further obligation to make any dividend equivalent payments unless employment of the participant is terminated as a result of qualifying retirement or disability. Should an employee terminate employment, they are not required to forfeit dividend equivalent payments already received. Outstanding PSUs do not receive dividend equivalent payments.

The Committee granted stock options, RSUs and PSUs pursuant to the LTIP for the last three years as follows:

	2021		2020		2019	
	Granted	Weighted-Average Grant-Date Fair Value	Granted	Weighted-Average Grant-Date Fair Value	Granted	Weighted-Average Grant-Date Fair Value
Stock options	42,770	\$ 62.49	43,770	\$ 52.05	47,360	\$ 45.74
RSUs	183,093	240.09	178,190	210.11	219,710	164.47
PSUs	50,100	240.72	78,830	212.66	102,250	160.97

Recipients of certain RSUs and PSUs pursuant to the LTIP who retire prior to October 1st will forfeit awards received in the current year. Receipt of certain LTIP awards is contingent on the recipient having executed a non-compete agreement with the company.

We account for our grants of stock options, RSUs, PSUs, and dividend equivalent payments in accordance with FASB ASC 718, “*Compensation - Stock Compensation.*” Accordingly, all awards result in charges to net income while dividend equivalent payments, which are all related to equity classified awards, are charged to retained income. Compensation cost for the awards is recognized on a straight-line basis over the requisite service period for the entire award. Related compensation costs and tax benefits during the years were:

	<u>2021</u>	<u>2020</u>	<u>2019</u>
	<i>(\$ in millions)</i>		
Stock-based compensation expense	\$ 54	\$ 28	\$ 53
Total tax benefit	34	44	37

Stock Options

Option exercise prices will be at least the higher of (i) the average of the high and low prices at which Common Stock is traded on the grant date, or (ii) the closing price of Common Stock on the grant date. All options are subject to a vesting period of at least one year, and the term of the option will not exceed ten years. Holders of the options granted under the LTIP who remain actively employed receive cash dividend equivalent payments for four years in an amount equal to the regular quarterly dividends paid on Common Stock.

For all years, options granted under the LTIP and the TSOP may not be exercised prior to the fourth and third anniversaries of the date of grant, respectively, or if the optionee retires or dies before that anniversary date, may not be exercised before the later of one year after the grant date or the date of the optionee’s retirement or death.

The fair value of each option awarded was measured on the date of grant using the Black-Scholes valuation model. Expected volatility is based on implied volatility from traded options on, and historical volatility of, Common Stock. Historical data is used to estimate option exercises and employee terminations within the valuation model. Historical exercise data is used to estimate the average expected option term. The average risk-free interest rate is based on the U.S. Treasury yield curve in effect at the time of grant. A dividend yield of zero was used for the LTIP options during the vesting period. For 2021, 2020, and 2019, a dividend yield of 1.64%, 1.76%, and 2.06%, respectively, was used for all vested LTIP options.

The assumptions for the LTIP grants for the last three years are shown in the following table:

	<u>2021</u>	<u>2020</u>	<u>2019</u>
Average expected volatility	26%	22%	23%
Average risk-free interest rate	0.75%	1.47%	2.56%
Average expected option term	7.5 years	7.5 years	7.2 years

A summary of changes in stock options is presented below:

	<u>Stock Options</u>	<u>Weighted- Average Exercise Price</u>
Outstanding at December 31, 2020	1,526,125	\$ 98.17
Granted	42,770	241.79
Exercised	(470,632)	91.66
Forfeited	<u>(2,368)</u>	94.31
Outstanding at December 31, 2021	<u><u>1,095,895</u></u>	106.58

The aggregate intrinsic value of options outstanding at December 31, 2021 was \$209 million with a weighted-average remaining contractual term of 4.1 years. Of these options outstanding, 953,680 were exercisable and had an aggregate intrinsic value of \$196 million with a weighted-average exercise price of \$92.43 and a weighted-average remaining contractual term of 2.5 years.

The following table provides information related to options exercised for the last three years:

	<u>2021</u>	<u>2020</u>	<u>2019</u>
	<i>(\$ in millions)</i>		
Options exercised	470,632	1,171,786	770,597
Total intrinsic value	\$ 83	\$ 144	\$ 86
Cash received upon exercise	42	98	53
Related tax benefits realized	17	29	18

At December 31, 2021, total unrecognized compensation related to options granted under the LTIP was \$1 million, and is expected to be recognized over a weighted-average period of approximately 2.6 years.

Restricted Stock Units

RSUs granted primarily have a four-year ratable restriction period and will be settled through the issuance of shares of Common Stock. Certain RSU grants include cash dividend equivalent payments during the restriction period in an amount equal to regular quarterly dividends paid on Common Stock.

	<u>2021</u>	<u>2020</u>	<u>2019</u>
	<i>(\$ in millions)</i>		
RSUs vested	260,307	204,665	166,197
Common Stock issued net of tax withholding	184,319	146,047	119,346
Related tax benefits realized	\$ 7	\$ 4	\$ 2

A summary of changes in RSUs is presented below:

	<u>RSUs</u>	<u>Weighted-Average Grant-Date Fair Value</u>
Nonvested at December 31, 2020	600,240	\$ 148.29
Granted	183,093	240.09
Vested	(260,307)	121.84
Forfeited	<u>(21,923)</u>	201.84
Nonvested at December 31, 2021	<u><u>501,103</u></u>	193.23

At December 31, 2021, total unrecognized compensation related to RSUs was \$34 million, and is expected to be recognized over a weighted-average period of approximately 2.6 years.

Performance Share Units

PSUs provide for awards based on the achievement of certain predetermined corporate performance goals at the end of a three-year cycle and are settled through the issuance of shares of Common Stock. All PSUs will earn out based on the achievement of performance conditions and some will also earn out based on a market condition. The market condition fair value was measured on the date of grant using a Monte Carlo simulation model.

	<u>2021</u>	<u>2020</u>	<u>2019</u>
	<i>(\$ in millions)</i>		
PSUs earned	78,727	235,935	331,099
Common Stock issued net of tax withholding	49,967	156,477	221,241
Related tax benefits realized	\$ 1	\$ 7	\$ 9

A summary of changes in PSUs is presented below:

	<u>PSUs</u>	<u>Weighted-Average Grant-Date Fair Value</u>
Balance at December 31, 2020	240,100	\$ 171.34
Granted	50,100	240.72
Earned	(78,727)	147.75
Unearned	(4,143)	147.75
Forfeited	<u>(4,400)</u>	207.40
Balance at December 31, 2021	<u><u>202,930</u></u>	197.33

At December 31, 2021, total unrecognized compensation related to PSUs granted under the LTIP was \$4 million, and is expected to be recognized over a weighted-average period of approximately 1.7 years.

Shares Available and Issued

Shares of Common Stock available for future grants and issued in connection with all features of the LTIP and the TSOP at December 31, were as follows:

	<u>2021</u>	<u>2020</u>	<u>2019</u>
Available for future grants:			
LTIP	8,609,075	8,995,582	9,294,726
TSOP	435,867	435,699	434,401
Issued:			
LTIP	632,279	1,270,208	852,869
TSOP	72,639	204,102	258,315

14. Stockholders' Equity

Common Stock

Common Stock is reported net of shares held by our consolidated subsidiaries (Treasury Shares). Treasury Shares at December 31, 2021 and 2020 amounted to 20,320,777, with a cost of \$19 million at both dates.

Accumulated Other Comprehensive Loss

The components of "Other comprehensive income (loss)" reported in the Consolidated Statements of Comprehensive Income and changes in the cumulative balances of "Accumulated other comprehensive loss" reported in the Consolidated Balance Sheets consisted of the following:

	<u>Balance at Beginning of Year</u>	<u>Net Income (Loss)</u>	<u>Reclassification Adjustments</u>	<u>Balance at End of Year</u>
	<i>(\$ in millions)</i>			
Year ended December 31, 2021				
Pensions and other postretirement liabilities	\$ (526)	\$ 139	\$ 31	\$ (356)
Other comprehensive income of equity investees	(68)	22	—	(46)
	<u>\$ (594)</u>	<u>\$ 161</u>	<u>\$ 31</u>	<u>\$ (402)</u>
Year ended December 31, 2020				
Pensions and other postretirement liabilities	\$ (421)	\$ (125)	\$ 20	\$ (526)
Other comprehensive income of equity investees	(70)	2	—	(68)
	<u>\$ (491)</u>	<u>\$ (123)</u>	<u>\$ 20</u>	<u>\$ (594)</u>

Other Comprehensive Income (Loss)

“Other comprehensive income (loss)” reported in the Consolidated Statements of Comprehensive Income consisted of the following:

	Pretax Amount	Tax (Expense) Benefit	Net-of-Tax Amount
	<i>(\$ in millions)</i>		
Year ended December 31, 2021			
Net gain arising during the year:			
Pensions and other postretirement benefits	\$ 185	\$ (46)	\$ 139
Reclassification adjustments for costs included in net income	41	(10)	31
Subtotal	226	(56)	170
Other comprehensive income of equity investees	24	(2)	22
Other comprehensive income	<u>\$ 250</u>	<u>\$ (58)</u>	<u>\$ 192</u>
Year ended December 31, 2020			
Net loss arising during the year:			
Pensions and other postretirement benefits	\$ (167)	\$ 42	\$ (125)
Reclassification adjustments for costs included in net income	27	(7)	20
Subtotal	(140)	35	(105)
Other comprehensive income of equity investees	2	—	2
Other comprehensive loss	<u>\$ (138)</u>	<u>\$ 35</u>	<u>\$ (103)</u>
Year ended December 31, 2019			
Net gain arising during the year:			
Pensions and other postretirement benefits	\$ 81	\$ (20)	\$ 61
Reclassification adjustments for costs included in net income	20	(5)	15
Subtotal	101	(25)	76
Other comprehensive loss of equity investees	(4)	—	(4)
Other comprehensive income	<u>\$ 97</u>	<u>\$ (25)</u>	<u>\$ 72</u>

15. Stock Repurchase Programs

We repurchased and retired 12.7 million, 7.4 million, and 11.3 million shares of Common Stock under our stock repurchase programs in 2021, 2020, and 2019, respectively, at a cost of \$3.4 billion, \$1.4 billion, and \$2.1 billion, respectively.

