2016

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, 2016
Commission file number 1-16811

United States Steel Corporation

(Exact name of registrant as specified in its charter)

Delaware	25-1897152
(State of Incorporation)	(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 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 and posted on its corporate Website, if any, every Interactive Data File required to be submitted and posted 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 and post 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, or a smaller reporting company. See the definition of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer ☑	Accelerated filer ______
Non-accelerated filer ______ (Do not check if a smaller reporting company)	Smaller reporting company ______

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 28, 2016 (the last business day of the registrant's most recently completed second fiscal quarter): $2.5 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 174,290,761 shares of United States Steel Corporation Common Stock outstanding as of February 23, 2017.

Documents Incorporated By Reference:

Portions of the Proxy Statement for the 2017 Annual Meeting of Stockholders are incorporated into Part III.

INDEX

FORWARD-LOOKING STATEMENTS

This report contains information that may constitute “forward-looking statements” within the meaning of Section 27 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,” “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 Policies (non-GAAP)

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) and adjusted net earnings (loss) per diluted share.

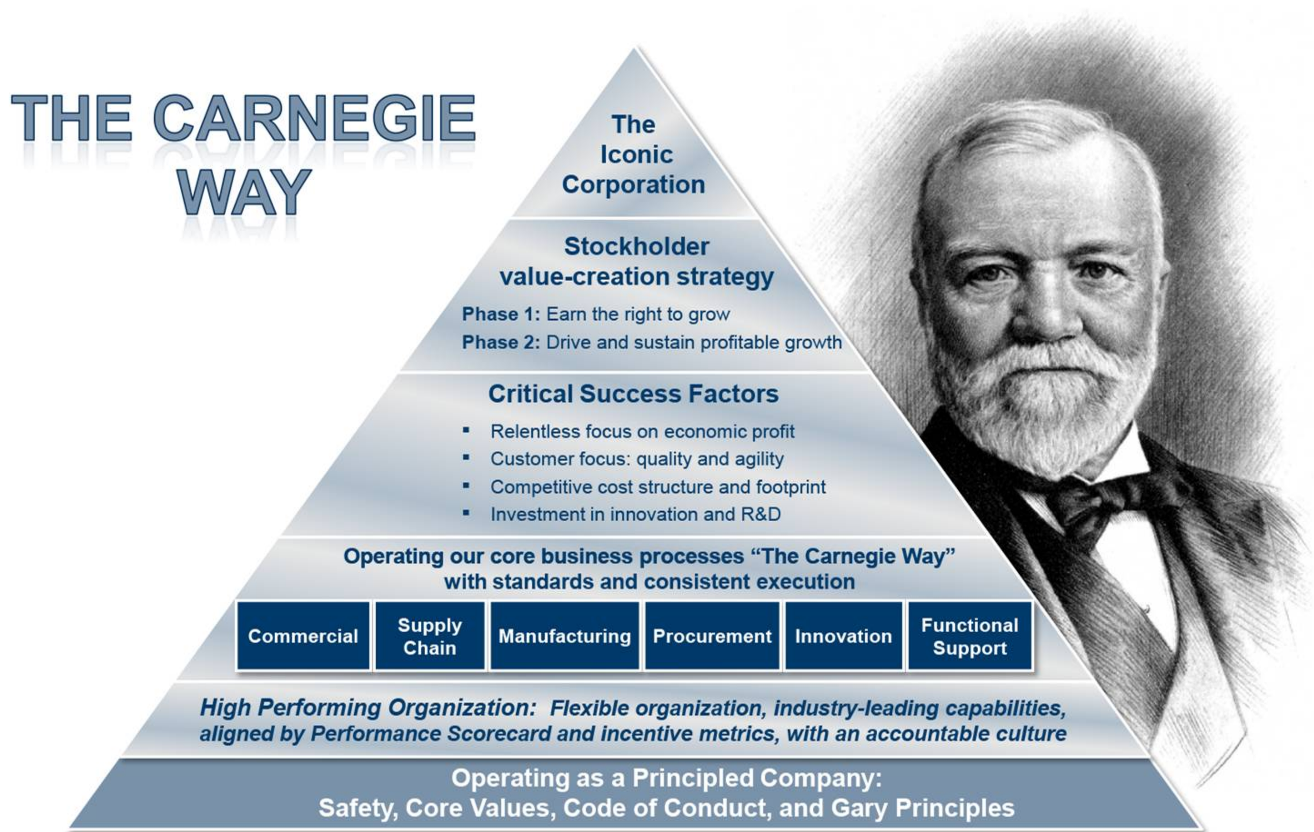
We believe that EBITDA, considered along with the net earnings (loss), is a relevant indicator of trends relating to cash generating activity and provides management and investors with additional information for comparison of our operating results to the operating results of other companies.

Adjusted net earnings (loss) and adjusted net earnings (loss) per diluted share are non-GAAP measures that exclude the effects of restructuring charges, impairment charges, losses associated with U. S. Steel Canada Inc., losses on debt extinguishment, certain postemployment actuarial adjustments and charges for deferred tax asset valuation allowances that are not part of the Company's core operations. Adjusted EBITDA is also a non-GAAP measure that excludes the effects of restructuring charges, impairment charges, certain postemployment actuarial adjustments and losses associated with U. S. Steel Canada, Inc. 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, particularly cash generating activity, by excluding the effects of restructuring charges, impairment charges, losses on debt extinguishment, certain postemployment actuarial adjustments, charges for deferred tax asset valuation allowances and losses associated with non-core operations 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 useful to investors by facilitating a comparison of our operating performance to the operating performance of our competitors, many of which use adjusted net earnings (loss), adjusted net earnings (loss) per diluted share and adjusted EBITDA as alternative measures of operating performance. 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. 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 are not necessarily comparable to similarly titled measures used by other companies.

10-K SUMMARY

Our Vision is to become the Iconic Corporation, returning to our stature as a leading business in the United States. This vision is about more than U. S. Steel; it is about having a strong manufacturing presence in the United States.

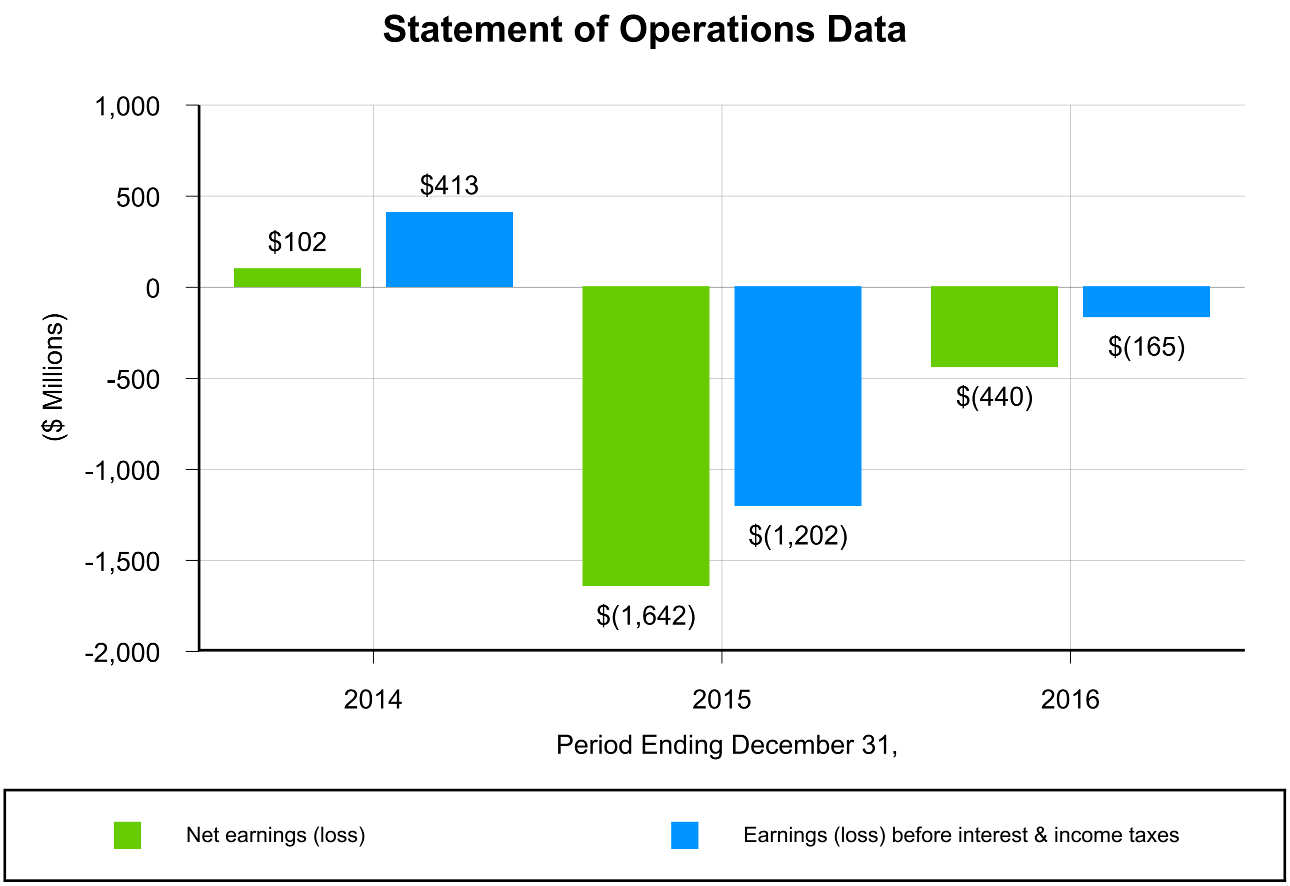
During 2016, we continued to transform U. S. Steel through the two phases of a focused execution on our stockholder value creation strategy: (1) earn the right to grow, and (2) drive and sustain profitable growth. Our long-term success depends on our ability to execute these phases and earn an economic profit across the business cycle. Through a disciplined approach we refer to as “The Carnegie Way,” we continue working towards strengthening our balance sheet, with a strong focus on cash flow, liquidity, and financial flexibility.



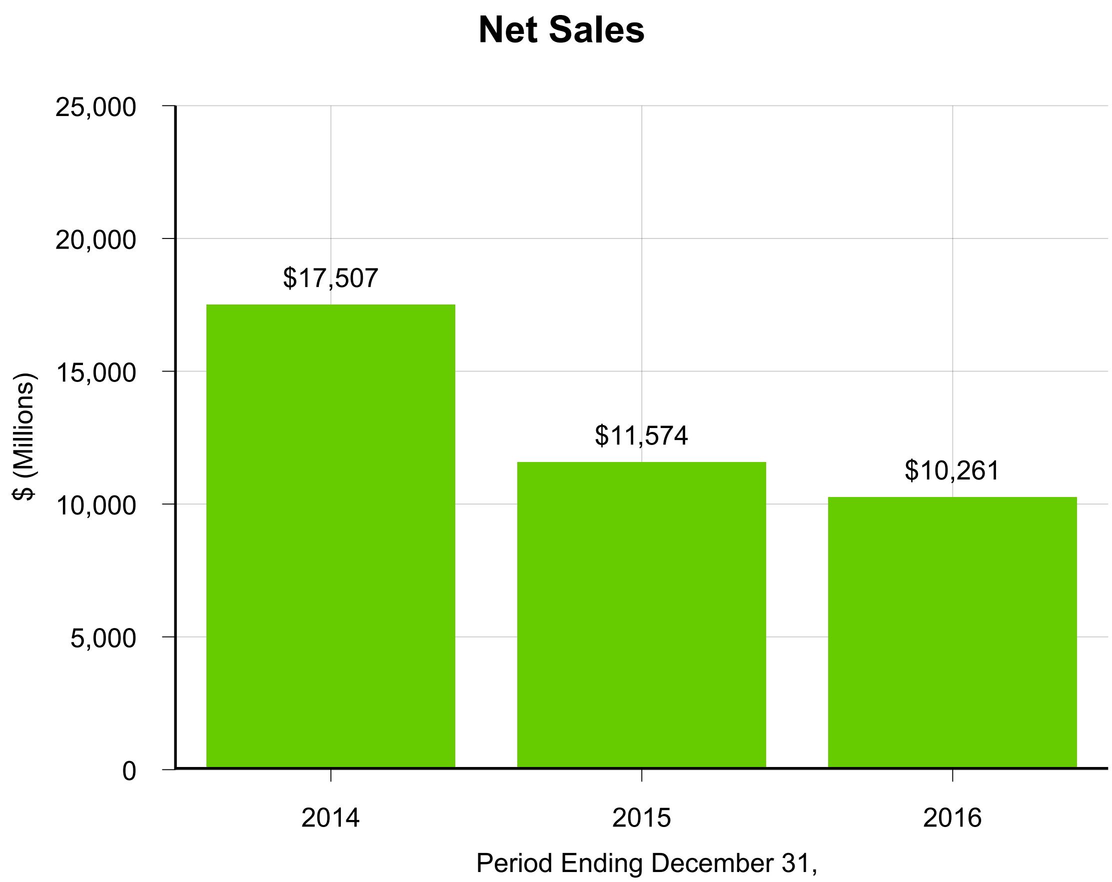
Based on the Carnegie Way philosophy, we have launched a series of initiatives that we believe will enable us to add value, re-shape the Company, and improve our performance across our core business processes, including commercial, supply chain, manufacturing, procurement, innovation, and operational and functional support. We are on a mission to become an iconic industry leader, as we create a sustainable competitive advantage with a relentless focus on economic profit, our customers, cost structure, and innovation. In pursuing our financial goals, we will not sacrifice our commitment to safety and environmental stewardship. We recognize that achieving this goal requires exemplary leadership and collaboration of all employees.

KEY PERFORMANCE INDICATORS

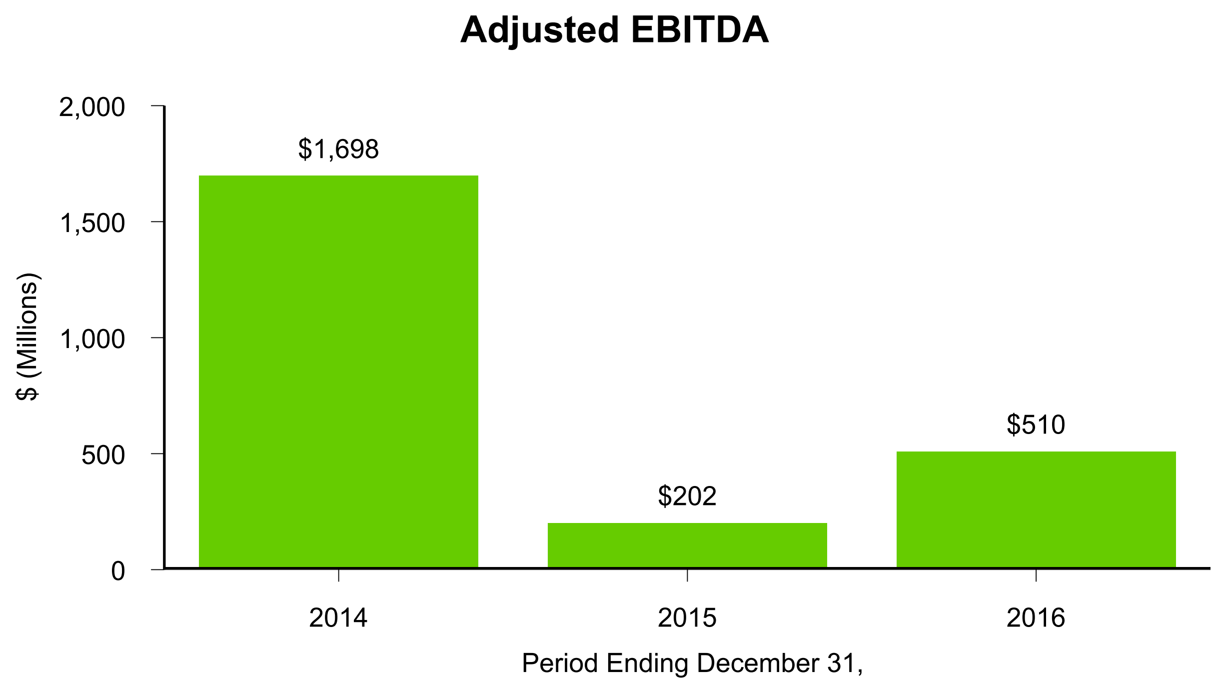
This section provides an overview of select key performance indicators for U. S. Steel which management and investors use to assess the Company's financial performance. It does not contain all of the information you should consider. Fluctuations for year to year changes are explained in Item 7. "Management's Discussion and Analysis of Financial Condition and Results of Operations." In addition, the results do not include U. S. Steel Canada Inc. (USSC) subsequent to USSC's filing for Companies' Creditors Arrangement Act (CCAA) protection on September 16, 2014. Please read the entire Annual Report on Form 10-K.



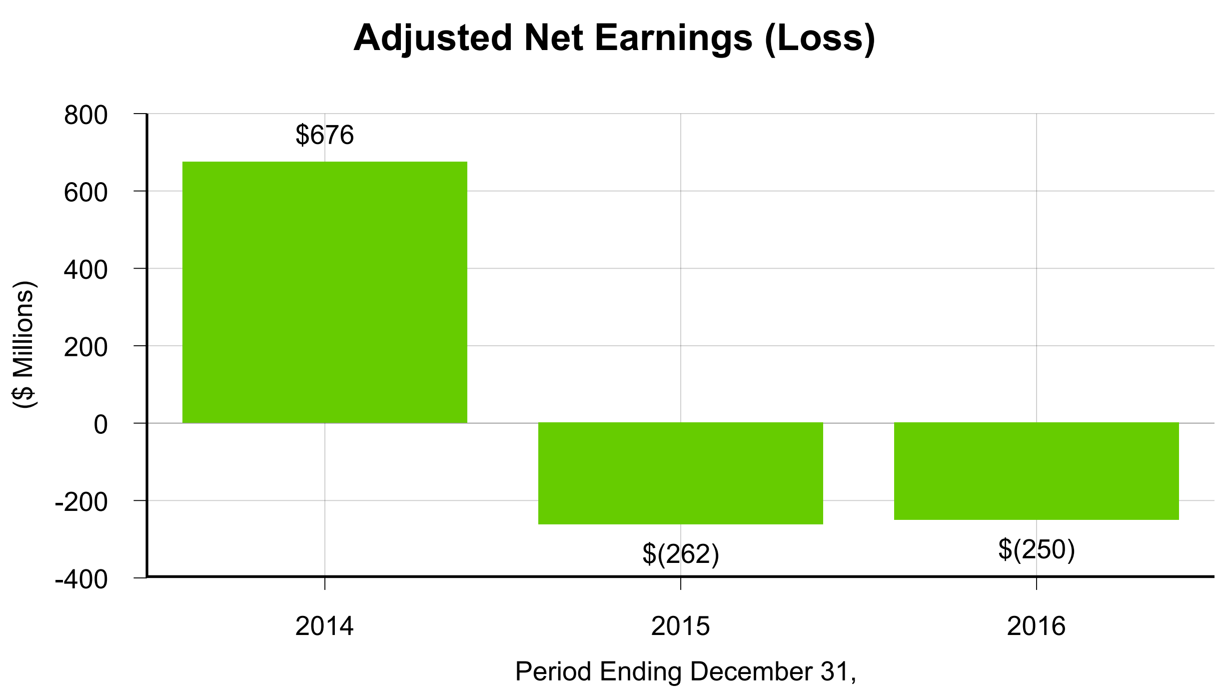
- The $745 million of Carnegie Way benefits realized in 2016 show that we continue to make significant progress toward our goal of achieving economic profit across the business cycle. Our progress is real and it is substantial, but our 2016 results show that it is not yet enough to fully overcome unfavorable market and business conditions.



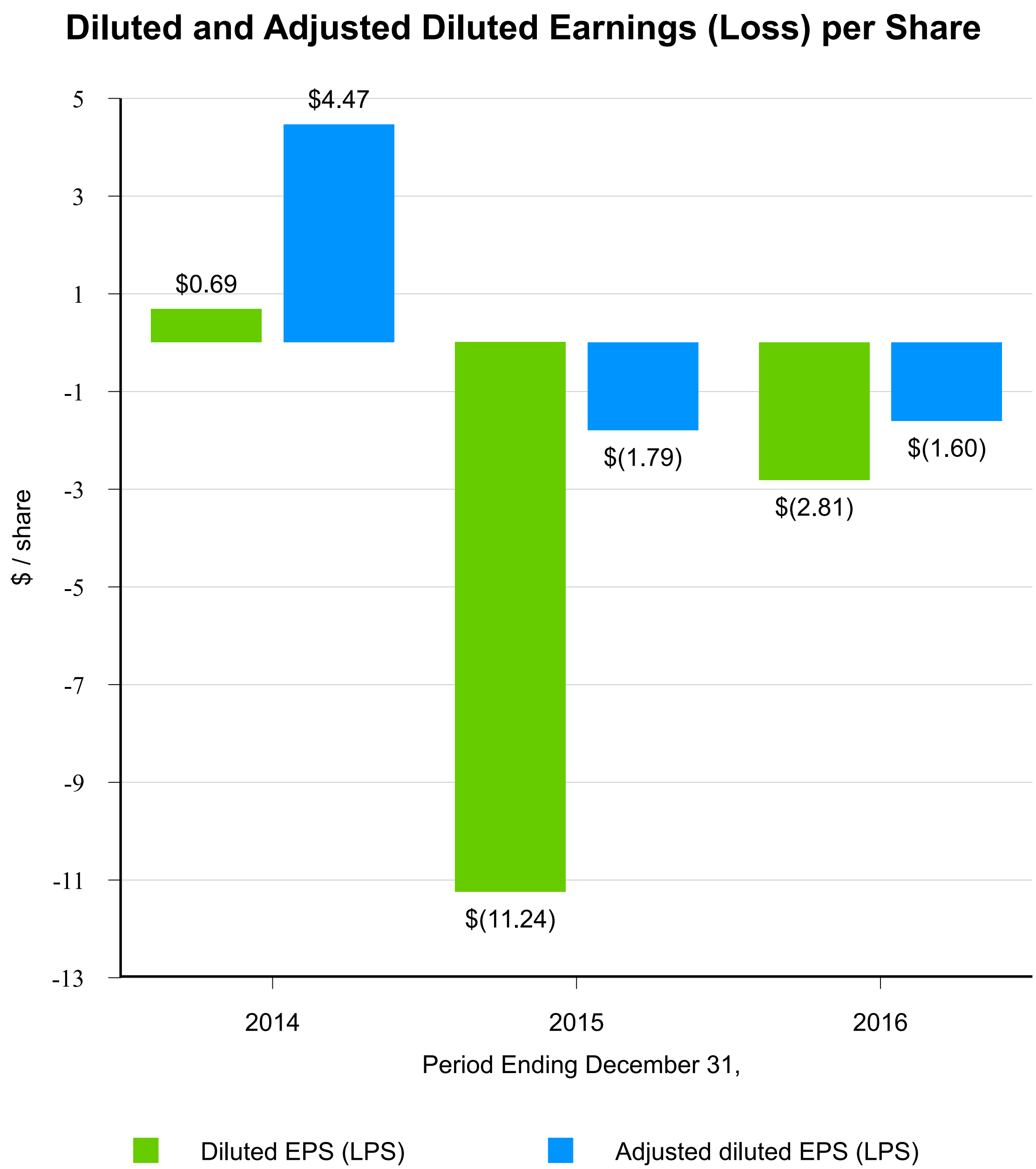
- The decrease in net sales in 2016 is primarily due to decreased shipment volumes and lower average realized prices as a result of extremely challenging market conditions to start 2016. While imported steel volumes decreased in 2016 because of three favorable trade case rulings in 2016, the cumulative impacts of imported volumes previously shipped into the United States served to reduce our shipment volumes and depress both spot and contract prices in 2016.
- Despite the reduced net sales revenue, our net loss decreased in 2016 due to an improved cost structure throughout the Company.



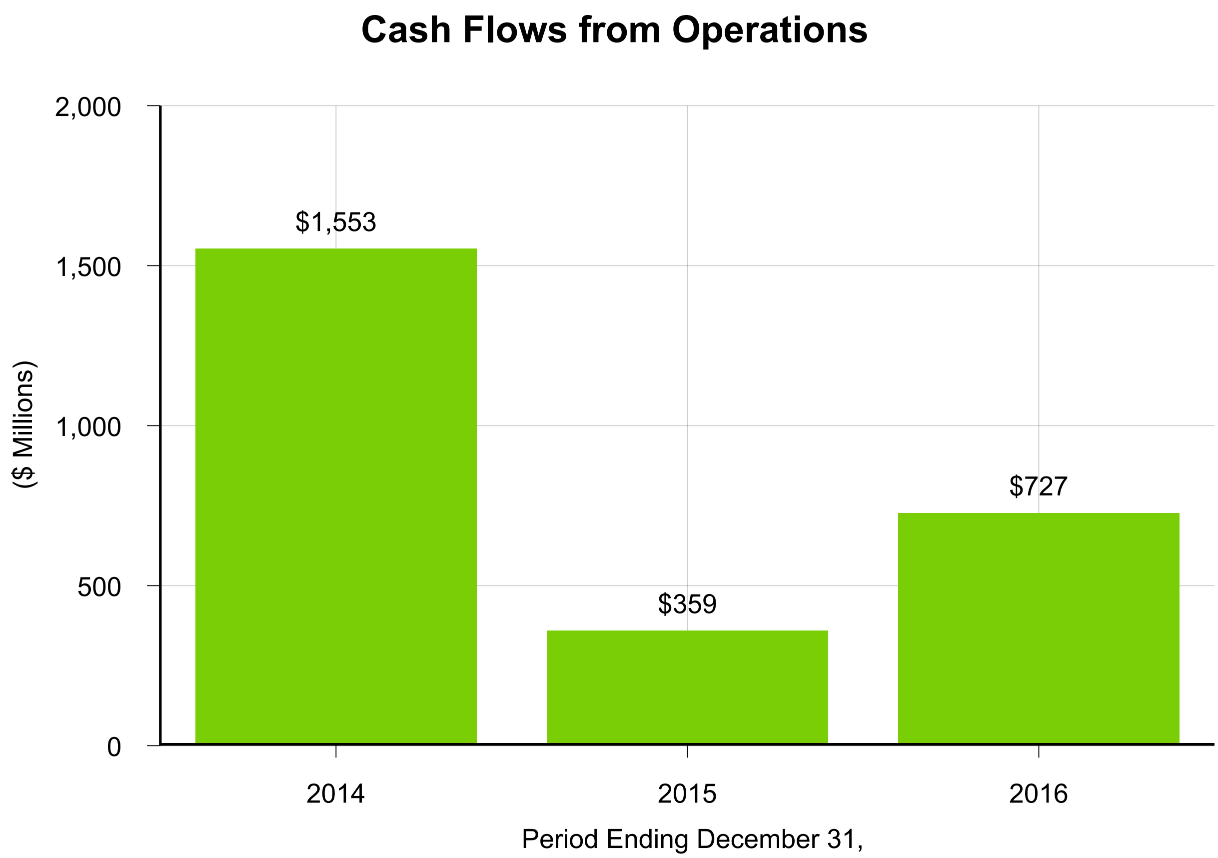
- These amounts are derived starting from net earnings (loss) as shown on page 5. For a full reconciliation of adjusted EBITDA see page 15.
- Under difficult market conditions we reported improved adjusted EBITDA in 2016 as compared to 2015.



