



BNSF RAILWAY COMPANY
Consolidated Financial Statements
for the period ended December 31, 2019

Consolidated Financial Statements

The Consolidated Financial Statements of BNSF Railway Company and subsidiary companies, together with the report of the Company's independent registered public accounting firm, are included as part of this document.

Report of Independent Registered Public Accounting Firm	3
Consolidated Statements of Income for the years ended December 31, 2019, 2018 and 2017	4
Consolidated Statements of Comprehensive Income for the years ended December 31, 2019, 2018 and 2017	5
Consolidated Balance Sheets as of December 31, 2019 and 2018	6
Consolidated Statements of Cash Flows for the years ended December 31, 2019, 2018 and 2017	7
Consolidated Statements of Changes in Equity for the years ended December 31, 2019, 2018 and 2017	8
Notes to Consolidated Financial Statements	9

Independent Auditors' Report

To the Shareholder and Board of Directors of BNSF Railway Company

We have audited the accompanying consolidated balance sheets of BNSF Railway Company and its subsidiaries (the "Company"), as of December 31, 2019 and 2018, the related consolidated statements of income, comprehensive income, changes in equity, and cash flows for each of the three years in the period ended December 31, 2019, and the related notes to the consolidated financial statements.

Management's Responsibility for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of these consolidated financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express an opinion on these consolidated financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the Company's preparation and fair presentation of the consolidated financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of BNSF Railway Company and its subsidiaries as of December 31, 2019 and 2018, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2019 in accordance with accounting principles generally accepted in the United States of America.

Change in Accounting Principle

As discussed in Note 9 to the financial statements, effective January 1, 2019, the Company adopted FASB Accounting Standards Update No. 2016-02, Leases (Topic 842), using the modified retrospective approach. Our opinion is not modified with respect to this matter.

/s/ DELOITTE & TOUCHE LLP

Fort Worth, Texas
February 21, 2020

BNSF Railway Company and Subsidiaries***Consolidated Statements of Income***

In millions

	Years ended December 31,		
	2019	2018	2017
Revenues	\$ 22,745	\$ 22,999	\$ 20,747
Operating expenses:			
Compensation and benefits	5,270	5,322	4,968
Fuel	2,944	3,346	2,518
Depreciation and amortization	2,389	2,306	2,341
Purchased services	2,086	2,168	2,019
Equipment rents	758	732	784
Materials and other	1,239	1,329	875
Total operating expenses	14,686	15,203	13,505
Operating income	8,059	7,796	7,242
Interest expense	57	51	43
Interest income, related parties	(892)	(643)	(360)
Other (income) expense, net	(229)	(70)	(24)
Income before income taxes	9,123	8,458	7,583
Income tax expense (benefit)	2,216	2,019	(4,536)
Net income	\$ 6,907	\$ 6,439	\$ 12,119

See accompanying Notes to Consolidated Financial Statements.

BNSF Railway Company and Subsidiaries***Consolidated Statements of Comprehensive Income***

In millions

	Years ended December 31,		
	2019	2018	2017
Net income	\$ 6,907	\$ 6,439	\$ 12,119
Other comprehensive income:			
Change in pension and retiree health and welfare benefits, net of taxes	16	(127)	112
Change in accumulated other comprehensive income (loss) of equity method investees	(1)	1	—
Other comprehensive income (loss), net of tax	15	(126)	112
Total comprehensive income	\$ 6,922	\$ 6,313	\$ 12,231

See accompanying Notes to Consolidated Financial Statements.

BNSF Railway Company and Subsidiaries
Consolidated Balance Sheets

In millions

	December 31, 2019	December 31, 2018
Assets		
Current assets:		
Cash and cash equivalents	\$ 557	\$ 513
Accounts receivable, net	1,874	1,784
Materials and supplies	789	793
Other current assets	129	297
Total current assets	3,349	3,387
Property and equipment, net of accumulated depreciation of \$12,065 and \$9,981, respectively	64,343	63,147
Goodwill	14,803	14,803
Operating lease right-of-use assets	2,264	—
Other assets	2,723	2,618
Total assets	\$ 87,482	\$ 83,955
Liabilities and Stockholder's Equity		
Current liabilities:		
Accounts payable and other current liabilities	\$ 3,619	\$ 3,082
Long-term debt and finance leases due within one year	121	80
Total current liabilities	3,740	3,162
Deferred income taxes	14,430	13,875
Operating lease liabilities	1,614	—
Long-term debt and finance leases	1,151	1,269
Casualty and environmental liabilities	465	486
Pension and retiree health and welfare liability	285	267
Other liabilities	1,287	1,400
Total liabilities	22,972	20,459
Commitments and contingencies (see Note 12)		
Stockholder's equity:		
Common stock, \$1 par value, 1,000 shares authorized; issued and outstanding and paid-in-capital	42,920	42,920
Retained earnings	52,655	45,748
Intercompany notes receivable	(31,210)	(25,302)
Accumulated other comprehensive income (loss)	145	130
Total stockholder's equity	64,510	63,496
Total liabilities and stockholder's equity	\$ 87,482	\$ 83,955

See accompanying Notes to Consolidated Financial Statements.

BNSF Railway Company and Subsidiaries
Consolidated Statements of Cash Flows

In millions

	Years ended December 31,		
	2019	2018	2017
Operating Activities			
Net income	\$ 6,907	\$ 6,439	\$ 12,119
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation and amortization	2,389	2,306	2,341
Deferred income taxes	549	369	(6,480)
Long-term casualty and environmental liabilities, net	(46)	(18)	(85)
Other, net	(336)	(159)	(249)
Changes in current assets and liabilities:			
Accounts receivable, net	35	(116)	(237)
Materials and supplies	4	10	22
Other current assets	(111)	(50)	78
Accounts payable and other current liabilities	316	(68)	(282)
Net cash provided by operating activities	9,707	8,713	7,227
Investing Activities			
Capital expenditures excluding equipment	(3,193)	(2,918)	(2,864)
Acquisition of equipment	(415)	(269)	(397)
Purchases of investments and investments in time deposits	(6)	(27)	(13)
Proceeds from sales of investments and maturities of time deposits	42	45	34
Other, net	(100)	21	(243)
Net cash used for investing activities	(3,672)	(3,148)	(3,483)
Financing Activities			
Payments on long-term debt and finance leases	(83)	(96)	(85)
Net increase in intercompany notes receivable classified as equity	(5,908)	(5,472)	(3,711)
Other, net	—	—	(2)
Net cash used for financing activities	(5,991)	(5,568)	(3,798)
Increase (decrease) in cash and cash equivalents	44	(3)	(54)
Cash and cash equivalents:			
Beginning of period	513	516	570
End of period	\$ 557	\$ 513	\$ 516
Supplemental Cash Flow Information			
Interest paid, net of amounts capitalized	\$ 52	\$ 68	\$ 61
Capital investments accrued but not yet paid	\$ 245	\$ 251	\$ 192
Income taxes paid, net of refunds	\$ 1,486	\$ 1,602	\$ 2,087
Non-cash asset financing	\$ 11	\$ 8	\$ —

See accompanying Notes to Consolidated Financial Statements.

BNSF Railway Company and Subsidiaries

Consolidated Statements of Changes in Stockholder's Equity

In millions

	Common Stock and Paid-in Capital	Retained Earnings	Intercompany Notes Receivable	Accumulated Other Comprehensive Income (Loss)	Total Stockholder's Equity
Balance as of December 31, 2016	\$ 42,920	\$ 27,218	\$ (16,119)	\$ 119	\$ 54,138
Change in intercompany notes receivable	—	—	(3,711)	—	(3,711)
Comprehensive income (loss), net of tax	—	12,119	—	112	12,231
Balance as of December 31, 2017	\$ 42,920	\$ 39,337	\$ (19,830)	\$ 231	\$ 62,658
Adoption of ASC Topic 606 ^a	—	(3)	—	—	(3)
Equity method investee adoption of ASU 2016-01 ^b	—	1	—	(1)	—
Reclassification upon early adoption of ASU 2018-02 ^c	—	(26)	—	26	—
Change in intercompany notes receivable	—	—	(5,472)	—	(5,472)
Comprehensive income (loss), net of tax	—	6,439	—	(126)	6,313
Balance as of December 31, 2018	\$ 42,920	\$ 45,748	\$ (25,302)	\$ 130	\$ 63,496
Change in intercompany notes receivable	—	—	(5,908)	—	(5,908)
Comprehensive income (loss), net of tax	—	6,907	—	15	6,922
Balance as of December 31, 2019	\$ 42,920	\$ 52,655	\$ (31,210)	\$ 145	\$ 64,510

^a Accounting Standards Codification Topic 606 - Revenue from Contracts with Customers

^b Accounting Standards Update (ASU) No. 2016-01 Financial Instruments - Recognition and Measurement of Financial Assets and Financial Liabilities

^c ASU No. 2018-02 Income Statement - Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income

See accompanying Notes to Consolidated Financial Statements.

