

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, 2018
Commission file number 1-16811



United States Steel Corporation

(Exact name of registrant as specified in its charter)

Delaware
(State of Incorporation)

25-1897152
(I.R.S. Employer Identification No.)

600 Grant Street, Pittsburgh, PA 15219-2800

(Address of principal executive offices)

Tel. No. (412) 433-1121

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

Title of Each Class	Name of Exchange on which Registered
United States Steel Corporation Common Stock, par value \$1.00	New York Stock Exchange, Chicago Stock Exchange

Indicate by check mark whether 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 Section 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 at least 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 if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§229.405 of this chapter) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

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

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 is a shell company (as defined in Rule 12b-2 of the Act). Yes No

Aggregate market value of Common Stock held by non-affiliates as of June 29, 2018 (the last business day of the registrant's most recently completed second fiscal quarter): \$6.1 billion. The amount shown is based on the closing price of the registrant's Common Stock on the New York Stock Exchange composite tape on that date. Shares of Common Stock held by executive officers and directors of the registrant are not included in the computation. However, the registrant has made no determination that such individuals are "affiliates" within the meaning of Rule 405 under the Securities Act of 1933.

There were 173,222,678 shares of United States Steel Corporation Common Stock outstanding as of February 12, 2019.

Documents Incorporated By Reference:

Portions of the Proxy Statement for the 2019 Annual Meeting of Stockholders are incorporated into Part III.

INDEX

	FORWARD-LOOKING STATEMENTS	3
	10-K SUMMARY	5
PART I		
Item 1.	BUSINESS	19
Item 1A	RISK FACTORS	43
Item 1B	UNRESOLVED STAFF COMMENTS	49
Item 2.	PROPERTIES	50
Item 3.	LEGAL PROCEEDINGS	52
Item 4.	MINE SAFETY DISCLOSURE	58
PART II		
Item 5.	MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES	61
Item 6.	SELECTED FINANCIAL DATA	63
Item 7.	MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS	64
Item 7A	QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK	93
Item 8.	FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA	F-1
Item 9.	CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE	95
Item 9A	CONTROLS AND PROCEDURES	95
Item 9B	OTHER INFORMATION	95
PART III		
Item 10.	DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE	96
Item 11.	EXECUTIVE COMPENSATION	96
Item 12.	SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS	97
Item 13.	CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE	97
Item 14.	PRINCIPAL ACCOUNTANT FEES AND SERVICES	97
PART IV		
Item 15.	EXHIBITS AND FINANCIAL STATEMENT SCHEDULE	98
Item 16.	10-K SUMMARY	107
	SIGNATURES	108
	GLOSSARY OF CERTAIN DEFINED TERMS	109
	TOTAL NUMBER OF PAGES	111

FORWARD-LOOKING STATEMENTS

This report contains information that may constitute “forward-looking statements” within the meaning of the Private Securities Litigation Reform Act of 1995, Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. We intend the forward-looking statements to be covered by the safe harbor provisions for forward-looking statements in those sections. Generally, we have identified such forward-looking statements by using the words “believe,” “expect,” “intend,” “estimate,” “anticipate,” “project,” “target,” “forecast,” “aim,” “should,” “will” and similar expressions or by using future dates in connection with any discussion of, among other things, operating performance, trends, events or developments that we expect or anticipate will occur in the future, statements relating to volume growth, share of sales and earnings per share growth, and statements expressing general views about future operating results. However, the absence of these words or similar expressions does not mean that a statement is not forward-looking. Forward-looking statements are not historical facts, but instead represent only the Company’s beliefs regarding future events, many of which, by their nature, are inherently uncertain and outside of the Company’s control. It is possible that the Company’s actual results and financial condition may differ, possibly materially, from the anticipated results and financial condition indicated in these forward-looking statements. Management believes that these forward-looking statements are reasonable as of the time made. However, caution should be taken not to place undue reliance on any such forward-looking statements because such statements speak only as of the date when made. Our Company undertakes no obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by law. In addition, forward-looking statements are subject to certain risks and uncertainties that could cause actual results to differ materially from our Company’s historical experience and our present expectations or projections. These risks and uncertainties include, but are not limited to the risks and uncertainties described in this report in “Item 1A. Risk Factors” and those described from time to time in our future reports filed with the Securities and Exchange Commission.

References in this Annual Report on Form 10-K to “U. S. Steel,” “the Company,” “we,” “us,” and “our” refer to United States Steel Corporation and its consolidated subsidiaries unless otherwise indicated by the context.

Non-Generally Accepted Accounting Principles (non-GAAP) Financial Measures

This report contains certain non-GAAP financial measures such as earnings (loss) before interest, income taxes, depreciation, depletion and amortization (EBITDA), adjusted EBITDA, adjusted net earnings (loss), adjusted net earnings (loss) per diluted share and cash conversion cycle.

We believe that EBITDA, considered along with the net earnings (loss), is a relevant indicator of trends relating to cash generating activity and provides management and investors with additional information for comparison of our operating results to the operating results of other companies.

Adjusted net earnings (loss) and adjusted net earnings (loss) per diluted share are non-GAAP measures that exclude the effects of the United Steelworkers (USW) labor agreement signing bonus and related costs, the gain associated with our retained interest in U. S. Steel Canada Inc., gains (losses) on the sale of ownership interests in equity investees, restructuring charges, impairment charges, significant temporary idling charges, restart and related costs associated with Granite City Works, debt extinguishment and other related costs, the reversal of our tax valuation allowance and effects of tax reform that are not part of the Company’s core operations. Adjusted EBITDA is also a non-GAAP measure that excludes the effects of the USW labor agreement signing bonus and related costs, the gain associated with our retained interest in U. S. Steel Canada Inc., gains (losses) on the sale of ownership interests in equity investees, restructuring charges, impairment charges and significant temporary idling charges and restart and related costs associated with Granite City Works. We present adjusted net earnings (loss), adjusted net earnings (loss) per diluted share and adjusted EBITDA to enhance the understanding of our ongoing operating performance and established trends affecting our core operations, by excluding the effects of events that can obscure underlying trends. U. S. Steel’s management considers adjusted net earnings (loss), adjusted net earnings (loss) per diluted share and adjusted EBITDA as alternative measures of operating performance and not alternative measures of the Company’s liquidity. U. S. Steel’s management considers adjusted net earnings (loss), adjusted net earnings (loss) per diluted share and adjusted EBITDA useful to investors by facilitating a comparison of our operating performance to the operating performance of our competitors. Additionally, the presentation of adjusted net earnings (loss), adjusted net earnings (loss) per diluted share and adjusted EBITDA provides insight into management’s view and assessment of the Company’s ongoing operating performance, because management does not consider the adjusting items when evaluating the Company’s financial performance or in preparing the Company’s quarterly or annual financial Guidance. Adjusted net earnings (loss), adjusted net earnings (loss) per diluted share and adjusted EBITDA should not be

considered a substitute for net earnings (loss), earnings (loss) per diluted share or other financial measures as computed in accordance with U.S. GAAP and is not necessarily comparable to similarly titled measures used by other companies.

We believe the cash conversion cycle is a useful measure in providing investors with information regarding our cash management performance and is a widely accepted measure of working capital management efficiency. The cash conversion cycle should not be considered in isolation or as an alternative to other GAAP metrics as an indicator of performance.

10-K SUMMARY

This section provides an overview of U. S. Steel's business, strategy and financial performance for 2018. It does not contain all of the information that may be important to a reader. Please read the entire annual report on Form 10-K.

Our vision is for U. S. Steel to be the industry leader in delivering high-quality, value added products and innovative solutions that address our customers' most challenging steel needs for the future. Underlying our efforts is our belief that we must operate as a principled company committed to a code of conduct that is rooted in our Gary Principles and our core values. Our core values are articulated in our **S.T.E.E.L.** principles set forth in our recently updated Code of Ethical Business Conduct - **S**afety First, **T**rust and Respect, **E**nvironmentally Friendly Activities, **E**thical Behavior, and **L**awful Business Conduct. These core beliefs have served us well for much of our history, and our commitment to them remains as strong as the products we make every day.

Our vision is about more than U. S. Steel; it is about reinforcing the economic and societal benefits associated with strong domestic manufacturing capabilities, of which steel is a foundational industry. During 2018, we continued to transform U. S. Steel through a disciplined approach committed to finding ways to innovate, grow, and overcome obstacles in order to create value and benefit the long-term interests of all U. S. Steel stakeholders, including stockholders, employees, customers and the communities where we do business. This work also included the development of a refreshed corporate strategy designed to build on our strengths and maximize the advantages we have over our competition. Our strategy builds on our proven processes and tools for our intense daily operational focus on safety, quality, delivery and cost. This refreshed strategy was approved by our Board of Directors in July 2018 and incorporates three critical success factors: winning in the most attractive markets, moving down the cost curve and moving up the talent curve, each of which is further described below.

First, we will focus on the most attractive steel markets by investing in our customers, with an emphasis on creating differentiated, innovative and value-added solutions that will help them succeed.

Second, we aim to move down the cost curve. Our efforts to improve our financial performance and our strong balance sheet enable us to reduce our costs so that we can achieve operational improvements from advanced technologies. We are also investing in our facilities to increase productivity and improve our capabilities, including through the ongoing multi-year asset revitalization effort in our North American Flat-Rolled (Flat-Rolled) segment, as well as reliability-centered maintenance activities. We are implementing reliability-centered maintenance focusing on thirteen priority assets and a few others within our Flat-Rolled segment.

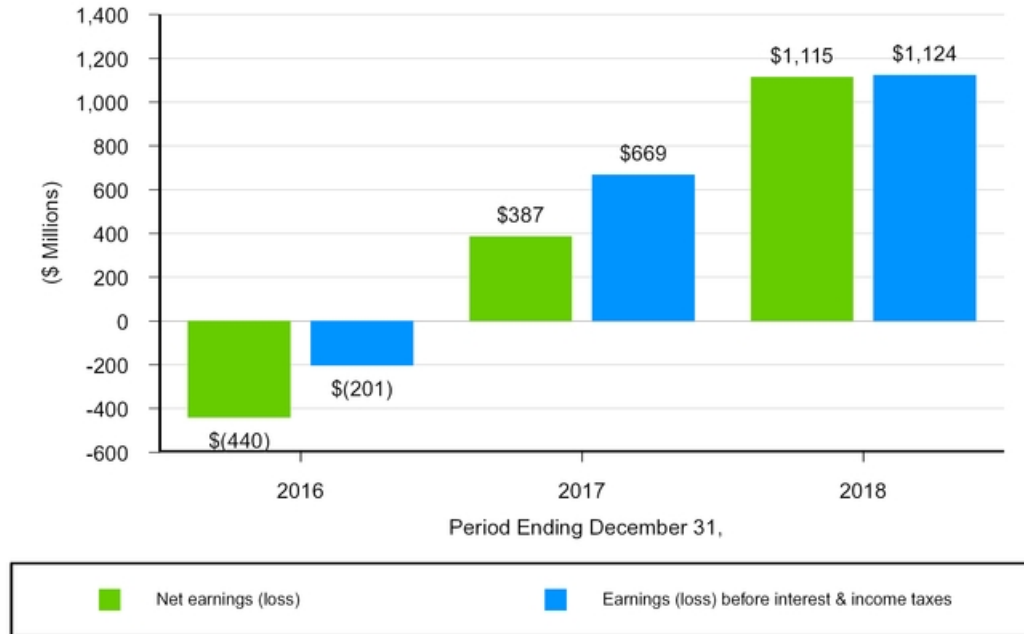
Third, we want to move up the talent curve by investing in our employees by providing the training and resources they need to succeed. This will help us reinforce a culture where accountability, fairness and respect are foundational, and high performance and diversity in all its forms are valued and celebrated.

We believe effectively executing our strategy will secure our position as an industry leader by reducing our vulnerabilities during down cycles, accentuating our advantages in up cycles, and enabling the creation of value - and the related rewards - for all U. S. Steel stakeholders through business cycles.

KEY PERFORMANCE INDICATORS

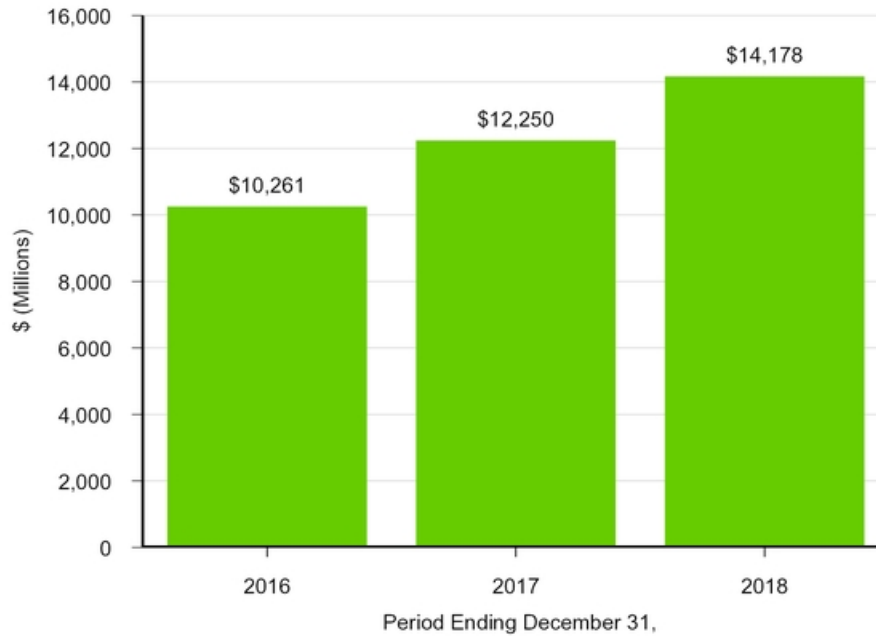
This section provides an overview of select key performance indicators for U. S. Steel which management and investors use to assess the Company's financial performance. It does not contain all of the information you should consider. Fluctuations for year to year changes are explained in Item 7. "Management's Discussion and Analysis of Financial Condition and Results of Operations."

Statement of Operations Data



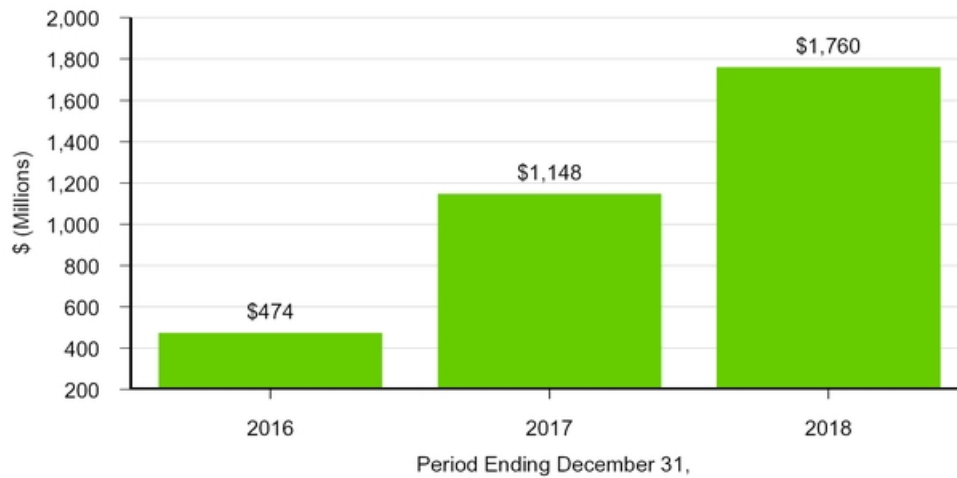
- Our continued investments in upgrading and improving our assets helped to provide a more stable operating performance in 2018.
- Our 2018 net earnings include a favorable impact of \$374 million due to the reversal of a portion of our deferred tax asset valuation allowance.
- Our 2017 and 2018 results include a favorable impact of \$344 million and \$455 million, respectively, related to our previously disclosed change in accounting method for property, plant and equipment.
- Our 2017 net earnings include an \$81 million income tax benefit from tax reform.

Net Sales



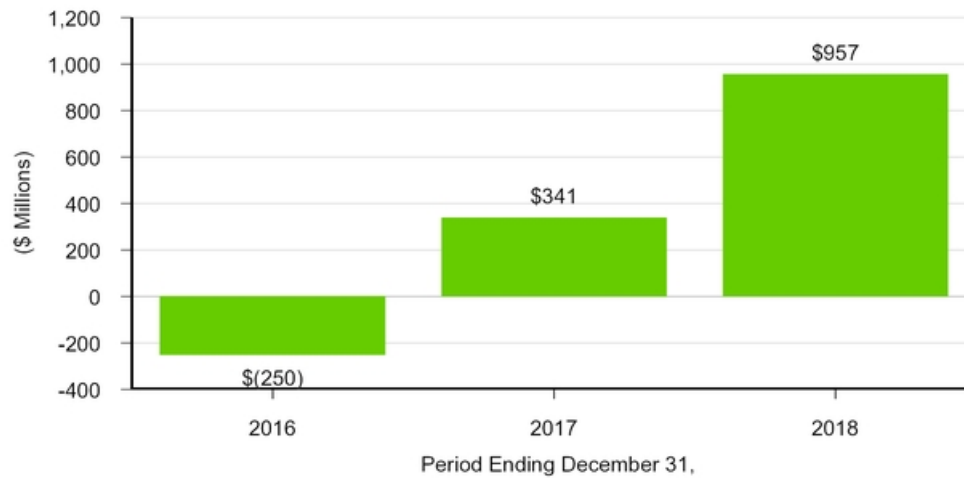
- The increase in net sales in 2018 as compared to 2017 was primarily due to higher average realized prices in all of our reportable segments and increased shipments in our Flat-Rolled and Tubular segments due to improved market conditions. Improved market conditions for our Flat-Rolled segment reflect accelerated demand for steel products in line with the recent economic growth, as well as the supply-demand balance between imported and domestic steel. The restart of the two blast furnaces at our Granite City Works during 2018 enabled us to take advantage of the improved market dynamics.
- The increase in net sales in 2017 as compared to 2016 was primarily due to higher average realized prices in all of our reportable segments. Improved market conditions for our Flat-Rolled segment, notably for hot-rolled coil, resulted in spot price increases in 2017 as well as price increases for both market-based and firm priced contracts from 2016 to 2017. Lower imports resulted in higher average realized prices for our USSE segment in 2017. Improved market conditions for our Tubular segment resulted in higher average realized prices and higher shipments.

Adjusted EBITDA



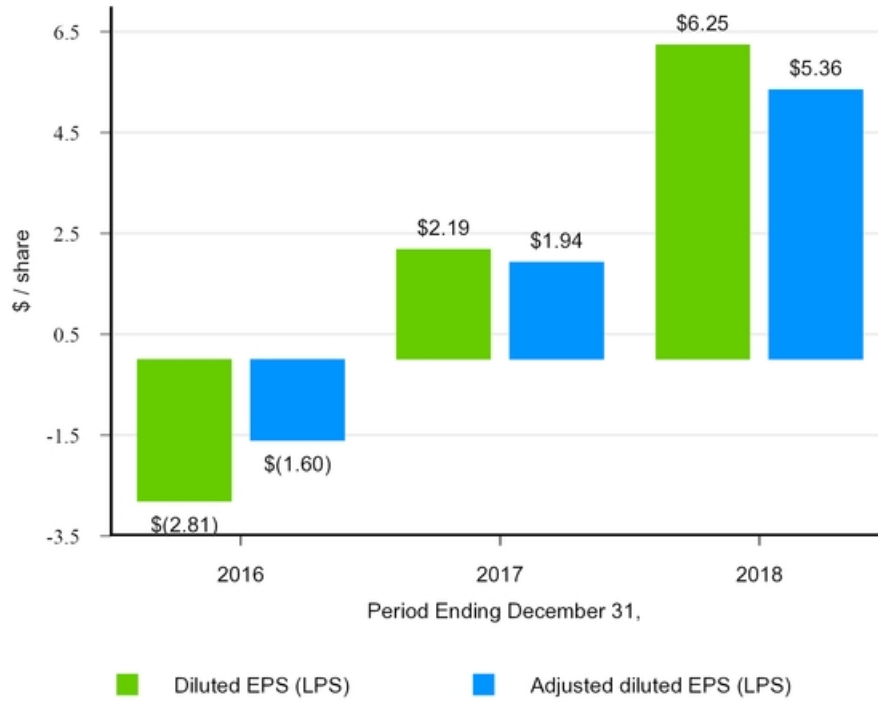
- These amounts are derived starting from net earnings (loss) as shown on page 6. For a full reconciliation of adjusted EBITDA see page 18.
- EBITDA increased for all three reportable segments in 2018 as compared to 2017 with higher average realized prices in all three segments. Our continued focus on maintaining a strong balance sheet while investing in operational excellence, technology and innovation led to another successful year.
- EBITDA increased for all three reportable segments in 2017 as compared to 2016 with higher average realized prices in all three segments. Our long-term strategic goals of improving our balance sheet, enhancing operational efficiency and reliability and seeking robust enforcement of our trade laws led to a successful year.
- Our 2017 and 2018 adjusted EBITDA includes a favorable impact of \$381 million and \$504 million, respectively, related to our previously disclosed change in accounting method for property, plant and equipment.

Adjusted Net Earnings (Loss)



- These amounts are derived starting from net earnings (loss) as shown on page 6. For a full reconciliation of adjusted net earnings (loss) see page 16.
- We have delivered another year of significant earnings improvement. We are encouraged by the effectiveness of the investments we are making in our assets and remain focused on improving our operating and commercial performance to drive long-term value creation for our stockholders.
- Our 2017 and 2018 results include a favorable impact of \$344 million and \$455 million, respectively, related to our previously disclosed change in accounting method for property, plant and equipment.

Diluted and Adjusted Diluted Earnings (Loss) per Share



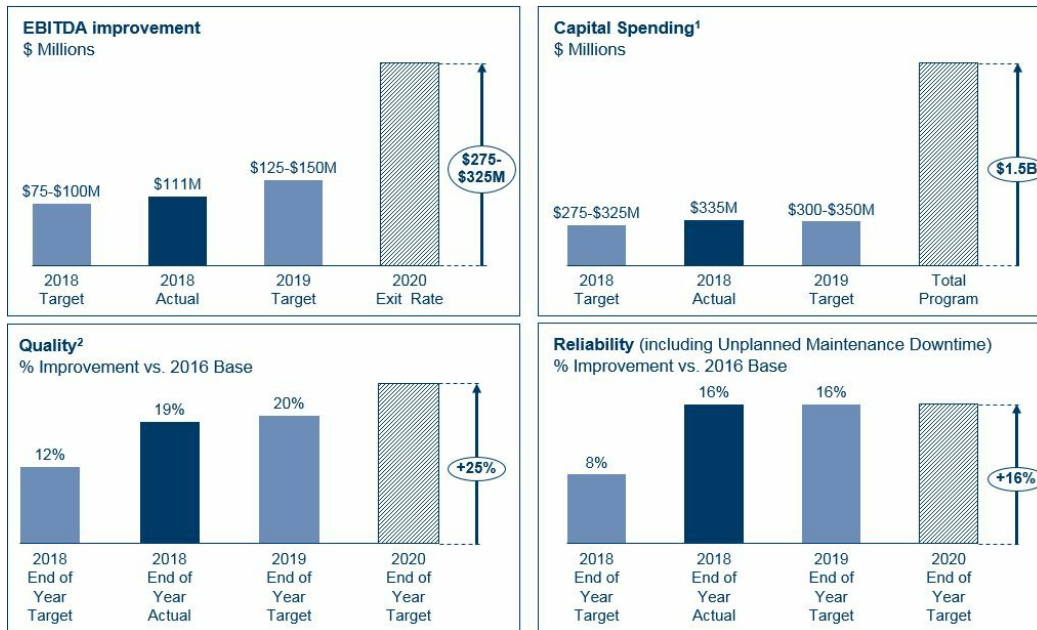
- See reconciliation from diluted net earnings (loss) per share to adjusted diluted net earnings (loss) per share on page 17.
- Our 2017 and 2018 results include a favorable impact of \$1.95 and \$2.55 per diluted share, respectively, related to our previously disclosed change in accounting method for property, plant and equipment.

Cash Flows from Operations



- In 2018 and 2017, improved financial performance more than offset the investment in working capital.
- Our cash conversion cycle was 43, 30 and 28 days for 2016, 2017 and 2018, respectively, illustrating our significant improvement in cash management. See “Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations – Financial Condition, Cash Flows and Liquidity – Cash Flows” for the calculation of our cash conversion cycle.

Flat-Rolled Segment Asset Revitalization Program Performance Scorecard

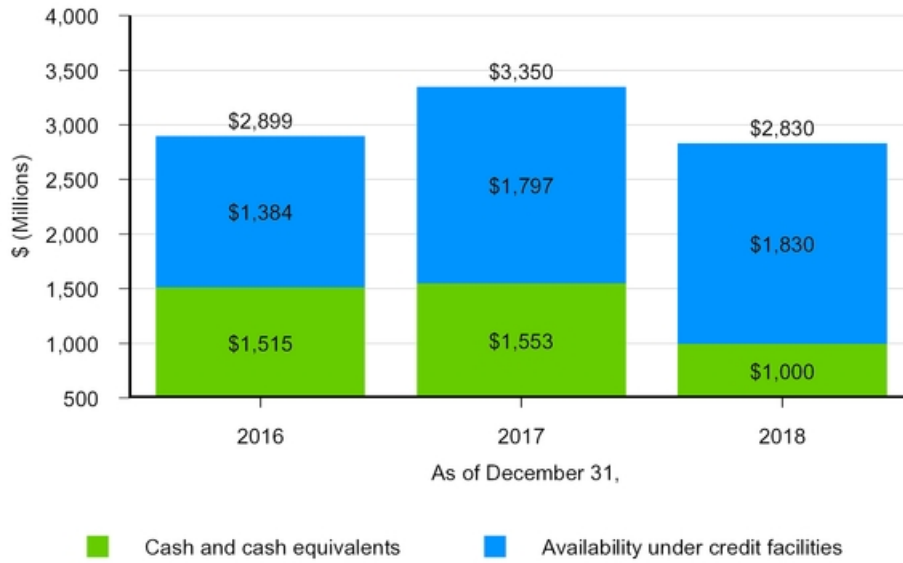


¹ Total Asset Revitalization program is \$2.0 billion, comprised of \$1.5 billion of capital and \$0.5 billion of expense.

² The quality metric has been adjusted to exclude significant planned outages. Applying the same adjustment, the 2017 end of year quality metric performance improved 13% from the base period compared to the 9% improvement previously reported.

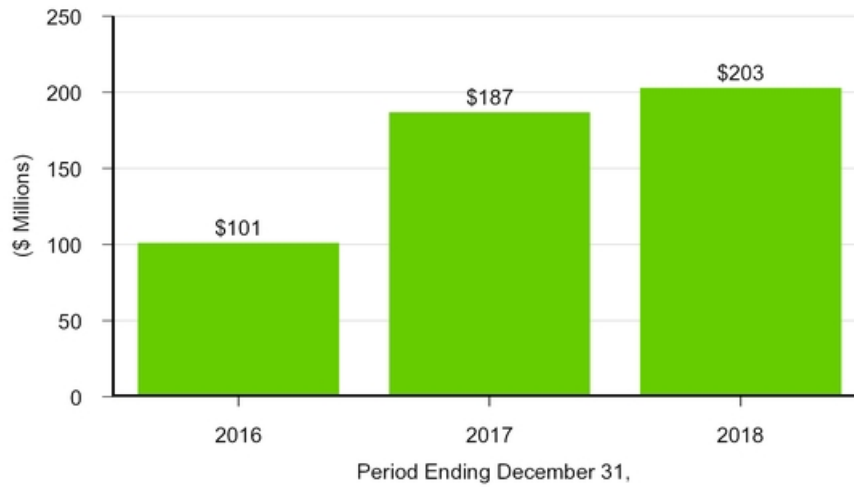
Our Asset Revitalization scorecard includes two financial (EBITDA and capital expenditures) and two non-financial (quality and reliability) metrics for tracking our progress on implementing our Flat-Rolled Segment asset revitalization program. Our progress in 2018 towards our 2020 goals is illustrated on the scorecard above. See the Business Strategy section for more information about the program and our progress so far.

Liquidity



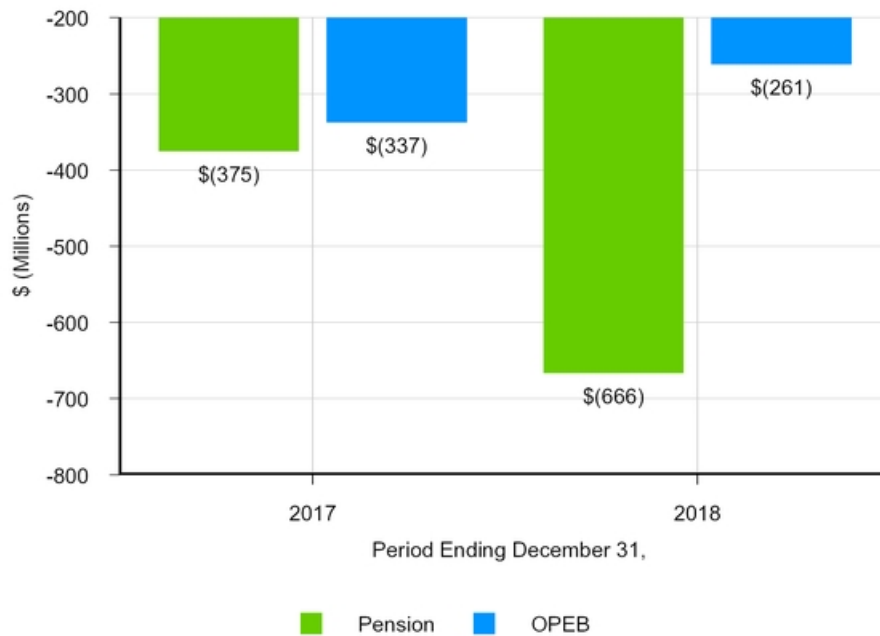
- Maintaining strong cash and liquidity continues to be a strategic priority. Our total liquidity in 2018 remained strong and supported our ability to satisfy short-term obligations, fund working capital requirements, and provided a foundation to execute key strategic initiatives such as our asset revitalization program. In 2018, capital spending was \$1,001 million, which is nearly double our capital spending of \$505 million in 2017.
- Total liquidity improved from 2016 to 2017 primarily due to higher Credit Facility Agreement availability and improved cash levels, which was driven by higher values of inventory and trade receivables that serve as collateral for the Credit Facility Agreement, as well as improved profitability levels.

Pension & Other Post-employment Benefits (OPEB) Net Periodic Benefit Costs



- The increase in 2018 pension and OPEB expense is mainly due to a lower return on assets assumption for pension benefits.
- The increase in 2017 pension and OPEB expense from 2016 is primarily due to a lower return on assets assumption for OPEB benefits as a result of actions taken in 2016 to de-risk the OPEB benefit plan.
- 2019 pension and OPEB expense is expected to be approximately \$215 million.
- For further details, see Note 18 to the Consolidated Financial Statements.

Funded Status of Pension/OPEB Plans



- The funded status of our pension plan deteriorated in 2018 primarily due to lower than expected asset performance partially offset by an increase in the discount rate. The funded status of our OPEB plan improved in 2018 primarily due to the increase in the discount rate.
- On a U.S. GAAP basis the funded status of both our pension and OPEB obligations was 88%.
- For further details, see Note 18 to the Consolidated Financial Statements.

NON-GAAP FINANCIAL MEASURES

As disclosed on page 3 of this report, we present EBITDA, adjusted EBITDA, adjusted net earnings (loss) and adjusted net earnings (loss) per diluted share, which are non-GAAP measures, as an additional measurement to enhance the understanding of our operating performance and facilitate a comparison with that of our competitors.

RECONCILIATION TO ADJUSTED NET EARNINGS (LOSS) ^(a)

(Dollars in millions)	Year Ended December 31,		
	2018	2017	2016
Reconciliation to adjusted net earnings (loss) attributable to United States Steel Corporation			
Net earnings (loss) attributable to United States Steel Corporation, as reported	\$ 1,115	\$ 387	\$ (440)
USW labor agreement signing bonus and related costs	81	—	—
Granite City Works restart and related costs	80	—	—
Reversal of tax valuation allowance	(374)	—	—
Loss on shutdown of certain tubular assets ^(b)	—	35	126
Gain associated with retained interest in U. S. Steel Canada Inc.	—	(72)	—
Restructuring and other charges ^(b)	—	—	(2)
Granite City Works temporary idling charges	(8)	17	18
(Gain) loss on equity investee transactions	(38)	(2)	12
Impairment of intangible assets	—	—	14
Loss on extinguishment of debt and other related costs	101	57	22
Effect of tax reform	—	(81)	—
Total Adjustments	(158)	(46)	190
Adjusted net earnings (loss) attributable to United States Steel Corporation	\$ 957	\$ 341	\$ (250)

^(a) The adjustments included in this table have been tax effected at a 0% tax rate due to the recognition of a full valuation allowance on domestic deferred tax assets, which was established in the fourth quarter of 2015.

^(b) Included in restructuring and other charges on the Consolidated Statement of Operations.

RECONCILIATION TO ADJUSTED NET EARNINGS (LOSS) PER SHARE ^(a)

	Year Ended December 31,		
	2018	2017	2016
Reconciliation to adjusted diluted net earnings (loss) per share			
Diluted net earnings (loss) per share, as reported	\$ 6.25	\$ 2.19	\$ (2.81)
USW labor agreement signing bonus and related costs	0.45	—	—
Granite City Works restart and related costs	0.45	—	—
Reversal of tax valuation allowance	(2.11)	—	—
Loss on shutdown of certain tubular assets ^(b)	—	0.20	0.80
Gain associated with retained interest in U. S. Steel Canada Inc.	—	(0.41)	—
Restructuring and other charges ^(b)	—	—	(0.01)
Granite City Works temporary idling charges	(0.04)	0.10	0.11
(Gain) loss on equity investee transactions	(0.21)	(0.01)	0.08
Impairment of intangible assets	—	—	0.09
Loss on extinguishment of debt and other related costs	0.57	0.33	0.14
Effect of tax reform	—	(0.46)	—
Total adjustments	(0.89)	(0.25)	1.21
Adjusted diluted net earnings (loss) per share	\$ 5.36	\$ 1.94	\$ (1.60)

^(a) The adjustments included in this table have been tax effected at a 0% tax rate due to the recognition of a full valuation allowance on domestic deferred tax assets, which was established in the fourth quarter of 2015.

^(b)Included in restructuring and other charges and cost of sales in the Consolidated Statement of Operations.

RECONCILIATION TO EBITDA AND ADJUSTED EBITDA

(Dollars in millions)	Year Ended December 31,		
	2018	2017	2016
Reconciliation to EBITDA and Adjusted EBITDA			
Net earnings (loss) attributable to U. S. Steel Corporation	\$ 1,115	\$ 387	\$ (440)
Income tax (benefit) provision	(303)	(86)	24
Net interest and other financial costs	312	368	215
Depreciation, depletion and amortization expense	521	501	507
EBITDA	1,645	1,170	306
USW labor agreement signing bonus and related costs	81	—	—
Granite City Works restart and related costs	80	—	—
Loss on shutdown of certain tubular assets ^(a)	—	35	126
Gain associated with retained interest in U. S. Steel Canada Inc.	—	(72)	—
Restructuring and other charges ^(a)	—	—	(2)
Granite City Works temporary idling charges	(8)	17	18
(Gain) loss on equity investee transactions	(38)	(2)	12
Impairment of intangible assets	—	—	14
Adjusted EBITDA	1,760	1,148	474

^(a) Included in restructuring and other charges in the Consolidated Statement of Operations.

PART I

Item 1. BUSINESS

United States Steel Corporation (U. S. Steel) is an integrated steel producer of flat-rolled and tubular products with major production operations in the United States and Europe. An integrated steel producer uses iron ore and coke as primary raw materials for steel production. U. S. Steel has annual raw steel production capability of 22.0 million net tons (17.0 million tons in the United States and 5.0 million tons in Europe). U. S. Steel supplies customers throughout the world primarily in the automotive, consumer, industrial and oil country tubular goods (OCTG) markets. According to World Steel Association's latest published statistics, in 2017 U. S. Steel was the third largest steel producer in the United States and the twenty-sixth largest steel producer in the world. U. S. Steel is also engaged in other business activities consisting primarily of railroad services and real estate operations. U. S. Steel is a Delaware corporation established in 1901.

Segments

U. S. Steel has three reportable operating segments: North American Flat-Rolled (Flat-Rolled), U. S. Steel Europe (USSE) and Tubular Products (Tubular). The results of our railroad and real estate businesses that do not constitute reportable segments are combined and disclosed in the Other Businesses category.

Flat-Rolled

The Flat-Rolled segment includes the operating results of U. S. Steel's integrated steel plants and equity investees in North America involved in the production of slabs, strip mill plates, sheets and tin mill products, as well as all iron ore and coke production facilities in the United States. These operations primarily serve North American customers in the service center, conversion, transportation (including automotive), construction, container, and appliance and electrical markets.

The Flat-Rolled segment is structured to specifically address customer needs through three "commercial entities." Our Flat-Rolled segment commercial entities are focused on customers in the: (1) automotive, (2) consumer and (3) industrial, service center and mining industries.

Automotive Solutions collaborates with customers to develop solutions such as the next generation of advanced high strength steel (AHSS) to address challenges facing the automotive industry, including increased fuel economy standards and enhanced safety requirements.

Consumer Solutions partners with customers in the appliance, packaging, container and construction markets. Consumer Solutions has a robust presence with our tin customers, who represent roughly one quarter of this market category. Additional product lines within the market category include the Company's COR-TEN AZP®, ACRYLUME®, GALVALUME® and Weathered Metals Series®.

Industrial, Service Center and Mining Solutions focuses on the Company's customers in the service center business, pipe and tube manufacturing markets, and agricultural and industrial equipment markets.

Flat-Rolled has aggregate annual raw steel production capability of 17.0 million tons produced at our Gary Works, Mon Valley Works, Great Lakes Works and Granite City Works facilities. Raw steel production was 11.9 million tons in 2018, 10.8 million tons in 2017 and 10.7 million tons in 2016. Raw steel production averaged 70 percent of capability in 2018, 64 percent of capability in 2017 and 63 percent of capability in 2016. During December 2015 the Granite City Works steelmaking operations were temporarily idled. The steelmaking operations and hot strip mill were restarted during 2018 and 2017, respectively. If its production capability is excluded during the temporary idle period, Flat-Rolled production would have been 76 percent and 75 percent of capability in 2017 and 2016, respectively.

European Operations

The USSE segment includes the operating results of U. S. Steel Košice (USSK), U. S. Steel's integrated steel plant and coke production facilities in Slovakia, and its subsidiaries. USSE primarily serves customers in the Eastern European service center, conversion, transportation (including automotive), construction, container, appliance and electrical, and oil, gas and petrochemical markets. USSE produces and sells slabs, strip mill plate, sheet, tin mill products and spiral welded pipe, as well as heating radiators and refractory ceramic materials.

USSE has annual raw steel production capability of 5.0 million tons. USSE's raw steel production was 5.0 million tons in 2018, 5.1 million tons in 2017, and 5.0 million tons in 2016. USSE's raw steel production averaged 100 percent of capability in 2018, 102 percent of capability in 2017 and 99 percent of capability in 2016.

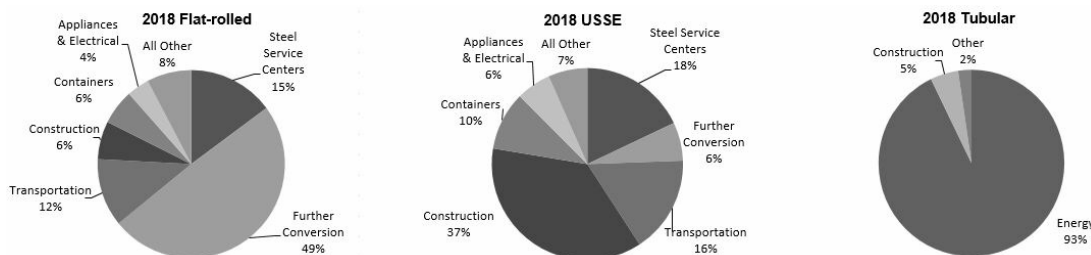
Tubular

The Tubular segment includes the operating results of U. S. Steel's tubular production facilities and an equity investee in the United States. These operations produce and sell seamless and electric resistance welded (ERW) steel casing and tubing (commonly known as OCTG), and standard and line pipe and mechanical tubing and primarily serve customers in the oil, gas and petrochemical markets. Tubular's annual production capability is 1.9 million tons, which includes the annual production capability of the No. 1 Electric-Weld Pipe mill at Lone Star Tubular Operations that U. S. Steel plans to restart (see "Item 1. Business - Facilities and Locations - Tubular" for further information).

U. S. Steel Tubular Products, Inc. (USSTP), a wholly owned subsidiary of U. S. Steel, is continuing to design and develop a range of premium and semi-premium connections to address the growing needs for technical solutions for our end users' well site production challenges. Through its wholly owned subsidiary, U. S. Steel Oilwell Services, LLC, USSTP also offers rig site services, which provides the technical expertise for proper installation of our tubular products and proprietary connections at the well site.

For further information, see "Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations" and Note 4 to the Consolidated Financial Statements.

Steel Shipments by Market and Segment



The following table does not include shipments to end customers by joint ventures and other equity investees of U. S. Steel. Shipments of materials to these entities are included in the "Further Conversion – Joint Ventures" market classification. No single customer accounted for more than 10 percent of gross annual revenues.

<i>(Thousands of Tons)</i>	Flat-Rolled	USSE	Tubular	Total
Major Market – 2018				
Steel Service Centers	1,560	799	—	2,359
Further Conversion – Trade Customers	3,529	287	—	3,816
– Joint Ventures	1,650	—	—	1,650
Transportation (Including Automotive)	1,231	728	—	1,959
Construction and Construction Products	689	1,637	38	2,364
Containers	635	439	—	1,074
Appliances and Electrical Equipment	406	261	—	667
Oil, Gas and Petrochemicals	—	11	724	735
Exports from the United States	445	—	18	463
All Other	365	295	—	660
TOTAL	10,510	4,457	780	15,747
Major Market – 2017				
Steel Service Centers	1,587	761	—	2,348
Further Conversion – Trade Customers	2,951	284	—	3,235
– Joint Ventures	1,513	—	—	1,513
Transportation (Including Automotive)	1,453	708	—	2,161
Construction and Construction Products	665	1,831	41	2,537
Containers	597	438	—	1,035
Appliances and Electrical Equipment	406	247	—	653
Oil, Gas and Petrochemicals	—	10	631	641
Exports from the United States	452	—	16	468
All Other	263	306	—	569
TOTAL	9,887	4,585	688	15,160
Major Market – 2016				
Steel Service Centers	1,765	801	—	2,566
Further Conversion – Trade Customers	2,650	274	—	2,924
– Joint Ventures	1,423	—	—	1,423
Transportation (Including Automotive)	1,725	660	—	2,385
Construction and Construction Products	725	1,811	40	2,576
Containers	600	436	—	1,036
Appliances and Electrical Equipment	420	236	—	656
Oil, Gas and Petrochemicals	—	4	340	344
Exports from the United States	436	—	20	456
All Other	350	274	—	624
TOTAL	10,094	4,496	400	14,990

Business Strategy

Our strategy is to create long-term stockholder value by remaining profitable through business cycles by focusing on three critical success factors: winning in attractive markets, moving down the cost curve and moving up the talent curve. Foundational to our efforts is our belief that we must operate as a principled company committed to our S.T.E.E.L. principles, outlined in our Code of Ethical Business Conduct. Our core value of safety - the safety of our employees, our environment, our communities and our facilities and equipment - has served us well for much of our history and our commitment to it remains as strong as the products we make every day.

We are focused on **winning in attractive markets** through a customer-focused business model. We have made significant progress and our goal remains to deliver high-quality, value-added products on time every time and to collaborate with customers to develop innovative solutions that address their most challenging needs. The strategic positioning of operations within the commercial entities enhances our ability to better hear the voice of the customer, ensuring that we deliver superior value and drive results in the markets we choose to serve.

To position the Company to increase profitability and win in attractive markets, we continue to enhance our cost structure and **move down the cost curve**. The next phase of our operations transformation will be defined by our continued implementation of disciplined and standardized business and operations practices, continued investments in asset revitalization and reliability-centered maintenance and a renewed focus on innovation and technology.

Core to our strategy is **moving up the talent curve**. The success of our business is driven by the efforts of our hard-working employees. We know that we must work to identify, attract and retain best-in-class diverse talent. Our goal is to build a pipeline mapping the right people to the right value-driving roles. Fostering a culture that incentivizes the right behavior and allows for a best talent wins environment will help achieve our operational and financial objectives.

Our performance has strengthened our earnings profile and balance sheet and positions us well to continue the execution of our strategy throughout the business cycle. To accomplish our strategy, U. S. Steel will continue to evaluate potential strategic and organizational opportunities, which may include the acquisition, divestiture or consolidation of assets. Given the cyclical nature of our industry, we are focused on strategically maintaining and spending cash (including capital investments under our asset revitalization program), in order to invest in areas consistent with our long-term strategy, such as sustainable steel technologies, and are considering various possibilities, including exiting lines of business and the sale of certain assets, that we believe would ultimately result in a stronger balance sheet and greater stockholder value. The Company will pursue opportunities based on its long-term strategy, and what the Board of Directors determines to be in the best interests of the Company's stockholders at the time.

Steel Innovation

We are continuing to develop the next generation of steel products for our customers. Our Generation 3 (GEN3) steel, the XG3™ steel, will provide superior formability and high-strength properties while using a low-alloyed approach for robust weldability. To expand our capabilities in GEN3 steels, a new continuous galvanizing line is currently under construction at our PRO-TEC Coating Company joint venture (PRO-TEC), which will allow PRO-TEC to produce these GEN3 steels with a hot-dipped zinc coating. This line will be the first of its kind and will utilize proprietary technology capable of producing the high-quality, cutting-edge advanced high-strength steels that will meet our automotive customers' needs and solve some of their most pressing challenges.

Asset Revitalization

In 2017, we launched our asset revitalization program, a multi-year, comprehensive \$2 billion investment in our most critical assets within our Flat-rolled segment. The program is composed of many projects designed to continuously improve safety, quality, delivery and cost performance. We expect capital spending for the entire program to be approximately \$1.5 billion. As we revitalize our assets, we are increasing profitability, productivity and operational stability, and reducing volatility. This program is designed to prioritize investment in the areas with the highest returns.

Importantly, while this is a large program, most projects are not complex, making projects easier to execute. Due to the smaller nature of many of the projects, we do not have to complete the entire program in order to start seeing benefits, as evident in our 2018 performance. Also, by breaking the program down into a series of smaller projects, we have greater flexibility to adjust the scope and pace of project implementation based on changes in business conditions. Our asset revitalization program covers investments in our existing assets and involves investments beyond routine capital and maintenance spending. These projects are expected to deliver both operational and

commercial benefits, with most of the benefits coming from operational improvements. The commercial benefits we expect to realize will be driven primarily by things we can control, such as better product quality, improved delivery performance, and increased throughput on constrained assets. Being regarded as a top quartile performer in the eyes of our customers will support sustainable commercial benefits from these investments. We will deliver products to our customers with improved reliability and quality. While this program only covers our existing assets, it will create a stable foundation for our future as we continue to evaluate strategic growth projects to strengthen our position as the markets we serve continue to grow and evolve.

We designed a performance scorecard to measure our success in implementing the asset revitalization program, focusing on two financial metrics (EBITDA and capital expenditures) and two non-financial metrics (quality and reliability). We set a goal for each metric that we plan to achieve as we exit 2020, as compared to our 2016 performance for each metric. To monitor our progress, we also set interim annual goals within each metric, and report progress against those metrics annually. We continued to make good progress in 2018 on our asset revitalization program and exceeded the scorecard targets we had committed to for 2018. We disclosed our 2019 targets for each of these metrics in January 2019 and are focused on achieving our goals.

Benefits from the program are noticeable and include operational impacts achieved through asset key performance indicator improvement and the commercial impact of additional throughput as a result of our investments.

Our quality metric, which is based on internal diversion and retreat volumes only, improved 19% in 2018 versus the base period. We are seeing substantial improvements in addition to internal diversion and retreat volumes, particularly in customer claims and the cost of poor quality as a result of our asset revitalization efforts. Going forward, we are considering expanding the scope of the quality metric to also include these types of important quality measures. We believe an expanded metric could provide a more comprehensive quality measurement. No decision regarding a change in the quality metric has been made. We are implementing reliability-centered maintenance focusing on thirteen priority assets and a few others within our Flat-Rolled segment. Our reliability metric improved 16% versus the 2016 base period. We are running our assets more reliably resulting in improved operating equipment effectiveness. As a result of these improvements, we have increased throughput versus 2016 despite additional planned outages. Exiting 2020, we expect to be capable of producing approximately one million more tons of slabs on existing assets at Gary Works, Great Lakes Works, and Mon Valley Works as compared with actual production in 2016.

Safety

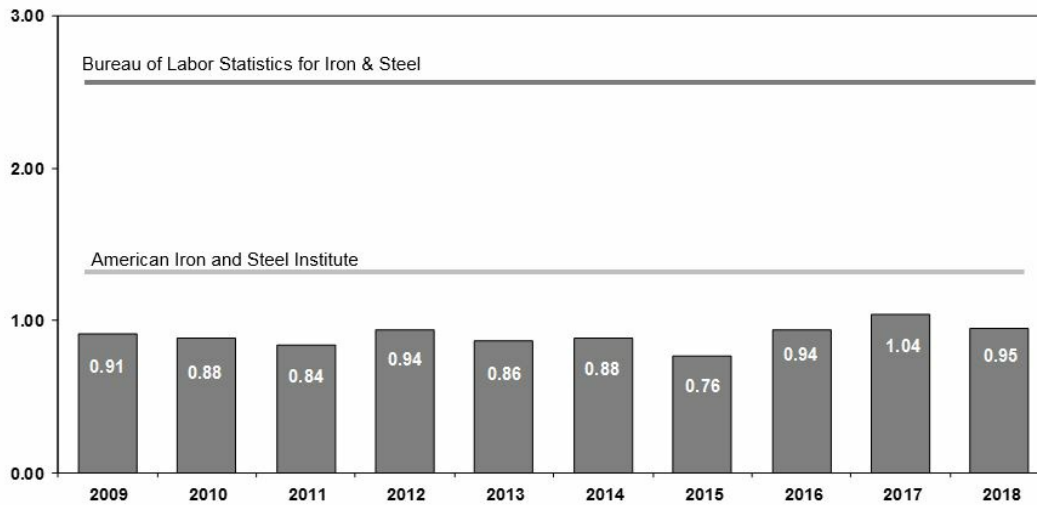
U. S. Steel has a long-standing commitment to the safety and health of the men and women who work in our facilities. Safety is our primary core value. Every employee deserves to return home safely at the end of every day, and we are working to eliminate all injuries and incidents at all of our facilities. Ensuring a safe workplace also improves productivity, quality, reliability and financial performance. By making safety and health a personal responsibility, our employees are making a daily commitment to follow safe work practices, look out for the safety of co-workers and ensure safe working conditions for everyone. A “Safety First” mindset is as essential to our success as the tools and technologies we rely on to do business.

Our objective is to attain a sustainable zero harm culture supported by leadership and owned by an engaged and highly skilled workforce, empowered with the capabilities and resources needed to assess, reduce, and eliminate workplace risks and hazards. In support of these objectives, we have developed an enhanced Safety Management System, initiated new safety communication methods and enhanced contractor safety processes. We experienced zero work-related fatalities among our employees and contractors in 2018.

U. S. Steel finished 2018 with a Global Total OSHA Recordable Rate of 0.95 , which is 63% better than the Bureau of Labor Statistics for Iron & Steel rate of 2.60 and 30% better than American Iron and Steel Institute rate of 1.36. U. S. Steel finished 2018 with a Days Away From Work Rate of 0.14, which is 80% better than the Bureau of Labor Statistics for Iron & Steel rate of 0.70 and 46% better than American Iron and Steel Institute rate of 0.26 . Additionally, when comparing our most severe injuries - cases involving 31 or more days away from work - U. S. Steel performs at a level almost 13 times better than the Bureau of Labor Statistics for Iron and Steel.

The 10 year performance for our key safety measures: Total Recordable Incidence and Days Away From Work rates are shown in the following graphs.

Global OSHA Recordable Incidence Rates January 2009 through December 2018

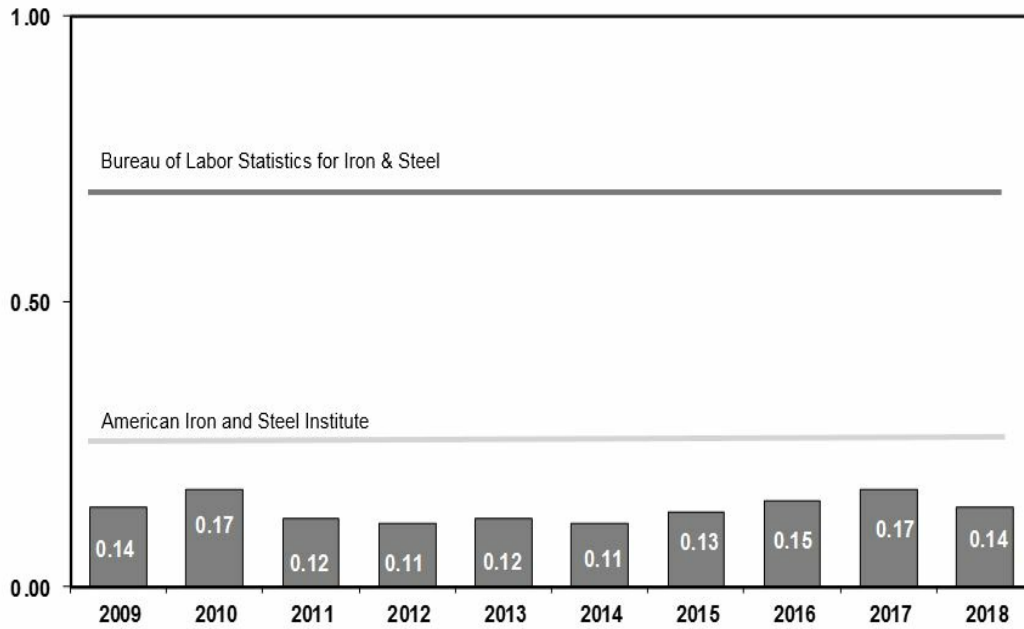


Frequency of Injuries (per 200,000 manhours)

Data for 2009 forward includes Lone Star Tubular Operations, Rig Site Services, Offshore Operations Houston, and Wheeling Machine Products. Data for 2009 through 2014 includes Belville Tubular Operations. Data for 2009 through 2017 includes Tubular Processing Houston. Data for 2011 forward includes Transtar. Data for 2009 through 2011 includes U. S. Steel Serbia. Data from 2009 through the end of the day on September 15, 2014, includes U. S. Steel Canada.

Bureau of Labor Statistics for Iron & Steel and American Iron and Steel Institute comparisons were held constant for all periods presented and were based on the most recent publicly available information as of December 31, 2018. We believe this provides a reasonable point of comparison to U. S. Steel's performance across all periods presented.

Global Days Away From Work Incidence Rates January 2009 through December 2018



Frequency of Injuries (per 200,000 manhours)

Data for 2009 forward includes Lone Star Tubular Operations, Rig Site Services, Offshore Operations Houston, and Wheeling Machine Products. Data for 2009 through 2014 includes Bellville Tubular Operations. Data for 2009 through 2017 includes Tubular Processing Houston. Data for 2011 forward includes Transtar. Data for 2009 through 2011 includes U. S. Steel Serbia. Data from 2009 through the end of the day on September 15, 2014, includes U. S. Steel Canada.

Bureau of Labor Statistics for Iron & Steel and American Iron and Steel Institute comparisons were held constant for all periods presented and were based on the most recent publicly available information as of December 31, 2018. We believe this provides a reasonable point of comparison to U. S. Steel's performance across all periods presented.

Environmental Stewardship

U. S. Steel is committed to effective environmental stewardship. We have implemented and continue to develop business practices that are environmentally effective. We believe part of being a good corporate citizen requires a dedicated focus on how our industry affects the environment. U. S. Steel's environmental expenditures totaled \$350 million in 2018, \$255 million in 2017 and \$232 million in 2016. Overall, environmental compliance expenditures represent approximately 2% of U. S. Steel's total costs and expenses. For further information, see "Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations – Environmental Matters." We have taken the actions described below in furtherance of that goal.

U. S. Steel, largely through the American Iron and Steel Institute (AISI), World Steel Association and the European Confederation of Iron and Steel Industries (Eurofer), is involved in the promotion of cost effective environmental strategies through the development of appropriate air, water, waste and climate change laws and regulations at the local, state, national and international levels.

We are committed to reducing emissions as well as our carbon footprint. We have investigated, created and implemented innovative, best practice solutions throughout U. S. Steel to manage and reduce energy consumption. We are also committed to investing in technologies to further improve the environmental performance of our steelmaking process. In addition, we continue to focus on implementing energy reduction strategies, use of efficient energy sources, waste reduction management and the utilization of by-product fuels.

According to the AISI, relative to competing materials, steel has approximately one-fifth the carbon footprint of aluminum, one-twelfth the footprint of magnesium, and one-ninth the footprint of carbon fiber composites. Our advanced high strength steel (AHSS) used in today's vehicles afford significant light-weighting opportunities that assist the automobile industry in meeting ever-increasing fuel economy standards while enhancing a vehicle's safety and engine performance. When comparing steel to aluminum, in terms of sustainability, steel has a smaller carbon footprint and costs less.

In 2018 alone, U. S. Steel recycled 3.2 million tons of purchased and produced steel scrap. Because of steel's physical properties, our products can be recycled at the end of their useful life without loss of quality, contributing to steel's high recycling rate and affordability. Comparatively, due to limitations in aluminum processing, very little recycled aluminum is included in aluminum sheet goods used for automotive or aircraft applications. This means that any increased use of aluminum sheet for high-end applications must come from Greenhouse Gas (GHG) intensive primary aluminum, which generates significantly more GHG emissions than steel.

Many of our major production facilities have Environmental Management Systems that are certified to the ISO 14001 Standard. This standard, published by the International Organization for Standardization (ISO), provides the framework for the measurement and improvement of environmental impacts of the certified facility.

In April of 2018, we released our 2017 Sustainability Report in which we have committed to establishing a GHG emission reduction goal by the end of 2019. We are gathering data to establish our GHG emissions baseline to help us prioritize reduction strategies and allocate the necessary capital. We are committed to reducing energy usage and have implemented projects, including replacing incandescent lights with LED lighting, to reduce electricity consumption and are utilizing monitoring and predictive modeling to increase energy efficiencies and reduce natural gas and electricity consumption. By using the blast furnace and coke oven gas generated in our cokemaking and steelmaking activities to power our facilities, we avoided consuming natural gas and other fuels from 2015 to 2018 to heat more than 3.8 million households each year. In 2018, we recycled approximately 3 million tons of blast furnace slag and 0.4 million tons of steel slag by selling it for use as aggregate and in highway construction.

Commercial Strategy

Our commercial strategy is focused on providing customer focused solutions with value-added steel products, including AHSS leadership with GEN3 steels, coated sheets for the automotive and appliance industries, electrical steel sheets for the manufacture of motors and electrical equipment, both bare and prepainted galvanized and Galvalume® sheets for construction, hot rolled skelp used in the production of energy transmitting line pipe, tin mill products for the packaging industry and pipe, connections, accessories and rig site services for use in drilling for oil and gas.

We are responsive to our customers' changing needs by developing new steel products and uses for steel that meet the evolving market and regulatory demands imposed on them. In connection with this commitment, we have research centers in Pittsburgh, Pennsylvania, and Košice, Slovakia, an automotive center in Troy, Michigan and a Research

and Development Laboratory and Test Facility for Tubular products in Houston, Texas. The focus of these centers is to develop new products and to collaborate with our customers to better provide innovative solutions to serve their needs.

For automotive markets, we developed the first commercially available coated AHSS and GEN3 steels. We are constructing a first of its kind GEN3 hot dipped galvanize line at PRO-TEC and have embedded application engineers at original equipment manufacturers to demonstrate how to best utilize the material in body design to meet automobile passenger safety requirements while significantly reducing weight to meet future vehicle fuel efficiency standards.

In our tubular markets, we continue development of premium and semi-premium tubular connections designed for our customers operating in challenging drilling environments. These connections optimize performance and provide outstanding sealing capabilities for onshore and offshore oil and gas drilling. An example is the USS-EAGLE SFH™ which was introduced in 2017 for customers drilling deep, high-pressure horizontal onshore natural gas and oil wells in North America. Please refer to Item I. Business Strategy for further details of related strategies.

Workforce

At U. S. Steel, we are committed to attracting, developing, and retaining a workforce of talented and diverse people — all working together to deliver superior results for our Company, stockholders, customers and communities. We regularly review our human capital needs and prioritize our efforts to sustain and enhance our competitive position in the markets we serve.

Most hourly employees of U. S. Steel's flat-rolled, tubular, cokemaking and iron ore operations in the United States are covered by collective bargaining agreements with the United Steelworkers (USW) entered into effective September 1, 2018 (the 2018 Labor Agreements) that expire on September 1, 2022. The 2018 Labor Agreements include a signing bonus for each eligible USW-represented employee (which was paid in December of 2018) and annual wage increases of 4%, 3.5%, 3.5% and 3% effective September 1, 2018, 2019, 2020 and 2021, respectively. Additionally, the 2018 Labor Agreements provide for certain employee benefit modifications to our defined benefit pension plan and increases to the contribution rate per hour to our multiemployer plan covering certain USW employees from \$2.65 per hour to \$3.15, \$3.35, and \$3.50 per hour effective January 1, 2019, 2020 and 2021, respectively. During the fourth quarter of 2018, U. S. Steel recorded a charge of approximately \$81 million for the 2018 Labor Agreements signing bonus and related costs.

Capital Structure and Liquidity

Our primary financial goal is to enhance stockholder value by utilizing our capital structure, liquidity, and financial flexibility to deploy cash to generate stockholder value. Our cash deployment strategy is aligned to our strategic priorities, and includes: revitalizing our capital, both human and equipment; maintaining a strong balance sheet and a healthy pension plan; and delivering sustainable growth with a focus on core values such as safety and environmental stewardship. Cash deployment is also performed with a customer-centric focus on improving safety, quality, delivery and cost.

Our improved financial profile in 2018 provided us with the opportunity to announce a \$300 million stock repurchase program that is authorized through 2020. Together with our common stock dividend, this program represents a sustainable and balanced stockholder return framework within our capital structure.

Our liquidity supports our ability to satisfy short-term obligations, fund working capital requirements, and provides a foundation to execute key strategic initiatives such as our asset revitalization program.

We are focused on maintaining a strong balance sheet and sustaining improved credit ratings, and may proactively manage our company's debt maturity profile from time to time to protect our capital structure from unforeseen external events and re-financing risks.

In 2018, we undertook several steps to support these goals. The Company issued \$650 million of 6.250% Senior Notes due March 15, 2026 and received net proceeds of approximately \$640 million, which together with cash on hand was used for a cash tender offer followed by a redemption of all of our outstanding 2021 Senior Secured Notes. We also entered into a fourth amended and restated \$1.5 billion revolving credit facility maturing in February 2023. USSK entered into a new €460 million five-year revolving credit facility maturing in September 2023. USSK drew down €200 million (approximately \$228 million) from the USSK Credit Agreement. Using available cash on hand together with

funds repatriated from USSK to its parent, U. S. Steel, redeemed all of our outstanding 2020 Senior Notes. During 2018 we reduced debt by \$322 million. We ended 2018 with \$2.8 billion of total liquidity.

Steel Industry Background and Competition

The global steel industry is cyclical, highly competitive and has historically been characterized by overcapacity.

U. S. Steel's competitive position may be affected by, among other things, differences among U. S. Steel's and its competitors' cost structure, labor costs, environmental remediation and compliance costs, global capacity and the existence and magnitude of government subsidies provided to competitors.

U. S. Steel competes with many North American and international steel producers. Competitors include integrated producers, which, like U. S. Steel, use iron ore and coke as the primary raw materials for steel production, as well as electric arc furnace (EAF) producers, which primarily use steel scrap and other iron-bearing feedstocks as raw materials. Global steel capacity has continued to increase, with some published sources estimating for 2018 that steel capacity in China alone is over one billion metric tonnes per year versus steel demand in China estimated at approximately 800 million metric tonnes. In addition, other materials, such as aluminum, plastics and composites, compete with steel in several applications.

EAF producers typically require lower capital expenditures for construction of facilities and may have lower total employment costs; however, these competitive advantages may be minimized or eliminated by the cost of scrap when scrap prices are high. Some mini-mills utilize thin slab casting technology to produce flat-rolled products and are increasingly able to compete directly with integrated producers in many flat-rolled product applications previously produced only by integrated steelmakers.

U. S. Steel provides defined benefit pension and/or other post-employment benefits to approximately 90,000 current employees, retirees and their beneficiaries. Many of our competitors do not have comparable retiree obligations. Participation in U. S. Steel's main defined benefit pension plan was closed to new entrants on July 1, 2003 and benefit accruals for all non-represented participants were frozen effective December 31, 2015. Participation in U. S. Steel's retiree medical and life insurance programs for USW-represented employees were closed to employees hired or rehired (except in limited circumstances) on or after January 1, 2016. Retiree medical and life insurance benefits for non-represented employees were eliminated for those who retired after December 31, 2017.