On September 26, 2017, our Board of Directors authorized the repurchase of up to an additional 50 million shares of Common Stock through December 31, 2022. As of December 31, 2021, 8.0 million shares remain authorized for repurchase.

16. Earnings Per Share

The following table sets forth the calculation of basic and diluted earnings per share:

	Basic			Diluted		
	2021	2020	2019	2021	2020	2019
	<i>(\$ in millions except per share amounts, shares in millions)</i>					
Net income	\$ 3,005	\$ 2,013	\$ 2,722	\$ 3,005	\$ 2,013	\$ 2,722
Dividend equivalent payments	(2)	(3)	(5)	—	(2)	—
Income available to common stockholders	\$ 3,003	\$ 2,010	\$ 2,717	\$ 3,005	\$ 2,011	\$ 2,722
Weighted-average shares outstanding	246.9	255.1	263.3	246.9	255.1	263.3
Dilutive effect of outstanding options and share-settled awards				1.2	1.5	2.3
Adjusted weighted-average shares outstanding				248.1	256.6	265.6
Earnings per share	<u>\$ 12.16</u>	<u>\$ 7.88</u>	<u>\$ 10.32</u>	<u>\$ 12.11</u>	<u>\$ 7.84</u>	<u>\$ 10.25</u>

In each year, dividend equivalent payments were made to holders of stock options and RSUs. For purposes of computing basic earnings per share, dividend equivalent payments made to holders of stock options and RSUs were deducted from net income to determine income available to common stockholders. For purposes of computing diluted earnings per share, we evaluate on a grant-by-grant basis those stock options and RSUs receiving dividend equivalent payments under the two-class and treasury stock methods to determine which method is more dilutive for each grant. For those grants for which the two-class method was more dilutive, net income was reduced by dividend equivalent payments to determine income available to common stockholders. There are no options excluded from the dilution calculations due to exercise prices exceeding the average market price of Common Stock for each of the years ended December 31, 2021, 2020, and 2019.

17. Commitments and Contingencies

Lawsuits

We and/or certain subsidiaries are defendants in numerous lawsuits and other claims relating principally to railroad operations. When we conclude that it is probable that a liability has been incurred and the amount of the liability can be reasonably estimated, it is accrued through a charge to earnings and, if material, disclosed below. While the ultimate amount of liability incurred in any of these lawsuits and claims is dependent on future developments, in our opinion, the recorded liability is adequate to cover the future payment of such liability and claims. However, the final outcome of any of these lawsuits and claims cannot be predicted with certainty, and unfavorable or unexpected outcomes could result in additional accruals that could be significant to results of operations in a particular year or quarter. Any adjustments to the recorded liability will be reflected in earnings in the periods in which such adjustments become known. For lawsuits and other claims where a loss may be reasonably possible, but not probable, or is probable but not reasonably estimable, no accrual is established but the matter, if potentially material, is disclosed below. We routinely review relevant information with respect to our lawsuits and other claims and update our accruals, disclosures and estimates of reasonably possible loss based on such reviews.

In 2007, various antitrust class actions filed against us and other Class I railroads in various Federal district courts regarding fuel surcharges were consolidated in the District of Columbia by the Judicial Panel on Multidistrict Litigation. In 2012, the court certified the case as a class action. The defendant railroads appealed this certification, and the Court of Appeals for the District of Columbia vacated the District Court's decision and remanded the case for further consideration. On October 10, 2017, the District Court denied class certification. The decision was upheld by the Court of Appeals on August 16, 2019. Since that decision, various individual cases have been filed in multiple jurisdictions and also consolidated in the District of Columbia. We believe the allegations in the complaints are without merit and intend to vigorously defend the cases. We do not believe the outcome of these proceedings will have a material effect on our financial position, results of operations, or liquidity.

In 2018, a lawsuit was filed against one of our subsidiaries by the minority owner in a jointly-owned terminal railroad company in which our subsidiary has the majority ownership. The lawsuit alleged violations of various state laws and federal antitrust laws. It is reasonably possible that we could incur a loss in the case; however, we intend to vigorously defend the case and believe that we will prevail. The potential range of loss cannot be estimated at this time.

Casualty Claims

Casualty claims include employee personal injury and occupational claims as well as third-party claims, all exclusive of legal costs. To aid in valuing our personal injury liability and determining the amount to accrue with respect to such claims during the year, we utilize studies prepared by an independent consulting actuarial firm. Job-related personal injury and occupational claims are subject to FELA, which is applicable only to railroads. The variability inherent in FELA's fault-based tort system could result in actual costs being different from the liability recorded. While the ultimate amount of claims incurred is dependent on future developments, in our opinion, the recorded liability is adequate to cover the future payments of claims and is supported by the most recent actuarial study. In all cases, we record a liability when the expected loss for the claim is both probable and reasonably estimable.

Employee personal injury claims – The largest component of claims expense is employee personal injury costs. The independent actuarial firm we engage provides quarterly studies to aid in valuing our employee personal injury liability and estimating personal injury expense. The actuarial firm studies our historical patterns of reserving for claims and subsequent settlements, taking into account relevant outside influences. The actuarial firm uses the results of these analyses to estimate the ultimate amount of liability. We adjust the liability quarterly based upon our assessment and the results of the study. The accuracy of our estimate of the liability is subject to inherent limitation given the difficulty of predicting future events such as jury decisions, court interpretations, or legislative changes. As a result, actual claim settlements may vary from the estimated liability recorded.

Occupational claims – Occupational claims include injuries and illnesses alleged to be caused by exposures which occur over time as opposed to injuries or illnesses caused by a specific accident or event. Types of occupational claims commonly seen allege exposure to asbestos and other claimed toxic substances resulting in respiratory diseases or cancer. Many such claims are being asserted by former or retired employees, some of whom have not been employed in the rail industry for decades. The independent actuarial firm provides an estimate of the occupational claims liability based upon our history of claim filings, severity, payments, and other pertinent facts. The liability is dependent upon judgments we make as to the specific case reserves as well as judgments of the actuarial firm in the quarterly studies. Our estimate of ultimate loss includes a provision for those claims that have been incurred but not reported. This provision is derived by analyzing industry data and projecting our experience. We adjust the liability quarterly based upon our assessment and the results of the study. However, it is possible that the recorded liability may not be adequate to cover the future payment of claims. Adjustments to the recorded liability are reflected in operating expenses in the periods in which such adjustments become known.

Third-party claims – We record a liability for third-party claims including those for highway crossing accidents, trespasser and other injuries, property damage, and lading damage. The actuarial firm assists us with the calculation of potential liability for third-party claims, except lading damage, based upon our experience including the number

and timing of incidents, amount of payments, settlement rates, number of open claims, and legal defenses. We adjust the liability quarterly based upon our assessment and the results of the study. Given the inherent uncertainty in regard to the ultimate outcome of third-party claims, it is possible that the actual loss may differ from the estimated liability recorded.

Environmental Matters

We are subject to various jurisdictions' environmental laws and regulations. We record a liability where such liability or loss is probable and reasonably estimable. Environmental specialists regularly participate in ongoing evaluations of all known sites and in determining any necessary adjustments to liability estimates.

Our Consolidated Balance Sheets include liabilities for environmental exposures of \$49 million at December 31, 2021, and \$54 million at December 31, 2020, of which \$15 million is classified as a current liability at the end of both 2021 and 2020. At December 31, 2021, the liability represents our estimates of the probable cleanup, investigation, and remediation costs based on available information at 88 known locations and projects compared with 100 locations and projects at December 31, 2020. At December 31, 2021, sixteen sites accounted for \$36 million of the liability, and no individual site was considered to be material. We anticipate that most of this liability will be paid out over five years; however, some costs will be paid out over a longer period.

At eight locations, one or more of our subsidiaries in conjunction with a number of other parties have been identified as potentially responsible parties under the Comprehensive Environmental Response, Compensation and Liability Act of 1980 or comparable state statutes that impose joint and several liability for cleanup costs. We calculate our estimated liability for these sites based on facts and legal defenses applicable to each site and not solely on the basis of the potential for joint liability.

With respect to known environmental sites (whether identified by us or by the Environmental Protection Agency or comparable state authorities), estimates of our ultimate potential financial exposure for a given site or in the aggregate for all such sites can change over time because of the widely varying costs of currently available cleanup techniques, unpredictable contaminant recovery and reduction rates associated with available cleanup technologies, the likely development of new cleanup technologies, the difficulty of determining in advance the nature and full extent of contamination and each potential participant's share of any estimated loss (and that participant's ability to bear it), and evolving statutory and regulatory standards governing liability.