BNSF Railway Company and Subsidiaries

Notes to Consolidated Financial Statements

1. The Company

BNSF Railway Company and its majority-owned subsidiaries (collectively, BNSF Railway or the Company) is a wholly-owned subsidiary of Burlington Northern Santa Fe, LLC (BNSF). BNSF Railway operates one of the largest railroad networks in North America. BNSF Railway operates approximately 32,500 route miles of track (excluding multiple main tracks, yard tracks and sidings) in 28 states and also operates in three Canadian provinces. Through one operating transportation services segment, BNSF Railway transports a wide range of products and commodities including the transportation of Consumer Products, Industrial Products, Agricultural Products, and Coal, derived from manufacturing, agricultural, and natural resource industries, which constituted 35 percent, 27 percent, 21 percent, and 17 percent, respectively, of total freight revenues for the year ended December 31, 2019.

On February 12, 2010, Berkshire Hathaway Inc., a Delaware corporation (Berkshire), acquired 100 percent of the outstanding shares of Burlington Northern Santa Fe Corporation common stock that it did not already own. The acquisition was completed through the merger (Merger) of a Berkshire wholly-owned merger subsidiary and Burlington Northern Santa Fe Corporation, with the surviving entity renamed Burlington Northern Santa Fe, LLC. Berkshire's cost of acquiring BNSF was pushed-down to establish a new accounting basis for BNSF Railway beginning as of February 13, 2010.

2. Significant Accounting Policies

Principles of Consolidation

The Consolidated Financial Statements include the accounts of BNSF Railway. All intercompany accounts and transactions have been eliminated. Investments in companies that are not majority-owned are carried at cost or are accounted for under the equity method if the Company has the ability to exercise significant influence but does not have a controlling financial interest. The Company also evaluates its less than majority-owned investments pursuant to accounting guidance related to the consolidation of variable interest entities. We currently have no investments that require consolidation under this guidance.

The Consolidated Balance Sheet as of December 31, 2018 reflects reclassifications to conform to 2019 presentation. Specifically, amounts for intangible assets and liabilities, which were previously presented separately, are now presented as part of other assets and other liabilities.

Use of Estimates

The preparation of financial statements in accordance with generally accepted accounting principles in the United States of America (GAAP) requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the periods presented. These estimates and assumptions are periodically reviewed by management. Actual results could differ from those estimates.

Revenue Recognition

The Company's primary source of revenue is freight rail transportation services. The primary performance obligation for the Company is to move freight from a point of origin to a point of destination for its customers. The performance obligations are represented by bills of lading which create a series of distinct services that have a similar pattern of transfer to the customer. The revenues for each performance obligation are based on various factors including the product being shipped, the origin and destination pair, and contract incentives which are outlined in various private rate agreements, common carrier public tariffs, interline foreign road agreements, and pricing quotes. The transaction price is generally a per car amount to transport cars from a certain origin to a certain destination.

The associated freight revenues are recognized over time as the service is performed because the customer simultaneously receives and consumes the benefits of the service. The Company recognizes revenue based on the proportion of the service completed as of the balance sheet date. Bills for freight transportation services are generally issued to customers and paid within thirty days or less. As a result, no significant contract assets exist and there are no significant financing components in the Company's revenue arrangements.

Customer incentives, which are primarily provided for shipping a specified cumulative volume or shipping to/from specific locations, are recorded as a reduction to revenue on a pro-rata basis based on actual or projected future customer shipments. A small portion of customer incentive agreements have a component where a different discount amount is provided for different levels of volumes, resulting in variable consideration. To determine the transaction price in these cases, the Company estimates the amount of variable consideration at each reporting period utilizing the most likely amount based on historical trends as well as economic and other indicators. These incentives are ratably applied to all units using an estimate of how much volume the customer will ship under the customer incentive agreement. Both the variable consideration and the associated contract liabilities resulting from these types of customer incentives are immaterial.

Other revenues are primarily generated from accessorial services provided to customers which are primarily storage and demurrage and are recognized when the service is performed.

Accounts Receivable, Net

Accounts receivable, net includes accounts receivable reduced by an allowance for bill adjustments and uncollectible accounts. The allowance for bill adjustments and uncollectible accounts is based on historical experience as well as any known trends or uncertainties related to customer billing and account collectibility. Receivables are written off against allowances after all reasonable collection efforts are exhausted.

Cash and Cash Equivalents

All short-term investments with maturities of 90 days or less from the date of purchase are considered cash equivalents. Cash equivalents are stated at cost, which approximates market value because of the short maturity of these instruments.

Materials and Supplies

Materials and supplies, which consist mainly of rail, ties and other items for construction and maintenance of property and equipment, as well as diesel fuel, are valued at the lower of average cost or market.

Goodwill

Goodwill is the excess of the cost of an acquired entity over the net of the amounts assigned to assets acquired and liabilities assumed.

Goodwill is tested for impairment annually or more frequently if events or circumstances indicate that the carrying amount may not be recoverable. The impairment test involves a two-step process. The first step is to estimate the fair value of the reporting unit using valuation models such as discounting projected future net cash flows and/or a multiple of earnings. If the carrying amount of a reporting unit, including goodwill, exceeds the estimated fair value, a second step is performed. Under the second step, the identifiable assets and liabilities of the reporting unit, including identifiable intangible assets and liabilities, are estimated at fair value as of the current testing date. The excess of the estimated fair value of the reporting unit over the estimated fair value of net assets establishes the implied value of goodwill. If the carrying amount of goodwill exceeds the implied value of goodwill, an impairment loss is recognized in an amount equal to that excess.

See Note 8 to the Consolidated Financial Statements for further information related to goodwill.

Property and Equipment, Net

BNSF Railway's railroad operations are highly capital intensive and its large base of homogeneous, network-type assets turns over on a continuous basis. BNSF Railway self-constructs portions of its track structure and rebuilds certain classes of rolling stock. Each year, BNSF Railway develops a capital program intended to enable BNSF Railway to increase capacity, enhance the safety or efficiency of operations, extend the useful life or increase the value of its assets, gain strategic benefit, or provide new service offerings to customers. Costs are capitalized if they meet these criteria as well as the applicable minimum units of property, including costs for assets purchased or constructed throughout the year, along with all costs necessary to make the assets ready for their intended use. Indirect costs that clearly relate to capital projects are also capitalized. Normal repairs and maintenance are charged to operating expense as incurred.

Property and equipment are stated at cost and are depreciated on a straight-line basis over their estimated useful lives using the group method of depreciation in which all items with similar characteristics, use, and expected lives are grouped together in asset classes and depreciated using composite depreciation rates. The Company conducts depreciation studies, generally every three years for equipment and every six years for track structure and other roadway property, and implements study results prospectively. These detailed studies form the basis for the Company's composite depreciation rates and take into account the following factors:

- Statistical analysis of historical patterns of use and retirements of each of BNSF Railway's asset classes;
- Evaluation of any expected changes in current operations and the outlook for continued use of the assets;
- Evaluation of technological advances and changes to maintenance practices; and
- Expected salvage to be received upon retirement.

Under group depreciation, the historical cost net of salvage of depreciable property that is retired or replaced in the ordinary course of business is charged to accumulated depreciation, and no gain or loss is recognized. This historical cost of certain assets is estimated as it is impracticable to track individual, homogeneous, network-type assets. Historical costs are estimated by deflating current costs using the Producer Price Index (PPI) or a unit cost method. These methods closely correlate with the major costs of the items comprising the asset classes. Because of the number of estimates inherent in the depreciation and retirement processes and because it is impossible to precisely estimate each of these variables until a group of property is completely retired, BNSF Railway monitors the estimated service lives of its assets and the accumulated depreciation associated with each asset class to ensure its depreciation rates are appropriate.