We believe that our major North American and many European integrated steel competitors are confronted with substantially similar environmental regulatory conditions and therefore do not believe that our relative position with regard to such competitors will be materially affected by the impact of environmental laws and regulations. However, if future regulations do not recognize the fact that the integrated steel process involves a series of chemical reactions involving carbon that create carbon dioxide (CO₂) emissions without linking these emissions to steel scrap as well, our competitive position relative to mini-mills will be adversely impacted. Our competitive position compared to producers in developing nations such as China, Russia, Ukraine, Turkey, Brazil and India, will be harmed unless such nations require commensurate reductions in CO₂ emissions. Competing materials such as plastics may not be similarly impacted. The specific impact on each competitor will vary depending on a number of factors, including the age and location of its operating facilities and its production methods. U. S. Steel is also responsible for remediation costs related to former and present operating locations and disposal of environmentally sensitive materials. Many of our competitors, including North American producers, or their successors, that have been the subject of bankruptcy relief have no or substantially lower liabilities for such environmental remediation matters.

International Trade

U. S. Steel continues to face import competition, much of which is unfairly-traded, supported by foreign governments, and fueled by massive global steel overcapacity. Such practices, policies, and overcapacity impact the Company's operational and financial performance. U. S. Steel continues to lead the industry in efforts to address these challenges that threaten the Company, our workers, our stockholders, and our country's national and economic security.

Through a series of Presidential Proclamations pursuant to Section 232 of the Trade Expansion Act of 1962, as of the date of this filing, U.S. imports of certain steel products are subject to a 25 percent tariff, except for imports from: (1) Turkey, which are subject to a 50 percent tariff; (2) Argentina, Brazil, and South Korea, which are subject to restrictive quotas; and (3) Australia, which is not subject to either tariffs or quotas. The U.S. Department of Commerce (DOC) is managing a process in which U.S. companies may request and/or oppose temporary product exclusions from the Section 232 tariffs or quotas. Over 44,000 exclusions have been requested. U. S. Steel is actively opposing exclusion requests for products that are the same as, or substitute products for, those U. S. Steel produces.

Several legal challenges, trade measures, and retaliation actions have been initiated in response to the Section 232 action on steel. In the United States, on December 19, 2018 the U.S. Court of International Trade (CIT) held oral arguments in the American Institute for International Steel's constitutional challenge to the Section 232 statute. Multiple countries have challenged the Section 232 action at the World Trade Organization (WTO), imposed retaliatory tariffs, and/or took action to safeguard their domestic steel industries from increased steel imports. Mexico imposed a 25 percent tariff on imports of U.S. steel and other products in June 2018. Canada imposed a countermeasure surtax of 25 percent on imports of U.S. steel and other products in July 2018 and a provisional safeguard in the form of tariff rate quotas (TRQs; 25 percent tariffs on imports that exceed the quota) on certain steel products in October 2018. The European Union imposed 25 percent retaliatory tariffs on imports of U.S. steel and other products in June 2018 and imposed a provisional TRQ safeguard on global steel imports in July 2018. Retaliatory tariffs were also imposed by China, India, Russia, and Turkey. In response, the United States challenged the retaliation at the WTO. In November, multiple dispute panels were established for the Section 232 and retaliation disputes. Panel decisions are not expected until the fourth quarter of 2019 at the earliest.

On January 16, 2019, the European Commission (EC) announced its definitive TRQ safeguard on steel imports: 25 percent tariffs on certain steel imports that exceed quotas based on 105 percent of average import volumes for 2015-2017 and increasing 5 percent annually, effective February 2019 through June 2021.

Antidumping (AD) and countervailing duty (CVD or antisubsidy) duties currently apply in addition to the Section 232 tariffs and quotas and AD/CVD orders will last beyond the Section 232 action. Thus, U. S. Steel continues to actively defend and maintain the 54 AD/CVD orders and 11 EU AD/CVD orders covering products U. S. Steel produces in proceedings before the DOC, U.S. International Trade Commission (ITC), CIT, the U.S. Court of Appeals for the Federal Circuit, and the WTO, including the below favorable results achieved in 2018.

On January 30, 2018, the ITC voted to continue the 1995 AD order and current duties of up to 57.72 percent on seamless carbon and alloy steel standard, line, and pressure pipe from Germany for another five years.

On April 12, 2018, DOC announced the final results of the second administrative review of the AD order on oil country tubular goods (OCTG) from Korea, assigning AD rates of up to 75.81 percent.

On May 17, 2018, in response to circumvention petitions filed by U. S. Steel and other domestic steel producers in September 2016, the DOC found that imports of cold-rolled and corrosion-resistant steel made from Chinese substrate are covered by the AD/CVD orders on such imports from China. As a result of the DOC final determination, U.S. imports of cold-rolled steel from Vietnam made from Chinese hot-rolled steel are subject to 522.23 percent cash deposit requirements and U.S. imports of corrosion-resistant steel from Vietnam made from Chinese hot- or cold-rolled steel are subject to 238.48 percent cash deposit requirements, both retroactive to November 4, 2016. In December 2018, the CIT dismissed all appeals of DOC's circumvention determinations. In August 2018, in response to additional similar circumvention petitions filed in June 2018 by U. S. Steel and other domestic producers, DOC initiated circumvention investigations on: (1) imports of cold-rolled and corrosion-resistant steel from Vietnam made from Korean substrate; and (2) imports of corrosion-resistant steel from Vietnam made from Taiwanese substrate.

On May 31, 2018 the ITC voted to continue the 2000 AD order and duties of up to 95.29 percent on tin mill products from Japan for another five years.

In August through November 2018, the DOC announced the preliminary results of the first administrative reviews of the 2016 AD/CVD orders on hot-rolled, cold-rolled, and corrosion-resistant steel, with final results due four to six months after the preliminary results.

Following an investigation of China's technology transfer and intellectual property violations by the U.S. Trade Representative (USTR) under Section 301 of the Trade Act of 1974, approximately \$250 billion of U.S. imports from China, including finished steel couplings and some products used in steel production, are subject to 10 to 25 percent tariffs. On December 1, 2018, President Trump and Chinese President Xi agreed to a 90-day pause in the escalation of trade measures and continued negotiations on structural trade issues, including China's subsidies and government support of its steel industry. Though an agreement has not been publicly released, it appears to include a commitment by China to import more U.S. products (particularly agricultural products) and a commitment by the U.S. to delay the increase of the current Section 301 tariffs on \$200 billion worth of Chinese exports to the U.S. from 10 percent to 25 percent as was planned to occur on January 1, 2019.

On November 30, 2018, the leaders of the United States, Mexico and Canada signed the United States-Mexico-Canada Agreement (USMCA), a new free trade agreement that is intended to replace the current North American Free Trade Agreement. USMCA contains several new provisions designed to increase the use of USMCA-origin steel and increase trade enforcement coordination among the three countries. To become law, the USMCA must be ratified and implemented by the three governments. The signing of USMCA does not change the current Section 232 steel action or retaliation thereto.

The G-20's Global Forum on Steel Excess Capacity, created in 2016, continues to work to reduce global steel overcapacity, including agreeing on six principles and specific policy recommendations to address excess steel capacity in November 2017 and issuing a September 20, 2018 Ministerial Report on progress thus far. The Global Forum's stated goal for 2019 is the full implementation of such principles and policy recommendations. The Organisation for Economic Co-operation and Development (OECD) Steel Committee and trilateral negotiations between the United States, EU, and Japan also continue to address global steel overcapacity. On January 9, 2019, the United States, EU, and Japan issued a joint statement instructing the finalization of text for proposals to reform WTO subsidies rules to address overcapacity by Spring 2019.

U. S. Steel continues to execute a broad, global strategy to maximize opportunities and navigate challenges presented by imports, global steel overcapacity, and international trade law and policy developments.

Facilities and Locations as of December 31, 2018

Location Overview

Flat-Rolled Segment

- 1 Gary Works
- 2 Great Lakes Works
- 3 4 Mon Valley Works
- 5 Granite City Works
- 6 Fairfield Sheet
- 7 Minntac
- 7 Keetac
- 7 Hibbing Taconite
- 8 USS-POSCO Industries
- 9 PRO-TEC Coating Company

- 10 Double G Coatings Company
- 11 11 Worthington Specialty Processing
- 1 Feralloy Processing Company
- 1 Chrome Deposit*
- 2 Automotive Center

Tubular Segment

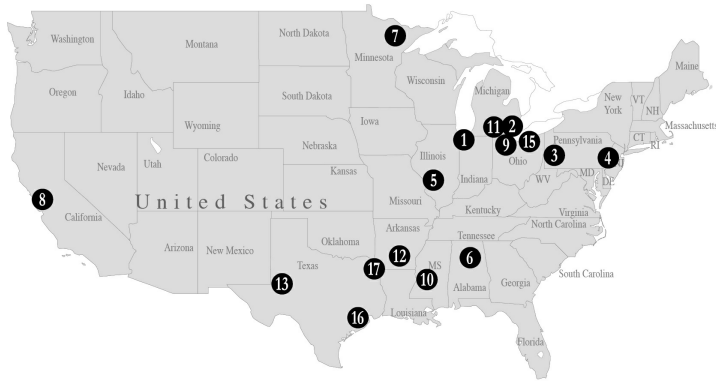
- 6 Fairfield Tubular
- 15 Lorain Tubular
- 16 Offshore Operations Houston
- 17 Lone Star Tubular
- 17 12 Wheeling Machine Products
- 13 Patriot Premium Threading Services

USSE Segment

- 14 U. S. Steel Kocise

Administrative and Research

- 3 Corporate Headquarters
- 3 Research and Technology Center
- 16 U. S. Steel Tubular Products Innovation
- 14 USSE Research



*Chrome Deposit locations are near major steel mills and are not all reflected on the map above.

Map of Europe not drawn to scale

Flat-Rolled

During 2018, U. S. Steel continued to review and adjust its operating levels at several of its Flat-Rolled operations. Customer order rates will determine the size and duration of any adjustments that we make at our Flat-Rolled operations during 2019.

The operating results of all facilities within U. S. Steel's integrated steel plants in the U.S. are included in Flat-Rolled. These facilities include Gary Works, Great Lakes Works, Mon Valley Works and Granite City Works. The operating results of U. S. Steel's coke and iron ore pellet operations and many equity investees in North America are also included in Flat-Rolled.

Gary Works, located in Gary, Indiana, has annual raw steel production capability of 7.5 million tons. Gary Works has four blast furnaces, six steelmaking vessels, a vacuum degassing unit and four slab casters. Finishing facilities include a hot strip mill, two pickling lines, two cold reduction mills, three temper mills, a double cold reduction line, four annealing facilities and two tin coating lines. Principal products include hot-rolled, cold-rolled and coated sheets and tin mill products. Gary Works also produces strip mill plate in coil.

The Midwest Plant, located in Portage, Indiana, processes hot-rolled and cold-rolled bands and produces tin mill products, hot dip galvanized, cold-rolled and electrical lamination sheets. Midwest facilities include a pickling line, two cold reduction mills, two temper mills, a double cold reduction mill, two annealing facilities, two hot dip galvanizing lines, a tin coating line and a tin-free steel line.

East Chicago Tin is located in East Chicago, Indiana and produces tin mill products. Facilities include a pickling line, a cold reduction mill, two annealing facilities, a temper mill, a tin coating line and a tin-free steel line.

Great Lakes Works, located in Ecorse and River Rouge, Michigan, has annual raw steel production capability of 3.8 million tons. Great Lakes facilities include three blast furnaces, two steelmaking vessels, a vacuum degassing unit, two slab casters, a hot strip mill, a pickling line, a tandem cold reduction mill, three annealing facilities, a temper mill, a recoil and inspection line, two electrolytic galvanizing lines (one being the former Double Eagle Steel Coating Company's (DESCO) line) and a hot dip galvanizing line. Principal products include hot-rolled, cold-rolled and coated sheets.

Mon Valley Works consists of the Edgar Thomson Plant, located in Braddock, Pennsylvania; the Irvin Plant, located in West Mifflin, Pennsylvania; the Fairless Plant, located in Fairless Hills, Pennsylvania; and the Clairton Plant, located in Clairton, Pennsylvania. Mon Valley Works has annual raw steel production capability of 2.9 million tons. Facilities at the Edgar Thomson Plant include two blast furnaces, two steelmaking vessels, a vacuum degassing unit and a slab caster. Irvin Plant facilities include a hot strip mill, two pickling lines, a cold reduction mill, three annealing facilities, a temper mill and two hot dip galvanizing lines. The Fairless Plant operates a hot dip galvanizing line. Principal products from Mon Valley Works include hot-rolled, cold-rolled and coated sheets, as well as coke and coke by-products produced at the Clairton Plant.

The Clairton Plant is comprised of ten coke batteries with an annual coke production capacity of 4.3 million tons. Almost all of the coke we produce is consumed by U. S. Steel facilities. From time to time, we may swap coke with other domestic steel producers. Coke by-products are sold to the chemicals and raw materials industries.

Granite City Works, located in Granite City, Illinois, has annual raw steel production capability of 2.8 million tons. Granite City's facilities includes two blast furnaces, two steelmaking vessels, two slab casters, a hot strip mill, a pickling line, a tandem cold reduction mill, a hot dip galvanizing line and a hot dip galvanizing/Galvalume® line. Principal products include hot-rolled and coated sheets. Gateway Energy and Coke Company LLC (Gateway) constructed a coke plant, which began operating in October 2009 to supply Granite City Works with its coke needs, under a 15-year agreement with Suncoke. U. S. Steel owns and operates a cogeneration facility that utilizes by-products from the Gateway coke plant to generate heat and power. During December 2015, the Granite City Works steelmaking operations and hot strip mill were temporarily idled. The steelmaking operations and hot strip mill were restarted during 2018 and 2017, respectively.

Fairfield Works, located in Fairfield, Alabama, consists of the #5 coating line.

U. S. Steel owns a Research and Technology Center located in Munhall, Pennsylvania (near Pittsburgh) where we carry out a wide range of applied research, development and technical support functions.

U. S. Steel also owns an automotive technical center in Troy, Michigan. This facility brings automotive sales, service, distribution and logistics services, product technology and applications research into one location. Much of U. S. Steel's work in developing new grades of steel to meet the demands of automakers for high-strength, light-weight and formable materials is carried out at this location.

U. S. Steel has iron ore pellet operations located at Mt. Iron (Minntac) and Keewatin (Keetac), Minnesota with annual iron ore pellet production capability of 22.4 million tons. During 2018, 2017 and 2016, these operations produced 21.8 million, 21.1 million and 15.0 million tons of iron ore pellets, respectively.

Joint Ventures Within Flat-Rolled

U. S. Steel participates in a number of joint ventures that are included in Flat-Rolled, most of which are conducted through subsidiaries. All of these joint ventures are accounted for under the equity method. The significant joint ventures and other investments are described below. For information regarding joint ventures and other investments, see Note 12 to the Consolidated Financial Statements.

U. S. Steel has a 14.7 percent ownership interest in Hibbing Taconite Company (Hibbing), which is based in Hibbing, Minnesota. Hibbing's rated annual production capability is 9.1 million tons of iron ore pellets, of which our share is about 1.3 million tons.

U. S. Steel and POSCO of South Korea participate in a 50-50 joint venture, USS-POSCO Industries (UPI), located in Pittsburg, California. The joint venture markets sheet and tin mill products, principally in the western United States. UPI produces cold-rolled sheets, galvanized sheets, tin plate and tin-free steel from hot bands principally provided by POSCO and U. S. Steel. UPI's annual production capability is approximately 1.5 million tons.

U. S. Steel and Kobe Steel, Ltd. of Japan participate in a 50-50 joint venture, PRO-TEC Coating Company (PRO-TEC). PRO-TEC owns and operates two hot dip galvanizing lines and a continuous annealing line (CAL) in Leipsic, Ohio, which primarily serve the automotive industry. PRO-TEC's annual production capability is approximately 1.5 million tons. U. S. Steel's domestic production facilities supply PRO-TEC with cold-rolled sheets and U. S. Steel markets all of PRO-TEC's products. The CAL produces high strength, lightweight steels that are an integral component in automotive manufacturing as vehicle emission and safety requirements become increasingly stringent. On September 25, 2017, U. S. Steel and Kobe Steel, Ltd. announced their agreement to begin construction of a new continuous galvanizing line (CGL) at PRO-TEC, in response to increased demand for advanced high-strength steels (AHSS). The new CGL, an investment of approximately \$400 million financed by the joint venture, will have a yearly capacity of 500,000 tons. This line, which will utilize a proprietary process, will be capable of coating steel that will help automakers manufacture economically lightweight vehicles to meet increasing fuel efficiency requirements while maintaining exceptionally high safety standards. Construction began in the fourth quarter of 2017 and the line is expected to commence startup in 2019.

U. S. Steel and ArcelorMittal participate in the Double G Coatings Company, L.P. a 50-50 joint venture (Double G), which operates a hot dip galvanizing and Galvalume® facility located near Jackson, Mississippi and primarily serves the construction industry. Double G processes steel supplied by each partner and each partner markets the steel it has processed by Double G. Double G's annual production capability is approximately 315,000 tons.

U. S. Steel and Worthington Industries, Inc. participate in Worthington Specialty Processing (Worthington), a joint venture with locations in Jackson, Canton, and Taylor, Michigan, in which U. S. Steel has a 49 percent interest. Worthington slits, cuts to length, and presses blanks from steel coils to desired specifications. Worthington's annual production capability is approximately 890,000 tons.

Chrome Deposit Corporation (CDC), a 50-50 joint venture between U. S. Steel and Court Holdings, reconditions finishing work rolls, which require grinding, chrome plating and/or texturing. The rolls are used on rolling mills to provide superior finishes on steel sheets. CDC has seven locations across the United States, with all locations near major steel plants.

U. S. Steel holds a 49 percent interest in Feralloy Processing Company (FPC), a joint venture between U. S. Steel and Feralloy Corporation, which converts coiled hot strip mill plate into sheared and flattened plates. The plant, located in Portage, Indiana, has annual production capability of approximately 275,000 tons.

U. S. Steel and Feralloy Corporation, participated in a joint venture, Acero Prime, S. de R.L. de C.V. (Acero Prime). U. S. Steel had a 40 percent interest. In October 2018, a subsidiary of U. S. Steel completed the sale of its ownership interest in Acero Prime, which has facilities in San Luis Potosi, Ramos Arizpe, Monterrey, and Toluca, Mexico.

USSE

USSE operates an integrated facility in Košice, Slovakia, which has annual raw steel production capability of 5.0 million tons. This facility has two coke batteries, four sintering strands, three blast furnaces, four steelmaking vessels, a vacuum degassing unit, two dual strand casters, a hot strip mill, two pickling lines, two cold reduction mills, four annealing facilities, a temper mill, a temper/double cold reduction mill, three hot dip galvanizing lines, two tin coating lines, three dynamo lines, a color coating line and two spiral welded pipe mills. USSE also has multiple slitting, cutting and other finishing lines for flat products. Principal products include hot-rolled, cold-rolled and coated sheets, tin mill products and spiral welded pipe. USSE also has facilities for manufacturing heating radiators, refractory ceramic materials and has a power plant for internal steam and electricity generation.

In addition, USSE has a research laboratory, which, in conjunction with our Research and Technology Center, supports efforts in coke making, electrical steels, design and instrumentation, and ecology.

Tubular

Tubular manufactures seamless and welded OCTG, standard pipe, line pipe and mechanical tubing.

Seamless products are produced at Fairfield Tubular Operations in Fairfield, Alabama and Lorain Tubular Operations located in Lorain, Ohio. The Fairfield Tubular Operations has annual production capability of 750,000 tons and has historically been supplied with steel rounds from Flat-Rolled's former Fairfield Works. Subsequent to the shutdown of the hot end at the Fairfield Works in August 2015, the facility is currently purchasing rounds from third parties. The Fairfield Tubular Operations has the capability to produce outer diameter (O.D.) sizes from 4.5 to 9.875 inches and has quench and temper, hydrotester, threading and coupling and inspection capabilities. On February 11, 2019, U. S. Steel announced plans to restart the delayed electric arc furnace (EAF) capital project located in Fairfield, Alabama. The new EAF will have an annual capacity of approximately 1.6 million tons. The EAF is expected to commence startup in the second half of 2020. The slab and rounds casters of the former Fairfield Works remain capable of operation and are now part of the Fairfield Tubular Operations. The Lorain plant consists of the #3 facility and has historically consumed steel rounds supplied by Fairfield Works and external sources. Subsequent to the shutdown of the hot end at the Fairfield Works, the Company is sourcing rounds from third parties. Lorain #3 facility has the capability to produce 380,000 tons annually in O.D. sizes from 10.125 to 26 inches and has quench and temper, hydrotester, cutoff and inspection capabilities. In March 2017, U. S. Steel made the strategic decision to permanently shutdown the Lorain No. 6 Quench & Temper Mill.

Welded products are produced at Lone Star Tubular Operations #2 facility in Lone Star, Texas and it has the capability to produce O.D. sizes from 1.088 to 7.15 inches. The Lone Star #2 facility has annual production capability of 390,000 tons. On February 4, 2019, U. S. Steel announced plans to restart the #1 Electric-Weld Pipe mill at Lone Star Tubular Operations that was idled in 2016. The #1 mill has annual production capability of 400,000 tons. Lone Star Tubular Operations also has quench and temper, hydrotester, threading and coupling and inspection capabilities.

Wheeling Machine Products manufactures couplings used to connect individual sections of oilfield casing and tubing. It produces sizes ranging from 2.375 to 20 inches at two locations: Pine Bluff, Arkansas, and Hughes Springs, Texas.

Tubular Processing, located in Houston, Texas, provides quench and temper and end-finishing services for oilfield production tubing. Offshore Operations, also located in Houston, Texas, provides threading and coupling, inspection, accessories and storage services to the OCTG market. Tubular Processing has been temporarily idled since 2015.

We have a Research and Development Laboratory and Test Facility in Houston, Texas where our engineers develop and test new steel products, including premium connections.

Joint Ventures Within Tubular

U. S. Steel and Butch Gilliam Enterprises LLC participate in a 50-50 joint venture, Patriot Premium Threading Services, LLC located in Midland, Texas, which provides oil country threading, accessory threading, repair services and rig site services to exploration and production companies located principally in the Permian Basin. For information regarding joint ventures and other investments, see Note 12 to the Consolidated Financial Statements.

Other Businesses

U. S. Steel's Other Businesses include railroad services and real estate operations.

U. S. Steel owns the Gary Railway Company in Indiana, Lake Terminal Railroad Company and Lorain Northern Company in Ohio, Union Railroad Company, LLC in Pennsylvania, Fairfield Southern Company, Inc. in Alabama, Delray Connecting Railroad Company in Michigan and Texas & Northern Railroad Company in Texas. These entities comprise U. S. Steel's transportation business.

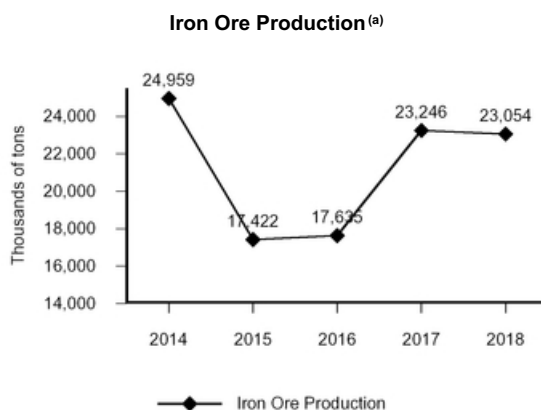
U. S. Steel owns, develops and manages various real estate assets, which include approximately 50,000 acres of surface rights primarily in Alabama, Michigan, Minnesota, Pennsylvania and Illinois. In addition, U. S. Steel holds ownership interests in a joint venture that is developing real estate projects in Alabama.

Raw Materials and Energy

As an integrated producer, U. S. Steel's primary raw materials are iron units in the form of iron ore pellets and sinter ore, carbon units in the form of coal and coke (which is produced from coking coal) and steel scrap. U. S. Steel's raw materials supply strategy consists of acquiring and expanding captive sources of certain primary raw materials and entering into flexible supply contracts for certain other raw materials at competitive market prices which are subject to fluctuations based on market conditions at the time.

The amounts of such raw materials needed to produce a ton of steel will fluctuate based upon the specifications of the final steel products, the quality of raw materials and, to a lesser extent, differences among steel producing equipment. In broad terms, U. S. Steel consumes approximately 1.4 tons of coal to produce one ton of coke and then it consumes approximately 0.3 tons of coke, 0.3 tons of steel scrap (45 percent of which is internally generated) and 1.3 tons of iron ore pellets to produce one ton of raw steel. At normal operating levels, we also consume approximately 6 mmbtu's of natural gas per ton produced. While we believe that these estimated consumption amounts are useful for planning purposes, and are presented to give a general sense of raw material and energy consumption related to steel production, substantial variations may occur.

Iron Ore



^(a) Includes our share of production from Hibbing through December 31, 2018 and Tilden to September 29, 2017. U. S. Steel's ownership interest in Tilden was sold on September 29, 2017. The decrease in iron ore production from 2014 is primarily related to the idling of our Keetac facility. In 2017, the Keetac facility restarted production.

The iron ore facilities at Minntac and Keetac contain an estimated 838 million short tons of recoverable reserves and our share of recoverable reserves at the Hibbing joint venture is 7 million short tons. Recoverable reserves are defined as the tons of product that can be used internally or delivered to a customer after considering mining and beneficiation or preparation losses. Minntac and Keetac's annual capability and our share of annual capability for the Hibbing joint

venture total approximately 24 million tons. Through our wholly owned operations and our share of our joint venture, we have iron ore pellet production capability that exceeds our steelmaking capability in the U.S.

We sold iron ore pellets in 2018, 2017 and 2016 to third parties. The Company has agreements to supply iron ore pellets to third-party customers over the next several years.

Substantially all of USSE's iron ore requirements are purchased from outside sources, primarily Russian and Ukrainian mining companies. Prices for European contracts are negotiated quarterly. In certain prior years, USSE also received iron ore from U. S. Steel's iron ore facilities in North America. We believe that supplies of iron ore adequate to meet USSE's needs are available at competitive market prices.

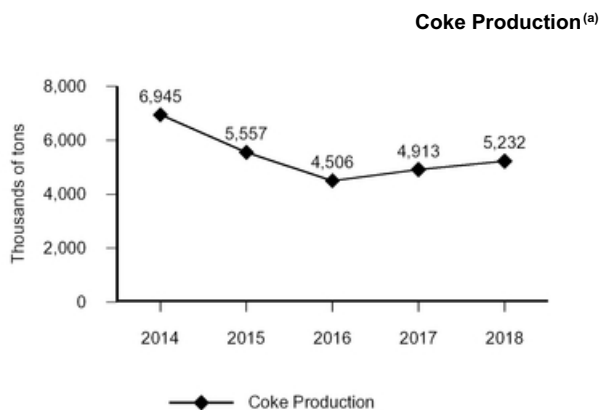
Coking Coal

All of U. S. Steel's coal requirements for our cokemaking facilities are purchased from outside sources. Pricing for Flat-Rolled's coking coal contracts are typically negotiated on a yearly basis, and from time to time we have entered into multi-year agreements for a portion of our coking coal requirements.

Prices for European contracts are negotiated at defined intervals, predominantly annually.

We believe that supplies of coking coal adequate to meet our needs are available from outside sources at competitive market prices. The main source of coking coal for Flat-Rolled is the United States, and sources for USSE include Poland, the Czech Republic, Russia, Ukraine, Mozambique and the United States.

Coke



^(a) The decrease in 2016 coke production from 2015 was due to decreased internal steel production and depletion of existing coke inventory. The decrease in 2015 coke production from 2014 is due to the permanent shutdown of coke operations at Gary Works and Granite City Works.

In North America, the Flat-Rolled segment operates a cokemaking facility at the Clairton Plant of Mon Valley Works. At our Granite City Works, we also have a 15-year coke supply agreement with Gateway which began in 2009. Blast furnace injection of coal, and self-generated coke oven gas is also used to reduce coke usage.

With Flat-Rolled's cokemaking facilities and the Gateway long-term supply agreement, it has the capability to be nearly self-sufficient with respect to its annual coke requirements at normal operating levels. Coke from time to time has been purchased from, sold to, or swapped with suppliers and other end-users to adjust for production needs and reduce transportation costs.

In Europe, the USSE segment operates cokemaking facilities at USSK. While USSE is self-sufficient for coke at normal operating levels, it periodically purchases coke from Polish and Czech coke producers to meet production needs. Volume and price are negotiated quarterly.

Steel Scrap and Other Materials

We believe that supplies of steel scrap, alloys and coating materials adequate to meet our needs to support Flat-Rolled and USSE are readily available from outside sources at competitive market prices. Generally, approximately 45 percent of our steel scrap requirements are internally generated through normal operations.

Limestone

All of Flat-Rolled's and USSE's limestone requirements are purchased from outside sources. We believe that supplies of limestone adequate to meet our needs are readily available from outside sources at competitive market prices.

Zinc and Tin

We believe that supplies of zinc and tin required to fulfill the requirements for Flat-Rolled and USSE are available from outside sources at competitive market prices. For Flat-Rolled, the main sources of zinc are Canada, Peru and Mexico and the main sources of tin are Bolivia and Peru. For USSE, the main sources of zinc are Sweden, the Slovak Republic, Netherlands and Poland and the main sources of tin are Bolivia, Indonesia and Peru.

During 2018, Flat-Rolled protected approximately 45% and 50% of its operation's zinc and tin purchases, respectively, with financial swap derivatives to manage exposure to zinc and tin price fluctuations. During 2018, USSE protected approximately 30% of its operation's zinc purchases with forward physical contracts to manage exposure to zinc price fluctuations. Also during 2018, USSE protected approximately 25% of its operation's tin purchases with forward physical contracts and 15% of its operation's tin purchases with financial swaps to manage our exposure to tin price fluctuations. For further information, see Note 16 to the Consolidated Financial Statements.

Natural Gas

All of U. S. Steel's natural gas requirements are purchased from outside sources.

We believe that adequate supplies to meet Flat-Rolled's and Tubular's needs are available at competitive market prices. For 2018, approximately 20 percent of our natural gas purchases in Flat-Rolled were based on bids solicited on a monthly basis from various vendors; the remainder were made daily or with term agreements.

We believe that adequate natural gas supplies to meet USSE's needs are available at competitive market prices. During 2018, we routinely executed fixed-price forward physical purchase contracts for natural gas to partially manage our exposure to natural gas price increases. For 2018, approximately 55 percent of our natural gas purchases in USSE were made with fixed-price forward physical purchase contracts; the remainder were based on bids solicited on a quarterly, monthly or a daily basis from various vendors.

Both Flat-Rolled and USSE use self-generated coke oven and blast furnace gas to reduce consumption of natural gas. USSE also captures and consumes converter gas from its four steelmaking vessels.

Industrial Gases

U. S. Steel purchases industrial gas in the U.S. under long-term contracts with various suppliers. USSE owns and operates its own industrial gas facilities, but also may purchase industrial gases from time to time.

Commercial Sales of Product

U. S. Steel characterizes sales as contract sales if sold pursuant to an agreement with a defined volume and pricing and a duration of longer than three months, and as spot if sold without a defined volume and pricing agreement. In 2018, approximately 80 percent, 70 percent and 28 percent of sales by Flat-Rolled, USSE and Tubular, respectively, were contract sales. Some contract pricing agreements include fixed prices while others are adjusted periodically based upon published prices of steel products or cost components.

Environmental Matters, Litigation and Contingencies

Some of U. S. Steel's facilities were in operation before 1900. Although management believes that U. S. Steel's environmental practices have either led the industry or at least been consistent with prevailing industry practices, hazardous materials may have been released at current or former operating sites or delivered to sites operated by third parties.

Our U.S. facilities are subject to environmental laws applicable in the U.S., including the Clean Air Act (CAA), the Clean Water Act (CWA), the Resource Conservation and Recovery Act (RCRA) and the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), as well as state and local laws and regulations.

U. S. Steel has incurred and will continue to incur substantial capital, operating, and maintenance and remediation expenditures as a result of environmental laws and regulations, related to release of hazardous materials, which in recent years have been mainly for process changes to meet CAA obligations and similar obligations in Europe.

Midwest Plant Incident

On April 11, 2017, there was a process waste water release at our Midwest Plant (Midwest) in Portage, Indiana that impacted a water outfall that discharges to Burns Waterway near Lake Michigan. U. S. Steel identified the source of the release and made the necessary repairs. We determined that all repairs were safely working as intended and, on April 14, 2017, resumed operations in a controlled, phased and highly monitored approach with extensive input from participating government agencies. The Company has since implemented substantial operational, process and notification improvements at Midwest. In January of 2018, The Surfrider Foundation and the City of Chicago initiated suits in the Northern District of Indiana alleging CWA and Permit violations at Midwest. On April 2, 2018, the United States Environmental Protection Agency (U.S. EPA) and the State of Indiana initiated a separate action against the Company and lodged a Consent Decree negotiated between U. S. Steel and the relevant governmental agencies consisting of all material terms to resolve the CWA and National Pollutant Discharge Elimination System (NPDES) violations at the Midwest Plant. A public comment period for the Consent Decree ensued. U. S. Steel, U.S. EPA and the State of Indiana continue the process of reviewing and addressing those comments. The Surfrider Foundation and the City of Chicago initially agreed to stay their actions pending finalization of the Consent Decree, but filed a motion to lift that stay in July 2018. On September 13, 2018, both The Surfrider Foundation and the City of Chicago filed motions to intervene in the Consent Decree case. On December 6, 2018, the court denied the Surfrider Foundation and City of Chicago's motion to lift the stay in the citizen suit case, and on December 13, 2018 the court granted the Surfrider Foundation and City of Chicago's motion to intervene in the Consent Decree case. The citizens groups filed their Complaints-in-Intervention on December 27, 2018, and Amended Complaints-in-Intervention on January 17, 2019. U. S. Steel continues to work with United States Department of Justice, U.S. EPA, and Indiana Department of Environmental Management towards a finalized Consent Decree.

EU Environmental Requirements and Slovak Operations

Under the Emission Trading Scheme (ETS), USSK's final allocation of free allowances for the Phase III period, which covers the years 2013 through 2020 is 48 million allowances. We estimate a shortfall of approximately 15 million allowances for the Phase III period. Based on projected future production levels, we started to purchase allowances in the third quarter of 2017 to meet the annual compliance submission in the future. As of December 31, 2018, we have purchased approximately 11 million European Union Allowances totaling €118 million (approximately \$135 million). However, due to a number of variables such as the future market value of allowances, future production levels and future emissions intensity levels, we cannot reliably estimate the full cost of complying with the ETS regulations at this time.

The EU's Industry Emission Directive requires implementation of EU determined best available techniques (BAT) for iron and steel production, to reduce environmental impacts as well as compliance with BAT associated emission levels. Our most recent broad estimate of future capital expenditures for projects that go beyond BAT requirements is up to €138 million (approximately \$158 million) over the 2017 to 2020 program period. These costs may be mitigated if USSK complies with certain financial covenants, which are assessed annually. USSK complied with these covenants as of December 31, 2018. If we are unable to meet these covenants in the future, USSK might be required to provide additional collateral (e.g. bank guarantee) to secure the full value of estimated expenditures. There could be increased operating costs associated with these projects, such as increased energy and maintenance costs. We are currently unable to reliably estimate what the increase in operating costs will be as many projects are still in the development stage.

Due to other EU legislation, BAT for Large Combustion Plants (LCP), we were required to make changes to the boilers at our steam and power generation plant in order to comply with stricter air emission limits for large combustion plants. The requirements for LCP resulted in the construction of a new boiler and certain upgrades to our existing boilers. In January 2014, the operation of USSK's boilers was approved by the European Commission (EC) as part of Slovakia's Transitional National Plan (TNP) for bringing all boilers in Slovakia into compliance by no later than 2020. The TNP establishes emissions ceilings for each category of emissions (total suspended particulate, sulfur dioxide (SO₂), and nitrogen oxide (NO_x)). The allowable amount of discharged emissions from existing boilers will decrease each year until mid-2020. These projects will result in a reduction in electricity, emissions, and operating, maintenance and waste disposal costs. The construction of both boilers is complete with a total final installed cost of €128 million (approximately \$147 million).

For further discussion of laws applicable in Slovakia and the EU and their impact on USSK, see Note 26 to the Consolidated Financial Statements, "Contingencies and Commitments - Environmental Matters, EU Environmental Requirements."

New and Emerging Environmental Regulations

United States and European Greenhouse Gas Emissions Regulations

Future compliance with CO₂ emission requirements may include substantial costs for emission allowances, restriction of production and higher prices for coking coal, natural gas and electricity generated by carbon based systems. Because we cannot predict what requirements ultimately will be imposed in the U.S. and Europe, it is difficult to estimate the likely impact on U. S. Steel, but it could be substantial. On March 28, 2017, President Trump signed Executive Order 13783 instructing the U.S. EPA to review the Clean Power Plan. On October 16, 2017, the U.S. EPA proposed to repeal the Clean Power Plan after reviewing the plan pursuant to President Trump's executive order. Any repeal and/or replacement of the Clean Power Plan is likely to be challenged by various proponents of the plan, such as environmental groups and certain states. Any impacts to our operations as a result of any future greenhouse gas regulations are not estimable at this time since the matter is unsettled. In any case, to the extent expenditures associated with any greenhouse gas regulation, as with all costs, are not ultimately reflected in the prices of U. S. Steel's products and services, operating results will be reduced.

There have been no material changes in U. S. Steel's exposure to European Greenhouse Gas Emissions regulations since December 31, 2017.

United States - Air

The CAA imposes stringent limits on air emissions with a federally mandated operating permit program and civil and criminal enforcement sanctions. The CAA requires, among other things, the regulation of hazardous air pollutants through the development and promulgation of National Emission Standards for Hazardous Air Pollutants (NESHAP) and Maximum Achievable Control Technology (MACT) Standards. The U.S. EPA has developed various industry-specific MACT standards pursuant to this requirement. The CAA requires the U.S. EPA to promulgate regulations establishing emission standards for each category of Hazardous Air Pollutants. The U.S. EPA also must conduct risk assessments on each source category that is already subject to MACT standards and determine if additional standards are needed to reduce residual risks.

While our operations are subject to several different categories of NESHAP and MACT standards, the principal impact of these standards on U. S. Steel operations includes those that are specific to coke making, iron making, steel making and iron ore processing.

The U.S. EPA is currently in the process of completing a Residual Risk and Technology Review of the Integrated Iron and Steel MACT regulations, Coke MACT regulations, and Taconite Iron Ore Processing MACT regulations as required by the CAA. The U.S. EPA is under a court order to complete the Residual Risk and Technology Review of the Integrated Iron and Steel regulations no later than March 13, 2020; and to complete the Residual Risk and Technology Review of the Taconite Iron Ore Processing Regulations by June 30, 2020. Because the U.S. EPA has not completed its review, any impacts related to the U.S. EPA's review of these standards cannot be estimated at this time.

On March 12, 2018, the New York State Department of Environmental Conservation (DEC) submitted a CAA Section 126 petition to the U.S. EPA. In the petition, the DEC asserts that stationary sources from the following nine states are interfering with attainment or maintenance of the 2008 and 2015 ozone National Ambient Air Quality Standards (NAAQS) in New York, Illinois, Indiana, Kentucky, Maryland, Michigan, Ohio, Pennsylvania, Virginia, and West Virginia. DEC is requesting the U.S. EPA to require sources of nitrogen oxides in the nine states to reduce such emissions. On May 4, 2018, citing Section 307(d)(10) of the CAA, the U.S. EPA issued a notice extending the deadline for the agency to respond to the petition until November 9, 2018. However, to date, U.S. EPA has not responded to the petition.

The CAA also requires the U.S. EPA to develop and implement NAAQS for criteria pollutants, which include, among others, particulate matter (PM) - consisting of PM₁₀ and PM_{2.5}, lead, carbon monoxide, nitrogen dioxide, SO₂, and ozone.

In June 2010, the U.S. EPA significantly lowered the primary NAAQS for SO₂ from 140 parts per billion (ppb) on a 24-hour basis to an hourly standard of 75 ppb. Subsequently, the U.S. EPA designated the areas in which Great Lakes Works and Mon Valley Works facilities are located as nonattainment with the 2010 standard for the SO₂ NAAQS. The non-attainment designation requires the facilities to implement operational and/or capital improvements to demonstrate attainment with the 2010 standard. U. S. Steel worked with the Allegheny County Health Department (ACHD) in developing a State Implementation Plan (SIP) for the Allegheny County portion of the Pennsylvania SIP that includes reductions of SO₂ and improved dispersion from U. S. Steel sources. On November 19, 2018, U.S. EPA published a proposed rule to approve the SIP. Comments on the proposed rule were accepted until December 19, 2018. In addition, as noted in the Legal Proceedings section, U. S. Steel continues to work with the regulatory authorities to address the Wayne County, Michigan (where Great Lakes Works is located) nonattainment status. The operational and financial impacts of the SO₂ NAAQS is not estimated to be material at this time.

In October 2015, the U.S. EPA lowered the NAAQS for ozone from 75 ppb to 70 ppb. On November 6, 2017, the U.S. EPA designated most areas in which we operate as attainment with the 2015 standard. In a separate ruling, on June 4, 2018, the U.S. EPA designated other areas in which we operate as “marginal nonattainment” with the 2015 ozone standard. While on December 6, 2018, U.S. EPA published a final rule regarding implementation of the 2015 ozone standard. Because no state regulatory or permitting actions to bring the ozone nonattainment areas into attainment have yet to be proposed or developed for U. S. Steel facilities, the operational and financial impact of the ozone NAAQS cannot be reasonably estimated at this time.

On December 14, 2012, the U.S. EPA lowered the annual standard for PM_{2.5} from 15 micrograms per cubic meter (ug/m³) to 12 ug/m³, and retained the PM_{2.5} 24-hour and PM₁₀ NAAQS rules. In December 2014, the U.S. EPA designated some areas in which U. S. Steel operates as nonattainment with the 2012 annual PM_{2.5} standard. On April 6, 2018, the U.S. EPA published a notice that Pennsylvania, California and Idaho failed to submit a SIP to demonstrate attainment with the 2012 fine particulate standard by the deadline established by the CAA. As a result of the notice, Pennsylvania, a state in which we operate, is required to submit a SIP to the U.S. EPA no later than November 7, 2019 to avoid sanctions. Because it is early in the SIP development stages, any impacts to U. S. Steel cannot be reasonably estimated at this time.

In 2010, the U.S. EPA retained the annual nitrogen dioxide NAAQS standard, but created a new 1-hour NAAQS and established new data reduction and monitoring requirements. While the U.S. EPA has classified all areas as being in attainment or unclassifiable, it is requiring implementation of a network of monitoring stations to assess air quality. Until the network is implemented and further designations are made, the impact on operations at U. S. Steel facilities cannot be reasonably estimated.

In July 2018, the ACHD provided U. S. Steel, ACHD Regulation Subcommittee members and interested parties with draft regulations that would modify the existing air regulations applicable to coke plants in Allegheny County. While ACHD currently has some of the most stringent air regulations in the country governing coke plants, which apply to U. S. Steel’s coke plant in Clairton, Pennsylvania (the only remaining coke plant in Allegheny County and one of two remaining in Pennsylvania), the draft regulations would reduce the current allowable emissions from coke plant operations and would be more stringent than the Federal Best Available Control Technology and Lowest Achievable Emission Rate requirements. In various meetings with ACHD, U. S. Steel has raised significant objections, in particular, that ACHD has not demonstrated that continuous compliance with the draft rule is economically and technologically feasible. While U. S. Steel continues to meet with ACHD regarding the draft rule, U. S. Steel believes that any rule promulgated by ACHD must comply with their statutory authority. Adopting the draft rule or similar rule could be material to U. S. Steel.

Environmental Remediation

In the United States, U. S. Steel has been identified as a potentially responsible party (PRP) at nine sites under CERCLA as of December 31, 2018. Of these, there are three sites where information requests have been received or there are other indications that U. S. Steel may be a PRP under CERCLA, but where sufficient information is not presently available to confirm the existence of liability or to make a reasonable estimate with respect to any potential liabilities. There are also 18 additional sites where U. S. Steel may be liable for remediation costs in excess of \$100,000 under other environmental statutes, both federal and state, or where private parties are seeking to impose liability on U. S. Steel for remediation costs through discussions or litigation. At many of these sites, U. S. Steel is one of a number of parties involved and the total cost of remediation, as well as U. S. Steel's share, is frequently dependent upon the outcome of ongoing investigations and remedial studies. U. S. Steel accrues for environmental remediation activities when the responsibility to remediate is probable and the amount of associated costs is reasonably estimable. As environmental remediation matters proceed toward ultimate resolution or as remediation obligations arise, charges in excess of those previously accrued may be required.

For further discussion of relevant environmental matters, see "Item 3. Legal Proceedings - Environmental Proceedings."

Property, Plant and Equipment Additions

For property, plant and equipment additions, including capital leases, see "Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations – Financial Condition, Cash Flows and Liquidity – Cash Flows" and Note 13 to the Consolidated Financial Statements.

Employees

As of December 31, 2018, U. S. Steel had approximately 17,000 employees in the U.S. and approximately 12,000 in Europe.

Approximately 14,000 hourly employees of U. S. Steel's flat-rolled, tubular, cokemaking and iron ore pellet facilities in the United States are covered by collective bargaining agreements with the USW effective September 1, 2018 (the 2018 Labor Agreements) that expire on September 1, 2022. The 2018 Labor Agreements provide for wage, pension and other benefit adjustments for current and future retirees. For more details on the 2018 Labor Agreements, see Note 28 to the Consolidated Financial Statements. A small number of workers at some of our North American facilities and at our transportation operations are covered by agreements with the USW or other unions that have various expiration dates.

In Europe, excluding U.S. expatriates, most employees at USSK are represented by the OZ KOVO union and all employees are covered by an agreement that expires at the end of March 2020.

Available Information

U. S. Steel's Internet address is www.ussteel.com. We post our annual report on Form 10-K, our quarterly reports on Form 10-Q, our proxy statement and our interactive data files to our website as soon as reasonably practicable after such reports are filed with the Securities and Exchange Commission (SEC). We also post all press releases and earnings releases to our website.

All other filings with the SEC are available via a direct link on the U. S. Steel website to the SEC's website, www.sec.gov.

Also available on the U. S. Steel website are U. S. Steel's Corporate Governance Principles, Code of Ethical Business Conduct and the charters of the Audit Committee, the Compensation & Organization Committee and the Corporate Governance & Public Policy Committee of the Board of Directors. These documents and the Annual Report on Form 10-K and proxy statement are also available in print to any stockholder who requests them. Such requests should be sent to the Office of the Corporate Secretary, United States Steel Corporation, 600 Grant Street, Suite 1500, Pittsburgh, Pennsylvania 15219-2800 (telephone: 412-433-1121).

U. S. Steel does not incorporate into this document the contents of any website or the documents referred to in the immediately preceding paragraph.

Other Information

Information on net sales, depreciation, capital expenditures, earnings (loss) before interest and income taxes and assets by reportable segment and for Other Businesses and on net sales and assets by geographic area are set forth in Note 4 to the Consolidated Financial Statements.

For significant operating data for U. S. Steel for each of the last five years, see “Five-Year Operating Summary (Unaudited)” within this document.

Item 1A. RISK FACTORS

Operational Risk Factors

Our operational footprint, unplanned equipment outages and other unforeseen disruptions may adversely impact our results of operations.

U. S. Steel has adjusted its operating configuration in response to market conditions including global overcapacity and unfairly traded imports by idling and restarting production at certain facilities. Due to our operational footprint, the Company may not be able to respond in an efficient manner to fully realize the benefits from changing market conditions that are favorable to integrated steel producers.

Our steel production depends on the operation of critical structures and pieces of equipment, such as blast furnaces, steel shops, casters, hot strip mills and various structures and operations that support them. While we are implementing asset revitalization and a reliability-centered maintenance initiative focusing on proactive maintenance of key machinery and equipment at our production facilities, we may experience prolonged periods of reduced production and increased maintenance and repair costs due to equipment failures at our facilities or those of our key suppliers.

It is also possible that operations may be disrupted due to other unforeseen circumstances such as power outages, explosions, fires, floods, accidents, severe weather conditions, and changes in U.S., European Union and other foreign tariffs, free trade agreements, trade regulations, laws, and policies. We are also exposed to similar risks involving major customers and suppliers such as force majeure events of raw materials suppliers that have occurred and may occur in the future. Availability of raw materials and delivery of products to customers could be affected by logistical disruptions, such as shortages of barges, ocean vessels, rail cars or trucks, or unavailability of rail lines or of the locks on the Great Lakes or other bodies of water. To the extent that lost production could not be compensated for at unaffected facilities and depending on the length of the outage, our sales and our unit production costs could be adversely affected.

U. S. Steel continues to incur certain costs when production capacity is idled, increased costs to resume production at idled facilities, or costs to idle facilities.

Our decisions concerning which facilities to operate and at what levels are made based upon our customers' orders for products as well as the capabilities and cost performance of our locations. During periods of depressed market conditions, we may concentrate production operations at several plant locations and not operate others in response to customer demand, and as a result we will incur idle facility costs.

When we restart idled facilities, we incur certain costs to replenish raw material inventories, prepare the previously idled facilities for operation, perform the required repair and maintenance activities and prepare employees to return to work safely and resume production responsibilities. The amount of any such costs can be material, depending on a variety of factors, such as the period of time during which the facilities remained idle, necessary repairs and available employees, and is difficult to project.

U. S. Steel has been and continues to be adversely affected by unfairly traded imports and global overcapacity, which may cause downward pricing pressure, lost sales and revenue, market share, decreased production, investment, and profitability.

Currently, global steel production capacity significantly exceeds global steel demand.

Global overcapacity continues to result in high levels of dumped and subsidized steel imports into the markets we serve. Domestic and international trade laws provide mechanisms to address the injury caused by such imports to domestic industries. Though U. S. Steel currently benefits from 54 U.S. antidumping and countervailing duty (AD/CVD) orders and 11 European Union (EU) AD/CVD orders, petitions for trade relief are not always successful or effective. When received, such relief is generally subject to periodic reviews and challenges, which can result in revocation of the AD/CVD order or reduction of the AD/CVD duties. There can be no assurance that any relief will be obtained or continued in the future or that such relief will adequately combat unfairly traded imports.

The current Section 232 national security tariffs and quotas on steel imports into the United States also provide U. S. Steel and other domestic steel producers relief from imports. Likewise, the EU's retaliatory 25 percent tariffs on certain U.S. steel imports and safeguard measures on steel provide USSE and other European steel producers relief

from imports. The duration of the Section 232 tariffs and quotas, the outcome of outstanding product exclusion requests before the U.S. Department of Commerce, and the EU retaliatory and safeguard relief is not known.

Faced with significant imports into the U.S. and overcapacity in various markets, we will continue to evaluate potential strategic and organizational opportunities, which may include exiting lines of business and the sale of certain assets, temporary shutdowns or closures of facilities.

We face risks relating to changes in U.S. and foreign tariffs, trade agreements, laws, and policies

Through a series of Presidential Proclamations pursuant to Section 232 of the Trade Expansion Act of 1962, U.S. imports of certain steel products are subject to a 25 percent tariff, except for imports from: (1) Turkey, which are subject to a 50 percent tariff; (2) Argentina, Brazil, and Korea, which are subject to restrictive quotas; and (3) Australia, which is not subject to either tariffs or quotas. The Section 232 national security tariffs and quotas on steel imports currently provide U. S. Steel and other domestic steel producers critical relief from imports. With no scheduled end date, the duration of the Section 232 relief is not known. Further, the U.S. government may negotiate alternatives to the Section 232 tariffs for certain countries. The U.S. Department of Commerce continues to administer its Section 232 product exclusion process. The Section 232 action on aluminum and steel imports, potential Section 232 action on other products, and recent and potential additional U.S. import tariffs imposed under Section 301 of the Trade Act of 1974 have resulted in the possibility of tariffs being applied to materials and/or items we purchase from subject countries or regions as part of our manufacturing process, and may result in additional, retaliatory action by foreign governments on U.S. exports of a range of products, including products produced by our customers. In response to the Section 232 being applied to its exports, the European Commission imposed both 25 percent retaliatory tariffs on certain U.S. steel imports in June 2018 and a provisional safeguard on global steel imports in the form of tariff rate quotas (TRQs; 25 percent tariffs on steel imports that exceed the quota) in July 2018. The final EU safeguards are effective February 2019 through June 2021. All of the above factors present a degree of uncertainty to our financial and operational performance, our customers, and overall economic conditions, all of which could impact steel demand and our performance.

The steel industry is highly cyclical, which may have an adverse effect on our results of operations.

Steel consumption is highly cyclical and generally follows economic and industrial conditions both worldwide and in regional markets. This volatility makes it difficult to balance the procurement of raw materials and energy with global steel prices, our steel production and customer product demand. U. S. Steel has implemented strategic initiatives to produce more stable and consistent results, even during periods of economic and market downturns, but this may not be enough to mitigate the effect that the volatility inherent in the steel industry has on our results of operations.

We face increased competition from alternative materials and risks concerning innovation, new technologies, products and increasing customer requirements.

As a result of increasingly stringent regulatory requirements, designers, engineers and industrial manufacturers, especially those in the automotive industry, are increasing their use of lighter weight and alternative materials, such as aluminum, composites, plastics, and carbon fiber. Use of such materials could reduce the demand for steel products, which may reduce our profitability and cash flow.

Additionally, technologies such as direct iron reduction, EAF production, oxygen-coal injection and experimental technologies such as molten oxide electrolysis and hydrogen flash smelting may be more cost effective than our current production methods. However, we may not have sufficient capital to invest in such technologies and may incur difficulties adapting and fully integrating these technologies into our existing operations. We may also encounter production restrictions, or not realize the cost benefit from such capital intensive technology adaptations to our current production processes. Customers, such as those in the automotive industry, are demanding stronger and lighter products. Tubular customers are increasingly requesting pipe producers to supply connections and other ancillary parts as well as inspection and other services. We may not be successful in meeting these technological challenges.

Limited availability of raw materials and energy may constrain operating levels and reduce profit margins.

U. S. Steel and other steel producers have periodically been faced with problems in obtaining sufficient raw materials and energy in a timely manner due to delays, defaults, severe weather conditions, or force majeure events by suppliers, shortages or transportation problems (such as shortages of barges, ore vessels, rail cars or trucks, or disruption of rail lines, waterways, or natural gas transmission lines), resulting in production curtailments. As a result, we may be

exposed to risks concerning pricing and availability of raw materials from third parties. USSE purchases substantially all of its iron ore and coking coal requirements from outside sources. USSE is also dependent upon availability of natural gas produced in Russia and transported through Ukraine. Any curtailments or escalated costs may further reduce profit margins.

Changes in the global economic environment may lead to declines in the production levels of our customers.

We sell to the automotive, service center, converter, energy and appliance and construction-related industries. Some of these industries are cyclical and exhibit a great deal of sensitivity to general economic conditions. Low demand from customers in these key industries may adversely impact our financial position, results of operations and cash flows.

Our Flat-Rolled and Tubular segments may be particularly impacted by unfavorable market conditions in the oil and gas industries. Declines in oil prices, and the correlating reduction in drilling activity, as well as high levels of inventory in the supply chain, may reduce demand for tubular products and could have adverse impacts on our results of operations and cash flows.

We may be adversely impacted by volatility in prices for raw materials, energy, and steel.

U. S. Steel may be faced with having agreed to purchase raw materials and energy at prices that are above the current market price or in greater volumes than required. Additionally, any future decreases in iron ore, scrap, natural gas and oil prices may place downward pressure on steel prices. If steel prices decline, our profit margins on market-based indexed contracts and spot business will be reduced.

Our operations expose us to uncertainties and risks in the countries in which we operate, which may negatively affect our results of operations, cash flows and liquidity.

Our U.S. operations are subject to economic conditions, including credit and capital market conditions, and political factors in the United States, which if changed could negatively affect our results of operations, cash flows and liquidity. Political factors include, but are not limited to, taxation, inflation, increased regulation, limitations on exports of energy and raw materials, and trade remedies. Actions taken by the U.S. government could affect our results of operations, cash flows and liquidity.

USSE is subject to economic conditions and political factors associated with the EU, Slovakia and neighboring countries, and the euro currency. Changes in any of these economic conditions or political factors could negatively affect our results of operations, cash flows and liquidity. Political factors include, but are not limited to, taxation, nationalization, inflation, government instability, civil unrest, increased regulation and quotas, tariffs and other protectionist measures.

Our 2018 Labor Agreements with the USW contain provisions that may impact certain business activities.

Our 2018 Labor Agreements with the USW contain provisions that grant the USW a limited right to bid on the Company's sale of a facility (or sale of a controlling interest in an entity owning a facility) covered by the 2018 Labor Agreements, excluding public equity offerings and/or the transfer of assets between U. S. Steel wholly owned subsidiaries. These agreements also require a minimum level of capital expenditures (subject to approval of the Board of Directors) to maintain the competitive status of the covered facilities, and place certain restrictions on our ability to replace product produced at a covered facility with product produced at other than U.S. or Canadian facilities with employee protections similar to the protections found in the 2018 Labor Agreements when the Company is operating covered facilities below capacity. These provisions could favorably or unfavorably impact certain business activities including pricing, operating costs, margins, and/or our competitiveness in the marketplace.

A failure of our information technology infrastructure and cybersecurity threats may adversely affect our business operations.

Despite efforts to protect confidential business information, personal data of employees and contractors, and the control systems of manufacturing plants, U. S. Steel systems and those of our third-party service providers may be subject to cyber-attacks or system breaches. System breaches can lead to theft, unauthorized disclosure, modification or destruction of proprietary business data, personally identifiable information (PII), or other sensitive information, and to defective products, production downtime and damage to production assets, with a resulting impact to our reputation, competitiveness and operations. We have experienced cybersecurity attacks that have resulted in unauthorized persons gaining access to our information technology systems and networks, and we could in the future experience

similar attacks. To date, no cybersecurity attack has had a material impact on our financial condition, results of operations or liquidity.

While the Company continually works to safeguard our systems and mitigate potential risks, there can be no assurance that such actions will be sufficient to prevent cyber-attacks or security breaches or mitigate all potential risks to our systems, networks and data. The potential consequences of a material cybersecurity attack include reputational damage, litigation with third parties, disruption to our systems, unauthorized release of confidential, personally identifiable, or otherwise protected information, corruption of data, diminution in the value of our investment in research, development and engineering, and increased cybersecurity protection and remediation costs, which in turn could adversely affect our competitiveness, results of operations and financial condition. The amount of insurance coverage we maintain may be inadequate to cover claims or liabilities resulting from a cybersecurity attack.

We depend on third parties for transportation services, and increases in costs or the availability of transportation may adversely affect our business and operations.

Our business depends on the transportation of a large number of products, both domestically and internationally. We rely primarily on third parties for transportation of the products we manufacture as well as delivery of our raw materials. Any increase in the cost of the transportation of our raw materials or products, as a result of increases in fuel or labor costs, higher demand for logistics services, consolidation in the transportation industry or otherwise, may adversely affect our results of operations as we may not be able to pass such cost increases on to our customers.

If any of these providers were to fail to deliver raw materials to us in a timely manner, we may be unable to manufacture and deliver our products in response to customer demand. In addition, if any of these third parties were to cease operations or cease doing business with us, we may be unable to replace them at a reasonable cost.

In addition, such failure of a third-party transportation provider could harm our reputation, negatively affect our customer relationships and have a material adverse effect on our financial position and results of operations.

Benefits from our stockholder value creation strategy and asset revitalization program may be limited or may not be fully realized.

U. S. Steel initiated a stockholder value creation strategy pursuant to which we focus on strengthening our balance sheet and cash flow generation. In 2018, we refreshed our corporate strategy to incorporate three critical success factors: winning in attractive markets, moving down the cost curve and moving up the talent curve. Our goal remains to deliver high-quality, value-added products on time every time and to collaborate with our customers to develop innovative solutions that address their most challenging needs. Additionally, in 2017 we implemented an asset revitalization program, which covers investments in our existing assets, and involves investments beyond routine capital and maintenance spending. These asset revitalization projects are expected to deliver both operational and commercial benefits, but such benefits may be limited to the assets that are revitalized. Business conditions, our ability to implement such initiatives, and factors beyond our control may limit the benefits associated with certain identified projects and limit the economic benefits of our stockholder value creation strategy or asset revitalization program.

We participate in joint ventures, which may not be successful.

We participate in a number of joint ventures and we may enter into additional joint ventures or other similar arrangements in the future. Our joint venture partners, as well as any future partners, may have interests that are different from ours which may result in conflicting views as to the conduct of the business of the joint venture. In the event that we have a disagreement with a joint venture partner as to the resolution of a particular issue, or as to the management or conduct of the business of the joint venture in general, we may not be able to resolve such disagreement in our favor. In addition, our joint venture partners may, as a result of financial or other difficulties or because of other reasons, be unable or unwilling to fulfill their obligations under the joint venture, such as contributing capital to expansion or maintenance projects or approving dividends or other distributions or payments to us. Any significant downturn or deterioration in the business, financial condition or results of operations of a joint venture could adversely affect our results of operations in a particular period. There can be no assurance that our joint ventures will be beneficial to us.

Financial Risk Factors

Our business requires substantial expenditures for debt service obligations, capital investments, operating leases and maintenance that we may be unable to fund.

While we have refinanced the near-term maturities of our long-term debt, we have approximately \$2.4 billion of total debt (see Note 17 to the Consolidated Financial Statements). If our cash flows and capital resources are insufficient to fund our debt service obligations, we may face substantial liquidity problems and may be forced to reduce or delay investments and capital expenditures or to dispose of material assets or operations, or issue additional debt or equity. We may not be able to take such actions, if necessary, on commercially reasonable terms or at all. Our inability to generate sufficient cash flows to satisfy our debt obligations, or to refinance our indebtedness on commercially reasonable terms or at all, would materially and adversely affect our financial position and results or operations.

Our ability to service or refinance our debt or fund investments and capital expenditures required to maintain or expand our business operations depends on our financial condition and operating performance, which are subject to prevailing economic and competitive conditions and to certain financial, business, legislative, regulatory and other factors beyond our control. We may not be able to maintain a level of cash flows from operating activities sufficient to permit us to satisfy our liquidity needs. In addition, the availability under our Fourth Amended and Restated Credit Agreement may be reduced if we have insufficient collateral, or if we do not meet a customary fixed charge coverage test. Availability under the USSK Credit Agreement could be limited if USSK does not meet certain financial covenants. See the Liquidity section in "Item 7. Management's Discussion and Analysis" and Note 17 to the Consolidated Financial Statements for further details.

We have significant retiree health care, retiree life insurance and pension plan costs, which may negatively affect our results of operations and cash flows.

We maintain retiree health care and life insurance and defined benefit pension plans covering many of our domestic employees and former employees upon their retirement. These benefit plans are not fully funded, and thus will require cash funding in future years. Minimum contributions to domestic qualified pension plans (other than contributions to the Steelworkers Pension Trust (SPT) described below) are regulated under the Employee Retirement Income Security Act of 1974 (ERISA) and the Pension Protection Act of 2006 (PPA).

The level of cash funding for our defined benefit pension plans in future years depends upon various factors, including voluntary contributions that we may make, future pension plan asset performance, actual interest rates under the law, and the impacts of business acquisitions or divestitures, union negotiated benefit changes and future government regulations, many of which are not within our control. In addition, assets held by the trusts for our pension plan and our trust for retiree health care and life insurance benefits are subject to the risks, uncertainties and variability of the financial markets. See "Item 7. Management's Discussion and Analysis" and Note 18 to the Consolidated Financial Statements for a discussion of assumptions and further information associated with these benefit plans.

U. S. Steel contributes to a domestic multiemployer defined benefit pension plan, the SPT, for USW-represented employees formerly employed by National Steel and represented employees hired after May 2003. We have legal requirements for future funding of this plan should the SPT become significantly underfunded or we decide to withdraw from the plan. Either of these scenarios may negatively impact our future cash flows. The 2018 Labor Agreements increased the contribution rate for most steelworker employees. Collectively bargained company contributions to the plan could increase further as a result of future changes agreed to by the Company and the USW.

Rating agencies may downgrade our credit ratings, which would make it more difficult for us to raise capital and would increase our financing costs.

Any downgrades in our credit ratings may make raising capital more difficult, may increase the cost and adversely affect the terms of future borrowings, may adversely affect the terms under which we purchase goods and services and may limit our ability to take advantage of potential business opportunities.

We are subject to foreign currency risks, which may negatively impact our profitability and cash flows.

The financial condition and results of operations of USSE are reported in euros and then translated into U.S. dollars at the applicable exchange rate for inclusion in our financial statements. The appreciation of the U.S. dollar against the euro negatively affects our Consolidated Results of Operations. International cash requirements have been and in the future may be funded by intercompany loans, which may create intercompany monetary assets and liabilities in currencies other than the functional currencies of the entities involved, which can have a non-cash impact on income when they are remeasured at the end of each period.

In addition, foreign producers, including foreign producers of subsidized or unfairly traded steel with foreign currency denominated costs may gain additional competitive advantages or target our home markets if the U.S. dollar or euro exchange rates strengthen relative to those producers' currencies.

Financial regulatory frameworks introduced by U.S. and EU regulators may limit our financial flexibility or increase our costs.

The Commodity Future Trading Commission's Dodd Frank and the EU's European Market Infrastructure Regulation regulatory frameworks can limit the Company's ability to hedge interest rate, foreign exchange (FX), or commodity pricing exposures, which could expose us to increased economic risk. These frameworks may introduce additional compliance costs or liquidity requirements. Some counterparties may cease hedging as a result of increased regulatory cost burdens, which in turn may reduce U. S. Steel's ability to hedge its interest rate, FX, or commodity exposures.

We may be subject to legal proceedings or investigations, the resolution of which could negatively affect our profitability and cash flows in a particular period.

We may be involved at any given time in various litigation matters, including administrative and regulatory proceedings, governmental investigations, environmental matters, and commercial disputes. Our profitability and cash flows in a particular period could be negatively affected by an adverse ruling in any legal proceeding or investigation that may be pending against us or filed against us in the future. While we believe that we have taken appropriate actions to mitigate and reduce these risks, due to the nature of our operations, these risks will continue to exist and additional legal proceedings or investigations may arise from time to time.