The risk of incurring environmental liability for acts and omissions, past, present, and future, is inherent in the railroad business. Some of the commodities we transport, particularly those classified as hazardous materials, pose special risks that we work diligently to reduce. In addition, several of our subsidiaries own, or have owned, land used as operating property, or which is leased and operated by others, or held for sale. Because environmental problems that are latent or undisclosed may exist on these properties, there can be no assurance that we will not incur environmental liabilities or costs with respect to one or more of them, the amount and materiality of which cannot be estimated reliably at this time. Moreover, lawsuits and claims involving these and potentially other unidentified environmental sites and matters are likely to arise from time to time. The resulting liabilities could have a significant effect on financial position, results of operations, or liquidity in a particular year or quarter.

Based on our assessment of the facts and circumstances now known, we believe we have recorded the probable and reasonably estimable costs for dealing with those environmental matters of which we are aware. Further, we believe that it is unlikely that any known matters, either individually or in the aggregate, will have a material adverse effect on our financial position, results of operations, or liquidity.

Insurance

We purchase insurance covering legal liabilities for bodily injury and property damage to third parties. This insurance provides coverage above \$75 million and below \$800 million (\$1.1 billion for specific perils) per occurrence and/or policy year. In addition, we purchase insurance covering damage to property owned by us or in our care, custody, or control. This insurance covers 87% of potential losses above \$75 million and below \$275 million per occurrence and/or policy year.

Purchase Commitments

At December 31, 2021, we had outstanding purchase commitments totaling \$916 million through 2030 for locomotives, track material, long-term service contracts, track and yard expansion projects in connection with our capital programs, freight cars and containers.

Change-In-Control Arrangements

We have compensation agreements with certain officers and key employees that become operative only upon a change in control of Norfolk Southern, as defined in those agreements. The agreements provide generally for payments based on compensation at the time of a covered individual's involuntary or other specified termination and for certain other benefits.

Indemnifications

In a number of instances, we have agreed to indemnify lenders for additional costs they may bear as a result of certain changes in laws or regulations applicable to their loans. Such changes may include impositions or modifications with respect to taxes, duties, reserves, liquidity, capital adequacy, special deposits, and similar requirements relating to extensions of credit by, deposits with, or the assets or liabilities of such lenders. The nature and timing of changes in laws or regulations applicable to our financings are inherently unpredictable, and therefore our exposure in connection with the foregoing indemnifications cannot be quantified. No liability has been recorded related to these indemnifications.

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure

Not applicable.

Item 9A. Controls and Procedures

Disclosure Controls and Procedures

Our Chief Executive Officer and Chief Financial Officer, with the assistance of management, evaluated the effectiveness of our disclosure controls and procedures (as such term is defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended (Exchange Act)) at December 31, 2021. Based on such evaluation, our officers have concluded that, at December 31, 2021, our disclosure controls and procedures were effective to ensure that information required to be disclosed in our reports under the Exchange Act is recorded, processed, summarized, and reported, within the time period specified in the SEC's rules and forms, and that such information is accumulated and communicated to management, including the Chief Executive Officer and the Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure.

Management's Annual Report on Internal Control Over Financial Reporting

We are responsible for establishing and maintaining adequate internal control over financial reporting. Our internal control over financial reporting includes those policies and procedures that pertain to our ability to record, process, summarize, and report reliable financial data. We recognize that there are inherent limitations in the effectiveness of any internal control over financial reporting, including the possibility of human error and the circumvention or overriding of internal control. Accordingly, even effective internal control over financial reporting can provide only reasonable assurance with respect to financial statement preparation. Further, because of changes in conditions, the effectiveness of internal control over financial reporting may vary over time.

Our Board of Directors, acting through its Audit Committee, is responsible for the oversight of our accounting policies, financial reporting, and internal control. The Audit Committee of our Board of Directors is comprised of outside directors who are independent of management. The independent registered public accounting firm and our internal auditors have full and unlimited access to the Audit Committee, with or without management, to discuss the adequacy of internal control over financial reporting, and any other matters which they believe should be brought to the attention of the Audit Committee.

We have issued a report of our assessment of internal control over financial reporting, and our independent registered public accounting firm has issued an attestation report on our internal control over financial reporting at December 31, 2021. These reports appear in Item 8 of this report on Form 10-K.

Changes in Internal Control Over Financial Reporting

During the fourth quarter of 2021, we have not identified any changes in internal control over financial reporting that have materially affected, or are reasonably likely to materially effect, our internal control over financial reporting.

Item 9B. Other Information

None.

Item 9C. Disclosure Regarding Foreign Jurisdictions that Prevent Inspections

Not applicable.

PART III

NORFOLK SOUTHERN CORPORATION AND SUBSIDIARIES

Item 10. Directors, Executive Officers and Corporate Governance

In accordance with General Instruction G(3), information called for by Part III, Item 10, is incorporated herein by reference from the information appearing under the caption “Election of Directors,” under the caption “Delinquent Section 16(a) Reports,” under the caption “Committees of the Board,” under the caption “Shareholder Recommendations and Nominations,” and under the caption “The Thoroughbred Code of Ethics” in our definitive Proxy Statement for our 2022 Annual Meeting of Stockholders, which definitive Proxy Statement will be filed electronically with the SEC pursuant to Regulation 14A. The information regarding executive officers called for by Item 401 of Regulation S-K is included in Part I hereof beginning under “Information about our Executive Officers.”

Item 11. Executive Compensation

In accordance with General Instruction G(3), information called for by Part III, Item 11, is incorporated herein by reference from the information:

- under the caption “Compensation of Directors;”
- under the caption “Compensation Discussion and Analysis,” the information appearing in the “Summary Compensation Table” and the “2021 Grants of Plan-Based Awards” table, including the narrative to such tables, the “Outstanding Equity Awards at Fiscal Year-End 2021” and “Option Exercises and Stock Vested in 2021” tables, and the tabular and narrative information appearing under the subcaptions “Retirement Benefits,” “Deferred Compensation,” and “Potential Payments Upon a Change in Control or Other Termination of Employment;” and,
- under the captions “Compensation Committee Interlocks and Insider Participation,” “Compensation Policy Risk Assessment,” and “Compensation Committee Report,”

in each case included in our definitive Proxy Statement for our 2022 Annual Meeting of Stockholders, which definitive Proxy Statement will be filed electronically with the SEC pursuant to Regulation 14A.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters

In accordance with General Instruction G(3), information on security ownership of certain beneficial owners and management called for by Part III, Item 12, is incorporated herein by reference from the information appearing under the caption “Beneficial Ownership of Stock” in our definitive Proxy Statement for our 2022 Annual Meeting of Stockholders, which definitive Proxy Statement will be filed electronically with the SEC pursuant to Regulation 14A.

Equity Compensation Plan Information (at December 31, 2021)

Plan Category	Number of securities to be issued upon exercise of outstanding options, warrants and rights	Weighted-average exercise price of outstanding options, warrants and rights	Number of securities remaining available for future issuance under equity compensation plans ⁽¹⁾
	(a)	(b)	(c)
Equity compensation plans approved by securities holders ⁽²⁾	1,820,307 ⁽³⁾	\$ 109.88 ⁽⁵⁾	8,609,075
Equity compensation plans not approved by securities holders	<u>185,552 ⁽⁴⁾</u>	90.35	<u>435,867 ⁽⁶⁾</u>
Total	<u><u>2,005,859</u></u>		<u><u>9,044,942</u></u>

(1) Excludes securities reflected in column (a).

(2) LTIP.

(3) Includes options, RSUs and PSUs granted under LTIP that will be settled in shares of Common Stock.

(4) TSOP.

(5) Calculated without regard to 909,964 outstanding RSUs and PSUs at December 31, 2021.

(6) Reflects shares remaining available for grant under TSOP.

Norfolk Southern Corporation Long-Term Incentive Plan

Established on June 28, 1983, and approved by our stockholders at their Annual Meeting held on May 10, 1984, LTIP was adopted to promote the success of our company by providing an opportunity for non-employee Directors, officers, and other key employees to acquire a proprietary interest in Norfolk Southern Corporation (the Corporation). The Board of Directors amended LTIP on January 23, 2015, which amendment was approved by shareholders on May 14, 2015, to include the reservation for issuance of an additional 8,000,000 shares of authorized but unissued Common Stock.

The amended LTIP adopted a fungible share reserve ratio so that, for awards granted after May 13, 2010, the number of shares remaining for issuance under the amended LTIP will be reduced (i) by 1 for each award granted as an option or stock-settled SAR, or (ii) by 1.61 for an award made in the form other than an option or stock-settled SAR. Any shares of Common Stock subject to options, PSUs, restricted shares, or RSUs which are not issued as Common Stock will again be available for award under LTIP after the expiration or forfeiture of an award.

Non-employee Directors, officers, and other key employees residing in the U.S. or Canada are eligible for selection to receive LTIP awards. Under LTIP, the Committee, or the Corporation's chief executive officer to the extent the Committee delegates award-making authority pursuant to LTIP, may grant incentive stock options, nonqualified stock options, SARs, RSUs, restricted shares, PSUs and performance shares. In addition, dividend equivalent payments may be awarded for options, RSUs and PSUs. Awards under LTIP may be made subject to forfeiture under certain circumstances and the Committee may establish such other terms and conditions for the awards as provided in LTIP.