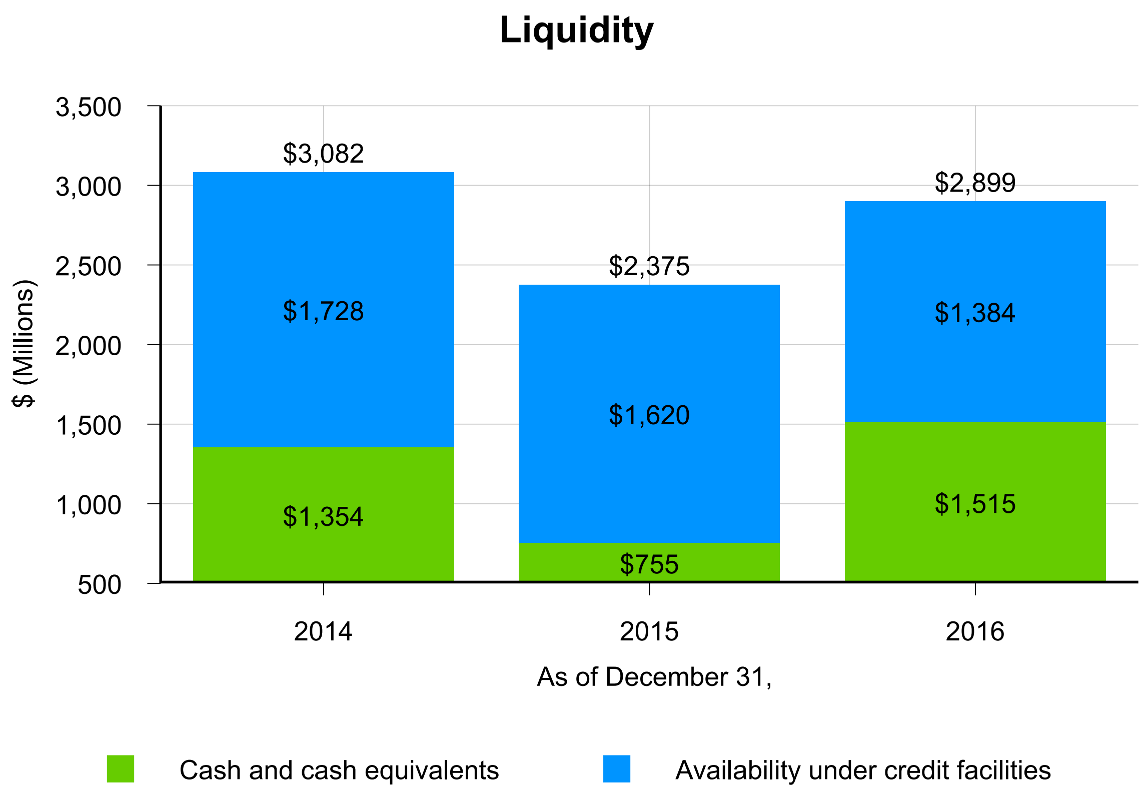
- These amounts are derived starting from net earnings (loss) as shown on page 5. For a full reconciliation of adjusted net earnings (loss) see page 13.
- Our efforts towards achieving economic profit across the business cycle, guided by the Carnegie Way continue, but in 2016 were not enough to overcome difficult market conditions.



- See reconciliation from diluted net earnings (loss) per share to adjusted diluted net earnings (loss) per share on page 14.

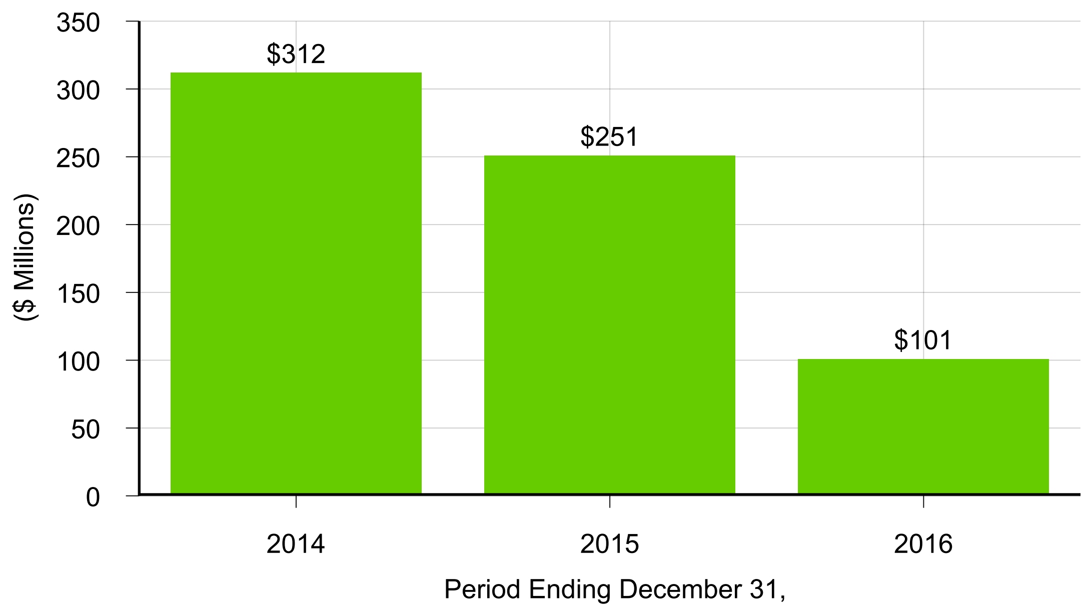


- Positive cash from operations due to efficient working capital management in 2016. The working capital reduction was primarily driven by improved inventory management.

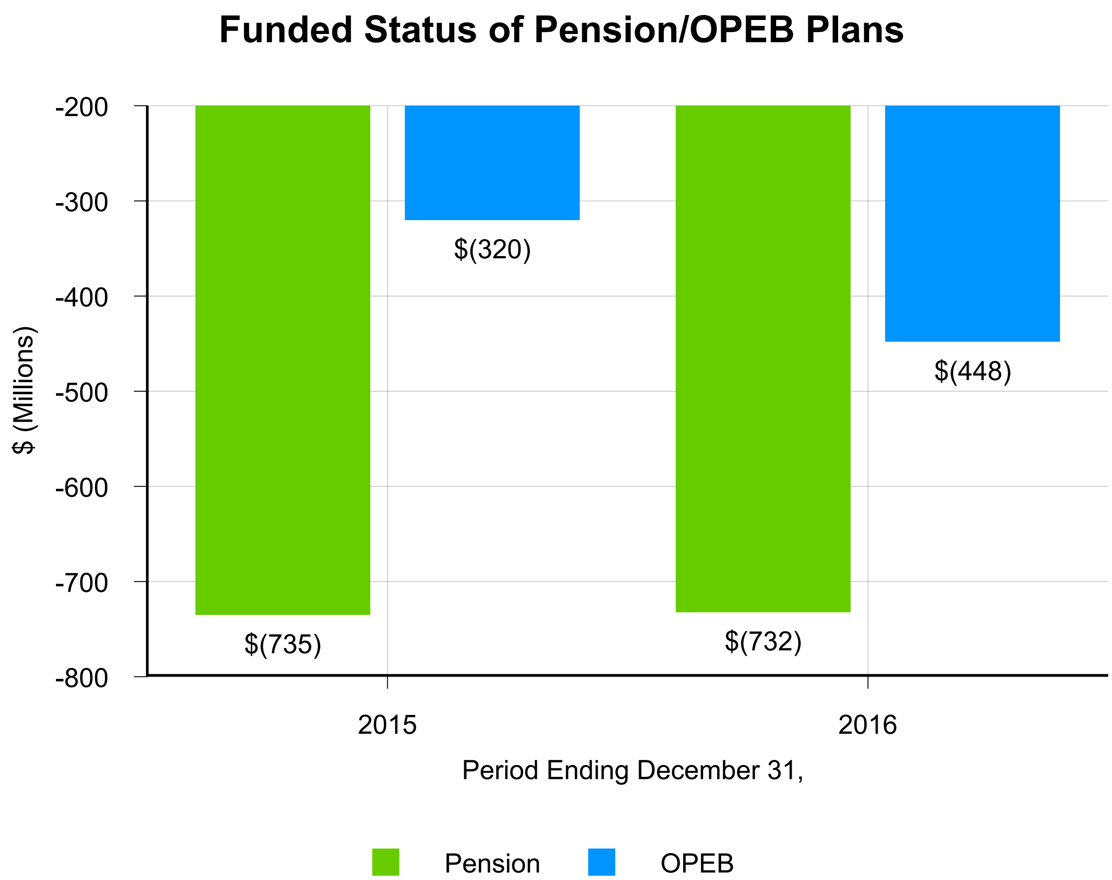


- Maintaining strong cash and liquidity is a strategic priority.
- Successful completion of an equity offering in 2016 resulted in net proceeds of $482 million.

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



- The decrease in 2016 pension and OPEB expense is primarily due to the freezing of benefit accruals for non-represented participants effective December 31, 2015.
- 2017 pension and OPEB expense is expected to be approximately $180 million. The increase in expected expense 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.
- For further details, see Note 17 to the Consolidated Financial Statements.



- Pension funded status remained consistent with 2015, while OPEB funded status decreased due to certain employee and retiree benefit modifications provided in the United Steelworkers (USW) collective bargaining agreement ratified in 2016.
- As we maintain focus on strengthening the balance sheet, the unfunded status of our benefit plans is improving. This is partially attributable to the decision to freeze benefit accruals for non-represented participants in the defined benefit pension plan effective December 31, 2015 and the closure of OPEB plans to represented employees hired or rehired under certain conditions on or after January 1, 2016.
- In August 2016, U. S. Steel made a voluntary contribution of $100 million in common stock to the Company's main defined benefit pension plan. From the date of the contribution to the end of the year, the investment returned 25%.
- At December 31, 2016, the Pension and OPEB obligations were funded 88% and 82% respectively, on a U.S. GAAP basis.
- For further details, see Note 17 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 (LOSS) EARNINGS [a]

	Year Ended December 31,		
(Dollars in millions)	**2016**	2015	2014
Reconciliation to adjusted net (loss) earnings attributable to United States Steel Corporation			
Net (loss) earnings attributable to United States Steel Corporation, as reported	**$ (440)**	$ (1,642)	$ 102
Loss on shutdown of certain tubular pipe mill assets [b]	**126**	—	—
Losses associated with U. S. Steel Canada Inc.	**—**	266	385
Loss on shutdown of Fairfield Flat-Rolled Operations [b] [c]	**—**	53	—
Loss on shutdown of coke production facilities [b]	**—**	65	—
Restructuring and other charges [b] [d]	**(2)**	64	—
Granite City Works temporary idling charges	**18**	99	—
Postemployment benefit actuarial adjustment	**—**	26	—
Impairment of equity investment	**12**	18	—
Loss on retirement of senior convertible notes	**—**	36	—
Deferred tax asset valuation allowance	**—**	753	—
Impairment of carbon alloy facilities [b]	**—**	—	161
Litigation reserves	**—**	—	46
Write-off of pre-engineering costs at Keetac [b]	**—**	—	30
Loss on assets held for sale	**—**	—	9
Gain on sale of real estate assets [e]	**—**	—	(45)
Curtailment gain	**—**	—	(12)
Impairment of intangible assets	**14**	—	—
Loss on extinguishment of debt	**22**	—	—
Total Adjustments	**190**	1,380	574
Adjusted net (loss) earnings attributable to United States Steel Corporation	**$ (250)**	$ (262)	$ 676

[a] The adjustments included in this table have been tax affected at the quarterly effective tax rate through the third quarter of 2015. Subsequent to the third quarter of 2015, the adjustments have been tax affected at a 0% tax rate due to the recognition of a full valuation allowance which was established in the fourth quarter of 2015.
[b] Included in restructuring and other charges on the Consolidated Statement of Operations.
[c] Fairfield Flat-Rolled Operations includes the blast furnace and associated steelmaking operations, along with most of the flat-rolled finishing operations at the former Fairfield Works. The #5 coating line continues to operate.
[d] The 2015 amount consists primarily of employee related costs, including costs for severance, supplemental unemployment benefits and continuation of health care benefits.
[e] Gain on sale of surface rights and mineral royalty revenue streams in the state of Alabama.

RECONCILIATION TO ADJUSTED NET (LOSS) EARNINGS PER SHARE [a]

	Year Ended December 31,		
	2016	2015	2014
Reconciliation to adjusted diluted net (loss) earnings per share			
Diluted net loss per share, as reported	**$ (2.81)**	$ (11.24)	$ 0.69
Loss on shutdown of certain tubular pipe mill assets [b]	**0.80**	—	—
Losses associated with U. S. Steel Canada Inc.	**—**	1.82	2.52
Loss on shutdown of Fairfield Flat-Rolled Operations [b] [c]	**—**	0.37	—
Loss on shutdown of coke production facilities [b]	**—**	0.44	—
Restructuring and other charges [b] [d]	**(0.01)**	0.44	—
Granite City Works temporary idling charges	**0.11**	0.68	—
Postemployment benefit actuarial adjustment	**—**	0.18	—
Impairment of equity investment	**0.08**	0.12	—
Loss on retirement of senior convertible notes	**—**	0.25	—
Deferred tax asset valuation allowance	**—**	5.15	—
Impairment of carbon alloy facilities [b]	**—**	—	1.06
Litigation reserves	**—**	—	0.31
Write-off of pre-engineering costs at Keetac [b]	**—**	—	0.21
Loss on assets held for sale	**—**	—	0.06
Gain on sale of real estate assets [e]	**—**	—	(0.30)
Curtailment gain	**—**	—	(0.08)
Impairment of intangible assets	**0.09**	—	—
Loss on extinguishment of debt	**0.14**	—	—
Total adjustments	**1.21**	9.45	3.78
Adjusted diluted net (loss) earnings per share	**$ (1.60)**	$ (1.79)	$ 4.47

[a] The adjustments included in this table have been tax affected at the quarterly effective tax rate through the third quarter of 2015. Subsequent to the third quarter of 2015, the adjustments have been tax affected at a 0% tax rate due to the recognition of a full valuation allowance 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.
[c] Fairfield Flat-Rolled Operations includes the blast furnace and associated steelmaking operations, along with most of the flat-rolled finishing operations at the former Fairfield Works. The #5 coating line continues to operate.
[d] The 2015 amount consists primarily of employee related costs, including costs for severance, supplemental unemployment benefits and continuation of health care benefits.
[e] Gain on sale of surface rights and mineral royalty revenue streams in the state of Alabama.

RECONCILIATION TO EBITDA AND ADJUSTED EBITDA

(Dollars in millions)	Year Ended December 31, 2016	2015	2014
Reconciliation to EBITDA and Adjusted EBITDA			
Net (loss) earnings attributable to U. S. Steel Corporation	**$ (440)**	$ (1,642)	$ 102
Income tax provision	**24**	183	68
Net interest and other financial costs	**251**	257	243
Depreciation, depletion and amortization expense	**507**	547	627
EBITDA	**342**	(655)	1,040
Loss on shutdown of certain tubular pipe mill assets [a]	**126**	—	—
Losses associated with U. S. Steel Canada Inc.	**—**	392	416
Loss on shutdown of Fairfield Flat-Rolled Operations [a] [b]	**—**	91	—
Loss on shutdown of coke production facilities [a]	**—**	153	—
Restructuring and other charges [a], [c]	**(2)**	78	—
Granite City Works temporary idling charges	**18**	99	—
Postemployment benefit actuarial adjustment	**—**	26	—
Impairment of equity investment	**12**	18	—
Impairment of carbon alloy facilities [a]	**—**	—	195
Litigation reserves	**—**	—	70
Write-off of pre-engineering costs at Keetac [a]	**—**	—	37
Loss on assets held for sale	**—**	—	14
Gain on sale of real estate assets [d]	**—**	—	(55)
Curtailment gain	**—**	—	(19)
Impairment of intangible assets	**14**	—	—
Adjusted EBITDA	**$ 510**	$ 202	$ 1,698

[a] Included in restructuring and other charges in the Consolidated Statement of Operations.
[b] Fairfield Flat-Rolled Operations includes the blast furnace and associated steelmaking operations, along with most of the flat-rolled finishing operations at Fairfield Works. The #5 coating line continues to operate.
[c] The 2015 amount consists primarily of employee related costs, including costs for severance, supplemental unemployment benefits and continuation of health care benefits.
[d] Gain on sale of surface rights and mineral royalty revenue streams in the state of Alabama.

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 North America 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 worldsteel Association's latest published statistics, U. S. Steel was the twenty-fourth largest steel producer in the world in 2015. Also in 2015, according to publicly available information, U. S. Steel was the third largest steel producer in the United States. U. S. Steel is also engaged in other business activities consisting primarily of railroad services and real estate operations.

The Carnegie Way

In 2013, U. S. Steel launched a transformational process called the "Carnegie Way," named after the famed American industrialist and U. S. Steel co-founder Andrew Carnegie. The Carnegie Way is a strategic, disciplined approach to transforming the Company to address the new realities of the marketplace. Through the Carnegie Way, we focus on our strengths and where we can create the most value for all U. S. Steel stakeholders, including our stockholders, employees, customers and suppliers. The Carnegie Way is a framework that helps employees address all aspects of our business and achieve sustainable improvements through process efficiencies and strategic investments. We have been working through a series of transformational initiatives that we believe will enable us to more effectively add value, respond to customer needs, get leaner faster, right-size our operations and improve our performance across our core business process capabilities, including commercial, supply chain, manufacturing, procurement, innovation, and operational and functional support. Key accomplishments to date include a more intense focus on cash flow, a stronger balance sheet and a revised approach to how we view shipment volume and production. In pursuing our financial goals, we will not sacrifice our commitment to our core values of safety and environmental stewardship. We also recognize that achieving this goal requires exemplary leadership and collaboration among all employees, and we are committed to attracting, developing and retaining a workforce with the talent, skills and integrity needed for our long-term success. The Carnegie Way has already driven a shift in the Company that has enabled us to withstand the prolonged downturn in steel prices while positioning us for success in a market recovery.

Our structured approach, using the Carnegie Way value creation methodology, gives us the confidence that we can continue to make progress and create value for our customers, and when we create value for our customers, we create value for all of our stakeholders - our stockholders, our suppliers, our employees and the communities where we do business.

Segments

U. S. Steel has three reportable operating segments: Flat-Rolled Products (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 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.

As part of the Carnegie Way transformation, the Flat-Rolled segment was structured to better service customer needs through the creation of three "commercial entities" to specifically address customers. Our Flat-Rolled segment commercial entities include: (1) automotive, (2) consumer and (3) industrial, service center and mining.

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 more than 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. Prior to the permanent shut down of the Fairfield Flat-Rolled operations beginning in August 2015 and the Companies' Creditors Arrangement Act (CCAA) filing and the deconsolidation of U. S. Steel Canada, Inc. (USSC) in September 2014, annual raw steel production capability for Flat-Rolled was 19.4 million tons and 22.0 million tons, respectively. Raw steel production was 10.7 million tons in 2016, 11.3 million tons in 2015 and 17.0 million tons in 2014. Raw steel production averaged 63 percent of capability in 2016, 60 percent of capability in 2015 and 80 percent of capability in 2014. In December 2015 the Granite City Works was temporarily idled and if its production capability is excluded, Flat-Rolled production would have been 75 percent of capability in 2016.

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. USSE primarily serves customers in the Eastern European construction, service center, conversion, container, transportation (including automotive), appliance and electrical, and oil, gas and petrochemical markets. USSE produces and sells slabs, sheet, strip mill plate, 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 2016, 4.7 million tons in 2015, and 4.8 million tons in 2014. USSE’s raw steel production averaged 99 percent of capability in 2016, 93 percent of capability in 2015 and 96 percent of capability in 2014.

Tubular

The Tubular segment includes the operating results of U. S. Steel’s tubular production facilities, in the United States, and equity investees in the United States and Brazil. These operations produce and sell seamless and electrical resistance welded (welded) steel casing and tubing (commonly known as OCTG), standard and line pipe and mechanical tubing and primarily serve customers in the oil, gas and petrochemical markets. Tubular’s annual production capability was 2.5 million prior to the permanent shutdown of the Lorain #4 and Lone Star #1 pipe mills and the Bellville

Operations, as further described below. After the permanent shutdowns, Tubular's annual production capability is 1.5 million tons.

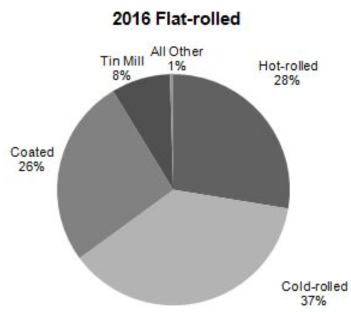
In December of 2016, U. S. Steel made the strategic decision to permanently close the Lorain #4 and Lone Star #1 pipe mills and the Bellville Operations after considering a number of factors, including challenging market conditions for tubular products, reduced rig counts, and continued high levels of unfairly traded imports.

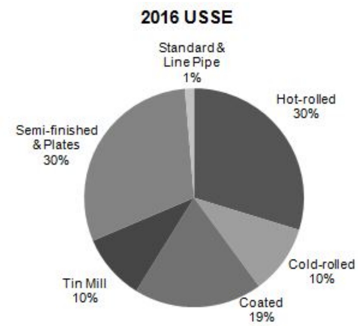
U. S. Steel Tubular Products, Inc. (USSTP), a wholly owned subsidiary of U. S. Steel, is designing and developing a range of premium and semi-premium connections to address the growing needs for technical solutions to our end users' well site production challenges. Through its wholly owned subsidiary, USS 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.

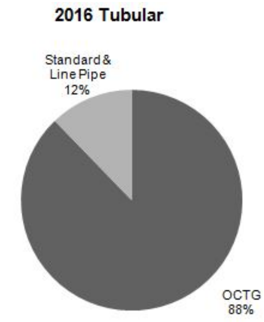
For further information, see "Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations" and Note 3 to the Consolidated Financial Statements.

Financial and Operational Highlights

Steel Shipments by Product and Segment



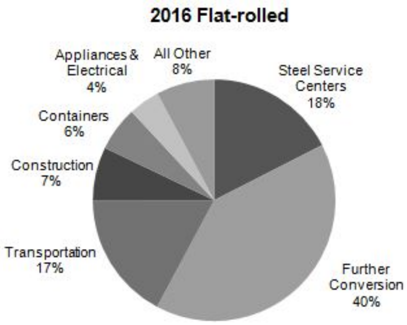


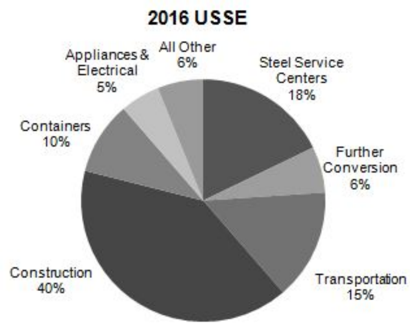


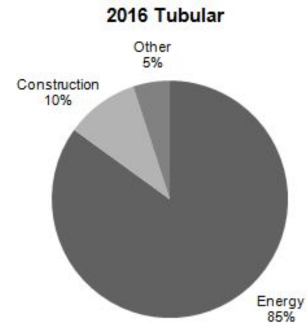
The following table shows steel shipments to end customers, joint ventures and equity investees of U. S. Steel.

(Thousands of Tons)	Flat-Rolled	USSE	Tubular	Total
Product—2016				
Hot-rolled Sheets	**2,784**	**1,337**	**—**	**4,121**
Cold-rolled Sheets	**3,775**	**459**	**—**	**4,234**
Coated Sheets	**2,655**	**849**	**—**	**3,504**
Tin Mill Products	**831**	**439**	**—**	**1,270**
Oil country tubular goods (OCTG)	**—**	**—**	**351**	**351**
Standard and line pipe	**—**	**60**	**49**	**109**
Semi-finished and Plates	**23**	**1,352**	**—**	**1,375**
Other	**26**	**—**	**—**	**26**
TOTAL	**10,094**	**4,496**	**400**	**14,990**
Memo: Intersegment Shipments from Flat-Rolled to Tubular				
Hot-rolled sheets	**42**			
Product—2015				
Hot-rolled Sheets	3,283	1,165	—	4,448
Cold-rolled Sheets	3,507	470	—	3,977
Coated Sheets	2,511	865	—	3,376
Tin Mill Products	927	428	—	1,355
Oil country tubular goods (OCTG)	—	—	345	345
Standard and line pipe	—	55	248	303
Semi-finished and Plates	47	1,374	—	1,421
Other	320	—	—	320
TOTAL	10,595	4,357	593	**15,545**
Memo: Intersegment Shipments from Flat-Rolled to Tubular				
Hot-rolled sheets	219			
Rounds	197			
Product—2014				
Hot-rolled Sheets	4,909	1,374	—	6,283
Cold-rolled Sheets	4,207	518	—	4,725
Coated Sheets	3,316	775	—	4,091
Tin Mill Products	1,180	411	—	1,591
Oil country tubular goods (OCTG)	—	—	1,308	1,308
Standard and line pipe	—	62	314	376
Semi-finished and Plates	165	1,039	—	1,204
Other	131	—	122	253
TOTAL	13,908	4,179	1,744	**19,831**
Memo: Intersegment Shipments from Flat-Rolled to Tubular				
Hot-rolled sheets	863			
Rounds	849			

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.

(Thousands of Tons)	**Flat-Rolled**	**USSE**	**Tubular**	**Total**
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**
Major Market – 2015				
Steel Service Centers	1,702	718	—	2,420
Further Conversion – Trade Customers	3,039	304	—	3,343
– Joint Ventures	1,254	—	—	1,254
Transportation (Including Automotive)	2,011	705	—	2,716
Construction and Construction Products	649	1,703	55	2,407
Containers	692	424	—	1,116
Appliances and Electrical Equipment	429	236	—	665
Oil, Gas and Petrochemicals	—	—	513	513
Exports from the United States	234	—	25	259
All Other	585	267	—	852
TOTAL	10,595	4,357	593	**15,545**
Major Market – 2014				
Steel Service Centers	2,578	682	—	3,260
Further Conversion – Trade Customers	4,013	299	—	4,312
– Joint Ventures	1,519	—	—	1,519
Transportation (Including Automotive)	2,445	674	—	3,119
Construction and Construction Products	775	1,584	122	2,481
Containers	1,287	403	—	1,690
Appliances and Electrical Equipment	616	267	—	883
Oil, Gas and Petrochemicals	—	3	1,545	1,548
Exports from the United States	263	—	77	340
All Other	412	267	—	679
TOTAL	13,908	4,179	1,744	**19,831**

Business Strategy

Over the long term, our strategy is to return to our stature as an iconic industry leader, as we create a sustainable competitive advantage with a relentless focus on value creation, customer, quality, cost structure and innovation. In pursuing our strategy, we remain committed to safety and environmental stewardship. We recognize that achieving this goal requires exemplary leadership and collaboration of all employees, and we are committed to attracting, developing and retaining a high-performing workforce with the talent, skills and integrity needed for our long-term success.

We have continued to transform U. S. Steel through the two phases of focused execution of our stockholder value creation strategy: (1) earn the right to grow, and (2) drive and sustain profitable growth. Through a disciplined approach we refer to as “The Carnegie Way,” we continue working toward strengthening our balance sheet, with a strong focus on cash flow, liquidity, and financial flexibility and have launched a series of initiatives that we believe will continue to enable us to add value, re-shape the Company, and improve our performance across our core business processes, including commercial, supply chain, manufacturing, procurement, innovation, and operational and functional support.

We have worked, and continue to work, to position the Company to be best-in-class in innovation, quality and providing customer service and solutions to our customers. 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. We believe this enhanced commercial concentration will continue to put U. S. Steel in a stronger position to be best-in-class in product innovation, quality and providing service and solutions to our customers, as well as steel manufacturing.