For retirements of depreciable asset classes that do not occur in the normal course of business, a gain or loss may be recognized in operating expense if the retirement: (i) is unusual, (ii) is significant in amount, and (iii) varies significantly from the retirement profile identified through BNSF Railway's depreciation studies. Gains or losses from disposals of land and non-rail property are recognized at the time of their occurrence. During the three fiscal years presented, no material gains or losses were recognized due to the retirement of depreciable assets.

Long-lived assets are reviewed for impairment when events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. If impairment indicators are present and the estimated future undiscounted cash flows are less than the carrying value of the long-lived assets, the carrying value is reduced to the estimated fair value as measured by the discounted cash flows.

Leases

On January 1, 2019, the Company adopted ASU No. 2016-02, Leases (Topic 842), using a modified retrospective approach for leases existing at or entered into after the effective date. The Company elected practical expedients permitted under the transition guidance, which allow entities to not reassess whether existing contracts are or contain leases, the classification of existing leases, initial direct costs for existing leases, or the existing accounting treatment for land easements. See Note 9 to the Consolidated Financial Statements for additional information.

The Company has substantial lease commitments for locomotives, freight cars, office buildings, operating facilities, and other property. Many of the Company's leases provide the option to purchase the leased item at fair market value or a fixed purchase price at the end of the lease, and some leases include early buyout options at a fixed purchase price. Also, many of the Company's leases include both fixed rate and fair market value renewal options.

As the implicit interest rate is not readily available for most operating leases, the Company uses its incremental borrowing rate based on information available at commencement date, including lease term, to determine the present value of lease payments. The Company has operating lease agreements that contain both lease and non-lease components, but only freight cars are accounted for as a single lease component. BNSF Railway has applied the short-term lease exemption to all asset classes, and as a result, short-term leases are not recognized on the Consolidated Balance Sheets. Variable lease costs, sublease income, and lessor transactions are not significant.

Assets held under finance leases are recorded at the net present value of the minimum lease payments at the inception of the lease. Amortization expense for finance leases, as well as leasehold improvements, is computed using the straight-line method over the shorter of the estimated useful lives of the assets or the period of the related lease.

Planned Major Maintenance Activities

BNSF Railway utilizes the deferral method of accounting for leased locomotive overhauls, which includes the complete refurbishment of the engine and related components to extend the useful life of the locomotive. Accordingly, BNSF Railway has established an asset in property and equipment, net in the Consolidated Balance Sheets for overhauls that is amortized to expense using the straight-line method until the next overhaul is performed.

Environmental Liabilities

Liabilities for environmental cleanup costs are initially recorded when BNSF Railway's liability for environmental cleanup is both probable and reasonably estimable. Subsequent adjustments to initial estimates are recorded as necessary based upon additional information developed in subsequent periods. Estimates for these liabilities are undiscounted.

Personal Injury Claims

Liabilities for personal injury claims are initially recorded when the expected loss is both probable and reasonably estimable. Subsequent adjustments to initial estimates are recorded as necessary based upon additional information developed in subsequent periods. Liabilities recorded for unasserted personal injury claims, including those related to asbestos, are based on information currently available. Estimates of liabilities for personal injury claims are undiscounted.

Income Taxes

Deferred tax assets and liabilities are measured using the tax rates that apply to taxable income in the period in which the deferred tax asset or liability is expected to be realized or paid. Changes in the Company's estimates regarding the statutory tax rate to be applied to the reversal of deferred tax assets and liabilities could materially affect the effective tax rate. Valuation allowances are established to reduce deferred tax assets if it is more likely than not that some or all of the deferred tax asset will not be realized. BNSF Railway has not recorded a valuation allowance, as it believes that the deferred tax assets will be fully realized in the future. Investment tax credits are accounted for using the flow-through method.

The Company recognizes the tax benefit from an uncertain tax position only if it is more likely than not that the tax position will be sustained on examination by the taxing authorities based on the technical merits of the position. The tax benefits recognized in the financial statements from such a position are measured based on the largest benefit that has a greater than fifty percent likelihood of being realized upon ultimate settlement.

Employment Benefit Plans

The Company estimates liabilities and expenses for pension and retiree health and welfare plans. Estimated amounts are based on historical information, current information, and estimates regarding future events and circumstances. Significant assumptions used in the valuation of pension and/or retiree health and welfare liabilities include the expected return on plan assets, discount rate, rate of increase in compensation levels, and the health care cost trend rate.

Fair Value Measurements

As defined under authoritative accounting guidance, fair value is the price that would be received to sell an asset or paid to transfer a liability between market participants in the principal market or in the most advantageous market when no principal market exists. Adjustments to transaction prices or quoted market prices may be required in illiquid or disorderly markets in order to estimate fair value. Different valuation techniques may be appropriate under the circumstances to determine the value that would be received to sell an asset or paid to transfer a liability in an orderly transaction. Market participants are assumed to be independent, knowledgeable, able, and willing to transact an exchange and not under duress. Nonperformance or credit risk is considered in determining the fair value of liabilities. Considerable judgment may be required in interpreting market data used to develop the estimates of fair value. Accordingly, estimates of fair value presented herein are not necessarily indicative of the amounts that could be realized in a current or future market exchange.

The authoritative accounting guidance specifies a three-level hierarchy of valuation inputs which was established to increase consistency, clarity and comparability in fair value measurements and related disclosures.

- Level 1—Quoted prices for identical assets or liabilities in active markets that the Company has the ability to access at the measurement date.
- Level 2—Quoted prices for similar assets or liabilities in active markets; quoted prices for identical or similar assets or liabilities in markets that are not active; and model-derived valuations in which all significant inputs are observable market data.
- Level 3—Valuations derived from valuation techniques in which one or more significant inputs are unobservable.

3. Accounting Pronouncements

In August 2018, the FASB issued Accounting Standards Update No. 2018-14 (ASU 2018-14), Compensation - Retirement Benefits - Defined Benefit Plans - General (Subtopic 715-20): Disclosure Framework - Changes to the Disclosure Requirements for Defined Benefit Plans. The amendments in ASU 2018-14 modify the disclosure requirements for employers that sponsor defined benefit pension and other postretirement plans. ASU 2018-14 is effective for the Company for the fiscal year ending after December 15, 2020, with early adoption permitted. Adoption of the standard is not expected to have a material impact on the Company's Consolidated Financial Statement disclosures.

In August 2018, the FASB issued Accounting Standards Update No. 2018-15 (ASU 2018-15), Intangibles - Goodwill and Other - Internal-Use Software (Subtopic 350-40). ASU 2018-15 aligns the requirements for capitalizing implementation costs incurred in a hosting arrangement that is a service contract with the requirements for capitalizing implementation costs incurred to develop or obtain internal-use software. The guidance requires an entity in such an arrangement to capitalize costs for certain implementation activities in the application development stage, expense the capitalized implementation costs over the term of the hosting arrangement, and present the expense with the associated hosting fees in the Consolidated Statements of Income. ASU 2018-15 is effective for fiscal years beginning after December 15, 2019, with early adoption permitted. Adoption of the standard is not expected to have a material impact on the Company's consolidated financial position, results of operations or cash flows.

In June 2016, the FASB issued Accounting Standards Update No. 2016-13 (ASU 2016-13), Financial Instruments—Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments. ASU 2016-13 requires the use of an "expected loss" model on financial instruments and other commitments to extend credit held by a reporting entity at each reporting date. ASU 2016-13 replaces the incurred loss methodology with a methodology that reflects expected credit losses and requires consideration of a broader range of reasonable and supportable information to calculate credit loss estimates. ASU 2016-13 is effective for fiscal years beginning after December 15, 2019, with early adoption permitted. Adoption of the standard is not expected to have a material impact on the Company's Consolidated Financial Statements and disclosures.

4. Revenue from Contracts with Customers

The Company disaggregates revenue from contracts with customers based on the characteristics of the services provided and the types of products transported (in millions):

	Years ended December 31,		
	2019	2018	2017
Consumer Products	\$ 7,860	\$ 7,902	\$ 7,111
Industrial Products	6,068	5,967	5,133
Agricultural Products	4,685	4,697	4,316
Coal	3,715	4,012	3,846
Total freight revenues	22,328	22,578	20,406
Accessorial and other	417	421	341
Total operating revenues	\$ 22,745	\$ 22,999	\$ 20,747

Contract assets and liabilities are immaterial. Receivables from contracts with customers is a component of accounts receivable, net on the Consolidated Balance Sheets. As of December 31, 2019 and 2018, \$1.0 billion and \$1.1 billion, respectively, represent net receivables from contracts with customers.