Additionally, we may be subject to product liability claims that may have an adverse effect on our financial position, results of operations and cash flows. Events such as well failures, line pipe leaks, blowouts, bursts, fires and product recalls could result in claims that our products or services were defective and caused death, personal injury, property damage or environmental pollution. The insurance we maintain may not be adequate, available to protect us in the event of a claim, or its coverage may be limited, canceled or otherwise terminated, or the amount of our insurance may be less than the related impact on our enterprise value after a loss.

Regulatory Risk Factors

Compliance with existing and new environmental regulations, environmental permitting and approval requirements may result in delays or other adverse impacts on planned projects, our results of operations and cash flows.

Steel producers in the United States, along with their customers and suppliers, are subject to numerous federal, state and local laws and regulations relating to the protection of the environment. These laws and regulations concern the generation, storage, transportation, disposal, emission or discharge of pollutants, contaminants, hazardous substances and greenhouse gases into the environment, the reporting of such matters, and the general protection of public health and safety, natural resources, wildlife and the environment. Steel producers in the EU are subject to similar laws. These laws continue to evolve and are becoming increasingly stringent. The ultimate impact of complying with such laws and regulations is not always clearly known or determinable because regulations under some of these laws have not yet been promulgated or are undergoing revision. Additionally, compliance with certain of these laws and regulations, such as the CAA and similar state and local requirements, governing GHG, SO₂ and other emissions, could result in substantially increased capital requirements and operating costs. Compliance with current or future regulations could entail substantial costs for emission based systems, and could have a negative impact on our results of operations and cash flows. Failure to comply with the requirements may result in administrative, civil and criminal penalties, revocation of permits to conduct business or construct certain facilities, substantial fines or sanctions, enforcement actions (including orders limiting our operations or requiring corrective measures), natural resource damages claims, cleanup and closure costs, and third-party claims for property damage and personal injury as a result of violations of, or liabilities under, environmental laws, regulations, codes and common law. The amount and timing of environmental expenditures is difficult to predict, and, in some cases, liability may be imposed without regard to contribution or to whether we knew of, or caused, the release of hazardous substances.

In addition, the Company must obtain, maintain and comply with numerous permits, leases, approvals, consents and certificates from various governmental authorities in connection with the construction and operation of new production facilities or modifications to existing facilities. In connection with such activities, the Company may need to make significant capital and operating expenditures to detect, repair and/or control air emissions, to control water

discharges or to perform certain corrective actions to meet the conditions of the permits issued pursuant to applicable environmental laws and regulations.

There can be no assurance that future approvals, licenses and permits will be granted or that we will be able to maintain and renew the approvals, licenses and permits we currently hold. Failure to do so could have a material adverse effect on our results of operations and cash flows. Furthermore, compliance with the environmental permitting and approval requirements may be costly and time consuming and could result in delays or other adverse impacts on planned projects, our results of operations and cash flows.

We have significant environmental remediation costs that may negatively affect our results of operations and cash flows.

Some of U. S. Steel's current and former facilities were in operation before 1900. Hazardous materials associated with those facilities may have been released at current or former operating sites or delivered to sites operated by third parties.

U. S. Steel is involved in numerous remediation projects at currently operating facilities, facilities that have been closed or sold to unrelated parties and other sites where material generated by U. S. Steel was deposited. In addition, there are numerous other former operating or disposal sites that could become the subject of remediation, which may negatively affect our results of operations and cash flows.

Our activities are subject to complex regulatory and compliance frameworks.

The need to comply with complex foreign and U.S. laws and regulations that apply to our international activities, including, but not limited to, U.S. laws such as the Foreign Corrupt Practices Act, economic sanctions, and other import and export laws and regulations, may increase our cost of doing business and expose the Company and its employees to elevated risk. The Company's subsidiaries and joint ventures may face similar risks. Although we have implemented policies and processes designed to comply with these laws and regulations, failure by our employees, contractors, or agents to comply with these laws and regulations can result in possible administrative, civil, or criminal liability, as well as reputational harm to the Company and its employees.

The IRS may disallow all or part of a worthless stock loss and bad debt deduction taken in 2013.

U. S. Steel made an election effective December 31, 2013 to liquidate for U.S. income tax purposes a foreign subsidiary that holds most of the Company's international operations. The tax liquidation allowed the Company to claim a worthless stock loss and bad debt deduction in its 2013 U.S. income tax return, resulting in a net income tax benefit in 2013 of \$419 million. In 2015, the IRS began its audit of the worthless stock loss and bad debt deduction taken in 2013. The audit is subject to finalization and possible adjustment by the IRS, which could result in the reversal of all or part of the income tax benefit from the worthless stock/bad debt deduction.

Changes to global data privacy laws and cross-border transfer requirements could adversely affect our business and operations.

Our business depends on the transfer of data between our affiliated entities, to and from our business partners, and with third-party service providers, which may be subject to global data privacy laws and cross-border transfer restrictions. While U. S. Steel takes steps to comply with these legal requirements, the volatility and changes to the applicability of those laws, as well as evolving standards and judicial and regulatory interpretations of such laws, may impact U. S. Steel's ability to effectively transfer data across borders in support of our business operations and/or keep pace with specific requirements regarding safeguarding personal information and lead to possible administrative, civil, or criminal liability, as well as reputational harm to the Company and its employees. For example, the European Union's General Data Protection Regulation (GDPR), which went into effect in May 2018, created a range of new compliance obligations for subject companies and increases financial penalties for non-compliance. The costs of compliance with the GDPR and the potential for fines and penalties in the event of a breach of the GDPR may have an adverse effect on our business and operations.

Item 1B. UNRESOLVED STAFF COMMENTS

None.

Item 2. PROPERTIES

The following tables list U. S. Steel's main properties, their locations and their products and services:

North American Operations

<u>Property</u>	<u>Location</u>	<u>Products and Services</u>
Gary Works	Gary, Indiana	Slabs; Sheets; Tin mill; Strip mill plate
Midwest Plant	Portage, Indiana	Sheets; Tin mill
East Chicago Tin	East Chicago, Indiana	Sheets; Tin mill
Great Lakes Works	Ecorse and River Rouge, Michigan	Slabs; Sheets
Great Lakes Works EGL at Dearborn	Dearborn, Michigan	Galvanized sheets
Mon Valley Works		
Irvin Plant	West Mifflin, Pennsylvania	Sheets
Edgar Thomson Plant	Braddock, Pennsylvania	Slabs
Fairless Plant	Fairless Hills, Pennsylvania	Galvanized sheets
Clairton Plant	Clairton, Pennsylvania	Coke
Granite City Works ^(a)	Granite City, Illinois	Slabs; Sheets
Southern Coatings		
Fairfield Sheet	Fairfield, Alabama	Galvanized Sheets
Double G Coatings Company, L.P. ^(b)	Jackson, Mississippi	Galvanized and Galvalume® sheets
USS-POSCO Industries ^(b)	Pittsburg, California	Sheets; Tin mill
PRO-TEC Coating Company ^(b)	Leipsic, Ohio	Galvanized and high strength annealed sheets
Fairfield Tubular Operations	Fairfield, Alabama	Seamless Tubular Pipe
Worthington Specialty Processing ^(b)	Jackson, Canton and Taylor, Michigan	Steel processing
Feralloy Processing Company ^(b)	Portage, Indiana	Steel processing
Chrome Deposit Corporation ^(b)	Various	Roll processing
Lorain Tubular Operations	Lorain, Ohio	Seamless Tubular Pipe
Lone Star Tubular	Lone Star, Texas	Welded Tubular Pipe
Wheeling Machine Products	Pine Bluff, Arkansas and Hughes Springs, Texas	Tubular couplings
Tubular Processing ^(c)	Houston, Texas	Tubular processing
Offshore Operations	Houston, Texas	Tubular threading, inspection, accessories and storage services and premium connections
Patriot Premium Threading Services ^(b)	Midland, Texas	Tubular threading, accessories and premium connections
Minntac Iron Ore Operations	Mt. Iron, Minnesota	Iron ore pellets
Keetac Iron Ore Operations	Keewatin, Minnesota	Iron ore pellets
Hibbing Taconite Company ^(b)	Hibbing, Minnesota	Iron ore pellets
Transtar, LLC	Alabama, Indiana, Michigan, Ohio, Pennsylvania, Texas	Railroad operations

(a) Hot end idled in 2015, restarted in the 2nd quarter of 2018

(b) Equity investee

(c) Temporarily Idled

European Operations

<u>Property</u>	<u>Location</u>	<u>Products and Services</u>
U. S. Steel Košice	Košice, Slovakia	Slabs; Sheets; Tin mill; Strip mill plate; Tubular; Coke; Radiators; Refractories

U. S. Steel and its predecessors (including Lone Star) have owned their properties for many years with no material adverse title claims asserted. In the case of Great Lakes Works, Granite City Works, the Midwest Plant and Keetac iron ore operations, U. S. Steel or its subsidiaries are the beneficiaries of bankruptcy laws and orders providing that properties are held free and clear of past liens and liabilities. In addition, U. S. Steel or its predecessors obtained title insurance, local counsel opinions or similar protections when significant properties were initially acquired or since acquisition.

At the Midwest Plant in Indiana, U. S. Steel has a supply agreement for various utility services with a company that owns a cogeneration facility located on U. S. Steel property. The Midwest Plant agreement expires in 2028.

U. S. Steel leases its headquarters office space in Pittsburgh, Pennsylvania.

For property, plant and equipment additions, including capital leases, see “Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations – Financial Condition, Cash Flows and Liquidity – Cash Flows” and Note 13 to the Consolidated Financial Statements.

Item 3. LEGAL PROCEEDINGS

U. S. Steel is the subject of, or a party to, a number of threatened or pending legal actions, contingencies and commitments involving a variety of matters, including laws and regulations relating to the environment, certain of which are discussed in Note 26 to the Consolidated Financial Statements. The ultimate resolution of these contingencies could, individually or in the aggregate, be material to the U. S. Steel financial statements. However, management believes that U. S. Steel will remain a viable and competitive enterprise even though it is possible that these contingencies could be resolved unfavorably to U. S. Steel.

General Litigation

On April 11, 2017, there was a process waste water release at our Midwest Plant (Midwest) in Portage, Indiana that impacted a water outfall that discharges to Burns Waterway near Lake Michigan. U. S. Steel identified the source of the release and made the necessary repairs. We determined that all repairs were safely working as intended and, on April 14, 2017, resumed operations in a controlled, phased and highly monitored approach with extensive input from participating government agencies. The Company has since implemented substantial operational, process and notification improvements at Midwest. The Company has been presented with cost reimbursements, loss of use and penalty requests from the involved governmental agencies. In January of 2018, The Surfrider Foundation and the City of Chicago initiated suits in the Northern District of Indiana alleging CWA and Permit violations at Midwest. On April 2, 2018, the U.S. EPA and the State of Indiana initiated a separate action against the Company and lodged a Consent Decree negotiated between U. S. Steel and the relevant governmental agencies consisting of all material terms to resolve the CWA and NPDES violations at the Midwest Plant. A public comment period for the Consent Decree ensued. U. S. Steel, U.S. EPA and the State of Indiana continue the process of reviewing and addressing those comments. The Surfrider Foundation and the City of Chicago initially agreed to stay their actions pending finalization of the Consent Decree, but filed a motion to lift that stay in July 2018. On September 13, 2018, both The Surfrider Foundation and the City of Chicago filed motions to intervene in the Consent Decree case. On December 6, 2018, the Court denied the Surfrider Foundation and City of Chicago's motion to lift the stay in the citizen suit case, and on December 13, 2018 the court granted the Surfrider Foundation and City of Chicago's motion to intervene in the Consent Decree case. The citizens groups filed their Complaints-in-Intervention on December 27, 2018, and Amended Complaints-in-Intervention on January 17, 2019. U. S. Steel continues to work with United States Department of Justice, U.S. EPA, and Indiana Department of Environmental Management towards a finalized Consent Decree.

On November 30, 2018, the Minnesota Pollution Control Agency (MPCA) issued a new Water Discharge Permit for the Minntac Tailings Basin waters. The Permit contains new sulfate limitations applicable to water in the Tailings Basin and groundwater flowing from U. S. Steel's property. The MPCA also acted on the same date, denying the Company's requests for variances from ground and surface water standards and request for a contested case hearing. U. S. Steel filed appeals on December 19, 2018 challenging the actions taken by the MPCA. Separate appeals have been filed by a Minnesota Native American Tribe (Fond du Lac Band) and a nonprofit environmental group (Water Legacy). U. S. Steel has filed Petitions to Intervene in both cases.

On October 2, 2017, an Amended Shareholder Class Action Complaint was filed in Federal Court in the Western District of Pennsylvania consolidating previously-filed actions. Separately, four related shareholder derivative lawsuits were filed in State and Federal courts in Pittsburgh, Pennsylvania. The underlying consolidated class action lawsuit alleges that U. S. Steel, certain current and former officers, an upper level manager of the Company and the financial underwriters who participated in the August 2016 secondary public offering of the Company's common stock (collectively, Defendants) violated federal securities laws in making false statements and/or failing to discover and disclose material information regarding the financial condition of the Company. The lawsuit claims that this conduct caused a prospective class of plaintiffs to sustain damages during the period from January 27, 2016 to April 25, 2017 as a result of the prospective class purchasing the Company's common stock at artificially inflated prices and/or suffering losses when the price of the common stock dropped. The derivative lawsuits generally make the same allegations against the same officers and also allege that certain current and former members of the Board of Directors failed to exercise appropriate control and oversight over the Company and were unjustly compensated. The plaintiffs seek to recover losses that were allegedly sustained. The class action Defendants moved to dismiss plaintiffs' claims. On September 29, 2018 the Court ruled on those motions granting them in part and denying them in part. The Company is vigorously defending the remaining claims.

Asbestos Litigation

As of December 31, 2018, U. S. Steel was a defendant in approximately 755 active cases involving approximately 2,320 plaintiffs. The vast majority of these cases involve multiple defendants. About 1,540, or approximately 66 percent, of these plaintiff claims are currently pending in jurisdictions which permit filings with massive numbers of plaintiffs. As of December 31, 2017, U. S. Steel was a defendant in approximately 820 cases involving approximately 3,315 plaintiffs. Based upon U. S. Steel's experience in such cases, it believes that the actual number of plaintiffs who ultimately assert claims against U. S. Steel will likely be a small fraction of the total number of plaintiffs.

The following table shows the activity with respect to asbestos litigation:

Period ended	Opening Number of Claims	Claims Dismissed, Settled and Resolved ^(a)	New Claims	Closing Number of Claims
December 31, 2016	3,315	225	250	3,340
December 31, 2017	3,340	275	250	3,315
December 31, 2018	3,315	1,285	290	2,320

(a) The period ending December 31, 2018 includes approximately 1,000 dismissed cases previously pending in the State of Texas.

Historically, asbestos-related claims against U. S. Steel fall into three groups: (1) claims made by persons who allegedly were exposed to asbestos on the premises of U. S. Steel facilities; (2) claims made by persons allegedly exposed to products manufactured by U. S. Steel; and (3) claims made under certain federal and maritime laws by employees of former operations of U. S. Steel.

The amount U. S. Steel accrues for pending asbestos claims is not material to U. S. Steel's financial condition. However, U. S. Steel is unable to estimate the ultimate outcome of asbestos-related claims due to a number of uncertainties, including: (1) the rates at which new claims are filed, (2) the number of and effect of bankruptcies of other companies traditionally defending asbestos claims, (3) uncertainties associated with the variations in the litigation process from jurisdiction to jurisdiction, (4) uncertainties regarding the facts, circumstances and disease process with each claim, and (5) any new legislation enacted to address asbestos-related claims.

Further, U. S. Steel does not believe that an accrual for unasserted claims is required. At any given reporting date, it is probable that there are unasserted claims that will be filed against the Company in the future. In the current year, the Company engaged an outside valuation consultant to assist in assessing its ability to estimate an accrual for unasserted claims. This assessment was based on the Company's settlement experience, including recent claims trends. The analysis focused on settlements made over the last several years as these claims are likely to best represent future claim characteristics. After review by the valuation consultant and U. S. Steel management, it was determined that the Company could not estimate an accrual for unasserted claims.

Despite these uncertainties, management believes that the ultimate resolution of these matters will not have a material adverse effect on U. S. Steel's financial condition.

ENVIRONMENTAL PROCEEDINGS

The following is a summary of the proceedings of U. S. Steel that were pending or contemplated as of December 31, 2018, under federal and state environmental laws. Information about specific sites where U. S. Steel is or has been engaged in significant clean up or remediation activities is also summarized below. Except as described herein, it is not possible to accurately predict the ultimate outcome of these matters.

CERCLA Remediation Sites

Claims under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) have been raised with respect to the cleanup of various waste disposal and other sites. Under CERCLA, potentially responsible parties (PRPs) for a site include current owners and operators, past owners and operators at the time of disposal, persons who arranged for disposal of a hazardous substance at a site, and persons who transported a hazardous

substance to a site. CERCLA imposes strict and joint and several liabilities. Because of various factors, including the ambiguity of the regulations, the difficulty of identifying the responsible parties for any particular site, the complexity of determining the relative liability among them, the uncertainty as to the most desirable remediation techniques, and the amount of damages and cleanup costs and the time period during which such costs may be incurred, we are unable to reasonably estimate U. S. Steel's ultimate liabilities under CERCLA.

As of December 31, 2018, U. S. Steel has received information requests or been identified as a PRP at a total of nine CERCLA sites, three of which have liabilities that have not been resolved. Based on currently available information, which is in many cases preliminary and incomplete, management believes that U. S. Steel's liability for CERCLA cleanup and remediation costs at the other six sites will be between \$100,000 and \$1 million for five of the sites, and over \$5 million for one site as described below.

Duluth Works

The former U. S. Steel Duluth Works site was placed on the National Priorities List under CERCLA in 1983 and on the State of Minnesota's Superfund list in 1984. Liability for environmental remediation at the site is governed by a Response Order by Consent executed with the MPCA in 1985 and a Record of Decision signed by MPCA in 1989. U. S. Steel has partnered with the Great Lakes National Program Office (GLNPO) of U.S. EPA Region 5 to address contaminated sediments in the St. Louis River Estuary and several other Operable Units that could impact the Estuary if not addressed. An amendment to the Project Agreement between U. S. Steel and GLNPO was executed during the second quarter of 2018 to recognize the costs associated with implementing the proposed remedial plan at the site.

While work continues on completion of the remedial design and educating the public and key stakeholders on the details of the plan, there has been no material change in the status of the project during the twelve months ended December 31, 2018. Additional study, investigation, design, oversight costs, and implementation of U. S. Steel's preferred remedial alternatives on the upland property and Estuary are currently estimated as of December 31, 2018 at approximately \$46 million.

RCRA and Other Remediation Sites

U. S. Steel may be liable for remediation costs under other environmental statutes, both federal and state, or where private parties are seeking to impose liability on U. S. Steel for remediation costs through discussions or litigation. There are 18 such sites where remediation is being sought involving amounts in excess of \$100,000. Based on currently available information, which is in many cases preliminary and incomplete, management believes that liability for cleanup and remediation costs in connection with eight sites have potential costs between \$100,000 and \$1 million per site, five sites may involve remediation costs between \$1 million and \$5 million per site and five sites are estimated to or could have, costs for remediation, investigation, restoration or compensation in excess of \$5 million per site.

For more information on the status of remediation activities at U. S. Steel's significant sites, see the discussions related to each site below.

Gary Works

On October 23, 1998, the U.S. EPA issued a final Administrative Order on Consent (Order) addressing Corrective Action for Solid Waste Management Units (SWMU) throughout Gary Works. This Order requires U. S. Steel to perform a Resource Conservation and Recovery Act (RCRA) Facility Investigation (RFI), a Corrective Measures Study (CMS) and Corrective Measure Implementation. While work continues on several items, there has been no material change in the status of the project during the twelve months ended December 31, 2018. Until the remaining Phase I work and Phase II field investigations are completed, it is not possible to assess what additional expenditures will be necessary for Corrective Action projects at Gary Works. In total, the accrued liability for Corrective Action projects is approximately \$25 million as of December 31, 2018, based on our current estimate of known remaining costs.

Geneva Works

At U. S. Steel's former Geneva Works, liability for environmental remediation, including the closure of three hazardous waste impoundments and facility-wide corrective action, has been allocated between U. S. Steel and the current property owner pursuant to an agreement and a permit issued by the Utah Department of Environmental Quality (UDEQ). Having completed the investigation on a majority of the remaining areas identified in the permit, U. S. Steel has determined the most effective means to address the remaining impacted material is to manage those materials

in a previously approved on-site Corrective Action Management Unit (CAMU). U. S. Steel awarded a contract for the implementation of the CAMU project during the fourth quarter of 2018 and submitted the first of several design documents to UDEQ for approval. Construction, waste stabilization and placement and closure of the CAMU are expected to be complete in 2020. U. S. Steel has an accrued liability of approximately \$62 million as of December 31, 2018, for our estimated share of the remaining costs of remediation.

USS-POSCO Industries (UPI)

A joint venture in Pittsburg, California between subsidiaries of U. S. Steel and POSCO, UPI's facilities were previously owned and operated solely by U. S. Steel which retains primary responsibility for the existing environmental conditions. Work continues to monitor the impacts of the remedial plan implemented in 2016 to address groundwater impacts from trichloroethylene at SWMU 4. Evaluations continue for the three SWMUs known as the Northern Boundary Group and it is likely that corrective measures will be required, but it is not possible at this time to define a scope or estimate costs for what may be required by the California Department of Toxic Substances Control. As such, there has been no material change in the status of the project during the twelve months ended December 31, 2018. As of December 31, 2018, approximately \$1 million has been accrued for ongoing environmental studies, investigations and remedy monitoring. Significant additional costs associated with this site are possible and are referenced in Note 26 to the Consolidated Financial Statements "Contingencies and Commitments - Environmental Matters - Remediation Projects - Projects with Ongoing Study and Scope Development."

Fairfield Works

A consent decree was signed by U. S. Steel, the U.S. EPA and the U.S. Department of Justice and filed with the United States District Court for the Northern District of Alabama (United States of America v. USX Corporation) in December 1997. In accordance with the consent decree, U. S. Steel initiated a RCRA corrective action program at the Fairfield Works facility. The Alabama Department of Environmental Management, with the approval of the U.S. EPA, assumed primary responsibility for regulation and oversight of the RCRA corrective action program at Fairfield Works. While work continues on different aspects of the program, there has been no material change in the status of the project during the twelve months ended December 31, 2018. In total, the accrued liability for remaining work under the Corrective Action Program, was approximately \$133,000 at December 31, 2018. Significant additional costs associated with this site are possible and are referenced in Note 26 to the Consolidated Financial Statements "Contingencies and Commitments - Environmental Matters - Remediation Projects - Projects with Ongoing Study and Scope Development."

Fairless Plant

In April 1993, U. S. Steel entered into a consent order with the U.S. EPA pursuant to RCRA, under which U. S. Steel would perform Interim Measures (IM), an RFI and CMS at our Fairless Plant. A Phase I RFI Final Report was submitted in September of 1997. With U.S. EPA's agreement, in lieu of conducting subsequent phases of the RFI and the CMS, U. S. Steel has been working through the Pennsylvania Department of Environmental Protection Act 2 Program to characterize and remediate facility parcels for redevelopment. While work continues on these items, there has been no material change in the status of the project during the twelve months ended December 31, 2018. As of December 31, 2018, the accrued liability to maintain the interim measures, and clear properties through the Act 2 process is approximately \$90,000. Significant additional costs associated with this site are possible and are referenced in Note 26 to the Consolidated Financial Statements "Contingencies and Commitments - Environmental Matters - Remediation Projects - Projects with Ongoing Study and Scope Development."

Lorain Tubular Operations

In September 2006, U. S. Steel and the Ohio Environmental Protection Agency (OEPA) commenced discussions about RCRA Corrective Action at Lorain Tubular Operations. A Phase I RFI on the identified SWMUs and Areas of Contamination was submitted in March 2012. While discussions continue with OEPA on drafting the Statement of Basis identifying potential remedies to address areas documented in the Phase II RFI, there has been no material change in the status of the project during the twelve months ended December 31, 2018. As of December 31, 2018, costs to complete additional projects are estimated to be approximately \$94,000. Significant additional costs associated with this site are possible and are referenced in Note 26 to the Consolidated Financial Statements "Contingencies and Commitments - Environmental Matters - Remediation Projects - Projects with Ongoing Study and Scope Development."

Joliet Works

The 50-acre parcel at the former Joliet Works is enrolled in the Illinois Environmental Protection Agency's (IEPA) voluntary Site Remediation Program (the Program). The Program requires investigation and establishment of cleanup objectives followed by submission/approval of a Remedial Action Plan to meet those objectives. The 50-acre parcel was divided into four subareas with remedial activities completed in 2015 for three of the subareas. While work continues to define the requirements for further investigation of the remaining subarea, there has been no material change in the status of the project during the twelve months ended December 31, 2018. U. S. Steel has an accrued liability of \$287,000 related to this matter as of December 31, 2018. Significant additional costs associated with this site are possible and are referenced in Note 26 to the Consolidated Financial Statements "Contingencies and Commitments - Environmental Matters - Remediation Projects - Projects with Ongoing Study and Scope Development."

Cherryvale (KS) Zinc

In April 2003, U. S. Steel and Salomon Smith Barney Holdings, Inc. (SSB) entered into a Consent Order with the Kansas Department of Health & Environment (KDHE) concerning a former zinc smelting operation in Cherryvale, Kansas. Remediation of the site proper was essentially completed in 2007. The Consent Order was amended on May 3, 2013, to require investigation (but not remediation) of potential contamination beyond the boundary of the former zinc smelting operation. On November 22, 2016, KDHE approved a State Cooperative Final Agency Decision Statement that identified the remedy selected to address potential contamination beyond the boundary of the former zinc smelting site. The Removal Action Design Plan was approved during the second quarter of 2018. The Waste Deposition Area design and the Interim Risk Management Plan (which includes institutional controls) were approved by KDHE during the fourth quarter of 2018. Negotiations of an amended consent order for remediation commenced in December 2018. U. S. Steel has an accrued liability of approximately \$11 million as of December 31, 2018, for our estimated share of the cost of remediation.

South Works

On August 29, 2017, U. S. Steel was notified by the U.S. Coast Guard of a sheen on the water in the North Vessel Slip at our former South Works in Chicago, Illinois. U. S. Steel has been working with the IEPA under their voluntary Site Remediation Program since 1993 to evaluate the condition of the property including the North Vessel Slip. The result of this cooperative effort has been the issuance of a series of "No Further Remediation" (NFR) notices to U. S. Steel including one specific to the North Vessel Slip. U. S. Steel has notified the IEPA of the potential changed condition and is working closely with the IEPA and the U. S. Coast Guard to determine the source of the sheen and options to address the issue. U. S. Steel has an accrued liability of \$24,000 as of December 31, 2018.

Air Related Matters

Gary Works

In November 2018, the Indiana Department of Environmental Management (IDEM) advised U. S. Steel that it intends to address certain deviations from the Gary Works Title V Permit that were to have occurred in late 2017 and the first three quarters of 2018 in an enforcement action that it anticipates would be resolved through an Agreed Order. IDEM indicated that it intends to address the following issues in the action: intermittent exceedances of opacity standards at the steel producing roof monitor; deviations from certain miscellaneous inspection requirements; exceedance of the hydrochloric acid limit at the pickle line (which U. S. Steel has since demonstrated compliance); and exceedance of the particulate matter limit at the iron pellet screeners. Generally, the deviations were self-disclosed by U. S. Steel in reports submitted to IDEM. U. S. Steel is currently working with IDEM to resolve the issues.

Great Lakes Works

In June 2010, the U.S. EPA significantly lowered the primary NAAQS for SO₂ from 140 ppb on a 24-hour basis to an hourly standard of 75 ppb. Based upon the 2009-2011 ambient air monitoring data, the U.S. EPA designated the area in which Great Lakes Works is located as nonattainment with the 2010 SO₂ NAAQS.

As a result, pursuant to the CAA, the Michigan Department of Environmental Quality (MDEQ) was required to submit a SIP to the U.S. EPA that demonstrates that the entire nonattainment area (and not just the monitor) would be in attainment by October 2018 by using conservative air dispersion modeling. To develop the SIP, U. S. Steel met with

MDEQ on multiple occasions and had offered reduction plans to MDEQ but the parties could not agree to a plan. MDEQ, instead promulgated Rule 430 which was solely directed at U. S. Steel. The Company challenged Rule 430 before the Michigan Court of Claims who by Order dated October 4, 2017, granted the Company's motion for summary disposition voiding Rule 430 finding that it violated rule-making provisions of the Michigan Administrative Procedures Act and Michigan Constitution. Since Rule 430 has been invalidated and MDEQ's SIP has not been approved, U.S. EPA has indicated that it would promulgate a Federal Implementation Plan (FIP) pursuant to its obligations and authority under the Clean Air Act (CAA). Because development of the FIP is in the early stages, the impacts of the nonattainment designation to the Company are not estimable at this time.

On November 21, 2018, MDEQ issued a Violation Notice to U. S. Steel in which MDEQ alleges that U. S. Steel intermittently exceeded the applicable opacity limit at D4 Blast Furnace Slag Pit on July 26, 2018. In addition, in the notice, MDEQ alleges that U. S. Steel intermittently violated the applicable opacity standard at the D4 Blast Furnace backdraft stack on July 30, 2018. On December 19, 2018, U. S. Steel responded to the violation notice. While no penalty has been assessed to date, U. S. Steel met with MDEQ on January 17, 2019 to discuss resolution of the matter. MDEQ and U. S. Steel continue to discuss resolution of the matter.

On October 12, 2018, MDEQ issued a Violation Notice to U. S. Steel in which MDEQ alleges that U. S. Steel violated the applicable opacity standard at the B2 Blast Furnace backdraft stack intermittently on September 16, 2018. In addition, in the notice, MDEQ alleges that U. S. Steel intermittently violated the Basic Oxygen Furnace roof monitor opacity standard on September 19, 2018. U. S. Steel responded to the notice on November 2, 2018 and provided MDEQ with actions taken. While no penalty has been assessed to date, U. S. Steel met with MDEQ on January 17, 2019 to discuss resolution of the matter. MDEQ and U. S. Steel continue to discuss resolution of the matter.

On October 8, 2018, U. S. Steel received a Violation Notice from MDEQ in which MDEQ alleges that U. S. Steel exceeded applicable limits at the pickle line based upon the results of a stack test conducted in April 2018. On October 26, 2018, U. S. Steel responded to the notice and provided MDEQ with more recent test results at the pickle line that demonstrate compliance with the applicable limit. While no penalty has been assessed to date, U. S. Steel met with MDEQ on January 17, 2019 to discuss resolution of the violation notice. MDEQ and U. S. Steel continue to discuss resolution of the matter.

On January 31, 2018, U. S. Steel received a Violation Notice from MDEQ in which MDEQ alleges that U. S. Steel exceeded the applicable six-minute opacity standard at the B2 Blast Furnace Casthouse intermittently on October 25, 2017. U. S. Steel responded to the notice on February 21, 2018. While no penalty has been assessed to date, U. S. Steel met with MDEQ on January 17, 2019 to discuss resolution of the matter.

Granite City Works

In October 2015, Granite City Works received a Violation Notice from IEPA in which the IEPA alleges that U. S. Steel violated the emission limits for nitrogen oxides (NOx) and volatile organic compounds from the Basic Oxygen Furnace Electrostatic Precipitator Stack. In addition, the IEPA alleges that U. S. Steel exceeded its natural gas usage limit at its CoGeneration Boiler. U. S. Steel responded to the notice and is currently discussing resolution of the matter with IEPA.

Although discussions with IEPA regarding the foregoing alleged violations are ongoing and the resolution of these matters is uncertain at this time, it is not anticipated that the result of those discussions will be material to U. S. Steel.

Minnesota Ore Operations

On February 6, 2013, the U.S. EPA published a FIP that applies to taconite facilities in Minnesota. The FIP establishes and requires emission limits and the use of low NOx reduction technology on indurating furnaces as Best Available Retrofit Technology (BART). While U. S. Steel installed low NOx burners on three furnaces at Minntac and is currently obligated to install low NOx burners on the two other furnaces at Minntac pursuant to existing agreements and permits, the rule would require the installation of a low NOx burner on the one furnace at Keetac for which U. S. Steel did not have an otherwise existing obligation. U. S. Steel estimates expenditures associated with the installation of low NOx burners of as much as \$25 to \$30 million. In 2013, U. S. Steel filed a petition for administrative reconsideration to the U.S. EPA and a petition for judicial review of the 2013 FIP and denial of the Minnesota SIP to the Eighth Circuit. In April 2016, the U.S. EPA promulgated a revised FIP with the same substantive requirements for U. S. Steel. In June 2016, U. S. Steel filed a petition for administrative reconsideration of the 2016 FIP to the U.S. EPA and a petition for judicial review of the 2016 FIP before the Eighth Circuit Court of Appeals. While the proceedings regarding the petition

for judicial review of the 2013 FIP remained stayed, oral arguments regarding the petition for judicial review of the 2016 FIP were heard by the Eighth Circuit Court of Appeals on November 15, 2017. Thus, both petitions for judicial review remain with the Eighth Circuit. On December 4, 2017, U.S. EPA published a notification in the Federal Register in which the U.S. EPA denied U. S. Steel's administrative petitions for reconsideration and stay of the 2013 FIP and 2016 FIP. On February 1, 2018, U. S. Steel filed a petition for judicial review of U.S. EPA's denial of the administrative petitions for reconsideration to the Eighth Circuit Court of Appeals. U. S. Steel continues to defend its three petitions that are before the Eighth Circuit Court of Appeals regarding BART requirements at Minntac and Keetac while pursuing a resolution that would include an equitable revision to the FIP.

Mon Valley Works

On November 9, 2017, U.S. EPA Region III and ACHD jointly issued a Notice of Violation (NOV) regarding the Company's Edgar Thomson facility in Braddock, PA. In addition, on November 20, 2017, ACHD issued a separate, but related NOV to the Company regarding the Edgar Thomson facility. In the NOVs, based upon their inspections and review of documents collected throughout the last two years, the agencies allege that the Company has violated the CAA by exceeding the allowable visible emission standards from certain operations during isolated events. In addition, the agencies allege that the Company has violated certain maintenance, reporting, and recordkeeping requirements. U. S. Steel met with U.S. EPA Region III and ACHD on December 18, 2017. ACHD, U.S. EPA Region III and U. S. Steel continue to negotiate a potential resolution of the matter.

On June 28, 2018, U. S. Steel received an Enforcement Order from the ACHD for the Clairton Plant for alleged violations of various environmental permit and regulatory requirements pertaining to air emissions. The total penalty demand is \$1,091,950 for alleged violations that were to have occurred in late 2017 and early 2018. ACHD ordered U. S. Steel to conduct SO₂ stack tests of C Battery Quench Tower exhaust. ACHD also ordered U. S. Steel to provide an assessment of all emissions points at the Clairton facility to ACHD; and to propose measures, for ACHD approval, to reduce SO₂, particulate matter and visible emissions within sixty days of receipt of the Order. In the Order, ACHD demanded that if U. S. Steel fails to meet any requirements in the Order, U. S. Steel shall place its two worst performing batteries on hot idle until ACHD determines U. S. Steel is in compliance with the Order. U. S. Steel has appealed the Order and posted the penalty amount in an escrow account. A hearing was held December 3 - 6, 2018. Post-hearing briefs are currently being drafted and will be submitted in accordance with the Hearing Officer's Scheduling Order. A decision regarding the appeal is not expected until the second quarter 2019.

On November 14, 2018, U. S. Steel received a revised Administrative Order from the ACHD with an assessed penalty of \$613,716 for alleged violations regarding fugitive emission sources (coke oven doors, lids, offtakes, charging, high opacity doors and soaking) at the Clairton Plant that were alleged to have occurred during the second quarter of 2018. On December 12, 2018, U. S. Steel appealed the Administrative Order. A hearing date has been scheduled for June 17, 2019.

On December 24, 2018, Clairton Plant experienced a fire, affecting portions of the facility involved in desulfurization of the coke oven gas generated during the coking process. With the desulfurization process being out of operation as a result of the fire, we have not been able to certify compliance with Clairton Plant's Title V permit levels for sulfur emissions. We are working diligently to repair the damaged equipment to restore the desulfurization process to normal operations and expect repairs to be completed during the second quarter of 2019. We promptly notified ACHD, which has regulatory jurisdiction for the Title V permit, and have been updating the ACHD regularly on our efforts to mitigate any potential environmental impacts until the desulfurization process is returned to normal operations. Since December 24, 2018, there were nine hours during which SO₂ emissions exceeded the hourly NAAQS for SO₂ at the Allegheny County regional air quality monitors located in Liberty and North Braddock boroughs which are near our Mon Valley Works facilities. ACHD has asserted that these emission levels are the result of our inability to complete the desulfurization process following the fire and has informed us that it will pursue enforcement action against the Company following restoration of the desulfurization process to normal operations. On February 13, 2019, PennEnvironment and Clean Air Council, both environmental, non-governmental organizations, sent U. S. Steel a 60-day notice of intent to sue letter pursuant to the CAA. The letter alleges Title V permit violations at the Clairton, Irvin, and Edgar Thomson facilities as a result of the December 24, 2018 Clairton Plant fire. The 60-day notice letter also alleges that the violations are causing adverse public health and welfare impacts to the communities surrounding the Clairton, Irvin, and Edgar Thomson facilities. U. S. Steel is currently evaluating the 60-day notice letter.

Item 4. MINE SAFETY DISCLOSURE

The information concerning mine safety violations and other regulatory matters required by Section 150 of the Dodd-Frank Wall Street Reform and Consumer Protection Act and Item 104 of Regulation S-K is included in Exhibit 95 to this Form 10-K.

EXECUTIVE OFFICERS OF THE REGISTRANT

The executive officers of U. S. Steel and their ages as of February 1, 2019, are as follows:

Name	Age	Title	Executive Officer Since
Kevin P. Bradley	56	Executive Vice President & Chief Financial Officer	July 27, 2017
Christine S. Breves	62	Senior Vice President, Manufacturing Support & Chief Supply Chain Officer	April 27, 2017
James E. Bruno	53	Senior Vice President - European Solutions and President - USSK ^(b)	December 1, 2014
Scott D. Buckiso	51	Senior Vice President - Automotive Solutions ^(a)	May 31, 2015
David B. Burritt	63	President & Chief Executive Officer	September 1, 2013
Colleen M. Darragh	49	Vice President & Controller	July 17, 2014
Sara A. Greenstein	44	Senior Vice President - Consumer Solutions ^(a)	December 1, 2014
Duane D. Holloway	46	Senior Vice President, General Counsel, Chief Ethics & Compliance Officer and Corporate Secretary	April 16, 2018
Douglas R. Matthews	53	Senior Vice President - Industrial, Service Center and Mining Solutions ^(a) and Interim Head - Tubular Business ^(c)	July 2, 2012
A. Barry Melnkovic	61	Senior Vice President and Chief Human Resources Officer	March 1, 2018

^(a) Automotive Solutions, Consumer Solutions, and Industrial, Service Center and Mining Solutions commercial entities are contained within the Flat-Rolled segment.

^(b) European Solutions commercial entity is contained within the USSE segment.

^(c) Tubular Business commercial entity is contained within the Tubular segment. Douglas R. Matthews assumed responsibilities for the Company's Tubular Segment on an interim basis March 1, 2018.

Messrs. Buckiso, Burritt and Matthews and Mss. Breves and Darragh have held responsible management or professional positions with U. S. Steel or our subsidiaries for more than the past five years. Prior to joining U. S. Steel, Mr. Bradley served as senior vice president and chief financial officer at Terex Corporation, a U.S.-based global manufacturer of lifting and material processing products such as cranes, aerial work platforms, and mobile crushing and screening equipment used in industries ranging from construction and mining to utilities. Prior to joining U. S. Steel, Mr. Bruno was with TRW Automotive, a global leader in automotive safety and one of the world's largest automotive suppliers, for 20 years, most recently serving as vice president – North American braking operations and global slip control portfolio. Ms. Greenstein joined U. S. Steel from Underwriters Laboratories, Inc. (UL) where she was employed for 12 years and most recently held the position of president, UL Supply Chain and Sustainability. Prior to joining U. S. Steel in 2018, Mr. Holloway served as executive vice president and general counsel at Ascena Retail Group Inc., the largest women's specialty retail and fashion company in the U.S. During his time at Ascena, Mr. Holloway served as global chief legal, compliance, sustainability and diversity officer. Prior to his work at Ascena, Mr. Holloway served as vice president and deputy general counsel for CoreLogic Inc., the leading global residential property information, analytics and data-enabled solutions provider. Prior to joining CoreLogic, Mr. Holloway spent nine years at Caesars Entertainment Corp., where he progressed through increasingly responsible roles in the legal department before being named senior vice president and chief counsel, operations and litigation. Prior to joining U. S. Steel in 2017, Mr. Melnkovic served as executive vice president and chief human capital officer, Labor Relations, Diversity and Lean Enterprise Solutions for National Railroad Passenger Corporation / Amtrak. Prior to joining Amtrak, Mr. Melnkovic served as the top human resources leader at Lilly Industries, Motor Coach Industries and Holland America Line. He also held senior corporate leadership and officer roles at Owens Corning, including vice president - human resources, vice president - talent management and organizational effectiveness, and interim chief operating officer for one of the company's business units.

PART II

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

Common Stock Information

The principal market on which United States Steel Corporation (U. S. Steel) common stock is traded is the New York Stock Exchange, where the common stock trades under trading symbol "X". U. S. Steel common stock is also traded on the Chicago Stock Exchange under the symbol "X".

As of February 12, 2019, there were 13,010 registered holders of U. S. Steel common stock.

The Board of Directors currently intends to declare and pay dividends on shares of U. S. Steel common stock based on the financial condition and results of operations of U. S. Steel out of legally available funds and in accordance with the requirements set forth by applicable law. Quarterly dividends were declared by U. S. Steel in 2018 and 2017 in the amount of \$0.05 per share.

Purchases of Equity Securities by the Issuer and the Affiliated Purchasers

Share repurchase activity under the Company's stock repurchase program during the three months ended December 31, 2018 was as follows:

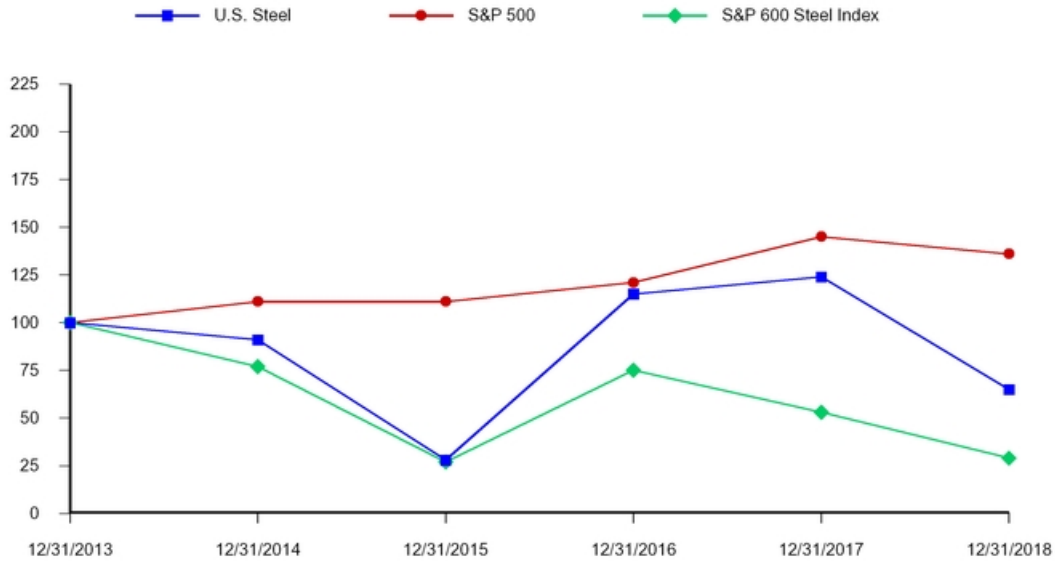
Period	Total Number of Shares Purchased	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Approximate Dollar Value of Shares that May Yet Be Purchased Under the Plans or Programs ^(a)
October 1 - 31, 2018	—	\$ —	—	\$ —
November 1 - 30, 2018	2,760,112	\$ 27.173	2,760,112	\$ 225,000,000
December 1 - 31, 2018	—	\$ —	—	\$ 225,000,000
Quarter ended December 31, 2018	2,760,112	\$ 27.173	2,760,112	\$ 225,000,000

^(a) On November 1, 2018, the Company announced that its Board of Directors authorized a stock repurchase program to repurchase up to \$300 million of our outstanding common stock over a two-year period at the discretion of management, of which \$75 million had been utilized as of December 31, 2018. The Company's stock repurchase program does not obligate it to acquire any specific number of shares. Under this program, the shares will be purchased from time to time at prevailing market prices, through open market or privately negotiated transactions, depending upon market conditions.

Stockholder Return Performance

The graph below compares the yearly change in cumulative total stockholder return of our common stock with the cumulative total return of the Standard & Poor's (S&P's) 500 Stock Index and the S&P 600 Steel Index.

Comparison of Cumulative Total Return on \$100 Invested in U. S. Steel Stock on December 31, 2013 vs S&P 500 and S&P 600 Steel Index^(a)



^(a) U. S. Steel was removed from the S&P 500 Index effective July 1, 2014. Consequently, U. S. Steel is now part of the S&P 600 Steel Index instead of the S&P 500 Steel Index, which is a subset of the S&P 500. Therefore, current year results may not be comparable to prior years.

For information on securities authorized for issuance under our equity compensation plans, see "Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters."

Recent Sales of Unregistered Securities

U. S. Steel had no sales of unregistered securities during the period covered by this report.

Item 6. SELECTED FINANCIAL DATA

<i>Dollars in millions (except per share data)^(a)</i>	2018	2017	2016	2015	2014
Statement of Operations Data:					
Net sales	\$ 14,178	\$ 12,250	\$ 10,261	\$ 11,574	\$ 17,507
Earnings (loss) before interest and income taxes ^(b)	1,124	669	(201)	(1,142)	521
Net earnings (loss) attributable to United States Steel Corporation	1,115	387	(440)	(1,642)	102
Per Common Share Data:					
Net earnings (loss) attributable to United States Steel Corporation ^(c)					
– basic	6.31	2.21	(2.81)	(11.24)	0.71
– diluted	6.25	2.19	(2.81)	(11.24)	0.69
Dividends per share declared and paid	0.20	0.20	0.20	0.20	0.20
Balance Sheet Data – December 31:					
Total assets ^{(d) (e)}	\$ 10,982	\$ 9,862	\$ 9,160	\$ 9,167	\$ 11,975
Capitalization:					
Debt ^(e)	\$ 2,381	\$ 2,703	\$ 3,031	\$ 3,138	\$ 3,460
United States Steel Corporation stockholders' equity	4,202	3,320	2,274	2,436	3,799
Total capitalization	\$ 6,583	\$ 6,023	\$ 5,305	\$ 5,574	\$ 7,259

(a) For discussion of changes between the years, see Item 7. "Management's Discussion and Analysis of Financial Condition and Results of Operations."

(b) 2014, 2015, 2016 and 2017 amounts have been adjusted as a result of the adoption of Accounting Standards Update 2017-07, *Compensation - Retirement Benefits* on January 1, 2018.

(c) See Note 8 to the Consolidated Financial Statements for the basis of calculating earnings per share.

(d) 2014 amounts have been adjusted to retroactively adopt Accounting Standards Update 2015-17, *Balance Sheet Classification of Deferred Taxes*, which requires that all deferred tax assets and liabilities, along with any related valuation allowance, be classified as noncurrent on the balance sheet.

(e) 2015 and 2014 amounts have been adjusted to retroactively adopt Accounting Standards Update 2015-03, *Interest-Imputation of Interest (Subtopic 835-30) - Simplifying the Presentation of Debt Issuance Costs*, which requires that debt issuance costs related to a recognized debt liability be presented in the balance sheet as a direct deduction from the carrying amount of the debt liability.

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

The following discussion should be read in conjunction with the Consolidated Financial Statements and related notes that appear elsewhere in this document.

Overview

According to World Steel Association's latest published statistics, U. S. Steel was the twenty-sixth largest steel producer in the world in 2017. Also in 2017 according to World Steel Association's latest published statistics, U. S. Steel was the third largest steel producer in the United States. U. S. Steel has a broad and diverse mix of products and customers. We use iron ore, coal, coke, steel scrap, zinc, tin, and other metallic additions to produce a wide range of flat-rolled and tubular steel products, concentrating on value-added steel products for customers with demanding technical applications in the transportation, appliance, container, industrial machinery, construction and oil, gas, and petrochemical industries. In addition to our facilities in the United States, U. S. Steel has significant operations in Eastern Europe through U. S. Steel Košice (USSK), located in Slovakia.

We are proud to report the following accomplishments achieved in 2018:

- Outperformed the Bureau of Labor Statistics and AISI industry safety benchmarks in both OSHA Recordable Days and Days Away From Work
- Reported net earnings of \$1.115 billion in 2018
- Finished 2018 with adjusted EBITDA of \$1.760 billion and positive operating cash flow of \$938 million
- Returned over \$110 million of capital to stockholders in 2018, including \$75 million through share repurchases
- Strong year-end liquidity of approximately \$2.830 billion, including \$1 billion of cash, which supports our goal of maintaining a healthy balance sheet
- Reduced total debt by \$322 million in 2018 as compared to 2017
- Successfully completed a \$650 million debt offering and redeemed all outstanding 2021 Senior Secured Notes, providing for future financial flexibility
- Improved our cash conversion cycle by two days
- Continued executing investments in our people and our assets, including investments under our multi-year asset revitalization program that includes \$1.5 billion of capital investments in our Flat-Rolled assets
- Continued to lead the U.S. steel industry's efforts to strengthen and enforce trade laws against unfairly traded imports

Our disciplined and balanced capital strategy has positioned our balance sheet to support investments in our business. We continue to take steps to improve and secure our long-term position as an industry leader by reducing our vulnerabilities during down cycles, accentuating our advantages in up cycles, and enabling the creation of value - and the related rewards - for all U. S. Steel stakeholders through business cycles.

Critical Accounting Estimates

Management's discussion and analysis of U. S. Steel's financial condition and results of operations is based upon U. S. Steel's financial statements, which have been prepared in accordance with accounting standards generally accepted in the United States (U.S. GAAP). The preparation of these financial statements requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at year-end and the reported amount of revenues and expenses during the year. Management regularly evaluates these estimates, including those related to employee benefits liabilities and assets held in trust relating to such liabilities; the carrying value of property, plant and equipment; intangible assets; valuation allowances for receivables, inventories and deferred income tax assets; liabilities for deferred income taxes, potential tax deficiencies, environmental obligations and potential litigation claims and settlements. Management's estimates are based on historical experience, current business and market conditions, and various other assumptions that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ materially from current expectations under different assumptions or conditions.

Management believes that the following are the more significant judgments and estimates used in the preparation of the financial statements.

Inventories – Inventories are carried at the lower of cost or market for last-in, first-out (LIFO) inventories and lower of cost and net realizable value for first-in, first-out (FIFO) method inventories. LIFO is the predominant method of inventory costing for inventories in the United States and FIFO is the predominant method used in Europe. The LIFO method of inventory costing was used on 74 percent and 75 percent of consolidated inventories at December 31, 2018 and 2017, respectively. Since the LIFO inventory valuation methodology is an annual calculation, interim estimates of the annual LIFO valuation are required. We recognize the effects of the LIFO inventory valuation method on an interim basis by estimating the year end inventory amounts. The projections of annual LIFO inventory amounts are updated quarterly. Changes in U.S. GAAP rules or tax law, such as the elimination of the LIFO method of accounting for inventories, could negatively affect our profitability and cash flow.

Equity method investments – Investments in entities over which U. S. Steel has significant influence are accounted for using the equity method of accounting and are carried at U. S. Steel's share of net assets plus loans, advances and our share of earnings less distributions. Differences in the basis of the investment and the underlying net asset value of the investee, if any, are amortized into earnings over the remaining useful life of the associated assets.

Income from investees includes U. S. Steel's share of income from equity method investments, which is generally recorded a month in arrears, except for significant and unusual items which are recorded in the period of occurrence. Gains or losses from changes in ownership of unconsolidated investees are recognized in the period of change. Intercompany profits and losses on transactions with equity investees have been eliminated in consolidation subject to lower of cost or market inventory adjustments.

U. S. Steel evaluates impairment of its equity method investments whenever circumstances indicate that a decline in value below carrying value is other than temporary. Under these circumstances, we would adjust the investment down to its estimated fair value, which then becomes its new carrying value. During the fourth quarter of 2016, the Company completed a review of its equity method investments and determined there was an other than temporary impairment of its Apolo Tubulars S.A. equity investment due to the intent to sell its ownership interest at an amount less than the carrying value of the investment. Accordingly, U. S. Steel recorded an impairment charge of \$12 million, which reduced the carrying value of the investment to \$18 million at December 31, 2016. U. S. Steel sold its ownership interest in this equity investment in 2017.

Pensions and other benefits – The recording of net periodic benefit costs for defined benefit pensions and other benefits is based on, among other things, assumptions of the expected annual return on plan assets, discount rate, mortality, escalation or other changes in retiree health care costs and plan participation levels. Changes in the assumptions or differences between actual and expected changes in the present value of liabilities or assets of U. S. Steel's plans could cause net periodic benefit costs to increase or decrease materially from year to year as discussed below.

U. S. Steel's investment strategy for its U.S. pension plan assets provides for a diversified mix of high quality bonds, public equities and selected smaller investments in private equities, timber and mineral interests. For its U.S. pension plan, U. S. Steel has a target allocation for plan assets of 45 percent in corporate bonds, government bonds and mortgage and asset-backed securities. The balance is invested in equity securities, timber, private equity and real estate

partnerships. U. S. Steel believes that returns on equities over the long term will be higher than returns from fixed-income securities as actual historical returns from U. S. Steel's trusts have shown. Returns on bonds tend to offset some of the short-term volatility of stocks. Both equity and fixed-income investments are made across a broad range of industries and companies (both domestic and foreign) to provide protection against the impact of volatility in any single industry as well as company specific developments. U. S. Steel will use a 6.50 percent assumed rate of return on assets for the development of net periodic cost for the main defined benefit pension plan in 2019. The 2019 assumed rate of return is lower than the rate of return used for 2018 domestic expense and was determined by taking into account the intended asset mix and some moderation of the historical premiums that fixed-income and equity investments have yielded above government bonds. Actual returns since the inception of the plans have exceeded this 6.50 percent rate and while recent annual returns have been volatile, it is U. S. Steel's expectation that rates will achieve this level in future periods.

For its other benefits plan assets, U. S. Steel employs a liability driven investment strategy. The plan assets are allocated to match the plan cash flows with maturing investments. To achieve this strategy, U. S. Steel has a target allocation for plan assets of 90 percent in high quality bonds with the balance primarily invested in equity securities, timber, private equity and real estate partnerships. U. S. Steel will use a 4.25 percent assumed rate of return on assets for the development of net periodic cost for its other benefits plans. The 2019 assumed rate of return has been conservatively set, taking into account the intended asset mix.

The expected long-term rate of return on plan assets is applied to the market value of assets as of the beginning of the period less expected benefit payments and considering any planned contributions.

To determine the discount rate used to measure our pension and other benefit obligations in 2016 and prior years, the discount rate for our U.S. plans was determined by utilizing several AAA and AA corporate bond indices as an indication of interest rate movements and levels. In 2017, we refined our discount rate determination process for our U.S. plans by using a bond matching approach to select specific bonds that would satisfy our projected benefit payments. At December 31, 2018, the weighted average discount rate used for our pension and other benefit obligations was determined to be 4.41 percent and 4.47 percent, respectively, compared to the weighted average discount rate used of 4.00 percent and 4.03 percent, respectively, at December 31, 2017. The discount rate reflects the current rate at which we estimate the pension and other benefits liabilities could be effectively settled at the measurement date.

U. S. Steel reviews its actual historical rate experience and expectations of future health care cost trends to determine the escalation of per capita health care costs under U. S. Steel's benefit plans. Approximately three quarters of our costs for the domestic United Steelworkers (USW) participants' retiree health benefits in the Company's main domestic benefit plan are limited to a per capita dollar maximum calculation based on 2006 base year actual costs incurred under the main U. S. Steel benefit plan for USW participants (cost cap). The full effect of the cost cap is expected to be realized around 2025. After 2025, the Company's costs for a majority of USW retirees and their dependents are expected to remain fixed and as a result, the cost impact of health care escalation for the Company is projected to be limited for this group (See Note 18 to the Consolidated Financial Statements). For measurement of its domestic retiree medical plans where health care cost escalation is applicable, U. S. Steel has assumed an initial escalation rate of 7.0 percent for 2019. This rate is assumed to decrease gradually to an ultimate rate of 5.0 percent in 2023 and remain at that level thereafter.

Net periodic pension cost, including multiemployer plans, is expected to total approximately \$158 million in 2019 compared to \$143 million in 2018. Excluding the settlement losses totaling \$10 million in 2018, the increase in expected expense in 2019 is primarily due to a lower rate of expected return on asset assumption and a lower asset return than expected for 2018, partially offset by the natural maturation of the plans and increased discount rates. Total other benefits costs in 2019 are expected to be approximately \$57 million, compared to \$60 million in 2018.

A sensitivity analysis of the projected incremental effect of a hypothetical one percentage point change in the significant assumptions used in the pension and other benefits calculations is provided in the following table:

(In millions)	Hypothetical Rate Increase (Decrease)	
	1%	(1)%
Expected return on plan assets		
Incremental (decrease) increase in:		
Net periodic pension & other benefits costs for 2019	\$ (69)	\$ 69
Discount rate		
Incremental (decrease) increase in:		
Net periodic pension & other benefits costs for 2019	\$ (18)	\$ 8
Pension & other benefits obligations at December 31, 2018	\$ (650)	\$ 770
Health care cost escalation trend rates		
Incremental increase (decrease) in:		
Other post-employment benefit obligations	\$ 77	\$ (66)
Service and interest costs components for 2019	\$ 4	\$ (3)

Changes in the assumptions for expected annual return on plan assets and the discount rate used for accounting purposes do not impact the funding calculations used to derive minimum funding requirements for the pension plan. However, the discount rate required for minimum funding purposes is also based on corporate bond related indices and as such, the same general sensitivity concepts as above can be applied to increases or decreases to the funding obligations of the plans assuming the same hypothetical rate changes. (See Note 18 to the Consolidated Financial Statements for a discussion regarding legislation enacted in November of 2015 that impacts the discount rate used for funding purposes.) For further cash flow discussion see "Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations – Financial Condition, Cash Flows and Liquidity – Liquidity."

Long-lived assets – U. S. Steel evaluates long-lived assets, primarily property, plant and equipment for impairment whenever changes in circumstances indicate that the carrying amounts of those productive assets exceed their recoverable amount as determined by the asset group's projected undiscounted cash flows. We evaluate the impairment of long-lived assets at the asset group level. Our primary asset groups are Flat-Rolled, welded tubular, seamless tubular and U. S. Steel Europe (USSE). During 2018 and 2017, there were no triggering events that required long-lived assets to be evaluated for impairment. During 2016, the permanent shutdown of certain Lorain, Lone Star and Bellville (sold in 2018) tubular assets was considered a triggering event for our welded and seamless tubular asset groups. U. S. Steel completed a quantitative analysis of its long-lived assets for these asset groups within the Tubular segment, and determined that the remaining assets were not impaired. The welded tubular asset group had a carrying value of \$410 million at December 31, 2016 and the recoverable amount exceeded this carrying value by approximately \$93 million, or 23 percent. The seamless tubular asset group had a carrying value of \$210 million at December 31, 2016 and the recoverable amount exceeded this carrying value by \$220 million, or 106 percent. The key assumption used to estimate the recoverable amounts for both the welded and seamless tubular asset groups was the forecasted price of oil over the 11-year average remaining useful lives of the assets within the asset groups. Management will continue to monitor market and economic conditions for triggering events that may warrant further review of long-lived assets.

Taxes - U. S. Steel records a valuation allowance to reduce deferred tax assets to the amount that is more likely than not to be realized. A valuation allowance is recorded if, based on the weight of all available positive and negative evidence, it is more likely than not that some portion, or all, of a deferred tax asset will not be realized. Each quarter U. S. Steel analyzes the likelihood that our deferred tax assets will be realized.

In 2015, U. S. Steel recorded a valuation allowance against our entire net domestic deferred tax asset. At December 31, 2016, the valuation allowance was increased by \$305 million due to an increase in the net domestic deferred tax asset. At December 31, 2017, the valuation allowance was decreased by \$505 million due to the reduction in the corporate income tax rate pursuant to the Tax Cut and Jobs Act of 2017 (2017 Act) and current year activity.

At December 31, 2018, U. S. Steel determined, based upon weighing all positive and negative evidence, that a full valuation allowance for the domestic deferred tax assets was no longer required. Accordingly, we reversed a portion of the valuation allowance, which resulted in a \$374 million non-cash benefit to earnings. That determination was

based, in part, on U. S. Steel's cumulative income from the past three years and projections of income in future years. In addition, U. S. Steel has had seven consecutive quarters of positive pretax income.

While U. S. Steel can now consider future taxable earnings, there remain certain domestic deferred tax assets that have expiration dates which may limit their realizability, including federal net operating losses (NOLs), state NOLs, state income tax credits, foreign tax credits (FTCs), general business credits (GBCs) and capital losses. Each of these deferred tax assets must be analyzed separately to determine the need for a valuation allowance.

U. S. Steel determined that it was more likely than not that all of the federal NOLs would be realized. However, based on all the evidence, including tax planning strategies, U. S. Steel determined that it was more likely than not that some of the state NOLs, state income tax credits, FTCs and GBCs may not be realized. In addition, U. S. Steel determined that it was more likely than not that all of the capital loss may not be realized. U. S. Steel will continue to monitor the realizability of its deferred tax assets on a quarterly basis. In the future, if we determine that realization is more likely than not for deferred tax assets with a valuation allowance, the related valuation allowance will be reduced, and we will record a non-cash benefit to earnings.

At the end of both 2018 and 2017, U. S. Steel did not have any undistributed foreign earnings and profits for which U.S. deferred taxes have not been provided.

U. S. Steel records liabilities for uncertain tax positions. These liabilities are based on management's judgment of the risk of loss for items that have been or may be challenged by taxing authorities. If U. S. Steel determines that tax-related items would not be considered uncertain tax positions or that items previously not considered to be potential uncertain tax positions could be considered potential uncertain tax positions (as a result of an audit, court case, tax ruling or other authoritative tax position), an adjustment to the liability would be recorded through income in the period such determination was made.

Environmental remediation – U. S. Steel has been identified as a potentially responsible party (PRP) at nine sites under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) as of December 31, 2018. Of these, there are three sites where information requests have been received or there are other indications that U. S. Steel may be a PRP under CERCLA, but where sufficient information is not presently available to confirm the existence of liability or to make a reasonable estimate with respect to any potential liabilities. There are also 18 additional sites where U. S. Steel may be liable for remediation costs in excess of \$100,000 under other environmental statutes, both federal and state, or where private parties are seeking to impose liability on U. S. Steel for remediation costs through discussions or litigation. At many of these sites, U. S. Steel is one of a number of parties involved and the total cost of remediation, as well as U. S. Steel's share, is frequently dependent upon the outcome of ongoing investigations and remedial studies. U. S. Steel accrues for environmental remediation activities when the responsibility to remediate is probable and the amount of associated costs is reasonably determinable. As environmental remediation matters proceed toward ultimate resolution or as remediation obligations arise, charges in excess of those previously accrued may be required.

U. S. Steel's accrual for environmental liabilities for U.S. and international facilities as of December 31, 2018 and 2017 was \$187 million and \$179 million, respectively. These amounts exclude liabilities related to asset retirement obligations, disclosed in Note 19 to the Consolidated Financial Statements.

U. S. Steel is the subject of, or a party to, a number of pending or threatened legal actions, contingencies and commitments involving a variety of matters, including laws and regulations relating to the environment. The ultimate resolution of these contingencies could, individually or in the aggregate, be material to the Consolidated Financial Statements.

For discussion of relevant environmental items, see "Part I. Item 3. Legal Proceedings—Environmental Proceedings."

Segments

U. S. Steel has three reportable segments: North American Flat-Rolled (Flat-Rolled), U. S. Steel Europe (USSE) and Tubular Products (Tubular). The results of our railroad and real estate businesses that do not constitute reportable segments are combined and disclosed in the Other Businesses category.

The Flat-Rolled segment includes the operating results of U. S. Steel's integrated steel plants and equity investees in North America involved in the production of slabs, strip mill plates, sheets and tin mill products, as well as all iron ore and coke production facilities in the United States. These operations primarily serve North American customers in the service center, conversion, transportation (including automotive), construction, container, and appliance and electrical

markets. Additionally, the Flat-Rolled segment consists of the following three commercial entities to specifically address our customers and service their needs: (1) automotive solutions, (2) consumer solutions, and (3) industrial, service center and mining solutions.

The USSE segment includes the operating results of U. S. Steel Košice (USSK), U. S. Steel's integrated steel plant and coke production facilities in Slovakia, and its subsidiaries. USSE primarily serves customers in the Eastern European service center, conversion, transportation (including automotive), construction, container, appliance and electrical, and oil, gas and petrochemical markets. USSE produces and sells slabs, strip mill plates, sheets, tin mill products and spiral welded pipe, as well as heating radiators and refractory ceramic materials.