U. S. Steel continuously evaluates potential strategic and organizational opportunities, which may include the acquisition, divestiture or consolidation of assets. The Company will pursue opportunities based on the financial condition of the Company, its long-term strategy, and what the Board of Directors determines to be in the best interests of the Company's stockholders.

Changes to Operational Footprint

In December 2016, the Company reached agreements to supply iron ore pellets to third party customers over the next several years. The Keetac Iron Ore Operations restarted production in the first quarter of 2017 to take full advantage of these business opportunities. It had previously been idle since May of 2015 due to significantly lower steel production.

In December 2016, U. S. Steel announced it would be restarting production on the hot strip mill at Granite City Works in the first quarter of 2017 to provide better alignment with customer needs and improve service while increasing the pace of our asset revitalization plan. The hot strip mill was temporarily idled in January of 2016.

In December 2016, the Company made the strategic decision to permanently close the Lorain #4 and Lone Star #1 pipe mills and the Bellville Tubular Operations after considering a number of factors, including challenging market conditions for tubular products, reduced rig counts, and unfairly traded imports.

In April 2016, U. S. Steel temporarily idled its Lone Star tubular operations.

During 2015, the Company adjusted operating levels at several of its tubular operations as declining oil prices and rig counts have significantly reduced demand for OCTG products.

In August 2015, U. S. Steel permanently shut down the majority of Fairfield Flat-Rolled operations.

In 2015, the Company permanently closed the coke making operations at Granite City Works and Gary Works. Also, in 2015, U. S. Steel temporarily idled steelmaking operations at Granite City Works.

On September 16, 2014, U. S. Steel Canada, Inc. (USSC), a wholly owned subsidiary of U. S. Steel, applied for relief from its creditors pursuant to Canada’s Companies’ Creditors Arrangement Act (CCAA). As a result of USSC filing for CCAA protection (CCAA filing), U. S. Steel determined that USSC and its subsidiaries would be deconsolidated from U. S. Steel’s financial statements on a prospective basis effective with the date of the CCAA filing.

Recent Acquisitions

On May 29, 2015, the Company purchased the 50 percent joint venture interest in Double Eagle Steel Coating Company (DESCO) that it did not previously own for $25 million. The facility coats sheet steel with free zinc or zinc alloy coatings, primarily for use in the automotive industry. DESCO’s annual production capability is approximately 720,000 tons. DESCO's electrolytic galvanizing line (EGL) has become part of the larger operational footprint of U. S. Steel's Great Lakes Works within the Flat-Rolled segment. The EGL is increasing our ability to provide industry-leading AHSS, including Gen 3 grades under development, as well as to provide high quality exposed steel for automotive body and closure applications to our customers.

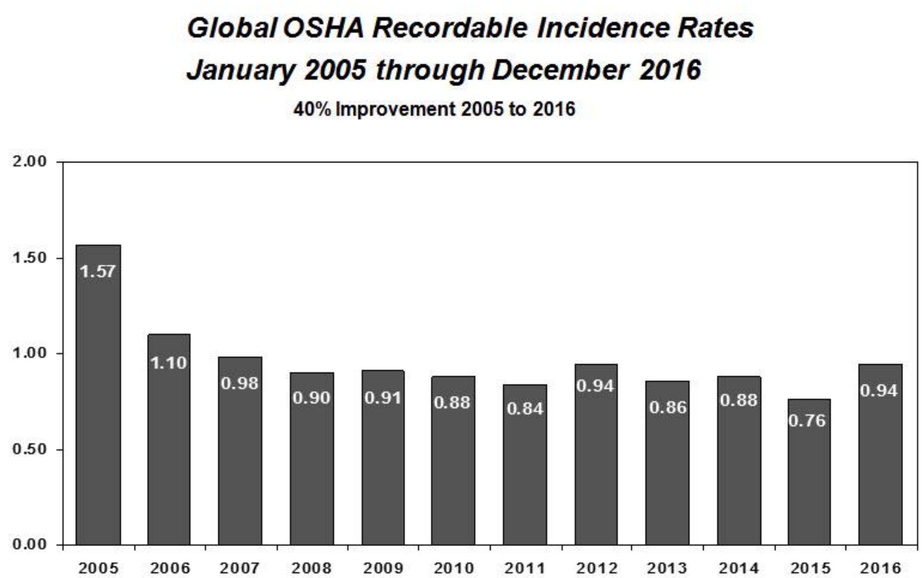
Safety

U. S. Steel has a long-standing commitment to the safety and health of the men and women who work in our facilities. For our Company, safety is our primary core value. Every employee has the right 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.

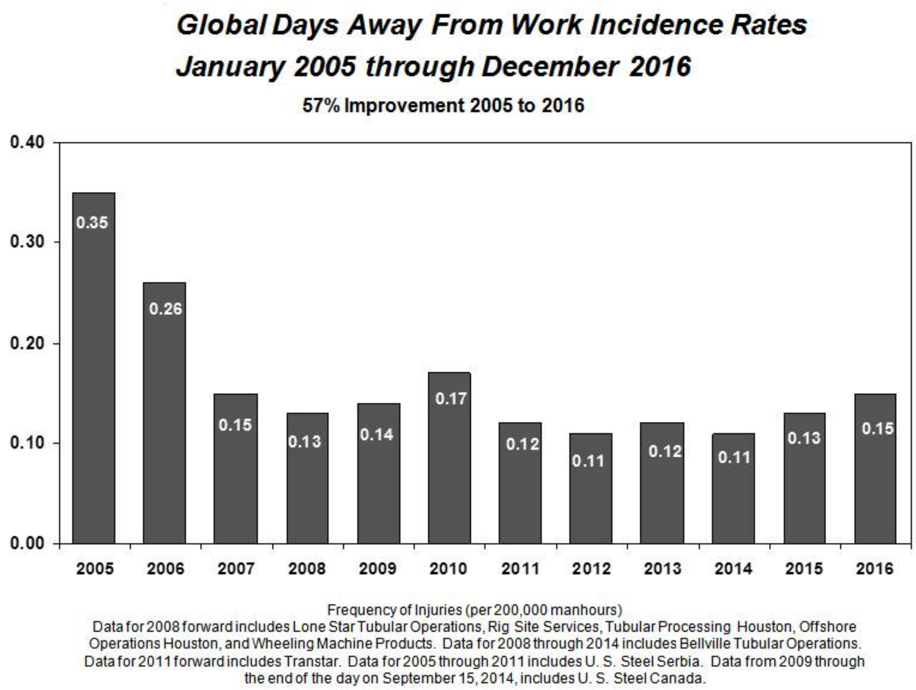
U. S. Steel finished 2016 with a Global Total OSHA Recordable Rate of 0.94, which is 73% better than the Bureau of Labor Statistics for Iron & Steel rate of 3.50 and 44% better than American Iron and Steel Institute rate of 1.67. U. S. Steel finished 2016 with a Days Away From Work Rate of 0.15, which is 85% better than the Bureau of Labor Statistics for Iron & Steel rate of 1.0 and 63% better than American Iron and Steel Institute rate of 0.40. Additionally, when comparing our most severe injuries - cases involving 31 or more days away from work - U. S. Steel performs at a level almost 6 times better than the Bureau of Labor Statistics for Iron and Steel.

In 2016 we experienced two domestic U. S. Steel fatalities and 1 contractor fatality in Europe. These tragic events serve as a reminder that we must remain vigilant in our safety efforts to ensure every employee returns home safely every day.

Through 2016, the 12 year performance for our key safety measures: Total Recordable and Days Away From Work rates show improvement of 40% and 57% respectively, as shown on the following graphs.



Frequency of Injuries (per 200,000 manhours)
Data for 2008 forward includes Lone Star Tubular Operations, Rig Site Services, Tubular Processing Houston, Offshore Operations Houston, and Wheeling Machine Products. Data for 2008 through 2014 includes Bellville Tubular Operations. Data for 2011 forward includes Transtar. Data for 2005 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.


Global Days Away From Work Incidence Rates
January 2005 through December 2016
57% Improvement 2005 to 2016
0.40
0.30
0.20
0.10
0.00
0.35
0.26
0.15
0.13
0.14
0.17
0.12
0.11
0.12
0.11
0.13
0.15
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
Frequency of Injuries (per 200,000 manhours)
Data for 2008 forward includes Lone Star Tubular Operations, Rig Site Services, Tubular Processing Houston, Offshore Operations Houston, and Wheeling Machine Products. Data for 2008 through 2014 includes Bellville Tubular Operations. Data for 2011 forward includes Transtar. Data for 2005 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.

Environmental Stewardship

Throughout its history, U. S. Steel has either led the industry or used methods consistent with prevailing industry practices in its commitment to 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, and we have taken the actions described below in furtherance of that goal.

U. S. Steel, largely through the American Iron and Steel Institute (AISI), the worldsteel 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 about one-ninth the footprint of carbon fiber composites. Our AHSS used in today’s vehicles afford significant light-weighting opportunities. When comparing steel to aluminum, in terms of sustainability, steel has a smaller carbon footprint and costs less.

U. S. Steel has historically recycled between 4 and 5 million tons of purchased and produced steel scrap every year. 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.

All 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, provides the framework for the measurement and improvement of environmental impacts of the certified facility.

Commercial Strategy

Our commercial strategy is focused on providing customer focused solutions with value-added steel products, including AHSS and coated sheets for the automotive and appliance industries, electrical steel sheets for the manufacture of motors and electrical equipment, galvanized and Galvalume® sheets for construction, tin mill products for the packaging industry and a vast array of steel products, including OCTG and premium connections, for use in the drilling, storage, and transmission of North American shale oil and gas.

We are committed to anticipating 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 an Innovation and Technology Center for Tubular products in Houston, Texas. The focus of these centers is to develop new products and work with our customers to better serve their needs. Examples of our customer focused product innovation include the development of the first commercially available coated AHSS and GEN3 steels and embedding 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; and a line of premium and semi-premium tubular connections to meet our customers’ increasingly complex needs for offshore and horizontal drilling. Designed and developed at the Innovation and Technology Center in Houston, USS- Liberty TC™ is the first domestically made, threaded and coupled premium connection with a metal-to-metal seal that has been tested to the 2014 version of API 5C5 CAL IV. USS- Liberty TC™ was successfully installed by a subsidiary of Range Resources Corporation and is available to other energy producers. This work in premium connection development is supported by our investment in a new full scale tubular connection test frame located at Offshore Operations in Houston, Texas. Please refer to Item I. Business Strategy for further details of our commercial entities and related strategies.

Capital Projects and Other Investments

We are currently developing projects within our Flat-Rolled, USSE and Tubular segments to revitalize our assets, enhance quality and reliability, expand production of AHSS, deliver additional premium connections, and improve our capabilities in packaging. This will further enhance our ability to support our customers' evolving needs and increase our value-added product capabilities. We have substantially completed the implementation of an Enterprise Resource Planning (ERP) system to replace our existing information technology systems, which will enable us to operate more efficiently. The completion of the ERP system is expected to provide further opportunities to streamline, standardize and centralize business processes in order to maximize cost effectiveness, efficiency and control across our global operations.

Workforce

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

Capital Structure and Liquidity

Our primary financial goal is to enhance stockholder value by focusing on our capital structure, liquidity, and financial flexibility by deploying cash strategically as we earn the right to grow. Our cash deployment strategy includes maintaining a healthy pension plan; delivering operational excellence with a focus on safety, quality and reliability; and the revitalization of our capital, both human and equipment, to enable sustainable growth.

In 2016, we undertook several steps to support these goals. The Company issued $980 million of 8.375% Senior Secured Notes due July 1, 2021 and received net proceeds of approximately $958 million, which was used to repay certain of the Company's outstanding debt obligations. Additionally, the Company completed an optional redemption of its outstanding 6.05% Senior Notes due 2017 for an aggregate principal amount of approximately $444 million plus a total make whole premium of approximately $22 million. Further, the Company repurchased approximately $6 million of its 6.05% Senior Notes due 2017, approximately $339 million of its 7.00% Senior Notes dues 2018, approximately $168 million of its 7.375% Senior Notes due 2020 and approximately $75 million of its 6.875% Senior Notes due 2021 through various tender offers and open market purchases.

During August 2016, we made a voluntary contribution of 3,763,643 shares of the Company's common stock to U. S. Steel's main defined benefit pension plan as part of our long term pension liability management strategy. The shares were valued at a price of $26.57 per share, or approximately $100 million in the aggregate, which was the closing price of the Company's common stock on the date of the contribution. Also during August 2016, U. S. Steel issued 21,735,000 of common shares in an underwritten public offering, resulting in net proceeds of approximately $482 million, which will be used for financial flexibility, revitalization of assets and general corporate purposes.

During 2016, U. S. Steel repaid $1.0 billion of debt. We ended 2016 with $1.5 billion of cash and cash equivalents on hand and total liquidity of approximately $2.9 billion.

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.

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 that steel capacity in China alone is over one billion metric tons per year. In addition, other products, 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, which was not the case in 2015 and 2016. 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 postretirement benefits to approximately 100,000 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. The 2015 Labor Agreements provided for the closure of other post-retirement benefits (OPEB) plans to represented employees hired or rehired under certain conditions on or after January 1, 2016.

U. S. Steel believes that our major North American and many European integrated steel competitors are confronted with substantially similar environmental regulatory conditions and thus does not believe that its 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 CO_2 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 and India, will be harmed unless such nations require commensurate reductions in CO_2 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 faces competition from non-U.S. steel producers, many of which are heavily subsidized by their governments and dump steel into the U.S. market. Trade-distorting policies and practices, coupled with global steel overcapacity, impact pricing in the U.S. market and influence the Company's ability to compete on a level playing field. Several flat-rolled products were granted trade relief through a series of three trade cases which concluded during 2016.

U. S. Steel continues to lead the industry in efforts to address illegal dumping and subsidized imports that injure the economic health of our country, our Company and our workers.

On June 3, 2015, U. S. Steel filed antidumping (AD) and countervailing duty (CVD) cases against China, India, Italy, South Korea, and Taiwan for the import of unfairly traded corrosion-resistant steel (CORE). On June 2, 2016, the U.S. Department of Commerce (DOC) issued its affirmative CVD determinations against China, India, Italy, and South Korea, and affirmative AD determinations against China, India, Italy, South Korea, and Taiwan. On June 24, 2016, the U.S. International Trade Commission (USITC) determined that the U.S. industry is materially injured by reason of imports of CORE from all five countries. Following the USITC's affirmative determinations, the DOC published its AD and CVD orders on July 25, 2016. U.S. Customs and Border Protection (CBP) is now enforcing these decisions and collecting AD and CVD duties.

Shortly before the DOC published the final AD/CVD orders on CORE from China, imports of CORE from Vietnam surged dramatically. Suspecting that Chinese producers were diverting cold-rolled steel to Vietnam to undergo minor processing before exporting to the United States in an attempt to avoid paying the new duties, U. S. Steel and the other domestic producers filed a request on June 3, 2016, asking the DOC to conduct an anti-circumvention investigation. DOC initiated its investigation on November 14, 2016, and in December 2016 identified and sent questionnaires to Vietnamese producers, requesting confidential quantity and value information. The DOC received responses from Vietnamese producers on December 28, 2016. If the DOC determines that imports of CORE from China are being channeled through Vietnam, it will impose duties on Vietnamese imports of CORE. The entire proceeding should be completed within 300 days of the initiation date, unless the deadline is extended by the DOC.

On July 28, 2015, U. S. Steel filed AD and CVD petitions charging that unfairly-traded imports of cold-rolled steel products from Brazil, China, India, Japan, South Korea, the Netherlands, Russia, and the United Kingdom are causing material injury to the domestic industry and that the foreign producers in Brazil, China, India, South Korea, and Russia benefit from numerous countervailable subsidies. On May 24, 2016, the DOC published its final determinations in the AD investigations against China and Japan and the CVD investigation against China. On June 22, 2016, the USITC announced its affirmative determinations against China and Japan on the basis of cumulated subject imports from all seven countries. The DOC published its AD and CVD order against China and Japan on July 14, 2016. For the remaining countries - Brazil, India, South Korea, Russia, and the United Kingdom - the DOC issued its final AD and CVD determinations on July 29, 2016, which was followed by a final affirmative injury determination by the USITC against Brazil, India, South Korea, and the United Kingdom. The DOC published its final AD and CVD orders on September 20, 2016. CBP is now enforcing these decisions and collecting AD duties on cold-rolled steel imports from Brazil, China, India, Japan, South Korea, and the United Kingdom, and CVD duties on imports from Brazil, China, India, and South Korea.

Following the publication of the AD/CVD orders, imports of cold-rolled steel from Vietnam significantly increased. Suspecting that Chinese producers were diverting cold-rolled steel to Vietnam to undergo minor processing before exporting to the United States in an attempt to avoid paying the new duties, U. S. Steel and several other domestic producers filed a request on September 27, 2016, for DOC to conduct an anti-circumvention investigation. The DOC initiated its investigation on November 14, 2016, and in December 2016 identified and sent questionnaires to Vietnamese producers, requesting confidential quantity and value information. The DOC received responses from Vietnamese producers on December 28, 2016. If the DOC determines that imports of cold-rolled steel from China are being redirected through Vietnam en route to the United States, it will impose duties on imports of cold-rolled steel from Vietnam. The entire proceeding should be completed within 300 days of the initiation date, unless the deadline is extended by the DOC.

On August 11, 2015, U. S. Steel filed AD and CVD petitions for the imposition of duties on hot-rolled coil from Australia, Brazil, Japan, South Korea, the Netherlands, Turkey, and the United Kingdom. On August 12, 2016, the DOC published affirmative final determinations in the CVD investigations against Brazil, South Korea, and Turkey and the AD investigations against Australia, Brazil, Japan, South Korea, the Netherlands, Turkey, and the United Kingdom. On September 12, 2016, the USITC announced its determination that the industry in the United States is materially injured by reason of imports of hot-rolled steel products from Australia, Brazil, Japan, South Korea, the Netherlands, and the United Kingdom, as well as subject imports from Turkey, that were sold in the United States at less than fair value. The DOC published AD and CVD orders on October 3, 2016.

At present, U. S. Steel is also involved in several appeals filed with the Court of International Trade from the OCTG cases. In addition to defending on-going appeals, U. S. Steel continues to be actively engaged in relevant administrative reviews and five-year ("sunset") reviews before the USITC and the DOC.

In April 2016, U. S. Steel launched a case under Section 337 of the Tariff Act of 1930 against ten of the eleven largest Chinese producers and their distributors. The complaint alleges three causes of action: 1) illegal conspiracy to fix prices and control output and export volumes; 2) the theft of trade secrets through industrial espionage; 3) circumvention of duties by false labeling and transshipment. On May 26, 2016, the USITC instituted an investigation on all three causes. The remedy sought in the petition is the barring of Chinese steel and alloy products from the U.S. market. Of the original forty named respondents, twenty Chinese producers and distributors failed to appear and defaults have been entered against them, including the ninth largest steel company in China (which is also the eighteenth largest in the world).

On November 14, 2016, the Administrative Law Judge (ALJ) initially granted Chinese respondent's motion to dismiss U. S. Steel's antitrust claim. On November 23, 2016, U. S. Steel petitioned for review of the ALJ's determination granting the Respondent's motion to terminate the antitrust claim. On December 19, 2016, the USITC announced it will review the ALJ's determination and invited interested parties to file written submissions. The USITC is expected to issue a determination in the first quarter of 2017. Upon review of all written submissions, the USITC will also determine whether to conduct oral arguments, which, if granted, will be held on March 14, 2017.

On January 12, 2017, the ALJ granted the Respondent's motion to dismiss U. S. Steel's trans-shipment claim. On January 23, 2017, U. S. Steel filed a petition for review of that determination. The USITC is expected to decide whether to review the dismissal of this claim in the first quarter of 2017.

On February 15, 2017, U. S. Steel filed a motion to withdraw its trade secrets claim without prejudice and to stay all matters on this claim until the ALJ can rule on the motion. The motion is unopposed. The trade secrets claim was the only one of three claims that avoided dismissal by the ALJ. While Section 337 offers U.S. companies the ability to seek relief against unfair methods of competition and the items being unfairly imported as a result of those actions, the decade's old law never contemplated the technological advancements over the past 50 years that have led to the proliferation of cyber theft and other cyber crimes committed against American companies. As such, the burdens imposed by the law are impracticable for corporate victims of cybercrime. U. S. Steel continues to advocate for legal reforms to address these issues and will revisit its trade secrets claim when the legal environment for such claims improves.

In the European Union (EU), USSK is participating in and cooperating with the European Commission's (EC) dumping action concerning hot-rolled steel flat products from China, which was initiated in February 2016. On October 6, 2016, the EC imposed provisional duties on hot-rolled steel flat products imported from China of between 13.2 and 22.6 percent. These duties are intended to offset the harm caused to the domestic steel industry by below-cost Chinese imports. The EC is expected to impose definitive duties in April 2017.

The EC initiated a concurrent subsidies investigation regarding hot-rolled steel flat products from China on May 13, 2016. The EC is expected to impose provisional duties to countervail unfair subsidies in February 2017.

On July 7, 2016, the EC opened an investigation against Russia, Ukraine, Serbia, Iran and Brazil to determine whether exporters of hot-rolled flat products from the subject countries sold in the EU below cost, and to assess whether the subject imports caused injury to the industry. If the case is successful, duties could be levied against hot-rolled steel products from the subject countries. The EC is expected to impose provisional duties in April 2017.

On February 13, 2016, the EC initiated an investigation to determine whether imports of heavy steel plate from China are being sold in the EU below cost, and to assess whether such imports are harming the domestic industry. On October 6, 2016, the EC imposed provisional dumping duties of between 65.1 and 73.7 percent on imports of heavy steel plate from China. The EC is expected to impose definitive duties in April 2017.

Also on February 13, 2016, the EC initiated a dumping investigation regarding seamless pipe and tube of non-stainless steel imported from China. On November 12, 2016, the EC imposed provisional dumping duties between 43.5 and 81.1 percent. The EC is expected to impose definitive duties in May 2017.

On December 9, 2016, the EC initiated an investigation to determine whether imported CORE from China is being sold in the EU below cost and to assess whether such imports are harming the domestic industry. The EC is expected to impose provisional duties in September 2017.

USSK actively participated in an investigation concerning cold-rolled steel flat products from China and Russia. On July 29, 2016, the EC imposed definitive dumping duties of between 19.7 and 22.1 percent against Chinese imports and between 18.7 and 36.1 percent against Russian imports of cold-rolled steel flat products.

On December 12, 2016, China filed a complaint at the World Trade Organization (WTO) against the United States and the European Union. The complaint alleges that the U.S. and EU are violating their treaty obligations by continuing to use the non-market economy (NME) methodology for price comparisons in antidumping duty investigations. China’s Accession Protocol, the agreement that China entered into in order to become a WTO Member, contemplated that China would have made the transition from NME to market economy by December 11, 2016. However, the U.S. and EU continue to find that China exercises too much control over its economy and have committed to continuing to use the NME methodology in AD investigations. U. S. Steel is actively monitoring this dispute as the outcome will impact all U.S. and EU dumping orders on Chinese goods, including many steel products.

U. S. Steel continually assesses the impact of imports from foreign countries on our business, and continues to execute a broad, global strategy to enhance the means and manner in which it competes in the U.S. market and internationally. In an effort to mitigate the negative impact of unfairly traded foreign imports on our business, U. S. Steel has commenced substantive work with regional trade partners and organizations, and outlined a robust engagement with the Administration to tackle global overcapacity. Across diverse platforms, U. S. Steel is leveraging its unique experience, knowledge, and reputation to forge alliances and partnerships to advance innovative structural changes to commercial and legal regimes to better position and support the U.S. steel industry in the 21st century and beyond.

Facilities and Locations

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 Tilden Mining
- 9 USS-POSCO Industries
- 10 PRO-TEC Coating Company
- 11 Double G Coatings Company
- 2 12 Worthington Specialty Processing
- 1 Feralloy Processing Company
- 13 14 15 Acero Prime
- 1 Chrome Deposit*
- 2 Automotive Center

Tubular Segment

- 6 Fairfield Tubular
- 16 Lorain Tubular
- 18 Lone Star Tubular
- 18 19 Wheeling Machine Products
- 20 Patriot Premium Threading Services
- 22 Apolo Tubulars

USSE Segment

- 21 U. S. Steel Košice

Administrative and Research

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

Map of Europe not drawn to scale

Map of Brazil not drawn to scale

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

NOTE: U. S. Steel Canada and its subsidiaries are not reflected above as they have been deconsolidated from U. S. Steel's financial results as of the end of the day on September 15, 2014.

Flat-Rolled

During 2016, U. S. Steel continued to review and adjust its operating levels at several of its Flat-Rolled operations as a result of actions that were taken during 2015 in response to unfavorable market conditions, primarily driven by lower oil prices, lower steel prices, the impact of the stronger U.S. dollar, global overcapacity and imports on our operations. Customer order rates will determine the size and duration of any adjustments that we make at our Flat-Rolled operations during 2017.

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. During 2015, the steelmaking operations at the Fairfield Works facility were shut down. The operating results of U. S. Steel’s coke and iron ore pellet operations and many equity investees in the United States 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. In May 2015, the one remaining coke battery at Gary Works was shut down.

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 currently idle 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, or swapped 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 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. In December 2016, U. S. Steel announced it would be restarting the hot strip mill in the first quarter of 2017.

Subsequent to the permanent shutdown of the steelmaking operations in August 2015, 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 2016, 2015 and 2014, these operations produced 15.0 million, 15.5 million and 22.2 million tons of iron ore pellets, respectively. The Keetac Iron Ore Operations restarted production in the first quarter of 2017. It had previously been idle since May of 2015 due to significantly lower steel production.

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 or other separate legal entities. 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 11 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 has a 15 percent ownership interest in Tilden Mining Company (Tilden), which is based in Ishpeming, Michigan. Tilden's rated annual production capability is 8.7 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.

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 50 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, participate in a joint venture, Acero Prime, S.R.L. de CV (Acero Prime). U. S. Steel has a 40 percent interest. Acero Prime has facilities in San Luis Potosi, Ramos Arizpe, and Toluca, Mexico. Acero Prime provides slitting, warehousing and logistical services. Acero Prime's annual slitting capability is approximately 486,000 tons.

USSE

USSK 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. USSK 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. USSK also has facilities for manufacturing heating radiators, refractory ceramic materials and has a power plant for internal steam and electricity generation.

In addition, USSK has a research laboratory, which, in conjunction with our Research and Technology Center, supports efforts in cokemaking, 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 until we complete construction of the EAF at Fairfield Works, which began in the second quarter of 2015, but was subsequently delayed until market conditions improve. When the EAF is completed it will be part of the Tubular segment and the Flat-rolled segment will not be supplying Fairfield Tubular Operations with rounds. 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. 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.

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. It has quench and temper, hydrotester, threading and coupling and inspection capabilities. The Lone Star #2 facility was temporarily idled in April 2016 and has annual production capability of 390,000 tons.

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, inspection, accessories and storage services to the OCTG market. During 2015, Tubular Processing was temporarily idled.

U. S. Steel and Butch Gilliam Enterprises LLC participate in a 50-50 joint venture, Patriot Premium Threading Services 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.

U. S. Steel also has a 50 percent ownership interest in Apolo Tubulars S.A. (Apolo), a Brazilian supplier of welded casing, tubing, line pipe and other tubular products. Apolo's annual production capability is approximately 150,000 tons.

We have an Innovation & Technology Center in Houston, Texas designed to serve as a training and education center for both internal and external audiences. Research and development for tubular premium connections are performed at this facility.

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. located 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, Illinois, Michigan, Minnesota and Pennsylvania. In addition, U. S. Steel holds ownership interests in joint ventures that are developing real estate projects in Alabama.