Remaining performance obligations primarily consist of in-transit freight revenues, which will be recognized in the next reporting period. As of December 31, 2019 and 2018, remaining performance obligations were \$172 million and \$234 million, respectively.

5. Income Taxes

Income tax expense (benefit) was as follows (in millions):

	Years ended December 31,		
	2019	2018	2017
Current:			
Federal	\$ 1,367	\$ 1,361	\$ 1,727
State	300	289	203
Total current	1,667	1,650	1,930
Deferred:			
Federal	464	365	(6,594)
State	85	4	128
Total deferred	549	369	(6,466)
Total	\$ 2,216	\$ 2,019	\$ (4,536)

Reconciliation of the U.S. federal statutory income tax rate to the effective tax rate was as follows:

	Years ended December 31,		
	2019	2018	2017
U.S. Federal statutory income tax rate	21.0%	21.0%	35.0%
State income taxes, net of federal tax benefit	3.3	2.7	2.8
Tax law change	—	—	(97.2)
Other, net	—	0.2	(0.4)
Effective tax rate	24.3%	23.9%	(59.8)%

The components of deferred tax assets and liabilities were as follows (in millions):

	December 31, 2019	December 31, 2018
Deferred tax liabilities:		
Property and equipment	\$ (14,351)	\$ (13,935)
Operating lease right-of-use assets	(486)	—
Other	(529)	(349)
Total deferred tax liabilities	(15,366)	(14,284)
Deferred tax assets:		
Operating lease liabilities	469	—
Compensation and benefits	155	162
Casualty and environmental	112	158
Other	200	89
Total deferred tax assets	936	409
Net deferred tax liability	\$ (14,430)	\$ (13,875)

BNSF Railway and BNSF are included in the consolidated U.S. federal income tax return of Berkshire. In accordance with the income tax allocation agreement between BNSF and BNSF Railway, BNSF Railway makes payments to or receives refunds from BNSF based on its separate consolidated tax liabilities.

All U.S. federal income tax returns of BNSF Railway are closed for audit through the tax period ended December 31, 2011. BNSF Railway is currently under examination for the years 2012 through 2016 as part of Berkshire's consolidated U.S. federal income tax return.

BNSF Railway and its subsidiaries have various state income tax returns in the process of examination, administrative appeal or litigation. State income tax returns are generally subject to examination for a period of three to five years after filing of the respective return. The state impact of any federal changes remains subject to examination by various states for a period of up to one year after formal notification to the states.

Tax Reform

As a result of the Tax Act signed into law on December 22, 2017, the provision for income taxes for the fourth quarter of 2017 was adjusted to reflect the revaluation of BNSF Railway’s deferred tax liability by \$7.4 billion as a result of the reduction of the federal income tax rate from 35 percent to 21 percent effective January 1, 2018. The effective tax rate for 2017 was negative 59.8 percent. Without the decrease to income tax expense arising from the Tax Act, the effective tax rate for 2017 would have been positive 37.4 percent.

Uncertain Tax Positions

The amount of unrecognized tax benefits for the years ended December 31, 2019, 2018 and 2017, was \$46 million, \$50 million, and \$57 million, respectively. The amount of unrecognized tax benefits as of December 31, 2019 that would affect the Company’s effective tax rate if recognized was \$33 million, computed at the federal income tax rate expected to be applicable in the taxable period in which the amount may be incurred by the Company. A reconciliation of the beginning and ending amount of unrecognized tax benefits is as follows (in millions):

	Years ended December 31,		
	2019	2018	2017
Beginning balance	\$ 50	\$ 57	\$ 62
Additions for tax positions related to current year	8	2	7
Additions (reductions) for tax positions taken in prior years	(6)	5	(1)
Additions (reductions) for tax positions as a result of:			
Lapse of statute of limitations	(6)	(14)	(11)
Ending balance	\$ 46	\$ 50	\$ 57

It is expected that the amount of unrecognized tax benefits will change in the next twelve months; however, BNSF Railway does not expect the change to have a significant impact on the results of operations, the financial position or the cash flows of the Company.

The Company recognizes interest accrued related to unrecognized tax benefits in interest expense and penalties in income tax expense in the Consolidated Statements of Income. The Company had recorded a liability of approximately \$7 million for interest for both years ended December 31, 2019 and 2018.

6. Accounts Receivable, Net

Accounts receivable, net consists of freight and other receivables, reduced by an allowance for bill adjustments and uncollectible accounts, based upon expected collectibility. As of December 31, 2019 and 2018, \$92 million and \$85 million, respectively, of such allowances had been recorded.

7. *Property and Equipment, Net*

Property and equipment, net (in millions), and the corresponding ranges of estimated useful lives were as follows:

	December 31, 2019	December 31, 2018	Range of Estimated Useful Life
Land for transportation purposes	\$ 6,188	\$ 6,216	—
Track structure	25,585	24,214	15 – 50 years
Other roadway	30,481	29,077	10 – 100 years
Locomotives	8,533	8,660	8 – 36 years
Freight cars and other equipment	3,567	3,100	8 – 41 years
Computer hardware, software and other	1,310	1,197	6 – 15 years
Construction in progress	744	664	—
Total cost	76,408	73,128	
Less accumulated depreciation and amortization	(12,065)	(9,981)	
Property and equipment, net	\$ 64,343	\$ 63,147	

The Consolidated Balance Sheets as of December 31, 2019 and 2018, included \$445 million, net of \$349 million of amortization, and \$479 million, net of \$282 million of amortization, respectively, for property and equipment under finance leases, primarily for rolling stock. Additionally, included within other assets are capitalized right-to-use fixed assets of \$1.1 billion at both December 31, 2019 and 2018, and related accumulated amortization of \$338 million and \$310 million, as of December 31, 2019 and 2018, respectively.

The Company capitalized \$15 million, \$24 million and \$22 million of interest for the years ended December 31, 2019, 2018 and 2017, respectively.

8. *Goodwill*

As a result of the Merger on February 12, 2010, the Company recorded \$14.8 billion of goodwill.

During the years ended December 31, 2019, 2018 and 2017, no impairment losses were incurred and there were no accumulated impairment losses related to goodwill, at both December 31, 2019 and 2018. As of both December 31, 2019 and 2018, the carrying value of goodwill was \$14.8 billion.

9. *Leases*

On January 1, 2019, the Company adopted ASU No. 2016-02, Leases (Topic 842), using a modified retrospective approach for leases existing at or entered into after the effective date. In addition, the Company elected the package of practical expedients permitted under the transition guidance within the new standard. The standard requires the recognition of right-of-use assets and lease liabilities for operating leases on the Company's Consolidated Balance Sheets. At adoption, assets and liabilities in the Company's Consolidated Balance Sheets increased approximately \$2.3 billion. The accounting for finance leases remained unchanged. There was no effect of adopting Topic 842 on member's equity, operating income, or net income. Results for reporting periods beginning after January 1, 2019 are presented under Topic 842, while prior period amounts have not been adjusted.

The following table shows the components of lease cost (in millions):

Lease Cost	Year Ended December 31, 2019
Operating lease cost	\$ 476
Finance lease cost:	
Amortization of right-of-use assets	37
Interest on lease liabilities	24
Short-term lease cost	85
Total lease cost	\$ 622

Supplemental balance sheet information related to leases was as follows (in millions):

Operating Leases	December 31, 2019
Operating lease right-of-use assets	\$ 2,264
Accounts payable and other current liabilities	451
Operating lease liabilities	1,614
Total operating lease liabilities	\$ 2,065

Finance Leases	December 31, 2019
Property and equipment	\$ 794
Accumulated depreciation	(349)
Property and equipment, net	\$ 445
Long-term debt due within one year	\$ 48
Long-term debt	324
Total finance lease liabilities	\$ 372

Supplemental cash flow information related to leases was as follows (in millions):

Cash Flow	Year Ended December 31, 2019
Cash paid for amounts included in the measurement of lease obligations:	
Operating cash flows for operating leases	\$ 407
Operating cash flows for finance leases	\$ 25
Financing cash flows for finance leases	\$ 47
Right-of-use assets obtained in exchange for lease obligations:	
Operating leases	\$ 53

Other information related to leases was as follows:

Other Information	December 31, 2019
Weighted-average remaining lease term (in years):	
Operating leases	7.7
Finance leases	4.5
Weighted-average discount rate:	
Operating leases	3.7%
Finance leases	6.4%

Maturities of lease liabilities as of December 31, 2019 are summarized as follows (in millions):

	Operating Leases	Finance Leases
2020	\$ 494	\$ 70
2021	422	200
2022	337	35
2023	295	28
2024	247	24
Thereafter	562	77
Total lease payments	2,357	434
Less amount representing interest	(292)	(62)
Total	\$ 2,065	\$ 372

Future minimum lease payments as of December 31, 2018 are summarized as follows (in millions):

	Operating Leases	Capital Leases
2019	\$ 396	\$ 72
2020	492	69
2021	417	200
2022	325	35
2023	287	28
Thereafter	781	101
Total lease payments	\$ 2,698	505
Less amount representing interest		(86)
Total lease obligations		419
Less current obligations		(47)
Long-term lease obligations		\$ 372

Lease rental expense for all operating leases, excluding per diem leases, was \$549 million and \$581 million for the years ended December 31, 2018 and 2017, respectively.