The Tubular segment includes the operating results of U. S. Steel's tubular production facilities and an equity investee in the United States. We had an equity investee, Apolo Tubulars S.A., in Brazil, and we sold our ownership interest in it in December of 2017. These operations produce and sell seamless and electric resistance welded (ERW) steel casing and tubing (commonly known as oil country tubular goods or OCTG), standard and line pipe and mechanical tubing and primarily serve customers in the oil, gas and petrochemical markets. In March 2017, U. S. Steel made the strategic decision to permanently shutdown the Lorain No. 6 Quench & Temper Mill.

For further information, see Note 4 to the Consolidated Financial Statements.

Net Sales



Net Sales by Segment

(Dollars in millions, excluding intersegment sales)

	2018	2017	2016
Flat-Rolled	\$ 9,681	\$ 8,297	\$ 7,507
USSE	3,205	2,949	2,243
Tubular	1,231	944	449
Total sales from reportable segments	14,117	12,190	10,199
Other Businesses	61	60	62
Net sales	\$ 14,178	\$ 12,250	\$ 10,261

Management's analysis of the percentage change in net sales for U. S. Steel's reportable business segments is set forth in the following tables:

Year Ended December 31, 2018 versus Year Ended December 31, 2017

	Steel Products ^(a)				Coke, Pellets & Other ^(c)	Net Change
	Volume	Price	Mix	FX ^(b)		
Flat-Rolled	5 %	12%	(1)%	—%	1%	17%
USSE	(3)%	5%	2 %	5%	—%	9%
Tubular	14 %	15%	1 %	—%	—%	30%

(a) Excludes intersegment sales

(b) Foreign currency translation effects

(c) Includes sales of scrap inventory

The increase in sales for the Flat-Rolled segment primarily reflected higher average realized prices (increase of \$85 per net ton) and higher shipments (increase of 623 thousand net tons) as a result of improved market conditions, notably for hot-rolled products from 2017 to 2018. Improved market conditions reflect accelerated demand for steel products in line with the recent economic growth, as well as the supply-demand balance between imported and domestic steel. The restart of the two blast furnaces at our Granite City Works during 2018 enabled us to take advantage of the improved market dynamics.

The increase in sales for the USSE segment was primarily due to higher average realized euro-based prices (increase of €35 per net ton) as a result of improved market conditions in line with recent economic growth and favorable currency impacts from 2017 to 2018. These favorable impacts were partially offset by decreased shipments (decrease of 128 thousand net tons).

The increase in sales from 2017 to 2018 for the Tubular segment primarily reflected higher average realized prices (increase of \$230 per net ton) and increased shipments (increase of 92 thousand net tons) as a result of improved market conditions and drilling activity.

Year Ended December 31, 2017 versus Year Ended December 31, 2016

	Steel Products ^(a)				Coke, Pellets & Other ^(c)	Net Change
	Volume	Price	Mix	FX ^(b)		
Flat-Rolled	(3)%	26%	(16)%	—%	4%	11%
USSE	2 %	26%	— %	2%	1%	31%
Tubular	74 %	13%	17 %	—%	6%	110%

(a) Excludes intersegment sales

(b) Foreign currency translation effects

(c) Includes sales of scrap inventory

The increase in sales for the Flat-Rolled segment primarily reflected higher average realized prices (increase of \$60 per net ton) as a result of improved market conditions, notably for hot-rolled products, that resulted in spot price increases in 2017 as well as price increases for both market-based and firm priced contracts from 2016 to 2017, and sales also increased due to a favorable impact from higher third-party pellet sales. These increases were partially offset by a lower value product mix and decreased shipments (decrease of 207 thousand net tons).

The increase in sales for the USSE segment was primarily due to higher average realized euro-based prices (increase of €115 per net ton) as a result of lower imports and increased shipments (increase of 89 thousand net tons).

The increase in sales from 2016 to 2017 for the Tubular segment primarily reflected increased shipments (increase of 288 thousand net tons), a favorable impact on product mix as a result of increased shipments of seamless tubular products, and higher average realized prices (increase of \$182 per net ton) as a result of improved market conditions.

Operating Expenses**Union profit-sharing costs**

<i>(Dollars in millions)</i>	Year Ended December 31,		
	2018	2017	2016
Allocated to segment results	\$ 92	\$ 35	\$ 3

Effective January 1, 2016, profit-based amounts per the 2015 Labor Agreements are calculated and paid on a quarterly basis as a percentage of consolidated earnings (loss) before interest and income taxes based on 7.5 percent of profit between \$10 and \$50 per ton and 15 percent of profit above \$50 per ton. There were no changes to the calculation of profit-based amounts in the 2018 Labor Agreements.

The amounts above represent profit-sharing amounts paid to active USW-represented employees and are included in cost of sales on the Consolidated Statement of Operations.

Pension and other benefits costs

Pension and other benefit costs (other than service cost) are reflected within net interest and other financial costs and the service cost component is reflected within cost of sales in the Consolidated Statements of Operations.

Defined benefit and multiemployer pension plan costs included in cost of sales totaled \$109 million in 2018, \$109 million in 2017 and \$117 million in 2016.

Costs related to defined contribution plans totaled \$44 million in 2018 and \$42 million in 2017 and 2016, respectively.

Other benefit expense included in cost of sales totaled \$17 million in 2018, \$17 million in 2017 and \$20 million in 2016.

Selling, general and administrative expenses

Selling, general and administrative expenses were \$336 million in 2018, \$320 million in 2017 and \$306 million in 2016. The increase from 2017 to 2018 is primarily related to increased variable compensation. The increase from 2016 to 2017 is primarily due to an increase in other post-employment benefit costs, which include workers' compensation and black lung benefits costs.

Operating configuration adjustments

Over the past three years, the Company has adjusted its operating configuration in response to changing market conditions including global overcapacity, unfair trade practices and increases in domestic demand as a result of tariffs on imports by indefinitely and temporarily idling and then re-starting production at certain of its facilities.

In February 2019, U. S. Steel announced plans to restart the No. 1 Electric-Weld Pipe mill (No. 1 mill) at Lone Star Tubular Operations in Lone Star, Texas. The No. 1 mill was idled in 2016. Also in February 2019, U. S. Steel announced plans to restart the delayed electric arc furnace (EAF) capital project located in Fairfield, Alabama. See Note 29 to the Consolidated Financial Statements for further details.

In 2018 and 2017, the Granite City Works steelmaking operations and hot strip mill, respectively, were restarted after they were temporarily idled in 2015.

Also in 2017, U. S. Steel made the strategic decision to permanently shutdown the Lorain No. 6 Quench & Temper Mill.

Other Strategic Decisions

U. S. Steel will continue to evaluate potential strategic and organizational opportunities, which may include the acquisition, divestiture or consolidation of assets. Given the cyclicity of our industry, we are focused on strategically maintaining and spending cash (including capital investments under our asset revitalization program), in order to invest in areas consistent with our long-term strategy, such as sustainable steel technologies, and are considering various possibilities, including exiting lines of business and the sale of certain assets, that we believe would ultimately result

in maintaining a strong balance sheet and greater stockholder value. The Company will pursue opportunities based on its long-term strategy, and what the Board of Directors determines to be in the best interests of the Company's stockholders at the time.

Better operating performance in our Flat-Rolled segment, coupled with relatively stable market conditions during 2018, have resulted in improved segment results in recent quarters. As we continue with the implementation of our asset revitalization program, described below, and increase investment in our facilities, we expect the sustainable improvements in safety, quality, delivery and costs we are targeting to position us to succeed over the long term, and support future growth initiatives.

Asset Revitalization

As part of our long-term strategy, the Board of Directors has approved a \$2 billion multi-year asset revitalization program focused on our Flat-Rolled segment. The program is structured over four years, and involves capital investments totaling approximately \$1.5 billion. Management evaluated performance in the key industries we serve, and developed projects across multiple Flat-Rolled segment assets with a focus on continuous improvement in safety, quality, delivery and cost. The Company views this program as essential to improving predictability and our ability to compete effectively in the industry. As we revitalize our assets, we are increasing profitability, productivity, and operational stability, and reducing volatility. The identified projects and schedule may change to address our customers' needs, current and future economic operating conditions, and risks identified in the production cycle. The Company plans to fund the program through cash generated from operations and cash on hand. Our total capital expenditures for 2018 were \$1,001 million, which includes \$335 million for the Company's asset revitalization program. Through 2018, we have made \$584 million in capital expenditures related to the asset revitalization program. For 2019, we expect \$300-350 million in capital expenditures related to the program. See Item 1. Business, Business Strategy - Asset Revitalization for more information.

Depreciation, depletion and amortization

Depreciation, depletion and amortization expenses were \$521 million in 2018, \$501 million in 2017 and \$507 million in 2016. The increase from 2017 to 2018 is primarily due to increased capital spending from prior years. Depreciation expense in 2017 was consistent with 2016 depreciation expense.

Earnings from investees

Earnings from investees was \$61 million in 2018, \$44 million in 2017 and \$98 million in 2016. The increase from 2017 to 2018 is primarily due to decreased losses from joint venture finishing affiliates. The decrease from 2016 to 2017 is primarily due to decreased earnings from our joint venture finishing and mining affiliates.

Restructuring and Other Charges

During 2017, U. S. Steel recorded net restructuring charges of approximately \$31 million, which consists of charges of \$37 million primarily related to the permanent shutdown of the No. 6 Quench & Temper Mill at Lorain Tubular Operations and a favorable adjustment of \$6 million primarily associated with a change in estimate for previously recorded costs for environmental obligations and Company-wide headcount reductions. Cash payments were made related to severance and exit costs of \$32 million.

During 2016, U. S. Steel recorded net restructuring charges of approximately \$122 million, which consists of: (1) charges of \$124 million related to the permanent shutdown of the Lorain #4, Lone Star #1 and Bellville pipe mills within our Tubular segment; (2) charges of \$24 million for Company-wide headcount reductions, including within our Flat-Rolled, Tubular and USSE segments; and (3) a favorable adjustment of \$26 million primarily associated with a change in estimate for previously recorded costs for Company-wide headcount reductions. Cash payments were made related to severance and exit costs of \$79 million.

Charges for restructuring and ongoing cost reduction initiatives are recorded in the period U. S. Steel commits to a restructuring or cost reduction plan, or executes specific actions contemplated by the plan and all criteria for liability recognition have been met. Charges related to the restructuring and cost reductions are reported in restructuring and other charges in the Consolidated Statements of Operations.

Gain and loss associated with U. S. Steel Canada Inc. (USSC)

USSC, a former indirect wholly owned subsidiary of U. S. Steel, applied for relief from its creditors pursuant to Canada's Companies' Creditors Arrangement Act in September of 2014. On June 30, 2017, U. S. Steel completed the restructuring and disposition of USSC through a sale and transfer of all of the issued and outstanding shares in USSC to an affiliate of Bedrock Industries LLC. In accordance with the Second Amended and Restated Plan of Compromise, Arrangement and Reorganization, approved by the Ontario Superior Court of Justice on June 9, 2017, U. S. Steel received approximately \$127 million in satisfaction of its secured claims, including interest, which resulted in a gain of \$72 million on the Company's retained interest in USSC. U. S. Steel also agreed to the discharge and cancellation of its unsecured claims for nominal consideration. The terms of the settlement also included mutual releases among key stakeholders, including a release of all claims against the Company regarding environmental, pension and other liabilities.

Earnings (loss) before interest and income taxes by Segment ^(a)

<i>(Dollars in Millions)</i>	Year Ended December 31,		
	2018	2017	2016
Flat-Rolled	\$ 883	\$ 375	\$ 22
USSE	359	327	185
Tubular	(58)	(99)	(303)
Total earnings (loss) from reportable segments	1,184	603	(96)
Other Businesses	55	44	63
Segment earnings (loss) before interest and income taxes	1,239	647	(33)
Other items not allocated to segments:			
USW labor agreement signing bonus and related costs (Note 28)	(81)	—	—
Granite City Works restart and related costs	(80)	—	—
Loss on shutdown of certain tubular pipe mill assets ^(b)	—	(35)	(126)
Gain associated with U. S. Steel Canada Inc. (Note 5)	—	72	—
Restructuring and other charges ^(b)	—	—	2
Granite City Works temporary idling charges	8	(17)	(18)
Gain (loss) on equity investee transactions (Note 12)	38	2	(12)
Impairment of intangible assets (Note 14)	—	—	(14)
Total earnings (loss) before interest and income taxes	\$ 1,124	\$ 669	\$ (201)

(a) See Note 4 to the Consolidated Financial Statements for reconciliations and other disclosures required by Accounting Standards Codification Topic 280.

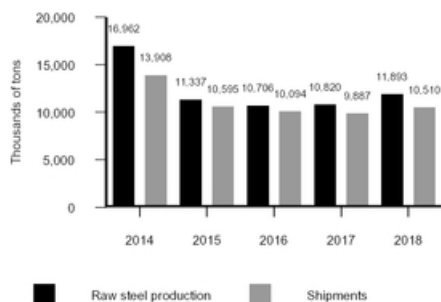
(b) Included in Restructuring and other charges on the Consolidated Statements of Operations. See Note 25 to the Consolidated Financial Statements.

Gross Margin by Segment

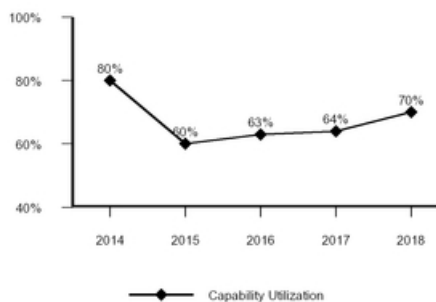
	Year Ended December 31,		
	2018	2017	2016
Flat-Rolled	15%	11 %	6 %
USSE	15%	15 %	14 %
Tubular	1%	(2)%	(43)%

Segment results for Flat-Rolled
(Excludes the results of USSC beginning September 16, 2014)

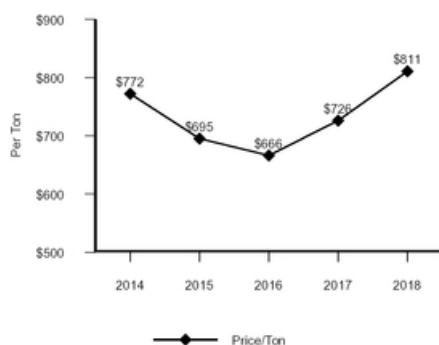
Raw Steel Production and Shipments



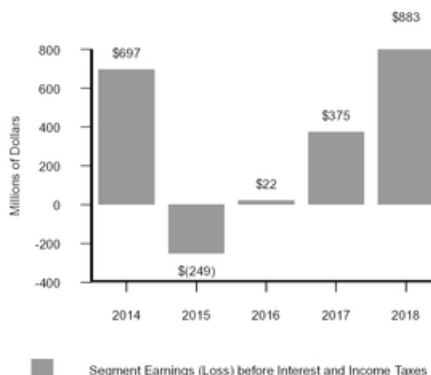
Raw Steel Capability Utilization



Average Realized Price Per Ton



Segment Earnings (Loss) before Interest and Income Taxes



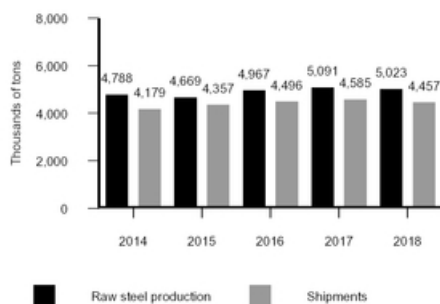
The Flat-Rolled segment had earnings of \$883 million for the year ended December 31, 2018 compared to earnings of \$375 million for the year ended December 31, 2017. The increase in Flat-Rolled results for 2018 compared to 2017 resulted from higher average realized prices (approximately \$950 million), and increased shipments, including substrate to our Tubular segment (\$135 million) as a result of improved market conditions, and lower energy costs (approximately \$30 million), respectively. These changes were partially offset by higher raw material costs (approximately \$320 million), increased spending for operating and maintenance costs (approximately \$180 million) and an increase in other operating costs primarily due to increased variable compensation (approximately \$105 million).

The Flat-Rolled segment had earnings of \$375 million for the year ended December 31, 2017 compared to earnings of \$22 million for the year ended December 31, 2016. The increase in Flat-Rolled results for 2017 compared to 2016 resulted from higher average realized prices (approximately \$695 million) as a result of improved market conditions, a favorable impact related to our change in accounting method for property, plant and equipment (approximately \$150 million), higher results from our mining operations (approximately \$80 million) including benefits from the restart of our Keetac facility to support third-party pellet sales, and increased shipments to our Tubular segment (approximately \$50 million). These changes were partially offset by increased maintenance and asset revitalization spending and other operating costs (approximately \$350 million) and higher raw materials costs, primarily scrap and coal (approximately \$275 million).

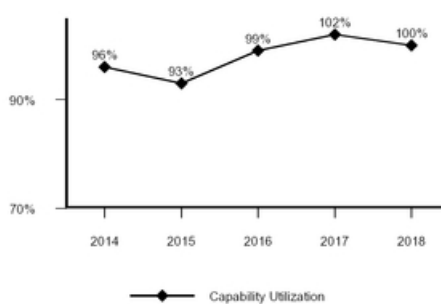
Gross margin for 2018 as compared to 2017 increased primarily as a result of higher average realized prices due to improved contract and spot market prices. Gross margin for 2017 as compared to 2016 increased primarily as a result of higher average realized prices due to improved contract and spot market prices, in addition to the favorable impact on cost of goods sold related to our change in accounting method for property, plant and equipment.

Segment results for USSE

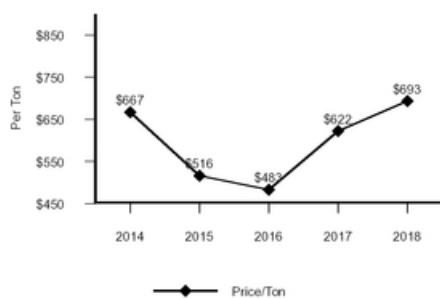
Raw Steel Production and Shipments



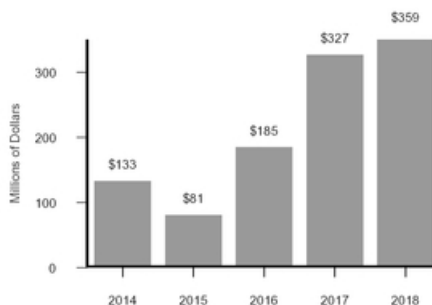
Raw Steel Capability Utilization



Average Realized Price Per Ton



Segment Earnings before Interest and Income Taxes



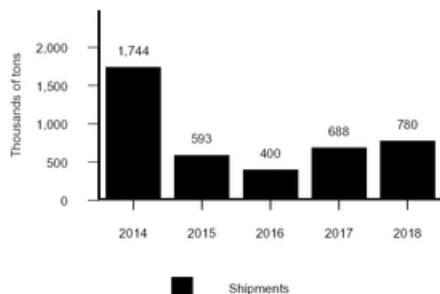
The USSE segment had earnings of \$359 million for the year ended December 31, 2018 compared to earnings of \$327 million for the year ended December 31, 2017. The increase in USSE results in 2018 compared to 2017 was primarily due to higher average realized euro-based prices (approximately \$165 million) and the strengthening of the euro versus the U.S. dollar in 2018 (approximately \$60 million). These changes were partially offset by higher raw materials costs (approximately \$85 million) including a favorable first-in-first out (FIFO) inventory impact, increased spending for operating and maintenance costs (approximately \$45 million), decreased shipments (approximately \$20 million) and higher other and energy costs (approximately \$45 million).

The USSE segment had earnings of \$327 million for the year ended December 31, 2017 compared to earnings of \$185 million for the year ended December 31, 2016. The increase in USSE results in 2017 compared to 2016 was primarily due to higher average realized euro-based prices (approximately \$600 million), the strengthening of the euro versus the U.S. dollar in 2017 as compared to the prior year (approximately \$15 million) and increased shipments (approximately \$10 million). These changes were partially offset by higher raw materials costs, primarily coal and iron ore (approximately \$475 million).

Gross margin for 2017 as compared to 2016 increased primarily due to higher average realized euro-based prices, partially offset by higher raw materials costs.

Segment results for Tubular

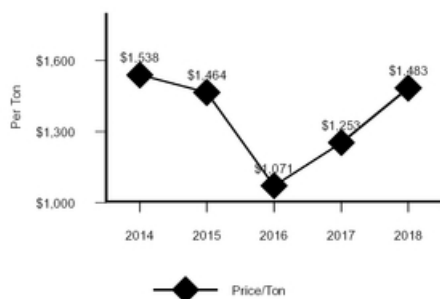
Shipments



Segment Earnings (Loss) before Interest and Income Taxes



Average Realized Price Per Ton



The Tubular segment had a loss of \$58 million for the year ended December 31, 2018 compared to a loss of \$99 million for the year ended December 31, 2017. The increase in Tubular results in 2018 as compared to 2017 was primarily due to higher average realized prices (approximately \$110 million), shipment volumes (approximately \$20 million) and lower other costs (\$10 million). These changes were partially offset by higher substrate costs (approximately \$85 million) and increased operating costs (approximately \$15 million).

The Tubular segment had a loss of \$99 million for the year ended December 31, 2017 compared to a loss of \$303 million for the year ended December 31, 2016. The increase in Tubular results in 2017 as compared to 2016 was primarily due to higher average realized prices and shipment volumes as a result of improving market conditions (approximately \$105 million), decreased labor and other operating costs (approximately \$95 million), favorable impacts from changes to our operating footprint (approximately \$35 million) and favorable lower of cost or market (LCM) adjustments (approximately \$30 million). These changes were partially offset by higher substrate costs (approximately \$60 million).

Gross margin for 2018 as compared to 2017 increased primarily due to increased average realized prices and shipment volumes and operating efficiencies. Gross margin for 2017 as compared to 2016 increased primarily due to increased average realized prices and shipment volumes and operating efficiencies.

Results for Other Businesses

Other Businesses had earnings of \$55 million, \$44 million and \$63 million for 2018, 2017 and 2016, respectively.

Items not allocated to segments:

We recorded a charge of \$81 million for **United Steelworkers labor agreement signing bonus and related costs** associated with the 2018 Labor Agreements with the United Steelworkers.

We recorded \$80 million for **Granite City Works restart and related costs** as a result of costs associated with the restart of the "A" and "B" blast furnaces.

We recorded a \$35 million **loss on the shutdown of certain tubular assets** in 2017 as a result of the permanent shutdown of the No. 6 Quench & Temper Mill at Lorain Tubular Operations. We recorded a loss on shutdown of certain tubular pipe mill assets of \$126 million in 2016 as a result of the permanent closure of the Lorain #4 and Lone Star #1 pipe mills and the Bellville Tubular Operations.

We recognized a \$72 million **gain associated with U. S. Steel Canada Inc. (USSC)** as a result of the restructuring and disposition of USSC on June 30, 2017.

We recorded a favorable adjustment of \$8 million in 2018 and expense of \$17 million and \$18 million in 2017 and 2016, respectively, for **Granite City Works temporary idling charges**.

We recognized a **gain on equity investee transactions** of \$38 million and \$2 million in 2018 and 2017, respectively.

In 2018, we recognized gains on equity investee transactions of approximately \$18 million for the assignment of our 33% ownership interest in Leeds Retail Center, LLC and \$20 million from the sale of our 40% ownership interest in Acero Prime, S. R. L. de CV. The 2017 gain was primarily due to the sale of our 15% ownership interest in Tilden Mining Company, L.C., partially offset by a loss on sale of our 50% ownership interest in Apolo Tubulars S.A. (Apolo). In 2016, the Company determined there was an other than temporary impairment of its Apolo equity investment due to the intent to sell its ownership interest at an amount less than the carrying value of the investment. Accordingly, an impairment charge of \$12 million was recorded in 2016. The Company sold its ownership interest in this equity investment in 2017 as discussed above. (see Note 12 to the Consolidated Financial Statements, "Investments and Long-Term Receivables and Equity Investee Transactions" for further details).

We recorded an **impairment charge** of \$14 million on our indefinite lived intangible assets related to certain of our patents in our Tubular segment as a result of an annual quantitative evaluation that was performed during the third quarter of 2016.

Net Interest and Other Financial Costs

<i>(Dollars in millions)</i>	Year Ended December 31,		
	2018	2017	2016
Interest income	\$ (23)	\$ (17)	\$ (5)
Interest expense	168	226	230
Net periodic benefit cost (other than service cost)	69	61	(36)
Loss on debt extinguishment	98	54	22
Other financial costs	—	44	4
Net interest and other financial costs	\$ 312	\$ 368	\$ 215

During 2018, U. S. Steel issued \$650 million aggregate principal amount of 6.250% Senior Notes due 2026 (2026 Senior Notes) and had borrowings of €200 million (approximately \$229 million) from the USSK Credit Agreement. Also, during 2018, through a series of open market purchases, U. S. Steel repurchased approximately \$75 million of its 7.375% Senior Notes due in 2020 (2020 Senior Notes) and redeemed the remaining \$357 million. Additionally, U. S. Steel tendered and then redeemed the \$780 million aggregate principal amount of its 8.375% Senior Secured Notes due 2021 (2021 Senior Secured Notes). The aggregate redemption costs of these repurchases and redemptions totaled \$1,296 million, which included \$1,212 million for the remaining principal balances and \$84 million of redemption premiums which have been reflected within the loss on debt extinguishment line in the table above. For further information see Note 17 to the Consolidated Financial Statements.

During 2017, U. S. Steel issued \$750 million of 6.875% Senior Notes due August 2025 (2025 Senior Notes) and redeemed \$161 million of 7.000% Senior Notes due 2018, \$200 million of 6.875% Senior Notes due 2021, and \$400 million of 7.500% Senior Notes due 2022 for an aggregate redemption cost of approximately \$808 million, which included \$761 million for the remaining principal balances, \$21 million in accrued and unpaid interest and \$26 million of redemption premiums which have been reflected within the loss on debt extinguishment line in the table above. Additionally, U. S. Steel redeemed \$200 million of its 8.375% Senior Secured Notes due 2021 for an aggregate redemption cost of approximately \$227 million, which included \$200 million for the remaining principal balance, \$8 million in accrued and unpaid interest and \$19 million of redemption premiums which have been reflected within the loss on debt extinguishment line in the table above.

During 2016, U. S. Steel issued \$980 million of 8.375% Senior Secured Notes due July 2021 (2021 Senior Secured Notes) and repurchased several tranches of its outstanding senior notes through various tender offers, redemptions and open market purchases, including the redemption of the remaining 6.050% Senior Notes due 2017 for an aggregate principal amount of approximately \$444 million plus a total make whole premium of approximately \$22 million, which has been reflected within the loss on debt extinguishment line in the table above.

The net periodic benefit cost (other than service cost) of pension and other benefit costs are a component of net interest and other financial costs. The increase in 2018 as compared to 2017 is mainly due to a lower return on assets assumption for pension benefits. The increase in 2017 as compared to 2016 is primarily due to lower return on assets assumptions as a result of action taken in 2016 to de-risk the OPEB plan. For additional information on pensions and other benefits, see Note 18 to the Consolidated Financial Statements.

The net decrease in net interest and other financial costs in 2018 as compared to 2017 is primarily due to reduced interest expense as a result of our improved debt profile and net foreign currency gains on our euro-U.S. dollar derivatives partially offset by a higher loss on debt extinguishment in 2018 (as described above).

The increase in net interest and other financial costs from 2016 to 2017 is primarily due to increased other benefits expense (as described above), an increase in loss on debt extinguishment and decreased foreign currency gains, partially offset by increased interest income as a result of increased cash balances and interest rates in 2017 as compared to 2016.

For additional information on U. S. Steel's foreign currency exchange activity see Note 16 to the Consolidated Financial Statements and Item 7A . "Quantitative and Qualitative Disclosures about Market Risk – Foreign Currency Exchange Rate Risk."

Income Taxes

The income tax benefit for the year ended December 31, 2018 was \$303 million compared to an income tax benefit of \$86 million in 2017 and an income tax provision of \$24 million in 2016. Included in the 2018 tax benefit is a benefit of \$374 million related to the reversal of a portion of the valuation allowance recorded against the Company's net domestic deferred tax asset, as well as a benefit of \$38 million related to the reversal of the valuation allowance for current year activity.

Included in the 2017 tax benefit is a benefit of \$10 million related to the corporate rate reduction provided by the Tax Cut and Jobs Act of 2017 (2017 Act), as well as a benefit of \$71 million related to the reversal of the valuation allowance recorded against the remaining balance of the Company's Alternative Minimum Tax (AMT) credits, which became fully refundable pursuant to the 2017 Act. Also included in the 2017 tax benefit is a benefit of \$48 million related to the Company's election to claim a refund of AMT credits pursuant to a provision in the Protecting Americans from Tax Hikes Act (PATH Act).

Included in the 2016 tax provision is a benefit of \$18 million related to the Company's election to claim a refund of AMT credits pursuant to a provision in the PATH Act. The 2016 provision also reflects a write-off of certain deferred tax assets and liabilities related to branch operations pursuant to new regulations. However, the write-off did not impact the total provision because of the valuation allowance on the net domestic deferred tax asset.

After review of the 2017 Act and guidance provided to date, the Company has completed its evaluation of the impact, which was immaterial.

The net domestic deferred tax asset was \$445 million at December 31, 2018, net of an established valuation allowance of \$211 million, compared to a net domestic deferred tax asset of \$53 million at December 31, 2017, net of an established valuation allowance of \$604 million.

At December 31, 2018, the net foreign deferred tax liability was \$14 million, net of an established valuation allowance of \$3 million. At December 31, 2017, the net foreign deferred tax liability was \$3 million, net of an established valuation allowance of \$4 million.

For further information on income taxes see Note 11 to the Consolidated Financial Statements.

Net earnings/(loss) attributable to U. S. Steel

Net earnings attributable to U. S. Steel in 2018 was \$1,115 million compared to net earnings of \$387 million in 2017 and a net loss of \$(440) million in 2016, respectively. The changes primarily reflected the factors discussed above.

Financial Condition, Cash Flows and Liquidity

Financial Condition

Accounts receivable increased by \$280 million from year-end 2017 primarily due to higher average realized prices in all three reportable segments, as well as increased shipment volumes in our Flat-Rolled and Tubular segments in 2018 compared to 2017.

Inventories increased by \$354 million from December 31, 2017 primarily as a result of increased operating levels and higher raw materials prices across all of our segments.

Property, plant and equipment, net increased by \$585 million due to the level of capital expenditures exceeding depreciation expense.

Deferred income tax benefits increased by \$389 million due to the reversal of a portion of the valuation allowance on our domestic deferred tax assets in 2018.

Accounts payable and other accrued liabilities increased by \$313 million from year-end 2017 primarily as a result of increased operating levels and higher raw materials prices across all of our segments.

Payroll and benefits payable increased by \$93 million from year-end 2017 primarily due to profit-based payment accruals related to 2018 financial performance that will be paid in the first quarter of 2019.

Short-term debt and current maturities of long-term debt increased by \$62 million from year-end 2017 primarily due to upcoming repayment requirements for environmental bonds.

Long-term debt decreased by \$384 million from year-end 2017 primarily due to the redemption of \$432 million of 7.375% Senior Notes due in 2020 and, pursuant to a cash tender offer followed by a redemption of \$780 million of 8.375% Senior Secured Notes due in 2021 and the reclassification of amounts for upcoming environmental bond repayments to current maturities of long-term debt as discussed above. These decreases were partially offset by the issuance of \$650 million of 6.250% Senior Notes due in 2026 and borrowings of €200 million (approximately \$229 million) under the USSK Credit Agreement.

Employee benefits increased by \$221 million from year-end 2017 primarily due to lower than expected returns on plan assets partially offset by the natural maturation of our pension plans and a higher discount rate.

Cash Flows

Net cash provided by operating activities was \$938 million in 2018 compared to \$826 million in 2017 and \$754 million in 2016. The increase in 2018 compared to 2017 and 2017 compared to 2016 is primarily due to improved financial results, partially offset by changes in working capital period over period. Changes in working capital can vary significantly depending on factors such as the timing of inventory production and purchases, which is affected by the length of our business cycles as well as our captive raw materials position, customer payments of accounts receivable and payments to vendors in the regular course of business.

Our key working capital components include accounts receivable and inventory. The accounts receivable and inventory turnover ratios for the years ended December 31, 2018 and 2017 are as follows:

	Year Ended December 31,	
	2018	2017
Accounts Receivable Turnover	9.3	9.3
Inventory Turnover	6.4	6.6

The last-in, first-out (LIFO) inventory method is the predominant method of inventory costing in the United States. At December 31, 2018 and 2017, the LIFO method accounted for 74 percent and 75 percent of total inventory values, respectively. In the U.S., management monitors the inventory realizability by comparing the LIFO cost of inventory with the replacement cost of inventory. To the extent the replacement cost (i.e., market value) of inventory is lower than the LIFO cost of inventory, management will write the inventory down. As of December 31, 2018 and 2017, the replacement cost of the inventory was higher by approximately \$1,038 million and \$802 million, respectively.

Our cash conversion cycle improved two days in the fourth quarter of 2018 from the fourth quarter of 2017 as shown below:

Cash Conversion Cycle	2018		2017	
	\$ millions	Days	\$ millions	Days
Accounts receivable, net ^(a)	\$ 1,659	42	\$ 1,379	43
+ Inventories ^(b)	\$ 2,092	58	\$ 1,738	58
- Accounts Payable and Other Accrued Liabilities ^(c)	\$ 2,477	72	\$ 2,163	71
= Cash Conversion Cycle ^(d)		28		30

^(a) Calculated as Average Accounts Receivable, net divided by total Net Sales multiplied by the number of days in the period.

^(b) Calculated as Average Inventory divided by total Cost of Sales multiplied by the number of days in the period.

^(c) Calculated as Average Accounts Payable and Other Accrued Liabilities less bank checks outstanding and other current liabilities divided by total Cost of Sales multiplied by the number of days in the period.

^(d) Calculated as Accounts Receivable Days plus Inventory Days less Accounts Payable Days.

Net cash provided by operating activities for 2018, 2017 and 2016 reflects employee benefits payments as shown in the following table.

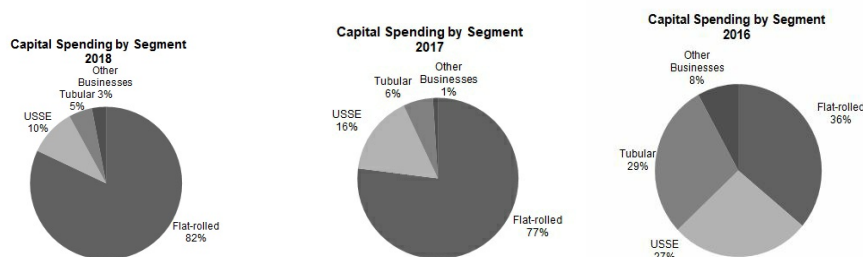
Employee Benefits Payments

<i>(Dollars in millions)</i>	Year Ended December 31,		
	2018	2017	2016
Voluntary contributions to main defined benefit pension plan ^(b)	\$ —	\$ 75	\$ 13 ^(a)
Other employee benefits payments not funded by trusts	48	59	61
Payments to a multiemployer pension plan	60	59	63
Pension related payments not funded by trusts	20	13	26
Reductions in cash flows from operating activities	\$ 128	\$ 206	\$ 163

^(a) Represents a contribution related to the payment of Pension Benefit Guarantee Corporation (PBGC) fees.

^(b) In 2016, we also made a voluntary contribution in Company stock valued at approximately \$100 million.

Capital expenditures in 2018 were \$1,001 million compared to \$505 million in 2017 and \$306 million in 2016.



2018 Capital Spending

Total capital expenditures for 2018 were over \$1 billion. Flat-rolled capital expenditures were \$820 million and included spending for the Great Lakes Works Blast Furnace D4 Major Repairs, Edgar Thomson Plant SO₂ Boiler Stack project, Gary Works No. 83 Stove Rebuild, and various other infrastructure, environmental and strategic projects. Tubular capital expenditures of \$45 million related to Offshore Operations Threading Line extension, Lorain Seamless Rotary Motor Mill, Offshore Operations premium thread line, as well as various other strategic capital projects. USSE capital expenditures of \$104 million consisted of spending for a boiler house upgrade, Blast Furnace No. 13 stove rebuild, pickle line upgrades, coke battery through-wall replacement and various other infrastructure and environmental projects.

2017 Capital Spending

Flat-rolled capital expenditures were \$388 million and included spending for the Mon Valley Works blast furnace stove rebuild, Gary Works blast furnace reline and skip incline replacement, Edgar Thomson Basic Oxygen Process (BOP) R vessel hood replacement, Midwest Plant galvanneal furnace upgrade, Great Lakes Works BOP truss off gas main replacement, and various other infrastructure, environmental and strategic projects. Tubular capital expenditures of \$28 million related to Lone Star pipe mill finishing, Offshore Operations premium thread line and Lorain primary electric utility supply, as well as various other strategic capital projects. USSE capital expenditures of \$83 million consisted of spending for a boiler house upgrade, pickle line upgrades, coke battery through-wall replacement and various other infrastructure and environmental projects.

2016 Capital Spending

Flat-rolled capital expenditures were \$111 million and included spending for the Gary Works No. 1 Caster upgrade and certain other blast furnace upgrades, the Great Lakes Works Pickle Line Tank replacement, Continuous Galvanized Line (CGL) Strip Cleaning and Roller Coater, and various other infrastructure, environmental and strategic projects. Tubular capital expenditures of \$88 million related to the delayed electric arc furnace (EAF) and coupling facilities projects as well as various other infrastructure and strategic capital projects. USSE capital expenditures of \$83 million consisted of spending for a boiler house upgrade, pickle line upgrades and various other infrastructure and environmental projects.

Capital expenditures for 2019 are expected to total approximately \$1,200 million and remain focused largely on strategic, infrastructure and environmental projects, as well as asset revitalization of our equipment to improve our operating reliability and efficiency, and product quality and cost by focusing on investments in our Flat-Rolled segment.

U. S. Steel’s contractual commitments to acquire property, plant and equipment at December 31, 2018, totaled \$601 million.

In 2018, U. S. Steel sold its 40% ownership interest in Acero Prime, S. R. L. de CV for a pretax gain of \$20 million.

In 2017, U. S. Steel received approximately \$11 million for the sale of its 50% ownership interest in Apolo Tubulars S.A. and approximately \$105 million for the sale of its 15% ownership in Tilden Mining Company L.C.

Also in 2017, U. S. Steel received approximately \$127 million in satisfaction of its secured and unsecured claims, including interest, as a result of the restructuring and disposition of USSC on June 30, 2017.

Revolving credit facilities - borrowings totaled \$228 million in 2018, which represents cash received from borrowings under the USSK Credit Agreement.

Issuance of long-term debt, net of financing costs, totaled \$640 million in 2018. In 2018, U. S. Steel issued \$650 million of 6.250% Senior Notes due March 15, 2026. U. S. Steel received net proceeds from the offering of approximately \$640 million after fees of approximately \$10 million related to the underwriting and third party expenses. In 2017, U. S. Steel issued \$750 million of 6.875% Senior Notes due August 15, 2025. U. S. Steel received net proceeds from the offering of approximately \$737 million after fees of approximately \$13 million related to the underwriting and third party expenses. In 2016, U. S. Steel issued \$980 million of its 8.375% Senior Secured Notes due July 1, 2021. U. S. Steel received net proceeds from the offering of approximately \$958 million after fees of approximately \$22 million related to underwriting and third party expenses. For further information see Note 17 to the Consolidated Financial Statements.

Repayment of long-term debt totaled \$1,299 million in 2018. In 2018, through a series of open market purchases, U. S. Steel repurchased approximately \$75 million aggregate principal amount of its 7.375% Senior Notes due 2020 (7.375% Senior Notes) for an aggregate cash outflow of \$80 million which included \$5 million of premiums. U. S. Steel then redeemed the remaining \$357 million aggregate principal amount of its 7.375% Senior Notes for an aggregate cash outflow of \$376 million which included \$19 million of premiums. Also in 2018, the Company tendered and then redeemed its \$780 million 8.375% Senior Secured Notes due 2021 for an aggregate cash outflow of \$840 million which included \$60 million of premiums. Repayment of long-term debt in 2017 reflects the redemption of the entire aggregate principal amount of \$70 million of the Lorain County Port Authority Recovery Zone Facility Revenue Bonds. Additionally in 2017, U. S. Steel redeemed \$161 million of 7.000% Senior Notes due 2018, \$200 million of 6.875% Senior Notes due 2021, and \$400 million of 7.500% Senior Notes due 2022 for a total aggregate redemption cost of approximately \$808 million. Also during 2017, U. S. Steel redeemed \$200 million of 8.375% Senior Secured Notes due 2021 for an aggregate redemption cost of approximately \$227 million. Repayment of long-term debt in 2016 reflects the repurchase of approximately \$6 million of U. S. Steel's 6.05% Senior Notes due 2017 through open market purchases and the redemption of the remaining aggregate principal amount of approximately \$444 million. Also during 2016, U. S. Steel repurchased portions of its outstanding senior notes which included the 7.000% Senior Notes due 2018, 7.375% Senior Notes due 2020, and the 6.875% Senior Notes due 2021 for a total aggregate principal value of approximately \$582 million through a series of tender offers and open market purchases. For further information see Note 17 to the Consolidated Financial Statements.

Common stock repurchased totaled \$75 million in 2018 and is a result of the repurchase of 2,760,112 shares under our common stock repurchase program approved in 2018. See Note 27 to the Consolidated Financial Statements, "Common Stock Repurchase Program and Common Stock Issuance" for further details.

Net proceeds from our public offering of 21,735,000 shares of common stock totaled \$482 million in 2016. Third-party expenses related to the issuance were approximately \$18 million. See Note 27 to the Consolidated Financial Statements, "Common Stock Repurchase Program and Common Stock Issuance" for further details.

For all four quarters in 2018, 2017 and 2016, **dividends paid** per share of U. S. Steel common stock was \$0.05.

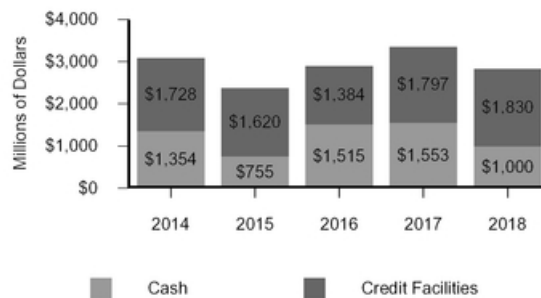
Liquidity

The following table summarizes U. S. Steel's liquidity as of December 31, 2018:

(Dollars in millions)

Cash and cash equivalents	\$	1,000
Amount available under \$1.5 Billion Credit Facility		1,500
Amounts available under USSK credit facilities		330
Total estimated liquidity	\$	2,830

Total Estimated Liquidity at December 31



As of December 31, 2018, \$147 million of the total cash and cash equivalents was held by our foreign subsidiaries. Substantially all of the liquidity attributable to our foreign subsidiaries can be accessed without the imposition of income taxes as a result of the election effective December 31, 2013 to liquidate for U.S. income tax purposes a foreign subsidiary that holds most of our international operations.

U. S. Steel maintains a \$1.5 billion asset-backed revolving credit facility. As of December 31, 2018, there were no amounts drawn on the \$1.5 billion credit facility (Credit Facility Agreement). U. S. Steel must maintain a fixed charge coverage ratio of at least 1.00 to 1.00 for the most recent four consecutive quarters when availability under the Credit Facility Agreement is less than the greater of 10% of the total aggregate commitments and \$150 million. Based on the four quarters as of December 31, 2018, we have met this covenant. If we are unable to meet this covenant in future periods, the amount available to the Company under this facility would be reduced by \$150 million.

At December 31, 2018, USSK had borrowings of €200 million (approximately \$229 million) under its €460 million (approximately \$527 million) unsecured revolving credit facility (the USSK Credit Agreement). The USSK Credit Agreement contains certain USSK financial covenants as well as other customary terms and conditions. At December 31, 2018, USSK had availability of an additional €260 million (approximately \$298 million) under the USSK Credit Agreement.

At December 31, 2018, USSK had no borrowings under its €20 million and €10 million unsecured credit facilities (collectively approximately \$34 million) and the aggregate availability was approximately \$32 million due to approximately \$2 million of customs and other guarantees outstanding. During the fourth quarter of 2018, USSK amended its €20 million and €10 million unsecured credit facilities, extending the maturity of both to December 2021.

In March 2018, U. S. Steel issued \$650 million aggregate principal amount of 6.250% Senior Notes due March 15, 2026 (2026 Senior Notes). U. S. Steel received net proceeds from the offering of approximately \$640 million after fees of approximately \$10 million related to the underwriting and third-party expenses. The net proceeds from the issuance of the 2026 Senior Notes, together with cash on hand, were used to tender or otherwise redeem all of our outstanding 2021 Senior Secured Notes. (see Note 17 to the Consolidated Financial Statements, "Debt" for further details). U. S. Steel will pay interest on the notes semi-annually in arrears on March 15th and September 15th of each year, commencing on September 15, 2018.

In August of 2017, U. S. Steel issued \$750 million of 6.875% Senior Notes due August 15, 2025 (2025 Senior Notes). U. S. Steel received net proceeds from the offering of approximately \$737 million after fees of approximately \$13 million related to the underwriting and third party expenses. The net proceeds from the issuance of the 2025 Senior Notes, together with cash on hand, were used to repurchase portions of our outstanding senior notes. Interest on the notes is payable semi-annually in arrears on February 15th and August 15th of each year, commencing on February 15, 2018.

We may from time to time seek to retire or repurchase our outstanding long-term debt through open market purchases, privately negotiated transactions, exchange transactions, redemptions or otherwise. Such purchases or exchanges,

if any, will depend on prevailing market conditions, our liquidity requirements, and other factors and may be commenced or suspended at any time. The amounts involved may be material.

We use surety bonds, trusts and letters of credit to provide financial assurance for certain transactions and business activities. The use of some forms of financial assurance and cash collateral have a negative impact on liquidity. U. S. Steel has committed \$181 million of liquidity sources for financial assurance purposes as of December 31, 2018. Increases in certain of these commitments which use collateral are reflected in restricted cash on the Consolidated Statement of Cash Flows.

At December 31, 2018, in the event of a change in control of U. S. Steel: (a) debt obligations totaling \$1,979 million as of December 31, 2018 may be declared due and payable; (b) the Credit Facility Agreement and the USSK credit facilities may be terminated and any amounts outstanding declared due and payable; and (c) U. S. Steel may be required to either repurchase the leased Fairfield slab caster for \$22 million or provide a cash collateralized letter of credit to secure the remaining obligation.

The maximum guarantees of the indebtedness of unconsolidated entities of U. S. Steel totaled \$4 million at December 31, 2018. If any default related to the guaranteed indebtedness occurs, U. S. Steel has access to its interest in the assets of the investees to reduce its potential losses under the guarantees.

The following table summarizes U. S. Steel's contractual obligations at December 31, 2018, and the effect such obligations are expected to have on our liquidity and cash flows in future periods.

(Dollars in millions)

Contractual Obligations	Total	2019	Payments Due by Period		
			2020 through 2021	2022 through 2023	Beyond 2023
Long-term debt (including interest) and capital leases ^(a)	\$ 3,824	\$ 212	\$ 308	\$ 539	\$ 2,765
Operating leases ^(b)	303	66	100	65	72
Contractual purchase commitments ^(c)	5,167	3,185	794	606	582
Capital commitments ^(d)	601	451	150	—	—
Environmental commitments ^(d)	187	37	—	—	150 ^(e)
Steelworkers Pension Trust ^(f)	379	66	151	162	—
Pensions ^(g)	766	—	65	415	286
Other benefits ^(h)	252	50	103	99	—
Total contractual obligations	\$ 11,479	\$ 4,067	\$ 1,671	\$ 1,886	\$ 3,855

(a) See Note 17 to the Consolidated Financial Statements.

(b) See Note 24 to the Consolidated Financial Statements. Amounts exclude subleases.

(c) Reflects contractual purchase commitments under purchase orders and "take or pay" arrangements. "Take or pay" arrangements are primarily for purchases of gases and certain energy and utility services. Additionally, includes coke and steam purchase commitments related to a coke supply agreement with Gateway Energy & Coke Company LLC (See Note 26 to the Consolidated Financial Statements).

(d) See Note 26 to the Consolidated Financial Statements.

(e) Timing of potential cash flows is not reasonably determinable.

(f) While it is difficult to make a prediction of cash requirements beyond the term of the 2018 Labor Agreements with the USW, which expire on September 1, 2022, projected amounts shown through 2023 assume the contribution rate per hour included in the 2018 Labor Agreements. For the schedule of contribution rate per hour, see Note 28 to the Consolidated Financial Statements.

(g) Projections are estimates of the minimum required contributions to the main domestic defined benefit pension plan which have been estimated assuming future asset performance consistent with our expected long-term earnings rate assumption, no voluntary contributions during the periods, and that the current low interest rate environment persists. Projections include the impacts of the November 2015 pension stabilization legislation, which further extended a revised interest rate formula to be used in calculating minimum required annual contributions. The legislation also increased the contribution rate of future PBGC premiums. After 2023, payments represent minimum contributions that may be needed over the next five years, and which would fully fund the plan.

(h) The amounts reflect corporate cash outlays for expected benefit payments to be paid by the Company. (See Note 18 to the Consolidated Financial Statements). The accuracy of this forecast of future cash flows depends on future medical health care escalation rates and restrictions related to our trusts for retiree healthcare and life insurance (VEBA) that impact the timing of the use of trust assets. Projected amounts have been reduced to reflect withdrawals from the USW VEBA trust available under its agreements with the USW. Due to these factors, it is not possible to reliably estimate cash requirements beyond five years and actual amounts experienced may differ significantly from those shown.

Contingent lease payments have been excluded from the above table. Contingent lease payments relate to operating lease agreements that include a floating rental charge, which is associated to a variable component. Future contingent lease payments are not determinable to any degree of certainty. U. S. Steel's annual incurred contingent lease expense is disclosed in Note 24 to the Consolidated Financial Statements. Additionally, recorded liabilities related to deferred income taxes and other liabilities that may have an impact on liquidity and cash flow in future periods, disclosed in Note 11 to the Consolidated Financial Statements, are excluded from the above table.

U. S. Steel made a voluntary contribution to our main U.S. defined benefit plan of \$75 million in 2017. U. S. Steel will monitor the funded status of the plan to determine when voluntary contributions may be prudent in order to mitigate potentially larger mandatory contributions in later years. The funded status of U. S. Steel's pension plans is disclosed in Note 18 to the Consolidated Financial Statements.

The following table summarizes U. S. Steel's commercial commitments at December 31, 2018, and the effect such commitments could have on our liquidity and cash flows in future periods.

(Dollars in millions)

Commercial Commitments	Total	Scheduled Reductions by Period			
		2019	2020 through 2021	2022 through 2023	Beyond 2023
Standby letters of credit ^(a)	\$ 40	\$ 30	\$ 1	\$ —	\$ 9 ^(b)
Surety bonds ^(a)	111	—	—	—	111 ^(b)
Funded Trusts ^(a)	13	—	—	—	13 ^(b)
Total commercial commitments	\$ 164	\$ 30	\$ 1	\$ —	\$ 133

(a) Reflects a commitment or guarantee for which future cash outflow is not considered likely.

(b) Timing of potential cash outflows is not determinable.

Our major cash requirements in 2019 are expected to be for capital expenditures, including asset revitalization, employee benefits and operating costs, which includes purchases of raw materials. We ended 2018 with \$1,000 million of cash and cash equivalents and \$2,830 million of total liquidity. Available cash is left on deposit with financial institutions or invested in highly liquid securities with parties we believe to be creditworthy.

U. S. Steel management believes that U. S. Steel's liquidity will be adequate to satisfy our obligations for the foreseeable future, including obligations to complete currently authorized capital spending programs. Future requirements for U. S. Steel's business needs, including the funding of acquisitions and capital expenditures, scheduled debt maturities, repurchase of debt, share buyback, contributions to employee benefit plans, and any amounts that may ultimately be paid in connection with contingencies, are expected to be funded by a combination of internally generated funds (including asset sales), proceeds from the sale of stock, borrowings, refinancings and other external financing sources.

Off-Balance Sheet Arrangements

U. S. Steel has invested in several joint ventures that are reported as equity investments. Several of these investments involved a transfer of assets in exchange for an equity interest. U. S. Steel has supply arrangements with several of these joint ventures.

U. S. Steel's other off-balance sheet arrangements include guarantees, indemnifications, unconditional purchase obligations, surety bonds, trusts and letters of credit disclosed in Note 26 to the Consolidated Financial Statements as well as operating leases disclosed in Note 24 to the Consolidated Financial Statements.

Derivative Instruments

See "Item 7A. Quantitative and Qualitative Disclosures About Market Risk" for discussion of derivative instruments and associated market risk for U. S. Steel.

Change in Accounting Estimate

Capitalization and Depreciation Method

During 2017, U. S. Steel completed a review of its accounting policy for property, plant and equipment depreciated on a group basis. As a result of this review, U. S. Steel changed its accounting method for property, plant and equipment from the group method of depreciation to the unitary method of depreciation, effective as of January 1, 2017. The change from the group method to the unitary method of depreciation is preferable under U.S. GAAP as it will result in a more precise estimate of depreciation expense. Additionally, the change to the unitary method of depreciation is consistent with the depreciation method applied by our competitors, and improves the comparability of our results to our competitors. Our change in the method of depreciation is considered a change in accounting estimate effected by a change in accounting principle and has been applied prospectively.

When property, plant, and equipment are disposed of by sale, retirement, or abandonment, the gross value of the property, plant and equipment and corresponding accumulated depreciation are removed from the Company's financial accounting records. Due to the application of the unitary method of depreciation, any gain or loss resulting from an

asset disposal by sale will now be immediately recognized as a gain or loss on the disposal of assets line in our consolidated statement of operations. Assets that are retired or abandoned will be reflected as an immediate charge to depreciation expense for any remaining book value in our consolidated statement of operations. Gains (losses) on disposals of assets for the year ended December 31, 2018 and 2017 were immaterial.

For the year ended December 31, 2018, the effect of the change was an increase in both income from continuing operations and net earnings of \$455 million (which consists of a \$504 million decrease in cost of sales due to the capitalization of maintenance and outage spending that would have been previously expensed, partially offset by increased depreciation expense of \$49 million, as a result of the impact of unitary depreciation on the existing net book value of fixed assets and the capitalization of maintenance and outage spending) and an increase in diluted earnings per share of \$2.55. The tax effect of this change was immaterial to the consolidated financial statements.

For the year ended December 31, 2017, the effect of the change was an increase in both income from continuing operations and net earnings of \$344 million (which consists of a \$381 million decrease in cost of sales due to the capitalization of maintenance and outage spending that would have been previously expensed, partially offset by increased depreciation expense of \$37 million, as a result of the impact of unitary depreciation on the existing net book value of fixed assets and the capitalization of maintenance and outage spending) and an increase in diluted earnings per share of \$1.95. The tax effect of this change was immaterial to the consolidated financial statements.

Environmental Matters

U. S. Steel's environmental expenditures were as follows:

(Dollars in millions)

	2018	2017	2016
North America:			
Capital	\$ 105	\$ 6	\$ 5
Compliance			
Operating & maintenance	198	176	167
Remediation ^(a)	6	9	17
Total North America	\$ 309	\$ 191	\$ 189
USSE:			
Capital	\$ 20	\$ 46	\$ 26
Compliance			
Operating & maintenance	12	11	11
Remediation ^(a)	9	7	6
Total USSE	\$ 41	\$ 64	\$ 43
Total U. S. Steel	\$ 350	\$ 255	\$ 232

(a) These amounts include spending charged against remediation reserves, net of recoveries where permissible, but do not include non-cash provisions recorded for environmental remediation.

U. S. Steel's environmental capital expenditures accounted for 12 percent of total capital expenditures in 2018 and 10 percent in 2017 and 2016.

Environmental compliance expenditures represented two percent of U. S. Steel's total costs and expenses in 2018, 2017 and 2016. Remediation spending during 2016 through 2018 was mainly related to remediation activities at former and present operating locations.

For discussion of other relevant environmental items see "Part I, Item 3. Legal Proceedings – Environmental Proceedings."

The following table shows activity with respect to environmental remediation liabilities for the years ended December 31, 2018 and December 31, 2017. These amounts exclude liabilities related to asset retirement obligations accounted for in accordance with ASC Topic 410. See Note 19 to the Consolidated Financial Statements.

(Dollars in millions)

	2018	2017
Beginning Balance	\$ 179	\$ 179
Plus: Additions	14	8
Less: Obligations settled	(6)	(8)
Ending Balance	\$ 187	\$ 179

New or expanded environmental requirements, which could increase U. S. Steel's environmental costs, may arise in the future. U. S. Steel intends to comply with all legal requirements regarding the environment, but since many of them are not fixed or presently determinable (even under existing legislation) and may be affected by future legislation, it is not possible to predict accurately the ultimate cost of compliance, including remediation costs which may be incurred and penalties which may be imposed. U. S. Steel's environmental capital expenditures are expected to be approximately \$120 million in 2019, \$50 million of which is related to projects at USSE. U. S. Steel's environmental expenditures for 2019 for operating and maintenance and for remediation projects are expected to be approximately \$190 million and \$50 million, respectively, of which approximately \$15 million and \$10 million for operating and maintenance and remediation, respectively, is related to USSE. Although, the outcome of pending environmental matters are not estimable at this time, it is reasonably possible that U. S. Steel's environmental capital and operating and maintenance expenditures could materially increase as a result of the future resolution of these matters. Predictions of future environmental expenditures beyond 2019 can only be broad-based estimates, which have varied, and will continue

to vary, due to the ongoing evolution of specific regulatory requirements, the possible imposition of more stringent requirements and the availability of new technologies to remediate sites, among other factors.

Accounting Standards

See Notes 2 and 3 to the Consolidated Financial Statements in Part II Item 8 of this Form 10-K.

Item 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

U. S. Steel is exposed to certain risks related to its ongoing business operations, including financial, market, political, and economic risks. The following discussion provides information regarding U. S. Steel's exposure to the risks of changing foreign currency exchange rates, commodity prices and interest rates.

U. S. Steel may enter into derivative financial instrument transactions in order to manage or reduce these market risks. The use of derivative instruments is subject to our corporate governance policies. These instruments are used solely to mitigate market exposure and are not used for trading or speculative purposes.

U. S. Steel may elect to use hedge accounting for certain commodity or currency transactions. For those transactions, the impact of the hedging instrument will be recognized in other comprehensive income until the transaction is settled. Once the transaction is settled, the effect of the hedged item will be recognized in income. For further information regarding derivative instruments see Notes 1 and 16 to the Consolidated Financial Statements.

Foreign Currency Exchange Rate Risk

U. S. Steel, through USSE, is subject to the risk of price fluctuations due to the effects of exchange rates on revenues and operating costs, firm commitments for capital expenditures and existing assets or liabilities denominated in currencies other than the U.S. dollar, particularly the euro. U. S. Steel historically has made limited use of forward currency contracts to manage exposure to certain currency price fluctuations. U. S. Steel has not elected to use hedge accounting for these contracts. Foreign currency derivative instruments have been marked-to-market and the resulting gains or losses recognized in the current period in net interest and other financial costs. At December 31, 2018 and December 31, 2017, U. S. Steel had open euro forward sales contracts for U.S. dollars (total notional value of approximately \$344 million and \$273 million, respectively). A 10 percent increase in the December 31, 2018 euro forward rates would result in a \$33 million charge to income.

The fair value of our derivatives is determined using Level 2 inputs, which are defined as "significant other observable" inputs. The inputs used include quotes from counterparties that are corroborated with market sources.

Volatility in the foreign currency markets could have significant implications for U. S. Steel as a result of foreign currency transaction effects. Future foreign currency impacts will depend upon changes in currencies and the extent to which we engage in derivatives transactions. For additional information on U. S. Steel's foreign currency exchange activity, see Note 16 to the Consolidated Financial Statements.

Commodity Price Risk and Related Risks

In the normal course of our business, U. S. Steel is exposed to market risk or price fluctuations related to the purchase, production or sale of steel products. U. S. Steel is also exposed to price risk related to the purchase, production or sale of coal, coke, natural gas, steel scrap, iron ore and pellets, and zinc, tin and other nonferrous metals used as raw materials. See Note 16 to the Consolidated Financial Statements for further details on U. S. Steel's derivatives.

U. S. Steel's market risk strategy has generally been to obtain competitive prices for our products and services and allow operating results to reflect market price movements dictated by supply and demand; however, U. S. Steel has made forward physical purchases to manage exposure to price risk related to the purchases of natural gas and certain non-ferrous metals used in the production process.

U. S. Steel held commodity contracts for natural gas forward buys placed for 2019 that qualified for the normal purchases and normal sales exemption with a total notional value of approximately \$26 million at December 31, 2018. Total commodity contracts for natural gas forward buys placed for 2019 at December 31, 2018 represent approximately 10 percent of our expected North American natural gas requirements.

Interest Rate Risk

U. S. Steel is subject to the effects of interest rate fluctuations on the fair value of certain of our non-derivative financial instruments. A sensitivity analysis of the projected incremental effect of a hypothetical 10 percent increase/decrease in year-end 2018 and 2017 interest rates on the fair value of U. S. Steel's non-derivative financial instruments is provided in the following table:

(Dollars in millions)

	2018		2017	
Non-Derivative Financial Instruments^(a)	Fair Value^(b)	Change in Fair Value^(c)	Fair Value ^(b)	Change in Fair Value ^(c)
Financial liabilities:				
Debt ^{(d)(e)}	\$ 2,182	\$ 102	\$ 2,851	\$ 93
(a) Fair values of cash and cash equivalents, current accounts and notes receivable, accounts payable, bank checks outstanding and accrued interest approximate carrying value and are relatively insensitive to changes in interest rates due to the short-term maturity of the instruments. Accordingly, these instruments are excluded from the table.				
(b) See Note 20 to the Consolidated Financial Statements for carrying value of instruments.				
(c) Reflects, by class of financial instrument, the estimated incremental effect of a hypothetical 10 percent change in interest rates at December 31, 2018 and 2017, on the fair value of U. S. Steel's non-derivative financial instruments. For financial liabilities, this assumes a 10 percent decrease in the weighted average yield to maturity of U. S. Steel's long-term debt at December 31, 2018 and December 31, 2017.				
(d) Excludes capital lease obligations.				
(e) Fair value was determined using Level 2 inputs which were derived from quoted market prices and is based on the yield on public debt where available or current borrowing rates available for financings with similar terms and maturities.				

U. S. Steel's sensitivity to interest rate declines and corresponding increases in the fair value of our debt portfolio would unfavorably affect our results and cash flows only to the extent that we elected to repurchase or otherwise retire all or a portion of our fixed-rate debt portfolio at prices above carrying value.

Item 8. CONSOLIDATED FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

The information required by this item is set forth in our Consolidated Financial Statement contained in this Annual Report on Form 10-K. Specific financial statements can be found at the page listed below:

	PAGE
MANAGEMENT'S REPORT TO STOCKHOLDERS	F-2
REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM	F-4
CONSOLIDATED STATEMENTS OF OPERATIONS FOR THE YEARS ENDED DECEMBER 31, 2018, 2017 AND 2016	F-6
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS) FOR THE YEARS ENDED DECEMBER 31, 2018, 2017 AND 2016	F-7
CONSOLIDATED BALANCE SHEETS AS OF DECEMBER 31, 2018 AND 2017	F-8
CONSOLIDATED STATEMENTS OF CASH FLOWS FOR THE YEARS ENDED DECEMBER 31, 2018, 2017 AND 2016	F-9
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY FOR THE YEARS ENDED DECEMBER 31, 2018, 2017 AND 2016	F-10
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS	F-12
SUPPLEMENTARY DATA (UNAUDITED)	F-57



MANAGEMENT'S REPORT TO STOCKHOLDERS

February 15, 2019

To the Stockholders of United States Steel Corporation:

Financial Statements and Practices

The accompanying consolidated financial statements of United States Steel Corporation are the responsibility of and have been prepared by United States Steel Corporation in conformity with accounting principles generally accepted in the United States of America. They necessarily include some amounts that are based on our best judgments and estimates. United States Steel Corporation's financial information displayed in other sections of this report is consistent with these financial statements.

United States Steel Corporation seeks to assure the objectivity and integrity of its financial records by careful selection of its managers, by organizational arrangements that provide an appropriate division of responsibility and by communication programs aimed at assuring that its policies, procedures and methods are understood throughout the organization.

United States Steel Corporation has a comprehensive, formalized system of internal controls designed to provide reasonable assurance that assets are safeguarded, that financial records are reliable and that information required to be disclosed in reports filed with or submitted to the Securities and Exchange Commission is recorded, processed, summarized and reported within the required time limits. Appropriate management monitors the system for compliance and evaluates it for effectiveness, and the auditors independently measure its effectiveness and recommend possible improvements thereto.

The Board of Directors exercises its oversight role in the area of financial reporting and internal control over financial reporting through its Audit Committee. This committee, composed solely of independent directors, regularly meets (jointly and separately) with the independent registered public accounting firm, management, internal audit and other executives to monitor the proper discharge by each of their responsibilities relative to internal control over financial reporting and United States Steel Corporation's financial statements.

Internal Control Over Financial Reporting

United States Steel Corporation's management is responsible for establishing and maintaining adequate internal control over financial reporting, as defined in Exchange Act Rule 13a-15(f). Under the supervision and with the participation of United States Steel Corporation's management, including the Chief Executive Officer and Chief Financial Officer, United States Steel Corporation conducted an evaluation of the effectiveness of its internal control over financial reporting based on the framework in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

Based on this evaluation, United States Steel Corporation's management concluded that United States Steel Corporation's internal control over financial reporting was effective as of December 31, 2018.

The effectiveness of United States Steel Corporation's internal control over financial reporting as of December 31, 2018 has been audited by PricewaterhouseCoopers LLP, an independent registered public accounting firm, as stated in their report which is included herein.