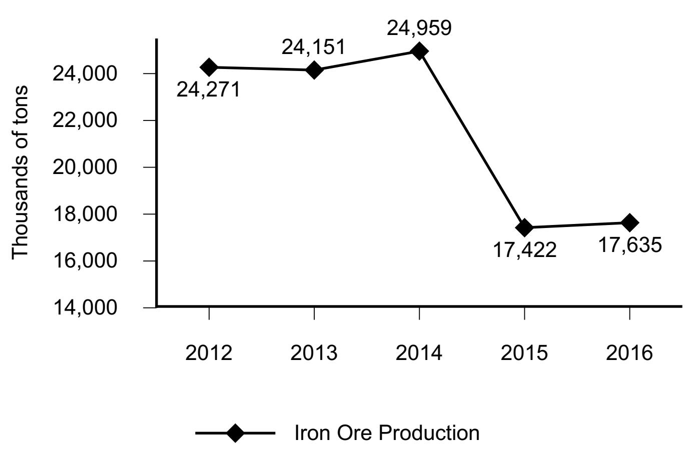
Raw Materials and Energy

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 (40 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

Iron Ore Production[a]



[a] Includes our share of production from Hibbing and Tilden. The decrease in iron ore production from 2014 is primarily related to the idling of our Keetac facility. In the first quarter of 2017 the Keetac facility restarted production.

The iron ore facilities at Minntac and Keetac contain an estimated 880 million short tons of recoverable reserves and our share of recoverable reserves at the Hibbing and Tilden joint ventures is 33 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 and Tilden joint ventures total approximately 25 million tons. Through our wholly owned operations and our share of joint ventures, we have iron ore pellet production capability that exceeds our steelmaking capability in the U.S.

We sold iron ore pellets in 2016, 2015 and 2014 to third parties. The Company has reached 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. However, in 2014 and 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

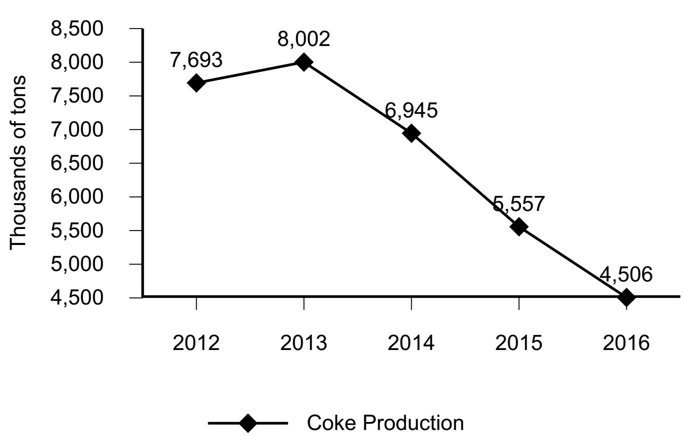
All of U. S. Steel's coal requirements for our cokemaking facilities are purchased from outside sources. U. S. Steel has entered into multi-year contracts for a portion of Flat-Rolled's coking coal requirements. Prices for these North American contracts for 2017 are set at what we believe are competitive market prices. Prices in subsequent years will be negotiated in accordance with contractual provisions on an annual basis at prevailing market prices or have fixed prices for a set time frame.

Prices for European contracts are negotiated at defined intervals, usually quarterly.

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, the United States, Russia, and Ukraine.

Coke

Coke Production[a]



[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. The decrease in 2014 coke production from 2013 is primarily due to the deconsolidation of USSC and the permanent shut down of two coke batteries at Gary 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. In Europe, the USSE segment operates cokemaking facilities at USSK. Blast furnace injection of coal, natural gas 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 self-sufficient with respect to its annual coke requirements at normal operating levels. Coke is purchased from, sold to, or swapped with suppliers and other end-users to adjust for production needs and reduce transportation costs.

To mitigate exposure to changes in coke costs and supply disruptions, U. S. Steel entered into multi-year arrangements with several of our coal suppliers to supply our domestic cokemaking facilities.

USSE is self-sufficient for coke at normal operating levels.

Steel Scrap and Other Materials

We believe supplies of steel scrap and other alloy and coating materials required to fulfill the requirements for Flat-Rolled and USSE are available from outside sources at competitive market prices. Generally, approximately 40 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.

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. During 2016, we routinely executed fixed-price forward physical purchase contracts for natural gas to partially manage our exposure to natural gas price increases. For 2016, approximately 68 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 or with fixed-price forward physical purchase contracts.

We believe that adequate natural gas supplies to meet USSE’s needs are available at competitive market prices. During 2016, we routinely executed fixed-price forward physical purchase contract for natural gas to partially manage our exposure to natural gas price increases. For 2016, approximately 50 percent of our natural gas purchases in USSK was made with fixed-price forward physical purchase contract; 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 in North America, purchases industrial gas 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 2016, approximately 78 percent, 64 percent and 40 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

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.

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 Environmental Protection Agency (EPA) has developed various industry-specific MACT standards pursuant to this requirement. The CAA requires the EPA to promulgate regulations establishing emission standards for each category of Hazardous Air Pollutants. The 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 cokemaking, ironmaking, steelmaking and iron ore processing.

The EPA is currently in the process of completing a Residual Risk and Technology Review of the Integrated Iron and Steel regulations and Coke MACT regulations as required by the CAA. Because the EPA has not completed its review, any impacts related to the EPA's review of these standards cannot be estimated at this time,

The CAA also requires the EPA to develop and implement National Ambient Air Quality Standards (NAAQS) for criteria pollutants, which include, among others, particulate matter (PM) - consisting of PM_{10} and $PM_{2.5}$, lead, carbon monoxide, nitrogen dioxide, sulfur dioxide, and ozone. Sulfur dioxide is the NAAQS criteria pollutant of most concern to the Company at this time.

In June 2010, the EPA significantly lowered the primary NAAQS for sulfur dioxide (SO_2) from 140 parts per billion (ppb) on a 24-hour basis to an hourly standard of 75 ppb. Subsequently, the EPA designated the areas in which Great Lakes Works and Mon Valley Works facilities are located as nonattainment with the 2010 for the SO_2 NAAQS. The non-attainment designation will require the facilities to implement operational and/or capital requirements to demonstrate attainment with the 2010 standard. In addition, the EPA is currently evaluating the attainment status for all other areas as required by a Consent Decree that the EPA entered with the Sierra Club and the Natural Resources Defense Counsel in March 2015 pursuant to a lawsuit filed by the non-governmental organizations. U. S. Steel is working with the relevant regulatory agencies in completing the evaluation process as required by the Consent Decree. While U. S. Steel could face increased capital, operating and compliance costs, the operational and financial impact of the SO_2 NAAQS cannot be reasonably estimated at this time.

In October 2015, the EPA lowered the NAAQS for ozone from 75 ppb to 70 ppb. It is likely that EPA will designate some areas in which we operate as nonattainment with the 2015 standard, which could require reductions of nitrogen oxides and volatile organic compounds from our operations in such designated areas. In April 2012, the EPA designated certain areas in which we operate as nonattainment with the 2008 ozone NAAQS of 75 pbb. The EPA is expected to publish an ozone implementation rule that will address the effect of the 2008 standard and area designations in light of the lowering of the NAAQS in 2015. At this time, the operational and financial impact of the ozone NAAQSs cannot be reasonably estimated.

On December 14, 2012, the 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 PM_{10} NAAQS rules. In December 2014, the EPA designated some areas in which U. S. Steel operates as nonattainment with the 2012 annual $PM_{2.5}$ standard. Because it is early in the State Implementation Plan (SIP) development stages, any impacts to U. S. Steel are not estimable at this time.

In 2010, the 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 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 estimated at this time.

For additional information regarding significant enforcement actions, capital expenditures and costs of compliance, see “Item 3. Legal Proceedings - Environmental Proceedings."

Water

U. S. Steel maintains water discharge permits as required under the National Pollutant Discharge Elimination System (NPDES) program of the CWA, and under equivalent state laws, and conducts operations in compliance with such permits. For information regarding enforcement actions, capital expenditures and costs of compliance, see “Item 3. Legal Proceedings - Environmental Proceedings."

Solid Waste

U. S. Steel facilities generate solid and hazardous wastes regulated by the Resource Conservation and Recovery Act (RCRA). In addition, each state and some local jurisdictions regulate solid and hazardous waste activities. In addition to regulating waste handling and disposal practices, these laws and regulations also govern the environmental remediation of some prior waste disposal operations (i.e., corrective actions), the recycling of wastes and the operation and maintenance of waste storage tanks. Corrective actions under these laws, are discussed below under “Remediation.” For additional information regarding significant remediation costs, enforcement actions, capital expenditures and costs of compliance, see “Item 3. Legal Proceedings - Environmental Proceedings.”

Remediation

U. S. Steel is involved in a number of environmental remediation projects under CERCLA, RCRA and other federal and state statutes, related to former and present locations as well as third party waste sites where material generated by U. S. Steel was deposited. A number of these locations either never were, or are no longer, owned or operated by U. S. Steel and are subject to cost sharing and remediation provisions. Projects include remediation of the former Geneva Works, the former Duluth Works, ground water issues at Gary Works and the closure of hazardous and non-hazardous waste landfills. It is possible that additional sites will be identified that require remediation. For additional information regarding remedial actions, capital expenditures and costs of compliance, see “Item 3. Legal Proceedings - Environmental Proceedings.”

United States GHG Regulation

The current and potential regulation of GHG emissions remains a significant issue for the steel industry, particularly for integrated steel producers such as U. S. Steel, but also increasingly for EAF producers due to regulatory actions impacting the power generation sector. The EPA has classified GHGs, such as CO_2, as harmful gases. Under this premise, it has implemented a GHG emission monitoring and reporting requirement for all facilities emitting 25,000 metric tons or more per year of CO_2, as well as equivalent CO_2 quantities of methane and nitrous oxide.

On August 3, 2015, the EPA issued three separate actions to address GHG emissions from fossil fuel fired power plants: 1) final rules for new, modified or reconstructed sources, 2) final rules for existing sources, and 3) a proposed Federal Implementation Plan. The rules for new, modified, or reconstructed sources impose separate intensity-based GHG limits for new coal fired and new natural gas fired power plants. The rules for existing fossil fuel fired power plants impose a two-part goal structure for existing power generation in each state. The structure is composed of an interim goal for states to meet on average over the ten-year period from 2020-2029, and a final goal that a state must meet at the end of that period in 2030 and thereafter. The final goal is to achieve a 32 percent reduction of GHG emissions by 2030 from 2005 levels. States will be given flexibility in terms of how to achieve their goal and what measures to implement, but must have submitted plans no later than September 6, 2016. The proposed Federal Implementation Plan would apply to any state that does not submit an EPA approved plan. In February 2016, the United States Supreme Court stayed the effectiveness of the Clean Power Plan (CPP) until judicial review of the rule is completed. Oral arguments were heard by the Court of Appeals for the District of Columbia on September 27, 2016. The impact these rules will have on the supply and cost of electricity to industrial consumers, especially energy intensive industries like ours, is being evaluated. We believe there will be increased operating costs, such as increased energy and maintenance costs, but we are currently unable to reliably estimate them.

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. Future compliance with CO_2 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. To the extent these expenditures, as with all costs, are not ultimately reflected in the prices of U. S. Steel's products and services, operating results will be reduced.

For further information, see "Item 3. Legal Proceedings - Environmental Proceedings" and Note 25 to the Consolidated Financial Statements, "Contingencies and Commitments - Environmental Matters - CO_2 Emissions."

Slovak Operations

A Memorandum of Understanding (MOU) was signed in March of 2013 between U. S. Steel and the government of Slovakia. The MOU outlines areas in which the government and U. S. Steel will work together to help create a more competitive environment and conditions for USSK. Incentives the government of Slovakia agreed to provide include potential participation in a renewable energy program that provides the opportunity to reduce electricity costs, as well as the potential for government grants and other support concerning investments in environmental control technology. Although there are many conditions and uncertainties regarding the grants, including matters controlled by the EU, the value of these incentives as stated in the MOU could be as much as €75 million (approximately $79 million). U. S. Steel also agreed to pay the government of Slovakia specified declining amounts should U. S. Steel sell USSK within five years of the date of the MOU. We continue to work closely with the government of Slovakia to monitor the progress of the respective commitments and to achieve the incentives described in the MOU.

Slovakia adopted a new waste code in March 2015 that became effective January 1, 2016. This legislation implements the EU Waste Framework Directive that strictly regulates waste disposal and encourages recycling, among other provisions, by increasing fees for waste disposed of in landfills, including privately owned landfills. The impact of this legislation is estimated to be €2 million (approximately $2 million) annually.

The EU’s Industry Emission Directive requires implementation of EU determined best available techniques (BAT) to reduce environmental impacts as well as compliance with BAT associated emission levels. This directive includes operational requirements for air emissions, wastewater discharges, solid waste disposal and energy conservation, dictates certain operating practices and imposes stricter emission limits. Producers were required to be in compliance with the iron and steel BAT by March 8, 2016, unless specific exceptions or extensions were granted by the Slovak environmental authority. USSK updated existing operating permits for different facilities involved in producing iron and steel in the plant in accordance with the new BAT requirements. Through this process for some facilities, USSK has obtained extensions from the 2016 compliance deadline in order to meet or exceed the BAT requirements. Compliance with stricter emission limits going beyond BAT requirements makes us eligible for EU funding support and prepares us for any further tightening of environmental protection standards. Our most recent broad estimate of likely capital expenditures for projects to comply with or go beyond the BAT requirements is €138 million (approximately $145 million) over the 2017 to 2020 time period.

The EU has various programs under which funds are allocated to member states to implement broad public policies which are then awarded by the member states to public and private entities on a competitive basis. The funding intensity under these programs currently ranges from 55 percent of defined eligible costs on a project under the standard state scheme to 90 percent on a recently approved ad hoc scheme to improve the air quality in the Košice region of Slovakia. Based on our list of projects that comprise the approximate €138 million (approximately $145 million) of spending noted, we currently believe we will be eligible to receive up to €85 million (approximately $90 million) of incentive grants. This could potentially reduce our net cash expenditures to approximately €53 million (approximately $56 million). The actual amount of capital spending will be dependent upon, among other things, the actual amount of incentive grants received.

We also believe there will 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.

For further discussion of laws applicable in Slovakia and the EU and their impact on USSK, see Note 25 to the Consolidated Financial Statements, “Contingencies and Commitments - Environmental Matters, EU Environmental Requirements.”

European Greenhouse Gas Emission Regulations

The European Commission (EC) has created an Emissions Trading System (ETS) and starting in 2013, the ETS began to employ centralized allocation, rather than national allocation plans, that are more stringent than the previous requirements. The ETS also includes a cap designed to achieve an overall reduction of GHGs for the ETS sectors of 21% in 2020 compared to 2005 emissions and auctioning as the basic principle for allocating emissions allowances, with some transitional free allocation provided on the basis of benchmarks for manufacturing industries under risk of transferring their production to other countries with lesser constraints on GHG emissions, commonly referred to as carbon leakage. Manufacturing of sinter, coke oven products, basic iron and steel, ferro-alloys and cast iron tubes have all been recognized as exposing companies to a significant risk of carbon leakage, but the ETS is still expected to lead to additional costs for steel companies in Europe. The EU has imposed limitations under the ETS for the period 2013-2020 (Phase III) that are more stringent than those in the 2008 - 2012 period (NAP II), reducing the number of free allowances granted to companies to cover their CO_2 emissions.

The EU has established GHG regulations for the EU member states. International negotiations to supplement and eventually replace the 1997 Kyoto Protocol are ongoing. In December 2015, Paris held the Conference of Parties (COP21) summit on global warming. The summit proposed goals and protocols for global CO_2 reduction. On October 5, 2016 the threshold for entry into force of the Paris Agreement was achieved. The Paris Agreement entered into force on November 4, 2016. In October 2014, the European Council approved 2030 goals in the areas of GHG reduction, energy efficiency and the use of renewable resources. Those targets are expected to transfer into legislation by 2020. Revision of the legislation is in the advanced stage, with two important EU Parliament Committees already giving their opinion. Final voting in the European Parliament is expected in the summer of 2017. Until the full details of the program are made known through specific enacting legislation, we cannot reasonably forecast the costs and benefits which might result from the program.

In the future, compliance with EU CO_2 emission requirements for USSK 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. For further discussion of CO_2 emission requirements and remediation, see "Part I, Item 3. Legal Proceedings - Environmental Proceedings" and Note 25 to the Consolidated Financial Statements, "Contingencies and Commitments - Environmental Matters - European Union (EU) Environmental Requirements."

For further information, see "Item 1A. Risk Factors," "Item 3. Legal Proceedings - Environmental Proceedings" and "Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations - Environmental Matters" and Note 25 to the Consolidated Financial Statements, "Contingencies and Commitments - Environmental Matters - CO_2 Emissions."

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 12 to the Consolidated Financial Statements.

Employees

As of December 31, 2016, U. S. Steel had approximately 18,000 employees in North America and approximately 11,800 in Europe.

Most 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 United Steelworkers (USW) that are effective as of September 1, 2015 and expire on September 1, 2018. Our North American collective bargaining agreements contain no-strike provisions which are applicable during the term of the respective agreements.

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

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 varying expiration dates.

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, our 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 and earnings (loss) before interest and income taxes by reportable segment and for Other Businesses and on net sales and assets by geographic area are set forth in Note 3 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)" on pages F-59 and F-60.

Item 1A. RISK FACTORS

Operational Risk Factors

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

Over the past two years, U. S. Steel has adjusted its operating configuration in response to challenging market conditions as a result of global overcapacity and unfair trade practices by indefinitely, permanently and temporarily idling production at certain facilities. Due to our reduced operational footprint, the Company may not be able to respond in an efficient manner when restarting certain of our temporarily idled facilities 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, 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 and severe weather conditions. 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 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 worldwide overcapacity and high levels of imports, which may negatively affect steel prices and demand levels, reducing profitability.

An increase in global capacity and new or expanded production capacity in the United States, China and other countries in recent years has resulted in capacity significantly in excess of global demand, as well as in the Company's primary markets in North America and Europe.

Worldwide overcapacity continues to result in high levels of dumped and subsidized steel products in the markets we serve. Imports into the United States and Europe often violate domestic and international trade laws. While in some cases, U. S. Steel is successful in obtaining relief under U.S. and international trade laws, in other circumstances, relief has been denied. When received, such relief is generally subject to annual automatic or discretionary review, which can result in rescission or reduction. There can be no assurance that any relief will be obtained or continued in the future or that such relief will adequately combat the surge in imports. There is also a risk that international bodies such as the World Trade Organization or other judicial bodies in the United States or the EU may change their interpretations of their respective trade laws in ways that are unfavorable to U. S. Steel.

Faced with 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.

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 under the Carnegie Way transformation 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, 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 and 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 then current market price or in greater volumes than required. Additionally, any future decreases in iron ore, 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.

USSK is subject to economic conditions and political factors associated with the EU, Slovakia, 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 collective bargaining agreements may limit our flexibility.

Our collective bargaining agreements contain provisions that may limit us from pursuing some North American transactions involving steel or steel-related assets without the consent of the USW, grant the USW a right to bid on any sale of one or more facilities covered by the three year Collective Bargaining Agreements between the USW and U. S. Steel and its U. S. Steel Tubular Products, Inc. subsidiary ratified on February 1, 2016 (the 2015 Labor Agreements), and require us to make a minimum level of capital expenditures (subject to approval of the Board of Directors) to maintain the competitive status of our domestic facilities. These agreements also restrict our ability to operate our facilities at less than full capacity and replace the product which could have been produced in such facilities with foreign products (excluding the United States or Canada), and further require that the ratio of non-USW employees to USW employees at our domestic facilities not exceed one to four. These terms may limit our ability to acquire or sell steel or steel related assets at favorable prices, increase our operating costs and reduce our margins and otherwise adversely affect our competitiveness in the marketplace.

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

Increasingly sophisticated attacks against rapidly evolving computer technologies pose a risk to the security of our systems, networks and data. Despite efforts to protect confidential business information, personal data of employees and the control systems of manufacturing plants, U. S. Steel systems and those of our third-party service providers may be subject to system breaches. System breaches can lead to disclosure, modification and destruction of proprietary business data, personally identifiable information (PII), other sensitive information, defective products, production downtime and damage to production assets with a resulting impact to our reputation, competitiveness and operations.

Of special note is our risk when implementing new capabilities. As an organization implements new systems, many times both new and old systems run in parallel until all processes have successfully transferred to the new system and thorough testing has been performed. Although our ERP system is substantially complete, as we continue to implement the final phases of the ERP system our exposure to system attacks and compromise are elevated since we are running many old and new processes in parallel and must simultaneously protect both the new system and legacy systems. This elevated exposure remains until the ERP project is complete and legacy systems can be retired.

Historically, U. S. Steel has experienced cybersecurity attacks, including a high profile breach of our information technology systems in which proprietary information was compromised. On May 19, 2014, the U.S. Department of Justice unsealed an indictment against certain individuals in connection with cyber crimes committed against the Company and other entities. We cooperated with the U.S. government on this matter and have implemented enhancements and improvements to safeguard our information technology enterprise against future attacks. Some of these enhancements include planning for and taking initial steps to implement a risk management framework based on security standards written by the National Institute of Standards and Technology. Other enhancements include implementing additional security monitoring of our systems by advanced technologies. However, there is no assurance the Company's remediation efforts will be successful in safeguarding information from future attacks, which likely will increase in frequency and sophistication. Based on information known to date, the Company is currently unable to determine the materiality, if any, of these events.

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.

Carnegie Way benefits may be limited or may not be fully realized.

U. S. Steel initiated a stockholder value creation strategy known as the "The Carnegie Way," pursuant to which we focus on strengthening our balance sheet and cash flow. We have launched a series of initiatives that we believe will enable us to add value, right size the Company, and improve our performance across our core business processes, including commercial, supply chain, manufacturing, procurement, innovation, and operational and functional support. 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 Carnegie Way's economic benefits.

Financial Risk Factors

We face substantial debt maturities.

Over the 2017 through 2021 period, we have approximately $1.9 billion of debt maturing (see Note 16 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 business requires substantial expenditures for debt service obligations, capital investments, operating leases and maintenance that we may be unable to fund.

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 limitations under our Third Amended and Restated Credit Agreement, such as insufficient collateral or not being able to meet the fixed charge coverage ratio, may limit our availability to draw upon this facility. See the Liquidity section in "Item 7. Management's Discussion and Analysis" 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 have significant liabilities that are not fully funded which will require additional 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 17 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 2015 Labor Agreements require a contribution rate of $2.65 per hour for most steelworker employees. Collectively bargained company contributions to the plan could increase as a result of future changes agreed to by the Company and the USW.

Product liability claims 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.

Rating agencies have downgraded our credit ratings, which may make it more difficult for us to raise capital and may increase our financial costs.

Our credit ratings have been downgraded by all three major rating agencies. This may make raising capital more difficult, may increase the cost, affect the terms of future borrowings, and 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 USSK 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.

In addition, international cash requirements have been and in the future may be funded by intercompany loans, creating 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.

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 EMIR 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. 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. Legislative uncertainty exists regarding possible margin requirements and clearing practices that could economically impact U. S. Steel. If additional liquidity is required under regulatory frameworks to support new margin requirements, that could reduce U. S. Steel’s liquidity available to invest in its core business operations.

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 which 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.

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. 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. Compliance with environmental laws and regulations, such as the Clean Air Act, governing GHG and Sulfur Dioxide emissions, could result in substantially increased capital requirements and operating costs. In addition, the integrated steel process involves a series of chemical reactions that create carbon dioxide. Accordingly, we are subject to regulations adopted by the EPA, the EU and various state agencies regulating GHG emissions. 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.

Construction and operation of new production facilities and modifications to existing facilities may require environmental permits and approvals from the appropriate regulatory agencies. 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 operations are subject to complex regulatory and compliance frameworks.

Complex foreign and U.S. laws and regulations that apply to our international operations, including but not limited to U. S. laws such as the Foreign Corrupt Practices Act, regulations related to import-export controls, the Office of Foreign Assets Control sanctions program, antiboycott provisions, and changes in transportation and logistics regulations may increase our cost of doing business in international jurisdictions and expose the Company and its employees to elevated risk. The Company's subsidiaries and joint ventures 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. The worthless stock loss and bad debt deduction are subject to audit and possible adjustment by the IRS, which could result in the reversal of all or part of the income tax benefit. In 2015, the IRS began its audit of the worthless stock loss and bad debt deduction taken in 2013. We expect resolution in a future period. While we believe we have adequate legal and factual support for the tax position taken, the IRS could reject or reduce the amount of the income tax benefit related to the worthless stock loss and bad debt deduction. If this occurs, U. S. Steel would incur additional current tax expense which could result in additional income tax payments.

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 may impact U. S. Steel's ability to effectively transfer data across borders in support of our business 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

Property	Location	Products and Services
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
Double Eagle Steel Coating Company	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
Acero Prime, S.R.L. de C.V.[b]	San Luis Potosi, Ramos Arizpe, and Toluca, Mexico	Steel processing; warehousing; logistical services
Lorain Tubular Operations	Lorain, Ohio	Seamless Tubular Pipe
Lone Star Tubular[c]	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
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[d]	Keewatin, Minnesota	Iron ore pellets

(a) Hot end temporarily idled
(b) Equity investee
(c) Temporarily idled
(d) Idled in 2015, restarted in the 1st quarter of 2017

North American Operations (Continued)

Property	Location	Products and Services
Hibbing Taconite Company[b]	Hibbing, Minnesota	Iron ore pellets
Tilden Mining Company[b]	Ishpeming, Michigan	Iron ore pellets
Transtar, LLC	Alabama, Indiana, Michigan, Ohio, Pennsylvania, Texas	Railroad operations

(b) Equity Investee

Other Operations

Property	Location	Products and Services
U. S. Steel Košice	Košice, Slovakia	Slabs; Sheets; Tin mill; Strip mill plate; Tubular; Coke; Radiators; Refractories
Apolo Tubulars S.A.[b]	Lorena, Sao Paulo, Brazil	Welded Tubular

(b) Equity Investee

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 12 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 25 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 September 16, 2014, U. S. Steel Canada Inc. commenced court-supervised restructuring proceedings under Canada's Companies' Creditors Arrangement Act (CCAA) before the Ontario Superior Court of Justice. As part of the CCAA proceedings, U. S. Steel submitted both secured and unsecured claims of approximately C$2.2 billion, which were verified by the court-appointed Monitor. U. S. Steel's claims were challenged by a number of interested parties and on February 29, 2016, the Court denied those challenges and verified U. S. Steel's secured claims in the amount of approximately $119 million and unsecured claims of approximately C$1.8 billion and $120 million. The interested parties have appealed the determinations of the Ontario Superior Court of Justice.

On April 26, 2016, the Company filed a complaint with the U.S. International Trade Commission to initiate an investigation under Section 337 of the Tariff Act of 1930, against ten of the eleven largest Chinese steel producers and their distributors seeking the exclusion of all unfairly traded Chinese steel products from the U.S. market. The complaint alleges three causes of action: 1) illegal conspiracy to fix prices and control output and export volumes; 2) the theft of trade secrets through industrial espionage, and 3) circumvention of duties by false labeling and transshipment. Refer to Item 1 "International Trade" for further information.

U. S. Steel v. Minnesota Pollution Control Agency and Commissioner John Linc Stine: On February 21, 2017, U. S. Steel filed a Verified Complaint and Writ of Mandamus against the Minnesota Pollution Control Agency (“MPCA”) for failure to act on U. S. Steel’s request for revisions to water quality standards which will affect the draft NPDES (water) permit at Minntac.