10. Accounts Payable and Other Current Liabilities

Accounts payable and other current liabilities consisted of the following (in millions):

	December 31, 2019	December 31, 2018
Compensation and benefits payable	\$ 742	\$ 910
Property and income tax liabilities	711	563
Operating leases - current	451	—
Accounts payable	427	180
Customer incentives	231	231
Capital expenditure estimated liabilities	120	188
Casualty and environmental liabilities	115	120
Rents and leases	86	117
Other	736	773
Total	\$ 3,619	\$ 3,082

11. Debt

Debt outstanding, excluding finance leases, was as follows (in millions):

	December 31, 2019 ^a		December 31, 2018 ^a	
Notes and debentures, due 2022	\$ 200	8.8%	\$ 200	8.8%
Equipment obligations, due 2020 to 2028	447	3.6	470	3.6
Mortgage bonds, due 2020 to 2047	81	4.5	81	4.5
Financing obligations, due 2020 to 2029	192	6.1	195	6.1
Unamortized fair value adjustment under acquisition method accounting, discount, debt issuance costs, and other, net	(20)		(16)	
Total	900		930	
Less current portion of long-term debt	(73)	5.6%	(33)	4.3%
Long-term debt	\$ 827		\$ 897	

^a Amounts represent debt outstanding and weighted average effective interest rates for 2019 and 2018, respectively. Maturities are as of December 31, 2019.

As of December 31, 2019, certain BNSF Railway properties and other assets were subject to liens securing \$81 million of mortgage debt. Certain locomotives and rolling stock of BNSF Railway were subject to equipment obligations.

The fair value of BNSF Railway's debt is primarily based on market value price models using observable market-based data for the same or similar issues, or on the estimated rates that would be offered to BNSF Railway for debt of the same remaining maturities (Level 2 inputs).

The following table provides fair value information for the Company's debt obligations including principal cash flows, related weighted average interest rates by contractual maturity dates and fair value. The Company had no outstanding variable rate debt as of December 31, 2019.

	December 31, 2019						Total	Fair Value
	Maturity Date							
	2020	2021	2022	2023	2024	Thereafter		
Fixed-rate debt (in millions)	\$73	\$32	\$303	\$31	\$54	\$407	\$900	\$1,005
Average interest rate	5.6%	4.3%	8.0%	4.3%	2.9%	3.7%	5.2%	

As of December 31, 2018, the fair value of fixed-rate debt was \$983 million.

Guarantees

As of December 31, 2019, BNSF Railway has not been called upon to perform under the guarantees specifically disclosed in this footnote and does not anticipate a significant performance risk in the foreseeable future.

Debt and other obligations of non-consolidated entities guaranteed by the Company as of December 31, 2019, were as follows (dollars in millions):

	Guarantees					
	BNSF Railway Ownership Percentage	Principal Amount Guaranteed	Maximum Future Payments	Maximum Recourse Amount^a	Remaining Term (in years)	Capitalized Obligations
Kinder Morgan Energy Partners, L.P.	0.5%	\$ 190	\$ 190	\$ —	Termination of Ownership	\$ 2 ^b
Chevron Phillips Chemical Company LP	—%	N/A ^d	N/A ^d	N/A ^d	8	\$ 16 ^c

^a Reflects the maximum amount the Company could recover from a third party other than the counterparty.

^b Reflects capitalized obligations that are recorded on the Company's Consolidated Balance Sheets.

^c Reflects the asset and corresponding liability for the fair value of these guarantees required by authoritative accounting guidance related to guarantees.

^d There is no cap to the liability that can be sought from BNSF Railway for BNSF Railway's negligence or the negligence of the indemnified party. However, BNSF Railway could receive reimbursement from certain insurance policies if the liability exceeds a certain amount.

Kinder Morgan Energy Partners, L.P.

Santa Fe Pacific Pipelines, Inc., an indirect, wholly-owned subsidiary of BNSF Railway, has a guarantee in connection with its remaining special limited partnership interest in Santa Fe Pacific Pipeline Partners, L.P. (SFPP), a subsidiary of Kinder Morgan Energy Partners, L.P., to be paid only upon default by the partnership. All obligations with respect to the guarantee will cease upon termination of ownership rights, which would occur upon a put notice issued by BNSF Railway or the exercise of the call rights by the general partners of SFPP.

Chevron Phillips Chemical Company LP

BNSF Railway has an indemnity agreement with Chevron Phillips Chemical Company LP (Chevron Phillips), granting certain rights of indemnity from BNSF Railway, in order to facilitate access to a storage facility. Under certain circumstances, payment under this obligation may be required in the event Chevron Phillips were to incur certain liabilities or other incremental costs resulting from trackage access.

Indemnities

In the ordinary course of business, BNSF Railway enters into agreements with third parties that include indemnification clauses. The Company believes that these clauses are generally customary for the types of agreements in which they are included. At times, these clauses may involve indemnification for the acts of the Company, its employees and agents, indemnification for another party's acts, indemnification for future events, indemnification based upon a certain standard of performance, indemnification for liabilities arising out of the Company's use of leased equipment or other property, or other types of indemnification. Despite the uncertainty whether events which would trigger the indemnification obligations would ever occur, the Company does not believe that these indemnity agreements will have a material adverse effect on the Company's results of operations, financial position or liquidity. Additionally, the Company believes that, due to lack of historical payment experience, the fair value of indemnities cannot be estimated with any amount of certainty and that the fair value of any such amount would be immaterial to the Consolidated Financial Statements. Unless separately disclosed above, no fair value liability related to indemnities has been recorded in the Consolidated Financial Statements.

12. Commitments and Contingencies

Personal Injury

BNSF Railway's personal injury liability includes the cost of claims for employee work-related injuries, third-party claims, and asbestos claims. BNSF Railway records a liability for asserted and unasserted claims when the expected loss is both probable and reasonably estimable. Because of the uncertainty of the timing of future payments, the liability is undiscounted. Defense and processing costs, which are recorded on an as-reported basis, are not included in the recorded liability. Expense accruals and adjustments are classified as materials and other in the Consolidated Statements of Income.

Personal injury claims by BNSF Railway employees are subject to the provisions of the Federal Employers' Liability Act (FELA) rather than state workers' compensation laws. Resolution of these cases under FELA's fault-based system requires either a finding of fault by a jury or an out of court settlement. Third-party claims include claims by non-employees for compensatory damages and may, from time to time, include requests for punitive damages or treatment of the claim as a class action.

BNSF Railway estimates its personal injury liability claims and expense using standard actuarial methodologies based on the covered population, activity levels and trends in frequency, and the costs of covered injuries. The Company monitors actual experience against the forecasted number of claims to be received, the forecasted number of claims closing with payment, and expected claim payments and records adjustments as new events or changes in estimates develop.

BNSF Railway is party to asbestos claims by employees and non-employees who may have been exposed to asbestos. Because of the relatively finite exposed population, the Company has recorded an estimate for the full amount of probable exposure. This is determined through an actuarial analysis based on estimates of the exposed population, the number of claims likely to be filed, the number of claims that will likely require payment, and the cost per claim. Estimated filing and dismissal rates and average cost per claim are determined utilizing recent claim data and trends.