/s/ DAVID B. BURRITT

David B. Burritt
President and
Chief Executive Officer

/s/ KEVIN P. BRADLEY

Kevin P. Bradley
Executive Vice President and
Chief Financial Officer

/s/ COLLEEN M. DARRAGH

Colleen M. Darragh
Vice President and Controller



Report of Independent Registered Public Accounting Firm

To the Board of Directors and Stockholders of United States Steel Corporation

Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated balance sheets of United States Steel Corporation and its subsidiaries (the "Company") as of December 31, 2018 and 2017, and the related consolidated statements of operations, comprehensive income (loss), stockholders' equity, and cash flows for each of the three years in the period ended December 31, 2018, including the related notes and financial statement schedule listed in the index appearing under Item 15(a)(2) (collectively referred to as the "consolidated financial statements"). We also have audited the Company's internal control over financial reporting as of December 31, 2018, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2018 and 2017, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2018 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2018, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the COSO.

Change in Accounting Principle

As discussed in Note 1 to the consolidated financial statements, the Company changed the manner in which it accounts for property, plant, and equipment in 2017.

Basis for Opinions

The Company's management is responsible for these consolidated financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Report to Stockholders on Internal Control Over Financial Reporting. Our responsibility is to express opinions on the Company's consolidated financial statements and on the Company's internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (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 audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the consolidated financial statements 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. 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 audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

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 (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) 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 (iii) 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/ PricewaterhouseCoopers LLP
Pittsburgh, Pennsylvania
February 15, 2019

We have served as the Company's auditor since 1903.

UNITED STATES STEEL CORPORATION
CONSOLIDATED STATEMENTS OF OPERATIONS

(Dollars in millions, except per share amounts)	Year Ended December 31,		
	2018	2017	2016
Net sales:			
Net sales	\$ 12,758	\$ 11,046	\$ 9,045
Net sales to related parties (Note 23)	1,420	1,204	1,216
Total	14,178	12,250	10,261
Operating expenses (income):			
Cost of sales (excludes items shown below)	12,305	10,858	9,608
Selling, general and administrative expenses	336	320	306
Depreciation, depletion and amortization (Notes 13 and 14)	521	501	507
Earnings from investees (Note 12)	(61)	(44)	(98)
Gain on equity investee transactions (Note 12)	(38)	(2)	—
Gain associated with U. S. Steel Canada Inc. (Note 5)	—	(72)	—
Restructuring and other charges (Note 25)	—	31	122
Impairment of intangible assets (Note 14)	—	—	14
Net (gain) loss on disposals of assets	(6)	(5)	5
Other income, net	(3)	(6)	(2)
Total	13,054	11,581	10,462
Earnings (loss) before interest and income taxes	1,124	669	(201)
Interest expense	168	226	230
Interest income	(23)	(17)	(5)
Loss on debt extinguishment	98	54	22
Other financial costs	—	44	4
Net periodic benefit cost (other than service cost) (Note 3) ^(a)	69	61	(36)
Net interest and other financial costs (Note 7)	312	368	215
Earnings (loss) before income taxes	812	301	(416)
Income tax (benefit) provision (Note 11)	(303)	(86)	24
Net earnings (loss)	1,115	387	(440)
Less: Net earnings attributable to noncontrolling interests	—	—	—
Earnings (loss) attributable to United States Steel Corporation	\$ 1,115	\$ 387	\$ (440)
Earnings (loss) per common share (Note 8)			
Earnings (loss) per share attributable to United States Steel Corporation stockholders:			
— Basic	\$ 6.31	\$ 2.21	\$ (2.81)
— Diluted	\$ 6.25	\$ 2.19	\$ (2.81)

^(a) Represents postretirement benefit expense as a result of the adoption of Accounting Standards Update 2017-07, *Compensation - Retirement Benefits* on January 1, 2018 (see Note 3 for further details).

The accompanying notes are an integral part of these Consolidated Financial Statements.

UNITED STATES STEEL CORPORATION
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)

(Dollars in millions)	Year Ended December 31,		
	2018	2017	2016
Net earnings (loss)	\$ 1,115	\$ 387	\$ (440)
Other comprehensive income (loss), net of tax:			
Changes in foreign currency translation adjustments	(60)	189	(38)
Changes in pension and other employee benefit accounts	(107)	462	(292)
Changes in derivative financial instruments	(14)	1	2
Total other comprehensive (loss) income, net of tax	(181)	652	(328)
Comprehensive income (loss) including noncontrolling interest	934	1,039	(768)
Comprehensive income attributable to noncontrolling interest	—	—	—
Comprehensive income (loss) attributable to United States Steel Corporation	\$ 934	\$ 1,039	\$ (768)

The accompanying notes are an integral part of these Consolidated Financial Statements.

UNITED STATES STEEL CORPORATION
CONSOLIDATED BALANCE SHEETS

(Dollars in millions)	December 31,	
	2018	2017
Assets		
Current assets:		
Cash and cash equivalents	\$ 1,000	\$ 1,553
Receivables, less allowance of \$29 and \$28	1,435	1,173
Receivables from related parties (Note 23)	224	206
Inventories (Note 10)	2,092	1,738
Other current assets	79	85
Total current assets	4,830	4,755
Investments and long-term receivables, less allowance of \$5 and \$11 (Note 12)	513	480
Property, plant and equipment, net (Note 13)	4,865	4,280
Intangibles — net (Note 14)	158	167
Deferred income tax benefits (Note 11)	445	56
Other noncurrent assets	171	124
Total assets	\$ 10,982	\$ 9,862
Liabilities		
Current liabilities:		
Accounts payable and other accrued liabilities	\$ 2,454	\$ 2,148
Accounts payable to related parties (Note 23)	81	74
Payroll and benefits payable	440	347
Accrued taxes	118	132
Accrued interest	39	69
Short-term debt and current maturities of long-term debt (Note 17)	65	3
Total current liabilities	3,197	2,773
Long-term debt, less unamortized discount and debt issuance costs (Note 17)	2,316	2,700
Employee benefits (Note 18)	980	759
Deferred income tax liabilities (Note 11)	14	6
Deferred credits and other noncurrent liabilities	272	303
Total liabilities	6,779	6,541
Contingencies and commitments (Note 26)		
Stockholders' Equity		
Common stock issued — 177,386,430 and 176,424,554 shares issued (par value \$1 per share, authorized 400,000,000 shares) (Note 8)	177	176
Treasury stock, at cost (2,857,578 shares and 1,203,344 shares)	(78)	(76)
Additional paid-in capital	3,917	3,932
Retained earnings	1,212	133
Accumulated other comprehensive loss (Note 21)	(1,026)	(845)
Total United States Steel Corporation stockholders' equity	4,202	3,320
Noncontrolling interests	1	1
Total liabilities and stockholders' equity	\$ 10,982	\$ 9,862

The accompanying notes are an integral part of these Consolidated Financial Statements.

UNITED STATES STEEL CORPORATION
CONSOLIDATED STATEMENTS OF CASH FLOWS

(Dollars in millions)	Year Ended December 31,		
	2018	2017	2016
Increase (decrease) in cash and cash equivalents			
Operating activities:			
Net earnings (loss)	\$ 1,115	\$ 387	\$ (440)
Adjustments to reconcile net cash provided by operating activities:			
Depreciation, depletion and amortization (Notes 13 and 14)	521	501	507
Impairment of intangible assets (Note 14)	—	—	14
Gain associated with retained interest in U. S. Steel Canada Inc. (Note 5)	—	(72)	—
Gain on equity investee transactions	(38)	(2)	—
Restructuring and other charges (Note 25)	—	31	122
Loss on debt extinguishment (Note 17)	98	54	22
Provision for doubtful accounts	4	1	—
Pensions and other post-employment benefits	77	(16)	(62)
Deferred income taxes (Note 11)	(329)	(72)	9
Net (gain) loss on disposal of assets	(6)	(5)	5
Equity investees earnings, net of distributions received	(47)	(32)	(89)
Changes in:			
Current receivables	(312)	(36)	(182)
Inventories	(374)	(117)	491
Current accounts payable and accrued expenses	282	225	287
Income taxes receivable/payable	(8)	(52)	10
Bank checks outstanding	1	(2)	—
All other, net	(46)	33	60
Net cash provided by operating activities	938	826	754
Investing activities:			
Capital expenditures	(1,001)	(505)	(306)
Disposal of assets	10	5	12
Proceeds from sale of ownership interests in equity investees	30	116	—
Investments, net	(2)	(2)	(21)
Net cash used in investing activities	(963)	(386)	(315)
Financing activities:			
Revolving credit facilities - borrowings, net	228	—	—
Issuance of long-term debt, net of financing costs (Note 17)	640	737	958
Repayment of long-term debt (Note 17)	(1,299)	(1,127)	(1,093)
Settlement of contingent consideration	—	—	(15)
Net proceeds from public offering of common stock (Note 27)	—	—	482
Common stock repurchased (Note 27)	(75)	—	—
Receipts from exercise of stock options (Note 15)	35	20	35
Taxes paid for equity compensation plans (Note 15)	(8)	(10)	(4)
Dividends paid	(36)	(35)	(31)
Net cash (used in) provided by financing activities	(515)	(415)	332
Effect of exchange rate changes on cash	(17)	17	(8)
Net (decrease) increase in cash, cash equivalents and restricted cash	(557)	42	763
Cash, cash equivalents and restricted cash at beginning of year	1,597	1,555	792
Cash, cash equivalents and restricted cash at end of year	\$ 1,040	\$ 1,597	\$ 1,555

See Note 22 for supplemental cash flow information.

The accompanying notes are an integral part of these Consolidated Financial Statements.

UNITED STATES STEEL CORPORATION
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY

	Dollars in Millions			Shares in Thousands		
	2018	2017	2016	2018	2017	2016
Common stock:						
Balance at beginning of year	\$ 176	\$ 176	\$ 151	176,425	176,425	150,926
Common stock issued	1	—	25	961	—	25,499
Balance at end of year	\$ 177	\$ 176	\$ 176	177,386	176,425	176,425
Treasury stock:						
Balance at beginning of year	\$ (76)	\$ (182)	\$ (339)	(1,203)	(2,614)	(4,645)
Common stock repurchased	(75)	—	—	(2,760)	—	—
Common stock reissued for employee/non-employee director stock plans	73	106	157	1,105	1,411	2,031
Balance at end of year	\$ (78)	\$ (76)	\$ (182)	(2,858)	(1,203)	(2,614)
Additional paid-in capital:						
Balance at beginning of year	\$ 3,932	\$ 4,027	\$ 3,603			
Common stock issued	—	—	557			
Dividends on common stock	—	(26)	(31)			
Employee stock plans	(15)	(69)	(102)			
Balance at end of year	\$ 3,917	\$ 3,932	\$ 4,027			

The accompanying notes are an integral part of these Consolidated Financial Statements.

UNITED STATES STEEL CORPORATION
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY

(Continued)

(Dollars in millions)	2018	2017	2016	Comprehensive Income (Loss)		
				2018	2017	2016
Retained earnings:						
Balance at beginning of year	\$ 133	\$ (250)	\$ 190			
Net earnings (loss) attributable to United States Steel Corporation	1,115	387	(440)	\$ 1,115	\$ 387	\$ (440)
Dividends on common stock	(36)	(9)	—			
Other	—	5	—			
Balance at end of year	\$ 1,212	\$ 133	\$ (250)			
Accumulated other comprehensive (loss) income:						
Pension and other benefit adjustments (Note 18):						
Balance at beginning of year	\$ (1,309)	\$ (1,771)	\$ (1,479)			
Changes during year, net of taxes	(108)	454	(288)	(108)	454	(288)
Changes during year, equity investee net of taxes	1	8	(4)	1	8	(4)
Balance at end of year	\$ (1,416)	\$ (1,309)	\$ (1,771)			
Foreign currency translation adjustments:						
Balance at beginning of year	\$ 463	\$ 274	\$ 312			
Changes during year, net of taxes	(60)	189	(38)	(60)	189	(38)
Balance at end of year	\$ 403	\$ 463	\$ 274			
Derivative financial instruments:						
Balance at beginning of year	\$ 1	\$ —	\$ (2)			
Changes during year, net of taxes	(14)	1	2	(14)	1	2
Balance at end of year	\$ (13)	\$ 1	\$ —			
Total balances at end of year	\$ (1,026)	\$ (845)	\$ (1,497)			
Total stockholders' equity	\$ 4,202	\$ 3,320	\$ 2,274			
Noncontrolling interests:						
Balance at beginning of year	\$ 1	\$ 1	\$ 1			
Net loss	—	—	—	—	—	—
Balance at end of year	\$ 1	\$ 1	\$ 1			
Total comprehensive (income) loss				\$ 934	\$ 1,039	\$ (768)

The accompanying notes are an integral part of these Consolidated Financial Statements.

1. Nature of Business and Significant Accounting Policies

Nature of Business

U. S. Steel produces and sells steel products, including flat-rolled and tubular products, in North America and Europe. Operations in the United States also include iron ore and coke production facilities, railroad services and real estate operations. Operations in Europe also include coke production facilities.

Significant Accounting Policies

Principles applied in consolidation

These financial statements include the accounts of U. S. Steel and its majority-owned subsidiaries. Additionally, variable interest entities for which U. S. Steel is the primary beneficiary are included in the Consolidated Financial Statements and their impacts are either partially or completely offset by noncontrolling interests. Intercompany accounts, transactions and profits have been eliminated in consolidation.

Investments in entities over which U. S. Steel has significant influence are accounted for using the equity method of accounting and are carried at U. S. Steel's share of net assets plus loans, advances and our share of earnings less distributions.

Earnings or loss from investees includes U. S. Steel's share of earnings or loss from equity method investments, which is generally recorded a month in arrears, except for significant and unusual items which are recorded in the period of occurrence.

Use of estimates

Generally accepted accounting principles require management to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at year-end and the reported amounts of revenues and expenses during the year. Significant items subject to such estimates and assumptions include the carrying value of property, plant and equipment; intangible assets; valuation allowances for receivables, inventories and deferred income tax assets and liabilities; environmental liabilities; liabilities for potential tax deficiencies; potential litigation claims and settlements; and assets and obligations related to employee benefits. Actual results could differ materially from the estimates and assumptions used.

Sales recognition

Sales are recognized when U. S. Steel's performance obligations are satisfied. Generally, U. S. Steel's performance obligations are satisfied, control of our products is transferred, and revenue is recognized at a single point in time, when title transfers to our customer for product shipped or when services are provided. Revenues are recorded net of any sales incentives. Shipping and other transportation costs charged to customers are treated as fulfillment activities and are recorded in both revenue and cost of sales at the time control is transferred to the customer. See Note 6 for further details on U. S. Steel's revenue.

Inventories

Inventories are carried at the lower of cost or market. Fixed costs related to abnormal production capacity are expensed in the period incurred rather than capitalized into inventory.

LIFO (last-in, first-out) is the predominant method of inventory costing for inventories in the United States and FIFO (first-in, first-out) is the predominant method in Europe. The LIFO method of inventory costing was used on 74 percent and 75 percent of consolidated inventories at December 31, 2018 and 2017, respectively.

Derivative instruments

From time to time, U. S. Steel may use fixed price forward physical purchase contracts to partially manage our exposure to price risk. Generally, forward physical purchase contracts qualify for the normal purchase normal sales exclusion in Accounting Standards Codification (ASC) 815, *Derivatives and Hedging*, and are not subject to mark-to-market accounting. U. S. Steel also uses derivatives such as commodity-based financial swaps and foreign currency exchange forward contracts to manage its exposure to purchase and sale price fluctuations and foreign currency exchange rate risk. U. S. Steel elects hedge accounting for some of its derivatives. Under hedge accounting, fluctuations in the value of the derivative are recognized in Accumulated Other Comprehensive Income (AOCI) until the associated underlying is recognized in earnings. When the associated underlying is recognized in earnings, the value of the derivative is reclassified to earnings from AOCI. We recognize fair value changes for derivatives where hedge accounting has not been elected immediately in earnings. See Note 16 for further details on U. S. Steel's derivatives.

Property, plant and equipment

Property, plant and equipment is carried at cost and is depreciated on a straight-line basis over the estimated useful lives of the assets.

Depletion of mineral properties is based on rates which are expected to amortize cost over the estimated tonnage of minerals to be removed.

When property, plant and equipment is sold or otherwise disposed of, any gains or losses are reflected in income. If a loss on disposal is expected, such losses are recognized when the assets are reclassified as assets held for sale or when impaired as part of an asset group's impairment.

U. S. Steel evaluates impairment of its property, plant and equipment whenever circumstances indicate that the carrying value may not be recoverable. We evaluate the impairment of long-lived assets at the asset group level. Our asset groups are Flat-Rolled, welded tubular, seamless tubular and U. S. Steel Europe (USSE). Asset impairments are recognized when the carrying value of an asset grouping exceeds its recoverable amount as determined by the asset group's aggregate projected undiscounted cash flows.

During 2018 and 2017, there were no triggering events that required fixed assets to be evaluated for impairment.

During 2016, the permanent shutdown of certain Lorain, Lone Star and Bellville (sold in 2018) tubular assets, was considered a triggering event for our welded and seamless tubular asset groups. U. S. Steel completed a quantitative analysis of its long-lived assets for these asset groups within the Tubular segment and determined that the remaining assets were not impaired. The welded tubular asset group had a carrying value of \$410 million at December 31, 2016 and the recoverable amount exceeded this carrying value by approximately \$93 million, or 23 percent. The seamless tubular asset group had a carrying value of \$210 million at December 31, 2016 and the recoverable amount exceeded this carrying value by \$220 million, or 106 percent. The key assumption used to estimate the recoverable amounts for both the welded and seamless tubular asset groups was the forecasted price of oil over the 11-year average remaining useful lives of the assets within the asset groups. Management will continue to monitor market and economic conditions for triggering events that may warrant further review of long-lived assets.

Change in Accounting Estimate - Capitalization and Depreciation Method

During 2017, U. S. Steel completed a review of its accounting policy for property, plant and equipment depreciated on a group basis. As a result of this review, U. S. Steel changed its accounting method for property, plant and equipment from the group method of depreciation to the unitary method of depreciation, effective as of January 1, 2017. The Company believes the change from the group method to the unitary method of depreciation is preferable under U.S. GAAP as it results in a more precise estimate of depreciation expense. Additionally, the change to the unitary method of depreciation is consistent with the depreciation method applied by our competitors, and improves the comparability of our results to the results of our competitors. Our change in the method of depreciation was considered a change in accounting estimate effected by a change in accounting principle and has been applied prospectively. Due to the application of the unitary method of depreciation and resultant change in our capitalization policy, maintenance and outage spending that had previously been expensed as well as capital investments associated with our asset revitalization program are now capitalized if the useful life of the related asset is extended.

When property, plant, and equipment are disposed of by sale, retirement, or abandonment, the gross value of the property, plant and equipment and corresponding accumulated depreciation are removed from the Company's financial accounting records. Due to the application of the unitary method of depreciation, any gain or loss resulting from an asset disposal by sale is now immediately recognized as a gain or loss on the disposal of assets line in our consolidated statement of operations. Assets that are retired or abandoned are reflected as an immediate charge to depreciation expense for any remaining book value in our consolidated statement of operations. Gains (losses) on disposals of assets for the year ended December 31, 2017 and 2018 were immaterial.

U. S. Steel's property, plant and equipment totaled \$3,979 million at December 31, 2016. U. S. Steel allocated the existing net book value of group assets at the transition date to approximate a unitary depreciation methodology, and the fixed assets are being depreciated over their estimated remaining useful lives as follows:

Life of Assets	Remaining Useful	(In millions)	
		Net Book Value at December 31,	2016
	Under 5 years	\$	597
	6-10 years		629
	11-15 years		765
	16-20 years		654
	21-25 years		363
	Over 25 years		479
	Assets not subject to depreciation		492
	Total	\$	3,979

Environmental remediation

Environmental expenditures are capitalized if the costs mitigate or prevent future contamination or if the costs improve existing assets' environmental safety or efficiency. U. S. Steel provides for remediation costs and penalties when the responsibility to remediate is probable and the amount of associated costs is reasonably estimable. The timing of remediation accruals typically coincides with completion of studies defining the scope of work to be undertaken or when it is probable that a formal plan of action will be approved by the oversight agency. Remediation liabilities are accrued based on estimates of believed environmental exposure and are discounted if the amount and timing of the cash disbursements are readily determinable.

Asset retirement obligations

Asset retirement obligations (AROs) are initially recorded at fair value and are capitalized as part of the cost of the related long-lived asset and depreciated in accordance with U. S. Steel's depreciation policies for property, plant and equipment. The fair value of the obligation is determined as the discounted value of expected future cash flows. Accretion expense is recorded each month to increase this discounted obligation over time. Certain AROs related to disposal costs of the majority of assets at our integrated steel facilities are not recorded because they have an indeterminate settlement date. These AROs will be initially recognized in the period in which sufficient information exists to estimate their fair value. See Note 19 for further details on U. S. Steel's AROs.

Pensions and other post-employment benefits

U. S. Steel has defined contribution or multi-employer arrangements for pension benefits for more than three-quarters of its employees in the United States and defined benefit pension plans covering the remaining employees. For hires before January 1, 2016, U. S. Steel has defined benefit retiree health care and life insurance plans (Other Benefits) that cover its represented employees in North America upon their retirement. Government-sponsored programs into which U. S. Steel makes required contributions cover the majority of U. S. Steel's European employees. For more details regarding pension and other post-employment benefits see Note 18 of the Consolidated Financial Statements.

The pension and other benefits obligations and the related net periodic benefit costs are based on, among other things, assumptions of the discount rate, estimated return on plan assets, salary increases, the projected mortality of participants and the current level and future escalation of health care costs. Additionally, U. S. Steel recognizes an obligation to provide post-employment benefits for disability-related claims covering indemnity and medical payments for certain employees in North America. The obligation for these claims and the related periodic costs are measured using actuarial techniques and assumptions. Actuarial gains and losses occur when actual experience differs from any of the many assumptions used to value the benefit plans, or when assumptions change. For pension and other benefits, the Company recognizes into income on an annual basis any unrecognized actuarial net gains or losses that exceed 10 percent of the larger of projected benefit obligations or plan assets (the corridor). These unrecognized amounts in excess of the corridor are amortized over the plan participants' average life expectancy or average future service, depending on the demographics of the plan. Unrecognized actuarial net gains and losses for disability-related claims are immediately recognized into income.

Deferred taxes

Deferred tax assets and liabilities are recognized for the estimated future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax basis. The realization of deferred tax assets is assessed quarterly based on several interrelated factors.

These factors include U. S. Steel's expectation to generate sufficient future taxable income and the projected time period over which these deferred tax assets will be realized. U. S. Steel records a valuation allowance when necessary to reduce deferred tax assets to the amount that will more likely than not be realized. See Note 11 for further details of deferred taxes.

Reclassifications and Adjustments

Certain reclassifications of prior years' data have been made to conform to the current year presentation including the following:

U. S. Steel reclassified certain prior year data as a result of the retrospective adoption on January 1, 2018 of ASU 2016-18, *Statement of Cash Flows (Topic 230): Restricted Cash*, ASU 2016-15, *Statement of Cash Flows: Classification of Certain Cash Receipts and Cash Payments* and ASU 2017-07, *Compensation - Retirement Benefits*. See Note 3 for further details.

U. S. Steel made an adjustment of \$52 million to correct the classification in the December 31, 2017 Consolidated Balance Sheet to reflect a previously reported non-current liability as a current liability. This adjustment had no impact on the Statement of Operations and resulted in a decrease to Deferred Credits and Other Non-Current Liabilities and an increase to Accounts Payable and Other Accrued Liabilities on the Consolidated Balance Sheets.

2. New Accounting Standards

In August 2018, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) 2018-15, *Intangibles - Goodwill and Other - Internal Use Software (Subtopic 350-40): Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract* (ASU 2018-15). 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 internal-use software. ASU 2018-15 is effective for annual and interim reporting periods beginning after December 15, 2019, with early adoption permitted. U. S. Steel is currently assessing the impact of the ASU but does not believe this ASU will have a material impact on its overall Consolidated Financial Statements.

In August 2018, the FASB issued ASU 2018-14, *Compensation - Retirement Benefits - Defined Benefit Plans - General (Subtopic 715-20), Disclosure Framework - Changes to the Disclosure Requirements for Defined Benefit Plans* (ASU 2018-14). ASU 2018-14 removes certain disclosures that the FASB no longer considers cost beneficial, adds certain disclosure requirements and clarifies others. ASU 2018-14 is effective for public companies for fiscal years beginning after December 15, 2020, with early adoption permitted. U. S. Steel is currently assessing the impact of the ASU on its defined benefit plan disclosures.

In June 2016, the FASB issued ASU 2016-13, *Financial Instruments - Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments* (ASU 2016-13), which adds an impairment model that is based on expected losses rather than incurred losses. Under ASU 2016-13, an entity recognizes as an allowance its estimate of expected credit losses, which the FASB believes will result in more timely recognition of such losses. ASU 2016-13 is effective for public companies for fiscal years beginning after December 15, 2019 including interim reporting periods, with early adoption permitted. U. S. Steel is currently assessing the impact of the ASU, but does not believe this ASU will have a material impact on its overall Consolidated Financial Statements.

In February 2016, the FASB issued ASU 2016-02, *Leases* (ASU 2016-02). ASU 2016-02 supersedes prior lease accounting guidance. Under ASU 2016-02, for operating leases, a lessee should recognize in its statement of financial position a liability to make lease payments and a right-of-use asset representing its right to use the underlying asset for the lease term; recognize a single lease cost, which is allocated over the lease term, generally on a straight line basis, and classify all cash payments within operating activities in the statement of cash flows. For financing leases, a lessee is required to recognize a right-of-use asset and a lease liability; recognize interest on the lease liability separately from amortization of the right-of-use asset, and classify repayments of the principal portion of the lease liability within financing activities and payments of interest on the lease liability within operating activities in the statement of cash flows. For leases with a term of 12 months or less, a lessee is permitted to make an accounting policy election not to recognize lease assets and lease liabilities. In addition, at the inception of a contract, an entity should determine whether the contract is or contains a lease. ASU 2016-02 is effective for public entities for fiscal years beginning after December 15, 2018, including interim periods within those fiscal years. In July 2018, the FASB issued ASU 2018-11, *Leases (Topic 842)* -

Targeted Improvements (ASU 2018-11), which provides an option to use a modified retrospective transition method at the adoption date. U. S. Steel will adopt the new lease accounting standard at the adoption date using the optional modified retrospective transition method outlined in ASU 2018-11. We anticipate that the impact of adoption will result in an insignificant cumulative effect of adoption and the recognition of a right of use asset and total operating lease liability in the range of \$230 million to \$250 million.

3. Recently Adopted Accounting Standards

In February 2018, the FASB issued ASU 2018-02, *Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income* (ASU 2018-02). ASU 2018-02 allows a reclassification from Accumulated Other Comprehensive Income to Retained Earnings for stranded tax effects resulting from the Tax Cuts and Jobs Act (2017 Act). The amendments in this ASU are effective for fiscal years beginning after December 15, 2018 and for interim periods therein; early adoption is permitted. U. S. Steel adopted ASU 2018-02 on July 1, 2018, and elected not to reclassify the stranded tax effects related to the 2017 Act. As a result, the adoption did not have an impact on the Company's Consolidated Financial Statements. U. S. Steel's accounting policy is to release stranded income tax effects from AOCI when the circumstances upon which the stranded tax effects are premised cease to exist.

In August 2017, the FASB issued ASU 2017-12, *Derivatives and Hedging (Topic 815): Targeted Improvements to Accounting for Hedging Activities* (ASU 2017-12), which amends and simplifies hedge accounting guidance so that companies could more accurately present the economic effects of risk management activities in the financial statements. ASU 2017-12 is effective for fiscal years beginning after December 15, 2018 and interim periods within those fiscal years with early adoption permitted. U. S. Steel adopted the provisions of ASU 2017-12 on January 1, 2018. The adoption did not result in a material impact to our financial results; however, we expanded our use of hedge accounting effective January 1, 2018 as well as our disclosures of derivative activity. See Note 16 for further details.

In May 2017, the FASB issued ASU 2017-09, *Compensation – Stock Compensation: Scope of Modification Accounting* (ASU 2017-09). The amendments included in ASU 2017-09 provide guidance about which changes to the terms and conditions of a share-based payment award require an entity to apply modification accounting. The amendments in this update will be applied prospectively to an award modified on or after the adoption date. On January 1, 2018, U. S. Steel adopted the provisions of ASU 2017-09 and the adoption did not have an impact on its Consolidated Financial Statements.

In March 2017, the FASB issued ASU 2017-07, *Compensation - Retirement Benefits* (ASU 2017-07). ASU 2017-07 requires an employer who offers defined benefit and postretirement benefit plans to report the service cost component of the net periodic benefit cost in the same line item or items as other compensation cost arising from services rendered by employees during the period. The other components of net periodic benefit costs are required to be presented on a retrospective basis in the income statement separately from the service cost component and outside a subtotal of income from operations, if one is presented. The ASU also allows for the service cost component of net periodic benefit cost to be eligible for capitalization into inventory when applicable. ASU 2017-07 was effective for periods beginning after December 15, 2017, including interim periods within those annual periods; early adoption was permitted. U. S. Steel adopted ASU 2017-07 on January 1, 2018. U. S. Steel has historically capitalized the service cost component of net periodic benefit cost into inventory, when applicable, and will continue to do so prospectively.

The effect of the retrospective presentation change related to the net periodic benefit cost of our defined benefit pension and other post-employment benefits (OPEB) plans on our consolidated statement of operations was as follows:

Statement of Operations (In millions)	Year Ended December 31, 2017		
	As Revised	Previously Reported	Effect of Change Higher/(Lower)
Cost of Sales	\$ 10,858	\$ 10,864	\$ (6)
Selling, general and administrative expenses	320	375	(55)
Net periodic benefit cost (other than service cost)	61	—	61

Statement of Operations (In millions)	Year Ended December 31, 2016		
	As Revised	Previously Reported	Effect of Change Higher/(Lower)
Cost of Sales	\$ 9,608	\$ 9,623	\$ (15)
Selling, general and administrative expenses	306	255	51
Net periodic benefit cost (other than service cost)	(36)	—	(36)

In November 2016, the FASB issued ASU 2016-18, *Statement of Cash Flows (Topic 230): Restricted Cash* (ASU 2016-18). The ASU reduced diversity in practice in the classification and presentation of changes in restricted cash on the statement of cash flows by including restricted cash and restricted cash equivalents with cash and cash equivalents when reconciling the beginning-of-period and end-of-period total amounts shown on the statement of cash flows. On January 1, 2018, U. S. Steel adopted the provisions of ASU 2016-18 using a retrospective transition method. As a result, a \$3 million cash outflow was removed from the investing activities section in the Consolidated Statements of Cash Flows for the years ended December 31, 2017 and 2016 as changes in restricted cash are now included in the beginning-of-period and end-of-period total cash, cash equivalents and restricted cash amounts. Expanded disclosures have been included, which describe the components of cash shown on the Company's Consolidated Statements of Cash Flows. See Note 9 for further details.

In August 2016, the FASB issued ASU 2016-15, *Statement of Cash Flows: Classification of Certain Cash Receipts and Cash Payments* (ASU 2016-15). ASU 2016-15 reduced diversity in practice in how certain transactions are classified in the statement of cash flows by addressing eight specific cash receipt and cash payment issues. On January 1, 2018, U. S. Steel adopted the provisions of ASU 2016-15 using a retrospective transition method. As a result, all payments to extinguish debt will now be presented as cash outflows from financing activities on our Consolidated Statements of Cash Flows in accordance with ASU 2016-15. U. S. Steel has historically presented make-whole premiums as cash outflows from operating activities. There were \$23 million of cash outflows for make-whole premiums that were reclassified from cash provided by operating activities to the repayment of long-term debt line within the cash used in financing activities section on the Consolidated Statements of Cash Flows for the years-ended December 31, 2017 and December 31, 2016. The other cash receipt and cash payment items addressed in ASU 2016-15 did not have an impact on the Company's Consolidated Statements of Cash Flows. Additionally, the Company has elected to use the cumulative earnings approach as defined in ASU 2016-15 to classify distributions received from equity method investees.

In May 2014, the FASB issued ASU No. 2014-09, *Revenue from Contracts with Customers* (ASU 2014-09). ASU 2014-09 and its related amendments (Revenue Recognition Standard) outline a single comprehensive model for entities to use in accounting for revenue arising from contracts with customers and superseded most previous revenue recognition guidance. On January 1, 2018, U. S. Steel adopted the Revenue Recognition Standard using the full retrospective method. Generally, U. S. Steel's performance obligations are satisfied, control of our products is transferred, and revenue is recognized at a single point in time. The adoption did not have a financial statement impact to U. S. Steel but did result in expanded disclosures. See Note 6 for further details.

On March 30, 2016, the FASB issued ASU 2016-09, *Compensation - Stock Compensation* (ASU 2016-09). ASU 2016-09 simplifies the accounting and reporting of certain aspects of share-based payment transactions, including income tax treatment of excess tax benefits, forfeitures, classification of share-based awards as either equity or liabilities, and classification in the statement of cash flows for certain share-based transactions related to tax benefits and tax payments. ASU 2016-09 was effective for public business entities for annual periods beginning after December 15, 2016.

On January 1, 2017, the Company adopted the provisions of ASU 2016-09. The adoption of ASU 2016-09 did not have a significant impact on the Company's Consolidated Financial Statements and included the following items: (1) adoption on a prospective basis of the recognition of excess tax benefits and tax deficiencies in the Company's income tax expense line in the Consolidated Statements of Operations for vested and exercised equity awards as discrete items in the period in which they occur; (2) adoption on a prospective basis of the classification of excess tax benefits in cash flows from operations in the Company's Consolidated Statements

of Cash Flows; (3) adoption on a retrospective basis of the classification of cash paid by the Company for directly withholding shares for tax withholding purposes in cash flows from financing activities, and (4) adoption on a prospective basis for the exclusion of the amount of excess tax benefits when applying the treasury stock method for the Company's diluted earnings per share calculation.

Additionally, the Company continues to withhold the statutory minimum taxes for participants in the Company's stock-based compensation plans and estimates forfeiture rates at the grant date and the expected term of its equity awards based on historical results.

On July 22, 2015, the FASB issued ASU No. 2015-11, *Simplifying the Measurement of Inventory* (ASU 2015-11). ASU 2015-11 requires an entity to measure most inventory at the lower of cost and net realizable value, thereby simplifying the prior guidance under which an entity must measure inventory at the lower of cost or market. ASU 2015-11 does not apply to inventories that are measured using either the last-in, first-out (LIFO) method or the retail inventory method. ASU 2015-11 was effective for public entities for financial statements issued for fiscal years beginning after December 15, 2016. U. S. Steel adopted ASU 2015-11 on January 1, 2017. The adoption did not have a significant financial statement impact to U. S. Steel.

4. Segment Information

U. S. Steel has three reportable segments: North American Flat-Rolled (Flat-Rolled), USSE and Tubular Products (Tubular). The results of our railroad and real estate businesses that do not constitute reportable segments are combined and disclosed in the Other Businesses category. The majority of U. S. Steel's customers are located in North America and Europe. No single customer accounted for more than 10 percent of gross annual revenues.

The Flat-Rolled segment includes the operating results of U. S. Steel's integrated steel plants and equity investees in the United States involved in the production of slabs, strip mill plates, sheets and tin mill products, as well as all iron ore and coke production facilities in the United States. These operations primarily serve North American customers in the service center, conversion, transportation (including automotive), construction, container, and appliance and electrical markets. Additionally, the Flat-Rolled segment is organized into the following three commercial entities to specifically address our customers and service their needs: (1) automotive solutions, (2) consumer solutions, and (3) industrial, service center and mining solutions.

The USSE segment includes the operating results of U. S. Steel Košice (USSK), U. S. Steel's integrated steel plant and coke production facilities in Slovakia, and its subsidiaries. USSE primarily serves customers in the Eastern European service center, conversion, transportation (including automotive), construction, container, appliance and electrical, and oil, gas and petrochemical markets. USSE produces and sells slabs, strip mill plates, sheets, tin mill products and spiral welded pipe, as well as heating radiators and refractory ceramic materials.

The Tubular segment includes the operating results of U. S. Steel's tubular production facilities and an equity investee in the United States. We sold our ownership interest in an equity investee in Brazil in December of 2017. These operations produce and sell seamless and electric resistance welded (welded) steel casing and tubing (commonly known as oil country tubular goods or OCTG), standard and line pipe and mechanical tubing and primarily serve customers in the oil, gas and petrochemical markets. During the fourth quarter of 2016, certain of our tubular assets within the Tubular segment were permanently shut down, including Pipe Mill #1 at our Lone Star facility, Pipe Mill #4 at our Lorain facility and our Bellville facility. We sold our Bellville facility in 2018 and the assets at our McKeesport tubular operations in 2016. On February 4, 2019, U. S. Steel announced plans to restart Pipe Mill #1 at our Lone Star facility. See Note 29 for further details.

The chief operating decision maker evaluates performance and determines resource allocations based on a number of factors, the primary measure being earnings (loss) before interest and income taxes. Earnings (loss) before interest and income taxes for reportable segments and Other Businesses does not include net interest and other financial costs (income), income taxes, and certain other items that management believes are not indicative of future results. In 2018, U. S. Steel began allocating certain post-employment benefits to its segments. Prior year information was adjusted to conform with the current year presentation.

The accounting principles applied at the operating segment level in determining earnings (loss) before interest and income taxes are generally the same as those applied at the consolidated financial statement level. Intersegment sales and transfers are accounted for at market-based prices and are eliminated at the corporate consolidation level. Corporate-level selling, general and administrative expenses and costs related to certain

former businesses are allocated to the reportable segments and Other Businesses based on measures of activity that management believes are reasonable.

The results of segment operations are as follows:

(In millions)	Customer Sales	Intersegment Sales	Net Sales	Earnings (loss) from investees	Earnings (Loss) before Interest and Income Taxes	Depreciation, depletion & amortization	Capital expenditures
2018							
Flat-Rolled	\$ 9,681	\$ 231	\$ 9,912	\$ 54	\$ 883	\$ 367	\$ 820
USSE	3,205	23	3,228	—	359	87	104
Tubular	1,231	5	1,236	7	(58)	47	45
Total reportable segments	14,117	259	14,376	61	1,184	501	969
Other Businesses	61	125	186	—	55	20	32
Reconciling Items and Eliminations	—	(384)	(384)	—	(115)	—	—
Total	\$ 14,178	\$ —	\$ 14,178	\$ 61	\$ 1,124	\$ 521	\$ 1,001
2017							
Flat-Rolled	\$ 8,297	\$ 194	\$ 8,491	\$ 38	\$ 375	\$ 352	\$ 388
USSE	2,949	25	2,974	—	327	76	83
Tubular	944	1	945	8	(99)	51	28
Total reportable segments	12,190	220	12,410	46	603	479	499
Other Businesses	60	119	179	(2)	44	22	6
Reconciling Items and Eliminations	—	(339)	(339)	—	22	—	—
Total	\$ 12,250	\$ —	\$ 12,250	\$ 44	\$ 669	\$ 501	\$ 505
2016							
Flat-Rolled	\$ 7,507	\$ 25	\$ 7,532	\$ 106	\$ 22	\$ 349	\$ 111
USSE	2,243	3	2,246	—	185	80	83
Tubular	449	2	451	6	(303)	68	88
Total reportable segments	10,199	30	10,229	112	(96)	497	282
Other Businesses	62	107	169	(2)	63	10	24
Reconciling Items and Eliminations	—	(137)	(137)	(12)	(168)	—	—
Total	\$ 10,261	\$ —	\$ 10,261	\$ 98	\$ (201)	\$ 507	\$ 306

A summary of total assets by segment is as follows:

(In millions)	December 31,	
	2018	2017
Flat-Rolled ^(a)	\$ 6,977	\$ 5,823
USSE ^(a)	5,607	5,423
Tubular	1,076	1,076
Total reportable segments	\$ 13,660	\$ 12,322
Other Businesses	\$ 329	\$ 344
Corporate, reconciling items, and eliminations ^(b)	(3,007)	(2,804)
Total assets	\$ 10,982	\$ 9,862

^(a) Included in segment assets for each year presented is goodwill for Flat-Rolled and USSE of \$3 million and \$4 million, respectively.

^(b) The majority of Corporate, reconciling items, and eliminations total assets is comprised of cash and the elimination of intersegment amounts.

The detail of reconciling items to consolidated earnings (loss) before interest and income taxes is as follows:

(In millions)	2018	2017	2016
Items not allocated to segments:			
United Steelworkers labor agreement signing bonus and related costs (Note 28)	(81)	—	—
Granite City Works restart and related costs	(80)	—	—
Loss on shutdown of certain tubular pipe mill assets ^(a)	—	(35)	(126)
Gain associated with U. S. Steel Canada Inc. (Note 5)	—	72	—
Restructuring and other charges ^(a)	—	—	2
Granite City Works temporary idling charges	8	(17)	(18)
Gain (loss) on equity investee transactions (Note 12)	38	2	(12)
Impairment of intangible assets (Note 14)	—	—	(14)
Total reconciling items	\$ (115)	\$ 22	\$ (168)

^(a) Included in Restructuring and other charges on the Consolidated Statements of Operations. See Note 25 to the Consolidated Financial Statements.

Geographic Area:

The information below summarizes external sales, property, plant and equipment and equity method investments based on the location of the operating segment to which they relate.

(In millions)	Year	External Sales	Assets
North America	2018	\$ 10,973	\$ 4,432 ^(a)
	2017	9,301	3,831 ^(a)
	2016	8,018	3,671 ^(a)
Europe	2018	3,205	919
	2017	2,949	906
	2016	2,243	789
Other Foreign Countries	2018	—	—
	2017	—	—
	2016	—	18
Total	2018	14,178	5,351
	2017	12,250	4,737
	2016	\$ 10,261	\$ 4,478

^(a) Assets with a book value of \$4,432 million, \$3,817 million and \$3,670 million were located in the United States at December 31, 2018, 2017 and 2016, respectively.

5. U. S. Steel Canada Inc. Retained Interest

On June 30, 2017, U. S. Steel completed the restructuring and disposition of U. S. Steel Canada Inc. (USSC) through a sale and transfer of all of the issued and outstanding shares in USSC to an affiliate of Bedrock Industries LLC. In accordance with the Second Amended and Restated Plan of Compromise, Arrangement and Reorganization, approved by the Ontario Superior Court of Justice on June 9, 2017, U. S. Steel received approximately \$127 million in satisfaction of its secured claims, including interest, which resulted in a gain of \$72 million on the Company's retained interest in USSC. U. S. Steel also agreed to the discharge and cancellation of its unsecured claims for nominal consideration. The terms of the settlement included mutual releases among key stakeholders, including a release of all claims against the Company regarding environmental, pension and other liabilities, and transition services agreements that superseded all prior arrangements among the parties, including the 2015 transition arrangements. Pursuant to the terms of these new transition services agreements, U. S. Steel will continue to provide various transition services for up to 24 months from June 30, 2017.

6. Revenue

Revenue is generated primarily from contracts to produce, ship and deliver steel products, and to a lesser extent, to deliver raw materials such as iron ore pellets, to deliver coke by-products and for railroad services and real estate sales. Generally, U. S. Steel's performance obligations are satisfied, control of our products is transferred, and revenue is recognized at a single point in time, when title transfers to our customer for product shipped or when services are provided. Revenues are recorded net of any sales incentives. Shipping and other transportation costs charged to customers are treated as fulfillment activities and are recorded in both revenue and cost of sales at the time control is transferred to the customer. Costs related to obtaining sales contracts are incidental and are expensed when incurred. Because customers are invoiced at the time title transfers and U. S. Steel's right to consideration is unconditional at that time, U. S. Steel does not maintain contract asset balances. Additionally, U. S. Steel does not maintain contract liability balances, as performance obligations are satisfied prior to customer payment for product. U. S. Steel offers industry standard payment terms.

U. S. Steel has three reportable segments: Flat-Rolled, USSE and Tubular. Flat-Rolled primarily generates revenue from sheet and coated product sales to North American customers. Flat-Rolled also sells iron ore pellets and coke making by-products. USSE sells slabs, sheets, strip mill plates, coated products and spiral welded pipe to customers primarily in the Eastern European market. Tubular sells seamless and electric resistance welded (ERW) steel casing and tubing (commonly known as oil country tubular goods or OCTG), standard and line pipe and mechanical tubing and primarily serves customers in the oil, gas and petrochemical markets. Revenue from our railroad and real estate businesses is reported in the Other Businesses category in our segment reporting structure. The following table disaggregates our revenue by product for each of our reportable business segments for the years ended December 31, 2018, 2017 and 2016, respectively:

Customer Sales by Product:

(In millions) Year Ended December 31, 2018	Flat-Rolled	USSE	Tubular	Other Businesses	Total
Semi-finished	\$ 156	\$ 174	\$ —	\$ —	\$ 330
Hot-rolled sheets	2,816	1,313	—	—	4,129
Cold-rolled sheets	2,709	384	—	—	3,093
Coated sheets	3,090	1,164	—	—	4,254
Tubular products	—	48	1,195	—	1,243
All Other ^(a)	910	122	36	61	1,129
Total	\$ 9,681	\$ 3,205	\$ 1,231	\$ 61	\$ 14,178

(In millions) Year Ended December 31, 2017	Flat-Rolled	USSE	Tubular	Other Businesses	Total
Semi-finished	\$ 72	\$ 232	\$ —	\$ —	\$ 304
Hot-rolled sheets	2,045	1,210	—	—	3,255
Cold-rolled sheets	2,355	328	—	—	2,683
Coated sheets	2,902	1,038	—	—	3,940
Tubular products	—	39	909	—	948
All Other ^(a)	923	102	35	60	1,120
Total	\$ 8,297	\$ 2,949	\$ 944	\$ 60	\$ 12,250

(In millions) Year Ended December 31, 2016	Flat-Rolled	USSE	Tubular	Other Businesses	Total
Semi-finished	\$ 6	\$ 165	\$ —	\$ —	\$ 171
Hot-rolled sheets	1,495	907	—	—	2,402
Cold-rolled sheets	2,405	230	—	—	2,635
Coated sheets	2,932	834	—	—	3,766
Tubular products	—	32	430	—	462
All Other ^(a)	669	75	19	62	825
Total	\$ 7,507	\$ 2,243	\$ 449	\$ 62	\$ 10,261

^(a) Consists primarily of sales of raw materials and coke making by-products.

7. Net Interest and Other Financial Costs

(In millions)	2018	2017	2016
Interest income:			
Interest income	\$ (23)	\$ (17)	\$ (5)
Interest expense and other financial costs:			
Interest incurred	175	229	234
Less interest capitalized	7	3	4
Total interest expense	168	226	230
Loss on debt extinguishment ^(a)	98	54	22
Net periodic benefit costs (other than service cost) ^(b)	69	61	(36)
Foreign currency net (gain) loss ^(c)	(19)	23	(14)
Financial costs on:			
Amended Credit Agreement	5	6	6
USSK credit facilities	3	3	3
Other	3	2	—
Amortization of discounts and deferred financing costs	8	10	9
Total other financial costs	—	44	4
Net interest and other financial costs	\$ 312	\$ 368	\$ 215

^(a) Represents a net pretax charge of a \$98 million during 2018 related to the retirement of our 2020 Senior Notes and 2021 Senior Secured Notes, a net pretax charge of \$54 million during 2017 related to the retirement of our 2018, 2021, and 2022 Senior Notes, partial redemption of our 2021 Senior Secured Notes, and redemption of the Lorain Recovery Zone Facility Bonds, and a net pretax charge of \$22 million during 2016 related to the retirement of our 2017 Senior Notes, and partial redemption of our 2018, 2020 and 2021 Senior Notes.

^(b) Represents postretirement benefit expense as a result of the adoption of Accounting Standards Update 2017-07, *Compensation - Retirement Benefits* on January 1, 2018. See Note 3 to the Consolidated Financial Statements.

^(c) The functional currency for USSE is the euro. Foreign currency net (gain) loss is a result of transactions denominated in currencies other than the euro.

8. Earnings and Dividends Per Common Share

Earnings (Loss) per Share Attributable to United States Steel Corporation Stockholders

Basic earnings (loss) per common share is based on the weighted average number of common shares outstanding during the period.

Diluted earnings (loss) per common share assumes the exercise of stock options, the vesting of restricted stock units and performance awards, provided in each case the effect is dilutive.

The computations for basic and diluted earnings (loss) per common share from continuing operations are as follows:

(Dollars in millions, except per share amounts)	2018	2017	2016
Net earnings (loss) attributable to United States Steel Corporation stockholders	\$ 1,115	\$ 387	\$ (440)
Weighted-average shares outstanding (in thousands):			
Basic	176,633	174,793	156,673
Effect of stock options, restricted stock units and performance awards	1,828	1,727	—
Adjusted weighted-average shares outstanding, diluted	178,461	176,520	156,673
Basic earnings (loss) per common share	\$ 6.31	\$ 2.21	\$ (2.81)
Diluted earnings (loss) per common share	\$ 6.25	\$ 2.19	\$ (2.81)

The following table summarizes the securities that were antidilutive, and therefore, were not included in the computation of diluted earnings (loss) per common share:

(In thousands)	2018	2017	2016
Securities granted under the 2005 Stock Incentive Plan	\$ 1,631	\$ 1,579	\$ 8,820

Dividends Paid per Share

Quarterly dividends on common stock were five cents per share for each quarter in 2018, 2017 and 2016.

9. Cash, Cash Equivalents and Restricted Cash

The following table provides a reconciliation of cash, cash equivalents and restricted cash reported within U. S. Steel's Consolidated Balance Sheets that sum to the total of the same amounts shown in the Consolidated Statement of Cash Flows:

(In millions)	December 31,		
	2018	2017	2016
Cash and cash equivalents	\$ 1,000	\$ 1,553	\$ 1,515
Restricted cash in other current assets	3	6	—
Restricted cash in other noncurrent assets	37	38	40
Total cash, cash equivalents and restricted cash	\$ 1,040	\$ 1,597	\$ 1,555

Amounts included in restricted cash represent cash balances which are legally or contractually restricted, primarily for environmental capital expenditure projects and insurance purposes.

10. Inventories

(In millions)	December 31, 2018		December 31, 2017	
Raw materials	\$	605	\$	527
Semi-finished products		1,021		796
Finished products		404		356
Supplies and sundry items		62		59
Total	\$	2,092	\$	1,738

Current acquisition costs were estimated to exceed the above inventory values at December 31 by \$1,038 million in 2018 and \$802 million in 2017. As a result of the liquidation of LIFO inventories, cost of sales decreased and earnings (loss) before interest and income taxes increased by \$10 million in 2018. As a result of the liquidation of LIFO inventories, cost of sales increased and earnings (loss) before interest and income taxes decreased by \$6 million and \$77 million in 2017 and 2016, respectively.

Inventory includes \$39 million and \$42 million of land held for residential/commercial development as of December 31, 2018 and 2017, respectively.

11. Income Taxes

Components of earnings (loss)

(In millions)	2018		2017		2016	
United States	\$	434	\$	75	\$	(588)
Foreign		378		226		172
Earnings (loss) before income taxes	\$	812	\$	301	\$	(416)

At the end of both 2018 and 2017, U. S. Steel does not have any undistributed foreign earnings and profits for which U.S. deferred taxes have not been provided.

(Benefit) Provision for income taxes

(In millions)	2018			2017			2016		
	Current	Deferred	Total	Current	Deferred	Total	Current	Deferred	Total
Federal	\$ (40)	\$ (283)	\$ (323)	\$ (66)	\$ (81)	\$ (147)	\$ (18)	\$ —	\$ (18)
State and local	2	(58)	(56)	(1)	—	(1)	1	—	1
Foreign	64	12	76	53	9	62	32	9	41
Total	\$ 26	\$ (329)	\$ (303)	\$ (14)	\$ (72)	\$ (86)	\$ 15	\$ 9	\$ 24

A reconciliation of the federal statutory tax rate of 21 percent (35 percent in 2017 and 2016) to total provision follows:

(In millions)	2018	2017	2016
Statutory rate applied to earnings (loss) before income taxes	\$ 171	\$ 105	\$ (146)
Valuation allowance	(412)	36	252
Excess percentage depletion	(48)	(68)	(49)
State and local income taxes after federal income tax effects	8	(28)	(20)
Effects of foreign operations	74	62	42
U.S. impact of foreign operations	(21)	(6)	(6)
Tax credits	(71)	(56)	(39)
Effect of tax reform	—	(81)	—
Alternative minimum tax credit refund	—	(48)	(18)
Other	(4)	(2)	8
Total (benefit) provision	\$ (303)	\$ (86)	\$ 24

In 2018, the tax benefit differs from the domestic statutory rate of 21 percent as a result of the items listed above. In particular, it includes a benefit of \$374 million related to the reversal of a portion of the valuation allowance recorded against the Company's net domestic deferred tax asset, as well as a benefit of \$38 million related to the reversal of the valuation allowance for current year activity.

Included in the 2017 tax benefit is a benefit of \$10 million related to corporate rate reduction provided by the 2017 Act, as well as a benefit of \$71 million related to the reversal of the valuation allowance recorded against the remaining balance of the Company's Alternative Minimum Tax (AMT) credits, which became fully refundable pursuant to the 2017 Act. Also included in the 2017 tax benefit is a benefit of \$48 million related to the Company's election to claim a refund of AMT credits pursuant to a provision in the Protecting Americans from Tax Hikes (PATH) Act.

Included in the 2016 tax provision is a benefit of \$18 million related to the Company's election to claim a refund of AMT credits pursuant to a provision in the PATH Act. The provision also reflects a write-off of certain deferred tax assets and liabilities related to branch operations pursuant to new regulations. However, the write-off did not impact the total provision because of the valuation allowance on the net domestic deferred tax asset.

Deferred taxes

Deferred tax assets and liabilities resulted from the following:

(In millions)	December 31,	
	2018	2017
Deferred tax assets:		
Federal tax loss carryforwards (expiring in 2035 through 2036)	\$ 220	\$ 394
Federal capital loss carryforwards (expiring 2021)	33	36
State tax credit carryforwards (expiring in 2019 through 2027)	16	14
State tax loss carryforwards (expiring in 2019 through 2038)	137	155
Minimum tax credit carryforwards	38	76
General business credit carryforwards (expiring in 2027 through 2038)	85	86
Foreign tax loss and credit carryforwards (expiring in 2024 through 2028)	173	102
Employee benefits	337	266
Contingencies and accrued liabilities	62	70
Investments in subsidiaries and equity investees	59	33
Other temporary differences	26	1
Valuation allowance	(214)	(608)
Total deferred tax assets	<u>972</u>	<u>625</u>
Deferred tax liabilities:		
Property, plant and equipment	468	516
Inventory	22	6
Receivables, payables and debt	33	14
Indefinite-lived intangible assets	18	18
Other temporary differences	—	21
Total deferred tax liabilities	<u>541</u>	<u>575</u>
Net deferred tax asset	<u>\$ 431</u>	<u>\$ 50</u>

U. S. Steel recognizes deferred tax assets and liabilities for the estimated future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax basis. The realization of deferred tax assets is assessed quarterly based on several interrelated factors. These factors include U. S. Steel's expectation to generate sufficient future taxable income and the projected time period over which these deferred tax assets will be realized.

At December 31, 2018, the net domestic deferred tax asset was \$445 million, net of an established valuation allowance of \$211 million. At December 31, 2017, the net domestic deferred tax asset was \$53 million, net of an established valuation allowance of \$604 million.

At December 31, 2018, the net foreign deferred tax liability was \$14 million, net of an established valuation allowance of \$3 million. At December 31, 2017, the net foreign deferred tax liability was \$3 million, net of an established valuation allowance of \$4 million. The net foreign deferred tax liability will fluctuate as the value of the U.S. dollar changes with respect to the euro.

U. S. Steel will continue to monitor the realizability of its deferred tax assets on a quarterly basis taking into consideration, among other items, the uncertainty regarding the Company's continued ability to generate domestic income in the near term. In the future, if we determine that realization is more likely than not for a deferred tax asset with a valuation allowance, the related valuation allowance will be reduced, and we will record a non-cash benefit to earnings.

Tax years subject to examination

Below is a summary of the tax years open to examination by major tax jurisdiction:

U.S. Federal – 2011 and forward*
 U.S. States – 2009 and forward
 Slovakia – 2008 and forward

*U. S. Steel's 2011 federal tax year remains open to the extent of net operating losses carried back from 2013.

Status of Internal Revenue Service (IRS) examinations

The IRS audit of U. S. Steel's 2014-2016 federal consolidated tax returns began in 2018 and is ongoing. The IRS audit of the Company's 2012-2013 tax returns began in 2015. Although the IRS and the Company have effectively agreed to adjustments to complete the 2012-2013 audit, final settlement is subject to Joint Committee approval.

Unrecognized tax benefits

Unrecognized tax benefits are the differences between a tax position taken, or expected to be taken, in a tax return and the benefit recognized for accounting purposes pursuant to the guidance in ASC Topic 740 on income taxes. The total amount of unrecognized tax benefits was \$35 million, \$42 million and \$72 million as of December 31, 2018, 2017 and 2016, respectively.

The total amount of unrecognized tax benefits that, if recognized, would affect the effective tax rate was \$2 million as of December 31, 2018 and \$6 million as of December 31, 2017.

U. S. Steel records interest related to uncertain tax positions as a part of net interest and other financial costs in the Consolidated Statements of Operations. Any penalties are recognized as part of selling, general and administrative expenses. U. S. Steel had accrued liabilities of \$2 million and \$6 million for interest and penalties related to uncertain tax positions as of December 31, 2018 and 2017, respectively.

A tabular reconciliation of unrecognized tax benefits follows:

(In millions)	2018	2017	2016
Unrecognized tax benefits, beginning of year	\$ 42	\$ 72	\$ 74
Increases – tax positions taken in prior years	—	1	—
Decreases – tax positions taken in prior years	(2)	(26)	(4)
Increases – current tax positions	—	—	3
Settlements	—	(4)	—
Lapse of statute of limitations	(5)	(1)	(1)
Unrecognized tax benefits, end of year	\$ 35	\$ 42	\$ 72

It is reasonably expected that during the next 12 months unrecognized tax benefits related to income tax issues will decrease by approximately \$32 million.

12. Investments, Long-Term Receivables and Equity Investee Transactions

(In millions)	December 31,	
	2018	2017
Equity method investments	\$ 485	\$ 457
Receivables due after one year, less allowance of \$5 and \$11	24	20
Other	4	3
Total	\$ 513	\$ 480

Summarized financial information of all investees accounted for by the equity method of accounting is as follows (amounts represent 100% of investee financial information):

(In millions)	2018	2017	2016
Income data – year ended December 31:^(a)			
Net Sales	\$ 2,193	\$ 2,485	\$ 2,839
Operating income	157	132	345
Net earnings	134	109	323
Balance sheet date – December 31:			
Current Assets	\$ 642	\$ 633	\$ 771
Noncurrent Assets	853	710	989
Current liabilities	348	441	478
Noncurrent Liabilities	516	335	506

(a) Former equity affiliates, Swan Point Development Company, Inc., Tilden Mining Company and Apolo Tubulars S.A. were sold on February 6, 2017, September 29, 2017 and December 22, 2017, respectively. We exited Leeds Retail Center, LLC and sold Acero Prime, S.R.L. de CV on May 31, 2018, and October 23, 2018, respectively. The former equity affiliates are included in the income data through the month prior to the date of sale.

U. S. Steel's portion of the equity in net earnings for its equity investments as reported in the income from investees line on the Consolidated Statements of Operations was \$61 million, \$44 million and \$98 million for the years ended December 31, 2018, 2017 and 2016, respectively.

Investees accounted for using the equity method include:

Investee	Country	December 31, 2018 Interest
Chrome Deposit Corporation	United States	50 %
Daniel Ross Bridge, LLC	United States	50 %
Double G Coatings Company, Inc.	United States	50 %
Feralloy Processing Company	United States	49 %
Hibbing Development Company	United States	24.1 %
Hibbing Taconite Company ^(a)	United States	14.7 %
Patriot Premium Threading Services, LLC	United States	50 %
PRO-TEC Coating Company, LLC	United States	50 %
Strategic Investment Fund Partners II ^(b)	United States	5.2 %
USS-POSCO Industries	United States	50 %
Worthington Specialty Processing	United States	49 %

(a) Hibbing Taconite Company (HTC) is an unincorporated joint venture that is owned, in part, by Hibbing Development Company (HDC),

which is accounted for using the equity method. Through HDC we are able to influence the activities of HTC, and as such, its activities are accounted for using the equity method.

(b) Strategic Investment Fund Partners II is a limited partnership and in accordance with ASC Topic 323, the financial activities are accounted for using the equity method.

In 2018, we recognized pre-tax gains on equity investee transactions of approximately \$18 million for the assignment of our ownership interest in Leeds Retail Center, LLC and \$20 million from the sale of our 40 percent ownership interest in Acero Prime, S. R. L. de CV. In 2017, we recognized a total gain on equity investee transactions of \$2 million primarily as a result of a gain on sale of our 15 percent ownership in Tilden Mining Company, L.C., partially offset by a loss on sale of our 50 percent ownership interest in Apolo Tubulars S.A.

Dividends and partnership distributions received from equity investees were \$13 million in 2018, \$12 million in 2017 and \$9 million in 2016.

U. S. Steel evaluates impairment of its equity method investments whenever circumstances indicate that a decline in value below carrying value is other than temporary. Under these circumstances, we would adjust the investment down to its estimated fair value, which then becomes its new carrying value.

During the fourth quarter of 2016, the Company completed a review of its equity method investments and determined there was an other than temporary impairment of an equity investee within our Tubular segment. Accordingly, U. S. Steel recorded an impairment charge of \$12 million, which reduced the carrying value of the investment to \$18 million at December 31, 2016. The equity investment was sold in 2017.

We supply substrate to certain of our equity method investees and from time to time will extend the payment terms for their trade receivables. For discussion of transactions and related receivable and payable balances between U. S. Steel and its investees, see Note 23.

13. Property, Plant and Equipment

(In millions)	Useful Lives	December 31,	
		2018	2017
Land and depletable property	—	\$ 207	\$ 208
Buildings	35 years	1,098	1,109
Machinery and equipment			
Steel producing	2-30 years	12,784	12,014
Transportation	3-40 years	268	239
Other	5-30 years	123	122
Information technology	5-6 years	786	782
Assets under capital lease	5-15 years	36	36
Construction in process	—	706	576
Total		16,008	15,086
Less accumulated depreciation and depletion		11,143	10,806
Net		\$ 4,865	\$ 4,280

Amounts in accumulated depreciation and depletion for assets acquired under capital leases (including sale-leasebacks accounted for as financings) were \$20 million and \$18 million at December 31, 2018 and 2017, respectively.

14. Intangible Assets

Intangible assets are being amortized on a straight-line basis over their estimated useful lives and are detailed below:

(In millions)	Useful Lives	As of December 31, 2018			As of December 31, 2017		
		Gross Carrying Amount	Accumulated Amortization	Net Amount	Gross Carrying Amount	Accumulated Amortization	Net Amount
Customer relationships	22 Years	\$ 132	\$ 70	\$ 62	\$ 132	\$ 64	\$ 68
Patents	10-15 Years	22	7	15	22	5	17
Other	4-20 Years	14	8	6	15	8	7
Total amortizable intangible assets		\$ 168	\$ 85	\$ 83	\$ 169	\$ 77	\$ 92

Identifiable intangible assets with finite lives are reviewed for impairment whenever events or circumstances indicate that the carrying value may not be recoverable. There were no triggering events in 2018 or 2017 that required a review for impairment.

Amortization expense was \$8 million and \$9 million for years ended December 31, 2018 and December 31, 2017, respectively. We expect a consistent level of annual amortization expense through 2023.

The carrying amount of acquired water rights with indefinite lives as of December 31, 2018 and December 31, 2017 totaled \$75 million. The acquired water rights are tested for impairment annually in the third quarter, or whenever events or circumstances indicate the carrying value may not be recoverable. U. S. Steel performed a qualitative impairment evaluation of its acquired water rights during the third quarter of 2018. Based on the results of the evaluation, the water rights were not impaired.

The research and development activities of the Company's acquired indefinite lived in-process research and development patents was completed during the fourth quarter of 2016 and the carrying amount of the patents is being amortized over the useful lives of the patents (approximately 10 years). As a result of the quantitative impairment evaluation of its in-process research and development patents during 2016, an impairment charge of approximately \$14 million was recorded during 2016. Key assumptions used in the discounted cash flow

analysis for the evaluation of the patents consisted of a combination of Level 2 and Level 3 inputs, which included future cash flow projections, a royalty rate of 5% and a discount rate of 17%.

15. Stock-Based Compensation Plans

U. S. Steel has outstanding stock-based compensation awards that were granted by the Compensation & Organization Committee of the Board of Directors (the Committee) under the 2005 Stock Incentive Plan (the 2005 Plan) and the 2016 Omnibus Incentive Compensation Plan (the Omnibus Plan) (collectively the Plans). On April 26, 2016, the Company's stockholders approved the Omnibus Plan and authorized the Company to issue up to 7,200,000 shares of U. S. Steel common stock under the Omnibus Plan. The Company's stockholders authorized the issuance of an additional 6,300,000 shares under the Omnibus Plan on April 25, 2017. While awards that were previously granted under the 2005 Plan remain outstanding, all future awards will be granted under the Omnibus Plan. As of December 31, 2018, there were 10,936,016 shares available for future grants under the Omnibus Plan. Generally, a share issued under the Omnibus Plan pursuant to an award other than a stock option will reduce the number of shares available under the Stock Plan by 1.73 shares. Also, shares related to awards under either plan (i) that are forfeited, (ii) that terminate without shares having been issued or (iii) for which payment is made in cash or property other than shares, are again available for awards under the Omnibus Plan; provided, however, that shares delivered to U. S. Steel or withheld for purposes of satisfying the exercise price or tax withholding obligations shall not be available for future awards. The purpose of the Plans is to attract, retain and motivate employees and non-employee directors of outstanding ability, and to align their interests with those of the stockholders of U. S. Steel. The Committee administers the plan pursuant to which they may make grants of stock options, restricted stock units (RSUs), performance awards, and other stock-based awards.