Asbestos Litigation

As of December 31, 2016, U. S. Steel was a defendant in approximately 845 active cases involving approximately 3,340 plaintiffs. The vast majority of these cases involve multiple defendants. As of December 31, 2015, U. S. Steel was a defendant in approximately 820 cases involving approximately 3,315 plaintiffs. About 2,500, or approximately 75 percent, of these plaintiff claims are currently pending in jurisdictions which permit filings with massive numbers of 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. During 2016, settlements and other dispositions resolved approximately 225 cases, and new case filings added approximately 250 cases. During 2015, settlements and other dispositions resolved approximately 415 cases, and new case filings added approximately 275 cases.

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

Period ended	Opening Number of Claims	Claims Dismissed, Settled and Resolved	New Claims	Closing Number of Claims
December 31, 2014	3,320	190	325	3,455
December 31, 2015	3,455	415	275	3,315
December 31, 2016	3,315	225	250	3,340

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. 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, although the resolution of such matters could significantly impact results of operations for a particular quarter.

Environmental Proceedings

The following is a summary of the proceedings of U. S. Steel that were pending or contemplated as of December 31, 2016, 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.

At December 31, 2016, U. S. Steel has received information requests or been identified as a PRP at a total of eight CERCLA sites, two of which liability has 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 Minnesota Pollution Control Agency (MPCA) in 1985 and a Record of Decision signed by MPCA in 1989. U. S. Steel has submitted a feasibility study that includes remedial measures to address contaminated sediments in the St. Louis River Estuary and several other Operable Units that could impact the Estuary if not addressed.

While work continues on obtaining additional information for 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, 2016. 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, 2016 at approximately $48 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 19 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 10 sites have potential costs between $100,000 and $1 million per site, 5 sites may involve remediation costs between $1 million and $5 million per site and 4 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

U. S. Steel has closed three hazardous waste disposal (HWD) sites located on plant property at Gary Works: HWD-5, HWD-2 and Hazardous Waste Treatment (HWT) Unit No. 2. Aside from HWT-2, which is complete, the other units are in post-closure monitoring. As of December 31, 2016, the accrued liability for retention of contractual guarantees at these sites was reduced to approximately $0.4 million.

On October 23, 1998, the 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, 2016. 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 $28 million as of December 31, 2016, 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). While preliminary approval of the conceptual CAMU design has been granted by the UDEQ, there has been no material change in the status of the project during the twelve months ended December 31, 2016. U. S. Steel has an accrued liability of approximately $63 million as of December 31, 2016, 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. The California Department of Toxic Substances Control (DTSC) previously approved U. S. Steel’s preferred remedial plan to address groundwater impacts from trichloroethylene at SWMU 4. Remedy implementation began during the first quarter of 2016 with the initial field phase completed in December. 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 DTSC. As such, there has been no material change in the status of the project during the twelve months ended December 31, 2016. As of December 31, 2016, approximately $2 million has been accrued for ongoing environmental studies, investigations and remedy implementation. Significant additional costs associated with this site are possible and are referenced in Note 25 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 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 (ADEM), with the approval of the 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, 2016. In total, the accrued liability for remaining work under the Corrective Action Program, was approximately $130,000 at December 31, 2016. Significant additional costs associated with this site are possible and are referenced in Note 25 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 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, 2016. As of December 31, 2016, the accrued liability to maintain the interim measures, and clear properties through the Act 2 process is approximately $116,000. Significant additional costs associated with this site are possible and are referenced in Note 25 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 received a letter from the Ohio Environmental Protection Agency (OEPA) inviting U. S. Steel to enter into 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 work continues on the implementation of the Phase II RFI work plan that addresses additional soil investigations, site wide groundwater and the pipe mill lagoon, there has been no material change in the status of the project during the twelve months ended December 31, 2016. As of December 31, 2016, costs to complete additional projects are estimated to be approximately $198,000. Significant additional costs associated with this site are possible and are referenced in Note 25 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 requires investigation and establishment of cleanup objectives followed by submission/approval of a Remedial Action Plan (RAP) to meet those objectives. The 50-acre parcel was divided into four (4) subareas with remedial activities completed in 2015 for three (3) of the subareas. While work continues to define the requirements for further investigation of the remaining parcel, there has been no material change in the status of the project during the twelve months ended December 31, 2016. U. S. Steel has an accrued liability of $306,000 as of December 31, 2016. Significant additional costs associated with this site are possible and are referenced in Note 25 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. While work continues on developing the Pre-Remedial Action Design Plan, there has been no material change in the status of the project during the twelve months ended December 31, 2016. As of December 31, 2016, an accrual of approximately $75,000 remains available for addressing these outstanding issues.

Air Related Matters

Great Lakes Works

In June 2010, the EPA significantly lowered the primary NAAQS for SO_2 from 140 parts per billion (ppb) on a 24-hour basis to an hourly standard of 75 ppb. Based upon the 2009-2011 ambient air monitoring data, the EPA designated the area in which Great Lakes Works is located as nonattainment with the 2010 SO_2 NAAQS.

Because of this designation, MDEQ must submit a State Implementation Plan (SIP) to U.S. EPA that demonstrates that the entire nonattainment area (and not just the monitor) will be in attainment by October 2018 by using conservative air dispersion modeling. 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. The rule became effective in June 2016. Impacts associated with compliance with the rule would be material to U. S. Steel. Because we believe the rule is illegal and inequitable, we filed a complaint against MDEQ with the Michigan Court of Claims in August 2016 seeking, among other things, a declaratory ruling that the rule is invalid as well as injunctive relief enjoining MDEQ from enforcing the rule. In October 2016, the Court heard oral arguments regarding each parties' motion for summary disposition. After oral arguments, the Court deferred its ruling on the parties' motions, stayed the effectiveness of Rule 430, and ordered the parties to mediate. The parties have been engaged in meaningful mediation since then. While the impacts regarding any resolution are inestimable at this time, the impacts of any resolution may also be material to U. S. Steel.

On May 27, 2015, Great Lakes Works received a Violation Notice in which MDEQ alleged that U. S. Steel did not obtain a required permit to install a BOP vessel replacement that occurred in November 2014. U. S. Steel responded to MDEQ on June 17, 2015. While the resolution of the matter is uncertain at this time, it is not anticipated that the resolution will be material to U. S. Steel.

Granite City Works

In October 2015, Granite City Works received a Violation Notice from IEPA in which the Agency alleges that U. S. Steel violated the emission limits for nitrogen oxides and volatile organic compounds from the Basic Oxygen Furnace Electrostatic Precipitator Stack. In addition, the Agency 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 EPA published a Federal Implementation Plan (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. 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 U. S. EPA and a petition for judicial review of the 2013 FIP and denial of the Minnesota State Implementation Plan (SIP) to the Eighth Circuit of the 2013 FIP. In April 2016, 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 U. S. EPA and a petition for judicial review of the 2016 FIP before the Eighth Circuit Court of Appeals. Both petitions for administrative reconsideration remain pending with U. S. EPA; and both petitions for judicial review remain with the Eighth Circuit. It is likely that any adverse resolution would be material to U. S. Steel; however, we are unable to estimate the amount, if any, at this time.

In June 2011, U. S. Steel and MPCA reached agreement on a Schedule of Compliance (SOC) to address alleged water quality issues at the Minntac facility. The 2011 agreement required U. S. Steel to determine sulfate levels at the property boundary and to resolve the water quality allegations. In addition, the agreement anticipated that U. S. Steel would pilot trial a dry control system on Line 6 at Minntac. Since then, U. S. Steel has employed actions to resolve some of the allegations raised in the SOC. In addition, since then, U. S. Steel has conducted additional investigations and evaluated technologies that would be used to address other water quality allegations in the SOC and reduce sulfate levels in groundwater outside the boundaries of our Minnesota Ore Operations. The actions already employed as well as the new data indicate that the proposed dry control system in the 2011 agreement would not be an effective means to reach the goals outlined in the SOC. U. S. Steel is currently negotiating a path forward with MPCA.

EPA Region V Federal Lawsuit

This is a CAA enforcement action filed in August 2012 pending in Federal Court in the Northern District of Indiana. The U.S. Government, joined by the States of Illinois, Indiana, and Michigan initiated the action alleging the Company violated the CAA and failed to have in place appropriate pollution control equipment at Gary Works, Granite City Works, and Great Lakes Works. A consent decree was lodged with the Court on November 22, 2016, but is not yet in effect. As part of the agreement, U. S. Steel will perform seven supplemental environmental projects totaling $1.9 million. In addition, U. S. Steel will expend $800,000 for an environmentally beneficial project to remove PCB transformers at its Gary and Ecorse (Great Lakes) facilities and pay a $2.2 million civil penalty. The Consent Decree was subject to a 30-day public comment period that ended on or about December 29, 2016. The government is currently reviewing the public comments.

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, 2017, are as follows:

Name	Age	Title	Executive Officer Since
James E. Bruno	51	Senior Vice President - Automotive Solutions [a]	December 1, 2014
Scott D. Buckiso	49	Vice President - European Solutions and President - USSK [b]	May 31, 2015
David B. Burritt	61	Executive Vice President & Chief Financial Officer	September 1, 2013
Colleen M. Darragh	47	Vice President & Controller	July 1, 2014
Suzanne Rich Folsom	55	General Counsel, Chief Compliance Officer and Senior Vice President - Government Affairs	January 27, 2014
Sara A. Greenstein	42	Senior Vice President - Consumer Solutions [a]	December 1, 2014
Mario Longhi	62	President and Chief Executive Officer	July 2, 2012
Douglas R. Matthews	51	Senior Vice President - Industrial, Service Center and Mining Solutions [a]	July 2, 2012
David J. Rintoul	59	Senior Vice President - Tubular Business [c]	May 1, 2014
Pipasu Soni	44	Vice President - Finance	February 1, 2017
Mark G. Tabler	55	Vice President - Global Quality and Manufacturing Processing	December 1, 2015

[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.

All of the executive officers mentioned above have held responsible management or professional positions with U. S. Steel or our subsidiaries for more than the past five years, with the exception of Mr. Longhi, Mr. Burritt, Mr. Bruno, Ms. Folsom, Ms. Greenstein and Mr. Soni. Prior to joining U. S. Steel, Mr. Longhi served as president from 2005 to 2006, and president and chief executive officer from 2006 to 2011, of Gerdau Ameristeel Corporation, a producer of long steel products. Prior to joining Gerdau Ameristeel Corporation, Mr. Longhi served in a variety of senior management positions with Alcoa Inc., a producer of aluminum products. Prior to joining U. S. Steel, Mr. Burritt served as chief financial officer and vice president of global finance and strategic services for Caterpillar Inc., a manufacturer of construction and mining equipment, diesel and natural gas engines, industrial gas turbines and diesel-electric locomotives, from 2004 to 2010. 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. Prior to joining U. S. Steel, from 2011-2014 Ms. Folsom served as executive vice president, general counsel & chief compliance officer at ACADEMI LLC, a leading global innovative security solutions provider to the federal government and commercial clients. Prior to joining ACADEMI LLC, Ms. Folsom served as deputy general counsel and chief regulatory and compliance officer at the American Insurance Group (AIG) from 2008 - 2010. 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. Mr. Soni joined U. S. Steel in 2016. Previously he was with Pentair for six years, most recently serving as Vice President, Business Analysis and Planning from 2012 - 2015. Mr. Soni also held various roles in international and business unit finance, corporate development and controllership at Honeywell.

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. U. S. Steel common stock is also traded on the Chicago Stock Exchange. Information concerning the high and low sales price for the common stock as reported in the consolidated transaction reporting system and the frequency and amount of dividends paid during the last two years is set forth in "Selected Quarterly Financial Data (Unaudited)" on page F-56.

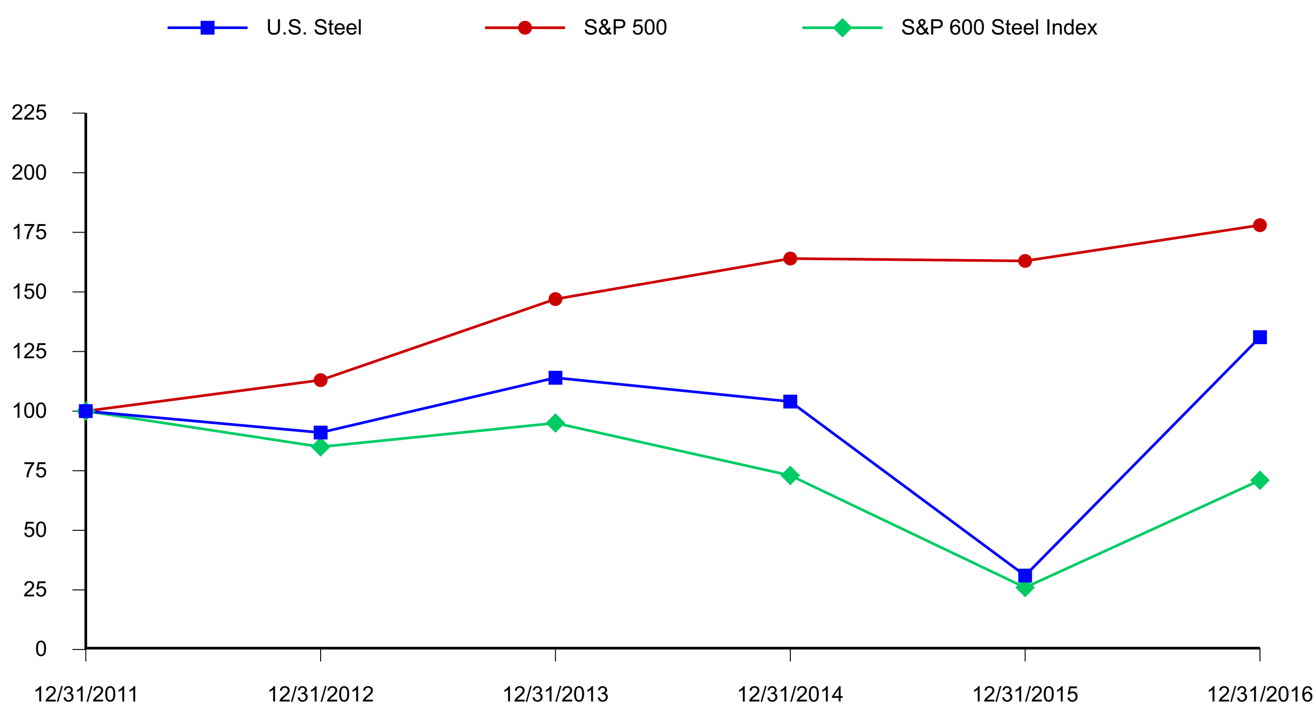
As of February 23, 2017, there were 14,625 registered holders of U. S. Steel common stock.

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 2016 and 2015 in the amount of $0.05 per share.

Shareholder Return Performance

The graph below compares the yearly change in cumulative total shareholder 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, 2011
vs
S&P 500 and S&P 600 Steel Index



[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

Dollars in millions (except per share data)[a]	2016	2015	2014	2013	2012
Statement of Operations Data:					
Net sales	**$ 10,261**	$ 11,574	$ 17,507	$ 17,424	$ 19,328
(Loss) earnings before interest and income taxes	**(165)**	(1,202)	413	(1,900)	247
Net (loss) earnings attributable to United States Steel Corporation	**(440)**	(1,642)	102	(1,645)	(124)
Per Common Share Data:					
Net (loss) earnings attributable to United States Steel Corporation[b]					
– basic	**(2.81)**	(11.24)	$ 0.71	$ (11.37)	$ (0.86)
– diluted	**(2.81)**	(11.24)	0.69	(11.37)	(0.86)
Dividends per share declared and paid	**0.20**	0.20	0.20	0.20	0.20
Balance Sheet Data – December 31:					
Total assets [c] [d]	**$ 9,160**	$ 9,167	$ 11,975	$ 12,679	$ 15,171
Capitalization:					
Debt [d]	**$ 3,031**	$ 3,138	$ 3,460	$ 3,892	$ 3,892
United States Steel Corporation stockholders' equity	**2,274**	2,436	3,799	3,375	3,477
Total capitalization	**$ 5,305**	$ 5,574	$ 7,259	$ 7,267	$ 7,369

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

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

(c) 2014 and 2013 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. The amounts for 2012 were not affected by the adoption.

(d) 2015, 2014, 2013 and 2012 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 worldsteel Association's latest published statistics, U. S. Steel was the twenty-fourth largest steel producer in the world in 2015. Also in 2015 according to publicly available information, 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 automotive, 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.

In 2013, we initiated a transformational process called the Carnegie Way. This process provides the framework for a multi-year journey to return our company to iconic status and sustainable profitability. Over the past few years, U. S. Steel, like the American steel industry in general, has faced difficult market conditions as a result of macroeconomic challenges, including significant reductions in the market price of steel, global overcapacity and record levels of unfairly traded imports, slow growth globally, a strong U. S. dollar, and markedly low energy prices.

The objective of the Carnegie Way is to focus our employees throughout the organization on the factors that we can control. This includes creating a lower and more flexible cost structure that will produce stronger and more consistent results across industry cycles to mitigate the financial impact of the volatility in our industry. We are focused on the development of differentiated, innovative products, processes and approaches to doing business through a culture of collaboration, accountability and demonstrating results.

The Carnegie Way is our culture and the way we run our business. Our Carnegie Way transformation efforts over the last three years have improved our cost structure, streamlined our operating footprint and increased our customer focus.

We are proud to report the following highlights and accomplishments achieved in 2016:

- Invested in new steel technologies
- Improved our operating and cost structures
- Strong year-end liquidity of approximately $2.9 billion
- Successful completion of $980 million debt offering and $500 million equity offering, providing for future financial flexibility
- Minimized market risk related to the Company's other post-retirement benefits obligations
- $100 million voluntary stock contribution to our defined benefit pension plan, which improved the funded status
- Continued to aggressively address unfair trade practices through landmark legal action

Our management team took several critical actions in 2016, including: idling facilities; right-sizing the organization; and exiting parts of the business where it is not possible to earn an economic profit. These were tough decisions and, despite the challenging economic circumstances, U. S. Steel ended 2016 as a more streamlined organization focused on generating economic profit across all business cycles.

We continue to take steps to improve our position for the long-term. The focus on improving the balance sheet and strategically accessing the capital markets enables the Company to move forward in the Carnegie Way process and open avenues to future growth and investment.

We have taken these actions as part of our strategy to return to profitable growth and deliver sustainable value creation for our stockholders as market conditions improve.

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.

Identifiable intangible assets - Intangible assets with indefinite lives are subject to at least annual impairment testing, which compares the fair value of the intangible assets with their carrying amounts. U. S. Steel has determined that certain of its acquired intangible assets have indefinite useful lives. These assets are reviewed for impairment annually in the third quarter and whenever events or circumstances indicate the carrying value may not be recoverable. U. S. Steel performed a quantitative impairment evaluation of its indefinite-lived intangible assets, which includes its water rights and in-process research and development patents, during 2016. Based on the results of the evaluation, the water rights were not impaired; however, the estimated fair value of the patents had decreased below their carrying value. As a result, an impairment charge of approximately $14 million was recorded in the third quarter of 2016.

Identifiable intangible assets with finite lives are amortized on a straight-line basis over their estimated useful lives and are reviewed for impairment whenever events or circumstances indicate that the carrying value may not be recoverable. During 2016, the permanent shutdown of certain Lorain, Lone Star and Bellville tubular assets was considered a triggering event for our welded and seamless tubular asset groups. U. S. Steel completed a review of certain of its identifiable intangible assets with finite lives, primarily customer relationships with a carrying value of $73 million, and determined the assets were not impaired.

Inventories – 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 used in Europe. The LIFO method of inventory costing was used on 75 percent and 80 percent of consolidated inventories at December 31, 2016 and 2015, 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 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. During the fourth quarter of 2015, U. S. Steel completed a review of its equity method investments and determined there was an other than temporary impairment of an equity investee within a non-core operating segment of U. S. Steel. The other than temporary impairment resulted from a decision to cease the funding of the long-term development plans of the equity investment, due to our intent to sell the particular investment, thereby inhibiting sufficient recovery of the market value. Accordingly, U. S. Steel recorded an impairment charge of $18 million, which reduced the carrying amount of the equity investment to $3 million, in the fourth quarter of 2015.

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 public equities, high quality bonds and selected smaller investments in private equities, investment trusts and partnerships, timber and mineral interests. For its U.S. pension plan, U. S. Steel has a target allocation for plan assets of 60 percent in equities (inclusive of private equity and investment trusts). The balance is primarily invested in corporate bonds, Treasury bonds and government-backed mortgages. 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 to provide protection against the impact of volatility in any single industry as well as company specific developments. U. S. Steel will use a 7.25 percent assumed rate of return on assets for the development of net periodic cost for the main defined benefit pension plan in 2017. The 2017 assumed rate of return is lower than the rate of return used for 2016 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 7.25 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 80 percent in high quality domestic bonds with the balance primarily invested in equity securities. U. S. Steel will use a 3.25 percent assumed rate of return on assets for the development of net periodic cost for its other benefits plans. The 2017 assumed rate of return has been conservatively set based on the current portfolio's yield to maturity.

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, certain corporate bond rates are utilized for both U.S. GAAP and funding purposes. As a result of a decrease in interest rates at December 31, 2016, as compared to December 31, 2015, U. S. Steel decreased the discount rate used to measure both domestic pension and other benefits obligations to 4.00 percent from 4.25 percent. 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. In setting the domestic rates, we utilize several AAA and AA corporate bond rates as an indication of interest rate movements and levels.

Mortality assumptions for the U.S. defined benefit pension and other postretirement liabilities for retirees is based on a custom table developed by an experience study performed in 2005. During 2013, the Company examined experience since 2005 and updated the assumption to assume mortality improvement of 7 years from the date of liability measurement. In 2016, the assumption was further updated to assume mortality improvement on a full generational basis.

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 2024. After 2024, 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 17 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 2017. This rate is assumed to decrease gradually to an ultimate rate of 5.0 percent in 2021 and remain at that level thereafter.

Net periodic pension cost, including multiemployer plans, is expected to total approximately $102 million in 2017 compared to $106 million in 2016. Excluding the settlement, termination and curtailment losses totaling $13 million in 2016, the increase in expected expense in 2017 is primarily due to lower expected return on assets, updates to the mortality assumption and unfavorable retirement experience, partially offset by the wage freeze provided for in the 2015 Labor Agreements. Total other benefits costs in 2017 are expected to be approximately $78 million, compared to a benefit of $(5) million in 2016. The additional expense in 2017 is primarily a result of the lower expected return on assets assumption.

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:

	Hypothetical Rate Increase (Decrease)	
(In millions)	**1%**	**(1)%**
Expected return on plan assets		
Incremental (decrease) increase in:		
Net periodic pension costs for 2017	$ (75)	$ 75
Discount rate		
Incremental (decrease) increase in:		
Net periodic pension & other benefits costs for 2017	$ (5)	$ 5
Pension & other benefits obligations at December 31, 2016	$ (736)	$ 874
Health care cost escalation trend rates		
Incremental increase (decrease) in:		
Other postretirement benefit obligations	$ 100	$ (86)
Service and interest costs components for 2017	$ 5	$ (4)

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 17 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 2016, the permanent shutdown of certain Lorain, Lone Star and Bellville 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.

At December 31, 2015, we identified the following forms of negative evidence concerning U. S. Steel's ability to use some or all of its domestic deferred tax assets:

- U. S. Steel's domestic operations generated significant losses in recent years and there is uncertainty regarding the Company's ability to generate domestic income in the near term,
- some of our domestic deferred tax assets are carryforwards, which have expiration dates, and
- the global steel industry is experiencing overcapacity, which is driving adverse economic conditions, including depressed selling prices for steel products and increased foreign steel imports into the U.S.

Most positive evidence can be categorized into one of the four sources of taxable income sequentially. These are (from least to most subjective):

- taxable income in prior carryback years, if carryback is permitted
- future reversal of existing taxable temporary differences
- tax planning strategies, and
- future taxable income exclusive of reversing temporary differences and carryforwards

U. S. Steel utilized all available carrybacks, and therefore, our analysis at December 31, 2015 focused on the other sources of taxable income. Our projection of the reversal of our existing temporary differences generated significant taxable income. This source of taxable income, however, was not sufficient to project full utilization of U. S. Steel's domestic deferred tax assets. To assess the realizability of the remaining domestic deferred tax assets, U. S. Steel analyzed its prudent and feasible tax planning strategies.

At December 31, 2015, after weighing all the positive and negative evidence, U. S. Steel determined that it was more likely than not that the net domestic deferred tax asset (excluding a deferred tax liability related to an asset with an indefinite life) may not be realized. As a result, U. S. Steel recorded a $753 million net non-cash charge to tax expense. At December 31, 2016, an incremental valuation allowance of $305 million was recorded against the increase in the net domestic deferred tax asset (excluding a deferred tax liability related to an asset with an indefinite life). 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 2016 and 2015, 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.

Long-term receivables from related parties - As disclosed in Note 4 to the Consolidated Financial Statements, USSC, an indirect wholly owned subsidiary of U. S. Steel, with unanimous approval from its Board of Directors applied for relief from its creditors pursuant to CCAA on September 16, 2014. As a result, U. S. Steel deconsolidated the USSC balances from its Consolidated Balance Sheet as of the end of the day on September 15, 2014. Prior to the deconsolidation date, the loans, associated interest and net trade accounts receivable from USSC were considered intercompany transactions and were eliminated in consolidation, but are now third party transactions and have been recognized in the financial statements based upon the recoverability of their carrying amounts and whether or not the amounts are secured or unsecured. U. S. Steel has estimated a recovery rate based upon the fair value of the net assets of USSC available for distribution to its creditors in relation to the secured and unsecured creditor claims in the CCAA filing.

Subsequent to the CCAA filing, U. S. Steel's management has continued to assess the recoverability of the Company's retained interest in USSC. During 2015, management's estimate of the recoverable retained interest was updated as a result of economic conditions impacting the steel industry in North America such as lower prices, elevated levels of imports, the strength of the U.S. dollar, depressed steel company valuations as well as the uncertainty of the ultimate outcome of USSC's CCAA filing. As a result of our assessment, an additional pre-tax charge was recognized, bringing the total charge to $392 million for the fiscal year ended December 31, 2015. U. S. Steel's recoverability involves uncertainties from economic and other events, including developments related to the ongoing CCAA proceedings, including the appeal of the decision of the Court in the trial relating to the classification and amounts of our secured and unsecured USSC claims, which are beyond the control of U. S. Steel that could materially impact the recoverability of our retained interest.

Environmental remediation – U. S. Steel has been identified as a potentially responsible party (PRP) at eight sites under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) as of December 31, 2016. Of these, there are two sites related to U. S. Steel 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 19 additional sites related to U. S. Steel 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 additional remediation obligations arise, charges in excess of those previously accrued may be required.

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

At December 31, 2016, U. S. Steel recorded a net decrease of $18 million to our accrued balance for environmental matters for U.S. and international facilities. The decrease is primarily due to obligations settled related to environmental matters for U.S. and international facilities. The total accrual for such liabilities as of December 31, 2016 was $179 million. These amounts exclude liabilities related to asset retirement obligations, disclosed in Note 18 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.

Segments

U. S. Steel has three reportable operating segments: Flat-Rolled Products (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 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 consists of the following three commercial entities: (1) automotive, (2) consumer and (3) industrial, service center and mining to specifically address our customers and service their needs.

Flat-Rolled also supplies steel rounds and hot-rolled bands to Tubular. In the third quarter of 2015, the blast furnace and associated steelmaking operations, along with most of the flat-rolled finishing operations at Fairfield Works were shutdown and therefore, Flat-Rolled will no longer supply rounds to Tubular.