The following table summarizes the activity in the Company's accrued obligations for personal injury claims (in millions):

	Years ended December 31,		
	2019	2018	2017
Beginning balance	\$ 308	\$ 307	\$ 367
Accruals / changes in estimates	104	76	(1)
Payments	(114)	(75)	(59)
Ending balance	\$ 298	\$ 308	\$ 307
Current portion of ending balance	\$ 75	\$ 80	\$ 85

The amount recorded by the Company for the personal injury liability is based upon the best information currently available. Because of the uncertainty surrounding the ultimate outcome of personal injury claims, it is reasonably possible that future costs to resolve these claims may be different from the recorded amounts. The Company estimates that costs to resolve the liability may range from approximately \$255 million to \$355 million.

Although the final outcome of these personal injury matters cannot be predicted with certainty, it is the opinion of BNSF Railway that none of these items, when finally resolved, will have a material adverse effect on the Company's financial position or liquidity. However, the occurrence of a number of these items in the same period could have a material adverse effect on the results of operations in a particular quarter or fiscal year.

Environmental

BNSF Railway is subject to extensive federal, state, and local environmental regulation. The Company's operating procedures include practices to protect the environment from the risks inherent in railroad operations, which frequently involve transporting chemicals and other hazardous materials. Additionally, many of BNSF Railway's land holdings are or have been used for industrial or transportation-related purposes or leased to commercial or industrial companies whose activities may have resulted in discharges onto the property. Under federal (in particular, the Comprehensive Environmental Response, Compensation, and Liability Act) and state statutes, the Company may be held jointly and severally liable for cleanup and enforcement costs associated with a particular site without regard to fault or the legality of the original conduct. The Company participates in the study, cleanup, or both of environmental contamination at approximately 200 sites.

Environmental costs may include, but are not limited to, site investigations, remediation, and restoration. The liability is recorded when the expected loss is both probable and reasonably estimable and is undiscounted due to uncertainty of the timing of future payments. Expense accruals and adjustments are classified as materials and other in the Consolidated Statements of Income.

BNSF Railway estimates the cost of cleanup efforts at its known environmental sites based on experience gained from cleanup efforts at similar sites, estimated percentage to closure ratios, possible remediation work plans, estimates of the costs and likelihood of each possible outcome, historical payment patterns, and benchmark patterns developed from data accumulated from industry and public sources. The Company monitors actual experience against expectations and records adjustments as new events or changes in estimates develop.

The following table summarizes the activity in the Company's accrued obligations for environmental matters (in millions):

	Years ended December 31,		
	2019	2018	2017
Beginning balance	\$ 298	\$ 317	\$ 342
Accruals / changes in estimates	5	—	5
Payments	(21)	(19)	(30)
Ending balance	\$ 282	\$ 298	\$ 317
Current portion of ending balance	\$ 40	\$ 40	\$ 40

The amount recorded by the Company for the environmental liability is based upon the best information currently available. It has not been reduced by anticipated recoveries from third parties and includes both asserted and unasserted claims. BNSF Railway's total cleanup costs at these sites cannot be predicted with certainty due to various factors, such as the extent of corrective actions that may be required, evolving environmental laws and regulations, advances in environmental technology, the extent of other parties' participation in cleanup efforts, developments in ongoing environmental analyses related to sites determined to be contaminated, and developments in environmental surveys and studies of contaminated sites. Because of the uncertainty surrounding various factors, it is reasonably possible that future costs to settle these claims may be different from the recorded amounts. The Company estimates that costs to settle the liability may range from approximately \$230 million to \$380 million.

Although the final outcome of these environmental matters cannot be predicted with certainty, it is the opinion of BNSF Railway that none of these items, when finally resolved, will have a material adverse effect on the Company's financial position or liquidity. However, the occurrence of a number of these items in the same period could have a material adverse effect on the results of operations in a particular quarter or fiscal year.

Other Claims and Litigation

In addition to personal injury and environmental matters, BNSF Railway and its subsidiaries are also parties to a number of other legal actions and claims, governmental proceedings, and private civil suits arising in the ordinary course of business, including those related to disputes and complaints involving certain transportation rates and charges. Some of the legal proceedings include claims for compensatory damages and may, from time to time, include requests for punitive damages or treatment of the claim as a class action. Although the final outcome of these matters cannot be predicted with certainty, it is the opinion of BNSF Railway that none of these items, when finally resolved, will have a material adverse effect on the Company's financial position or liquidity. However, the occurrence of a number of these items in the same period could have a material adverse effect on the results of operations in a particular quarter or fiscal year.

Other Commitments

In the normal course of business, the Company enters into long-term contractual requirements for future goods and services needed for the operations of the business. Such commitments are not in excess of expected requirements and are not reasonably likely to result in performance penalties or payments that would have a material adverse effect on the Company's liquidity.

In 2019, the Company experienced significant flooding across parts of the network. The Company is insured for certain costs incurred as a result of the flooding and has compiled and submitted a claim to its third-party insurers. The Company may recover up to \$250 million associated with property damage, business interruption, and extra expense incurred as part of the flooding.

13. Employment Benefit Plans

BNSF provides a funded, noncontributory qualified pension plan (BNSF Retirement Plan), which covers most non-union employees, and an unfunded non-tax-qualified pension plan (BNSF Supplemental Retirement Plan), which covers certain officers and other employees. The benefits under these pension plans are based on years of credited service and the highest consecutive sixty months of compensation for the last ten years of salaried employment with the Company. BNSF Railway also provides two funded, noncontributory qualified pension plans which cover certain union employees of the former The Atchison, Topeka and Santa Fe Railway Company (Union Plans). The benefits under these pension plans are based on elections made at the time the plans were implemented. With respect to the funded plans, the Company's funding policy is to contribute annually not less than the regulatory minimum and not more than the maximum amount deductible for income tax purposes. The BNSF Retirement Plan, the BNSF Supplemental Retirement Plan, and the Union Plans are collectively referred to herein as the Pension Plans.

During the first quarter of 2019, the Company amended the BNSF Retirement Plan and the BNSF Supplemental Retirement Plan. Non-union employees hired on or after April 1, 2019 are not eligible to participate in these retirement plans and instead receive an additional employer contribution as part of the qualified 401(k) plan based on the employees' age and years of service. Current employees will be transitioned away from the retirement plans within the next ten years, beginning October 1, 2019, and upon transition will be eligible for the additional employer contribution. As a result of the plan amendments, the Company recognized a curtailment gain of \$120 million in the first quarter of 2019 consisting of \$117 million for the reduction in projected benefit obligation and \$3 million for the recognition of prior service credits.

Components of the net (benefit) cost for the Pension Plans were as follows (in millions):

	Pension Benefits		
	Years ended December 31,		
	2019	2018	2017
Service cost	\$ 32	\$ 46	\$ 42
Interest cost	81	82	88
Expected return on plan assets	(160)	(157)	(149)
Amortization of net loss	—	1	—
Amortization of prior service credits	(3)	(1)	—
Curtailment gain	(117)	—	—
Settlement loss (gain)	5	(1)	—
Net (benefit) cost recognized	\$ (162)	\$ (30)	\$ (19)

The projected benefit obligation is the present value of benefits earned to date by plan participants, including the effect of assumed future salary increases. The following tables show the change in projected benefit obligation for the Pension Plans (in millions):

Change in Benefit Obligation	Pension Benefits	
	December 31, 2019	December 31, 2018
Projected benefit obligation at beginning of period	\$ 2,198	\$ 2,387
Service cost	32	46
Interest cost	81	82
Actuarial loss (gain)	279	(158)
Benefits paid	(142)	(149)
Curtailments	(117)	—
Settlements	(36)	(10)
Projected benefit obligation at end of period	2,295	2,198
Component representing future salary increases	(44)	(136)
Accumulated benefit obligation at end of period	\$ 2,251	\$ 2,062

The following tables show the change in plan assets of the Pension Plans (in millions):

Change in Plan Assets	Pension Benefits	
	December 31, 2019	December 31, 2018
Fair value of plan assets at beginning of period	\$ 2,336	\$ 2,669
Actual return (loss) on plan assets	482	(189)
Employer contributions ^a	—	3
Benefits paid	(134)	(137)
Settlements	(12)	(10)
Fair value of plan assets at measurement date	\$ 2,672	\$ 2,336

^a Employer contributions were classified as Other, Net under Operating Activities in the Company's Consolidated Statements of Cash Flows.