The option price is at least the higher of (i) the average of the high and low prices at which Common Stock is traded on the date of grant, or (ii) the closing price of Common Stock on the date of the grant. All options are subject to a vesting period of at least one year, and the term of the option will not exceed ten years. LTIP specifically prohibits option repricing without stockholder approval, except that adjustments may be made in the event of changes in our capital structure or Common Stock.

PSUs entitle a recipient to receive performance-based compensation at the end of a three-year cycle based on our performance during that period. For the 2021 PSU awards, corporate performance will be based directly on return on average capital invested, with total return to stockholders serving as a modifier, and will be settled in shares of Common Stock.

RSUs are payable in cash or in shares of Common Stock at the end of a restriction period. During the restriction period, the holder of the RSUs has no beneficial ownership interest in the Common Stock represented by the RSUs and has no right to vote the shares represented by the units or to receive dividends (except for dividend equivalent payment rights that may be awarded with respect to the RSUs). The Committee at its discretion may waive the restriction period, but settlement of any RSUs will occur on the same settlement date as would have applied absent a waiver of restrictions, if no performance goals were imposed. RSUs will be settled in shares of Common Stock.

Norfolk Southern Corporation Thoroughbred Stock Option Plan

Our Board of Directors adopted TSOP on January 26, 1999, to promote the success of our company by providing an opportunity for management employees to acquire a proprietary interest in our company and thereby to provide an additional incentive to management employees to devote their maximum efforts and skills to the advancement, betterment, and prosperity of our company and our stockholders. Under TSOP there were 6,000,000 shares of authorized but unissued Common Stock reserved for issuance. TSOP has not been and is not required to have been approved by our stockholders.

Active full-time management employees residing in the U.S. or Canada are eligible for selection to receive TSOP awards. Under TSOP, the Committee, or the Corporation's chief executive officer to the extent the Committee delegates award-making authority pursuant to TSOP, may grant nonqualified stock options subject to such terms and conditions as provided in TSOP.

The option price may not be less than the average of the high and low prices at which Common Stock is traded on the date of the grant. All options are subject to a vesting period of at least one year, and the term of the option will not exceed ten years. TSOP specifically prohibits repricing without stockholder approval, except for capital adjustments.

Norfolk Southern Corporation Directors' Restricted Stock Plan

The Plan was adopted on January 1, 1994, and was designed to increase ownership of Common Stock by our non-employee Directors so as to further align their ownership interest in our company with that of our stockholders. The Plan has not been and is not required to have been approved by our stockholders.

Effective January 23, 2015, the Board amended the Plan to provide that no additional awards will be made under the Plan. Prior to that amendment, only non-employee Directors who are not and never have been employees of our company were eligible to participate in the Plan. Upon becoming a Director, each eligible Director received a one-time grant of 3,000 restricted shares of Common Stock. No additional shares may be granted under the Plan. No individual member of the Board exercised discretion concerning the eligibility of any Director or the number of shares granted.

The restriction period applicable to restricted shares granted under the Plan begins on the date of the grant and ends on the earlier of the recipient's death or the day after the recipient ceases to be a Director by reason of disability or retirement. During the restriction period, shares may not be sold, pledged, or otherwise encumbered. Directors forfeit the restricted shares if they cease to serve as a Director of our company for reasons other than their disability, retirement, or death.

Item 13. Certain Relationships and Related Transactions, and Director Independence

In accordance with General Instruction G(3), information called for by Part III, Item 13, is incorporated herein by reference from the information appearing under the caption "Related Persons Transactions" and under the caption "Director Independence" in our definitive Proxy Statement for our 2022 Annual Meeting of Stockholders, which definitive Proxy Statement will be filed electronically with the SEC pursuant to Regulation 14A.

Item 14. Principal Accountant Fees and Services

Our independent registered public accounting firm is KPMG LLP, Atlanta, GA, Auditor Firm ID: 185.

In accordance with General Instruction G(3), information called for by Part III, Item 14, is incorporated herein by reference from the information appearing under the caption "Ratification of Appointment of Independent Registered Public Accounting Firm" in our definitive Proxy Statement for our 2022 Annual Meeting of Stockholders, which definitive Proxy Statement will be filed electronically with the SEC pursuant to Regulation 14A.

PART IV

NORFOLK SOUTHERN CORPORATION AND SUBSIDIARIES

Item 15. Exhibits and Financial Statement Schedule

		Page
(A)	The following documents are filed as part of this report:	
1.	Index to Financial Statements	
	Report of Management	K33
	Reports of Independent Registered Public Accounting Firm	K34
	Consolidated Statements of Income, Years ended December 31, 2021, 2020, and 2019	K38
	Consolidated Statements of Comprehensive Income, Years ended December 31, 2021, 2020, and 2019	K39
	Consolidated Balance Sheets at December 31, 2021 and 2020	K40
	Consolidated Statements of Cash Flows, Years ended December 31, 2021, 2020, and 2019	K41
	Consolidated Statements of Changes in Stockholders' Equity, Years ended December 31, 2021, 2020, and 2019	K42
	Notes to Consolidated Financial Statements	K43
2.	Financial Statement Schedule:	
	The following consolidated financial statement schedule should be read in connection with the consolidated financial statements:	
	Index to Consolidated Financial Statement Schedule	
	Schedule II – Valuation and Qualifying Accounts	K91
	Schedules other than the one listed above are omitted either because they are not required or are inapplicable, or because the information is included in the consolidated financial statements or related notes.	
3.	Exhibits	
Exhibit Number	Description	
2.1	Distribution Agreement, dated as of July 26, 2004, by and among CSX Corporation, CSX Transportation, Inc., CSX Rail Holding Corporation, CSX Northeast Holdings Corporation, Norfolk Southern Corporation, Norfolk Southern Railway Company, CRR Holdings LLC, Green Acquisition Corp., Conrail Inc., Consolidated Rail Corporation, New York Central Lines LLC, Pennsylvania Lines LLC, NYC Newco, Inc., and PRR Newco, Inc., is incorporated by reference to Exhibit 2.1 to Norfolk Southern Corporation's Form 8-K filed on September 2, 2004. (SEC File No. 001-08339)	
3	Articles of Incorporation and Bylaws –	
(i)(a)	The Restated Articles of Incorporation of Norfolk Southern Corporation are incorporated by reference to Exhibit 3(i) to Norfolk Southern Corporation's 10-K filed on March 5, 2001. (SEC File No. 001-08339)	
(i)(b)	An amendment to the Articles of Incorporation of Norfolk Southern Corporation is incorporated by reference to Exhibit 3(i) to Norfolk Southern Corporation's Form 8-K filed on May 18, 2010. (SEC File No. 001-08339)	
(i)(c)	An amendment to the Articles of Incorporation of Norfolk Southern Corporation is incorporated by reference to Exhibit 3(i) to Norfolk Southern Corporation's Form 10-Q filed on July 29, 2020. (SEC File No. 001-08339)	
(ii)	The Bylaws of Norfolk Southern Corporation, as amended January 25, 2022, are incorporated by reference to Exhibit 3(ii) to Norfolk Southern Corporation's Form 8-K filed on January 26, 2022. (SEC File No. 001-08339)	