The following table summarizes the total stock-based compensation awards granted during the years 2018, 2017 and 2016:

	Stock Options	Restricted Stock Units	TSR Performance Awards	ROCE Performance Awards
2018 Grants	—	824,195	79,190	247,510
2017 Grants	647,780	348,040	169,850	—
2016 Grants	1,333,210	1,120,332	308,130	—

Stock-based compensation expense

The following table summarizes the total compensation expense recognized for stock-based compensation awards:

(In millions, except per share amounts)	Year Ended December 31, 2018	Year Ended December 31, 2017	Year Ended December 31, 2016
Stock-based compensation expense recognized:			
Cost of sales	\$ 11	\$ 10	\$ 9
Selling, general and administrative expenses	21	17	13
Decrease in net income	32	27	22
Decrease in basic earnings per share	0.14	0.15	0.14
Decrease in diluted earnings per share	0.13	0.15	0.14

As of December 31, 2018, total future compensation cost related to nonvested stock-based compensation arrangements was \$23 million, and the average period over which this cost is expected to be recognized is approximately 16 months.

Stock options

Compensation expense for stock options is recorded over the vesting period based on the fair value on the date of grant, as calculated by U. S. Steel using the Black-Scholes model and the assumptions listed below. Awards generally vest ratably over a three-year service period and have a term of ten years. Stock options are generally issued at the market price of the underlying stock on the date of the grant. Upon exercise of stock options, shares of U. S. Steel stock are issued from treasury stock or from authorized, but unissued common stock. There were no stock options granted in 2018.

Black-Scholes Assumptions ^(a)	2017 Grants	2016 Grants
Grant date price per share of option award	\$ 36.94	\$ 14.78
Exercise price per share of option award	\$ 36.94	\$ 14.78
Expected annual dividends per share	\$ 0.20	\$ 0.20
Expected life in years	5.0	5.0
Expected volatility	57%	53%
Risk-free interest rate	2.0%	1.5%
Average grant date fair value per share of unvested option awards as calculated from above	\$ 17.28	\$ 6.24

(a) The assumptions represent a weighted-average for all grants during the year.

The expected annual dividends per share are based on the latest annualized dividend rate at the date of grant; the expected life in years is determined primarily from historical stock option exercise data; the expected volatility is based on the historical volatility of U. S. Steel stock; and the risk-free interest rate is based on the U.S. Treasury strip rate for the expected life of the option.

The following table shows a summary of the status and activity of stock options for the year ended December 31, 2018:

	Shares	Weighted-Average Exercise Price (per share)	Weighted-Average Remaining Contractual Term (in years)	Aggregate Intrinsic Value (in millions)
Outstanding at January 1, 2018	4,612,940	\$ 28.92		
Granted	—	\$ —		
Exercised	(1,541,989)	\$ 22.65		
Forfeited or expired	(324,431)	\$ 72.15		
Outstanding at December 31, 2018	2,746,520	\$ 27.73	5.03	\$ 2
Exercisable at December 31, 2018	2,174,000	\$ 28.10	4.32	\$ 1
Exercisable and expected to vest at December 31, 2018	2,640,308	\$ 27.76	4.92	\$ 2

The aggregate intrinsic value in the table above represents the total pretax intrinsic value (difference between our closing stock price on the last trading day of 2018 and the exercise price, multiplied by the number of in-the-money options). Intrinsic value changes are a function of the fair market value of our stock.

The total intrinsic value of stock options exercised (i.e., the difference between the market price at exercise and the price paid by the employee to exercise the option) was \$27 million during the year ended December 31, 2018, \$11 million during the year ended December 31, 2017 and \$13 million during the year ended December 31, 2016. The total amount of cash received by U. S. Steel from the exercise of options during the year ended December 31, 2018 and December 31, 2017, was \$35 million and \$20 million, respectively, and the related net tax benefit realized from the exercise of these options was \$3 million in 2018 and was immaterial in 2017.

Stock awards

Compensation expense for nonvested stock awards is recorded over the vesting period based on the fair value at the date of grant.

RSUs awarded as part of annual grants generally vest ratably over 3 years. Their fair value is the market price of the underlying common stock on the date of grant. RSUs granted in connection with new-hire or retention awards generally cliff vest three years from the date of the grant.

Total shareholder return (TSR) performance awards may vest at the end of a three-year performance period if U. S. Steel's total shareholder return compared to the total shareholder return of a peer group of companies over the three-year performance period meets the performance criteria. Performance awards can vest at between zero and 200 percent of the target award. The fair value of the performance awards is calculated using a Monte-Carlo simulation.

Performance awards based on the return on capital employed (ROCE) metric were granted in 2018 in equity and in 2017 and 2016 in cash. ROCE awards granted will be measured on a weighted average basis of the Company's consolidated worldwide earnings (loss) before interest and income taxes, as adjusted, divided by consolidated worldwide capital employed, as adjusted, over a three year period.

Weighted average ROCE is calculated based on the ROCE achieved in the first, second and third years of the performance period, weighted at 20 percent, 30 percent and 50 percent, respectively. The ROCE awards will payout 50 percent at the threshold level, 100 percent at the target level and 200 percent at the maximum level. Amounts in between the threshold percentages will be interpolated.

Compensation expense associated with the ROCE awards will be contingent based upon the achievement of the specified ROCE performance goals and will be adjusted on a quarterly basis to reflect the probability of achieving the ROCE metric.

ROCE performance awards may vest at the end of a three-year performance period contingent upon meeting ROCE performance goals approved by the Committee. The fair value of the ROCE performance awards is the average market price of the underlying common stock on the date of grant.

The following table shows a summary of the performance awards outstanding as of December 31, 2018, and their fair market value on the respective grant date:

Performance Period	Fair Value (in millions)	Minimum Shares	Target Shares	Maximum Shares
2018 - 2020	\$ 15	—	313,874	627,748
2017 - 2019	\$ 4	—	105,479	210,958
2016 - 2018	\$ 2	—	192,332	384,664

The following table shows a summary of the status and activity of nonvested stock awards for the year ended December 31, 2018:

	Restricted Stock Units	TSR Performance Awards ^(a)	ROCE Performance Awards ^(a)	Total	Weighted- Average Grant-Date Fair Value
Nonvested at January 1, 2018	1,188,746	515,531	—	1,704,277	\$ 21.08
Granted	824,195	79,190	247,510	1,150,895	41.65
Vested	(431,661)	(150,133)	—	(581,794)	24.20
Performance adjustment factor ^(b)	—	(52,557)	—	(52,557)	24.95
Forfeited or expired	(85,008)	(16,244)	(11,612)	(112,864)	28.99
Nonvested at December 31, 2018	1,496,272	375,787	235,898	2,107,957	\$ 30.92

(a) The number of shares shown for the performance awards is based on the target number of share awards.

(b) Consists of adjustments to vested performance awards to reflect actual performance. The adjustments were required since the original grants of the awards were at 100 percent of the targeted amounts and the awards vested at less than target.

The following table presents information on RSUs and performance awards granted:

	2018	2017	2016
Number of awards granted	1,150,895	517,890	1,428,462
Weighted-average grant-date fair value per share	\$ 41.65	\$ 37.68	\$ 13.39

During the years ended December 31, 2018, 2017, and 2016, the total fair value of shares vested was \$14 million, \$11 million, and \$17 million, respectively.

16. Derivative Instruments

U. S. Steel is exposed to foreign currency exchange rate risks in our European operations. USSE's revenues are primarily in euros and costs are primarily in euros and U.S. dollars (USD). U. S. Steel uses foreign exchange forward sales contracts (foreign exchange forwards) with maturities no longer than 12 months to exchange euros for USD to manage our currency requirements and exposure to foreign currency exchange rate fluctuations. Derivative instruments are required to be recognized at fair value in the Consolidated Balance Sheet. U. S. Steel has not elected to designate these contracts as hedges. Therefore, changes in their fair value are recognized immediately in the Consolidated Statements of Operations and are also shown in the tabular disclosure below. We mitigate the risk of concentration of counterparty credit risk by purchasing our forwards from several counterparties.

In 2018, U. S. Steel entered into long-term freight contracts in its domestic operations that require payment in Canadian dollars (CAD). We entered into foreign exchange forward sales contracts with remaining maturities up to two years to exchange USD for CAD to mitigate a portion of the related risk of exchange rate fluctuations and to manage our currency requirements. We elected to designate these contracts as cash flow hedges. Accordingly, we record gains and losses on these contracts within Accumulated Other Comprehensive Income (AOCI) until the related contract impacts earnings.

From time to time U. S. Steel may use fixed-price forward physical purchase contracts to partially manage our exposure to price risk related to the purchases of natural gas, zinc and tin used in the production process. Generally, forward physical purchase contracts qualify for the normal purchase and normal sales exceptions described in ASC Topic 815 and are not subject to mark-to-market accounting. U. S. Steel also uses financial swaps to protect from the commodity price risk associated with purchases of natural gas, zinc and tin (commodity purchase swaps) in both our domestic and European operations. Commodity purchase swaps did not have a significant impact on the Company's financial results and were classified as cash flow hedges in prior periods for our domestic operations. Commodity purchase swaps used in our European operations were not classified as hedges. The impacts of our commodity purchase swaps are included in the tabular disclosure below. Effective January 1, 2018, U. S. Steel adopted the provisions of ASU 2017-12, *Derivatives and Hedging (Topic 815): Targeted Improvements to Accounting for Hedging Activities*. The cumulative effect of the adoption of ASU 2017-12 was not material to U. S. Steel's financial results. See Note 3 for additional information on the recently adopted accounting standard.

Financial swaps are also used to partially manage the sales price of certain hot-rolled coil and iron ore pellet contract sales (sales swaps). In prior periods, we did not elect hedge accounting for these financial swaps and changes in their fair value were immediately recognized in earnings. Effective January 1, 2018, U. S. Steel elected to designate its hot-rolled coil sales swaps as cash flow hedges. See the tabular disclosure below for further details.

In accordance with the guidance in ASC Topic 820 on fair value measurements and disclosures, the fair value of our foreign exchange forwards, commodity purchase swaps and sales swaps was determined using Level 2 inputs, which are defined as "significant other observable" inputs. The inputs used are from market sources that aggregate data based upon market transactions.

The table below shows the outstanding swap quantities used to hedge forecasted purchases and sales as of December 31, 2018 and December 31, 2017:

Hedge Contracts	Classification	December 31, 2018	December 31, 2017
Natural gas (in mmbtus)	Commodity purchase swaps	33,951,016	22,049,500
Tin (in metric tons)	Commodity purchase swaps	585	80
Zinc (in metric tons)	Commodity purchase swaps	3,471	4,179
Hot-rolled coils (in tons)	Sales swaps	9,000	38,000
Iron ore pellets (in metric tons)	Sales swaps	—	40,000
Foreign currency (in millions of euros)	Foreign exchange forwards	€ 286	€ 234
Foreign currency (in millions of CAD)	Foreign exchange forwards	C\$ 50	C\$ —

The following summarizes the fair value amounts included in our Consolidated Balance Sheets as of December 31, 2018 and December 31, 2017:

(In millions) Designated as Hedging Instruments	Balance Sheet Location	December 31,	
		2018	2017
Sales swaps	Accounts payable	\$ 1	\$ —
Commodity purchase swaps	Accounts receivable	2	4
Commodity purchase swaps	Accounts payable	17	2
Commodity purchase swaps	Investments and long-term receivables	—	1
Commodity purchase swaps	Other long-term liabilities	1	1
Foreign exchange forwards	Accounts payable	1	—
Foreign exchange forwards	Other long-term liabilities	1	—
Not Designated as Hedging Instruments			
Sales swaps	Accounts payable	—	2
Commodity purchase swaps	Accounts payable	—	1
Foreign exchange forwards	Accounts receivable	12	11

The table below summarizes the effect of hedge accounting on AOCI and amounts reclassified from AOCI into earnings for 2018, 2017, and 2016:

(In millions)	Gain (Loss) on Derivatives in AOCI			Location of Reclassification from AOCI ^(a)	Amount of Gain (Loss) Recognized in Income		
	2018	2017	2016		2018	2017	2016
Sales swaps ^(b)	\$ —	\$ —	\$ —	Net sales	\$ (13)	\$ —	\$ —
Commodity purchase swaps	(15)	1	2	Cost of sales ^(c)	(8)	(2)	13
Foreign exchange forwards	(2)	—	—	Cost of sales	—	—	—

^(a) The earnings impact of our hedging instruments substantially offsets the earnings impact of the related hedged items since ineffectiveness is less than \$1 million.

^(b) U. S. Steel has elected hedge accounting for hot-rolled coil sales swaps prospectively on January 1, 2018. Iron ore pellet sales swaps were not classified as hedges.

^(c) Costs for commodity purchase swaps are recognized in cost of sales as products are sold.

The table below summarizes the impact of derivative activity where hedge accounting has not been elected on our Consolidated Statements of Operations for 2018, 2017 and 2016:

(In millions)	Consolidated Statement of Operations Location	Amount of Gain (Loss) Recognized in Income		
		2018	2017	2016
Sales swaps ^(a)	Net sales	\$ (1)	\$ 6	\$ (3)
Commodity purchase swaps ^(b)	Cost of sales	—	3	3
Foreign exchange forwards ^(c)	Other financial costs	24	(23)	7

^(a) U. S. Steel has elected hedge accounting for hot-rolled coil sales swaps prospectively on January 1, 2018. Iron ore pellet sales swaps were not classified as hedges.

^(b) The 2017 impacts were for de-designated zinc contracts for our domestic operations and the 2016 impacts were for zinc and tin contracts not elected for hedge accounting for our European operations.

^(c) U. S. Steel has elected hedge accounting for foreign exchange forwards to exchange USD for CAD. Foreign exchange forwards to exchange euro for USD were not classified as hedges.

At current contract values, \$16 million and \$1 million currently in AOCI as of December 31, 2018 will be recognized as an increase in cost of sales and a decrease in net sales, respectively, over the next year as related hedged items are recognized in earnings. The maximum derivative contract duration for commodity purchase swaps is 24 months and the maximum duration for foreign exchange forwards is 24 months. There are no outstanding contracts for commodity sales swaps.

17. Debt

(In millions)	Interest Rates %	Maturity	December 31,	
			2018	2017
2037 Senior Notes	6.650	2037	\$ 350	\$ 350
2026 Senior Notes	6.250	2026	650	—
2025 Senior Notes	6.875	2025	750	750
2021 Senior Secured Notes	8.375	2021	—	780
2020 Senior Notes	7.375	2020	—	432
Environmental Revenue Bonds	5.750 - 6.875	2019 - 2042	400	400
Fairfield Caster Lease		2022	22	24
Other capital leases and all other obligations		2019	6	1
Fourth Amended and Restated Credit Agreement	Variable	2023	—	—
USSK Credit Agreement	Variable	2023	229	—
USSK credit facilities	Variable	2021	—	—
Total debt			2,407	2,737
Less unamortized discount and debt issuance costs			26	34
Less short-term debt and long-term debt due within one year			65	3
Long-term debt			\$ 2,316	\$ 2,700

Senior Note Repurchases and Redemption

Through a series of open market purchases, U. S. Steel repurchased approximately \$75 million of its 7.375% Senior Notes due 2020 at a weighted average price of 107.119 percent of par during 2018. The aggregate cash flow for the open market purchases was \$80 million which included approximately \$5 million of premiums. U. S. Steel redeemed the remaining \$357 million of 7.375% Senior Notes due 2020 for 105.307 percent of par. The aggregate cash flow for the redemption was approximately \$376 million, which included approximately \$19 million of premiums.

Senior Secured Note Tender and Redemption

In March 2018, pursuant to a cash tender offer, U. S. Steel repurchased approximately \$499 million aggregate principal amount of its outstanding 8.375% Senior Secured Notes due 2021 (2021 Senior Secured Notes). The aggregate cash outflow from the tender was approximately \$538 million, which included \$39 million of premiums. The remaining approximately \$281 million aggregate principal amount of 2021 Senior Secured Notes was redeemed in April 2018. The aggregate cash flow from the redemption was \$302 million, which included \$21 million of premiums.

Issuance of Senior Notes due 2026

In March 2018, U. S. Steel issued \$650 million aggregate principal amount of 6.250% Senior Notes due 2026 (2026 Senior Notes). U. S. Steel received net proceeds from the offering of approximately \$640 million after fees of approximately \$10 million related to underwriting and third-party expenses. The net proceeds from the issuance of the 2026 Senior Notes, together with cash on hand, were used to tender or otherwise redeem all of our outstanding 2021 Senior Secured Notes as discussed above.

The 2026 Senior Notes are senior and unsecured obligations that rank equally in right of payment with all of our other existing and future senior and unsecured indebtedness. U. S. Steel will pay interest on the notes semi-annually in arrears on March 15th and September 15th of each year, commencing on September 15, 2018.

Similar to our other senior notes, the indenture governing the 2026 Senior Notes restricts our ability to create certain liens, to enter into sale leaseback transactions and to consolidate, merge, transfer or sell all, or substantially

all of our assets. It also contains provisions requiring the purchase of the 2026 Senior Notes upon a change of control under certain specified circumstances, as well as other customary provisions.

U. S. Steel may redeem the 2026 Senior Notes, in whole or in part, at our option at any time, or from time to time, on or after March 15, 2021 at the redemption price for such notes set forth below as a percentage of the principal amount, plus accrued and unpaid interest, if any, to, but excluding the redemption date, if redeemed during the twelve-month period beginning March 15 of the years indicated below:

Year	Redemption Price
2021	103.125 %
2022	101.563 %
2023 and thereafter	100.000 %

At any time prior to March 15, 2021, U. S. Steel may also redeem up to 35% of the original aggregate principal amount of the 2026 Senior Notes at 106.25%, plus accrued and unpaid interest, if any, up to, but excluding the applicable date of redemption, with proceeds from equity offerings.

Fourth Amended and Restated Credit Agreement

On February 26, 2018, U. S. Steel entered into the Fourth Amended and Restated Credit Agreement (Credit Facility Agreement), replacing the Company's Third Amended and Restated Credit Agreement. The Credit Facility Agreement maintains the facility size of \$1.5 billion and extends the maturity date to 2023.

As of December 31, 2018, there were no amounts drawn under the \$1.5 billion Credit Facility Agreement. U. S. Steel must maintain a fixed charge coverage ratio of at least 1.00 to 1.00 for the most recent four consecutive quarters when availability under the Credit Facility Agreement is less than the greater of 10 percent of the total aggregate commitments and \$150 million. Based on the most recent four quarters as of December 31, 2018, we would have met this covenant. If we are unable to meet this covenant in future periods, the amount available to the Company under this facility would be reduced by \$150 million.

The Credit Facility Agreement provides for borrowings at interest rates based on defined, short-term market rates plus a spread based on availability and includes other customary terms and conditions including restrictions on our ability to create certain liens and to consolidate, merge or transfer all, or substantially all, of our assets. The Credit Facility Agreement expires in February 2023. Maturity may be accelerated 91 days prior to the stated maturity of any outstanding senior debt if excess cash and credit facility availability do not meet the liquidity conditions set forth in the Credit Facility Agreement. Borrowings are secured by liens on certain North American inventory and trade accounts receivable.

U. S. Steel Košice (USSK) credit facilities

On September 26, 2018, USSK and one of its wholly owned subsidiaries, as guarantor, entered into a €460 million unsecured revolving credit facility (USSK Credit Agreement), replacing USSK's €200 million revolving credit facility (Prior Facility). The USSK Credit Agreement has a maturity date of September 26, 2023 and contains terms and conditions substantially similar to the Prior Facility. Concurrent with the execution of the USSK Credit Agreement, USSK reduced the size of a separate €40 million unsecured credit facility to €20 million.

At December 31, 2018, USSK had borrowings of €200 million (approximately \$229 million) under its €460 million (approximately \$527 million) unsecured revolving credit facility. At December 31, 2017, USSK had no borrowings under the Prior Facility. The USSK Credit Agreement contains certain USSK financial covenants, including a maximum net debt to EBITDA ratio and a minimum stockholders' equity to assets ratio. The covenants are measured semi-annually for the period covering the last twelve calendar months and calculated as set forth in the USSK Credit Agreement. If USSK does not comply with the USSK Credit Agreement financial covenants, it may not draw on the facility until the next measurement date, outstanding borrowings may be accelerated, or the margin on outstanding borrowings may be increased. At December 31, 2018, USSK had availability of €260 million (approximately \$298 million) under the USSK Credit Agreement.

At December 31, 2018, USSK had no borrowings under its €20 million and €10 million unsecured credit facilities (collectively approximately \$34 million) and the availability was approximately \$32 million due to approximately \$2 million of customs and other guarantees outstanding. At December 31, 2017, USSK had no borrowings under

its €40 million and €10 million unsecured credit facilities (collectively approximately \$60 million) and the availability was approximately \$57 million due to approximately \$3 million of customs and other guarantees outstanding. During the fourth quarter of 2018, USSK amended its €20 million and €10 million credit facilities, extending the maturity of both credit facilities to December 2021.

Each of these facilities bear interest at the applicable inter-bank offer rate plus a margin and contain customary terms and conditions.

Change in control event

If there is a change in control of U. S. Steel: (a) debt obligations totaling \$1,979 million as of December 31, 2018 may be declared due and payable; (b) the Credit Facility Agreement and the USSK credit facilities may be terminated and any amounts outstanding declared due and payable; and (c) U. S. Steel may be required to either repurchase the leased Fairfield Works slab caster for \$22 million or provide a letter of credit to secure the remaining obligation.

Debt Maturities – Aggregate maturities of debt are as follows (in millions):

2019	2020	2021	2022	2023	Later Years	Total
\$ 65	\$ 4	\$ 4	\$ 10	\$ 229	\$ 2,095	\$ 2,407

18. Pensions and Other Benefits

U. S. Steel has defined contribution or multi-employer retirement benefits for more than three-quarters of its employees in the United States and non-contributory defined benefit pension plans covering the remaining employees. Benefits under the defined benefit pension plans are based upon years of service and final average pensionable earnings, or a minimum benefit based upon years of service, whichever is greater. In addition, pension benefits for most non-represented employees under these plans are based upon a percent of total career pensionable earnings. Effective December 31, 2015, non-represented participants in the defined benefit plan no longer accrue additional benefits under the plan. For those without defined benefit coverage (defined benefit pension plan was closed to new participants in 2003) and those for which the defined benefit plan was frozen, the Company also provides a retirement account benefit based on salary and attained age. Most non-represented employees also participate in defined contribution plans (401(k) plans) whereby the Company matches a certain percentage of salary based on the amount contributed by the participant. At December 31, 2018, more than two-thirds of U. S. Steel's represented employees in the United States are covered by the Steelworkers Pension Trust (SPT), a multi-employer pension plan, to which U. S. Steel contributes on the basis of a fixed dollar amount for each hour worked.

On November 13, 2018, the USW ratified successor four year Collective Bargaining Agreements with U. S. Steel and its U. S. Steel Tubular Products, Inc. subsidiary (the 2018 Labor Agreements). The 2018 Labor Agreements were effective as of September 1, 2018 and expire on September 1, 2022. As a result of the 2018 Labor Agreements, the defined benefit pension liability increased \$26 million after considering higher wages on final average pay formulas and higher flat rate minimum multipliers.

U. S. Steel's defined benefit retiree health care and life insurance plans (Other Benefits) cover the majority of its represented employees in the United States upon their retirement. Health care benefits are provided for Medicare and pre-Medicare retirees, with Medicare retirees largely enrolled in Medicare Advantage Plans. Both are subject to various cost sharing features, and in most cases domestically, an employer cap on total costs. The Other Benefits plan was closed to represented employees hired or rehired under certain conditions on or after January 1, 2016.

Per an amendment effective June 30, 2014 to the retiree medical and retiree life insurance plan, benefits for non-represented employees who retired after December 31, 2017 were eliminated.

The majority of U. S. Steel's European employees are covered by government-sponsored programs into which U. S. Steel makes required contributions. Also, U. S. Steel sponsors defined benefit plans for most European employees covering benefit payments due to employees upon their retirement, some of which are government mandated. These same employees receive service awards throughout their careers based on stipulated service and, in some cases, age and service.

U. S. Steel uses a December 31 measurement date for its plans and may have an interim measurement date if significant events occur. Details relating to Pension Benefits and Other Benefits are below.

(In millions)	Pension Benefits		Other Benefits	
	2018	2017	2018	2017
Change in benefit obligations				
Benefit obligations at January 1	\$ 6,107	\$ 6,214	\$ 2,379	\$ 2,432
Service cost	49	50	17	17
Interest cost	233	235	92	94
Plan amendments	26	—	—	—
Actuarial (gains) losses	(223)	214	(185)	8
Exchange rate loss	(3)	4	—	—
Settlements, curtailments and termination benefits	(18)	(12)	—	—
Benefits paid	(545)	(598)	(182)	(172)
Benefit obligations at December 31	\$ 5,626	\$ 6,107	\$ 2,121	\$ 2,379
Change in plan assets				
Fair value of plan at January 1	\$ 5,732	\$ 5,482	\$ 2,042	\$ 1,984
Actual return on plan assets	(228)	773	(49)	171
Employer contributions	—	75	—	—
Benefits paid from plan assets	(544)	(598)	(133)	(113)
Fair value of plan assets at December 31	\$ 4,960	\$ 5,732	\$ 1,860	\$ 2,042
Funded status of plans at December 31	(666)	(375)	(261)	(337)

Amounts recognized in accumulated other comprehensive loss:

(In millions)	12/31/2017	2018		12/31/2018
		Amortization	Activity	
Pensions				
Prior Service Cost	\$ (8)	\$ —	\$ 26	\$ 18
Actuarial Losses	2,238	(152)	356	2,442
Other Benefits				
Prior Service Cost	(51)	(29)	—	(80)
Actuarial Losses	41	(4)	(54)	(17)

As of December 31, 2018 and 2017, the following amounts were recognized in the Consolidated Balance Sheet:

(In millions)	Pension Benefits		Other Benefits	
	2018	2017	2018	2017
Current liabilities	(2)	(4)	(52)	(59)
Noncurrent liabilities	(664)	(371)	(209)	(278)
Accumulated other comprehensive loss ^(a)	2,460	2,230	(97)	(10)
Net amount recognized	\$ 1,794	\$ 1,855	\$ (358)	\$ (347)

^(a) Accumulated other comprehensive loss effects associated with accounting for pensions and other benefits in accordance with ASC Topic 715 at December 31, 2018 and December 31, 2017, respectively, are reflected net of tax of \$991 million and \$958 million respectively, on the Consolidated Statements of Stockholders' Equity.

The Accumulated Benefit Obligation (ABO) for all defined benefit pension plans was \$5,454 million and \$5,937 million at December 31, 2018 and 2017, respectively.

(In millions)	December 31,	
	2018	2017
Information for pension plans with an accumulated benefit obligation in excess of plan assets:		
Aggregate accumulated benefit obligations (ABO)	\$ (5,454)	\$ (5,937)
Aggregate projected benefit obligations (PBO)	(5,626)	(6,107)
Aggregate fair value of plan assets	4,960	5,732

The aggregate PBO in excess of plan assets reflected above is included in the payroll and benefits payable and employee benefits lines on the Consolidated Balance Sheet.

Following are the details of net periodic benefit costs related to Pension and Other Benefits:

(In millions)	Pension Benefits			Other Benefits		
	2018	2017	2016	2018	2017	2016
Components of net periodic benefit cost:						
Service cost	\$ 49	\$ 50	\$ 54	\$ 17	\$ 17	\$ 20
Interest cost	233	235	258	92	94	98
Expected return on plan assets	(361)	(390)	(422)	(82)	(65)	(151)
Amortization - prior service costs	—	—	11	29	29	26
- actuarial losses	152	148	129	4	3	3
Net periodic benefit cost (benefit), excluding below	73	43	30	60	78	(4)
Multiemployer plans ^(a)	60	59	63	—	—	—
Settlement, termination and curtailment losses/(gains)	10	7	13	—	—	(1)
Net periodic benefit cost (benefit)	\$ 143	\$ 109	\$ 106	\$ 60	\$ 78	\$ (5)

(a) Primarily represents pension expense for the SPT covering USW employees hired from National Steel Corporation and new USW employees hired after May 21, 2003.

Net periodic benefit cost for pensions and other benefits is projected to be approximately \$158 million and approximately \$57 million, respectively, in 2019. The pension cost projection includes approximately \$66 million of contributions to the SPT. The amounts in accumulated other comprehensive income that are expected to be recognized as components of net periodic benefit cost during 2019 are as follows:

(In millions)	Pension Benefits 2019	Other Benefits 2019
Amortization of actuarial loss	\$ 131	\$ 3
Amortization of prior service cost	2	29
Total recognized from accumulated other comprehensive income	\$ 133	\$ 32

Weighted average assumptions used to determine the benefit obligation at December 31 and net periodic benefit cost for the year ended December 31 are detailed below.

	Pension Benefits		Other Benefits	
	2018	2017	2018	2017
	U.S. and Europe	U.S. and Europe	U.S.	U.S.
Actuarial assumptions used to determine benefit obligations at December 31:				
Discount rate	4.41%	4.00%	4.47%	4.03%
Increase in compensation rate	2.60%	2.60%	N/A	N/A

	Pension Benefits		
	2018	2017	2016
	U.S. and Europe	U.S. and Europe	U.S. and Europe
Actuarial assumptions used to determine net periodic benefit cost for the year ended December 31:			
Discount rate	4.00%	4.00%	4.25%
Expected annual return on plan assets	6.85%	7.25%	7.50%
Increase in compensation rate	2.60%	2.60%	2.60%

	Other Benefits		
	2018	2017	2016
	U.S.	U.S.	U.S.
Discount rate	4.03%	4.00%	4.25%
Expected annual return on plan assets	4.25%	3.25%	7.50%
Increase in compensation rate	N/A	3.50%	3.50%

The discount rate reflects the current rate at which the pension and other benefit liabilities could be effectively settled at the measurement date. In 2016 and prior years, the discount rate for our U.S. plans was determined by utilizing several AAA and AA corporate bond indices as an indication of interest rate movements and levels. In 2017, we refined our discount rate determination process for our U.S. plans by using a bond matching approach to select specific bonds that would satisfy our projected benefit payments. We believe the bond matching approach more closely reflects the process we would employ to settle our pension and other benefits obligations. For our European pension plan, the discount rate is determined using a yield curve methodology based on European bonds. The discount rate assumptions are updated annually.

Assumed health care cost trend rates at December 31:	2018	2017
	U.S.	U.S.
Health care cost trend rate assumed for next year	7.00%	7.00%
Rate to which the cost trend rate is assumed to decline (the ultimate trend rate)	5.00%	5.00%
Year that the rate reaches the ultimate trend rate	2023	2022

A one-percentage-point change in the assumed return on plan assets, discount rate or health care cost trend rates would have the following effects:

(In millions)	1-Percentage-Point Increase	1-Percentage-Point Decrease
Expected return on plan assets		
Incremental (decrease) increase in:		
Net periodic pension & other benefits costs for 2019	\$ (69)	\$ 69
Discount rate		
Incremental (decrease) increase in:		
Net periodic pension & other benefits costs for 2019	\$ (18)	\$ 8
Pension & other benefits liabilities at December 31, 2018	\$ (650)	\$ 770
Health care cost escalation trend rates		
Incremental increase (decrease) in:		
Other post-employment benefit obligations	\$ 77	\$ (66)
Service and interest costs components for 2019	\$ 4	\$ (3)

U. S. Steel reviews its actual historical rate experience and expectations of future health care cost trends to determine the escalation of per capita health care costs under U. S. Steel's benefit plans. About three quarters of our costs for the domestic USW participants' retiree health benefits in the Company's main domestic benefit plan are limited to a per capita dollar maximum calculation based on 2006 base year actual costs incurred under the main U. S. Steel benefit plan for USW participants (cost cap). The full effect of the cost cap is expected to be

realized around 2025. After 2025, the Company's costs for a majority of USW retirees and their dependents are expected to remain fixed and as a result, the cost impact of health care escalation for the Company is projected to be limited for this group.

Plan Assets

On January 1, 2016, U. S. Steel adopted Accounting Standards Update 2015-07, *Fair Value Measurement (Topic 820) Disclosures for Investments in Certain Entities that Calculate Net Asset Value per Share (or Its Equivalent)* (ASU 2015-07). ASU 2015-07 removes the requirement to categorize within the fair value hierarchy all investments for which fair value is measured using the net asset value per share practical expedient.

ASC Topic 820 establishes a single definition of fair value, creates a three-tier hierarchy as a framework for measuring fair value based on inputs used to value the Plan's investments, and requires additional disclosure about fair value. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (level 1) and the lowest priority to unobservable inputs (level 3). The three levels of the fair value hierarchy are summarized below:

- Level 1 – Inputs to the valuation methodology are unadjusted quoted prices for identical assets or liabilities in active markets that the Plan has 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;
 - 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.

U. S. Steel's Pension plan and Other Benefits plan assets are classified as follows:

Level 1	Level 2	Level 3
Short-term Investments	Corporate Bonds - U.S. & Non U.S.	Private Equities
Equity Securities - U.S. & Non U.S.	Government Bonds - U.S. & Non U.S.	Real Estate
Exchange-traded Funds	Mortgage and asset-backed securities	Mineral Interests
Investment Trusts		Timberlands

An instrument's level is based on the lowest level of any input that is significant to the fair value measurement. Valuation techniques maximize the use of relevant observable inputs and minimize the use of unobservable inputs. The following is a description of the valuation methodologies used for assets measured at fair value. There have been no changes in the methodologies used at December 31, 2018 and 2017.

Short-term investments are valued at amortized cost which approximates fair value due to the short-term maturity of the instruments. Equity securities - U.S. & Non U.S., investments in investment trusts and exchange-traded funds are valued at the closing price reported on the active exchange on which the individual securities are traded. U.S. & Non U.S. government bonds are valued using pricing models maximizing the use of observable inputs for similar securities. Corporate U.S. & Non U.S. bonds are also valued using pricing models maximizing the use of observable inputs for similar securities, which includes basing value on yields currently available on comparable securities of issuers with similar credit ratings. When quoted prices are not available for identical or similar bonds, the bond is valued under a discounted cash flow approach that maximizes observable inputs, such as current yields of similar instruments, but includes adjustments for certain risks that may not be observable, such as credit and liquidity risks. Mortgage and asset-backed securities are valued using quotes from a broker dealer. Investments in non-public investment partnerships are valued using net asset value (NAV) as a practical expedient. Private equities and real estate are valued using information provided by external managers for each individual investment held in the fund or using NAV as a practical expedient. Timberland investments are either appraised or valued using the investment managers' assessment of the assets within the fund. Mineral Interests are valued at the present value of estimated future cash flows discounted at estimated market rates for assets of similar quality and duration.

The following is a summary of U. S. Steel's Pension plan assets carried at fair value at December 31, 2018 and 2017:

Fair Value Measurements at December 31, 2018 (in millions)				
Asset Classes	Total	Quoted Prices in Active Markets (Level 1)	Other Significant Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Short-term investments	\$ 7	\$ 7	\$ —	\$ —
Equity Securities ^(a)	101	101	—	—
Corporate & Government Bonds ^(b)	2,143	—	2,143	—
Mineral Interests	2	—	—	2
Timberlands	294	—	—	294
Private equities ^(c)	2	—	—	2
Real Estate ^(d)	33	—	—	33
All Other ^(e)	14	14	—	—
Total assets in the fair value hierarchy	\$ 2,596	\$ 122	\$ 2,143	\$ 331
Investments measured at net asset value ^(f)	2,364			
Investments at fair value	\$ 4,960			

(a) Includes \$95 million of U.S. equity securities and \$6 million of Non U.S. equity securities.

(b) Underlying investments include:

Corporate Bonds – U.S.	\$ 933
Corporate Bonds - Non U.S.	149
Government Bonds – U.S.	858
Government Bonds - Non U.S.	67
Mortgage and asset-backed securities	136
Total	\$ 2,143

(c) Includes investments in CAI Partners and Company III LP, Clayton Dubilier Rice Fund VI and Epiris Club 2007.

(d) Includes investments in the Avanti Funds and the Mariano Ranch properties.

(e) Includes \$32 million of cash, \$57 million of investment sales, \$21 million of accrued income, \$(80) million of investment purchases and \$(16) million of miscellaneous payables.

(f) In accordance with ASC Topic 820, certain investments that were measured at net asset value per share (or its equivalent) have not been classified in the fair value hierarchy.

The following table represents investments based on net asset value and the significant unobservable inputs and the ranges of values for those inputs:

	Net Asset Value at December 31, 2018	Unfunded Commitments	Redemption Frequency	Redemption Notice Period
Private Equity Funds ^(a)	\$ 254	\$ 68	Not redeemable	NA
Real Estate Funds ^(a)	236	93	Not redeemable	NA
Commingled Funds	1,874	NA	NA	NA
Investments measured at net asset value	\$ 2,364			

(a) The remaining lives of such investments range from approximately less than 1 year to up to 10 years.

Fair Value Measurements at December 31, 2017 (in millions)

	Total	Quoted Prices in Active Markets (Level 1)	Other Significant Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Asset Classes				
Short-term investments	\$ 155	\$ 155	\$ —	\$ —
Equity Securities - U.S. ^(a)	260	260	—	—
Corporate & Government Bonds ^(b)	1,806	—	1,806	—
Mineral Interests	3	—	—	3
Timberlands	300	—	—	300
Private equities ^(c)	4	—	—	4
Real Estate ^(d)	33	—	—	33
All Other ^(e)	(39)	(39)	—	—
Total assets in the fair value hierarchy	\$ 2,522	\$ 376	1,806	\$ 340
Investments measured at net asset value ^(f)	3,210			
Investments at fair value	\$ 5,732			

(a) Includes U. S. Steel stock.

(b) Underlying investments include:

Corporate Bonds – U.S.	\$ 1,084
Government Bonds – U.S.	720
Agency Mortgages	2
Total	\$ 1,806

(c) Includes investments in CAI Partners and Company III LP, Clayton Dubilier Rice Fund VI, Epiris Club 2007 and FF&P Investor 8 ERISA LP.

(d) Includes investments in the Avanti Funds and the Mariano Ranch properties.

(e) Includes \$157 million of investment sales, \$19 million of accrued income, and \$(197) million of investment purchases and \$(18) million of miscellaneous payables.

(f) In accordance with ASC Topic 820, certain investments that were measured at net asset value per share (or its equivalent) have not been classified in the fair value hierarchy.

The following table represents investments based on net asset value and the significant unobservable inputs and the ranges of values for those inputs:

	Net Asset Value at December 31, 2017	Unfunded Commitments	Redemption Frequency	Redemption Notice Period
Private Equity Funds ^(a)	\$ 252	\$ 91	Not redeemable	N/A
Real Estate Funds ^(a)	260	117	**	N/A
Interest in Investment Partnerships ^(b)	729	N/A	N/A	N/A
Commingled Funds	1,969	N/A	N/A	N/A
Investments measured at net asset value	\$ 3,210			

** Not redeemable, except for JP Morgan Real Estate Income & Growth, which has a quarterly redemption provision.

(a) The remaining lives of such investments range from approximately less than 1 year to up to 11 years.

(b) Investment partnerships whose investment objectives are to achieve long-term capital appreciation by investing in global equity markets.

The following table sets forth a summary of changes in the fair value of U. S. Steel's Pension plan Level 3 assets for the years ended December 31, 2018 and 2017 (in millions):

(In millions)	Level 3 assets only	
	2018	2017
Balance at beginning of period	\$ 340	\$ 357
Transfers in and/or out of Level 3	—	—
Actual return on plan assets:		
Realized gain	11	2
Net unrealized loss	(8)	(16)
Purchases, sales, issuances and settlements:		
Sales	(12)	(3)
Balance at end of period	\$ 331	\$ 340

The following is a summary of U. S. Steel's Other Benefits plan assets carried at fair value at December 31, 2018 and 2017.

Fair Value Measurements at December 31, 2018 (in millions)					
Asset Classes	Total	Quoted Prices in Active Markets (Level 1)	Other Significant Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	
Short-term investments	\$ 42	\$ 42	—	—	—
Equity Securities ^(a)	45	45	—	—	—
Corporate & Government Bonds ^(b)	1,631	—	1,631	—	—
Timberlands	35	—	—	—	35
All Other ^(c)	13	13	—	—	—
Total assets in the fair value hierarchy	\$ 1,766	\$ 100	\$ 1,631	\$	35
Investments measured at net asset value ^(d)	94				
Investments at fair value	\$ 1,860				

(a) Includes \$27 million of U.S. equity securities and \$18 million of Non U.S. equity securities.

(b) Underlying investments include:

Corporate Bonds – U.S.	\$ 1,052
Corporate Bonds - Non U.S.	271
Government Bonds – U.S.	270
Government Bonds - Non U.S.	8
Mortgage and asset-backed securities	30
Total	\$ 1,631

(c) Includes \$16 million of accrued income and \$(3) million of investment purchase payables.

(d) In accordance with Subtopic 820-10, certain investments that were measured at net asset value per share (or its equivalent) have not been classified in the fair value hierarchy.

The following table represents investments based on net asset value and the significant unobservable inputs and the ranges of values for those inputs:

	Net Asset Value at December 31, 2018	Unfunded Commitments	Redemption Frequency	Redemption Notice Period
Private Equity Funds ^(a)	\$ 61	\$ 10	Not redeemable	NA
Real Estate Funds ^(a)	33	12	Not redeemable	NA
Investments measured at net asset value	\$ 94			

(a) The remaining lives of such investments range from approximately less than 1 year up to 10 years.

Fair Value Measurements at December 31, 2017 (in millions)				
Asset Classes	Total	Quoted Prices in Active Markets (Level 1)	Other Significant Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Short-term investments	54	54	—	—
Equity Securities - U.S.	29	29	—	—
Corporate Bonds - U.S.	1,455	—	1,455	—
Government bonds - U.S.	323	—	323	—
Timberlands	34	—	—	34
Private equities ^(a)	1	—	—	1
All Other ^(b)	39	39	—	—
Total assets in the fair value hierarchy	\$ 1,935	\$ 122	1,778	\$ 35
Investments measured at net asset value ^(c)	107			
Investments at fair value	\$ 2,042			

(a) Includes investment in Epiris Club 2007 (formerly Electra Partners Club 2007 LP) and FF&P Investor 8 ERISA LP.

(b) Includes \$23 million of investment sales, \$17 million of accrued income and \$(1) million of investment purchase payables.

(c) In accordance with Subtopic 820-10, certain investments that were measured at net asset value per share (or its equivalent) have not been classified in the fair value hierarchy.

The following table represents investments based on net asset value and the significant unobservable inputs and the ranges of values for those inputs:

	Net Asset Value at December 31, 2017	Unfunded Commitments	Redemption Frequency	Redemption Notice Period
Private Equity Funds ^(a)	\$ 62	\$ 15	Not redeemable	N/A
Real Estate Funds ^(a)	33	15	**	N/A
Interest in Investment Partnerships ^(b)	12	N/A	N/A	N/A
Investments measured at net asset value	\$ 107			

** Not redeemable, except for JP Morgan U.S. Real Estate Income & Growth, which has a quarterly redemption provision.

(a) The remaining lives of such investments range from approximately less than 1 year to up to 11 years.

(b) Investment partnerships whose investment objectives are to achieve long-term capital appreciation by investing in global equity markets.

The following table sets forth a summary of changes in the fair value of U. S. Steel's Other Benefits plan Level 3 assets for the years ended December 31, 2018 and 2017 (in millions):

(In millions)	Level 3 assets only	
	2018	2017
Balance at beginning of period	\$ 35	\$ 38
Transfers in and/or out of Level 3	—	—
Actual return on plan assets:		
Realized gain	1	—
Net unrealized loss	(1)	(2)
Purchases, sales, issuances and settlements:		
Sales	—	(1)
Balance at end of period	\$ 35	\$ 35

U. S. Steel's investment strategy for its U.S. pension and other benefits plan assets provides for a diversified mix of high quality bonds, public equities and selected smaller investments in private equities, timber and mineral interests. For its U.S. pension, U. S. Steel has a target allocation for plan assets of 45 percent in corporate bonds, government bonds and mortgage and asset-backed securities. The balance is invested in equity securities, timber, private equity and real estate partnerships. U. S. Steel believes that returns on equities over the long term will be higher than returns from fixed-income securities as actual historical returns from U. S. Steel's trusts have shown. Returns on bonds tend to offset some of the short-term volatility of stocks. Both equity and fixed-income

investments are made across a broad range of industries and companies (both domestic and foreign) to provide protection against the impact of volatility in any single industry as well as company specific developments. U. S. Steel will use a 6.50 percent assumed rate of return on assets for the development of net periodic cost for the main defined benefit pension plan in 2019. The 2019 assumed rate of return is lower than the rate of return used for 2018 domestic expense and was determined by taking into account the intended asset mix and some moderation of the historical premiums that fixed-income and equity investments have yielded above government bonds. Actual returns since the inception of the plan have exceeded this 6.50 percent rate and while recent annual returns have been volatile, it is U. S. Steel's expectation that rates will achieve this level in future periods.

For its Other Benefits Plan, U. S. Steel is now employing a liability driven investment strategy. The plan assets are allocated to match the plan cash flows with maturing investments. To achieve this strategy, U. S. Steel has a target allocation for plan assets of 90 percent in high quality bonds with the balance primarily invested in equity securities, timber, private equity and real estate partnerships. U. S. Steel will use a 4.25 percent assumed rate of return on assets for the development of net periodic cost for its Other Benefits Plan. The 2019 assumed rate of return has been conservatively set, taking into account the intended asset mix.

Steelworkers Pension Trust

For most bargaining unit employees participating in the SPT, U. S. Steel contributes to the SPT a fixed dollar amount for each hour worked of \$2.65 through December 31, 2018. Please see Note 28 for increases to the fixed dollar contribution amount that are included in the 2018 Labor Agreement. U. S. Steel's contributions to the SPT represented greater than 5% of the total combined contributions of all employers participating in the plan for the years ended December 31, 2018, 2017 and 2016.

Participation in a multi-employer pension plan agreed to under the terms of a collective bargaining agreement differ from a traditional qualified single employer defined benefit pension plan. The SPT shares risks associated with the plan in the following respects:

- a. Contributions to the SPT by U. S. Steel may be used to provide benefits to employees of other participating employers;
- b. If a participating employer stops contributing to the SPT, the unfunded obligations of the plan may be borne by the remaining participating employers;
- c. If U. S. Steel chooses to stop participating in the SPT, U. S. Steel may be required to pay an amount based on the underfunded status of the plan, referred to as a withdrawal liability.

On March 21, 2011 the Board of Trustees of the SPT elected funding relief which has the effect of decreasing the amount of required minimum contributions in near-term years, but will increase the minimum funding requirements during later plan years. As a result of the election of funding relief, the SPT's zone funding under the Pension Protection Act may be impacted.

In addition to the funding relief election, the Board of Trustees also elected a special amortization rule, which allows the SPT to separately amortize investment losses incurred during the SPT's December 31, 2008 plan year-end over a 29 year period, whereas they were previously required to be amortized over a 15 year period.

U. S. Steel’s participation in the SPT for the annual periods ended December 31, 2018, 2017 and 2016 is outlined in the table below.

Pension Fund	Employer Identification Number/ Pension Plan Number	Pension Protection Act Zone Status as of December 31 ^(a)		FIP/RP Status Pending/Implemented ^(b)	U.S. Steel Contributions (in millions)			Surcharge Imposed ^(c)		Expiration Date of Collective Bargaining Agreement
		2018	2017		2018	2017	2016	2018	2017	
Steelworkers Pension Trust	23-6648508/499	Green	Green	No	\$ 60	\$ 59	\$ 63	No	No	September 1, 2022

(a) The zone status is based on information that U. S. Steel received from the plan and is certified by the plan’s actuary. Among other factors, plans in the green zone are at least 80 percent funded, while plans in the yellow zone are less than 80 percent funded and plans in the red zone are less than 65 percent funded.

(b) Indicates if a financial improvement plan (FIP) or a rehabilitation plan (RP) is either pending or has been implemented.

(c) Indicates whether there were charges to U. S. Steel from the plan.

Cash Flows

Employer Contributions – U. S. Steel did not make any voluntary contributions to the pension plan in 2018.

In addition to the contributions to the SPT noted in the table above, on November 20, 2017, U. S. Steel made a voluntary contribution of \$75 million to the U. S. Steel Retirement Plan Trust, which is the funding vehicle for the Company’s main defined pension plan. In 2016, U. S. Steel made a voluntary contribution of 3,763,643 shares of common stock (the shares), par value of \$1.00 per share, to the U. S. Steel Retirement Plan Trust. The shares were valued by an independent valuation firm for the purposes of the contribution at \$26.57 per share, or approximately \$100 million in the aggregate, which was the closing price of the Company’s common stock on August 1, 2016.

For pension plans not funded by trusts, U. S. Steel made \$20 million, \$13 million and \$26 million of pension payments not funded by trusts in 2018, 2017 and 2016, respectively.

Cash payments totaling \$48 million, \$59 million and \$61 million were made for other post-employment benefit payments not funded by trusts in 2018, 2017 and 2016, respectively. In 2018 and 2017, U. S. Steel continued to use assets from our trust for represented retiree health care and life insurance benefits to pay USW post-employment benefit claims.

Estimated Future Benefit Payments – The following benefit payments, which reflect expected future service as appropriate, are expected to be paid from U. S. Steel’s defined benefit plans:

(In millions)	Pension Benefits	Other Benefits
2019	\$ 498	\$ 164
2020	470	184
2021	453	186
2022	440	186
2023	426	185
Years 2024 - 2027	1,962	755

Defined contribution plans

U. S. Steel also contributes to several defined contribution plans for its salaried employees. Effective December 31, 2015, all non-represented salaried employees in North America receive pension benefits through a defined contribution pension plan with contribution percentages based upon age, for which company contributions totaled \$23 million, \$22 million and \$23 million in 2018, 2017 and 2016, respectively. U. S. Steel’s matching contributions to salaried employees’ defined contribution savings fund plans, which for the most part are based on a percentage of the employees’ contributions, totaled \$17 million each year for 2018, 2017 and 2016. U. S. Steel also maintains non-qualified defined contribution plans to provide benefits which are otherwise limited by the Internal Revenue Service for qualified plans. U. S. Steel’s contributions under these defined contribution plans totaled \$4 million in 2018, and \$1 million each year for 2017 and 2016.

Most represented employees are eligible to participate in a defined contribution savings fund plan where there is no company match on savings except for certain Tubular hourly employees. Effective with the 2015 Labor Agreement, represented hires on or after January 1, 2016 are eligible for a \$0.50 per hour savings account contribution. As a result of the 2018 Labor Agreement, increases to the savings account contribution for each hour worked will increase to \$0.55 effective January 1, 2019, \$0.60 effective January 1, 2020, and \$0.65 effective January 1, 2021. These company contributions for represented employees totaled \$2 million in 2018 and \$1 million each year for 2017 and 2016.

Other post-employment benefits

The Company provides benefits to former or inactive employees after employment but before retirement. Certain benefits including workers' compensation and black lung benefits represent material obligations to the Company and under the guidance for nonretirement post-employment benefits, have historically been treated as accrued benefit obligations. Liabilities for these benefits recorded at December 31, 2018, totaled \$110 million as compared to \$116 million at December 31, 2017. Liability amounts were developed assuming a discount rate of 4.36% and 3.57% at December 31, 2018 and 2017. Net periodic benefit cost for these benefits is projected to be \$14 million in 2019 compared to \$10 million in 2018 and \$22 million in 2017.

Pension Funding

In November 2015, pension stabilization legislation further extended a revised interest rate formula to be used to measure defined benefit pension obligations for calculating minimum annual contributions. The new interest rate formula results in higher interest rates for minimum funding calculations as compared to prior law over the next few years, which will improve the funded status of our main defined benefit pension plan and reduce minimum required contributions.

U. S. Steel will monitor the funded status of the plan to determine when voluntary contributions may be prudent in order to mitigate potentially larger mandatory contributions in later years.

19. Asset Retirement Obligations

U. S. Steel's asset retirement obligations (AROs) primarily relate to mine, landfill closure and post-closure costs. The following table reflects changes in the carrying values of AROs for the years ended December 31, 2018 and 2017:

(In millions)	December 31,	
	2018	2017
Balance at beginning of year	\$ 69	\$ 79
Obligations settled	(12)	(8)
Change in estimate of obligations	—	(6)
Foreign currency translation effects	—	2
Accretion expense	3	2
Balance at end of period	\$ 60	\$ 69

Certain AROs related to disposal costs of the majority of fixed assets at our integrated steel facilities have not been recorded because they have an indeterminate settlement date. These AROs will be initially recognized in the period in which sufficient information exists to estimate their fair value.

20. Fair Value of Financial Instruments

The carrying value of cash and cash equivalents, current accounts and notes receivable, accounts payable, bank checks outstanding, and accrued interest included in the Consolidated Balance Sheet approximate fair value. See Note 16 for disclosure of U. S. Steel's derivative instruments, which are accounted for at fair value on a recurring basis.

The following table summarizes U. S. Steel's financial assets and liabilities that were not carried at fair value at December 31, 2018 and 2017.

(In millions)	December 31, 2018		December 31, 2017	
	Fair Value	Carrying Amount	Fair Value	Carrying Amount
Financial liabilities:				
Long-term debt ^(a)	\$ 2,182	\$ 2,353	\$ 2,851	\$ 2,678

(a) Excludes capital lease obligations.

The following methods and assumptions were used to estimate the fair value of financial instruments included in the table above:

Long-term debt: Fair value was determined using Level 2 inputs which were derived from quoted market prices and is based on the yield on public debt where available or current borrowing rates available for financings with similar terms and maturities.

Fair value of the financial assets and liabilities disclosed herein is not necessarily representative of the amount that could be realized or settled, nor does the fair value amount consider the tax consequences of realization or settlement.

Financial guarantees are U. S. Steel's only unrecognized financial instrument. For details relating to financial guarantees see Note 26.

21. Reclassifications from Accumulated Other Comprehensive Income (AOCI)

(In millions) ^(a)	Pension and Other Benefit Items	Foreign Currency Items	Unrealized Gain (Loss) on Derivatives	Total
Balance at December 31, 2016	\$ (1,771)	\$ 274	\$ —	\$ (1,497)
Other comprehensive income before reclassifications	640	189	5	834
Amounts reclassified from AOCI ^(b)	(187)	—	(4)	(191)
Sale of ownership interest in Tilden Mining Company L.C.	9	—	—	9
Net current-period other comprehensive income	462	189	1	652
Balance at December 31, 2017	\$ (1,309)	\$ 463	\$ 1	\$ (845)
Other comprehensive income (loss) before reclassifications	41	(60)	—	(19)
Amounts reclassified from AOCI ^(b)	(148)	—	(14)	(162)
Net current-period other comprehensive loss	(107)	(60)	(14)	(181)
Balance at December 31, 2018	\$ (1,416)	\$ 403	\$ (13)	\$ (1,026)

(a) Amounts in 2017 and 2016 do not reflect a tax benefit as a result of a full valuation allowance on our domestic deferred tax assets.

(b) See table below for further details.

(In millions) ^(a)	Details about AOCI components	Amount reclassified from AOCI		
		2018	2017	2016
Amortization of pension and other benefit items				
	Prior service costs ^(a)	\$ (29)	\$ (29)	\$ (37)
	Actuarial losses ^(a)	(156)	(151)	(132)
	Settlements, termination and curtailment losses ^(a)	(10)	(7)	(12)
	Total pensions and other benefits items	(195)	(187)	(181)
	Derivative reclassifications to Consolidated Statements of Operations	(19)	(4)	(18)
	Total before tax	(214)	(191)	(199)
	Tax benefit ^(b)	52	—	—
	Net of tax	\$ (162)	\$ (191)	\$ (199)

(a) These AOCI components are included in the computation of net periodic benefit cost (see Note 18 for additional details).

(b) Amounts in 2017 and 2016 do not reflect a tax benefit as a result of a full valuation allowance on our domestic deferred tax assets.

22. Supplemental Cash Flow Information

(In millions)	Year Ended December 31,		
	2018	2017	2016
Net cash used in operating activities included:			
Interest and other financial costs paid (net of amount capitalized)	\$ (207)	\$ (242)	\$ (193)
Income taxes paid	\$ (39)	\$ (40)	\$ (6)
Non-cash investing and financing activities:			
Change in accrued capital expenditures	\$ 135	\$ 208	\$ (110)
U. S. Steel common stock issued for employee/non-employee director stock plans	\$ 21	\$ 49	\$ 32
U. S. Steel common stock issued for defined benefit pension plans	\$ —	\$ —	\$ 100

23. Transactions with Related Parties

Net sales to related parties and receivables from related parties primarily reflect sales of raw materials and steel products to equity investees and USSC after the Canada's Companies' Creditors Arrangement Act (CCAA) filing on September 16, 2014, but before the sale to an affiliate of Bedrock on June 30, 2017. Generally, transactions are conducted under long-term contractual arrangements. Related party sales and service transactions were \$1,420 million, \$1,204 million and \$1,216 million in 2018, 2017 and 2016, respectively.

Purchases from related parties for outside processing services provided by equity investees and USSC after the CCAA filing on September 16, 2014, but before the sale to an affiliate of Bedrock on June 30, 2017, amounted to \$29 million, \$70 million and \$80 million during 2018, 2017 and 2016, respectively. Purchases of iron ore pellets from related parties amounted to \$91 million, \$140 million and \$177 million for the years ended December 31, 2018, 2017 and 2016, respectively.

Accounts payable to related parties include balances due to PRO-TEC Coating Company (PRO-TEC) of \$80 million and \$72 million at December 31, 2018 and 2017, respectively for invoicing and receivables collection services provided by U. S. Steel on PRO-TEC's behalf. U. S. Steel, as PRO-TEC's exclusive sales agent, is responsible for credit risk related to those receivables. U. S. Steel also provides PRO-TEC marketing, selling and customer service functions. Payables to other related parties totaled \$1 million and \$2 million at December 31, 2018 and 2017, respectively.

24. Leases

Future minimum commitments for capital leases (including sale-leasebacks accounted for as financings) and for operating leases having initial non-cancelable lease terms in excess of one year are as follows:

(In millions)	Capital Leases	Operating Leases
2019	\$ 5	\$ 66
2020	5	55
2021	5	45
2022	11	37
2023	—	28
Later years	—	72
Total minimum lease payments	\$ 26	\$ 303
Less imputed interest costs	4	
Present value of net minimum lease payments included in long-term debt (see Note 17)	\$ 22	

Operating lease rental expense:

(In millions)	Year Ended December 31,		
	2018	2017	2016
Minimum rentals	\$ 114	\$ 114	\$ 115
Contingent rentals	19	10	8
Net rental expense	\$ 133	\$ 124	\$ 123

U. S. Steel leases a wide variety of facilities and equipment under operating leases, including land and building space, office equipment, production equipment and transportation equipment. Most long-term leases include renewal options and, in certain leases, purchase options. See the discussion of residual value guarantees under “Other contingencies” in Note 26. Contingent rental payments are determined based on operating lease agreements that include floating rental charges that are directly associated to variable operating components.

25. Restructuring and Other Charges

During 2018, restructuring charges recorded were immaterial. Cash payments were made related to severance and exit costs of \$21 million.

During 2017, U. S. Steel recorded net restructuring charges of approximately \$31 million, which consists of charges of \$37 million primarily related to the permanent shutdown and relocation of the No. 6 Quench & Temper Mill at Lorain Tubular Operations and a favorable adjustment of \$6 million primarily associated with a change in estimate for previously recorded costs for environmental obligations and Company-wide headcount reductions. Cash payments were made related to severance and exit costs of \$32 million.

During 2016, U. S. Steel recorded net restructuring charges of approximately \$122 million, which consists of: (1) charges of \$124 million related to the permanent shutdown of the Lorain #4, Lone Star #1 and Bellville pipe mills within our Tubular segment; (2) charges of \$24 million for Company-wide headcount reductions, including within our Flat-Rolled, Tubular and USSE segments; and (3) a favorable adjustment of \$26 million primarily associated with a change in estimate for previously recorded costs for Company-wide headcount reductions. Cash payments were made related to severance and exit costs of \$79 million.

Charges for restructuring and ongoing cost reduction initiatives are recorded in the period U. S. Steel commits to a restructuring or cost reduction plan, or executes specific actions contemplated by the plan and all criteria for liability recognition have been met. Charges related to the restructuring and cost reductions are reported in restructuring and other charges in the Consolidated Statements of Operations.

The activity in the accrued balances incurred in relation to restructuring and other cost reduction programs during the years ended December 31, 2018 and December 31, 2017 were as follows:

(in millions)	Employee Related Costs	Exit Costs	Non-cash Charges	Total
Balance at December 31, 2016	\$ 14	\$ 60	\$ —	\$ 74
Additional charges	2	—	35 ^(a)	37
Cash payments/utilization	(8)	(24)	(35)	(67)
Other adjustments and reclasses	(4)	(2)	—	(6)
Balance at December 31, 2017	\$ 4	\$ 34	\$ —	\$ 38
Cash payments/utilization	(4)	(17)	—	(21)
Balance at December 31, 2018	\$ —	\$ 17	\$ —	\$ 17

^(a) Charges are primarily related to the write down of assets associated with the permanent shutdown of the No. 6 Quench & Temper Mill at Lorain Tubular Operations.

Accrued liabilities for restructuring and other cost reduction programs are included in the following balance sheet lines:

(in millions)	December 31, 2018		December 31, 2017	
Accounts payable	\$	11	\$	26
Payroll and benefits payable		—		4
Deferred credits and other noncurrent liabilities		6		8
Total	\$	17	\$	38

26. Contingencies and Commitments

U. S. Steel is the subject of, or party to, a number of pending or threatened legal actions, contingencies and commitments involving a variety of matters, including laws and regulations relating to the environment. Certain of these matters are discussed below. The ultimate resolution of these contingencies could, individually or in the aggregate, be material to the Consolidated Financial Statements. However, management believes that U. S. Steel will remain a viable and competitive enterprise even though it is possible that these contingencies could be resolved unfavorably.

U. S. Steel accrues for estimated costs related to existing lawsuits, claims and proceedings when it is probable that it will incur these costs in the future and the costs are reasonably estimable.

Asbestos matters – As of December 31, 2018, U. S. Steel was a defendant in approximately 755 active cases involving approximately 2,320 plaintiffs. The vast majority of these cases involve multiple defendants. About 1,540, or approximately 66 percent, of these plaintiff claims are currently pending in jurisdictions which permit filings with massive numbers of plaintiffs. At December 31, 2017, U. S. Steel was a defendant in approximately 820 cases involving approximately 3,315 plaintiffs. Based upon U. S. Steel's experience in such cases, it believes that the actual number of plaintiffs who ultimately assert claims against U. S. Steel will likely be a small fraction of the total number of plaintiffs.

The following table shows the number of asbestos claims in the current year and the prior two years:

Period ended	Opening Number of Claims	Claims Dismissed, Settled and Resolved ^(a)	New Claims	Closing Number of Claims
December 31, 2016	3,315	225	250	3,340
December 31, 2017	3,340	275	250	3,315
December 31, 2018	3,315	1,285	290	2,320

(a) The period ending December 31, 2018 includes approximately 1,000 dismissed cases previously pending in the State of Texas.

Historically, asbestos-related claims against U. S. Steel fall into three groups: (1) claims made by persons who allegedly were exposed to asbestos on the premises of U. S. Steel facilities; (2) claims made by persons allegedly exposed to products manufactured by U. S. Steel; and (3) claims made under certain federal and maritime laws by employees of former operations of U. S. Steel.

The amount U. S. Steel accrues for pending asbestos claims is not material to U. S. Steel's financial condition. However, U. S. Steel is unable to estimate the ultimate outcome of asbestos-related claims due to a number of uncertainties, including: (1) the rates at which new claims are filed, (2) the number of and effect of bankruptcies of other companies traditionally defending asbestos claims, (3) uncertainties associated with the variations in the litigation process from jurisdiction to jurisdiction, (4) uncertainties regarding the facts, circumstances and disease process with each claim, and (5) any new legislation enacted to address asbestos-related claims.

Further, U. S. Steel does not believe that an accrual for unasserted claims is required. At any given reporting date, it is probable that there are unasserted claims that will be filed against the Company in the future. In the current year, the Company engaged an outside valuation consultant to assist in assessing its ability to estimate an accrual for unasserted claims. This assessment was based on the Company's settlement experience, including recent claims trends. The analysis focused on settlements made over the last several years as these claims are likely to best represent future claim characteristics. After review by the valuation consultant and

U. S. Steel management, it was determined that the Company could not estimate an accrual for unasserted claims.

Despite these uncertainties, management believes that the ultimate resolution of these matters will not have a material adverse effect on U. S. Steel's financial condition.

Environmental Matters – U. S. Steel is subject to federal, state, local and foreign laws and regulations relating to the environment. These laws generally provide for control of pollutants released into the environment and require responsible parties to undertake remediation of hazardous waste disposal sites. Penalties may be imposed for noncompliance. Changes in accrued liabilities for remediation activities where U. S. Steel is identified as a named party are summarized in the following table:

(In millions)	Year Ended December 31,	
	2018	2017
Beginning of period	\$ 179	\$ 179
Accruals for environmental remediation deemed probable and reasonably estimable	14	8
Obligations settled	(6)	(8)
End of period	\$ 187	\$ 179

Accrued liabilities for remediation activities are included in the following Consolidated Balance Sheet lines:

(In millions)	December 31, 2018	December 31, 2017
Accounts payable	\$ 37	\$ 29
Deferred credits and other noncurrent liabilities	150	150
Total	\$ 187	\$ 179

Expenses related to remediation are recorded in cost of sales and were immaterial for the years ended December 31, 2018, December 31, 2017 and December 31, 2016. It is not presently possible to estimate the ultimate amount of all remediation costs that might be incurred or the penalties that may be imposed. Due to uncertainties inherent in remediation projects and the associated liabilities, it is reasonably possible that total remediation costs for active matters may exceed the accrued liabilities by as much as 15 to 25 percent.