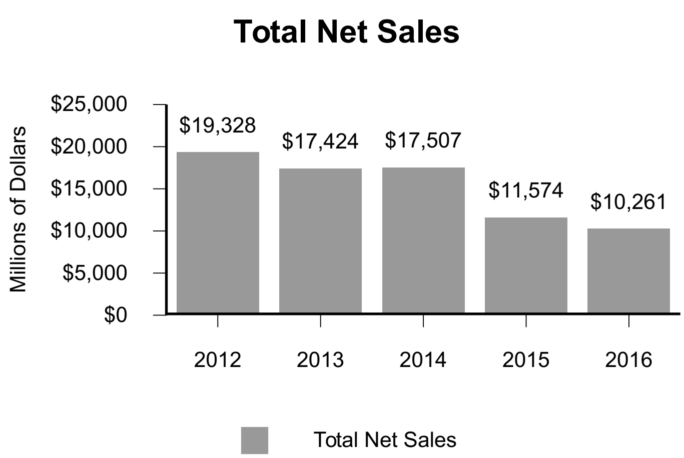
The Flat-Rolled segment information subsequent to September 16, 2014 does not include USSC. Transactions between U. S. Steel and USSC subsequent to USSC applying for relief from its creditors pursuant to the CCAA filing are treated as related party transactions.

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. USSE primarily serves customers in the Eastern European construction, service center, conversion, container, transportation (including automotive), appliance and electrical, and oil, gas and petrochemical markets. USSE produces and sells slabs, sheet, strip mill plate, 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 in the United States, and equity investees in the United States and Brazil. 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. Additionally, we sold the assets at our McKeesport tubular operations.

For further information, see Note 3 to the Consolidated Financial Statements.

Net Sales



Net Sales by Segment

(Dollars in millions, excluding intersegment sales)	**2016**	2015	2014
Flat-Rolled	**$ 7,507**	$ 8,293	$ 11,708
USSE	**2,243**	2,323	2,891
Tubular	**449**	898	2,772
Total sales from reportable segments	**10,199**	11,514	17,371
Other Businesses	**62**	60	136
Net sales	**$ 10,261**	$ 11,574	$ 17,507

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, 2016 versus Year December 31, 2015

	Steel Products[a]					
	Volume	Price	Mix	FX[b]	Other	Net Change
Flat-Rolled	(4)%	(3)%	— %	—%	(2)%	(9)%
USSE	3 %	(5)%	(1)%	—%	— %	(3)%
Tubular	(27)%	(24)%	2 %	—%	(1)%	(50)%

(a) Excludes intersegment sales
(b) Foreign currency translation effects

The decrease in sales for the Flat-Rolled segment primarily reflected lower shipments (decrease of 501 thousand net tons, which includes the reduction in shipments due to the permanent shutdown of Fairfield Flat-Rolled Operations, as well as operational issues across our Flat-Rolled facilities) and lower average realized prices (decrease of $29 per net ton) as a result of market conditions, including high import levels, which have served to reduce shipment volumes and depress both spot and contract prices. In the second half of 2016 we experienced unplanned outages at several of our steelmaking and finishing facilities and our operating configuration in 2016 extended the time it took to recover volumes from unplanned outages.

The decrease in sales for the USSE segment was primarily due to lower average realized euro-based prices (decrease of €28 per net ton), partially offset by an increase in shipments (increase of 139 thousand net tons).

The decrease in sales from 2015 to 2016 for the Tubular segment primarily reflected lower shipments (decrease of 193 thousand net tons) and lower average realized prices (decrease of $393 per net ton) as a result of reduced drilling activity caused by low crude oil prices and continued high import levels.

Year Ended December 31, 2015 versus Year Ended December 31, 2014

	Steel Products[a]					
	Volume	Price	Mix	FX[b]	Other	Net Change
Flat-Rolled	(21)%	(7)%	— %	— %	(1)%	(29)%
USSE	4 %	(7)%	(1)%	(15)%	(1)%	(20)%
Tubular	(65)%	(2)%	1 %	— %	(2)%	(68)%

(a) Excludes intersegment sales
(b) Foreign currency translation effects

The decrease in sales for the Flat-Rolled segment primarily reflected a decrease in shipments (decrease of 3,313 thousand net tons), which includes the deconsolidation of USSC (represents 1,532 thousand net tons, or 46%, of the total volume decrease) and lower average realized prices (decrease of $77 per net ton) as a result of market conditions, including high import levels, which has served to reduce shipment volumes and drastically depress both spot and contract prices.

The decrease in sales for the USSE segment primarily reflected the strengthening of the U.S. dollar versus the euro in 2015 compared to 2014 (decrease of $0.22 in average exchange rate between the euro and the U.S. dollar) and lower average realized euro-based prices (decrease of €37 per net ton), partially offset by increased shipments (increase of 178 thousand net tons).

The decrease in sales for the Tubular segment primarily reflected lower shipments (decrease of 1,151 thousand net tons) as a result of decreased drilling activity and continued high import levels and lower average realized prices (decrease of $74 per net ton).

Operating Expenses

Union profit-sharing costs

(Dollars in millions)	Year Ended December 31, 2016	2015	2014
Allocated to segment results	**$ 3**	$ —	$ 81

Effective January 1, 2016, profit-based amounts per the agreements with the USW are calculated and paid on a quarterly basis as a percentage of consolidated earnings (loss) before interest and income taxes (as defined in the 2015 Labor Agreements) based on 7.5 percent of profit between $10 and $50 per ton and 15 percent of profit above $50 per ton. Profit-based amounts per the agreements with the USW are calculated and paid on a quarterly basis as a percentage of consolidated earnings (loss) before interest and income taxes (as defined in the 2015 Labor Agreements) based on 7.5 percent of profit between $10 and $50 per ton and 10 percent of profit above $50 per ton in prior periods.

The amounts above represent profit-sharing amounts to active USW-represented employees (excluding employees of USSC subsequent to the deconsolidation of USSC) and are included in cost of sales on the Consolidated Statement of Operations.

Pension and other benefits costs

Defined benefit and multiemployer pension plan costs totaled $106 million in 2016, $291 million in 2015 and $337 million during 2014. Plan costs in 2016, 2015 and 2014 included $13 million, $35 million and $29 million of settlement and curtailment costs, respectively. Excluding these costs, the $163 million decrease from 2015 to 2016 is primarily due to the freezing of benefit accruals for non-represented participants effective December 31, 2015, and the natural maturation of our pension plans, offset by better asset performance. U. S. Steel calculates its market-related value of assets such that investment gains or losses as compared to expected returns are recognized over a three-year period. To the extent that deferred gains and losses on plan assets are not yet reflected in this calculated value, the amounts do not impact expected asset returns or the net actuarial gains or losses subject to amortization within the net periodic pension expense calculation. (See Note 17 to the Consolidated Financial Statements.)

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. In 2016, the Company 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, which is the funding vehicle for the Company's main defined benefit pension plan. The shares were valued by an independent valuation firm for 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. Prior to 2015, U. S. Steel made voluntary contributions to our main U.S. defined benefit plan for several years, including a voluntary contribution of $140 million in 2014. U. S. Steel will monitor the status of the plan to determine when voluntary contributions may be prudent to mitigate potentially larger mandatory contributions in later years.

Costs related to defined contribution plans totaled $42 million during 2016, $42 million during 2015 and $45 million during 2014.

Other benefits (income), which are included in earnings (loss) before interest and income taxes, totaled $(5) million in 2016, $(40) million in 2015 and $(25) million in 2014. The other postemployment benefits income in 2016 and 2015 included $1 million and $4 million of curtailment gains, respectively. Excluding the one-time costs, the $32 million decrease in income from 2015 to 2016 is primarily due to benefit and plan design changes included in the Collective Bargaining Agreement between the United Steelworkers (USW) and U. S. Steel and its U. S. Steel Tubular Products, Inc. subsidiary ratified by the USW on February 1, 2016 (2015 Labor Agreements). For additional information on pensions and other benefits, see Note 17 to the Consolidated Financial Statements.

Selling, general and administrative expenses

Selling, general and administrative expenses were $255 million in 2016, $415 million in 2015 and $523 million in 2014. The decrease from 2015 to 2016 is primarily related to lower pension costs, as discussed above, as well as impacts from Company-wide headcount reductions. The decrease from 2014 to 2015 is primarily related to lower pension and other benefits costs, as discussed above, as well as lower expense for profit based payments.

Operating configuration adjustments

Over the past two years, the Company has adjusted its operating configuration in response to challenging market conditions as a result of global overcapacity and unfair trade practices by indefinitely and temporarily idling production at certain of its facilities. At December 31, 2016, there were no facilities indefinitely idled.

As of December 31, 2016, the following facilities are temporarily idled:

Temporarily Idled:
Lone Star Tubular (idled in April 2016)
Tubular Processing (idled in April 2015)
Granite City Works - Steelmaking Operations (idled in December 2015)
Keetac Iron Ore Operations (idled in May 2015; restarted production in the first quarter of 2017)

The carrying value of the long-lived assets associated with the temporarily idled facilities listed above total approximately $510 million.

In December of 2016, U. S. Steel made the strategic decision to permanently shutdown the Lorain #4 and Lone Star #1 pipe mills and the Bellville Tubular Operations (which had been indefinitely idled) after considering a number of factors, including challenging market conditions for tubular products, reduced rig counts, and unfairly traded imports.

U. S. Steel will continue to evaluate potential strategic and organizational opportunities, which may include the acquisition, divestiture or consolidation of assets. Given recent market conditions and the continued challenges faced by the Company, we are aggressively focused on maintaining cash 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 the financial condition of the Company, 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.

Depreciation, depletion and amortization

Depreciation, depletion and amortization expenses were $507 million in 2016, $547 million in 2015 and $627 million in 2014. The decrease from 2015 to 2016 is primarily related to the write-off of assets as a result of the permanent shutdown of the Fairfield Flat-Rolled Operations in 2015. The decrease from 2014 to 2015 is primarily related to the deconsolidation of U. S. Steel Canada, Inc. in September 2014, as well as the write-off of assets due to the permanent shutdown of certain facilities.

Earnings from investees

Earnings from investees was $98 million in 2016, $38 million in 2015 and $142 million in 2014. The increase from 2015 to 2016 is primarily due to increased earnings from our joint venture mining affiliates, offset by a $12 million impairment charge for an equity investee. The decrease from 2014 to 2015 is primarily related to a decrease in income from equity affiliates that produce iron ore pellets and cold-rolled and coated sheets, and tin mill products as well as an $18 million impairment charge for an equity investee.

Restructuring and Other Charges

During 2016, the Company 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.

As a result of lower steel prices, decreased demand for steel products and the continued high level of imports, during the year ended December 31, 2015, the Company took action to make changes to its operational footprint. As a result of these actions, U. S. Steel recorded restructuring charges of $322 million, primarily related to the permanent shutdown of the Fairfield Flat-Rolled Operations and the cokemaking operations at Gary Works and Granite City Works, within our Flat-Rolled segment and headcount reductions across the Company. Cash payments were made related to severance and exit costs of $28 million. Favorable adjustments for changes in estimates on restructuring reserves were made for $21 million, primarily related to employee and environmental costs associated with the shutdown of our cokemaking operations at Gary Works and Granite City Works within our Flat-Rolled segment.

During the year ended December 31, 2014, the Company implemented certain headcount reductions and recorded severance related charges of $16 million. The headcount reductions related to our Canadian operations, within our Flat-Rolled segment; certain of our Tubular operations in Bellville, Texas and McKeesport, Pennsylvania within our Tubular segment; and our USSK operations within our USSE segment as well as headcount reductions principally within the Company’s corporate functions. The Company also recorded charges of $195 million and $37 million, related to the impairment of carbon alloy facilities and the write-off of pre-engineering costs associated with a proposed Keetac expansion, respectively, within our Flat-Rolled segment. Additionally, an asset impairment charge of $14 million was taken for certain of the Company's non-strategic assets that were designated as held for sale in our Other Businesses. Cash payments were made related to severance and exit costs of $16 million. Favorable adjustments for changes in estimates on and the removal of restructuring reserves as a result of the deconsolidation of USSC were made for $17 million within our Flat-Rolled segment.

Charges for restructuring and ongoing cost reduction initiatives are recorded in the period the Company 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 include severance costs, accelerated depreciation, asset impairments and other closure costs.

Management believes its restructuring actions with regards to the Company's operations will potentially impact the Company’s cash flows by approximately $305 million over the course of subsequent annual periods as a result of decreased employee, maintenance and other facility costs, as well as eliminating the need for capital investment at the facilities. These actions will result in other non-cash savings of approximately $90 million, primarily related to reduced depreciation expense in future periods. Management does not believe there will be any significant impacts related to the Company’s revenues as a result of these actions. The Company has realized actual cash savings of approximately $285 million related to restructuring efforts through December 31, 2016.

Loss on deconsolidation of U. S. Steel Canada

USSC, an indirect wholly owned subsidiary of U. S. Steel, with unanimous approval from its Board of Directors applied for relief from its creditors pursuant to CCAA on September 16, 2014. The CCAA filing was approved by the Ontario Superior Court of Justice (the Court) on September 16, 2014 and grants USSC creditor protection while it formulates a plan of restructuring. To assist USSC with its plan of restructuring, the Court confirmed the engagement by USSC of a chief restructuring officer, the appointment of a monitor and certain other financial advisors. As of the date of the CCAA filing, any proceedings pending against USSC, or currently underway affecting USSC’s business operations or property, have been stayed pending further order by the Court.

As a result of the CCAA proceedings, U. S. Steel no longer has a controlling financial interest over USSC, as defined under ASC 810, *Consolidation*, and therefore has deconsolidated USSC’s financial position as of the end of the day on September 15, 2014. This resulted in a pretax loss on deconsolidation and other charges of $416 million, which includes approximately $20 million of professional fees in 2014. The pretax loss on deconsolidation includes the derecognition of the carrying amounts of USSC's assets and liabilities and accumulated other comprehensive loss that were previously consolidated in U. S. Steel's Consolidated Balance Sheet and the impact of recording the retained interest in USSC. Subsequent to the deconsolidation, U. S. Steel accounts for USSC using the cost method of accounting, which has been reflected as zero in U. S. Steel’s Consolidated Balance Sheet as of December 31, 2016, December 31, 2015 and December 31, 2014, due to the negative equity associated with USSC’s underlying financial position. Net assets totaling $(1,716) million were deconsolidated as of the end of the day on September 15, 2014.

Prior to the deconsolidation, U. S. Steel made loans to USSC for the purpose of funding its operations and had net trade accounts receivable in the ordinary course of business. The loans, the corresponding interest and the net trade accounts receivable were considered intercompany transactions and were eliminated in the consolidated U. S. Steel financial statements. As of the deconsolidation date, the loans, associated interest and net trade accounts receivable are now considered third party transactions and have been recognized in U. S. Steel's consolidated financial statements based upon our assessment of the recoverability of their carrying amounts and whether or not the amounts are secured or unsecured. U. S. Steel has estimated a recovery rate based upon the fair value of the net assets of USSC available for distribution to its creditors in relation to the secured and unsecured creditor claims in the CCAA filing. For updates to U. S. Steel's retained interest in USSC, see Note 5 to the Consolidated Financial Statements.

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

	Year Ended December 31,		
(Dollars in Millions)	**2016**	**2015**	**2014**
Flat-Rolled [b]	**$ (3)**	$ (237)	$ 709
USSE	**185**	81	133
Tubular	**(304)**	(179)	261
Total earnings from reportable segments	**(122)**	(335)	1,103
Other Businesses	**63**	33	82
Reportable segments and Other Businesses earnings before interest and income taxes	**(59)**	(302)	1,185
Items not allocated to segments:			
Postretirement benefit income (expense) [b] [c]	**62**	(43)	(114)
Other items not allocated to segments:			
Loss on shutdown of certain tubular pipe mill assets[d]	**(126)**	—	—
Losses associated with U. S. Steel Canada Inc. (Notes 4 and 5)	**—**	(392)	(416)
Loss on shutdown of Fairfield Flat-Rolled Operations [d][e]	**—**	(91)	—
Loss on shutdown of coke production facilities [d]	**—**	(153)	—
Restructuring and other charges (Note 24)[d]	**2**	(78)	—
Granite City Works temporary idling charges	**(18)**	(99)	—
Postemployment benefit actuarial adjustment	**—**	(26)	—
Impairment of equity investment (Note 11)	**(12)**	(18)	—
Impairment of carbon alloy facilities (Note 24)[d]	**—**	—	(195)
Litigation reserves (Note 25)	**—**	—	(70)
Write-off of pre-engineering costs at Keetac (Note 24)[d]	**—**	—	(37)
Loss on assets held for sale (Note 24)[d]	**—**	—	(14)
Gain on sale of real estate assets[f]	**—**	—	55
Curtailment gain (Note 17)	**—**	—	19
Impairment of intangible assets (Note 13)	**(14)**	—	—
Total (loss) earnings before interest and income taxes	**$ (165)**	$ (1,202)	$ 413

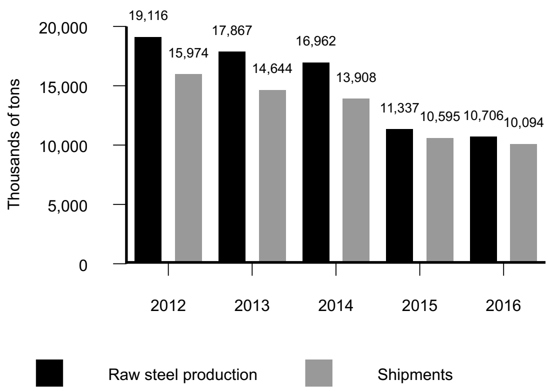
(a) See Note 3 to the Consolidated Financial Statements for reconciliations and other disclosures required by Accounting Standards Codification Topic 280.
(b) Excludes the results of USSC beginning September 16, 2014 as a result of the CCAA filing. See Note 4 to the Consolidated Financial Statements.
(c) Consists of the net periodic benefit cost elements, other than service cost and amortization of prior service cost for active employees, associated with our defined pension, retiree health care and life insurance benefit plans.
(d) Included in Restructuring and other charges on the Consolidated Statements of Operations. See Note 24 to the Consolidated Financial Statements.
(e) Fairfield Flat-Rolled Operations includes the blast furnace and associated steelmaking operations, along with most of the flat-rolled finishing operations at Fairfield Works. The #5 coating line continues to operate.
(f) Gain on sale of surface rights and mineral royalty revenue streams in the state of Alabama.

Gross Margin by Segment
(Flat-Rolled excludes the results of USSC beginning September 16, 2014)

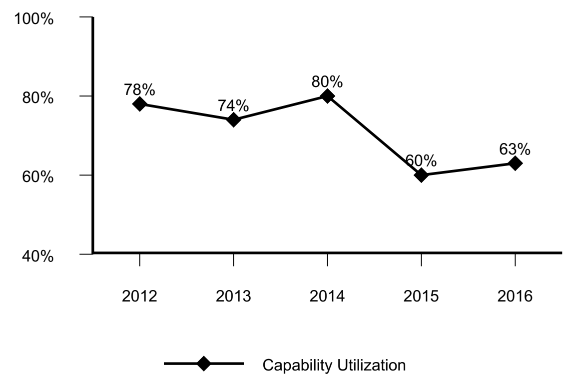
	Year Ended December 31,		
	2016	**2015**	**2014**
Flat-Rolled	**6 %**	2 %	10%
USSE	**14 %**	9 %	10%
Tubular	**(43)%**	(6)%	14%

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

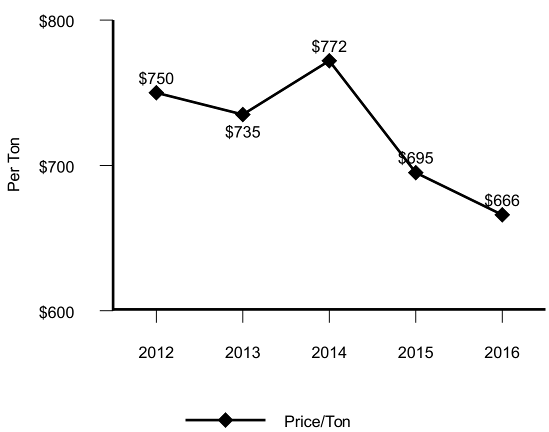
Raw Steel Production and Shipments



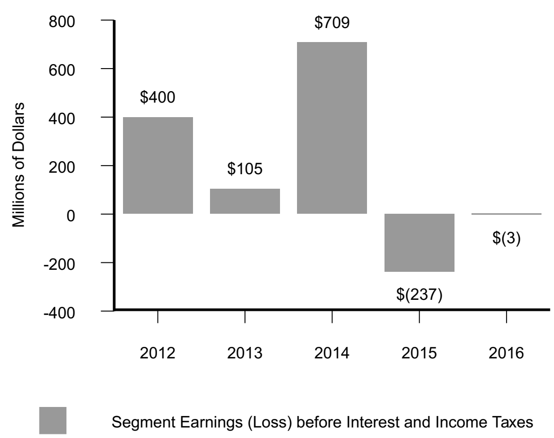
Raw Steel Capability Utilization



Average Realized Price Per Ton



Segment Earnings (Loss) before Interest and Income Taxes



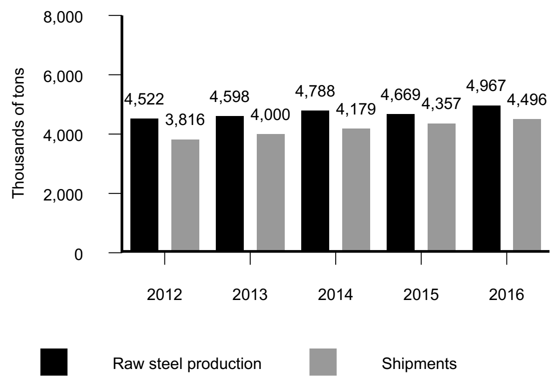
The Flat-Rolled segment had a loss of $3 million for the year ended December 31, 2016 compared to a loss of $237 million for the year ended December 31, 2015. The increase in Flat-Rolled results for 2016 compared to 2015 resulted from lower raw materials costs (approximately $275 million), reduced losses in 2016 after the shutdown of the blast furnace and associated steel making assets and most of the finishing operations at Fairfield Works in the third quarter of 2015 (approximately $145 million), decreased spending for repairs and maintenance and other operating costs (approximately $145 million), reduced costs associated with lower operating rates at our mining operations (approximately $70 million) and lower energy costs, primarily natural gas costs (approximately $55 million). These changes were partially offset by lower average realized prices (approximately $390 million) as a result of market conditions and higher levels of imports and higher costs for profit based payments (approximately $75 million).

The Flat-Rolled segment had a loss of $237 million for the year ended December 31, 2015 compared to earnings of $709 million for the year ended December 31, 2014. The decrease in Flat-Rolled results for 2015 compared to 2014 resulted from a decrease in average realized prices (approximately $890 million) as a result of continued import activity which has served to drastically depress both spot and contract prices, a decrease in shipment volumes and a loss in market share as a result of continued high import levels and competition from lower cost electric arc furnace (EAF) producers (approximately $210 million), higher repairs and maintenance costs, and other operating costs related to a reduction in our Mining activities (approximately $155 million), lower steel substrate sales to our Tubular segment (approximately $125 million) and lower income from our joint ventures (approximately $20 million). These changes were partially offset by lower raw materials costs (approximately $170 million), lower costs for profit based payments (approximately $160 million), and lower energy costs (approximately $115 million).

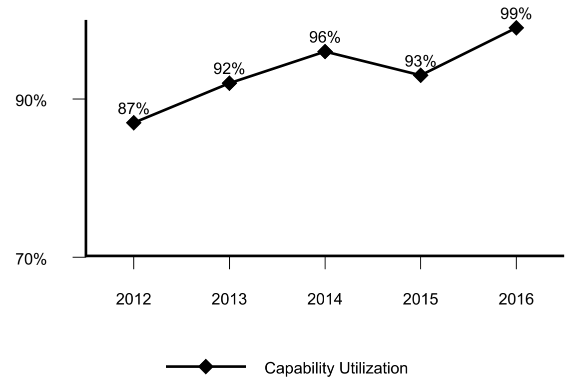
Gross margin for 2016 as compared to 2015 increased primarily due to lower raw materials costs and our lower and more flexible cost structure. Gross margin for 2015 as compared to 2014 decreased as a result of lower production volumes resulting in operating inefficiencies and significant market price decreases associated with the continued surge of imported sheet products into the U.S. market playing a significant role in both of these factors.

Segment results for USSE

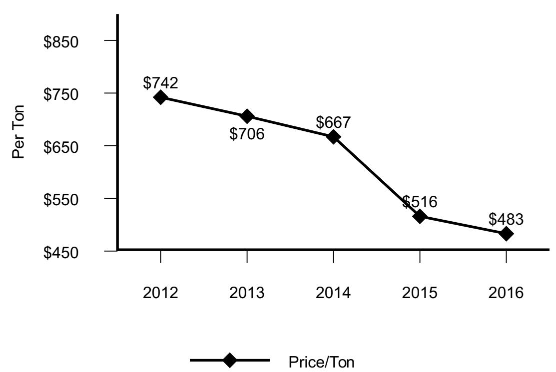
Raw Steel Production and Shipments



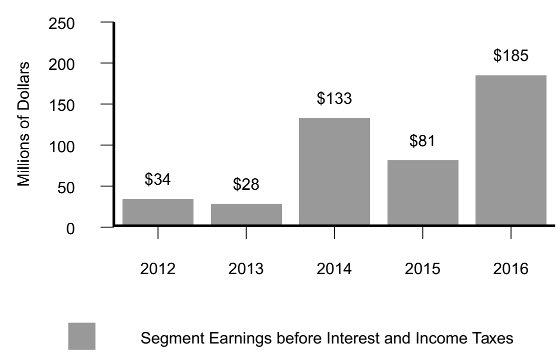
Raw Steel Capability Utilization



Average Realized Price Per Ton



Segment Earnings before Interest and Income Taxes

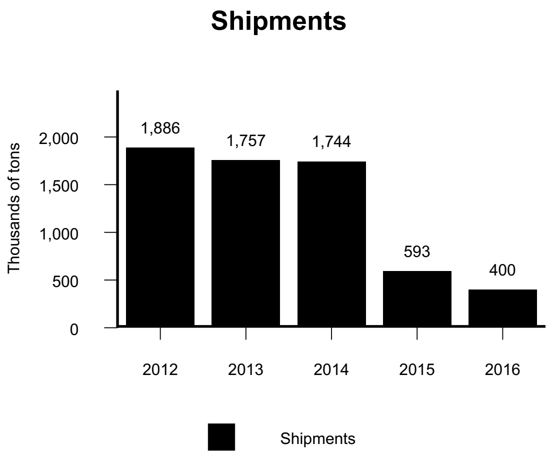


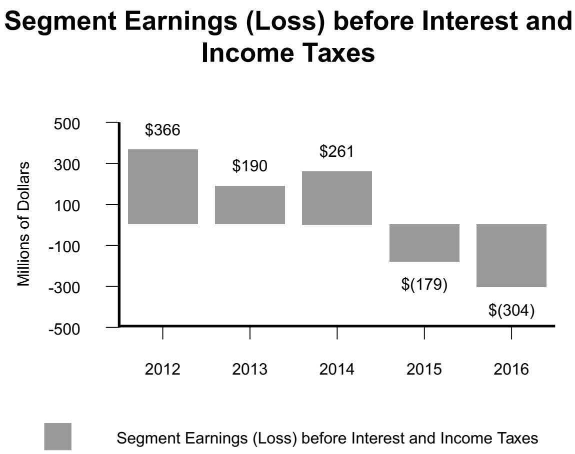
The USSE segment had earnings of $185 million for the year ended December 31, 2016 compared to earnings of $81 million for the year ended December 31, 2015. The increase in USSE results in 2016 compared to 2015 was primarily due to lower raw materials costs (approximately $145 million), reduced costs due to operating efficiencies (approximately $60 million) and decreased energy costs (approximately $20 million). These changes were partially offset by lower average realized euro-based prices (approximately $130 million), as selling prices reached a 5-year low in early 2016.