- 4 Instruments Defining the Rights of Security Holders, Including Indentures:
- (a) Indenture, dated as of January 15, 1991, from Norfolk Southern Corporation to First Trust of New York, National Association, as Trustee, is incorporated by reference to Exhibit 4.1 to Norfolk Southern Corporation's Registration Statement on Form S-3 (No. 33-38595).
 - (b) [First Supplemental Indenture, dated May 19, 1997, between Norfolk Southern Corporation and First Trust of New York, National Association, as Trustee, related to the issuance of notes in the principal amount of \\$4.3 billion, is incorporated by reference to Exhibit 1.1\(d\) to Norfolk Southern Corporation's Form 8-K filed on May 21, 1997. \(SEC File No. 001-08339\)](#)
 - (c) [Fourth Supplemental Indenture, dated as of February 6, 2001, between Norfolk Southern Corporation and U.S. Bank Trust National Association, as Trustee, related to the issuance of notes in the principal amount of \\$1 billion, is incorporated by reference to Exhibit 4.1 to Norfolk Southern Corporation's Form 8-K filed on February 7, 2001. \(SEC File No. 001-08339\)](#)
 - (d) [Indenture, dated August 27, 2004, among PRR Newco, Inc., as Issuer, and Norfolk Southern Railway Company, as Guarantor, and The Bank of New York, as Trustee, is incorporated by reference to Exhibit 4\(1\) to Norfolk Southern Corporation's Form 10-Q filed on October 28, 2004. \(SEC File No. 001-08339\)](#)
 - (e) [First Supplemental Indenture, dated August 27, 2004, among PRR Newco, Inc., as Issuer, and Norfolk Southern Railway Company, as Guarantor, and The Bank of New York, as Trustee, related to the issuance of notes in the principal amount of approximately \\$451.8 million, is incorporated by reference to Exhibit 4\(m\) to Norfolk Southern Corporation's Form 10-Q filed on October 28, 2004. \(SEC File No. 001-08339\)](#)
 - (f) [Ninth Supplemental Indenture, dated as of March 11, 2005, between Norfolk Southern Corporation and U.S. Bank Trust National Association, as Trustee, related to the issuance of notes in the principal amount of \\$300 million, is incorporated by reference to Exhibit 4.1 to Norfolk Southern Corporation's Form 8-K filed on March 15, 2005. \(SEC File No. 001-08339\)](#)
 - (g) [Tenth Supplemental Indenture, dated as of May 17, 2005, between Norfolk Southern Corporation and U.S. Bank Trust National Association, as Trustee, related to the issuance of notes in the principal amount of \\$366.6 million, is incorporated by reference to Exhibit 99.1 to Norfolk Southern Corporation's Form 8-K filed on May 18, 2005. \(SEC File No. 001-08339\)](#)
 - (h) [Eleventh Supplemental Indenture, dated as of May 17, 2005, between Norfolk Southern Corporation and U.S. Bank Trust National Association, as Trustee, related to the issuance of notes in the principal amount of \\$350 million, is incorporated by reference to Exhibit 99.2 to Norfolk Southern Corporation's Form 8-K filed on May 18, 2005. \(SEC File No. 001-08339\)](#)
 - (i) [Twelfth Supplemental Indenture, dated as of August 26, 2010, between Norfolk Southern Corporation and U.S. Bank Trust National Association, as Trustee, related to the issuance of notes in the principal amount of \\$250 million, is incorporated by reference to Exhibit 4.2 to Norfolk Southern Corporation's Form 8-K filed on August 26, 2010. \(SEC File No. 001-08339\)](#)
 - (j) [Indenture, dated as of June 1, 2009, between Norfolk Southern Corporation and U.S. Bank Trust National Association, as Trustee, is incorporated by reference to Exhibit 4.1 to Norfolk Southern Corporation's Form 8-K filed on June 1, 2009. \(SEC File No. 001-08339\)](#)
 - (k) [Second Supplemental Indenture, dated as of May 23, 2011, between the Registrant and U.S. Bank Trust National Association, as Trustee, related to the issuance of notes in the principal amount of \\$400 million, is incorporated by reference to Exhibit 4.1 to Norfolk Southern Corporation's Form 8-K filed on May 23, 2011. \(SEC File No. 001-08339\)](#)
 - (l) [Indenture, dated as of September 14, 2011, between the Registrant and U.S. Bank Trust National Association, as Trustee, related to the issuance of notes in the principal amount of \\$595,504,000, is incorporated by reference to Exhibit 4.1 to Norfolk Southern Corporation's Form 8-K filed on September 15, 2011. \(SEC File No. 001-08339\)](#)
 - (m) [Third Supplemental Indenture, dated as of September 14, 2011, between the Registrant and U.S. Bank Trust National Association, as Trustee, related to the issuance of notes in the principal amount of \\$4,492,000, is incorporated by reference to Exhibit 4.2 to Norfolk Southern Corporation's Form 8-K filed on September 15, 2011. \(SEC File No. 001-08339\)](#)

- (n) [Fourth Supplemental Indenture, dated as of November 17, 2011, between the Registrant and U.S. Bank Trust National Association, as Trustee, related to the issuance of two series of notes, one in the principal amount of \\$500 million and one in the principal amount of \\$100 million, is incorporated by reference to Exhibit 4.1 to Norfolk Southern Corporation's Form 8-K filed on November 17, 2011. \(SEC File No. 001-08339\)](#)
- (o) [Indenture, dated as of March 15, 2012, between the Registrant and U.S. Bank Trust National Association, as Trustee, is incorporated by reference to Exhibit 4.1 to Norfolk Southern Corporation's Form 8-K filed on March 15, 2012. \(SEC File No. 001-08339\)](#)
- (p) [First Supplemental Indenture, dated as of March 15, 2012, between the Registrant and U.S. Bank Trust National Association, as Trustee, is incorporated by reference to Exhibit 4.2 to Norfolk Southern Corporation's Form 8-K filed on March 15, 2012. \(SEC File No. 001-08339\)](#)
- (q) [Indenture, dated as of August 20, 2012, between the Registrant and U.S. Bank Trust National Association, as Trustee, is incorporated by reference to Exhibit 4.1 to the Registrant's Form 8-K filed on August 21, 2012. \(SEC File No. 001-08339\)](#)
- (r) [Second Supplemental Indenture, dated as of September 7, 2012, between the Registrant and U.S. Bank Trust National Association, as Trustee, is incorporated by reference to Exhibit 4.1 to Norfolk Southern Corporation's Form 8-K filed on September 7, 2012. \(SEC File No. 001-08339\)](#)
- (s) [Third Supplemental Indenture, dated as of August 13, 2013, between the Registrant and U.S. Bank Trust National Association, as Trustee, related to the issuance of notes in the principal amount of \\$500,000,000, is incorporated by reference to Exhibit 4.1 to Norfolk Southern Corporation's Form 8-K filed on August 13, 2013. \(SEC File No. 001-08339\)](#)
- (t) [Fourth Supplemental Indenture, dated as of November 21, 2013, between the Registrant and U.S. Bank Trust National Association, as Trustee, related to the issuance of notes in the principal amount of \\$400,000,000, is incorporated by reference to Exhibit 4.1 to Norfolk Southern Corporation's Form 8-K filed on November 21, 2013. \(SEC File No. 001-08339\)](#)
- (u) [Indenture, dated as of June 2, 2015, between Registrant and U.S. Bank National Association, as Trustee, is incorporated by reference to Exhibit 4.1 to Norfolk Southern Corporation's Form 8-K filed on June 2, 2015. \(SEC File No. 001-08339\)](#)
- (v) [First Supplemental Indenture, dated as of June 2, 2015, between the Registrant and U.S. Bank National Association, as Trustee, is incorporated by reference to Exhibit 4.2 to Norfolk Southern Corporation's Form 8-K filed on June 2, 2015. \(SEC File No. 001-08339\)](#)
- (w) [Second Supplemental Indenture, dated as of November 3, 2015, between the Registrant and U.S. Bank National Association, as Trustee, is incorporated by reference to Exhibit 4.1 to Norfolk Southern Corporation's Form 8-K filed on November 3, 2015. \(SEC File No. 001-08339\)](#)
- (x) [Third Supplemental Indenture, dated as of June 3, 2016, between the Registrant and U.S. Bank National Association, as Trustee, is incorporated by reference to Exhibit 4.1 to Norfolk Southern Corporation's Form 8-K filed on June 3, 2016. \(SEC File No. 001-08339\)](#)
- (y) [Fourth Supplemental Indenture, dated as of May 31, 2017, between the Registrant and U.S. Bank National Association, as Trustee, is incorporated by reference to Exhibit 4.1 to the Corporation's Form 8-K filed May 31, 2017. \(SEC File No. 001-08339\)](#)
- (z) [Indenture, dated as of August 15, 2017, between the Registrant and U.S. Bank National Association, as Trustee, is incorporated by reference herein to Exhibit 4.1 to Norfolk Southern Corporation's Form 8-K filed August 15, 2017. \(SEC File No. 001-08339\)](#)
- (aa) [Indenture, dated as of February 28, 2018 between the Registrant and U.S. Bank National Association, as Trustee. The Indenture is incorporated by reference herein to Exhibit 4.1 to Norfolk Southern Corporation's Form 8-K filed February 28, 2018. \(SEC File No. 001-08339\)](#)
- (bb) [First Supplemental Indenture, dated as of February 28, 2018, between the Registrant and U.S. Bank National Association, as Trustee. The Indenture is incorporated by reference herein to Exhibit 4.2 to Norfolk Southern Corporation's Form 8-K filed February 28, 2018. \(SEC File No. 001-08339\)](#)
- (cc) [Second Supplemental Indenture, dated as of August 2, 2018, between the Registrant and U.S. Bank National Association, as Trustee. The Indenture is incorporated by reference herein to Exhibit 4.1 to Norfolk Southern Corporation's Form 8-K filed August 2, 2018. \(SEC File No. 001-08339\)](#)

- (dd) [Third Supplemental Indenture, dated as of May 8, 2019, between the Registrant and U.S. Bank National Association, as Trustee, is incorporated by reference to Exhibit 4.1 to the Registrant's Form 8-K filed on May 8, 2019 \(SEC File No. 001-08339\).](#)
- (ee) [Fourth Supplemental Indenture, dated as of October 24, 2019, between the Registrant and U.S. Bank National Association, as Trustee, is incorporated by reference to Exhibit 4.1 to the Registrant's Form 8-K filed on November 4, 2019. \(SEC File No. 001-08339\)](#)
- (ff) [Description of the Registrant's Common Stock Registered Under Section 12 of the Securities Exchange Act of 1934, is incorporated by reference to Exhibit 4\(hh\) to Norfolk Southern Corporation's Form 10-K filed on February 6, 2020. \(SEC File No. 001-08339\)](#)
- (gg) [Fifth Supplemental Indenture, dated as of May 11, 2020, between the Registrant and U.S. Bank National Association, as Trustee, is incorporated by reference to Exhibit 4.1 to the Registrant's Form 8-K filed on May 11, 2020. \(SEC File No. 001-08339\)](#)
- (hh) [Indenture dated as of May 15, 2020, between the Registrant and U.S. Bank National Association, as Trustee is incorporated by reference to Exhibit 4.1 to the Registrant's Form 8-K filed on May 15, 2020. \(SEC File No. 001-08339\)](#)
- (ii) [Sixth Supplemental Indenture, dated as of May 12, 2021, between the Registrant and U.S. Bank National Association, as Trustee, is incorporated by reference to Exhibit 4.2 to the Registrant's Form 8-K filed on May 12, 2021. \(SEC File No. 001-08339\)](#)
- (jj) [Seventh Supplemental Indenture, dated as of August 25, 2021, between the Registrant and U.S. Bank National Association, as trustee, is incorporated by reference to Exhibit 4.1 to the Registrant's Form 8-K filed on August 25, 2021. \(SEC File No. 001-08339\)](#)

In accordance with Item 601(b)(4)(iii) of Regulation S-K, copies of other instruments of Norfolk Southern Corporation and its subsidiaries with respect to the rights of holders of long-term debt are not filed herewith, or incorporated by reference, but will be furnished to the Commission upon request.