Remediation Projects

U. S. Steel is involved in environmental remediation projects at or adjacent to several current and former U. S. Steel facilities and other locations that are in various stages of completion ranging from initial characterization through post-closure monitoring. Based on the anticipated scope and degree of uncertainty of projects, we categorize projects as follows:

- (1) *Projects with Ongoing Study and Scope Development* – Projects which are still in the development phase. For these projects, the extent of remediation that may be required is not yet known, the remediation methods and plans are not yet developed, and/or cost estimates cannot be determined. Therefore, significant costs, in addition to the accrued liabilities for these projects, are reasonably possible. There are five environmental remediation projects where additional costs for completion are not currently estimable, but could be material. These projects are at Fairfield Works, Lorain Tubular, USS-POSCO Industries (UPI), the Fairless Plant, and the former steelmaking plant at Joliet, Illinois. As of December 31, 2018, accrued liabilities for these projects totaled \$1 million for the costs of studies, investigations, interim measures, design and/or remediation. It is reasonably possible that additional liabilities associated with future requirements regarding studies, investigations, design and remediation for these projects could be as much as \$25 million to \$40 million.
- (2) *Significant Projects with Defined Scope* – Projects with significant accrued liabilities with a defined scope. As of December 31, 2018, there are four significant projects with defined scope greater than or equal to \$5 million each, with a total accrued liability of \$144 million. These projects are: Gary Resource Conservation and Recovery Act (RCRA) (accrued liability of \$25 million), the former Geneva facility (accrued liability of \$62 million), the Cherryvale Zinc site (accrued liability of \$11 million) and the former Duluth facility St. Louis River Estuary (accrued liability of \$46 million).

(3) *Other Projects with a Defined Scope* – Projects with relatively small accrued liabilities for which we believe that, while additional costs are possible, they are not likely to be significant, and also include those projects for which we do not yet possess sufficient information to estimate potential costs to U. S. Steel. There are two other environmental remediation projects which each had an accrued liability of between \$1 million and \$5 million. The total accrued liability for these projects at December 31, 2018 was \$4 million. These projects have progressed through a significant portion of the design phase and material additional costs are not expected.

The remaining environmental remediation projects have an accrued liability of less than \$1 million each. The total accrued liability for these projects at December 31, 2018 was approximately \$5 million. We do not foresee material additional liabilities for any of these sites.

Post-Closure Costs – Accrued liabilities for post-closure site monitoring and other costs at various closed landfills totaled \$22 million at December 31, 2018 and were based on known scopes of work.

Administrative and Legal Costs – As of December 31, 2018, U. S. Steel had an accrued liability of \$10 million for administrative and legal costs related to environmental remediation projects. These accrued liabilities were based on projected administrative and legal costs for the next three years and do not change significantly from year to year.

Capital Expenditures – For a number of years, U. S. Steel has made substantial capital expenditures to comply with various regulations, laws, and other requirements relating to the environment. In 2018 and 2017, such capital expenditures totaled \$125 million and \$52 million, respectively. U. S. Steel anticipates making additional such expenditures in the future, which may be material; however, the exact amounts and timing of such expenditures are uncertain because of the continuing evolution of specific regulatory requirements.

EU Environmental Requirements – Under the Emission Trading Scheme (ETS), USSK's final allocation of free allowances for the Phase III period, which covers the years 2013 through 2020 is 48 million allowances. We estimate a shortfall of approximately 15 million allowances for the Phase III period. Based on projected total production levels during Phase III, we started to purchase allowances in the third quarter of 2017 to meet the annual compliance submission in the future. As of December 31, 2018, we have purchased 11 million European Union Allowances (EUA) totaling €118 million (approximately \$135 million). However, due to a number of variables such as the future market value of allowances, future production levels and future emissions intensity levels, we cannot reliably estimate the full cost of complying with the ETS regulations at this time.

The EU's Industry Emission Directive requires implementation of EU determined best available techniques (BAT) for Iron and Steel production to reduce environmental impacts as well as compliance with BAT associated emission levels. Our most recent broad estimate of future capital expenditures for projects that go beyond BAT requirements is €138 million (approximately \$158 million) over the 2017 to 2020 program period. These costs may be mitigated if USSK complies with certain financial covenants, which are assessed annually. USSK complied with these covenants as of December 31, 2018. If we are unable to meet these covenants in the future, USSK might be required to provide additional collateral (e.g. bank guarantee) to secure the full value of estimated expenditures. There could be increased operating costs associated with these projects, such as increased energy and maintenance costs. We are currently unable to reliably estimate what the increase in operating costs will be as many projects are still in the development stage.

Due to other EU legislation, BAT for Large Combustion Plants (LCP), we were required to make changes to the boilers at our steam and power generation plant in order to comply with stricter air emission limits for large combustion plants. The requirements for LCP resulted in the construction of a new boiler and certain upgrades to our existing boilers. In January 2014, the operation of USSK's boilers was approved by the European Commission (EC) as part of Slovakia's Transitional National Plan (TNP) for bringing all boilers in Slovakia into compliance by no later than 2020. The TNP establishes emissions ceilings for each category of emissions (total suspended particulate, sulfur dioxide (SO₂), and nitrogen oxide (NO_x)). The allowable amount of discharged emissions from existing boilers will decrease each year until mid-2020. These projects will result in a reduction in electricity, emissions, and operating, maintenance and waste disposal costs. The construction of the new boiler is complete with a total final installed cost of €128 million (approximately \$147 million).

Environmental indemnifications – Throughout its history, U. S. Steel has sold numerous properties and businesses and many of these sales included indemnifications and cost sharing agreements related to the assets that were divested. These indemnifications and cost sharing agreements have included provisions related to

the condition of the property, the approved use, certain representations and warranties, matters of title, and environmental matters. While most of these provisions have not specifically dealt with environmental issues, there have been transactions in which U. S. Steel indemnified the buyer for clean-up or remediation costs relating to the business sold or its then existing conditions or past practices related to non-compliance with environmental laws. Most of the recent indemnification and cost sharing agreements are of a limited nature, only applying to non-compliance with past and/or current laws. Some indemnifications and cost sharing agreements only run for a specified period of time after the transactions close and others run indefinitely. In addition, current owners or operators of property formerly owned or operated by U. S. Steel may have common law claims and cost recovery and contribution rights against U. S. Steel related to environmental matters. The amount of potential environmental liability associated with these transactions and properties is not estimable due to the nature and extent of the unknown conditions related to the properties divested and deconsolidated. Aside from the environmental liabilities already recorded as a result of these transactions due to specific environmental remediation activities and cases (included in the \$187 million of accrued liabilities for remediation discussed above), there are no other known environmental liabilities related to these transactions.

Guarantees – The maximum guarantees of the indebtedness and other obligations of unconsolidated entities of U. S. Steel totaled \$4 million at December 31, 2018.

Other contingencies – Under certain operating lease agreements covering various equipment, U. S. Steel has the option to renew the lease or to purchase the equipment at the end of the lease term. If U. S. Steel does not exercise the purchase option by the end of the lease term, U. S. Steel guarantees a residual value of the equipment as determined at the lease inception date (totaling approximately \$17 million at December 31, 2018). No liability has been recorded for these guarantees as the potential loss is not probable.

Insurance – U. S. Steel maintains insurance for certain property damage, equipment, business interruption and general liability exposures; however, insurance is applicable only after certain deductibles and retainages. U. S. Steel is self-insured for certain other exposures including workers' compensation (where permitted by law) and auto liability. Liabilities are recorded for workers' compensation and personal injury obligations. Other costs resulting from losses under deductible or retainage amounts or not otherwise covered by insurance are charged against income upon occurrence.

U. S. Steel uses surety bonds, trusts and letters of credit to provide whole or partial financial assurance for certain obligations such as workers' compensation. The total amount of active surety bonds, trusts and letters of credit being used for financial assurance purposes was approximately \$181 million as of December 31, 2018, which reflects U. S. Steel's maximum exposure under these financial guarantees, but not its total exposure for the underlying obligations. A significant portion of our trust arrangements and letters of credit are collateralized by our Fourth Amended and Restated Credit Agreement. The remaining trust arrangements and letters of credit are collateralized by restricted cash. Restricted cash, which is recorded in other current and noncurrent assets, totaled \$40 million and \$44 million at December 31, 2018 and December 31, 2017 respectively.

Capital Commitments – At December 31, 2018, U. S. Steel's contractual commitments to acquire property, plant and equipment totaled \$601 million.

Contractual Purchase Commitments – U. S. Steel is obligated to make payments under contractual purchase commitments, including unconditional purchase obligations. Payments for contracts with remaining terms in excess of one year are summarized below (in millions):

2019	2020	2021	2022	2023	Later years	Total
\$842	\$484	\$310	\$310	\$296	\$582	\$2,824

The majority of U. S. Steel's unconditional purchase obligations relates to the supply of industrial gases, and certain energy and utility services with terms ranging from two to 15 years. Unconditional purchase obligations also include coke and steam purchase commitments related to a coke supply agreement with Gateway Energy & Coke Company LLC (Gateway) under which Gateway is obligated to supply a minimum volume of the expected targeted annual production of the heat recovery coke plant, and U. S. Steel is obligated to purchase the coke from Gateway at the contract price. As of December 31, 2018, if U. S. Steel were to terminate the agreement, it may be obligated to pay in excess of \$142 million.

Total payments relating to unconditional purchase obligations were approximately \$600 million in 2018, \$576 million in 2017 and \$457 million in 2016.

27. Common Stock Repurchase Program and Common Stock Issuance

In November 2018, U. S. Steel announced a common stock repurchase program that allows for the repurchase of up to \$300 million of its outstanding common stock from time to time in the open market or privately negotiated transactions over the next two years at the discretion of management. During 2018, U. S. Steel repurchased 2,760,112 shares of common stock for approximately \$75 million under this program. Additionally, during January of 2019, U. S. Steel repurchased 1,313,982 shares of common stock for approximately \$25 million under this program.

In August 2016, the Company issued 21,735,000 shares of common stock, par value of \$1.00 per share, at a price of \$23.00 per share in an underwritten public offering. Third-party expenses related to the issuance of approximately \$18 million were recorded as a decrease to additional paid-in capital, resulting in net proceeds of approximately \$482 million.

28. 2018 Labor Agreements

Effective September 1, 2018, U. S. Steel and its U. S. Steel Seamless Tubular Operations, LLC and U. S. Steel Tubular Products, Inc. subsidiaries reached new labor agreements with the United Steelworkers (USW) covering approximately 14,000 employees at our flat-rolled, tubular, cokemaking and iron ore operations in the United States (2018 Labor Agreements). The 2018 Labor Agreements expire on September 1, 2022. The 2018 Labor Agreements include a signing bonus (which was paid in December of 2018) and annual wage increases of 4%, 3.5%, 3.5% and 3% effective September 1, 2018, 2019, 2020 and 2021, respectively. Additionally, the 2018 Labor Agreements provide for certain employee benefit modifications to our defined benefit pension plan (see Note 18) and increases to the contribution rate per hour to our multiemployer plan covering certain USW employees from \$2.65 per hour to \$3.15, \$3.35, and \$3.50 per hour effective January 1, 2019, 2020 and 2021, respectively. During the fourth quarter of 2018, U. S. Steel recorded a charge of approximately \$81 million for the 2018 Labor Agreements signing bonus and related costs.

29. Subsequent Events

On February 4, 2019, U. S. Steel announced plans to restart the No. 1 Electric-Weld Pipe mill (No. 1 mill) at Lone Star Tubular Operations in Lone Star, Texas. The No. 1 mill was idled in 2016. The restart of the No. 1 mill is in response to the growing energy market and will enable U. S. Steel to provide full-body normalized electric-welded pipe in size ranges 7" to 16" outside diameter for customers across the U.S., including the very active Permian Basin. The restart process is expected to be complete in the third quarter of 2019, and restart costs are not expected to be material.

On February 11, 2019, U. S. Steel announced plans to restart the delayed electric arc furnace (EAF) capital project located in Fairfield, Alabama. The restart of the project is in response to positive market conditions and support from the USW in the form of a new agreement. The investment to complete the EAF, which includes modernization of the existing rounds caster, is expected to be approximately \$215 million. The EAF will have an annual capacity of approximately 1.6 million tons and is expected to commence startup in the second half of 2020.

SELECTED QUARTERLY FINANCIAL DATA (Unaudited)

(In millions, except per share data)	2018				2017			
	4th Qtr.	3rd Qtr.	2nd Qtr.	1st Qtr.	4th Qtr.	3rd Qtr.	2nd Qtr.	1st Qtr.
Net sales	\$ 3,691	\$ 3,729	\$ 3,609	\$ 3,149	\$ 3,133	\$ 3,248	\$ 3,144	\$ 2,725
Segment earnings (loss) before interest and income taxes: ^(a)								
Flat-rolled	321	305	224	33	82	161	220	(88)
USSE	62	72	115	110	112	73	55	87
Tubular	(3)	7	(35)	(27)	(6)	(7)	(29)	(57)
Total reportable segments	\$ 380	\$ 384	\$ 304	\$ 116	\$ 188	\$ 227	\$ 246	\$ (58)
Other Businesses	11	16	17	11	10	12	9	13
Items not allocated to segments	(78)	(27)	(20)	10	(36)	21	72	(35)
Total earnings (loss) before interest and income taxes	\$ 313	\$ 373	\$ 301	\$ 137	\$ 162	\$ 260	\$ 327	\$ (80)
Net earnings (loss)	592	291	214	18	159	147	261	(180)
Net earnings (loss) attributable to United States Steel Corporation	\$ 592	\$ 291	\$ 214	\$ 18	\$ 159	\$ 147	\$ 261	\$ (180)
Gross profit ^(a)	\$ 487	\$ 557	\$ 488	\$ 341	\$ 385	\$ 420	\$ 421	\$ 166
Common stock data								
Net earnings (loss) per share attributable to United States Steel Corporation								
- Basic	\$ 3.36	\$ 1.64	\$ 1.21	\$ 0.10	\$ 0.91	\$ 0.84	\$ 1.49	\$ (1.03)
- Diluted	\$ 3.34	\$ 1.62	\$ 1.20	\$ 0.10	\$ 0.90	\$ 0.83	\$ 1.48	\$ (1.03)
Dividends paid per share	\$ 0.05	\$ 0.05	\$ 0.05	\$ 0.05	\$ 0.05	\$ 0.05	\$ 0.05	\$ 0.05

(a) 2017 amounts have been adjusted to retroactively adopt Accounting Standards Update 2017-07, *Compensation - Retirement Benefits*, which requires that an employer who offers defined benefit and postretirement benefit plans report the service cost component of the net periodic benefit cost in the same line item or items as the compensation arising from services rendered by employees during the period. The other components of net periodic benefit costs are required to be presented separately from the service cost component and outside a subtotal of income from operations.

SUPPLEMENTARY INFORMATION ON MINERAL RESERVES OTHER THAN OIL AND GAS (Unaudited)

Mineral Reserves

U. S. Steel operates two surface iron ore mining complexes in Minnesota consisting of the Minntac Mine and Pellet Plant and the Keetac Mine and Pellet Plant. As of December 31, 2018 U. S. Steel owns an interest in the iron ore mining assets of Hibbing Taconite Company.

The following table provides a summary of our reserves and minerals production by mining complex:

(Millions of short tons)	Proven and Probable Reserves As of December 31, 2018			Production		
	Owned	Leased	Total	2018	2017	2016
Iron ore pellets:						
Minntac Mine and Pellet Plant	99	365	464	15.9	16.0	15.0
Keetac Mine and Pellet Plant	19	355	374	5.9	5.1	—
Tilden Mining Company, L.C. ⁽¹⁾⁽²⁾	—	—	—	—	0.8	1.3
Hibbing Taconite Company ⁽¹⁾	—	7	7	1.3	1.3	1.3
Total	118	727	845	23.1	23.2	17.6

(1) Represents U. S. Steel's proportionate share of proven and probable reserves and production as these investments are unconsolidated equity affiliates.

(2) On September 29, 2017, a subsidiary of U. S. Steel completed the sale of its 15% ownership interest in Tilden Mining Company, L.C.

Iron Ore Reserves

Reserves are defined by SEC Industry Standard Guide 7 as that part of a mineral deposit that could be economically and legally extracted and produced at the time of the reserve determination. The estimate of proven and probable reserves is of recoverable tons. Recoverable tons mean the tons of product that can be used internally or delivered to a customer after considering mining and beneficiation or preparation losses. Neither inferred reserves nor resources that exist in addition to proven and probable reserves were included in these figures. At December 31, 2018, all 845 million tons of proven and probable reserves are assigned, which means that they have been committed by U. S. Steel to its operating mines and are of blast furnace pellet grade.

U. S. Steel estimates its iron ore reserves using exploration drill holes, physical inspections, sampling, laboratory testing, 3-D computer models, economic pit analysis and fully-developed pit designs for its operating mines. These estimates are reviewed and reassessed from time to time. The most recent such review for our Keetac operating mine was completed in 2013 and resulted in an increase in the proven and probable reserves primarily due to additional exploration drilling and development of an economic computerized mine plan. The most recent review for our Minntac operating mine was conducted in 2005 and led U. S. Steel to reduce its determination of proven and probable reserves mainly due to excluding areas where sampling and measurement did not meet its new 600-foot drill spacing standard, based on updated geostatistical studies. Estimates for our share of unconsolidated equity affiliates are based upon information supplied by the joint ventures. The most recent such review for Hibbing Taconite Company was conducted in 2015.

FIVE-YEAR OPERATING SUMMARY (Unaudited)

(Thousands of tons, unless otherwise noted)	2018	2017	2016	2015	2014
Raw Steel Production					
Gary, IN	5,958	5,755	5,608	5,172	5,936
Great Lakes, MI	2,369	2,592	2,543	2,257	2,442
Mon Valley, PA	2,640	2,473	2,555	2,266	2,563
Granite City, IL	926	—	—	1,162	2,285
Fairfield, AL ^(a)	—	—	—	480	1,992
Lake Erie, Ontario, Canada ^(a)	—	—	—	—	1,744
Total Flat-Rolled facilities	11,893	10,820	10,706	11,337	16,962
U. S. Steel Košice	5,023	5,091	4,967	4,669	4,788
Total	16,916	15,911	15,673	16,006	21,750
Raw Steel Capability					
Flat-Rolled ^(a)	17,000	17,000	17,000	17,000	19,400
USSE	5,000	5,000	5,000	5,000	5,000
Total	22,000	22,000	22,000	22,000	24,400
Production as % of total capability:					
Flat-Rolled	70%	64%	63%	60%	80%
USSE	100%	102%	99%	93%	96%
Coke Production					
Flat-Rolled ^(a)	3,718	3,416	2,961	3,957	5,406
USSE	1,514	1,497	1,545	1,600	1,539
Total	5,232	4,913	4,506	5,557	6,945
Iron Ore Pellet Production^(b)					
Total	23,054	23,246	17,635	17,422	24,959
Steel Shipments by Segment^(c)					
Flat-Rolled ^(a)	10,510	9,887	10,094	10,595	13,908
USSE	4,457	4,585	4,496	4,357	4,179
Tubular	780	688	400	593	1,744
Total steel shipments	15,747	15,160	14,990	15,545	19,831
Average Realized Price (dollars per net ton)					
Flat-Rolled	\$ 811	\$ 726	\$ 666	\$ 695	\$ 772
USSE	\$ 693	\$ 622	\$ 483	\$ 516	\$ 667
Tubular	\$ 1,483	\$ 1,253	\$ 1,071	\$ 1,464	\$ 1,538

(a) As a result of the CCAA filing and deconsolidation of USSC on September 16, 2014, the year ended December 31, 2014 raw steel and coke production amounts and shipments for Flat-Rolled do not include USSC after September 15, 2014 and Flat-Rolled's annual raw steel capability was reduced to 19.4 million tons. As a result of the permanent shutdown of the blast furnace and associated steelmaking operations, along with most of the flat-rolled finishing operations at Fairfield Works late in the third quarter of 2015, Flat-Rolled's annual raw steel capability was reduced to 17.0 million tons. In 2015, coke operations at Gary Works and Granite City Works were permanently shutdown.

(b) Includes our share of production from Hibbing and Tilden. As a result of the sale of our ownership interest, iron ore pellet production amounts do not include Tilden after September 29, 2017.

(c) Does not include intersegment shipments or shipments by joint ventures and other equity investees of U. S. Steel. Includes shipments from U. S. Steel to joint ventures and equity investees of substrate materials, primarily hot-rolled and cold-rolled sheets.

FIVE-YEAR OPERATING SUMMARY (Unaudited) (Continued)

(Thousands of net tons)	2018	2017	2016	2015	2014
Steel Shipments by Market - North American Facilities^(a) ^(b)					
Steel service centers	1,560	1,587	1,765	1,702	2,578
Further conversion:					
Trade customers	3,529	2,951	2,650	3,039	4,013
Joint ventures	1,650	1,513	1,423	1,254	1,519
Transportation (including automotive)	1,231	1,453	1,725	2,011	2,445
Construction and construction products	727	706	765	704	897
Containers	635	597	600	692	1,287
Appliances & electrical equipment	406	406	420	429	616
Oil, gas and petrochemicals	724	631	340	513	1,545
Export from the United States	463	468	456	259	340
All other	365	263	350	585	412
Total	<u>11,290</u>	<u>10,575</u>	<u>10,494</u>	<u>11,188</u>	<u>15,652</u>
Steel Shipments by Market - USSE					
Steel service centers	799	761	801	718	682
Further conversion:					
Trade customers	287	284	274	304	299
Transportation (including automotive)	728	708	660	705	674
Construction and construction products	1,637	1,831	1,811	1,703	1,584
Containers	439	438	436	424	403
Appliances & electrical equipment	261	247	236	236	267
Oil, gas and petrochemicals	11	10	4	—	3
All other	295	306	274	267	267
Total	<u>4,457</u>	<u>4,585</u>	<u>4,496</u>	<u>4,357</u>	<u>4,179</u>

(a) Does not include shipments by joint ventures and other equity investees of U. S. Steel, but instead reflects the shipments of substrate materials, primarily hot-rolled and cold-rolled sheets, to those entities.

(b) As a result of the CCAA filing, shipments do not include USSC after September 15, 2014.

FIVE-YEAR FINANCIAL SUMMARY (Unaudited) (Continued)

(Dollars in millions, except per share amounts)	2018	2017	2016	2015	2014
Net sales by segment:					
Flat-Rolled ^(a)	\$ 9,912	\$ 8,491	\$ 7,532	\$ 8,561	\$ 12,895
USSE	3,228	2,974	2,246	2,326	2,936
Tubular	1,236	945	451	898	2,774
Total reportable segments	\$ 14,376	\$ 12,410	\$ 10,229	\$ 11,785	\$ 18,605
Other Businesses	186	179	169	165	269
Intersegment sales	(384)	(339)	(137)	(376)	(1,367)
Total	\$ 14,178	\$ 12,250	\$ 10,261	\$ 11,574	\$ 17,507
Segment earnings (loss) before interest and income taxes:					
Flat-Rolled ^(a)	\$ 883	\$ 375	\$ 22	\$ (249)	\$ 697
USSE	359	327	185	81	133
Tubular	(58)	(99)	(303)	(181)	257
Total reportable segments	\$ 1,184	\$ 603	\$ (96)	\$ (349)	\$ 1,087
Other Businesses	55	44	63	33	82
Items not allocated to segments ^(c)	(115)	22	(168)	(826)	(648)
Total earnings (loss) before interest and income taxes ^(b)	\$ 1,124	\$ 669	\$ (201)	\$ (1,142)	\$ 521
Net interest and other financial costs^(b)	312	368	215	317	351
Income tax (benefit) provision	(303)	(86)	24	183	68
Net earnings (loss) attributable to United States Steel Corporation	\$ 1,115	\$ 387	\$ (440)	\$ (1,642)	\$ 102
Per common share:					
- Basic	\$ 6.31	\$ 2.21	\$ (2.81)	\$ (11.24)	\$ 0.71
- Diluted	\$ 6.25	\$ 2.19	\$ (2.81)	\$ (11.24)	\$ 0.69

(a) Excludes the results of USSC beginning September 16, 2014 as a result of the CCAA filing.

(b) Amounts have been adjusted to include \$61 million, (\$36) million, \$60 million and \$108 million in 2017, 2016, 2015 and 2014, respectively, of postretirement benefit expense (other than service cost) related to the retrospective presentation change of net periodic benefit cost of our defined benefit pension and other post-employment benefits as a result of the adoption of Accounting Standards Update 2017-07, *Compensation - Retirement Benefits* on January 1, 2018.

(c) See Note 4 to the Consolidated Financial Statements.

FIVE-YEAR FINANCIAL SUMMARY (Unaudited) (Continued)

	2018	2017	2016	2015	2014
Balance Sheet Position at Year-End (dollars in millions) ^(a)					
Current assets	\$ 4,830	\$ 4,755	\$ 4,356	\$ 3,917	\$ 5,829
Net property, plant & equipment	4,865	4,280	3,979	4,411	4,574
Total assets ^{(b) (c)}	10,982	9,862	9,160	9,167	11,975
Short-term debt and current maturities of long-term debt	65	3	50	45	378
Other current liabilities	3,132	2,770	2,281	2,103	3,191
Long-term debt ^(b)	2,316	2,700	2,981	3,093	3,082
Employee benefits	980	759	1,216	1,101	1,117
Total United States Steel Corporation stockholders' equity	4,202	3,320	2,274	2,436	3,799
Cash Flow Data (dollars in millions)					
Net cash provided by operating activities ^{(a) (d) (e) (f)}	\$ 938	\$ 826	\$ 754	\$ 360	\$ 1,558
Capital expenditures ^{(a) (d)}	1,001	505	306	500	480
Dividends paid	36	35	31	29	29
Employee Data					
Total employment costs (dollars in millions) ^(a)	\$ 2,824	\$ 2,477	\$ 2,342	\$ 2,780	\$ 3,408
Average North America employment costs (dollars per hour) ^(a)	\$ 65.97	\$ 62.32	\$ 61.75	\$ 65.64	\$ 57.55
Average number of North America employees ^(a)	16,258	15,326	15,048	19,391	22,408
Average number of USSE employees	11,993	11,948	11,927	12,052	12,272
Number of pensioners at year-end	43,573	45,837	47,765	49,802	52,483
Stockholder Data at Year-End					
Common shares outstanding, net of treasury shares (millions)	174.5	175.2	173.8	146.3	145.7
Registered stockholders (thousands)	13.0	13.8	14.8	15.4	16.1
Market price of common stock	\$ 18.24	\$ 35.19	\$ 33.01	\$ 7.98	\$ 26.74

(a) Excludes the results of USSC beginning September 16, 2014 as a result of the CCAA filing.

(b) 2015 and 2014 amounts have been adjusted to retroactively adopt Accounting Standards Update 2015-03, *Interest-Imputation of Interest (Subtopic 835-30) - Simplifying the Presentation of Debt Issuance Costs*, which requires that debt issuance costs related to a recognized debt liability be presented in the balance sheet as a direct deduction from the carrying amount of the debt liability.

(c) 2014 amounts have been adjusted to retroactively adopt Accounting Standards Update 2015-17, *Balance Sheet Classification of Deferred Taxes*, which requires that all deferred tax assets and liabilities, along with any related valuation allowance, be classified as noncurrent on the balance sheet.

(d) 2014 amounts have been revised to correct a prior period error that resulted in an increase in capital expenditures and an offsetting change to net cash provided by operating activities of \$61 million.

(e) 2016, 2015 and 2014 amounts have been adjusted to retroactively adopt Accounting Standards Update 2016-09, *Compensation - Stock Compensation*, which requires that cash taxes paid by the Company when directly withholding shares for tax withholding purposes be classified as a cash flow from financing activity.

(f) 2017, 2016, 2015 and 2014 amounts have been adjusted to retroactively adopt Accounting Standards Update 2016-15, *Statement of Cash Flows: Classification of Certain Cash Receipts and Cash Payments*, which requires that all payments to extinguish debt now be presented as cash outflows from financing activities on our Consolidated Statement of Cash Flows.

Item 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

Item 9A. CONTROLS AND PROCEDURES

Conclusions Regarding the Effectiveness of Disclosure Controls and Procedures

Under the supervision and with the participation of U. S. Steel's management, including the chief executive officer and chief financial officer, U. S. Steel conducted an evaluation of our disclosure controls and procedures, as such term is defined under Rule 13a-15(e) promulgated under the Securities Exchange Act of 1934, as amended (the Exchange Act). Based on this evaluation, U. S. Steel's chief executive officer and chief financial officer concluded that U. S. Steel's disclosure controls and procedures were effective as of the end of the period covered by this annual report.

Management's Report on Internal Control Over Financial Reporting

See "Item 8. Financial Statements and Supplementary Data – Management's Reports to Stockholders – Internal Control Over Financial Reporting."

Attestation Report of Independent Registered Public Accounting Firm

See "Item 8. Financial Statements and Supplementary Data – Report of Independent Registered Public Accounting Firm."

Changes in Internal Control Over Financial Reporting

There have not been any changes in U. S. Steel's internal control over financial reporting that occurred during the fourth quarter of 2018 which have materially affected, or are reasonably likely to materially affect, U. S. Steel's internal control over financial reporting.

Item 9B. OTHER INFORMATION

None.

PART III

Item 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

Information concerning the directors of U. S. Steel required by this item is incorporated and made part hereof by reference to the material appearing under the heading "Election of Directors" in U. S. Steel's Proxy Statement for the 2019 Annual Meeting of Stockholders, which will be filed with the Securities and Exchange Commission, pursuant to Regulation 14A, no later than 120 days after the end of the fiscal year. Information concerning the Audit Committee and its financial expert required by this item is incorporated and made part hereof by reference to the material appearing under the heading "Corporate Governance - Board Committees – Audit Committee" in U. S. Steel's Proxy Statement for the 2019 Annual Meeting of Stockholders. Information regarding the Nominating Committee required by this item is incorporated and made part hereof by reference to the material appearing under the heading "Corporate Governance - Board Committees – Corporate Governance & Public Policy Committee" in U. S. Steel's Proxy Statement for the 2019 Annual Meeting of Stockholders. Information regarding the ability of stockholders to communicate with the Board of Directors is incorporated and made part hereof by reference to the material appearing under the heading "Communications from Stockholders and Interested Parties" in U. S. Steel's Proxy Statement for the 2019 Annual Meeting of Stockholders. Information regarding compliance with Section 16(a) of the Exchange Act required by this item is incorporated and made part hereof by reference to the material appearing under the heading "Section 16(a) Beneficial Ownership Reporting Compliance" in U. S. Steel's Proxy Statement for the 2019 Annual Meeting of Stockholders. Information concerning the executive officers of U. S. Steel is contained in Part I of this Form 10-K under the caption "Executive Officers of the Registrant."

U. S. Steel has adopted a Code of Ethical Business Conduct that applies to all of our directors and officers, including our principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions. U. S. Steel will provide a copy of this code free of charge upon request. To obtain a copy, contact the Office of the Corporate Secretary, United States Steel Corporation, 600 Grant Street, Pittsburgh, Pennsylvania 15219-2800 (telephone: 412-433-1121). The Code of Ethical Business Conduct is also available through the Company's website at www.ussteel.com. U. S. Steel does not intend to incorporate the contents of our website into this Annual Report on Form 10-K.

Item 11. EXECUTIVE COMPENSATION

Information required by this item is incorporated and made part hereof by reference to the material appearing under the heading "Compensation & Organization Committee Report" in U. S. Steel's Proxy Statement for the 2019 Annual Meeting of Stockholders.

Item 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

Equity Compensation Plan Information

Plan Category	(1) Number of securities to be issued upon exercise of outstanding options, warrants and rights	(2) Weighted-average exercise price of outstanding options, warrants and rights	(3) Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in Column (1))
Equity compensation plans approved by security holders ^(a)	5,824,402	\$27.73	10,936,016 ^(b)
Equity compensation plans not approved by security holders ^(c)	5,055	(one for one)	—
Total	5,829,457	—	10,936,016

(a) The numbers in columns (1) and (2) of this row contemplate all shares that could potentially be issued as a result of outstanding grants under the 2005 Stock Incentive Plan and the 2016 Omnibus Incentive Compensation Plan as of December 31, 2018. (For more information, see Note 15 to the Consolidated Financial Statements. Column (1) includes (i) 358,240 shares of common stock that could be issued for the Common Stock Units outstanding under the Deferred Compensation Program for Non-Employee Directors and (ii) 1,223,370 shares that could be issued for the 611,685 performance awards outstanding under the Long-Term Incentive Compensation Program (a program under the 2005 Stock Incentive Plan and the 2016 Omnibus Incentive Compensation Plan). The calculation in column (2) does not include the Common Stock Units since the weighted average exercise price for Common Stock Units is one for one; that is, one share of common stock will be given in exchange for each unit of such phantom stock accumulated through the date of the director's retirement. Also, the calculation in column (2) does not include the performance awards since the weighted average exercise price for performance awards can range from zero for one to two for one; that is, performance awards may result in up to 1,223,370 shares of common stock being issued (two for one), or some lesser number of shares (including zero shares of common stock issued), depending upon the Corporation's common stock performance versus that of a peer group of companies.

(b) Represents shares available under the 2005 Stock Incentive Plan and 2016 Omnibus Incentive Compensation Plan.

(c) At December 31, 2018, U. S. Steel had no securities remaining for future issuance under equity compensation plans that had not been approved by security holders. Column (1) represents Common Stock Units that were issued pursuant to the Deferred Compensation Plan for Non-Employee Directors prior to its being amended to make it a program under the 2005 Stock Incentive Plan and 2016 Omnibus Plan. The weighted average exercise price for Common Stock Units in column (2) is one for one; that is, one share of common stock will be given in exchange for each unit of phantom stock upon the director's retirement from the Board of Directors. All future grants under this amended plan/program will count as shares issued under to the 2016 Omnibus Incentive Compensation Plan, a stockholder approved plan.

Other information required by this item is incorporated and made part hereof by reference to the material appearing under the headings "Stock Ownership of Directors and Executive Officers" and "Stock Ownership of Certain Beneficial Owners" in U. S. Steel's Proxy Statement for the 2019 Annual Meeting of Stockholders.

Item 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

Information required by this item is incorporated and made part hereof by reference to the material appearing under the headings "Policy with Respect to Related Person Transactions" and "Corporate Governance – Independence" in U. S. Steel's Proxy Statement for the 2019 Annual Meeting of Stockholders.

Item 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

Information required by this item is incorporated and made part hereof by reference to the material appearing under the heading "Audit Fees" in U. S. Steel's Proxy Statement for the 2019 Annual Meeting of Stockholders.

PART IV

Item 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULE

A. Documents Filed as Part of the Report

1. Financial Statements and Supplementary Data

Financial Statements filed as part of this report are included in "Item 8 – Financial Statements and Supplementary Data" list on page F-1.

2. Financial Statement Schedules

"Schedule II – Valuation and Qualifying Accounts and Reserves" for years ended December 31, 2018, 2017, and 2016 is included on page 106. All other schedules are omitted because they are not applicable or the required information is contained in the applicable financial statements or notes thereto.

B. Exhibits

Exhibit No.

3. Articles of Incorporation and By-Laws

- | | | |
|-----|--|---|
| (a) | Amended and Restated Certificate of Incorporation of United States Steel Corporation, dated April 25, 2017 | Incorporated by reference to Exhibit 3.1 to United States Steel Corporation's Form 8-K filed on April 28, 2017, Commission File Number 1-16811. |
| (b) | Amended and Restated By-Laws of United States Steel Corporation dated as of November 1, 2016. | Incorporated by reference to Exhibit 3.1 to United States Steel Corporation's Form 8-K filed on November 2, 2016, Commission File Number 1-16811. |

4. Instruments Defining the Rights of Security Holders, Including Indentures

- (a) [Indenture dated as of May 21, 2007 between United States Steel Corporation and The Bank of New York Mellon, formerly known as The Bank of New York.](#) Incorporated by reference to Exhibit 4.1 to United States Steel Corporation's Form 8-K filed on May 22, 2007, Commission File Number 1-16811.
- (b) [First Supplemental Indenture dated as of May 21, 2007, between United States Steel Corporation and The Bank of New York Mellon, formerly known as The Bank of New York, regarding 5.65% Senior Notes due June 1, 2013, 6.05% Senior Notes due June 1, 2017 and 6.65% Senior Notes due June 1, 2037.](#) Incorporated by reference to Exhibit 4.2 to United States Steel Corporation's Form 8-K filed on May 22, 2007, Commission File Number 1-16811.
- (c) [Fourth Supplemental Indenture dated as of March 19, 2010, between United States Steel Corporation and The Bank of New York Mellon, formerly known as The Bank of New York, regarding 7.375% Senior Notes due April 1, 2020.](#) Incorporated by reference to Exhibit 4.1 to United States Steel Corporation's Form 8-K filed on March 23, 2010, Commission File Number 1-16811.
- (d) [United States Steel Corporation Certificate of Elimination filed with the Secretary of State of the State of Delaware on December 5, 2007.](#) Incorporated by reference to Exhibit 3.1 to United States Steel Corporation's Form 8-K filed on December 6, 2007, Commission File Number 1-16811.
- (e) [Indenture, dated as of May 10, 2016, by and among United States Steel Corporation, the guarantor named on the signature page thereto and U.S. Bank National Association, as trustee and notes collateral agent.](#) Incorporated by reference to Exhibit 4.1 to United States Steel Corporation's Form 8-K filed on May 10, 2016, Commission File Number 1-16811.
- (f) [Eighth Supplemental Indenture, dated August 4, 2017, by and among United States Steel Corporation and the Bank of New York Mellon as trustee.](#) Incorporated by reference to Exhibit 4.1 to United States Steel Corporation's Form 8-K filed on August 4, 2017, Commission File Number 1-16811.
- (g) [Ninth Supplemental Indenture, dated March 15, 2018, by and among United States Steel Corporation and the Bank of New York Mellon as trustee.](#) Incorporated by reference to Exhibit 4.1 to United States Steel Corporation's Form 8-K filed on March 15, 2018, Commission File Number 1-16811.

Certain long-term debt instruments are omitted pursuant to Item 601(b)(4)(iii) of Regulation S-K. U. S. Steel agrees to furnish to the Commission on request a copy of any instrument defining the rights of holders of long-term debt of U. S. Steel and of any subsidiary for which consolidated or unconsolidated financial statements are required to be filed.

10. Material Contracts

- | | | |
|-----|---|--|
| (a) | United States Steel Corporation Supplemental Retirement Account Program.** | Incorporated by reference to Exhibit 10.1 to United States Steel Corporation's Form 10-Q for the quarter ended September 30, 2015, Commission File Number 1-16811. |
| (b) | United States Steel Corporation Executive Management Supplemental Pension Program.** | Incorporated by reference to Exhibit 10.2 to United States Steel Corporation's Form 8-K filed on August 21, 2015, Commission File Number 1-16811. |
| (c) | United States Steel Corporation Supplemental Thrift Program.** | Incorporated by reference to Exhibit 10.7 to United States Steel Corporation's Form 10-Q for the quarter ended September 30, 2013, Commission File Number 1-16811. |
| (d) | United States Steel Corporation Deferred Compensation Program for Non-Employee Directors, a program under the 2005 Stock Incentive Plan.** | Incorporated by reference to Exhibit 10(d) to United States Steel Corporation's Form 10-K for the year ended December 31, 2011, Commission File Number 1-16811. |
| (e) | Form of Offer Letter to David B. Burritt.** | Incorporated by reference to Exhibit 10.2 to United States Steel Corporation's Form 8-K filed on August 20, 2013, Commission File Number 1-16811. |
| (f) | Financial Matters Agreement between USX Corporation (renamed Marathon Oil Corporation) and United States Steel Corporation. | Incorporated by reference to Exhibit 99.5 to United States Steel Corporation's Form 8-K filed on January 3, 2002, Commission File Number 1-16811. |
| (g) | Third Amended and Restated Credit Agreement dated as of July 27, 2015, among United States Steel Corporation, the Lenders party thereto, the LC Issuing Banks party thereto and JPMorgan Chase Bank, National Association as Administrative Agent and Collateral Agent. | Incorporated by reference to Exhibit 10.1 to United States Steel Corporation's Form 10-Q for the quarter ended June 30, 2015, Commission File Number 1-16811. |
| (h) | Amendment No. 1 to Third Amended and Restated Credit Agreement, dated as of February 24, 2016. | Incorporated by reference to Exhibit 10.1 to United States Steel Corporation's Form 8-K filed on February 24, 2016, Commission File Number 1-16811. |
| (i) | Amended and Restated Security Agreement dated as of July 27, 2015, between United States Steel Corporation and JPMorgan Chase Bank, National Association as Collateral Agent. | Incorporated by reference to Exhibit 10.1 to United States Steel Corporation's Form 10-Q for the quarter ended June 30, 2015, Commission File Number 1-16811. |
| (j) | EUR 200,000,000 multicurrency revolving credit facility agreement dated February 22, 2016, among U. S. Steel Košice, s.r.o., and ING Bank N.V., Commerzbank Aktiengesellschaft, Slovenská sporiteľňa, a.s., Komerční banka, a.s. and Citibank Europe plc. | Incorporated by reference to Exhibit 10.1 to United States Steel Corporation's Form 8-K filed on February 24, 2016, Commission File Number 1-16811. |
| (k) | United States Steel Corporation Non Tax-Qualified Pension Plan.** | Incorporated by reference to Exhibit 10.1 to United States Steel Corporation's Form 8-K filed on August 21, 2015, Commission File Number 1-16811. |
| (l) | United States Steel Corporation Non Tax-Qualified Retirement Account Program. | Incorporated by reference to Exhibit 10(dd) to United States Steel Corporation's Form 10-K for the year ended December 31, 2013, Commission File Number 1-16811. |

(m)	United States Steel Corporation 2005 Stock Incentive Plan.**	Incorporated by reference to Appendix B to United States Steel Corporation's Definitive Proxy Statement on Schedule 14A filed on March 11, 2005, Commission File Number 1-16811.
(n)	United States Steel Corporation 2005 Stock Incentive Plan, Amended and Restated, April 27, 2010.**	Incorporated by reference to Appendix A to United States Steel Corporation's Definitive Proxy Statement on Schedule 14A filed on March 12, 2010, Commission File Number 1-16811.
(o)	United States Steel Corporation 2005 Stock Incentive Plan, Amended and Restated, April 29, 2014.**	Incorporated by reference to Appendix A to United States Steel Corporation's Definitive Proxy Statement on Schedule 14A filed on March 14, 2014, Commission File Number 1-16811.
(p)	Administrative Regulations for the Long-Term Incentive Compensation Program under the United States Steel Corporation 2005 Stock Incentive Plan, Amended and Restated, May 28, 2013.**	Incorporated by reference to Exhibit 10.1 to United States Steel Corporation's Form 8-K filed on May 30, 2013, Commission File Number 1-16811.
(q)	Administrative Regulations for the Long-Term Incentive Compensation Program under the United States Steel Corporation 2005 Stock Incentive Plan, Amended and Restated, February 25, 2014.**	Incorporated by reference to Exhibit 10.1 to United States Steel Corporation's Form 8-K filed on March 3, 2014, Commission File Number 1-16811.
(r)	Administrative Procedures for the Long-Term Incentive Compensation Program under the United States Steel Corporation 2005 Stock Incentive Plan, as Amended and Restated, and under the United States Steel Corporation 2010 Annual Incentive Compensation Plan, as amended February 24, 2015.**	Incorporated by reference to Exhibit 10.3 to United States Steel Corporation's Form 10-Q for the quarter ended March 31, 2015, Commission File Number 1-16811.
(s)	Form of stock option grant under the Long-Term Incentive Compensation Program, a program under the 2005 Stock Incentive Plan.**	Incorporated by reference to Exhibit 10(x) to United States Steel Corporation's Form 10-K for the year ended December 31, 2006, Commission File Number 1-16811.
(t)	Form of Performance Award Grant Agreement under the 2005 Stock Incentive Plan.**	Incorporated by reference to Exhibit 10.3 to United States Steel Corporation's Form 10-Q for the quarter ended March 31, 2011, Commission File Number 1-16811.
(u)	Form of Stock Option Grant Agreement under the 2005 Stock Incentive Plan.**	Incorporated by reference to Exhibit 10.2 to United States Steel Corporation's Form 10-Q for the quarter ended March 31, 2011, Commission File Number 1-16811.
(v)	Form of Restricted Stock Unit Retention Grant Agreement under the 2005 Stock Incentive Plan.**	Incorporated by reference to Exhibit 10.5 to United States Steel Corporation's Form 10-Q for the quarter ended March 31, 2011, Commission File Number 1-16811.
(w)	Form of Restricted Stock Unit Annual Grant Agreement under the 2005 Stock Incentive Plan.**	Incorporated by reference to Exhibit 10.4 to United States Steel Corporation's Form 10-Q for the quarter ended March 31, 2011, Commission File Number 1-16811.
(x)	Form of Retention Performance Award Grant Agreement.**	Incorporated by reference to Exhibit 10.5 to United States Steel Corporation's Form 8-K filed on July 2, 2012, Commission File Number 1-16811.

(y)	Form of Non-Qualified Stock Option Grant Agreement.**	Incorporated by reference to Exhibit 10.1 to United States Steel Corporation's Form 10-Q for the quarter ended March 31, 2015, Commission File Number 1-16811.
(z)	Form of Incentive Award Agreement, 2010 Annual Incentive Compensation Plan.**	Incorporated by reference to Exhibit 10.2 to United States Steel Corporation's Form 10-Q for the quarter ended March 31, 2015, Commission File Number 1-16811.
(aa)	United States Steel Corporation 2010 Annual Incentive Compensation Plan.**	Incorporated by reference to Appendix B to United States Steel Corporation's Definitive Proxy Statement on Schedule 14A filed on March 12, 2010, Commission File Number 1-16811.
(bb)	Administrative Regulations for the Executive Management Annual Incentive Compensation Plan under the 2010 Annual Incentive Compensation Plan.**	Incorporated by reference to Exhibit 10.1 to United States Steel Corporation's Form 8-K filed on January 31, 2014, Commission File Number 1-16811.
(cc)	Administrative Procedures for the Executive Management Annual Incentive Compensation Program under the United States Steel Corporation 2010 Annual Incentive Compensation Plan, as amended January 27, 2015**.	Incorporated by reference to Exhibit 10.4 to United States Steel Corporation's Form 10-Q for the quarter ended March 31, 2015, Commission File Number 1-16811.
(dd)	United States Steel Corporation Change in Control Severance Plan effective January 1, 2016.**	Incorporated by reference to Exhibit 10.1 to United States Steel Corporation's Form 8-K filed on November 6, 2015, Commission File Number 1-16811.
(ee)	Administrative Procedures for the Long-Term Incentive Compensation Program under the United States Steel Corporation 2005 Stock Incentive Plan, as Amended and Restated, and under the United States Steel Corporation Annual Incentive Compensation Plan, as amended February 22, 2016.**	Incorporated by reference to Exhibit 10(kk) to United States Steel Corporation's Form 10-K for the year ended December 31, 2015, Commission File Number 1-16811.
(ff)	Administrative Procedures for the Executive Management Annual Incentive Compensation Program under the United States Steel Corporation Annual Incentive Compensation Plan, as amended February 22, 2016.**	Incorporated by reference to Exhibit 10(ll) to United States Steel Corporation's Form 10-K for the year ended December 31, 2015, Commission File Number 1-16811.
(gg)	United States Steel Corporation 2016 Omnibus Incentive Compensation Plan.**	Incorporated by reference to Exhibit 10.1 to United States Steel Corporation's Form 10-Q for the quarter ended March 31, 2016, Commission File Number 1-16811.
(hh)	United States Steel Corporation 2016 Omnibus Incentive Compensation Plan Restricted Stock Unit Grant Agreement - Retention Grant Form**.	Incorporated by reference to Exhibit 10.1 to United States Steel Corporation's Form 10-Q for the quarter ended June 30, 2016, Commission File Number 1-16811.
(ii)	United States Steel Corporation 2016 Omnibus Incentive Compensation Plan Restricted Stock Unit Grant Agreement - Annual Grant Form**.	Incorporated by reference to Exhibit 10.2 to United States Steel Corporation's Form 10-Q for the quarter ended June 30, 2016, Commission File Number 1-16811.
(jj)	United States Steel Corporation 2016 Omnibus Incentive Compensation Plan - Stock Option Grant Form.**	Incorporated by reference to Exhibit 10.3 to United States Steel Corporation's Form 10-Q for the quarter ended June 30, 2016, Commission File Number 1-16811.

(kk)	Administrative Procedures for the Executive Management Annual Incentive Compensation Program under the United States Steel Corporation Annual Incentive Compensation Plan, as amended November 1, 2016.**	Incorporated by reference to Exhibit 10.1 to United States Steel Corporation's Form 10-Q for the quarter ended September 30, 2016, Commission File Number 1-16811.
(ll)	United States Steel Corporation Non Tax-Qualified Retirement Account Program, amended effective as of January 1, 2016.**	Incorporated by reference to Exhibit 10.2 to United States Steel Corporation's Form 10-Q for the quarter ended September 30, 2016, Commission File Number 1-16811.
(mm)	United States Steel Corporation Supplemental Thrift Program, as amended November 1, 2016.**	Incorporated by reference to Exhibit 10.3 to United States Steel Corporation's Form 10-Q for the quarter ended September 30, 2016, Commission File Number 1-16811.
(nn)	Offer letter to Kevin Bradley, dated July 21, 2017.**	Incorporated by reference to Exhibit 10.1 to United States Steel Corporation's Form 10-Q filed on November 1, 2017, Commission File Number 1-16811.
(oo)	First Amendment to United States Steel Corporation 2016 Omnibus Incentive Compensation Plan.**	Incorporated by reference to Exhibit 10.1 to United States Steel Corporation's Form 10-Q filed on April 26, 2017, Commission File Number 1-16811.
(pp)	Letter Agreement dated November 20, 2017 between United States Steel Corporation and Scott Buckiso**	Incorporated by reference to Exhibit 10(bbb) to United States Steel Corporation's Form 10-K for the year ended December 31, 2017, Commission File Number 1-16811.
(qq)	Fourth Amended and Restated Credit Agreement dated as of February 26, 2018, among United States Steel Corporation, the Lenders party thereto, the LC Issuing Banks party thereto and JPMorgan Chase Bank, National Association as Administrative Agent and Collateral Agent.	Incorporated by reference to Exhibit 10.1 to United States Steel Corporation's Form 8-K filed on March 2, 2018, Commission File Number 1-16811.
(rr)	Amended and Restated Borrower Security Agreement dated as of February 26, 2018, between United States Steel Corporation and JPMorgan Chase Bank, National Association as Collateral Agent.	Incorporated by reference to Exhibit 10.2 to United States Steel Corporation's Form 8-K filed on March 2, 2018, Commission File Number 1-16811.
(ss)	Amended and Restated Subsidiary Security Agreement dated as of February 26, 2018, between the guarantors identified herein and JPMorgan Chase Bank, National Association as Collateral Agent.	Incorporated by reference to Exhibit 10.3 to United States Steel Corporation's Form 8-K filed on March 2, 2018, Commission File Number 1-16811.
(tt)	Underwriting Agreement, by and among United States Steel Corporation and J.P. Morgan Securities LLC, dated March 13, 2018.	Incorporated by reference to Exhibit 10.1 to United States Steel Corporation's Form 8-K filed on March 15, 2018, Commission File Number 1-16811.
(uu)	Form of United States Steel Corporation 2016 Omnibus Incentive Compensation Plan Restricted Stock Unit Grant Agreement (Annual Grant)**	Incorporated by reference to Exhibit 10.1 to United States Steel Corporation's Form 10-Q filed on April 27, 2018, Commission File Number 1-16811.
(vv)	Form of United States Steel Corporation 2016 Omnibus Incentive Compensation Plan Restricted Stock Unit Grant Agreement (Retention Grant)**	Incorporated by reference to Exhibit 10.2 to United States Steel Corporation's Form 10-Q filed on April 27, 2018, Commission File Number 1-16811.

(ww)	Form of United States Steel Corporation 2016 Omnibus Incentive Compensation Plan Performance Share Award Grant Agreement (TSR Grant)**	Incorporated by reference to Exhibit 10.3 to United States Steel Corporation's Form 10-Q filed on April 27, 2018, Commission File Number 1-16811.
(xx)	Form of United States Steel Corporation 2016 Omnibus Incentive Compensation Plan Performance Share Award Grant Agreement (ROCE Grant)**	Incorporated by reference to Exhibit 10.4 to United States Steel Corporation's Form 10-Q filed on April 27, 2018, Commission File Number 1-16811.
(yy)	Administrative Procedures for the Executive Management Annual Compensation Incentive Program under the United States Steel Corporation 2016 Omnibus Incentive Compensation Plan as approved on February 27, 2018**	Incorporated by reference to Exhibit 10.5 to United States Steel Corporation's Form 10-Q filed on April 27, 2018, Commission File Number 1-16811.
(zz)	Summary of Realistically Achievable Potential (RAP) Incentive Program awards under the United States Steel Corporation 2016 Omnibus Incentive Compensation Plan.**	Incorporated by reference to Exhibit 10.1 to United States Steel Corporation's Form 10-Q filed on August 2, 2018, Commission File Number 1-16811.
(aaa)	EUR 460,000,000 multicurrency revolving credit facility agreement dated September 26, 2018, among U. S. Steel Košice, s.r.o., and Commerzbank Aktiengesellschaft, ING Bank N.V., Komerční banka, a.s., Slovenská sporiteľňa, a.s., Unicredit Bank Czech Republic and Slovakia, a.s., Československá Obchodná Banka, a.s., and Citibank Europe plc.	Incorporated by reference to Exhibit 10.1 to United States Steel Corporation's Form 8-K filed on October 2, 2018, Commission File Number 1-16811.

- 10.1. [Amendment No. 1 to the Fourth Amended and Restated Credit Agreement dated as of February 26, 2018, by and among United States Steel Corporation, a Delaware corporation \(the "Borrower"\), the Lenders and LC Issuing Banks from time to time party thereto and JPMorgan Chase Bank, N.A., as administrative agent and collateral agent.](#)
- 10.2. [Form of Offer Letter to Duane D. Holloway.**](#)
- 10.3. [Letter Agreement, dated December 21, 2018, between United States Steel Corporation and Douglas R. Matthews**](#)
- 10.4. [United States Steel Corporation Deferred Compensation Program for Non-Employee Directors, effective as of July 26, 2016, as amended on October 30, 2018**](#)
- 10.5. [Summary of Non-Employee Director Fee Arrangements**](#)
- 21. [List of Subsidiaries](#)
- 23. [Consent of PricewaterhouseCoopers LLP](#)
- 24. [Powers of Attorney](#)
- 31.1. [Certification of Chief Executive Officer required by Rules 13a-14\(a\) or 15d-14\(a\) of the Securities Exchange Act of 1934, as promulgated by the Securities and Exchange Commission pursuant to Section 302 of the Sarbanes-Oxley Act of 2002](#)
- 31.2. [Certification of Chief Financial Officer required by Rules 13a-14\(a\) or 15d-14\(a\) of the Securities Exchange Act of 1934, as promulgated by the Securities and Exchange Commission pursuant to Section 302 of the Sarbanes-Oxley Act of 2002](#)
- 32.1. [Certification of Chief Executive Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002](#)
- 32.2. [Certification of Chief Financial Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002](#)
- 95. [Mine Safety Disclosure required under Section 1503 of the Dodd-Frank Wall Street Reform and Consumer Protection Act](#)
- 101. INS XBRL Instance Document
- 101. SCH XBRL Taxonomy Extension Schema Document
- 101. CAL XBRL Taxonomy Extension Calculation Linkbase Document
- 101. DEF XBRL Taxonomy Extension Definition Linkbase Document
- 101. LAB XBRL Taxonomy Extension Label Linkbase Document
- 101. PRE XBRL Taxonomy Extension Presentation Linkbase Document

* Portions of the exhibit have been omitted pursuant to a request for confidential treatment

** Indicates management contract or compensatory plan or arrangement.

SCHEDULE II – VALUATION AND QUALIFYING ACCOUNTS AND RESERVES
YEARS ENDED DECEMBER 31, 2018, 2017 AND 2016
(Millions of Dollars)

Description	Balance at Beginning of Period	Additions		Deductions		Balance at End of Period
		Charged to Costs and Expenses	Charged to Other Accounts	Charged to Costs and Expenses	Charged to Other Accounts	
Year ended December 31, 2018:						
Reserves deducted in the balance sheet from the assets to which they apply:						
Allowance for doubtful accounts	\$ 28	\$ 5	\$ —	\$ —	\$ 4	\$ 29
Investments and long-term receivables reserve	11	—	—	—	6	5
Deferred tax valuation allowance:						
Domestic	604	—	—	393	—	211
Foreign	4	—	—	1	—	3
Year ended December 31, 2017:						
Reserves deducted in the balance sheet from the assets to which they apply:						
Allowance for doubtful accounts	\$ 25	\$ 2	\$ 2	\$ —	\$ 1	\$ 28
Allowance for related party doubtful accounts	265	—	—	—	265	—
Investments and long-term receivables reserve	10	—	1	—	—	11
Long-term receivables from related parties reserve	1,627	—	—	—	1,627	—
Deferred tax valuation allowance:						
Domestic	1,109	42	—	373	174	604
Foreign	4	—	—	—	—	4
Year ended December 31, 2016:						
Reserves deducted in the balance sheet from the assets to which they apply:						
Allowance for doubtful accounts	\$ 28	\$ —	\$ —	\$ —	\$ 3	\$ 25
Allowance for related party doubtful accounts	254	—	11	—	—	265
Investments and long-term receivables reserve	7	—	3	—	—	10
Long-term receivables from related parties reserve	1,446	—	181	—	—	1,627
Deferred tax valuation allowance:						
Domestic	804	174	131	—	—	1,109
Foreign	4	—	—	—	—	4

Item 16. FORM 10-K SUMMARY

None.

GLOSSARY OF CERTAIN DEFINED TERMS

The following definitions apply to terms used in this document:

2017 Act	Tax Cut and Jobs Act of 2017
401(k) plans	defined contribution plans
ABO	Accumulated Benefit Obligation
Acero Prime	Acero Prime, S.R.L. de CV
ACHD	Allegheny County Health Department
AD	antidumping
AHSS	advanced high-strength steels
AISI	American Iron and Steel Institute
AMT	Alternative Minimum Tax
AOCI	Accumulated Other Comprehensive Income
Apolo	Apolo Tubulars S.A.
ARO	Asset Retirement Obligation
ASC	Accounting Standards Codification
ASU	Accounting Standards Update
BART	Best Available Retrofit Technology
BAT	Best Available Technique
BOP	Basic Oxygen Process
CAA	Clean Air Act
CAD	Canadian dollars
CAL	continuous annealing line
CAMU	Corrective Action Management Unit
CCAA	Canada's Companies' Creditors Arrangement Act
CDC	Chrome Deposit Corporation
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CGL	continuous galvanizing line
CIT	U.S. Court of International Trade
CMS	Corrective Measure Study
CO ₂	carbon dioxide
cost cap	a per capita dollar maximum calculation based on 2006 base year actual costs incurred
Credit Facility Agreement	\$1.5 billion credit facility
CVD	countervailing duties
CWA	Clean Water Act
DEC	Department of Environmental Conservation
DESCO	Double Eagle Steel Coating Company
DOC	U.S. Department of Commerce
Double G	Double G Coatings Company LLC
EAF	Electric Arc Furnace
EBITDA	earnings before interest, taxes, depreciation and amortization
EC	European Commission
ERISA	Employee Retirement Income Security Act of 1974
ERW	electric resistance welded
ETS	Emissions Trading System
EU	European Union
EUA	European Union Allowances
Eurofer	European Confederation of Iron and Steel Industries
FASB	Financial Accounting Standards Board
FIFO	first in, first out
FIP	Federal Implementation Plan
Flat-Rolled	North American Flat-Rolled segment
FPC	Feralloy Processing Company
FTC	foreign tax credits
FX	foreign exchange
Gateway	Gateway Energy & Coke Company, LLC, a subsidiary of SunCoke Energy
GBC	general business credits

GDPR	General Data Protection Regulation
GEN3	Generation 3
GHG	greenhouse gas
GLNPO	Great Lakes National Program Office
HDC	Hibbing Development Company
Hibbing	Hibbing Taconite Company
IDEM	Indiana Department of Environmental Management
IEPA	Illinois Environmental Protection Agency
IM	intern measures
IRS	Internal Revenue Service
ISO	International Organization for Standardization
ITC	U.S. International Trade Commission
KDHE	Kansas Department of Health & Environment
Keetac	U. S. Steel's iron ore operations at Keewatin, Minnesota
KS	Cherryvale
LCM	lower of cost or market
LCP	Large Combustion Plants
LIFO	last in, first out
MACT	Maximum Achievable Control Technology
MDEQ	Michigan Department of Environmental Quality
Midwest	Midwest Plant
Minntac	U. S. Steel's iron ore operations at Mt. Iron, Minnesota
MPCA	Minnesota Pollution Control Agency
NAAQS	National Ambient Air Quality Standards
NESHAP	National Emission Standards for Hazardous Air Pollutants
NFR	No Further Remediation
No. 1 mill	No. 1 Electric-Weld Pipe mill
NOL	net operating losses
non-GAAP	Non-Generally Accepted Accounting Principles
NOV	Notice of Violation
NOx	nitrogen oxide
NPDES	National Pollutant Discharge Elimination System
O. D.	outer diameter
OCTG	oil country tubular goods
OECD	The Organisation for Economic Co-operation and Development
OEPA	Ohio Environmental Protection Agency
OPEB	other post-employment benefits
Order	Administrative Order on Consent
OSHA	Occupational Safety and Health Administration
PATH Act	Protecting Americans from Tax Hikes Act
PBGC	Pension Benefit Guarantee Corporation
PII	Personally Identifiable Information
PM	Particulate Matter
PPA	Pension Protection Act of 2006
ppb	parts per billion
Prior Facility	USSK's €200 million revolving credit facility
PRO-TEC	PRO-TEC Coating Company, U. S. Steel and Kobe Steel Ltd. joint venture
PRP	potentially responsible party
RCRA	Resource Conservation and Recovery Act
RFI	RCRA Facility Investigation
ROCE	Return On Capital Employed
RP	Rehabilitation plan
RSU	Restricted Stock Units
S&P's	Standard & Poor's
SEC	Securities and Exchange Commission
SIP	State Implementation Plan
SO2	Sulfur dioxide
SPT	Steelworkers Pension Trust

SSB	Salomon Smith Barney Holdings, Inc.
SWMU	Solid Waste Management Units
the 2005 Plan	2005 Stock Incentive Plan
the 2018 Labor Agreements	collective bargaining agreements with United Steelworkers effective September 1, 2018
the Committee	Compensation & Organization Committee of the Board of Directors
the Exchange Act	the Securities Exchange Act of 1934
the Indenture	Trust Indenture dated as of December 1, 2010, between the Lorain County Port Authority and The Bank of New York Mellon Trust Company, N.A., as Trustee
the Omnibus Plan	2016 Omnibus Incentive Compensation Plan
the Program	IEPA voluntary Site Remediation Program
the shares	3,763,643 shares of common stock voluntary contribution to the U. S. Steel Retirement Plan Trust
the USSK Credit Agreement	USSK €460 million (approximately \$527 million) unsecured revolving credit facility
Tilden	Tilden Mining Company, L.C.
TNP	Transitional National Plan
TRQ	tariff rate quotas
TSR	Total Shareholder Return
Tubular	Tubular Products segment
U.S. EPA	United States Environmental Protection Agency
U.S. GAAP	accounting standards generally accepted in the United States
UDEQ	Utah Department of Environmental Quality
ug/m3	micrograms per cubic meter
UL	Underwriters Laboratories, Inc.
UPI	USS-POSCO Industries, U. S. Steel and POSCO joint venture
USD	U.S. dollars
USMCA	United States-Mexico-Canada Agreement
USSC	U. S. Steel Canada Inc.
USSE	U. S. Steel Europe segment
USSK	U. S. Steel Košice
USSTP	U. S. Steel Tubular Products
USTR	U.S. Trade Representative
USW	United Steelworkers
welded	seamless and electric resistance welded steel castings
Worthington	Worthington Specialty Processing, U. S. Steel and Worthington Industries, Inc. joint venture
WTO	World Trade Organization

**AMENDMENT NO. 1 TO
FOURTH AMENDED AND RESTATED CREDIT AGREEMENT**

AMENDMENT NO. 1 (this “**First Amendment**”), dated as of November 28, 2018, to the Fourth Amended and Restated Credit Agreement dated as of February 26, 2018 (as amended, restated, amended and restated, supplemented or otherwise modified prior to the date hereof, the “**Existing Credit Agreement**” and, as amended by this First Amendment, the “**Amended Credit Agreement**”), by and among United States Steel Corporation, a Delaware corporation (the “**Borrower**”), the Lenders and LC Issuing Banks from time to time party thereto and JPMorgan Chase Bank, N.A., as administrative agent and collateral agent (in such capacities, the “**Agent**”).

WHEREAS, the Borrower has requested that the Existing Credit Agreement be amended on the terms set forth herein, and each Lender party hereto consents to this First Amendment; and

WHEREAS, this First Amendment includes amendments to the Existing Credit Agreement that are subject to the approval of the Lenders having aggregate Credit Exposures representing at least 75% of the sum of all Credit Exposures as of the date hereof (the “**Supermajority Lenders**”), and that, in each case, will become effective on the First Amendment Effective Date (as defined below) on the terms and subject to the conditions set forth herein.

Accordingly, in consideration of the foregoing and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto hereby agree as follows:

**ARTICLE I
DEFINITIONS**

Section 1.01 **Definitions.** Capitalized terms used and not otherwise defined herein have the meanings assigned to them in the Amended Credit Agreement.