The following table shows the funded status of the Pension Plans, defined as plan assets less the projected benefit obligation (in millions):

	Pension Benefits	
	December 31, 2019	December 31, 2018
Funded status (plan assets less projected benefit obligations)	\$ 377	\$ 138

Of the net pension assets of \$377 million and \$138 million recognized as of December 31, 2019 and December 31, 2018, respectively, \$9 million and \$3 million were included in other current liabilities as of December 31, 2019 and 2018, respectively, and \$465 million and \$240 million were included in other assets as of December 31, 2019 and 2018, respectively.

The BNSF Supplemental Retirement Plan and the Union Plans have accumulated and projected benefit obligations in excess of plan assets. The following table shows the projected benefit obligation, accumulated benefit obligation, and fair value of plan assets for the plans (in millions):

	December 31, 2019	December 31, 2018
Projected benefit obligation	\$ 113	\$ 138
Accumulated benefit obligation	\$ 113	\$ 138
Fair value of plan assets	\$ 25	\$ 36

Actuarial gains and losses and prior service credits are recognized in the Consolidated Balance Sheets through an adjustment to accumulated other comprehensive income (loss) (AOCI). The following tables show the pre-tax change in AOCI attributable to the components of the net cost and the change in benefit obligation (in millions):

Change in AOCI	Pension Benefits		
	Years ended December 31,		
	2019	2018	2017
Beginning balance	\$ 182	\$ 371	\$ 207
Amortization of net loss	—	1	—
Amortization of prior service credits	(3)	(1)	—
Actuarial gain (loss)	44	(188)	164
Settlements	5	(1)	—
Ending balance	\$ 228	\$ 182	\$ 371

Approximately \$1 million, net of tax, of the actuarial gains from defined benefit pension plans in AOCI are required to be amortized into net periodic benefit cost over the next fiscal year. Pre-tax amounts currently recognized in AOCI consist of the following (in millions):

	Pension Benefits	
	Years ended December 31,	
	2019	2018
Net gain (loss)	\$ 227	\$ 183
Prior service credits	—	3
Settlements	1	(4)
Pre-tax amount recognized in AOCI at December 31,	\$ 228	\$ 182

The assumptions used in accounting for the Pension Plans were as follows:

Assumptions Used to Determine Net Cost	Pension Benefits		
	Years ended December 31,		
	2019	2018	2017
Discount rate	4.2%	3.6%	4.1%
Expected long-term rate of return on plan assets	6.7%	6.6%	6.6%
Rate of compensation increase	3.5%	3.6%	3.3%

Assumptions Used to Determine Benefit Obligations	Pension Benefits	
	December 31, 2019	December 31, 2018
Discount rate	3.2%	4.2%
Rate of compensation increase	3.1%	3.5%

The Company determined the discount rate based on a yield curve that utilized year-end market yields of high-quality corporate bonds to develop spot rates that are matched against the plans' expected benefit payments. The discount rate used for the 2020 calculation of net benefit cost decreased to 3.2 percent for pension and 3.1 percent for retiree health and welfare benefits, which reflects market conditions at the December 31, 2019 measurement date.

Various other assumptions including retirement and withdrawal rates, compensation increases, payment form and benefit commencement age are based upon a five-year experience study. In 2016, the Company obtained an updated study which had an immaterial impact on its pension and retiree health and welfare projected benefit obligation.

The Company utilizes actuary-produced mortality tables and an improvement scale derived from the most recently available data, which were used in the calculation of its December 31, 2019 and 2018 liabilities.

Pension plan assets are generally invested with the long-term objective of earning sufficient amounts to cover expected benefit obligations while assuming a prudent level of risk. Allocations may change as a result of changing market conditions and investment opportunities.

The expected rates of return on plan assets reflect subjective assessments of expected invested asset returns over a period of several years. Actual experience may differ from the assumed rates. The expected rate of return on pension plan assets was 6.7 percent for 2019 and will be 6.7 percent for 2020.

The following table is an estimate of the impact on future net benefit cost that could result from hypothetical changes to the most sensitive assumptions, the discount rate and expected rate of return on plan assets:

Sensitivity Analysis	
Hypothetical Discount Rate Change	Change in 2020 Net Benefit Cost
	Pension
50 basis point decrease	\$ 5 million decrease
50 basis point increase	\$ 2 million increase
Hypothetical Expected Rate of Return on Plan Assets Change	Pension
50 basis point decrease	\$ 13 million increase
50 basis point increase	\$ 13 million decrease

Investments are stated at fair value. The various types of investments are valued as follows:

(i) Equity securities are valued at the last trade price at primary exchange close time on the last business day of the year (Level 1 input). If the last trade price is not available, values are based on bid, ask/offer quotes from contracted pricing vendors, brokers, or investment managers (Level 3 input or Level 2 if corroborated).

(ii) Highly liquid government obligations, such as U.S. Treasury securities, are valued based on quoted prices in active markets for identical assets (Level 1 input). Other fixed maturity securities and government obligations are valued based on institutional bid evaluations from contracted vendors. Where available, vendors use observable market-based data to evaluate prices (Level 2 input). If observable market-based data is not available, unobservable inputs such as extrapolated data, proprietary models, and indicative quotes are used to arrive at estimated prices representing the price a dealer would pay for the security (Level 3 input).

(iii) Investment funds / other are valued at the daily net asset value of shares held at year end. Net asset value is considered a Level 1 input if net asset value is computed daily and redemptions at this value are available to all shareholders without restriction. Net asset value is considered a Level 2 input if the fund may restrict share redemptions under limited circumstances or if net asset value is not computed daily. Net asset value is considered a Level 3 input if shares could not be redeemed on the reporting date and net asset value cannot be corroborated by trading activity.

The following table summarizes the investments of the funded pension plans as of December 31, 2019, based on the inputs used to value them (in millions):

Asset Category	Total as of December 31, 2019	Level 1 Inputs^a	Level 2 Inputs^a	Level 3 Inputs^a
Cash and equivalents	\$ 32	\$ 2	\$ 30	\$ —
Equity securities ^b	2,518	2,518	—	—
Government obligations	111	111	—	—
Other fixed maturity securities	11	—	11	—
Investment funds and other	—	—	—	—
Total^c	\$ 2,672	\$ 2,631	\$ 41	\$ —

^a See Note 2 to the Consolidated Financial Statements under the heading “Fair Value Measurements” for a definition of each of these levels of inputs.

^b As of December 31, 2019, three equity securities each exceeded 10 percent of total plan assets. These investments represent approximately 58 percent of total plan assets.

^c Excludes less than \$1 million accrued for dividend and interest receivable.

Comparative Prior Year Information

The following table summarizes the investments of the funded pension plans as of December 31, 2018, based on the inputs used to value them (in millions):

Asset Category	Total as of December 31, 2018	Level 1 Inputs^a	Level 2 Inputs^a	Level 3 Inputs^a
Cash and equivalents	\$ 21	\$ 1	\$ 20	\$ —
Equity securities ^b	1,895	1,895	—	—
Government obligations	403	403	—	—
Other fixed maturity securities	14	—	14	—
Investment funds and other	3	3	—	—
Total^c	\$ 2,336	\$ 2,302	\$ 34	\$ —

^a See Note 2 to the Consolidated Financial Statements under the heading “Fair Value Measurements” for a definition of each of these levels of inputs.

^b As of December 31, 2018, three equity securities each exceeded 10 percent of total plan assets. These investments represented approximately 51 percent of total plan assets.

^c Excludes less than \$1 million accrued for dividend and interest receivable.

The Company is not required to make contributions to its funded pension plans in 2020.

The following table shows expected benefit payments from the Pension Plans for the next five fiscal years and the aggregate five years thereafter (in millions):

Fiscal year	Expected Pension Plan Benefit Payments ^a
2020	\$ 156
2021	\$ 144
2022	\$ 140
2023	\$ 136
2024	\$ 132
2025-2029	\$ 620

^a Primarily consists of the BNSF Retirement Plan payments, which are made from the plan trust and do not represent an immediate cash outflow to the Company.

Other Benefit Plans

BNSF and BNSF Railway sponsors qualified 401(k) plans that cover substantially all employees and a non-qualified defined contribution plan that covers certain officers and other employees. BNSF Railway matches contributions made by non-union employees and a limited number of union employees subject to certain percentage limits of the employees' earnings. Non-union employees hired on or after April 1, 2019 and employees hired before that date who have transitioned from the BNSF Retirement Plan are also eligible for an additional employer contribution based on the employee's age and years of service. BNSF Railway's 401(k) expense was \$40 million, \$35 million, and \$34 million during the years ended December 31, 2019, 2018, and 2017, respectively.