10 Material Contracts -

- (a) [The Transaction Agreement, dated as of June 10, 1997, by and among CSX and CSX Transportation, Inc., Registrant, Norfolk Southern Railway Company, Conrail Inc., Consolidated Rail Corporation, and CRR Holdings LLC, with certain schedules thereto, previously filed, is incorporated by reference to Exhibit 10\(a\) to Norfolk Southern Corporation's Form 10-K filed on February 24, 2003. \(SEC File No. 001-08339\)](#)
- (b) [Amendment No. 1 dated as of August 22, 1998, to the Transaction Agreement, dated as of June 10, 1997, by and among CSX Corporation, CSX Transportation, Inc., Norfolk Southern Corporation, Norfolk Southern Railway Company, Conrail, Inc., Consolidated Rail Corporation, and CRR Holdings LLC, is incorporated by reference from Exhibit 10.1 to Norfolk Southern Corporation's Form 10-Q filed on August 11, 1999. \(SEC File No. 001-08339\)](#)
- (c) [Amendment No. 2 dated as of June 1, 1999, to the Transaction Agreement, dated June 10, 1997, by and among CSX Corporation, CSX Transportation, Inc., Norfolk Southern Corporation, Norfolk Southern Railway Company, Conrail, Inc., Consolidated Rail Corporation, and CRR Holdings LLC, is incorporated by reference from Exhibit 10.2 to Norfolk Southern Corporation's Form 10-Q filed on August 11, 1999. \(SEC File No. 001-08339\)](#)
- (d) [Amendment No. 3 dated as of June 1, 1999, and executed in April 2004, to the Transaction Agreement, dated June 10, 1997, by and among CSX Corporation, CSX Transportation, Inc., Norfolk Southern Corporation, Norfolk Southern Railway Company, Conrail, Inc., Consolidated Rail Corporation, and CRR Holdings LLC, is incorporated by reference from Exhibit 10\(dd\) to Norfolk Southern Corporation's Form 10-Q filed on July 30, 2004. \(SEC File No. 001-08339\)](#)
- (e) [Amendment No. 5 to the Transaction Agreement, dated as of August 27, 2004, by and among CSX Corporation, CSX Transportation, Inc., Norfolk Southern Corporation, Norfolk Southern Railway Company, Conrail, Inc., Consolidated Rail Corporation, and CRR Holdings LLC, is incorporated by reference to Exhibit 10.1 to Norfolk Southern Corporation's Form 8-K filed on September 2, 2004. \(SEC File No. 001-08339\)](#)

- (f) [Amendment No. 6 dated as of April 1, 2007, to the Transaction Agreement, dated June 10, 1997, by and among CSX Corporation, CSX Transportation, Inc., Norfolk Southern Railway Company, Conrail, Inc., Consolidated Rail Corporation, and CRR Holdings LLC, is incorporated by reference to Exhibit 10.5 to Norfolk Southern Corporation's Form 10-Q filed on July 27, 2007. \(SEC File No. 001-08339\)](#)
- (g) [Shared Assets Area Operating Agreement for North Jersey, dated as of June 1, 1999, by and among Consolidated Rail Corporation, CSX Transportation, Inc., and Norfolk Southern Railway Company, with exhibit thereto, is incorporated by reference from Exhibit 10.4 to Norfolk Southern Corporation's Form 10-Q filed on August 11, 1999. \(SEC File No. 001-08339\)](#)
- (h) [Shared Assets Area Operating Agreement for Detroit, dated as of June 1, 1999, by and among Consolidated Rail Corporation, CSX Transportation, Inc., and Norfolk Southern Railway Company, with exhibit thereto, is incorporated by reference from Exhibit 10.6 to Norfolk Southern Corporation's Form 10-Q filed on August 11, 1999. \(SEC File No. 001-08339\)](#)
- (i) [Shared Assets Area Operating Agreement for South Jersey/Philadelphia, dated as of June 1, 1999, by and among Consolidated Rail Corporation, CSX Transportation, Inc., and Norfolk Southern Railway Company, with exhibit thereto, is incorporated by reference from Exhibit 10.5 to Norfolk Southern Corporation's Form 10-Q filed on August 11, 1999. \(SEC File No. 001-08339\)](#)
- (j) [Amendment No. 1, dated as of June 1, 2000, to the Shared Assets Area Operating Agreements for North Jersey, South Jersey/Philadelphia, and Detroit, dated as of June 1, 1999, by and among Consolidated Rail Corporation, CSX Transportation, Inc., and Norfolk Southern Railway Company, with exhibits thereto, is incorporated by reference to Exhibit 10\(h\) to Norfolk Southern Corporation's Form 10-K filed on March 5, 2001. \(SEC File No. 001-08339\)](#)
- (k) [Amendment No. 2, dated as of January 1, 2001, to the Shared Assets Area Operating Agreements for North Jersey, South Jersey/Philadelphia, and Detroit, dated as of June 1, 1999, by and among Consolidated Rail Corporation, CSX Transportation, Inc., and Norfolk Southern Railway Company, with exhibits thereto, is incorporated by reference to Exhibit 10\(j\) to Norfolk Southern Corporation's Form 10-K filed on February 21, 2002. \(SEC File No. 001-08339\)](#)
- (l) [Amendment No. 3, dated as of June 1, 2001, and executed in May of 2002, to the Shared Assets Area Operating Agreements for North Jersey, South Jersey/Philadelphia, and Detroit, dated as of June 1, 1999, by and among Consolidated Rail Corporation, CSX Transportation, Inc., and Norfolk Southern Railway Company, with exhibits thereto, is incorporated by reference to Exhibit 10\(k\) to Norfolk Southern Corporation's Form 10-K filed on February 24, 2003. \(SEC File No. 001-08339\)](#)
- (m) [Amendment No. 4, dated as of June 1, 2005, and executed in late June 2005, to the Shared Assets Area Operating Agreements for North Jersey, South Jersey/Philadelphia, and Detroit, dated as of June 1, 1999, by and among Consolidated Rail Corporation, CSX Transportation, Inc., and Norfolk Southern Railway Company, with exhibits thereto, is incorporated by reference to Exhibit 99 to Norfolk Southern Corporation's Form 8-K filed on July 1, 2005. \(SEC File No. 001-08339\)](#)
- (n) [Monongahela Usage Agreement, dated as of June 1, 1999, by and among CSX Transportation, Inc., Norfolk Southern Railway Company, Pennsylvania Lines LLC, and New York Central Lines LLC, with exhibit thereto, is incorporated by reference from -Exhibit 10.7 to Norfolk Southern Corporation's Form 10-Q filed on August 11, 1999. \(SEC File No. 001-08339\)](#)
- (o) [The Agreement, entered into as of July 27, 1999, between North Carolina Railroad Company and Norfolk Southern Railway Company, is incorporated by reference from Exhibit 10\(i\) to Norfolk Southern Corporation's Form 10-K filed on March 6, 2000. \(SEC File No. 001-08339\)](#)
- (p) [Second Amendment, dated December 28, 2009, to the Master Agreement dated July 27, 1999, by and between North Carolina Railroad Company and Norfolk Southern Railway Company, is incorporated by reference to Exhibit 10\(q\) to Norfolk Southern Corporation's Form 10-K filed on February 17, 2010 \(Exhibits, annexes and schedules omitted. The Registrant will furnish supplementary copies of such materials to the SEC upon request\). \(SEC File No. 001-08339\)](#)
- (q) [The Supplementary Agreement, entered into as of January 1, 1987, between the Trustees of the Cincinnati Southern Railway and The Cincinnati, New Orleans and Texas Pacific Railway Company \(the latter a wholly owned subsidiary of Norfolk Southern Railway Company\) – extending and amending a Lease, dated as of October 11, 1881 – is incorporated by reference to Exhibit 10\(k\) to Norfolk Southern Corporation's Form 10-K filed on March 5, 2001. \(SEC File No. 001-08339\)](#)