**ARTICLE II
AMENDMENTS TO THE CREDIT AGREEMENT**

Section 2.01 **Amendments to Existing Credit Agreement.** Each of the parties hereto agrees that, effective on the First Amendment Effective Date, Section 1.01 of the Existing Credit Agreement shall be amended by amending and restating clause (j) of the definition of “Ineligible Receivables” in its entirety as follows:

“(j) Qualified Receivables which are owed (i) in a currency other than Dollars or (ii) by an Account Debtor which (A) is not invoiced at an address in the United States or Canada or (B) is not organized under applicable law of the United States, any state thereof or the District of Columbia or Canada or any province in Canada other than, in the case of clause (ii), (x) Qualified Receivables backed by a letter of credit or other credit insurance acceptable to the Collateral Agent, in its Permitted Discretion, so long as, in the case of a letter of credit, (1) such letter of credit is in the possession of, and is directly drawable by, the Collateral Agent or (2)(I) the applicable Credit Party has assigned its right to the proceeds of such letter of credit to the Collateral Agent in accordance with the terms and conditions thereof and in accordance with Section 5-114 of the Uniform Commercial Code as in effect from time to time in the State of New York, (II) each of the “issuer” and the “nominated person” (each as defined under Section 5-102 of the Uniform Commercial Code as in effect from time to time in the State of New York), if any, of such letter of credit has consented to the assignment of the proceeds thereof by such Credit Party to the Collateral Agent in accordance with Section 5-114 of the Uniform Commercial Code as in effect from time to time in the State of New York and (III) the documentation governing the assignment of proceeds of such letter of credit is in form and substance reasonably satisfactory to the Collateral Agent and the Borrower and (y) Qualified Receivables as to which the Account Debtor is a Qualified Foreign Account Debtor in an aggregate amount for all such Qualified Receivables not to exceed \$50,000,000;”

**ARTICLE III
REPRESENTATIONS AND WARRANTIES**

Section 3.01 **Representations and Warranties.** To induce the other parties hereto to enter into this First Amendment, each of (i) in the case of a Subsidiary Guarantor, solely with respect to clauses (a) and (b) below, and (ii) the Borrower represents and warrants, on and as of the First Amendment Effective Date (as defined below), that the following statements are true and correct on and as of the First Amendment Effective Date:

(a) The execution, delivery and performance of this First Amendment is within each applicable Credit Party’s corporate or other organizational power and has been duly authorized by all necessary corporate or other organizational action of such Credit Party, and do not and will not violate the terms of such Credit Party’s organizational documents;

(b) This First Amendment has been duly executed and delivered by each Credit Party and constitutes a legal, valid and binding obligation of such Credit Party, enforceable in accordance with its terms, subject to applicable bankruptcy, insolvency, reorganization, moratorium and other similar laws affecting creditors’ rights generally and subject to general principles of equity, regardless of whether considered in a proceeding in equity or at law;

(c) Immediately after giving effect to this First Amendment, the representations and warranties of the Borrower contained in Article 3 of the Amended Credit Agreement are true and correct in all material respects on and as of the First Amendment Effective Date; *provided* that to the extent that such representations and warranties specifically refer to an earlier date, they are true and correct in all material respects as of such earlier date;

provided further that any representation and warranty that is qualified as to “materiality,” “Material Adverse Effect” or similar language is true and correct (after giving effect to any qualification therein) in all respects on such respective dates; and

(d) As of the First Amendment Effective Date, (i) no Default exists immediately before giving effect to this First Amendment and (ii) no Default shall exist immediately after giving effect to this First Amendment.

ARTICLE IV CONDITIONS TO EFFECTIVENESS

Section 4.01 **First Amendment Effective Date.** This First Amendment shall become effective as of the first date (the “**First Amendment Effective Date**”) on which each of the following conditions shall have been satisfied:

(a) The Agent shall have received counterparts hereof signed by the Borrower, each Subsidiary Guarantor and each of the Lenders constituting the Supermajority Lenders.

(b) The Agent shall have received payment of all fees and expenses required to be paid by the Borrower pursuant to the Existing Credit Agreement and this First Amendment for which an invoice has been provided to the Borrower.

Section 4.02 **Effects of this First Amendment.**

(a) Except as expressly set forth herein, this First Amendment (i) shall not by implication or otherwise limit, impair, constitute a waiver of or otherwise affect the rights and remedies of the Lenders or the Agent under the Existing Credit Agreement or any other Loan Document, and (ii) shall not alter, modify, amend or in any way affect any of the terms, conditions, obligations, covenants or agreements contained in the Existing Credit Agreement or any other provision of the Existing Credit Agreement or of any other Loan Document, all of which are ratified and affirmed in all respects and shall continue in full force and effect. Except as expressly set forth herein, nothing herein shall be deemed to be a waiver, amendment, modification or other change of, any of the terms, conditions, obligations, covenants or agreements contained in the Existing Credit Agreement, the Amended Credit Agreement or any other Loan Document in similar or different circumstances.

(b) From and after the First Amendment Effective Date, each reference in the Existing Credit Agreement to “this Agreement”, “hereunder”, “hereof”, “herein”, or words of like import, and each reference to the Existing Credit Agreement in any other Loan Document shall be deemed a reference to the Amended Credit Agreement. This First Amendment shall constitute a “Loan Document” for all purposes of the Amended Credit Agreement and the other Loan Documents.

ARTICLE V REAFFIRMATION

Section 5.01 **Reaffirmation.** Notwithstanding the effectiveness of this First Amendment and the transactions contemplated hereby, (i) each Credit Party acknowledges and agrees that each Loan Document to which it is a party is hereby confirmed and ratified and shall remain in full force and effect according to its respective terms (in the case of the Existing Credit Agreement, as amended hereby), (ii) each Credit Party hereby confirms and ratifies its continuing unconditional obligations as a Lien Grantor under the Security Documents and (iii) each Subsidiary Guarantor hereby confirms and ratifies its continuing unconditional obligations as a Subsidiary Guarantor under the applicable Subsidiary Guarantee Agreement.

ARTICLE VI MISCELLANEOUS

Section 6.01 **Governing Law.** THIS FIRST AMENDMENT AND ANY CLAIMS, CONTROVERSY, DISPUTE OR CAUSE OF ACTION (WHETHER IN CONTRACT OR TORT OR OTHERWISE) BASED UPON, ARISING OUT OF OR RELATING TO THIS FIRST AMENDMENT AND THE TRANSACTIONS CONTEMPLATED HEREBY SHALL BE GOVERNED BY, AND CONSTRUED IN ACCORDANCE WITH, THE LAW OF THE STATE OF NEW YORK. Notwithstanding anything to the contrary contained herein, the provisions of Section 9.10(b), Section 9.10(c), Section 9.10(d) and Section 9.11 of the Existing Credit Agreement are incorporated by reference herein, *mutatis mutandis*.

Section 6.02 **Costs and Expenses.** The Borrower agrees to reimburse the Agent for its reasonable and documented out-of-pocket costs and expenses in connection with this First Amendment to the extent required pursuant to Section 9.03(a) of the Existing Credit Agreement.

Section 6.03 **Counterparts; Effectiveness.** This First Amendment may be executed in any number of counterparts, each of which when so executed and delivered shall be deemed an original, but all of which together shall constitute one and the same instrument. Delivery by facsimile or other electronic imaging means of an executed counterpart of a signature page to this First Amendment shall be effective as delivery of an original executed counterpart of this First Amendment.

Section 6.04 **Headings.** Section headings herein are included for convenience of reference only and shall not constitute a part hereof for any other purpose or be given any substantive effect.

[Signature Pages Follow]

IN WITNESS WHEREOF, the parties hereto have caused this First Amendment to be duly executed by their respective authorized officers as of the date first above written.

BORROWER

UNITED STATES STEEL CORPORATION

By: _____
Name:
Title:

SUBSIDIARY GUARANTORS

U.S. STEEL SEAMLESS TUBULAR OPERATIONS, LLC

By: _____
Name:
Title:

UNITED STATES STEEL INTERNATIONAL, INC.

By: _____
Name:
Title:

JPMORGAN CHASE BANK, N.A.,
as Agent

By: _____
Name:
Title:

_____,
as a Lender

By: _____
Name:
Title:

[If second signature is required]

By: _____
Name:
Title:

[Signature Page to First Amendment]



Barry Melnkovic
Senior Vice President & Chief
Human Resources Officer

United States Steel Corporation
600 Grant Street
Pittsburgh, PA 15219-2800
412 433 1125
bmelnkovic@uss.com

March 21, 2018

Duane Holloway
[ADDRESS]

Dear Duane:

On behalf of United States Steel Corporation (U. S. Steel or the Company), I am pleased to confirm our offer to join the company in the position of Senior Vice President, General Counsel, Chief Compliance Officer & Corporate Secretary effective on April 16, 2018. In this position, you will report directly to David Burritt, President & Chief Executive Officer in our Pittsburgh, PA corporate headquarters. I am looking forward to your joining the team and helping us build the future of the United States Steel Corporation.

The purpose of this letter is to provide clarity on the compensation and benefits programs for which you will be eligible. The details of our offer are below.

Base Salary: Your base salary will be at an annualized rate of \$550,000 subject to payroll deductions.

Annual Incentive Compensation Program: As part of your employment, you will be eligible to participate in the Executive Management Annual Incentive Compensation Program (Annual Incentive Compensation Program or AICP) targeted at 75% of your base salary earned, with a maximum incentive opportunity of up to 227% of your target based on company performance and influenced by your individual performance. Any payments for the 2018 performance period would be prorated based on the number of full months worked during the performance period. If an award is earned, AICP payments are typically made in March following the performance year.

Long-Term Incentive Program: You will be eligible to participate in the annual Long-Term Incentive Program (LTIP) on a basis reasonably comparable to that of other employees at a similar job level. Under the current program, you will receive a mix of long-term incentive compensation value in the form of stock options, restricted stock units and performance awards.

The LTIP award amount for employees at your level for 2018 was \$1,250,000 on the date of grant. The amount, mix, terms and conditions of equity awards are reviewed and determined annually by the Compensation & Organization Committee of the Board of Directors. At this time, LTIP awards are typically granted in February each year based on eligibility as of January 1. Your first full grant will be in April 2018 subject to approval by the Compensation & Organization Committee of the Board of Directors.

Hiring Incentives (Cash): The Company will provide you with a cash incentive of \$250,000 payable within 30 days of your hire date.

Stock Ownership Guidelines: As an executive, you will be subject to stock ownership and retention guidelines as approved by our Board of Directors. The ownership requirement is currently defined as a multiple of salary midpoint and, for executives at your level, the multiple is three times your salary midpoint. Until the required ownership is achieved, you will be required to retain shares equal to 100% of the after-tax value of shares received in connection with the vesting of restricted stock units and equity performance shares and 100% of the net value received from the exercise of stock options. Once the ownership requirement is satisfied, an executive who has received approval can sell up to 100% of the available full value shares and may exercise stock options with no requirement to hold any of the gain in shares. Further details regarding this program will be provided with your new hire paperwork.

Relocation Benefits: You are eligible for new hire relocation benefits, which include:

- Ninety days temporary living expense in the Pittsburgh area
- Two house hunting trips for you and your spouse
- One-way movement of household goods and personal effects
- Transportation for you and your family to relocate to Pittsburgh
- Closing costs on the sale of your current residence and purchase of your future residence
- Loss on sale benefit up to a maximum of \$30,000, which represents the difference between the origin home purchase price and the end-out sales price based on HUD-1 documents
- NOTE: The company will allow temporary living expenses to be extended up to an additional 9 months in the event that there is a delay in selling your home in Connecticut.

You agree that if you voluntarily terminate your employment within 24 months of the effective date of your hire, you will reimburse the company for any relocation benefits and cash hiring incentives you received. This amount will be due within thirty (30) days of the effective date of your employment termination.

Employee Benefits: You will be eligible to participate in retirement, savings, health and welfare benefit plans, including short-term and long-term disability programs. Outlined below are highlights of the retirement programs and additional benefits you will be eligible to receive based on your level.

- (1) Vacation: As an experienced hire at the Senior Vice President level, you will be eligible to receive five weeks of vacation annually. In 2017, your vacation will be prorated based on your hire date.
- (2) Retirement Account: You will participate in the Retirement Account under the Savings Fund Plan for Salaried Employees and be eligible for monthly company contributions in the amount of 4.75% to 8.5% of your base salary based on your age (see the table below). You will participate in a non tax-qualified restoration plan (the “Non Tax-Qualified Retirement Account Program”) with respect to the portion of the company contributions to your Retirement Account that cannot be made due to certain Internal Revenue Code (IRC) limitations. In general, you will vest in your Retirement Account under the Savings Fund Plan and your account under the Non-Tax Qualified Retirement Account Program after you complete three years of continuous service.

Your Age as of the First Day of the Month	Percentage of Monthly Eligible Salary
Less than 35	4.75%
35 to less than 40	6.00%
40 to less than 45	7.25%
45 and above	8.50%

- (3) Company Matching Contributions: You will be eligible to make employee contributions on a pre-tax and/or after-tax basis to the Savings Account under the Savings Fund Plan for salaried employees not to exceed 16% of your base salary subject to limitations under the IRC. You will also be eligible for company contributions that match 100% of your employee contributions up to 6.0% of your base salary (subject to the IRC limitations.) You will participate in a non tax-qualified restoration plan (the “Supplemental Thrift Program”) with respect to the portion of company contributions to your Savings Account that cannot be made due to certain IRC limitations. In general, you will vest in your company matching contributions under the Savings Fund Plan after you complete three years of continuous service and in the Supplemental Thrift Program after you complete five years of continuous service.
- (4) Supplemental Retirement Account: As an executive with the company, you will be eligible to participate in the Supplemental Retirement Account Program (SRA.) Under the SRA, you will be eligible for book accruals in the amount of 4.75% to 8.5% of your Annual Incentive Compensation, based on your age when earned (see table below). In order to vest in the SRA benefit, a participant must be at least age 55, have at least 10 years of continuous service and must be a participant in the plan for at least three years.

Your Age as of the First Day of the Month	Book Accrual Percentage
Less than 35	4.75%
35 to less than 40	6.00%
40 to less than 45	7.25%
45 and above	8.50%

Change in Control Severance Plan: As a Senior Vice President, you will be an eligible participant in the Company's Change in Control Severance Plan, providing for a severance multiple of 2.0 times your salary and bonus. You have been provided with a copy of the plan. Please contact me with any questions related to the change in control severance plan.

Severance Provision: If the Company terminates your employment within two years of your date of hire other than for cause (as defined below), you will be entitled to a lump sum payment equal to the sum of (i) twelve months of your base salary, and (ii) the equivalent of one year of your target bonus (i.e., 100% of your base salary) as that amount would be calculated under the Annual Incentive Compensation Program (the "Severance Benefit"). This Severance Benefit is in lieu of any benefits to which you otherwise may be eligible under the Company's Supplemental Unemployment Benefit (SUB) Program or any other severance or change in control arrangement or program. Such payment shall be made on the 30th day following your separation from service within the meaning of IRC section 409A (or, if such day is not a business day, on the next succeeding business day); provided, however, that no such payment may be made to you until the first business day following the six month anniversary of your separation from service if you are a "specified employee" under IRC section 409A at the time of your separation from service. The foregoing severance payment is conditioned upon your execution, nonrevocation, and compliance with the terms of a general release and waiver of all claims you may have against the Company and its directors, officers and affiliates, in the form presented by the Company.

For purposes of this severance provision, termination by the Company of your employment for "cause" shall mean termination upon (i) the willful and continued failure by you to substantially perform your duties with the Company (other than any such failure resulting from your incapacity due to physical or mental illness), (ii) the willful engaging by you in conduct which is demonstrably and materially injurious to the Company, monetarily or otherwise, (iii) your conviction of a felony or conviction of a misdemeanor which impairs your ability substantially to perform your duties with the Company, or (iv) the material breach by you of the Company's Code of Ethical Business Conduct. Under this definition of "cause", no act, or failure to act, on your part shall be deemed "willful" unless done, or omitted to be done, by you not in good faith and without reasonable belief that your action or omission was in the best interest of the Company.

Following the second anniversary of your date of hire, the severance provision described above will expire, and you will be eligible for benefits, if any, under the Company's severance plans or programs on the same basis as similarly-situated employees, and subject to the terms and conditions of such plans or programs.

Conditions of Employment: The terms and conditions of this letter and the offer of employment that it contains shall be construed under the laws of, and the place of its acceptance shall be deemed to be, the Commonwealth of Pennsylvania.

This offer of employment is contingent upon your successful completion of a background check, verification of work authorization and pre-placement drug screening. As a condition of your employment, you will also be required to execute a non-disclosure and non-compete agreement, a copy of which is attached. You will be subject to all applicable company policies and procedures, including but not limited to, the Code of Ethical Business Conduct. More information about policies and procedures will be provided to you upon commencement of your employment.

If you accept this offer of employment, you will be an employee-at-will, meaning that either you or the company may terminate the employment relationship at any time for any reason, with or without cause. Any statements to the contrary that may have been made to you, or that may be made to you, by the company, its agents or representatives are superseded by this offer letter. Nothing will change the at-will status of your employment except for a written agreement signed by yourself and an appropriate officer of the company.

Dispute Resolution: Any and all disputes, controversies or claims arising out of or related in any manner to your employment with the company shall be resolved by final binding arbitration. Disputes which the parties agree to arbitrate, and thereby agree to waive any right to a trial by jury, include, but are not limited to, claims based upon federal or state statutes, including the Age Discrimination in Employment Act, Title VII of the Civil Rights Act of 1964, as amended, the Americans with Disabilities Act, the Family and Medical Leave Act, the Fair Labor Standards Act and other wage and hour statutes, the WARN Act, claims based upon tort or contract laws or common law or any other federal or state or local law affecting employment in any manner whatsoever. Notwithstanding the foregoing, nothing shall preclude the parties from petitioning a court of competent jurisdiction for appropriate injunctive relief where either party alleges a violation of any contractual obligations to the other or trade secret laws. Any arbitration will be administered by the American Arbitration Association (AAA) pursuant to its Employment Arbitration Rules, as such rules may be amended from time to time. The parties agree that the arbitrator shall have the power to decide any motions brought by any party to the arbitration, including motions for summary judgment and/or adjudication and motions to dismiss and demurrers, prior to any arbitration hearing. The parties also agree that the arbitrator shall have the power to award any remedies, including attorneys' fees, costs and equitable relief, available under applicable law. The parties further agree that the decision of the arbitrator shall be in writing and that any judgment upon the award rendered by the arbitrator may be entered by any court having jurisdiction thereof. The parties agree that the arbitration hearing shall take place in Pittsburgh, Pennsylvania. The company will pay for any administrative or hearing fees and costs charged by the arbitrator or the AAA, except that you shall pay any filing fees associated with any arbitration that you initiate. This obligation to arbitration does not include any claims which by law are not subject to arbitration, such as claims for workers compensation or unemployment compensation.

If you agree to accept this offer of employment, please countersign this letter and return it to me. I sincerely hope you will accept this employment offer. We look forward to working with you at United States Steel Corporation.

Very truly yours,

Barry Melnkovic
Senior Vice President &
Chief Human Resources Officer

Attachments

Accepted by:

Duane Holloway Date

United States Steel Corporation **Barry
Melnkovic**
600 Grant Street, Room 6100 Senior Vice President &
Pittsburgh, PA 15219-2800 Chief Human Resources Officer 412 433 1125
412 433 6219 Fax
bmelnkovic@uss.com

December 21, 2018

Douglas R. Matthews [ADDRESS]

Re: Retention Agreement

Dear Doug:

In consideration for you continuing to serve as the Senior Vice President – Industrial, Service Center and Mining Solutions and Interim Head – Tubular, of United States Steel Corporation (the “Corporation”) and postponing your retirement, the Corporation agrees to provide you with the payments described below, provided you satisfy the requirements outlined in this letter agreement (the “Agreement”).

1. Consideration

The following payments are in addition to any other post-employment benefits that you may be entitled to receive under the Corporation’s employee benefit plans and programs, except as provided in paragraph 6, below:

(a) Preservation of PBGC Interest

Rate.

The lump sum value of your benefits under the United States Steel Corporation Plan for Employee Pension Benefits (Revision of 2003) (the “Qualified Plan”) and the Non-Tax Qualified Pension Plan (the “Non-Qualified Plan”) is based in part on the interest rate used by the Pension Benefit Guaranty Corporation (“PBGC”) for determining the present value of immediate annuities (the “Immediate Annuity Rate”), which was .75% when you became eligible to retire in February 2018. To offset the potential loss in the lump sum value of your pension in the event of a higher interest rate being in effect at the time of your retirement, you will be entitled to receive a single lump sum cash payment equal to the amount, if any, by which (i) your benefits payable in the form of a lump sum under the Qualified Plan and the Non-Qualified Plan calculated at your retirement using an Immediate Annuity Rate of .75% exceed (ii) the amount of those benefits payable in the form of a lump sum using the higher applicable interest rate that is in effect when you retire. The difference in value will be paid to you in a separate payment from the Corporation’s general assets and, because it will not be an eligible rollover distribution, the portion of the payment attributable to the Qualified Plan will be grossed up for federal, state, and local income taxes (at the highest marginal individual income tax rates for each). For purposes of clarification, your benefit under the Supplemental Pension Program is not included in the determination of this payment. See Exhibit A for estimated payments under this paragraph at various Immediate Annuity Rates.

(b) Recognition of Lost Earnings

Opportunity.

The Corporation recognizes that if you elected to retire, you could elect to receive a lump sum payout of your pension and invest it in an interest-bearing account. Therefore, in consideration of your postponement of retirement, the Corporation will pay you an additional amount equal to 4% compounded annually on the lump sum payment amount of your benefits under the Qualified Plan and the Non-Qualified Plan. Interest will accrue from May 1, 2018 through your date of retirement. The amount determined under this paragraph will be paid to you from the Corporation’s general assets and, because it will not be an eligible rollover distribution, the portion of the payment attributable to the Qualified Plan will be grossed up for federal, state, and local income taxes (at the highest marginal individual income tax rate for each). See Exhibit A for the lump sum amount of

your benefits under the Qualified Plan and Nonqualified Plan for this purpose and the estimated payments under this paragraph upon retirement at age 58 and age 60.

(c) Additional Retention/Recognition

To encourage your retention with the Corporation and to recognize your efforts in leading the Tubular segment, the Corporation will (i) pay you a \$75,000 lump sum cash award at the end of January 2019, provided you remain in the employ of the Corporation through the payment date, and (ii) grant you an additional Restricted Stock Unit award at the regularly scheduled Compensation and Organization Committee meeting in February 2019, provided you remain in the employ of the Corporation through the grant date. The number of shares awarded will be determined based on your performance and achievement of the Tubular segment EBITDA goals under the 2018 Executive Management Annual Incentive Compensation Program (“AICP”) as shown in the table below.

Tubular Segment Performance & Corresponding RSU Award Levels						
Individual Performance Multiplier	Threshold (50%)		Target (100%)		Maximum (175%)	
	RSU Award	Value at \$35/share	RSU Award	Value at \$35/share	RSU Award	Value at \$35/share
100%	2,500	\$87,500	5,000	\$175,000	8,750	\$306,250
110%	2,750	\$96,250	5,500	\$192,500	9,625	\$336,875
120%	3,000	\$105,000	6,000	\$210,000	10,500	\$367,500
130%	3,250	\$113,750	6,500	\$227,500	11,375	\$398,125

Note: Interpolation will be used to determine awards at various performance levels.

The award will be subject to three-year cliff vesting and the terms and conditions in the 2019 Restricted Stock Unit Grant Agreement and the 2016 Omnibus Incentive Compensation Plan.

2. Non-Competition Agreement

All payments by the Corporation under this Agreement are conditioned upon you signing this Agreement and the Non-Competition Agreement and the Confidentiality and Proprietary Rights Agreement, which are attached hereto as Exhibits B and C, respectively, and returning all agreements to me by December 28, 2018.

3. Best Efforts. In consideration for this Agreement, you agree to use your best efforts in performing your current and future employment duties for the Corporation. In addition, you are expected to continue to comply with all applicable policies and procedures, including the Corporation’s Code of Ethical Business Conduct.
4. At Will Employment. Nothing in this Agreement changes the at-will nature of your employment. Either you or the Corporation may terminate the employment relationship at any time, with or without notice and with or without cause.
5. Death or Permanent Disability. In the event of your death or permanent disability, the payments in paragraphs 1(a) and 1(b) shall be determined as of your date of death or disability and paid to you or, in the event of death, to your spouse and, if none, to your estate. You will be considered to be permanently disabled if you qualify for a Permanent Incapacity Retirement under the Qualified Plan.
6. Severance. In addition to the payments described above, in the event your employment is involuntarily terminated by the Corporation, other than for Cause, or you resign for Good Reason, you will be entitled to a lump sum payment equal to the sum of (i) twelve months of your base salary in effect at the time of termination, and (ii) your target bonus under the AICP, or a successor plan, in the year of termination. This payment will be in lieu of any benefits to which you may otherwise be

entitled under the Corporation's Supplemental Unemployment Benefit Program or any other severance arrangement or program of the Corporation, except for the Change in Control Severance Plan to the extent it provides for greater benefits. In no event shall there be any duplication of benefits under this severance provision and the Change in Control Severance Plan.

In addition, if your employment is terminated as described above and you elect to continue your healthcare coverage (including family coverage) under the COBRA continuation provisions of the Corporation's group health plans, the Corporation will reimburse you for a period of up to twelve (12) months for the cost of such coverage. No reimbursement will be made for COBRA continuation coverage after the date that you become eligible for group health coverage provided by another employer. The reimbursements will be made as soon as administratively practicable after receipt of your request for reimbursement with evidence of payment, but in no event later than the end of the year following the end of the year in which the expense was incurred. The Corporation will treat the reimbursements as taxable income.

To avoid any misunderstandings, in the event of your termination of employment, the vesting of any outstanding long-term incentive awards will be determined in accordance with the terms and conditions contained in the applicable grant agreement and stock plan, and, if your employment is involuntarily terminated prior to age 60, the Corporation will make a separate determination in good faith on your vesting under the United States Steel Corporation Executive Management Supplemental Pension Program.

For purposes of this severance provision, the terms "Cause" and "Good Reason" are defined as follows:

- (a) "Cause" shall mean any of the following (i) the willful and continued failure by you to substantially perform your duties with the Corporation (other than any such failure resulting from your incapacity due to physical or mental illness), (ii) the willful engaging by you in conduct which is demonstrably and materially injurious to the Corporation, monetarily or otherwise, (iii) your conviction of a felony or of a misdemeanor which impairs your ability to substantially perform your duties with the Corporation, or (iv) the material breach by you of the Corporation's Code of Ethical Business Conduct. Under this definition of "cause", no act or failure to act, on your part shall be deemed "willful" unless done, or omitted to be done, by you not in good faith and without reasonable belief that your action or omission was in the best interest of the Corporation.
- (b) "Good Reason" shall mean (i) a reduction by the Corporation in your duties, authority, and responsibilities such that you are no longer a North American Flat Roll Commercial Entity leader; and (ii) a reduction by the Corporation in your salary grade level from level 50 to level 40 or lower.

The foregoing severance payments are conditioned upon your execution, nonrevocation, and compliance with the terms of a separation agreement, which includes a general release and waiver of all claims you may have against the Corporation and its directors, officers, subsidiaries and affiliates, in the form presented by the Corporation.

7. Miscellaneous.

- (a) The validity, interpretation, construction and performance of this Agreement shall be governed by the laws of the Commonwealth of Pennsylvania, except to the extent preempted by Federal law.
 - (b) You may not assign any of your rights under this Agreement.
 - (c) The Corporation's obligations to provide cash payments under this Agreement shall be an unfunded and unsecured promise of the Corporation to pay money in the future. Nothing in the Agreement conveys a secured interest or right, title or claim in any property or assets of the Corporation.
 - (d) Payments made pursuant to this Agreement will not be treated as covered compensation under any of the Corporation's compensation, retirement, or benefit programs. The payments will be subject to applicable tax withholding and other mandatory reductions.
-

8. Section 409A/Cash

Payments.

This Agreement shall be interpreted and administered in accordance with Section 409A of the Internal Revenue Code and the regulations and interpretations that may be promulgated thereunder ("Section 409A"). In accordance with Section 409A, the cash payments provided under this Agreement (other than the \$75,000 payment described in paragraph 1(c) above) will be made on the first business day of the seventh month following your separation from service (or, if earlier, the last business day of the calendar month following the month of your death). During this six-month delay period, simple interest will accrue and be paid on the date specified in the preceding sentence, on the balance due using the average of the Immediate Annuity Rates in effect during the months included in the six-month delay period.

9. Validity. The invalidity or unenforceability of any provision of this Agreement shall not affect the validity or enforceability of any other provision of this Agreement, which shall remain in full force and effect.

10. Resolution of Disputes. Any dispute or controversy arising under or in connection with this Agreement shall be settled exclusively by arbitration in accordance with the rules of the American Arbitration Association ("AAA") then in effect. The parties agree that the arbitrator shall have the power to decide any motions brought by any party to the arbitration, including motions for summary judgment and/or adjudication and motions to dismiss and demurrers, prior to any arbitration hearing. The parties also agree that the arbitrator shall have the power to award any remedies, including attorneys' fees, costs and equitable relief, available under applicable law. The parties further agree that the decision of the arbitrator shall be in writing and that any judgment upon the award rendered by the arbitrator may be entered by any court having jurisdiction thereof. The parties agree that the arbitration hearing shall take place in Pittsburgh,

Pennsylvania. The Corporation will pay for any administrative or hearing fees and costs charged by the arbitrator or the AAA, except that you shall pay any filing fees associated with any arbitration that you initiate.

11. Entire Agreement. This Agreement contains the entire agreement between the parties and supersedes any other agreement or understanding between the parties hereto with respect to the issues that are the subject matter of this Agreement. You acknowledge and agree that other benefits that you may be entitled to receive will be determined in accordance with the terms and conditions of the applicable plan or program.

12. Amendment. This Agreement may not be amended or modified other than by a written agreement executed by the parties hereto, except that the Corporation may amend this Agreement from time to time without your consent to the extent deemed necessary or appropriate, in its sole discretion, to effect compliance with applicable law. You hereby irrevocably consent to such amendments.

Sincerely,

/s/ Barry Melnkovic

Barry Melnkovic Agreed to by:

/s/ Douglas Matthews

December 21, 2018

Douglas R. Matthews Date

Senior Vice President – Industrial, Service Center, and Mining Solutions; Interim Head – Tubular

EXHIBIT B

United States Steel Corporation Non-Competition Agreement

This Non-Competition Agreement is attached as Exhibit B to, and incorporated as a part of, the Retention Agreement for Douglas R. Matthews, dated December 21, 2018.

In connection with your Retention Agreement with United States Steel Corporation (the "Corporation"), and in consideration of such payments, you acknowledge and agree that during your employment, and, should your employment with the Corporation terminate for any reason, for a period of twelve (12) months immediately following such termination, you shall not, unless acting pursuant to the prior written consent of the Corporation's Board of Directors, directly or indirectly (a) own, manage, operate, finance, join, control or participate in the ownership, operation, management, financing or control of, or be connected as an officer, director, employee, partner, principal, agent, representative, consultant or otherwise with, or use or permit your name to be used in connection with any Competing Business, (b) solicit or divert to any Competing Business any individual or entity which is then a customer, or was a customer of the Corporation at any time during the twelve (12) months preceding your termination, or (c) employ, attempt to employ, solicit or assist any business or enterprise in employing any employee of the Corporation or advise or recommend to any other person or entity that he or it employ or solicit for employment any employee of the Corporation. Notwithstanding the foregoing, ownership of 1% or less of any class of outstanding securities of a Competing Business shall not be deemed a violation of this paragraph. The term "Competing Business" shall mean an integrated steel manufacturer within (i) any state of the United States or the District of Columbia or (ii) any foreign country in which the Corporation has engaged in any such business within twelve (12) months prior to, or within the twelve (12) month period immediately following, the termination of your employment. In the event that the provisions of this agreement should ever be adjudicated to exceed the time, geographic, product or other limitations permitted by applicable law in any jurisdiction, then such provisions shall be deemed reformed in such jurisdiction to the maximum time, geographic, product or other limitations permitted by applicable law. You acknowledge the reasonableness of the duration and scope of these non-competition and non-solicitation periods and agree that you would be able to obtain employment and will remain able to obtain employment other than as limited herein.

You further acknowledge and agree that upon termination of your employment for any reason, you will not disparage the Corporation or its officers, director, employees, agents or representatives.

Agreed to by:

/s/ Douglas Matthews

December 21, 2018

Douglas R. Matthews Date

Senior Vice President – Industrial, Service Center and Mining Solutions; Interim Head - Tubular

**UNITED STATES STEEL CORPORATION
DEFERRED COMPENSATION PROGRAM
FOR NON-EMPLOYEE DIRECTORS**

(Effective as of July 26, 2016, as amended on October 30, 2018)

1. **Purpose.** The United States Steel Corporation Deferred Compensation Program for Non-Employee Directors, a program under the United States Steel Corporation 2016 Omnibus Incentive Compensation Plan, is intended to enable the Corporation to attract and retain non-employee Directors and to enhance the long-term mutuality of interest between such Directors and shareholders of the Corporation.
2. **Definitions.** Unless otherwise defined herein, capitalized terms shall have the meanings set forth in the Plan. The following definitions apply to this Program and to the Deferral Election Forms:
 - a) **Base Retainer** means the means that portion of a Participant's compensation that is fixed and paid without regard to his/her attendance at meetings, as such amount is established for or during the Deferral Year, subject to Section 4(c), exclusive of fees paid to chairs of committees or the Board.
 - b) **Beneficiary or Beneficiaries** means a person or persons or other entity designated on a Beneficiary Designation Form by a Participant as allowed in subsection 7(c) of this Program to receive Deferred Stock Benefit payments. If there is no valid designation by the Participant, or if the designated Beneficiary or Beneficiaries fail to survive the Participant or otherwise fail to take the Deferred Stock Benefit, the Participant's Beneficiary is the Participant's surviving spouse or, if there is no surviving spouse, the Participant's estate.
 - c) **Beneficiary Designation Form** means that portion of the Deferral Election Form that is used by a Participant according to this Program to name his/her Beneficiary or Beneficiaries.
 - d) **Board** means the board of directors of United States Steel Corporation.
 - e) **Committee** means the Corporate Governance & Public Policy Committee of the Board.
 - f) **Common Stock** means the common stock of the Corporation, par value \$1.00 per share.
 - g) **Common Stock Unit** shall have the meaning assigned to it in Section 6(a).
 - h) **Corporation** means United States Steel Corporation.
 - i) **Deferral Election Form** means a document governed by the provisions of Section 4 of this Program by which a Participant elects the portion of his or her Retainer Fee to be deferred and designates a Beneficiary.
 - j) **Deferral Year** means a calendar year for which a Participant has a Deferred Stock Benefit.
 - k) **Deferred Stock Account** means that bookkeeping record established for each Participant to reflect the status of his/her Deferred Stock Benefits under this Program. A Deferred Stock Account is established only for purposes of measuring a Deferred Stock Benefit and not to segregate assets or to identify assets that may or must be used to satisfy a Deferred Stock Benefit. A Deferred Stock Account will be credited with that portion of the Participant's Retainer Fee deferred as a Deferred Stock Benefit according to a Deferral Election Form and according to Sections 3 and 6 of this Program. A Deferred Stock Account will also be adjusted periodically with amounts specified under subsections 6(a)(iii) through 6(a)(v) of this Program.
 - l) **Deferred Stock Benefit** means the benefit that results in distributions governed by sections 6 and 7.
 - m) **Directors** means those duly named members of the Board.

- n) **Election Date** means the date established by this Program as the date before which a Participant must submit a valid Deferral Election Form to the Committee. For the Deferral Year during which an individual first becomes a Participant, the Election Date is the earlier of (i) 30 days following the date on which the individual becomes a Participant and (ii) December 31 of such Deferral Year. For each subsequent Deferral Year, the Election Date is December 31 of the preceding calendar year. Despite the two preceding sentences, the Committee may set an earlier date as the Election Date for any Deferral Year.
- o) **Participant** means a Director who is not simultaneously an employee of the Corporation.
- p) **Plan** means the United States Steel Corporation 2016 Omnibus Incentive Compensation Plan, or any successor plan.
- q) **Program** means the United States Steel Corporation Deferred Compensation Program for Non-Employee Directors under the Plan.
- r) **Retainer Fee** means the Base Retainer together with any additional amounts paid to chairs of the committees of the Board or the chairman of the Board.
- s) **Terminate, Terminating, or Termination**, with respect to a Participant, means cessation of his/her relationship with the Corporation as a Director whether by resignation, retirement, death, disability or severance for any other reason. The terms “Terminate”, “Terminating”, and “Termination”, when used in the context of a condition to, or timing of, payment hereunder, shall be interpreted to mean a “separation from service” as that term is used in Section 409A of the Internal Revenue Code of 1986, as amended (“Section 409A”).
3. **Minimum Stock-Based Compensation.** Each Person who becomes a Participant is required to receive at least \$145,000 of his/her Base Retainer in the form of Common Stock Units and may increase such amount pursuant to a Deferral Election. Additional chair fees will be paid in deferred Common Stock Units in a proportionate manner.
4. **Deferral Election.** A deferral election is valid when a Deferral Election Form is completed, signed by the Participant, and received by the Committee or its designee. Deferral elections are governed by the provisions of this section.
- a) A Participant may elect a Deferred Stock Benefit for any Deferral Year, subject to the Election Date Requirements, if he/she is a Participant at the beginning of that Deferral Year or becomes a Participant during the Deferral Year.
- b) Before each Deferral Year’s Election Date, each Participant will be provided with a Deferral Election Form. Subject to Section 3, a Participant may elect on or before the Election Date to defer until Termination the receipt of all or part of his/her Retainer Fee for the Deferral Year in the form of a Deferred Stock Benefit; provided, however, that no deferral election shall be effective for any portion of a Retainer Fee earned prior to the completion of the deferral election.
- c) A Participant may not revoke or amend a Deferral Election Form after the Deferral Year begins with respect to such Deferral Year, and no re-allocation between fixed and variable compensation (if any) otherwise payable during the year shall be permitted to indirectly amend such Deferral Election Form or the amount of Retainer Fees subject thereto. Any revocation before the beginning of the Deferral Year is the same as a failure to submit a Deferral Election Form. Any writing signed by a Participant expressing an intention to revoke his/her Deferral Election Form and delivered to the Committee or its designee before the close of business on the relevant Election Date is a revocation.
5. **Effect of No Election.** In the case of a person who does not submit a valid Deferral Election Form on or before the relevant Election Date, the minimum required portion of such Participant’s Retainer Fee will become a Deferred Stock Benefit, in accordance with Section 3.
6. **Deferred Stock Benefits**
- a) Deferred Stock Benefits will consist of Common Stock Units and will be recorded in a Deferred Stock Account for each Participant. “Common Stock Unit” shall mean a book-entry unit equal in value to a share of Common Stock on the date specified below. Each Common Stock Unit will increase or decrease in value by the same amount and with the same frequency as the fair market value of a share of Common Stock. Each Deferred Stock Account will be credited or adjusted as follows:

1. Participant's First Deferral Year. For the Deferral Year during which an individual first becomes a Participant, on the 15th day of the month following the Election Date, the Participant's Deferred Stock Account will be credited with a quantity of Common Stock Units, including fractional units, determined by dividing (A) the amount of the Retainer Fee that the Participant has elected to defer (or if a valid Deferral Election Form has not been submitted on or before the relevant Election Date, the amount specified in Section 5 above) by (B) the closing price of a share of Common Stock on the New York Stock Exchange ("NYSE") on the Election Date (or if such date was not a trading day on the immediately preceding trading day).
2. Subsequent Deferral Years. On January 15th of each subsequent Deferral Year during which the Participant remains a Director (or, if such day is not a business day, on the next succeeding business day), the Participant's Deferred Stock Account will be credited with a quantity of Common Stock Units, including fractional units, determined by dividing (A) the amount of the Retainer Fee that the Participant has elected to defer (or if a valid Deferral Election Form has not been submitted on or before the relevant Election Date, the amount specified in Section 5 above) by (B) the closing price of a share of Common Stock on the NYSE on the last trading day of the preceding calendar year.
3. Cash Dividends. Each Deferred Stock Account will be credited each calendar quarter, on the date on which cash dividends are reinvested under the Corporation's dividend reinvestment and stock purchase plans (the "Investment Date"), with a quantity of additional Common Stock Units, including fractional units, determined by dividing (A) the Dividend Payment Amount by (B) the Stock Purchase Price. "Dividend Payment Amount" means the product of the number of Common Stock Units in the Deferred Stock Account on the dividend payment date times the amount of the cash dividend payable on a share of Common Stock. "Stock Purchase Price" means the closing price of a share of Common Stock on the NYSE on the most recent trading day preceding the Investment Date.
4. Stock Dividends, Stock Splits and Reverse Stock Splits. In the event of a stock dividend, stock split, reverse stock split or similar event affecting the Common Stock, the number of Common Stock Units in the Deferred Stock Account shall be adjusted in an equitable and proportional manner to reflect such event in order to prevent the dilution or enlargement of Participant's rights.
5. Other Adjustments to Deferred Stock Account. Amounts credited to a Participant's Deferred Stock Account pursuant to this Section 6 are based upon the assumption that the amount of the Retainer Fee which the Participant is entitled to receive will remain unchanged during the Deferral Year. However, it is possible that certain events may occur which change the amount of the Retainer Fee that the Participant is entitled to receive. Accordingly, the number of Common Stock Units in a Participant's Deferred Stock Account shall be adjusted from time to time in an equitable and proportional manner consistent with Section 409A to reflect the occurrence of any the following events and the effect that such an event has on the actual amount of the Retainer Fee which the Participant is entitled to receive during the Deferral Year:
 - A. a prospective uniform increase or decrease in the amount of the Retainer Fee applicable to all Participant's, excluding any reallocation between fixed and variable compensation during a Deferral Year;
 - B. the Termination of a Participant;
 - C. the appointment or resignation of a Participant as the Presiding Director, a Committee Chairperson or other similar position resulting in a prospective increase or decrease in the amount of the Retainer Fee applicable to such Participant;
or
 - D. any other similar event or circumstance.

Such upward adjustments shall be made as follows: on the 15th day of the month following the effective date of the change causing the adjustment, the Participant's Deferred Stock Account will be credited with a quantity of Common Stock Units, including fractional units, determined by dividing (A) the amount of the Retainer Fee that the Participant has elected to defer (or if a valid Deferral Election Form has not been submitted on or before the relevant Election Date, the amount specified in Section 5 above) by (B) the closing price of a share of Common Stock on the NYSE on the effective date of the change causing the adjustment (or if such date was not a trading day on the immediately preceding trading day).

Downward adjustments due to a retirement or resignation during the year shall be made by deducting a quantity of Common Stock Units, including fractional units, determined by (A) dividing the number of full months not serving as a Director by 12, and (B) multiplying by the number of Common Stock Units credited in January of the retirement year.

- b) If a trust is established under section 8(b), an electing Participant may advise the trustee under the governing trust agreement as to the voting of shares of the Common Stock allocated to that Participant's separate account under the trust according to this subsection and provisions of the governing trust agreement. Before each annual or special meeting of the Corporation's shareholders, the trustee under the governing trust agreement must furnish each Participant with a copy of the proxy solicitation and other relevant material for the meeting as furnished to the trustee by the Corporation, and a form addressed to the trustee requesting the Participant's confidential advice as to the voting of shares of the Common Stock allocated to his/her account as of the valuation date established under the governing trust agreement preceding the record date.

7. Distributions

- a) Except as set forth in Section 7(d), a Deferred Stock Benefit will be distributed in shares of Common Stock equal to the number of, the whole Common Stock Units credited to the Participant's Deferred Stock Account; provided, however, cash will be paid in lieu of fractional shares of the Common Stock otherwise distributable, calculated on the basis of the closing price of a share of Common Stock on the NYSE on the date of Termination (or if such date is not a trading day on the immediately preceding trading day).
- b) Delivery of Common Stock and any cash payable in lieu of fractional shares will be made on or before the fifth business day immediately following the Participant's Termination.
- c) Deferred Stock Benefits may not be assigned by a Participant or Beneficiary. A Participant may use a Beneficiary Designation Form to designate one or more Beneficiaries for all of his/her Deferred Stock Benefits; such designations are revocable. Each Beneficiary will receive his/her portion of the Participant's otherwise unpaid Deferred Stock Account on the scheduled payment date as set forth in Section 7(b).
- d) Upon the occurrence of a Change in Control resulting in a Participant's Termination, the Corporation shall pay such Participant, on or before the fifth business day following such Termination, cash in an aggregate amount equal to the value of such Participant's Deferred Stock Account on the date of the Change in Control, as determined using the higher of the closing price of the Common Stock on the NYSE on such date or the highest per-share price actually paid in connection with the consummation of such Change in Control. For purposes of this Program, "Change in Control" shall mean a change in control of a nature that would be required to be reported in response to Item 6(e) of Schedule 14A of Regulation 14A promulgated under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), whether or not the Corporation is then subject to such reporting requirement; provided, that, without limitation, such a change in control shall be deemed to have occurred if:
1. any person (as defined in Sections 13(d) and 14(d) of the Exchange Act) (a "Person") is or becomes the "beneficial owner" (as defined in Rule 13d-3 under the Exchange Act), directly or indirectly, of securities of the Corporation representing twenty percent (20%) or more of the combined voting power of the Corporation's then outstanding voting securities; provided, however, that for purposes of this Program the term "Person" shall not include (i) the Corporation or any of its subsidiaries, (ii) a trustee or other fiduciary holding securities under an employee benefit plan of the Corporation or any of its subsidiaries, (iii) an underwriter temporarily holding securities pursuant to an offering of such securities, or (iv) a corporation owned, directly or indirectly, by the stockholders of the Corporation in substantially the same proportions as their ownership of stock of the Corporation; or
 2. the following individuals cease for any reason to constitute a majority of the number of directors then serving: individuals who, on the date hereof, constitute the Board and any new director (other than a director whose initial assumption of office is in connection with an actual or threatened election contest including but not limited to a consent solicitation, relating to the election of directors of the Corporation) whose appointment or election by the Board or nomination for election by the Corporation's stockholders was approved by a vote of at least two-thirds (2/3) of the directors then still in office who either were directors on the date hereof or whose appointment, election or nomination for election was previously so approved; or
 3. there is consummated a merger or consolidation of the Corporation or a subsidiary thereof with any other corporation, other than a merger or consolidation which would result in the holders of the voting securities of the Corporation outstanding immediately prior thereto holding securities which represent immediately after such merger or consolidation at least 50% of the combined voting power of the voting securities of the entity surviving the merger or consolidation (or the parent of such surviving entity) or the shareholders of the Corporation approve a plan of complete liquidation of the Corporation, or there is consummated the sale or other disposition of all or substantially all of the Corporation's assets.

8. Corporation's Obligation

- a) The Program is unfunded. A Deferred Stock Benefit is at all times solely a contractual obligation of the Corporation. A Participant and his/her Beneficiaries have no right, title or interest in the Deferred Stock Benefits or any claim against them. Except according to section 8(b), the Corporation will not segregate any funds or assets for Deferred Stock Benefits nor issue any notes or security for the payment of any Deferred Stock Benefit.
- b) The Corporation may establish a grantor trust and transfer to that trust shares of Common Stock or other assets. The governing trust agreement must require a separate account to be established for each electing Participant. The governing trust agreement must also require that all Corporation assets held in trust remain at all times subject to the Corporation's judgment creditors.

9. **No Control by Participant.** A Participant has no control over Deferred Stock Benefits except according to his/her Deferral Election Forms and Beneficiary Designation Form.

10. **Claims Against Participant's Deferred Stock Benefits.** A Deferred Stock Account relating to a Participant under this Program is not subject in any manner to anticipation, alienation, sale, transfer, assignment, pledge, encumbrance, or charge, and any attempt to do so is void. A Deferred Stock Benefit is not subject to attachment or legal process for a Participant's debts or other obligations. Nothing contained in this Program gives any Participant any interest, lien or claim against any specific asset of the Company. A Participant or his/her beneficiary has no rights other than as a general creditor.

11. **Amendment or Termination.** This Program may be altered, amended, suspended, or terminated at any time by the Board.

12. **Notices.** Notices and elections under this Program must be in writing. A notice or election is deemed delivered if it is delivered personally or if it is mailed by registered or certified mail to the person at his/her last known business address.

13. **Waiver.** The waiver of a breach of any provision in this Program does not operate as and may not be construed as a waiver of any later breach.

14. **Construction.** This Program is created, adopted, maintained and governed according to the laws of the State of Delaware. Headings and captions are only for convenience; they do not have substantive meaning. If a provision of this Program is not valid or not enforceable, the validity or enforceability of any other provision is not affected. Use of one gender includes all, and the singular and plural include each other.

15. **Effective Date.** This Program shall be effective as a program under the 2016 Omnibus Incentive Compensation Plan as of July 26, 2016.

SUMMARY OF NON-EMPLOYEE DIRECTOR FEE ARRANGEMENTS

Non-employee directors are paid an annual retainer fee of \$265,000. If the Chairman of the Board is not an employee of the Corporation, he or she is paid an additional annual fee of \$100,000. Committee Chairs are paid an additional annual fee of \$20,000. No meeting fees or committee membership fees are paid.

See the Corporation's most recent definitive proxy statement on Schedule 14A for additional disclosure on director compensation.

UNITED STATES STEEL CORPORATION
SUBSIDIARIES AND JOINT VENTURES AS OF DECEMBER 31, 2018

Company Name

Chisholm Coal LLC
Chrome Deposit Corporation
Compagnie de Gestion de Mifergui- Nimba, LTEE
Cygnus Mines Limited
Double G Coatings, Inc.
Double G Coatings Company, L.P.
Essex Minerals Company
Fairfield Primary Operations, LLC
Feralloy Processing Company
GCW/USS Energy, LLC
Grant Assurance Corporation
Kanawha Coal LLC
Oilfield Technologies, Inc.
Orinoco Mining Company
Perdido Land Development Co., Inc.
PITCAL, Inc.
 USS-POSCO Industries
Pitcal Pipe, LLC
Preserve Village Developers, LLC
Stelco Holding Company
 Ontario Coal Company
 Ontario Eveleth Company
 Ontario Hibbing Company
 Hibbing Development Company
 Hibbing Taconite Company
 Stelco Coal Company
 Stelco Erie Corporation
 Ontario Tilden Company
Swan Point Yacht & Country Club, Inc.
Timber Wolf Land, LLC
Transtar, LLC
 Delray Connecting Railroad Company
 Gary Railway Company
 Tracks Traffic and Management Services, Inc.
 Texas & Northern Railway Company
 Lake Terminal Railroad Company, The
 Lorain Northern Company
 Union Railroad Company, LLC
 Birmingham Southern Railroad Company
 Fairfield Southern Company, Inc.
 Warrior & Gulf Navigation LLC
U. S. Steel China, LLC
U. S. Steel Holdings, Inc.
 U. S. Steel Global Holdings I B.V.
 U. S. Steel Global Holdings VI B.V.
 U. S. Steel Košice, s.r.o. (USSK)
 OBAL-SERVIS, a.s. Košice
 Ferroenergy s.r.o.
 U. S. Steel Košice – Labortest, s.r.o.

UNITED STATES STEEL CORPORATION
SUBSIDIARIES AND JOINT VENTURES AS OF DECEMBER 31, 2018

Company Name

U. S. Steel Services s.r.o.
U. S. Steel Europe - Bohemia a.s.
U. S. Steel Europe - France S.A.
U.S. Steel Košice - SBS, s.r.o.
U. S. Steel Europe - Germany GmbH
U. S. Steel Europe - Italy S.r.l.
RMS, a.s. Košice
U. S. Steel Global Holdings II, B.V.
U. S. Steel Canada Limited Partnership
U. S. Steel Holdings IV, Inc.
U. S. Steel International of Canada, LTD.
U. S. Steel LRD Canada North Inc.
U. S. Steel Mining Company, LLC
U. S. Steel Timber Company, LLC
U. S. Steel Tubular Products Holdings, LLC
U. S. Steel Seamless Tubular Operations, LLC
U. S. Steel Tubular Products, Inc.
U. S. Steel Tubular Products Middle East DMCC
U.S. Steel Oilwell Services, LLC
Patriot Premium Threading Services, LLC
USS Construction Products, LLC
U. S. Steel Tubular Products Canada Inc.
U.S. Steel Produtos Tubulares do Brasil Ltda.
Zinklahoma, Inc.
Star Brazil US, LLC 2
Star Brazil US, LLC 1
Lone Star Brazil Holdings 1 Ltda.
Lone Star Brazil Holdings 2 Ltda.
Lone Star Steel Holdings, Inc.
Lone Star Steel Holdings II, Inc.
Fintube (Thailand) Limited
UEC Technologies, LLC
189548 Canada Inc.
USX Engineers and Consultants
UEC Sail Information Technology, LTD.
United States Steel International, Inc.
United States Steel Export Company de Mexico, S.R.L. de C.V.
United States Steel International de Mexico, S.R.L. de C. V.
USS Galvanizing, Inc.
PRO-TEC Coating Company
PRO-TEC Coating Company, Inc.
USS International Services, LLC
USS Lakeside, LLC
Chicago Lakeside Development, LLC
USS Oilwell Supply Co., LTD.
USS Oilwell Tubular, Inc.
USS Portfolio Delaware, Inc.
USS WSP, LLC
Worthington Specialty Processing
ProCoil Company, LLC
Worthington Taylor, LLC
USX International Sales Company, Inc.

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in the Registration Statement on Form S-3 (No. 333-209914 and 333-209913) and Form S-8 (No. 333-217464, 333-210953, 333-196186, 333-151438 and 333-151440) of United States Steel Corporation of our report dated February 15, 2019 relating to the financial statements, financial statement schedule and the effectiveness of internal control over financial reporting, which appears in this Form 10-K.

/s/ PricewaterhouseCoopers LLP
Pittsburgh, Pennsylvania
February 15, 2019

POWER OF ATTORNEY

That the undersigned does hereby make, constitute and appoint Kevin P. Bradley and Colleen M. Darragh or any one of them, my true and lawful attorneys-in-fact to sign and execute for me and on my behalf United States Steel Corporation's Annual Report on Form 10-K for the year ended December 31, 2018 to be filed with the Securities and Exchange Commission, and any and all amendments to such report to be filed with the Securities and Exchange Commission pursuant to the Securities Exchange Act of 1934, as amended, in such form as they or any one or more of them may approve, and to do any and all other acts which said attorneys-in-fact may deem necessary or desirable to enable United States Steel Corporation to comply with said Act and the rules and regulations thereunder.

IN WITNESS WHEREOF, I have hereunto set my hand this 29th day of January, 2019.

/s/ David B. Burritt
David B. Burritt

POWER OF ATTORNEY

That the undersigned does hereby make, constitute and appoint David B. Burritt, Kevin P. Bradley and Colleen M. Darragh or any one of them, my true and lawful attorneys-in-fact to sign and execute for me and on my behalf United States Steel Corporation's Annual Report on Form 10-K for the year ended December 31, 2018 to be filed with the Securities and Exchange Commission, and any and all amendments to such report to be filed with the Securities and Exchange Commission pursuant to the Securities Exchange Act of 1934, as amended, in such form as they or any one or more of them may approve, and to do any and all other acts which said attorneys-in-fact may deem necessary or desirable to enable United States Steel Corporation to comply with said Act and the rules and regulations thereunder.

IN WITNESS WHEREOF, I have hereunto set my hand this 29th day of January, 2019.

/s/ Patricia Diaz Dennis

Patricia Diaz Dennis

POWER OF ATTORNEY

That the undersigned does hereby make, constitute and appoint David B. Burritt, Kevin P. Bradley and Colleen M. Darragh or any one of them, my true and lawful attorneys-in-fact to sign and execute for me and on my behalf United States Steel Corporation's Annual Report on Form 10-K for the year ended December 31, 2018 to be filed with the Securities and Exchange Commission, and any and all amendments to such report to be filed with the Securities and Exchange Commission pursuant to the Securities Exchange Act of 1934, as amended, in such form as they or any one or more of them may approve, and to do any and all other acts which said attorneys-in-fact may deem necessary or desirable to enable United States Steel Corporation to comply with said Act and the rules and regulations thereunder.

IN WITNESS WHEREOF, I have hereunto set my hand this 29th day of January, 2019.

/s/ Dan O. Dinges Dan O. Dinges

POWER OF ATTORNEY

That the undersigned does hereby make, constitute and appoint David B. Burritt, Kevin P. Bradley and Colleen M. Darragh or any one of them, my true and lawful attorneys-in-fact to sign and execute for me and on my behalf United States Steel Corporation's Annual Report on Form 10-K for the year ended December 31, 2018 to be filed with the Securities and Exchange Commission, and any and all amendments to such report to be filed with the Securities and Exchange Commission pursuant to the Securities Exchange Act of 1934, as amended, in such form as they or any one or more of them may approve, and to do any and all other acts which said attorneys-in-fact may deem necessary or desirable to enable United States Steel Corporation to comply with said Act and the rules and regulations thereunder.

IN WITNESS WHEREOF, I have hereunto set my hand this 29th day of January, 2019.

/s/ John J. Engel
John J. Engel

POWER OF ATTORNEY

That the undersigned does hereby make, constitute and appoint David B. Burritt, Kevin P. Bradley and Colleen M. Darragh or either one of them, my true and lawful attorneys-in-fact to sign and execute for me and on my behalf United States Steel Corporation's Annual Report on Form 10-K for the year ended December 31, 2018 to be filed with the Securities and Exchange Commission, and any and all amendments to such report to be filed with the Securities and Exchange Commission pursuant to the Securities Exchange Act of 1934, as amended, in such form as they or any one or more of them may approve, and to do any and all other acts which said attorneys-in-fact may deem necessary or desirable to enable United States Steel Corporation to comply with said Act and the rules and regulations thereunder.

IN WITNESS WHEREOF, I have hereunto set my hand this 29th day of January, 2019.

/s/ Murry S. Gerber
Murry S. Gerber

POWER OF ATTORNEY

That the undersigned does hereby make, constitute and appoint David B. Burritt, Kevin P. Bradley and Colleen M. Darragh or any one of them, my true and lawful attorneys-in-fact to sign and execute for me and on my behalf United States Steel Corporation's Annual Report on Form 10-K for the year ended December 31, 2018 to be filed with the Securities and Exchange Commission, and any and all amendments to such report to be filed with the Securities and Exchange Commission pursuant to the Securities Exchange Act of 1934, as amended, in such form as they or any one or more of them may approve, and to do any and all other acts which said attorneys-in-fact may deem necessary or desirable to enable United States Steel Corporation to comply with said Act and the rules and regulations thereunder.

IN WITNESS WHEREOF, I have hereunto set my hand this 29th day of January, 2019.

/s/ Stephen J. Girsky
Stephen J. Girsky

POWER OF ATTORNEY

That the undersigned does hereby make, constitute and appoint David B. Burritt, Kevin P. Bradley and Colleen M. Darragh or any one of them, my true and lawful attorneys-in-fact to sign and execute for me and on my behalf United States Steel Corporation's Annual Report on Form 10-K for the year ended December 31, 2018 to be filed with the Securities and Exchange Commission, and any and all amendments to such report to be filed with the Securities and Exchange Commission pursuant to the Securities Exchange Act of 1934, as amended, in such form as they or any one or more of them may approve, and to do any and all other acts which said attorneys-in-fact may deem necessary or desirable to enable United States Steel Corporation to comply with said Act and the rules and regulations thereunder.

IN WITNESS WHEREOF, I have hereunto set my hand this 29th day of January, 2019.

/s/ Paul A. Mascarenas
Paul A. Mascarenas

POWER OF ATTORNEY

That the undersigned does hereby make, constitute and appoint David B. Burritt, Kevin P. Bradley and Colleen M. Darragh or any one of them, my true and lawful attorneys-in-fact to sign and execute for me and on my behalf United States Steel Corporation's Annual Report on Form 10-K for the year ended December 31, 2018 to be filed with the Securities and Exchange Commission, and any and all amendments to such report to be filed with the Securities and Exchange Commission pursuant to the Securities Exchange Act of 1934, as amended, in such form as they or any one or more of them may approve, and to do any and all other acts which said attorneys-in-fact may deem necessary or desirable to enable United States Steel Corporation to comply with said Act and the rules and regulations thereunder.

IN WITNESS WHEREOF, I have hereunto set my hand this 29th day of January, 2019.

/s/ Eugene B. Sperling
Eugene B. Sperling

POWER OF ATTORNEY

That the undersigned does hereby make, constitute and appoint David B. Burritt, Kevin P. Bradley and Colleen M. Darragh or any one of them, my true and lawful attorneys-in-fact to sign and execute for me and on my behalf United States Steel Corporation's Annual Report on Form 10-K for the year ended December 31, 2018 to be filed with the Securities and Exchange Commission, and any and all amendments to such report to be filed with the Securities and Exchange Commission pursuant to the Securities Exchange Act of 1934, as amended, in such form as they or any one or more of them may approve, and to do any and all other acts which said attorneys-in-fact may deem necessary or desirable to enable United States Steel Corporation to comply with said Act and the rules and regulations thereunder.

IN WITNESS WHEREOF, I have hereunto set my hand this 29th day of January, 2019.

/s/ David S. Sutherland
David S. Sutherland

POWER OF ATTORNEY

That the undersigned does hereby make, constitute and appoint David B. Burritt, Kevin P. Bradley and Colleen M. Darragh or any one of them, my true and lawful attorneys-in-fact to sign and execute for me and on my behalf United States Steel Corporation's Annual Report on Form 10-K for the year ended December 31, 2018 to be filed with the Securities and Exchange Commission, and any and all amendments to such report to be filed with the Securities and Exchange Commission pursuant to the Securities Exchange Act of 1934, as amended, in such form as they or any one or more of them may approve, and to do any and all other acts which said attorneys-in-fact may deem necessary or desirable to enable United States Steel Corporation to comply with said Act and the rules and regulations thereunder.

IN WITNESS WHEREOF, I have hereunto set my hand this 29th day of January, 2019.

/s/ Patricia A. Tracey
Patricia A. Tracey

CHIEF EXECUTIVE OFFICER CERTIFICATION

I, David B. Burritt, certify that:

1. I have reviewed this annual report on Form 10-K of United States Steel Corporation;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, 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;
 - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent functions):
 - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

February 15, 2019

/s/ David B. Burritt

David B. Burritt

President and Chief Executive Officer

CHIEF FINANCIAL OFFICER CERTIFICATION

I, Kevin P. Bradley, certify that:

1. I have reviewed this annual report on Form 10-K of United States Steel Corporation;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, 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;
 - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent functions):
 - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

February 15, 2019

/s/ Kevin P. Bradley

Kevin P. Bradley

Executive Vice President and Chief Financial Officer

CHIEF EXECUTIVE OFFICER
CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350

I, David B. Burritt, President and Chief Executive Officer of United States Steel Corporation, certify that:

- (1) The Annual Report on Form 10-K of United States Steel Corporation for the period ending December 31, 2018 fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the foregoing report fairly presents, in all material respects, the financial condition and results of operations of United States Steel Corporation.

/s/ David B. Burritt

David B. Burritt

President and Chief Executive Officer

February 15, 2019

A signed original of this written statement required by Section 906 of the Sarbanes-Oxley Act of 2002 has been provided to United States Steel Corporation and will be retained by United States Steel Corporation and furnished to the Securities and Exchange Commission or its staff upon request.

CHIEF FINANCIAL OFFICER
CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350

I, Kevin P. Bradley, Executive Vice President and Chief Financial Officer of United States Steel Corporation, certify that:

- (1) The Annual Report on Form 10-K of United States Steel Corporation for the period ending December 31, 2018 fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the foregoing report fairly presents, in all material respects, the financial condition and results of operations of United States Steel Corporation.

/s/ Kevin P. Bradley

Kevin P. Bradley

Executive Vice President and Chief Financial Officer

February 15, 2019

A signed original of this written statement required by Section 906 of the Sarbanes-Oxley Act of 2002 has been provided to United States Steel Corporation and will be retained by United States Steel Corporation and furnished to the Securities and Exchange Commission or its staff upon request.

United States Steel Corporation
Mine Safety Disclosure
(Unaudited)

Information for the twelve months ended December 31, 2018 follows:

Mine (Federal Mine Safety and Health Administration (MSHA) ID)	Total # of Significant & Substantial violations under §104(a) ^(a)	Total # of orders under §104(b) ^(a)	Total # of unwarrantable failure citations and orders under §104(d) ^(a)	Total # of violations under §110(b) (2) ^(a)	Total # of orders under §107(a) ^(a)	Total dollar value of proposed assessments from MSHA	Total # of mining related fatalities	Received Notice of Pattern of Violations under §104(e) ^(a) (yes/no)?	Received Notice of Potential to have Pattern under §104(e) ^(a) (yes/no)?	Total # of Legal Actions Pending with the Mine Safety and Health Review Commission as of Last Day of Period ^(b)	Legal Actions Initiated During Period	Legal Actions Resolved During Period
Mt. Iron (2100820, 2100282)	75	—	—	—	—	\$557,416	—	no	no	9	146	230
Keewatin (2103352)	14	—	—	—	—	\$80,820	—	no	no	—	33	90

^(a) References to Section numbers are to sections of the Federal Mine Safety and Health Act of 1977.

^(b) Includes all legal actions pending before the Federal Mine Safety and Health Review Commission, together with the Administrative Law Judges thereof, for each of our iron ore operations. These actions may have been initiated in prior quarters. All of the legal actions were initiated by us to contest citations, orders or proposed assessments issued by the Federal Mine Safety and Health administration, and if we are successful, may result in the reduction or dismissal of those citations, orders or assessments. As of the last day of the period, all 9 legal actions were to contest citations and proposed assessments.