Certain salaried employees of BNSF Railway who met age and years of service requirements and who began salaried employment prior to September 22, 1995 are eligible for medical benefits, including prescription drug coverage, during retirement. For pre-Medicare participants, the postretirement medical and prescription drug benefit is contributory and provides benefits to retirees and their covered dependents. For Medicare eligible participants, a yearly stipend is recorded in a Health Reimbursement Account (HRA) established on their behalf. Retirees can use these HRAs to reimburse themselves for eligible out-of-pocket expenses, as well as premiums for personal supplemental insurance policies. HRAs are unfunded, so no funds are expended by the Company until the reimbursements are paid to participants. As of December 31, 2019, the projected benefit obligation associated with the retiree health and welfare plans was \$224 million. For the year ended December 31, 2019, the service cost associated with the health and welfare plans was less than \$1 million.

Under collective bargaining agreements, BNSF Railway participates in multi-employer benefit plans that provide certain postretirement health care and life insurance benefits for eligible union employees. Health care claim payments and life insurance premiums paid attributable to retirees, which are generally expensed as incurred, were \$59 million, \$64 million and \$75 million during the years ended December 31, 2019, 2018 and 2017, respectively. The average number of employees covered under these plans was 37,000, 37,000, and 35,000 during the years ended December 31, 2019, 2018, and 2017, respectively.

14. Related Party Transactions

BNSF Railway is involved with BNSF and certain of its subsidiaries in related party transactions in the ordinary course of business, which include payments made on each other's behalf and performance of services. Under the terms of a tax allocation agreement with BNSF, BNSF Railway made federal and state income tax payments, net of refunds, of \$1.4 billion, \$1.6 billion and \$2.0 billion during the years ended December 31, 2019, 2018 and 2017, respectively, which are reflected in changes in current assets and liabilities in the Consolidated Statements of Cash Flows. As of December 31, 2019 and 2018, BNSF Railway had a tax payable to BNSF of \$383 million and \$264 million, respectively.

As of December 31, 2019 and 2018, BNSF Railway had \$649 million and \$426 million, respectively, of intercompany receivables which are reflected in accounts receivable in the respective Consolidated Balance Sheets. As of December 31, 2019 and 2018, BNSF Railway had \$25 million and \$22 million of intercompany payables, respectively, which are reflected in accounts payable in the respective Consolidated Balance Sheets. Net intercompany balances are settled in the ordinary course of business.

As of December 31, 2019 and 2018, BNSF Railway had \$31.2 billion and \$25.3 billion, respectively, of intercompany notes receivable from BNSF. During the years ended December 31, 2019, 2018 and 2017, loans to BNSF were \$5.9 billion, \$5.5 billion and \$3.9 billion, respectively, partially offset by repayments received of \$146 million in 2017. There were no repayments received for the years ended December 31, 2019 and 2018. All intercompany notes have a variable interest rate of 1.0 percent above the monthly average of the daily effective Federal Funds rate. Interest is collected semi-annually on all intercompany notes receivable. Interest income from intercompany notes receivable is presented in interest income, related parties in the Consolidated Statements of Income.

BNSF Railway engages in various transactions with related parties in the ordinary course of business. The following table summarizes revenues earned by BNSF Railway for services provided to related parties and expenditures to related parties (in millions):

	Years ended December 31,		
	2019	2018	2017
Revenues	\$ 165	\$ 162	\$ 150
Expenditures	\$ 481	\$ 434	\$ 388

BNSF Railway owns 17.3 percent of TTX Company (TTX) while other North American railroads own the remaining interest. As BNSF Railway possesses the ability to exercise significant influence, but not control, over the operating and financial policies of TTX, BNSF Railway applies the equity method of accounting to its investment in TTX. The investment in TTX recorded under the equity method is recorded in other assets. Equity income or losses are recorded in materials and other in the Consolidated Statements of Income. North American railroads pay TTX car hire to use TTX's freight equipment to serve their customers. BNSF Railway's car hire expenditures incurred with TTX are included in the table above. BNSF Railway had \$656 million and \$609 million recognized as investments related to TTX in its Consolidated Balance Sheets as of December 31, 2019 and 2018, respectively.

Burlington Northern Santa Fe Insurance Company, Ltd. (BNSFIC), a wholly-owned subsidiary of BNSF, offers insurance coverage for certain risks, FELA claims, railroad protective and force account insurance claims and certain excess general liability and property coverage, and certain other claims which are subject to reinsurance. During the years ended December 31, 2019, 2018 and 2017, BNSFIC wrote insurance coverage with premiums totaling \$70 million, \$70 million, and \$74 million, respectively, for BNSF Railway, net of reimbursements from third parties. During this same time, BNSF Railway recognized \$70 million, \$70 million, and \$73 million, respectively, in expense related to those premiums, which is classified as purchased services in the Consolidated Statements of Income. As of December 31, 2019 and 2018, unamortized premiums remaining on the Consolidated Balance Sheets were \$6 million for both periods. During the years ended December 31, 2019, 2018 and 2017, BNSFIC made claim payments totaling \$110 million, \$37 million, and \$35 million, respectively, for settlement of covered claims. As of December 31, 2019 and 2018, claims receivables from BNSFIC were \$4 million and \$1 million, respectively.

15. Accumulated Other Comprehensive Income

Other comprehensive income refers to revenues, expenses, gains and losses that under generally accepted accounting principles are included in accumulated other comprehensive income, a component of equity within the Consolidated Balance Sheets, rather than net income on the Consolidated Statements of Income. Under existing accounting standards, other comprehensive income may include, among other things, unrecognized gains and losses and prior service credit related to pension and other postretirement benefit plans.

The following tables provide the components of accumulated other comprehensive income (loss) (AOCI) by component (in millions):

	Pension and Retiree Health and Welfare Benefit Items	Equity Method Investments	Total
Balance as of December 31, 2016	\$ 122	\$ (3)	\$ 119
Other comprehensive income (loss), net before reclassifications	114	—	114
Amounts reclassified from AOCI:			
Amortization of prior service credits ^a	(2)	—	(2)
Tax expense (benefit)	—	—	—
Balance as of December 31, 2017	\$ 234	\$ (3)	\$ 231
Other comprehensive income (loss), net before reclassifications	(126)	1	(125)
Amounts reclassified from AOCI:			
Reclassification due to ASU 2016-01 adoption	—	(1)	(1)
Reclassification due to ASU 2018-02 adoption	26	—	26
Amortization of actuarial losses ^a	1	—	1
Amortization of prior service credits ^a	(3)	—	(3)
Tax expense (benefit)	1	—	1
Balance as of December 31, 2018	\$ 133	\$ (3)	\$ 130
Other comprehensive income (loss), net before reclassifications	16	(1)	15
Amounts reclassified from AOCI:			
Amortization of prior service credits ^a	(4)	—	(4)
Settlement loss ^a	5	—	5
Tax expense (benefit)	(1)	—	(1)
Balance as of December 31, 2019	\$ 149	\$ (4)	\$ 145

^a This accumulated other comprehensive income component is included in the computation of net periodic pension cost (see Note 13 for additional details).

16. Quarterly Financial Data—Unaudited

In millions

2019	Fourth	Third	Second	First
Revenues	\$ 5,664	\$ 5,822	\$ 5,693	\$ 5,566
Operating income	\$ 2,093	\$ 2,177	\$ 2,011	\$ 1,778
Net income	\$ 1,785	\$ 1,821	\$ 1,700	\$ 1,601

2018	Fourth	Third	Second	First
Revenues	\$ 5,991	\$ 5,912	\$ 5,664	\$ 5,432
Operating income	\$ 2,064	\$ 2,111	\$ 1,883	\$ 1,738
Net income	\$ 1,725	\$ 1,702	\$ 1,603	\$ 1,409

Certification by Vice President

With respect to the annual financial statements and related footnotes of BNSF Railway Company (the Company) for the period ended December 31, 2019, the undersigned, Paul W. Bischler, Vice President - Controller and Chief Sourcing Officer of the Company, hereby certifies that, to his knowledge as of the date hereof, the information contained in such attached financial statements and related footnotes fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: February 21, 2020

A handwritten signature in black ink, appearing to read "Paul W. Bischler", written over a horizontal line.

Paul W. Bischler
Vice President - Controller and Chief Sourcing Officer