- (r)* [Norfolk Southern Corporation Executive Management Incentive Plan, as approved by shareholders May 14, 2015, and as amended effective March 27, 2018, and November 17, 2020, is incorporated by reference to Exhibit 10.1 to Norfolk Southern Corporation's Form 8-K filed on January 8, 2021. \(SEC File No. 001-08339\)](#)
- (s)* [The Norfolk Southern Corporation Directors' Restricted Stock Plan, adopted January 1, 1994, and amended and restated effective as of January 23, 2015, is incorporated by reference to Exhibit 10.1 to Norfolk Southern Corporation's Form 10-Q filed on October 25, 2017. \(SEC File No. 001-08339\)](#)
- (t)* [Supplemental Benefit Plan of Norfolk Southern Corporation and Participating Subsidiary Companies, adopted June 1, 1982, as amended and restated effective as of June 26, 2015, is incorporated by reference to Exhibit 10.2 to Norfolk Southern Corporation's Form 10-Q filed on October 25, 2017. \(SEC File No. 001-08339\)](#)
- (u)* [The Norfolk Southern Corporation Directors' Charitable Award Program, as amended effective July 2007, is incorporated by reference to Exhibit 10.6 to Norfolk Southern Corporation's Form 10-Q filed on July 27, 2007. \(SEC File No. 001-08339\)](#)
- (v) [The Norfolk Southern Corporation Thoroughbred Stock Option Plan, as amended effective July 22, 2013, is incorporated by reference to Exhibit 10.2 to Norfolk Southern Corporation's Form 10-Q filed on July 24, 2013. \(SEC File No. 001-08339\)](#)
- (w)* [The Norfolk Southern Corporation Executive Life Insurance Plan, as amended and restated effective December 1, 2018, is incorporated by reference to Exhibit 10\(y\) to Norfolk Southern Corporation's Form 10-K filed on February 8, 2019. \(SEC File No. 001-08339\)](#)
- (x)* [The Norfolk Southern Corporation Long-Term Incentive Plan, as approved by shareholders May 14, 2015, and as amended July 29, 2016, November 29, 2016, November 28, 2017, November 27, 2018, and November 19, 2019, is incorporated by referenced to Exhibit 10\(aa\) to Norfolk Southern Corporation's Form 10-K filed on February 6, 2020. \(SEC File No. 001-08339\)](#)
- (y) [Amended and Restated Transfer and Administration Agreement dated as of May 28, 2021 is incorporated by reference to Exhibit 10.1 on Norfolk Southern Corporation's Form 8-K filed on May 28, 2021. \(SEC File No. 001-08339\)](#)
- (z)* [Directors' Deferred Fee Plan of Norfolk Southern Corporation, adopted June 1, 1982 and as amended and restated effective December 1, 2019, is incorporated by referenced to Exhibit 10\(xx\) to Norfolk Southern Corporation's Form 10-K filed on February 6, 2020. \(SEC File No. 001-08339\)](#)
- (aa)* [Norfolk Southern Corporation Executives' Deferred Compensation Plan, as amended and restated effective January 1, 2019, is incorporated by reference to Exhibit 10\(ww\) to Norfolk Southern Corporation's Form 10-K filed on February 8, 2019. \(SEC File No. 001-08339\)](#)
- (bb)* [Form of Amended and Restated Change in Control Agreement between Norfolk Southern Form of Amended and Restated Change in Control Agreement between Norfolk Southern Corporation and the Corporation's Chairman, President and Chief Executive Officer, is incorporated by reference to Exhibit 10\(aaaa\) to Norfolk Southern Corporation's Form 10-K filed on February 18, 2009. \(SEC File No. 001-08339\)](#)
- (cc)*,** [Form of Norfolk Southern Corporation Long-Term Incentive Plan, Award Agreement for Outside Directors for restricted stock units and deferral election form as approved by the Compensation Committee on November 18, 2021.](#)
- (dd)* [Form of Norfolk Southern Corporation Long-Term Incentive Plan, Award Agreement for performance share units approved by the Compensation Committee on November 16, 2020.](#)
- (ee)*,** [Form of Norfolk Southern Corporation Long-Term Incentive Plan, Award Agreement for non-qualified stock options approved by the Compensation Committee on January 24, 2022.](#)
- (ff)*,** [Form of Norfolk Southern Corporation Long-Term Incentive Plan, Award Agreement for restricted stock units approved by the Compensation Committee on November 18, 2021.](#)
- (gg)*,** [Form of Norfolk Southern Corporation Long-Term Incentive Plan, Award Agreement for performance share units approved by the Compensation Committee on November 18, 2021.](#)

- (hh)* [Form of Amendment to Amended and Restated Change in Control Agreement between Norfolk Southern Corporation and the Corporation's Chairman, President and Chief Executive Officer, to eliminate the excise tax gross-up provision in the Agreement, is incorporated by reference to Exhibit 10.1 to Norfolk Southern Corporation's Form 8-K filed on January 23, 2013. \(SEC File No. 001-08339\)](#)
- (ii)* [Form of Change in Control Agreement between Norfolk Southern Corporation and executive officers who entered into a change in control agreement after 2015 is incorporated by reference to Exhibit 10.2 to Norfolk Southern Corporation's Form 10-Q filed on July 29, 2020. \(SEC File No. 001-08339\)](#)
- (jj) [Credit Agreement dated as of March 27, 2020 establishing a 5 year, \\$800 million, unsecured revolving credit facility of the Registrant, is incorporated by reference to Exhibit 10.1 to Norfolk Southern Corporation's Form 8-K filed on March 30, 2020. \(SEC File No. 001-08339\)](#)
- (kk)*,** [Form of Norfolk Southern Corporation Long-Term Incentive Plan, Off-Cycle Award Agreement for Non-Qualified Stock Options as approved by the Compensation Committee on January 24, 2022.](#)
- (ll)*,** [Form of Norfolk Southern Corporation Long-Term Incentive Plan, Off-Cycle Award Agreement for Performance Share Units as approved by the Compensation Committee on November 18, 2021.](#)
- (mm)*,*
* [Form of Norfolk Southern Corporation Long-Term Incentive Plan, Off-Cycle Award Agreement for Restricted Stock Units as approved by the Compensation Committee on November 18, 2021.](#)
- (nn)* [Offer Letter for Mark R. George, dated August 26, 2019, is incorporated by reference to Exhibit 99.1 to Norfolk Southern Corporation's Form 8-K filed on August 28, 2019. \(SEC File No. 001-08339\)](#)
- (oo)* [Norfolk Southern Corporation Long-Term Incentive Plan Inducement Award Agreement for Performance-Based Restricted Stock Units is incorporated by reference to Exhibit 99.2 to Norfolk Southern Corporation's Form 8-K filed on August 28, 2019. \(SEC File No. 001-08339\)](#)
- (pp)* [Norfolk Southern Corporation Long-Term Incentive Plan Inducement Award Agreement for Restricted Stock Units is incorporated by reference to Exhibit 99.3 to Norfolk Southern Corporation's Form 8-K filed on August 28, 2019. \(SEC File No. 001-08339\)](#)
- (qq)* [Norfolk Southern Corporation Long-Term Incentive Plan Inducement Award Agreement for Non-Qualified Stock Options is incorporated by reference to Exhibit 99.4 to Norfolk Southern Corporation's Form 8-K filed on August 28, 2019. \(SEC File No. 001-08339\)](#)
- (rr) [A Lease Agreement, dated March 1, 2019, between NSRC and BA Leasing BSC, LLC. This Agreement is incorporated by reference herein to Exhibit 10.2 to Norfolk Southern Corporation's Form 8-K filed March 5, 2019. \(See SEC File No. 001-08339\).](#)
- (ss) [A Participation Agreement, dated March 1, 2019, between NSRC, BA Leasing BSC, LLC, Bank of America, N.A. as Administrative Agent, and each of the Rent Assignees listed on Schedule II thereto. This Agreement is incorporated by reference herein to Exhibit 10.3 to Norfolk Southern Corporation's Form 8-K filed March 5, 2019. \(See SEC File No. 001-08339\).](#)
- (tt) [Guaranty of NSRC's obligations under the Participation Agreement, Construction Agency Agreement, Lease Agreement and related documents by Norfolk Southern Corporation. This Agreement is incorporated by reference herein to Exhibit 10.4 to Norfolk Southern Corporation's Form 8-K filed March 5, 2019. \(See SEC File No. 001-08339\).](#)
- (uu)* [Norfolk Southern Executive Severance Plan as adopted on May 14, 2020, and as amended July 28, 2020, is incorporated by reference to Exhibit 10.1 to Norfolk Southern Corporation Form 10-Q filed on July 29, 2020. \(SEC File No. 001-08339\).](#)
- (vv)*,** [Form of Norfolk Southern Corporation Long-Term Incentive Plan, Award Agreement for Pro-Rata Forfeiture of Non-Qualified Stock Options Due to Retirement as approved by the Compensation Committee on January 24, 2022.](#)
- (ww)*,*
* [Form of Norfolk Southern Corporation Long-Term Incentive Plan, Award Agreement for Pro-Rata Forfeiture of Restricted Stock Units Due to Retirement as approved by the Compensation Committee on January 24, 2022.](#)

- (xx)*,** [Form of Norfolk Southern Corporation Long-Term Incentive Plan, Award Agreement for Pro-Rata Forfeiture of Performance Share Units Due to Retirement as approved by the Compensation Committee on January 24, 2022.](#)
- (yy)*,** [Form of Norfolk Southern Corporation Long-Term Incentive Plan, Award Agreement for Pro-Rata Vesting of Non-Qualified Stock Options as approved by the Compensation Committee on January 24, 2022.](#)
- 21** [Subsidiaries of the Registrant.](#)
- 23** [Consent of Independent Registered Public Accounting Firm.](#)
- 31-A** [Rule 13a-14\(a\)/15d-014\(a\) CEO Certification.](#)
- 31-B** [Rule 13a-14\(a\)/15d-014\(a\) CFO Certification.](#)
- 32** [Section 1350 Certifications.](#)
- 101** The following financial information from Norfolk Southern Corporation’s Annual Report on Form 10-K for the year ended December 31, 2021, formatted in Inline Extensible Business Reporting Language (iXBRL) includes: (i) the Consolidated Statements of Income for each of the years ended December 31, 2021, 2020, and 2019; (ii) the Consolidated Statements of Comprehensive Income for each of the years ended December 31, 2021, 2020, and 2019; (iii) the Consolidated Balance Sheets at December 31, 2021 and 2020; (iv) the Consolidated Statements of Cash Flows for each of the years ended December 31, 2021, 2020, and 2019; (v) the Consolidated Statements of Changes in Stockholders’ Equity for each of the years ended December 31, 2021, 2020, and 2019; and (vi) the Notes to Consolidated Financial Statements.