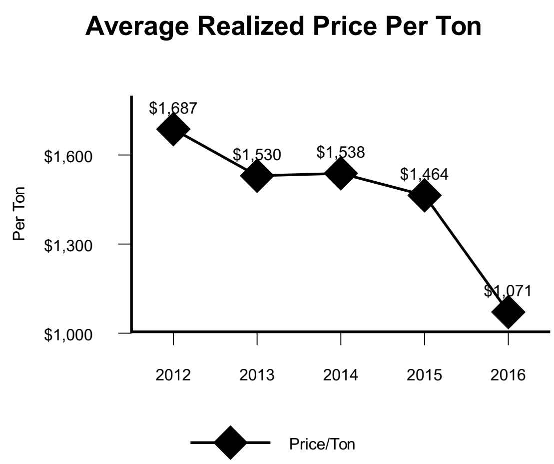
The USSE segment had earnings of $81 million for the year ended December 31, 2015 compared to earnings of $133 million for the year ended December 31, 2014. The decrease in USSE results in 2015 compared to 2014 was primarily due to lower average realized euro-based prices (approximately $200 million), the strengthening of the U.S. dollar versus the euro in 2015 compared to 2014 (approximately $165 million) and the absence of the favorable effects of a sale and swap of a portion of our emission credits during 2014 (approximately $15 million), partially offset by decreased raw materials costs (approximately $300 million), increased shipping volumes (approximately $15 million) and decreased energy costs (approximately $15 million).

Gross margin for 2016 as compared to 2015 increased primarily due to lower raw materials costs and operating efficiencies. Gross margin for 2015 as compared to 2014 remained substantially consistent.

Segment results for Tubular







The Tubular segment had a loss of $304 million for the year ended December 31, 2016 compared to a loss of $179 million for the year ended December 31, 2015. The decrease in Tubular results in 2016 as compared to 2015 was primarily due to lower average realized prices (approximately $135 million), decreased shipment volumes (approximately $25 million) as a result of high import levels, lower energy pricing and a continued decline in drilling activity and lower of cost or market (LCM) adjustments for obsolete inventory related to the prolonged downturn in the energy markets (approximately $45 million). These changes were partially offset by decreased repairs and maintenance and other operating costs (approximately $45 million) and lower raw materials costs (approximately $30 million).

The Tubular segment had a loss of $179 million for the year ended December 31, 2015 compared to earnings of $261 million for the year ended December 31, 2014. The decrease in Tubular results in 2015 as compared to 2014 resulted mainly from decreased shipment volumes (approximately $330 million), decreased average realized prices (approximately $80 million) as a result of reduced drilling activity caused by low energy prices and continued high import levels and operating cost inefficiencies primarily due to reduced production levels (approximately $55 million). These decreases were partially offset by lower raw materials costs (approximately $25 million).

Gross margin for 2016 as compared to 2015, and 2015 as compared to 2014, decreased as a result of production cost inefficiencies driven by the decrease in shipments.

Results for Other Businesses

Other Businesses had earnings of $63 million, $33 million and $82 million for 2016, 2015 and 2014, respectively.

Items not allocated to segments:

The decrease in **postretirement benefit expense** in 2016 as compared to 2015 resulted from lower pension expenses as a result of the freezing of benefit accruals for non-represented participants effective December 31, 2015 and the natural maturation of our plans. The decrease in expense in 2015 as compared to 2014 resulted from lower pension and retiree medical expenses as a result of the natural maturation of our pension plans and the deconsolidation of USSC, partially offset by a lower discount rate and expected return on asset assumption.

We recorded a **loss on shutdown of certain tubular pipe mill assets** of $126 million as a result of the permanent closure of the Lorain #4 and Lone Star #1 pipe mills and the Bellville Tubular Operations in December 2016.

We recorded a net favorable adjustment of $2 million in **restructuring and other charges** in 2016 primarily due to changes in estimates associated with supplemental unemployment and severance cost accruals with respect to our actions to adjust our operating configuration, streamline our operational processes, and reduce costs. We recorded restructuring and other charges of $78 million during 2015 as a result of further actions to adjust our operational footprint.

We recorded $18 million and $99 million of **Granite City Works temporary idling charges** during 2016 and 2015, respectively.

We recorded **impairment of equity investment charges** of $12 million and $18 million as a result of other than temporary impairment of equity investments during 2016 and 2015, respectively. In 2016, the Company determined there was an other than temporary impairment of an equity investee within our Tubular segment. Accordingly, an impairment charge of $12 million was recorded in 2016. During 2015, U. S. Steel determined there was an other than temporary impairment of an equity investee within a non-core operating segment of U. S. Steel, which resulted from a decision in the due to our intent to sell the particular investment, thereby inhibiting sufficient recovery of the market value. As a result, an impairment charge of $18 million was recorded in 2015 and during the first quarter of 2017, this investment was sold.

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.

We recorded a $91 million **loss on shutdown of Fairfield Flat-Rolled Operations** during 2015 as a result of the permanent closure of those operations.

We recorded a $392 million **loss associated with U. S. Steel Canada Inc.** in 2015 as a result of a change in our assessment of the recoverability of the Company's retained interest in USSC and other charges. We recorded $416 million of non-cash, pretax charges associated with the deconsolidation of USSC during 2014 after its CCAA filing (see Note 4).

We recorded a $153 million **loss on shutdown of coke production facilities** during 2015 as a result of the permanent closure of our Gary Works and Granite City Works coke facilities.

We recorded a $26 million **postemployment benefit actuarial adjustment** in 2015 related to workers' compensation and black lung benefit obligations.

We recorded a $195 million **carbon alloy facilities impairment charge** during 2014.

We recorded a loss of $70 million related to **litigation reserves** during 2014 for the Company's ongoing litigation matters.

We recorded a $37 million charge during 2014 to **write-off pre-engineering costs** since we have decided not to pursue an expansion of our Keetac iron ore pellet operations.

We recorded a $14 million **loss on assets held for sale** during 2014 related to the write-down of non-strategic Corporate assets.

We recorded a $55 million **gain on the sale of real estate assets** during 2014 consisting of surface rights and mineral royalty revenue streams in the state of Alabama.

We recorded a **curtailment gain** of $19 million for other benefit plans in 2014 associated with the elimination of non-union retiree medical coverage after 2017.

Net Interest and Other Financial Costs

(Dollars in millions)	Year Ended December 31, 2016	2015	2014
Interest income	**$ (5)**	$ (3)	$ (12)
Interest expense	**230**	214	234
Loss on debt extinguishment	**22**	36	—
Other financial costs	**4**	10	21
Net interest and other financial costs	**$ 251**	$ 257	$ 243

During 2016, U. S. Steel issued $980 million of 8.375% Senior Secured Notes due July 2, 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 6.05% 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. During 2015, U. S. Steel incurred a $36 million charge related to the retirement of the 2.75% Senior Convertible Notes due 2019, which has also been reflected within the loss on debt extinguishment line in the table above. For further information see Note 16 to the Consolidated Financial Statements.

The decrease in net interest and other financial costs from 2015 to 2016 is primarily due to a decrease in loss on debt extinguishment (as described above) and decreased other financing costs, partially offset by increased interest expense associated with the 2021 Senior Secured Notes.

The increase in net interest and other financial costs from 2014 to 2015 is primarily due to the $36 million charge related to the retirement of the 2.75% Senior Convertible Notes due 2019 partially offset by the reduction in interest due to the redemption of the 4.00% Senior Convertible Notes due May 15, 2014.

For additional information on U. S. Steel’s foreign currency exchange activity see Note 15 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 provision for the year ended December 31, 2016 was $24 million compared to an income tax provision of $183 million in 2015 and $68 million in 2014. Due to the full valuation allowance on our domestic deferred tax assets in 2016, the tax provision does not reflect any tax benefit for domestic pretax losses. Included in the 2016 tax provision is a benefit of $18 million related to the Company's election to claim a refund of deferred Alternative Minimum Tax credits pursuant to a provision in the Protecting Americans from Tax Hikes 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 does not impact the total provision because of the valuation allowance on the net domestic deferred tax asset. Included in the 2015 tax provision is a net tax benefit of $31 million relating to adjustments to tax reserves related to the conclusion of certain audits. The tax provision in 2014 does not reflect any tax benefit for pretax losses in Canada, which was deconsolidated as of the end of the day on September 15, 2014, as this is a jurisdiction where we had recorded a full valuation allowance on deferred tax assets. Included in the 2014 tax provision is a benefit of $32 million related to the loss on deconsolidation of USSC and other charges.

The net domestic deferred tax liability was $28 million at December 31, 2016, net of an established valuation allowance of $1,109 million, compared to a net domestic deferred tax liability of $29 million at December 31, 2015, net of an established valuation allowance of $804 million.

At December 31, 2016, the net foreign deferred tax asset was $6 million, net of an established valuation allowance of $4 million. At December 31, 2015, the net foreign deferred tax asset was $15 million, net of an established valuation allowance of $4 million.

For further information on income taxes see Note 10 to the Consolidated Financial Statements.

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

Net loss attributable to U. S. Steel in 2016 was $(440) million compared to a net loss of $(1,642) million in 2015 and net earnings of $102 million in 2014, respectively. The changes primarily reflected the factors discussed above.

Financial Condition, Cash Flows and Liquidity

Financial Condition

Cash and cash equivalents increased by $760 million from December 31, 2015 due to effective management of our working capital, in addition to net proceeds of approximately $482 million received from the issuance of 21,735,000 shares of common stock, par value of $1.00 per share, during the third quarter of 2016.

Accounts receivable increased by $185 million from year-end 2015 due to higher average realized pricing in the fourth quarter of 2016 compared to the fourth quarter of 2015.

Inventories decreased by $501 million from December 31, 2015 primarily due to our planned working capital reductions, which includes better inventory management.

Property, plant and equipment decreased by $432 million from December 31, 2015 primarily due to depreciation expense in excess of capital expenditures as well as the write down of fixed assets as a result of the permanent shutdown of the Lorain #4 and Lone Star #1 pipe mills and the Bellville Tubular Operations in 2016.

Accounts payable and other accrued liabilities increased by $175 million from year-end 2015 primarily as a result of increased production levels in the fourth quarter of 2016 as compared to the fourth quarter of 2015.

Employee benefits increased by $115 million from year-end 2015 primarily due to benefit and plan design changes in the 2015 Labor Agreements, which were not agreed to until February 1, 2016, partially offset by the impacts from the natural maturation of our pension plans as well as the voluntary contribution of 3,763,643 shares of our common stock (the shares) to the U. S. Steel Retirement Plan Trust during 2016. The shares were valued by an independent valuation firm for 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.

The total of **long-term debt (less unamortized discount and debt issuance costs) and the current portion of long-term debt** decreased by $107 million from year-end 2015 primarily due to the repurchase of $1,032 million of our outstanding senior notes through various tender offers, redemptions and open market purchases as well as payments of $43 million on environmental bonds, partially offset by the issuance of $980 million of 8.375% Senior Secured Notes due July 1, 2021. See Note 16 to the Consolidated Financial Statements for further details.

Cash Flows

Net cash provided by operating activities was $727 million in 2016 compared to $359 million in 2015 and $1,553 million in 2014. The increase in 2016 compared to 2015 is primarily due to stronger financial results. The decrease in 2015 compared to 2014 is primarily due to lower financial results. The decrease was partially offset by working capital improvements period over period, the reimbursement from our trust for represented retiree health care and life insurance benefits (VEBA) for payment of represented retiree health care and retiree life claims and the absence of a $140 million contribution to the defined benefit pension plan. 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, 2016 and 2015 are as follows:

	Year Ended December 31,	
	2016	2015
Accounts Receivable Turnover	**8.8**	7.7
Inventory Turnover	**5.3**	4.9

The increase in the accounts receivable turnover approximates six days for 2016 as compared to 2015 and is due to decreased sales as a result of decreased shipments in our Flat-Rolled and Tubular segments as well as lower average realized prices in our Flat-Rolled, Tubular and USSE segments, partially offset by an increase in accounts receivable due to higher average realized pricing in the fourth quarter of 2016 compared to the fourth quarter of 2015. The increase in the inventory turnover approximates six days for 2016 as compared to 2015 and is primarily due to decreased inventory levels in all of our reportable segments resulting from better inventory management, partially offset by a decrease in cost of goods sold mainly attributable to a decrease in shipment volumes in our Flat-Rolled and Tubular segments and our lower and more flexible cost structure due to our Carnegie Way transformation efforts.

The last-in, first-out (LIFO) inventory method is the predominant method of inventory costing in the United States. At December 31, 2016 and 2015, the LIFO method accounted for 75 percent and 80 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 that the LIFO cost of inventory, management will write the inventory down. As of December 31, 2016 and 2015, the replacement cost of the inventory was higher by approximately $489 million and $900 million, respectively.

During 2016, we made significant improvements in our working capital, primarily driven by improved inventory management. As a result of the liquidation of LIFO inventories, cost of sales increased and earnings (loss) before interest and income taxes decreased by $77 million in 2016.

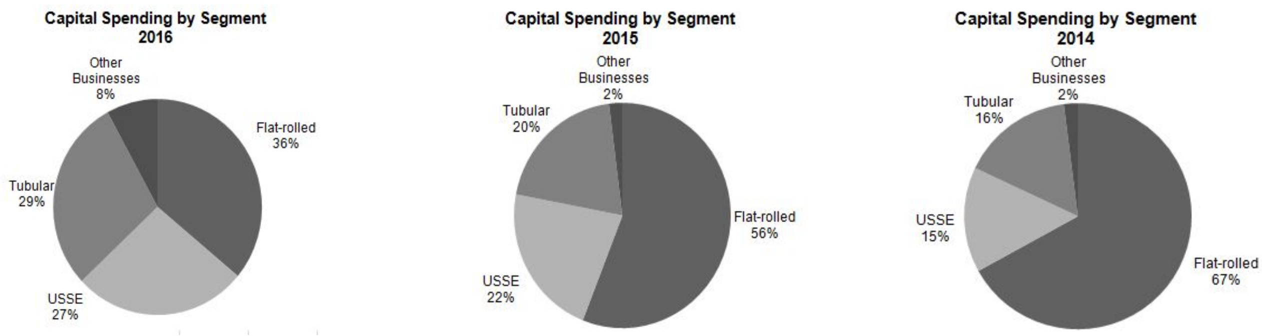
Net cash provided by operating activities for 2016, 2015 and 2014 reflects employee benefits payments as shown in the following table.

Employee Benefits Payments

	Year Ended December 31,		
(Dollars in millions)	**2016**	**2015**	**2014**
Voluntary contributions to main defined benefit pension plan [b]	**$ 13** [a]	$ —	$ 140
Required contributions to other defined benefit pension plans	**—**	—	47
Other employee benefits payments not funded by trusts	**61**	75	198
Contributions to trusts for retiree health care and life insurance	**—**	10	—
Payments to a multiemployer pension plan	**63**	66	73
Pension related payments not funded by trusts	**26**	38	87
Reductions in cash flows from operating activities	**$ 163**	$ 189	$ 545

[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 2016 were $306 million compared to $500 million in 2015 and $480 million in 2014.



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.

2015 Capital Spending

Flat-Rolled capital expenditures were $280 million and included spending for the Granite City Works No. 1 Caster replacement, the ongoing implementation of an enterprise resource planning (ERP) system, No. 1 Caster upgrade at Gary Works, pickle line replacement at Great Lakes Works, blast furnace maintenance at Granite City Works, and various other infrastructure, environmental and strategic projects. Tubular capital expenditures of $102 million related to the EAF and coupling facilities as well as various other infrastructure and strategic capital projects. USSE capital expenditures of $110 million consisted of spending for infrastructure and environmental projects.

2014 Capital Spending

Flat-Rolled capital expenditures were $322 million and included spending for ongoing implementation of an enterprise resource planning (ERP) system, the Granite City Works Steel Shop Tap and Charging Emission Control System, a blast furnace reline at Mon Valley Works, blast furnace projects at Granite City and Great Lakes Works and various other infrastructure, environmental and strategic projects. Tubular capital expenditures of $76 million related to an upgrade to the Lorain No. 4 Seamless Hot Mill, the Offshore Operations Houston Test Lab and various other infrastructure and strategic capital projects. USSE capital expenditures of $74 million consisted of spending for infrastructure and environmental projects.

U. S. Steel’s contract commitments to acquire property, plant and equipment at December 31, 2016, totaled $106 million.

Capital expenditures for 2017 are expected to total approximately $475 million and remain focused largely on strategic, infrastructure and environmental projects.

With reduced pricing for iron ore, management is considering its options with respect to the Company's iron ore position in the United States. The Company is also exploring opportunities related to the availability of reasonably priced natural gas as an alternative to coke in the iron reduction process to improve our cost competitiveness, while reducing our dependence on coal and coke. After receiving the necessary authorizations from the Jefferson County Department of Health and the Alabama Department of Environmental Management for the Fairfield EAF project, construction began in the second quarter of 2015, but due to challenging market conditions resulting from depressed oil prices and reduced oil rig counts, the construction of the Fairfield EAF has been delayed until market conditions improve.

Acquisitions in 2015 reflects the purchase of the 50 percent joint venture interest in Double Eagle Steel Coating Company not already owned by U. S. Steel.

Disposal of assets in 2014 primarily reflects proceeds from transactions to sell and swap a portion of the emissions allowances at USSK, as well as the sale of certain non-strategic assets.

Restricted cash in 2015 and 2014 reflects the use of restricted cash for qualified environmental capital projects. These proceeds are restricted for environmental capital projects at Gary Works, our Clairton Plant and Granite City Works and become unrestricted as capital expenditures for these projects are made. At December 31, 2016 and December 31, 2015, there was no restricted cash related to these projects. At December 31, 2014, $12 million of this restricted cash remained.

Issuance of long-term debt, net of financing costs, totaled $958 million in 2016. U. S. Steel issued $980 million of 8.375% Senior Secured Notes dues 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 16 to the Consolidated Financial Statements.

Repayment of long-term debt totaled $1,070 million in 2016. In 2016, U. S. Steel repurchased approximately $6 million of its 6.05% Senior Notes due 2017 through open market purchases and redeemed 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 7.00% 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. Repayment of long-term debt in 2015 reflects the retirement of the $316 million principal amount of the 2019 Senior Convertible Notes along with scheduled repayments of certain environmental revenue bonds. Repayment of long-term debt in 2014 reflects the redemption of the remaining $322 million principal amount of our 2014 Senior Convertible Notes. The aggregate price, including accrued and unpaid interest, for the 2014 Senior Convertible Notes redeemed was approximately $327 million and the redemptions were paid with cash. See "Liquidity."

For all four quarters in 2016, 2015 and 2014, **dividends paid** per share of U. S. Steel common stock was $0.05.

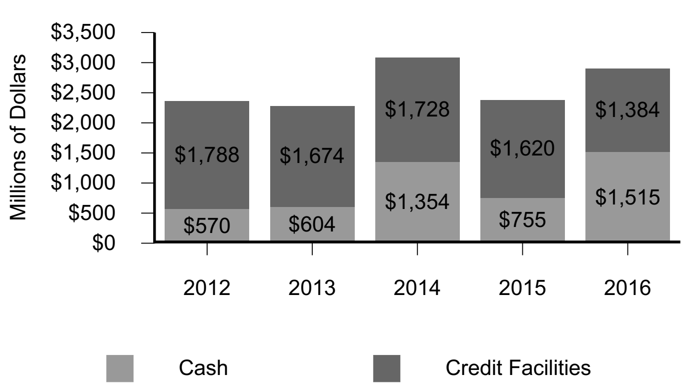
Liquidity

The following table summarizes U. S. Steel's liquidity as of December 31, 2016:

(Dollars in millions)		
Cash and cash equivalents	$	1,515
Amount available under $1.5 Billion Credit Facility [(a)]		1,123
Amounts available under USSK credit facilities		261
Total estimated liquidity	$	2,899

[(a)] See below for discussion of the reasons for reduced availability under this Facility.

Total Estimated Liquidity at December 31



As of December 31, 2016, $126 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, 2016, there were no amounts drawn on the $1.5 billion credit facility agreement (Third Amended and Restated Credit Agreement). However, since the value of our inventory and trade accounts receivable less specified reserves calculated in accordance with the Third Amended and Restated Credit Agreement do not support the full amount of the facility at December 31, 2016, the amount available to the Company under this facility was reduced by $227 million. Additionally, 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 Third Amended and Restated Credit 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, 2016, we would not meet this covenant. So long as we continue to not meet this covenant, the amount available to the Company under this facility is effectively reduced by $150 million. As a result, availability under the Third Amended and Restated Credit Agreement was $1,123 million as of December 31, 2016.

At both December 31, 2016 and 2015, USSK had no borrowings under its €200 million (approximately $210 million and $218 million, respectively) 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, 2016, USSK had full availability under the USSK Credit Agreement. The USSK Credit Agreement expires in July 2019. The USSK Credit Agreement also permits up to two additional one-year extensions to the final maturity date at the mutual consent of USSK and its lenders. On January 23, 2017, USSK's lenders confirmed the first maturity extension request to July 2020 under the USSK Credit Agreement.

USSK also has a €40 million unsecured revolving credit facility that expires in December 2018 and a €10 million unsecured credit facility that was to expire in December 2016. On November 2, 2016, USSK entered into an amendment to its €10 million unsecured credit agreement to extend the agreement's final maturity date from December 2016 to December 2017. The amendment also permits up to two additional one-year extensions to the final maturity date at the mutual consent of USSK and its lender. At December 31, 2016, USSK had no borrowings under its €40 million and €10 million unsecured credit facilities (collectively approximately $53 million) and the aggregate availability was approximately $51 million due to approximately $2 million of customs and other guarantees outstanding. At December 31, 2015, USSK had no borrowings under its €40 million and €10 million unsecured credit facilities (collectively approximately $55 million) and the availability was approximately $52 million due to approximately $3 million of customs and other guarantees outstanding.

On May 10, 2016, U. S. Steel issued $980 million of 8.375% Senior Secured Notes due July 1, 2021 (2021 Senior Secured Notes). U. S. Steel received net proceeds from the offering of approximately $958 million after fees of approximately $22 million related to the underwriting and third party expenses. The net proceeds from the issuance of the 2021 Senior Secured Notes were used to repurchase portions of our outstanding senior notes (see Note 16 to the Consolidated Financial Statements, "Debt" for further details). Interest on the notes is payable semi-annually in arrears on January 1st and July 1st of each year commencing on January 1, 2017. The notes are secured by first-priority liens on substantially all of the tangible and intangible assets of the Company's domestic flat-rolled facilities, exclusive of the collateral required under the Third Amended and Restated Credit Agreement.

On August 15, 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.

For the twelve months ended December 31, 2016, the Non-Guarantor Subsidiaries (as defined in the Indenture governing the 2021 Senior Secured Notes), which consist principally of our tubular subsidiaries and our foreign subsidiaries, including USSK, represented approximately 34% of our net sales, 131% of our operating loss and 21% of our Adjusted EBITDA on a consolidated basis. As of December 31, 2016, the Non-Guarantor Subsidiaries represented 39% of our total assets and had $1.2 billion of total liabilities on a consolidated basis, including trade payables but excluding intercompany liabilities, all of which would be structurally senior to the 2021 Senior Secured Notes.

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 $160 million of liquidity sources for financial assurance purposes as of December 31, 2016. Increases in certain of these commitments which use collateral are reflected in restricted cash on the Consolidated Statement of Cash Flows.

At December 31, 2016, in the event of a change in control of U. S. Steel: (a) debt obligations totaling $2,523 million as of December 31, 2016 (including the Senior Notes and Senior Secured Notes) may be declared due and payable; (b) the Third Amended and Restated Credit Agreement and USSK's €200 million revolving credit agreement 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 $29 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, 2016. 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 2015 Labor Agreements restructured prior contractual obligations that required U. S. Steel to make $235 million in cash contributions to the VEBA trust fund. These funds will now be used to help keep healthcare affordable for our retirees.

The following table summarizes U. S. Steel's contractual obligations at December 31, 2016, and the effect such obligations are expected to have on our liquidity and cash flows in future periods.

(Dollars in millions)

			Payments Due by Period		
Contractual Obligations	**Total**	**2017**	**2018 through 2019**	**2020 through 2021**	**Beyond 2021**
Long-term debt (including interest) and capital leases[a]	$ 4,712	$ 284	$ 666	$ 1,936	$ 1,826
Operating leases[b]	241	72	78	25	66
Contractual purchase commitments[c]	6,373	3,539	1,004	615	1,215
Capital commitments[d]	106	92	14	—	—
Environmental commitments[d]	179	19	—	—	160 [e]
Steelworkers Pension Trust	305 [f]	57	120 [f]	128 [f]	— [f]
Pensions[g]	658	—	—	159	499
Other benefits	286 [h]	59	116	111	— [h]
Unrecognized tax positions	72	—	—	—	72 [e]
Total contractual obligations	$ 12,932	$ 4,122	$ 1,998	$ 2,974	$ 3,838

(a) See Note 16 to the Consolidated Financial Statements.
(b) See Note 23 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 25 to the Consolidated Financial Statements).
(d) See Note 25 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 2015 Labor Agreements with the USW, which expire on September 1, 2018, projected amounts shown through 2021 assume that the current $2.65 contribution rate per hour will apply.
(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 2021, payments represent minimum contributions that may be needed over the next 5 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. Under the 2015 Labor Agreement, previously required contributions to the USW VEBA trust have been eliminated (See Note 17 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 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 23 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 10 to the Consolidated Financial Statements, are excluded from the above table.

On August 1, 2016, U. S. Steel made a voluntary contribution of 3,763,643 shares of common stock, par value of $1.00 per share, to the U. S. Steel Retirement Plan Trust, which is the funding vehicle for our main defined benefit pension plan. The shares were valued by an independent valuation firm for 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. In 2014, U. S. Steel made voluntary contributions to our main U.S. defined benefit plan of $140 million. 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 17 to the Consolidated Financial Statements.

The following table summarizes U. S. Steel's commercial commitments at December 31, 2016, and the effect such commitments could have on our liquidity and cash flows in future periods.

(Dollars in millions)

		Scheduled Reductions by Period			
Commercial Commitments	**Total**	**2017**	**2018 through 2019**	**2020 through 2021**	**Beyond 2021**
Standby letters of credit[a]	$ 60	$ 50	$ 1	$ —	$ 9 [b]
Surety bonds[a]	68	—	—	—	68 [b]
Funded Trusts[a]	32	—	—	—	32 [b]
Total commercial commitments	$ 160	$ 50	$ 1	$ —	$ 109

(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 2017 are expected to be for capital expenditures, employee benefits and operating costs, including purchases of raw materials. We ended 2016 with $1,515 million of cash and cash equivalents and $2.9 billion 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 buybacks, 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.

Other Relevant Matters

Apolo Tubulars S.A.

Apolo Tubulars S.A, an unconsolidated Brazilian joint venture of which the Company owns 50%, was the subject of a search of its premises on May 24, 2016, pursuant to the Brazilian investigation of the CEO of Apolo Tubulars S.A., who has since been suspended, and others. The former CEO was among those subsequently indicted by the Brazilian federal prosecutor on June 27, 2016 for corruption, money laundering and organized crime in connection with alleged payments to government officials in exchange for contracts with Petróleo Brasileiro S.A. (commonly known as "Petrobras"), Brazil's state-run energy company. An interim CEO has been appointed. The prosecutor has not alleged any violations of law by, or initiated any investigation of, the Company or any of its employees. While there can be no assurance that the outcome of the prosecution of the joint venture's former CEO will not have an adverse effect on the joint venture or result in an impairment of the Company's investment in the joint venture, it would not have a material impact on the Company as a whole.