* *Management contract or compensatory arrangement.*

** *Filed herewith.*

(B) Exhibits.

The Exhibits required by Item 601 of Regulation S-K as listed in Item 15(A)3 are filed herewith or incorporated by reference.

(C) Financial Statement Schedules.

Financial statement schedules and separate financial statements specified by this Item are included in Item 15(A)2 or are otherwise not required or are not applicable.

Exhibits 23, 31, and 32 are included in copies assembled for public dissemination. All exhibits are included in the 2021 Form 10-K posted on our website at www.norfolksouthern.com under “Invest in NS” and “SEC Filings” or you may request copies by writing to:

**Office of Corporate Secretary
Norfolk Southern Corporation
650 West Peachtree Street NW
Atlanta, Georgia 30308-1925**

Item 16. Form 10-K Summary

Not applicable.

POWER OF ATTORNEY

Each person whose signature appears on the next page under SIGNATURES hereby authorizes Lorri J. Kleine and Mark R. George, or any one of them, to execute in the name of each such person, and to file, any amendments to this report, and hereby appoints Lorri J. Kleine and Mark R. George, or any one of them, as attorneys-in-fact to sign on his or her behalf, individually and in each capacity stated below, and to file, any and all amendments to this report.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, Norfolk Southern Corporation has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized, on this 4th day of February, 2022.

/s/ James A. Squires

By: James A. Squires
(Chairman and Chief Executive Officer)

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below on this 4th day of February, 2022, by the following persons on behalf of Norfolk Southern Corporation and in the capacities indicated.

Signature	Title
<u>/s/ James A. Squires</u> (James A. Squires)	Chairman and Chief Executive Officer and Director (Principal Executive Officer)
<u>/s/ Mark R. George</u> (Mark R. George)	Executive Vice President Finance and Chief Financial Officer (Principal Financial Officer)
<u>/s/ Clyde H. Allison, Jr.</u> (Clyde H. Allison, Jr.)	Vice President and Controller (Principal Accounting Officer)
<u>/s/ Thomas D. Bell, Jr.</u> (Thomas D. Bell, Jr.)	Director
<u>/s/ Mitchell E. Daniels, Jr.</u> (Mitchell E. Daniels, Jr.)	Director
<u>/s/ Marcela E. Donadio</u> (Marcela E. Donadio)	Director
<u>/s/ John C. Hufford, Jr.</u> (John C. Hufford, Jr.)	Director
<u>/s/ Christopher T. Jones</u> (Christopher T. Jones)	Director
<u>/s/ Thomas C. Kelleher</u> (Thomas C. Kelleher)	Director
<u>/s/ Steven F. Leer</u> (Steven F. Leer)	Director
<u>/s/ Michael D. Lockhart</u> (Michael D. Lockhart)	Director
<u>/s/ Amy E. Miles</u> (Amy E. Miles)	Director
<u>/s/ Claude Mongeau</u> (Claude Mongeau)	Director
<u>/s/ Jennifer F. Scanlon</u> (Jennifer F. Scanlon)	Director
<u>/s/ John R. Thompson</u> (John R. Thompson)	Director

Norfolk Southern Corporation and Subsidiaries
Valuation and Qualifying Accounts
Years ended December 31, 2021, 2020, and 2019
(\$ in millions)

	<u>Beginning Balance</u>	<u>Additions charged to:</u>			<u>Ending Balance</u>
		<u>Expenses</u>	<u>Other Accounts</u>	<u>Deductions</u>	
Year ended December 31, 2021					
Current portion of casualty and other claims included in accounts payable	\$ 182	\$ 20	\$ 80 ⁽²⁾	\$ 116 ⁽³⁾	\$ 166
Casualty and other claims included in other liabilities	169	77 ⁽¹⁾	—	76 ⁽⁴⁾	170
Year ended December 31, 2020					
Current portion of casualty and other claims included in accounts payable	\$ 212	\$ 27	\$ 81 ⁽²⁾	\$ 138 ⁽³⁾	\$ 182
Casualty and other claims included in other liabilities	171	80 ⁽¹⁾	—	82 ⁽⁴⁾	169
Year ended December 31, 2019					
Current portion of casualty and other claims included in accounts payable	\$ 213	\$ 22	\$ 131 ⁽²⁾	\$ 154 ⁽³⁾	\$ 212
Casualty and other claims included in other liabilities	158	89 ⁽¹⁾	—	76 ⁽⁴⁾	171

⁽¹⁾ Includes adjustments for changes in estimates for prior years' claims.

⁽²⁾ Includes revenue refunds and overcharges provided through deductions from operating revenues and transfers from other accounts.

⁽³⁾ Payments and reclassifications to/from accounts payable.

⁽⁴⁾ Payments and reclassifications to/from other liabilities.

STOCKHOLDER INFORMATION

FINANCIAL INQUIRIES

Mark R. George

Executive Vice President
Finance and Chief
Financial Officer

Norfolk Southern Corporation
650 W. Peachtree St. NW
Atlanta, GA 30308
470.463.4833

INVESTOR INQUIRIES

Meghan Achimasi

Senior Director
Investor Relations

Norfolk Southern Corporation
650 W. Peachtree St. NW
Atlanta, GA 30308
470.867.4807

CORPORATE OFFICE

Norfolk Southern Corporation
650 W. Peachtree St. NW
Atlanta, GA 30308
855.NORFOLK or
855.667.3655

SHAREHOLDER SERVICES INFORMATION

Norfolk Southern Corporation
Requests & Information
shareholder@nscorp.com
800.531.6757

COMMON STOCK

Ticker symbol: NSC

Our common stock is listed and traded on the New York Stock Exchange.

DIVIDENDS

At its January 2022 meeting, our board of directors declared a quarterly dividend of \$1.24 per share on the company's common stock, payable on Feb. 21, 2022, to shareholders of record on Feb. 4, 2022.

We reduced the days between shareholder of record date and payable date beginning in the second quarter of 2021, effectively accelerating payments to shareholders.

We usually pay quarterly dividends on our common stock on or about Feb. 20, May 20, Aug. 20, and Nov. 20, when and if declared by our board of directors to shareholders of record. Through the end of 2021, we have paid 158 consecutive quarterly dividends since our inception in 1982.

ACCOUNT ASSISTANCE

For assistance with lost stock certificates, transfer requirements, the INVESTORS CHOICE Plan, address changes, dividend checks, and direct deposit of dividends, contact:

American Stock Transfer & Trust Company LLC
6201 15th Avenue
Brooklyn, NY 11219
877.864.4750

INVESTORS CHOICE

We and our transfer agent, American Stock Transfer & Trust Company LLC (AST), offer the INVESTORS CHOICE Plan for investors wishing to purchase or sell Norfolk Southern Corporation common stock. This plan is available to both present shareholders of record and individual investors wishing to make an initial purchase of Norfolk Southern Corporation common stock. Once enrolled in the plan, you can invest cash dividends when paid and make optional cash investments simply and conveniently.

To take advantage of the INVESTORS CHOICE Plan, contact AST at 877.864.4750 or visit <http://astfinancial.mobular.net/amstock/NSC/> to learn more about the INVESTORS CHOICE Plan.

PUBLICATIONS

The following reports and publications are available on our website at www.norfolksouthern.com and, upon written request, will be furnished in printed form to shareholders free of charge:

- Annual Reports on Form 10-K
- Quarterly Reports on Form 10-Q
- Corporate Governance Guidelines
- Board Committee Charters
- Thoroughbred Code of Ethics
- Code of Ethical Conduct for Senior Financial Officers
- Categorical Independence Standards for Directors
- Norfolk Southern Corporation Bylaws

Shareholders desiring a printed copy of one or more of these reports and publications should send their request to our corporate secretary:

Denise W. Hutson

Corporate Secretary

Norfolk Southern Corporation
650 W. Peachtree St. NW
Atlanta, GA 30308
470.463.5567

A notice and proxy statement for the annual meeting of shareholders are furnished to shareholders in advance of the meeting.

Amendments to or waivers of the Thoroughbred Code of Ethics and/or the Code of Ethical Conduct for Senior Financial Officers that are required to be disclosed pursuant to Item 5.05 of the current report on Form 8-K will be disclosed on our website.

ETHICS & COMPLIANCE HOTLINE

High ethical standards always have been key to our success. Anyone who might be aware of a violation of our corporation's Thoroughbred Code of Ethics is encouraged to contact our Ethics & Compliance Hotline at 800.732.9279.



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