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. In some cases, a portion of the labor force used by the investees is provided by U. S. Steel, the cost of which is reimbursed; however, failing reimbursement, U. S. Steel is ultimately responsible for the cost of these employees. The terms of these arrangements were a result of negotiations in arms-length transactions with the other joint venture participants, who are not affiliates of U. S. Steel.

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 25 to the Consolidated Financial Statements as well as operating leases disclosed in Note 23 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.

Environmental Matters

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

(Dollars in millions)	2016	2015	2014
North America:			
Capital	**$ 5**	$ 16	$ 47
Compliance			
Operating & maintenance	**167**	226	303
Remediation[(a)]	**17**	12	22
Total North America	**$ 189**	$ 254	$ 372
USSE:			
Capital	**$ 26**	$ 80	$ 36
Compliance			
Operating & maintenance	**11**	12	14
Remediation[(a)]	**6**	8	8
Total USSE	**$ 43**	$ 100	$ 58
Total U. S. Steel	**$ 232**	$ 354	$ 430

(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 10 percent of total capital expenditures in 2016, 19 percent in 2015 and 20 percent in 2014.

Environmental compliance expenditures represented two percent of U. S. Steel's total costs and expenses in 2016, 2015 and 2014. Remediation spending during 2014 through 2016 was mainly related to remediation activities at former and present operating locations.

RCRA establishes standards for the management of solid and hazardous wastes. Besides affecting current waste disposal practices, RCRA also addresses the environmental impacts of certain past waste disposal operations, the recycling of wastes and the regulation of storage tanks.

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, 2016 and December 31, 2015. These amounts exclude liabilities related to asset retirement obligations accounted for in accordance with ASC Topic 410. See Note 18 to the Consolidated Financial Statements.

(Dollars in millions)	2016	2015
Beginning Balance	**$ 197**	$ 212
Plus: Additions	**1**	—
Adjustments for changes in estimates	**(7)**	(5)
Less: Obligations settled	**(12)**	(10)
Ending Balance	**$ 179**	$ 197

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. However, based on presently available information and existing laws and regulations as currently implemented, U. S. Steel does not anticipate that environmental compliance and remediation expenditures (including operating and maintenance) will materially increase in 2017. U. S. Steel's environmental capital expenditures are expected to be approximately $60 million in 2017, $45 million of which is related to projects at USSE. U. S. Steel's environmental expenditures for 2017 for operating and maintenance and for remediation projects are expected to be approximately $175 million and $30 million, respectively of which approximately $15 million and $5 million for operating and maintenance and remediation, respectively, is related to USSE. Predictions beyond 2017 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.

Outlook for 2017

If market conditions, which include spot prices, raw material costs, customer demand, import volumes, supply chain inventories, rig counts and energy prices, remain at their current levels, we expect:

- 2017 net earnings of approximately $535 million, or $3.08 per share, and EBITDA of approximately $1.3 billion;
- Results for our Flat-Rolled, European, and Tubular segments to be higher than 2016;
- To be cash positive for the year, primarily due to improved cash from operations; and
- Other Businesses to be comparable to 2016 and approximately $50 million of postretirement benefit expense.

The outlook for 2017 is based on market conditions as of February 22, 2017. We believe market conditions will change, and as changes occur during the balance of 2017, our net earnings and EBITDA should change consistent with the pace and magnitude of changes in market conditions.

Please refer to the table below for the reconciliation of the Outlook net earnings to EBITDA.

UNITED STATES STEEL CORPORATION

RECONCILIATION OF ANNUAL EBITDA OUTLOOK

(Dollars in millions)		Year Ended Dec. 31 2017
Reconciliation to Projected Annual EBITDA Included in Outlook		
Projected net earnings attributable to United States Steel Corporation included in Outlook	$	535
Estimated income tax expense		60
Estimated net interest and other financial costs		245
Estimated depreciation, depletion and amortization		460
Projected annual EBITDA included in Outlook	$	1,300

EBITDA is a non-GAAP measure that we believe, 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.

The outlook for 2017 is based on market conditions as of February 22, 2017 and may change based on prevailing economic and competitive conditions and other risks and uncertainties referred to in the Forward-Looking Statements section and in "Item 1A. Risk Factors." These factors could significantly affect our shipments and average realized prices and our outlook may change as a result of these and other factors.

Accounting Standards

See Note 2 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 effective portion 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 15 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, 2016 and December 31, 2015, U. S. Steel had open euro forward sales contracts for U.S. dollars (total notional value of approximately $176 million and $266 million, respectively). A 10 percent increase in the December 31, 2016 euro forward rates would result in a $17 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 15 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 15 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 2017 that qualified for the normal purchases and normal sales exemption with a total notional value of approximately $26 million at December 31, 2016. Total commodity contracts for natural gas forward buys placed for 2017 at December 31, 2016 represent approximately 16 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 2016 and 2015 interest rates on the fair value of U. S. Steel's non-derivative financial instruments is provided in the following table:

(Dollars in millions)	**2016**		**2015**	
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)]	**$ 3,139**	**$ 101**	$ 1,896	$ 133

(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 19 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, 2016 and 2015, 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, 2016 and December 31, 2015.
(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. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

United States Steel Corporation
600 Grant Street
Pittsburgh, PA 15219-2800

MANAGEMENT'S REPORT TO STOCKHOLDERS

February 28, 2017

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 internal 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, 2016.

The effectiveness of United States Steel Corporation's internal control over financial reporting as of December 31, 2016 has been audited by PricewaterhouseCoopers LLP, an independent registered public accounting firm, as stated in their report which is included herein.

/s/ MARIO LONGHI	/s/ DAVID B. BURRITT
Mario Longhi	David B. Burritt
President and Chief Executive Officer	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 Stockholders of United States Steel Corporation

In our opinion, the accompanying consolidated balance sheets and the related consolidated statements of operations, comprehensive income/(loss), stockholders' equity and cash flows present fairly, in all material respects, the financial position of United States Steel Corporation and its subsidiaries (the Company) at December 31, 2016 and 2015, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2016 in conformity with accounting principles generally accepted in the United States of America. In addition, in our opinion, the financial statement schedule listed in the index appearing under Item 15(a)(2) presents fairly, in all material respects, the information set forth therein when read in conjunction with the related consolidated financial statements. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2016, based on criteria established in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). The Company's management is responsible for these financial statements and financial statement schedule, 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. Our responsibility is to express opinions on these financial statements, on the financial statement schedule, and on the Company's internal control over financial reporting based on our integrated audits. We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement and whether effective internal control over financial reporting was maintained in all material respects. Our audits of the financial statements included examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. 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.

As discussed in Note 2 to the consolidated financial statements, the Company changed the manner in which it accounts for the presentation of debt issuance costs in 2016.

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 28, 2017

UNITED STATES STEEL CORPORATION
CONSOLIDATED STATEMENTS OF OPERATIONS

	Year Ended December 31,		
(Dollars in millions, except per share amounts)	**2016**	**2015**	**2014**
Net sales:			
Net sales	**$ 9,045**	$ 10,111	$ 16,149
Net sales to related parties (Note 22)	**1,216**	1,463	1,358
Total	**10,261**	11,574	17,507
Operating expenses (income):			
Cost of sales (excludes items shown below)	**9,623**	11,141	15,455
Selling, general and administrative expenses	**255**	415	523
Depreciation, depletion and amortization (Notes 12 and 13)	**507**	547	627
Earnings from investees (Note 11)	**(98)**	(38)	(142)
Impairment of intangible assets (Note 13)	**14**	—	—
Losses associated with U. S. Steel Canada Inc. (Notes 4 and 5)	**—**	392	416
Restructuring and other charges (Note 24)	**122**	322	250
Net loss (gain) on disposals of assets (Note 25)	**5**	(2)	(23)
Other income, net	**(2)**	(1)	(12)
Total	**10,426**	12,776	17,094
(Loss) earnings before interest and income taxes	**(165)**	(1,202)	413
Interest expense (Note 7)	**230**	214	234
Interest income	**(5)**	(3)	(12)
Loss on debt extinguishment (Note 7)	**22**	36	—
Other financial costs (Note 7)	**4**	10	21
Net interest and other financial costs	**251**	257	243
(Loss) earnings before income taxes	**(416)**	(1,459)	170
Income tax provision (Note 10)	**24**	183	68
Net (loss) earnings	**(440)**	(1,642)	102
Less: Net earnings attributable to noncontrolling interests	**—**	—	—
(Loss) earnings attributable to United States Steel Corporation	**$ (440)**	$ (1,642)	$ 102
(Loss) earnings per common share (Note 8)			
(Loss) earnings per share attributable to United States Steel Corporation stockholders:			
— Basic	**$ (2.81)**	$ (11.24)	$ 0.71
— Diluted	**$ (2.81)**	$ (11.24)	$ 0.69

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

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

	Year Ended December 31,		
(Dollars in millions)	**2016**	**2015**	**2014**
Net (loss) earnings	**$ (440)**	$ (1,642)	$ 102
Other comprehensive (loss) income, net of tax:			
Changes in foreign currency translation adjustments [a]	**(38)**	(104)	66
Changes in pension and other employee benefit accounts [a]	**(292)**	373	(218)
Changes in unrecognized (losses) gains on other [a]	**2**	3	(5)
Deconsolidation of U. S. Steel Canada [b]	**—**	—	468
Total other comprehensive income, net of tax	**(328)**	272	311
Comprehensive (loss) income including noncontrolling interest	**(768)**	(1,370)	413
Comprehensive loss attributable to noncontrolling interest	**—**	—	—
Comprehensive (loss) income attributable to United States Steel Corporation	**$ (768)**	$ (1,370)	$ 413

[a] Related income tax benefit (provision):

Foreign currency translation adjustments [c]	**$** —	$ 82	$ 111
Pension and other benefits adjustments [c]	—	(228)	282
Other adjustments [c]	—	(2)	3

[b] Consists of $493 million for Pension and other benefit adjustments and $(25) million for currency translation adjustments.
[c] Amounts for 2016 do not reflect a tax benefit as a result of a full valuation allowance on our domestic deferred tax assets.

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

UNITED STATES STEEL CORPORATION
CONSOLIDATED BALANCE SHEETS

	December 31,	
(Dollars in millions)	**2016**	**2015**
Assets		
Current assets:		
Cash and cash equivalents	**$ 1,515**	$ 755
Receivables, less allowance of $25 and $28	**976**	864
Receivables from related parties, less allowance of $265 and $254 (Note 22)	**272**	199
Inventories (Note 9)	**1,573**	2,074
Other current assets	**20**	25
Total current assets	**4,356**	3,917
Investments and long-term receivables, less allowance of $10 and $7 (Note 11)	**528**	540
Long-term receivables from related parties, less allowance of $1,627 and $1,446	**—**	—
Property, plant and equipment, net (Note 12)	**3,979**	4,411
Intangibles — net (Note 13)	**175**	196
Deferred income tax benefits (Note 10)	**6**	15
Other noncurrent assets	**116**	88
Total assets	**$ 9,160**	$ 9,167
Liabilities		
Current liabilities:		
Accounts payable and other accrued liabilities	**$ 1,602**	$ 1,412
Accounts payable to related parties (Note 22)	**66**	81
Payroll and benefits payable	**400**	462
Accrued taxes	**128**	99
Accrued interest	**85**	49
Current portion of long-term debt (Note 16)	**50**	45
Total current liabilities	**2,331**	2,148
Long-term debt, less unamortized discount and debt issuance costs (Note 16)	**2,981**	3,093
Employee benefits (Note 17)	**1,216**	1,101
Deferred income tax liabilities (Note 10)	**28**	29
Deferred credits and other noncurrent liabilities	**329**	359
Total liabilities	**6,885**	6,730
Contingencies and commitments (Note 25)		
Stockholders' Equity		
Common stock issued — 176,424,554 shares issued and 150,925,911 shares issued (par value $1 per share, authorized 400,000,000 shares) (Notes 8 and 26)	**176**	151
Treasury stock, at cost (2,614,378 shares and 4,644,867 shares)	**(182)**	(339)
Additional paid-in capital	**4,027**	3,603
(Accumulated deficit) retained earnings	**(250)**	190
Accumulated other comprehensive loss (Note 20)	**(1,497)**	(1,169)
Total United States Steel Corporation stockholders' equity	**2,274**	2,436
Noncontrolling interests	**1**	1
Total liabilities and stockholders' equity	**$ 9,160**	$ 9,167

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

UNITED STATES STEEL CORPORATION
CONSOLIDATED STATEMENTS OF CASH FLOWS

	Year Ended December 31,		
(Dollars in millions)	**2016**	**2015**	**2014**
Increase (decrease) in cash and cash equivalents			
Operating activities:			
Net (loss) earnings	**$ (440)**	$ (1,642)	$ 102
Adjustments to reconcile net cash provided by operating activities:			
Depreciation, depletion and amortization (Notes 12 and 13)	**507**	547	627
Impairment of intangible assets (Note 13)	**14**	—	—
Losses associated with U. S. Steel Canada Inc. (Notes 4 and 5)	**—**	392	416
Restructuring and other charges (Note 24)	**122**	322	256
Loss on debt extinguishment (Note 7)	**22**	36	—
Provision for doubtful accounts	**—**	(15)	—
Pensions and other postretirement benefits	**(62)**	50	(235)
Deferred income taxes (Note 10)	**9**	213	76
Net loss (gain) on disposal of assets (Note 25)	**5**	(2)	(23)
Distributions received, net of equity investees earnings	**(89)**	(28)	(135)
Changes in:			
Current receivables	**(182)**	792	(199)
Inventories	**491**	391	(247)
Current accounts payable and accrued expenses	**287**	(632)	581
Income taxes receivable/payable	**10**	6	161
All other, net	**33**	(71)	173
Net cash provided by operating activities	**727**	359	1,553
Investing activities:			
Capital expenditures	**(306)**	(500)	(480)
Acquisitions	**—**	(25)	—
Disposal of assets	**12**	4	29
Change in restricted cash, net	**(3)**	13	29
Investments, net	**(21)**	(2)	(5)
Net cash used in investing activities	**(318)**	(510)	(427)
Financing activities:			
Issuance of long-term debt, net of financing costs (Note 16)	**958**	—	—
Repayment of long-term debt (Note 16)	**(1,070)**	(379)	(325)
Settlement of contingent consideration	**(15)**	—	—
Net proceeds from public offering of common stock (Note 26)	**482**	—	—
Receipts from exercise of stock options	**35**	1	13
Dividends paid	**(31)**	(29)	(29)
Net cash provided by (used in) financing activities	**359**	(407)	(341)
Effect of exchange rate changes on cash	**(8)**	(41)	(35)
Net increase (decrease) in cash and cash equivalents	**760**	(599)	750
Cash and cash equivalents at beginning of year	**755**	1,354	604
Cash and cash equivalents at end of year	**$ 1,515**	$ 755	$ 1,354

See Note 21 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		
	2016	**2015**	**2014**	**2016**	**2015**	**2014**
Common stock:						
Balance at beginning of year	**$ 151**	$ 151	$ 151	**150,926**	150,926	150,926
Common stock issued	**25**	—	—	**25,499**	—	—
Balance at end of year	**$ 176**	$ 151	$ 151	**176,425**	150,926	150,926
Treasury stock:						
Balance at beginning of year	**$ (339)**	$ (396)	$ (480)	**(4,645)**	(5,271)	(6,246)
Common stock reissued for employee/ non-employee director stock plans	**157**	57	84	**2,031**	626	975
Balance at end of year	**$ (182)**	$ (339)	$ (396)	**(2,614)**	(4,645)	(5,271)
Additional paid-in capital:						
Balance at beginning of year	**$ 3,603**	$ 3,623	$ 3,667			
Common stock issued	**557**	—	—			
Dividends on common stock	**(31)**	—	—			
Employee stock plans	**(102)**	(20)	(44)			
Balance at end of year	**$ 4,027**	$ 3,603	$ 3,623			

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

UNITED STATES STEEL CORPORATION
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY

(Continued)

				Comprehensive Income (Loss)		
(Dollars in millions)	**2016**	**2015**	**2014**	**2016**	**2015**	**2014**
Retained earnings:						
Balance at beginning of year	**$ 190**	$ 1,862	$ 1,789			
Net (loss) earnings attributable to United States Steel Corporation	**(440)**	(1,642)	102	**$ (440)**	$ (1,642)	$ 102
Dividends on common stock	**—**	(29)	(29)			
Other	**—**	(1)	—			
Balance at end of year	**$ (250)**	$ 190	$ 1,862			
Accumulated other comprehensive (loss) income:						
Pension and other benefit adjustments (Note 17):						
Balance at beginning of year	**$ (1,479)**	$ (1,852)	$ (2,127)			
Changes during year, net of taxes[a] [b]	**(288)**	364	296	**(288)**	364	296
Changes during year, equity investee net of taxes[a]	**(4)**	9	(21)	**(4)**	9	(21)
Balance at end of year	**$ (1,771)**	$ (1,479)	$ (1,852)			
Foreign currency translation adjustments:						
Balance at beginning of year	**$ 312**	$ 416	$ 375			
Changes during year, net of taxes[a] [b]	**(38)**	(104)	41	**(38)**	(104)	41
Balance at end of year	**$ 274**	$ 312	$ 416			
Other:						
Balance at beginning of year	**$ (2)**	$ (5)	$ —			
Changes during year, net of taxes[a]	**2**	3	(5)	**2**	3	(5)
Balance at end of year	**$ —**	$ (2)	$ (5)			
Total balances at end of year	**$ (1,497)**	$ (1,169)	$ (1,441)			
Total stockholders' equity	**$ 2,274**	$ 2,436	$ 3,799			
Noncontrolling interests:						
Balance at beginning of year	**$ 1**	$ 1	$ 1			
Net loss	**—**	—	—	**—**	—	—
Balance at end of year	**$ 1**	$ 1	$ 1			
Total comprehensive (income) loss				**$ (768)**	$ (1,370)	$ 413

[a] Related income tax benefit (provision):

Foreign currency translation adjustments [c]	$ —	$ 82	$ 111
Pension and other benefits adjustments [c]	—	(228)	282
Other adjustments [c]	—	(2)	3

[b] 2014 amounts include $493 million for pension and other benefit adjustments and $(25) million for currency translation adjustment related to the deconsolidation of U. S. Steel Canada.
[c] Amounts for 2016 do not reflect a tax benefit as a result of a full valuation allowance on our domestic deferred tax assets.

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 Central Europe. Operations in North America 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. On September 16, 2014, U. S. Steel Canada Inc. (USSC), a wholly owned subsidiary of U. S. Steel, applied for relief from its creditors pursuant to Canada's Companies' Creditors Arrangement Act (CCAA). As a result of USSC filing for protection under CCAA (CCAA filing), U. S. Steel determined that USSC and its subsidiaries would be deconsolidated from U. S. Steel's financial statements on a prospective basis effective as of the date of the CCAA filing. Transactions between USSC and U. S. Steel subsequent to the CCAA filing are not eliminated and are considered related party.

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.

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. 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.

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 adjust the investment down to its estimated fair value, which then becomes its new carrying value.

Investments in companies whose equity has no readily determinable fair value are carried at cost and are periodically reviewed for impairment.

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 products are shipped, properties are sold or services are provided to customers; the sales price is fixed and determinable; collectability is reasonably assured; and title and risks of ownership have passed to the buyer. Depending on the shipping terms, shipping and other transportation costs charged to buyers are recorded gross (as both sales and cost of sales), or net of the amount paid to shipping providers.

Cash and cash equivalents

Cash and cash equivalents include cash on deposit and investments in highly liquid debt instruments with maturities of three months or less.

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 75 percent and 80 percent of consolidated inventories at December 31, 2016 and 2015, respectively.

Derivative instruments
U. S. Steel uses commodity-based and foreign currency derivative instruments to manage its exposure to price and foreign currency exchange rate risk. Forward physical purchase contracts and foreign exchange forward contracts are used to reduce the effects of fluctuations in the purchase price of natural gas and certain nonferrous metals and also certain business transactions denominated in foreign currencies. U. S. Steel has not elected to designate derivative instruments as qualifying for hedge accounting treatment. As a result, the changes in fair value of these derivatives are recognized immediately in results of operations. See Note 15 for further details on U. S. Steel's derivatives.

Identifiable intangible assets
U. S. Steel has determined that certain acquired intangible assets have indefinite useful lives. These assets are reviewed for impairment annually and whenever events or circumstances indicate that the carrying value may not be recoverable.

Identifiable intangible assets with finite lives are amortized on a straight-line basis over their estimated useful lives and are reviewed for impairment whenever events or circumstances indicate that the carrying value may not be recoverable.

See Note 13 for further details on our evaluation of intangible asset impairment.

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 depreciated on a group basis is sold or otherwise disposed of, proceeds are credited to accumulated depreciation, depletion and amortization with no immediate effect on income. When property, plant and equipment depreciated on an individual basis is sold or otherwise disposed of, any gains or losses are reflected in income. Gains on disposal of long-lived assets are recognized when earned. 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 2016, the permanent shutdown of certain Lorain, Lone Star and Bellville 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.

During 2015, the economic environment, including the significant decline in energy prices and the high levels of tubular imports, 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. This analysis indicated that the assets were not impaired.

Major maintenance activities

U. S. Steel incurs maintenance costs on all of its major equipment. Costs that extend the life of the asset, materially add to its value, or adapt the asset to a new or different use are separately capitalized in property, plant and equipment and are depreciated over the estimated useful life. All other repair and maintenance costs are expensed as incurred.

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 18 for further details on U. S. Steel's AROs.

Pensions, other postretirement and postemployment benefits

U. S. Steel has defined contribution or multi-employer arrangements for pension benefits for more than two-thirds of its North American employees and non-contributory defined benefit pension plans covering the remaining North American employees. Effective December 31, 2015, defined benefit pension benefits for non-represented salaried employees were frozen. As of January 1, 2016 all salaried non-represented employees participate in defined contribution plans. U. S. Steel has defined benefit retiree health care and life insurance plans (Other Benefits) that cover the majority of its employees in North America upon their retirement. As a result of the USW 2015 Labor Agreement, retiree medical and retiree life benefit plans were closed to represented employees hired on or after January 1, 2016. Instead, these employees will receive a company defined contribution into a savings account of $0.50 per hour worked. Defined benefit retiree health and retiree life insurance has been eliminated for salaried non-represented retirements after December 31, 2017. 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 by participating employees, currently covers approximately two-thirds of our represented employees in the United States. Government-sponsored programs into which U. S. Steel makes required contributions cover the majority of U. S. Steel's European employees.

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 postemployment 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.

Concentration of credit and business risks

U. S. Steel is exposed to credit risk in the event of nonpayment by customers, principally within the automotive, container, construction, steel service center, appliance and electrical, conversion, and oil, gas and petrochemical industries. Changes in these industries may significantly affect U. S. Steel's financial performance and management's estimates. U. S. Steel mitigates its exposure to credit risk by performing ongoing credit evaluations and, when deemed necessary, requiring letters of credit, credit insurance, prepayments, guarantees or other collateral.

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.

Foreign currency translation
U. S. Steel is subject to the risk of the effects of exchange rates on revenues and operating costs and existing assets or liabilities denominated in currencies other than our reporting currency, the U.S. dollar.

The functional currency for U. S. Steel Europe (USSE) is the euro (€). USSC (which was deconsolidated as of the end of the day on September 15, 2014) had the Canadian dollar (C$) as its functional currency. Assets and liabilities of these entities are translated into U.S. dollars at period-end exchange rates. Revenue and expenses are translated using the average exchange rate for the reporting period. Resulting translation adjustments are recorded in the accumulated other comprehensive income (loss) component of stockholders' equity. Gains and losses from foreign currency transactions are included in net earnings (loss) for the period.

Stock-based compensation
U. S. Steel accounts for its various stock-based employee compensation plans in accordance with the guidance in Accounting Standards Codification (ASC) Topic 718 on stock compensation (see Note 14).

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. Deferred taxes have been recognized for the undistributed earnings of most foreign subsidiaries because management does not intend to indefinitely reinvest such earnings in foreign operations. See Note 10 for further details of deferred taxes.

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 automobile 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.

Sales taxes
Sales are generally recorded net of sales taxes charged to customers. Sales taxes primarily relate to value-added tax on sales.

Reclassifications
Certain reclassifications of prior years' data have been made to conform to the current year presentation.

2. New Accounting Standards

On August 26, 2016, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update 2016-15, *Statement of Cash Flows: Classification of Certain Cash Receipts and Cash Payments* (ASU 2016-15). ASU 2016-15 reduces 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. ASU 2016-15 is effective for public business entities for fiscal years beginning after December 15, 2017, and interim periods within those fiscal years. Early adoption is permitted, including adoption in an interim period. U. S. Steel is evaluating the financial statement implications of adopting ASU 2016-15.

On March 30, 2016, the FASB issued Accounting Standards Update 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 is effective for public business entities for annual periods beginning after December 15, 2016, and interim periods within those annual periods; early adoption is permitted. U. S. Steel does not expect a material financial statement impact relating to the adoption of ASU 2016-09.

On February 25, 2016, the FASB issued Accounting Standards Update 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 the 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 the 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, using a modified retrospective approach. U. S. Steel is evaluating the financial statement implications of adopting ASU 2016-02, but recognizing the lease liability and related right-of-use asset will impact our balance sheet.

On July 22, 2015, the FASB issued Accounting Standards Update 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 current guidance under which an entity must measure inventory at the lower of cost or market. ASU 2015-11 will not apply to inventories that are measured using either the last-in, first-out (LIFO) method or the retail inventory method. ASU 2015-11 is effective for public entities for financial statements issued for fiscal years beginning after December 15, 2016, including interim periods within those fiscal years; early application is permitted. U. S. Steel does not expect a material financial statement impact relating to the adoption of this ASU.

On April 7, 2015, the FASB issued Accounting Standards Update No. 2015-03, *Simplifying the Presentation of Debt Issuance Costs* (ASU 2015-03). ASU 2015-03 changes the presentation of debt issuance costs in financial statements and requires an entity to present such costs in the balance sheet as a direct deduction from the related debt liability rather than as an asset. Amortization of the costs is reported as interest expense. An entity is required to apply the new guidance on a retrospective basis, wherein the balance sheet of each individual period presented should be adjusted to reflect the period-specific effects of applying the new guidance. On August 16, 2015, the FASB issued ASU 2015-15 to clarify the SEC staff's position on presenting and measuring debt issuance costs incurred in connection with line-of-credit arrangements given the lack of guidance on this topic in ASU 2015-03. Effective January 1, 2016, U. S. Steel retroactively adopted ASU 2015-03. As a result, debt issuance costs which were a component of other non-current assets in the Consolidated Balance Sheets were reclassified and are now reflected as a reduction of long-term debt. As of December 31, 2016 and 2015, other non-current assets and long-term debt in the Consolidated Balance Sheets decreased by approximately $36 million and $23 million, respectively.

On August 27, 2014, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update No. 2014-15, *Disclosure of Uncertainties about an Entity's Ability to Continue as a Going Concern* (ASU 2014-15). ASU 2014-15 explicitly requires management to assess an entity's ability to continue as a going concern, and to provide related footnote disclosures in certain circumstances. Currently, there is no guidance in U.S. GAAP about management's responsibility to evaluate whether there is substantial doubt about an entity's ability to continue as a going concern or to provide related footnote disclosures. ASU 2014-15 is effective for all entities for interim and annual periods beginning after December 15, 2016; early application is permitted. During the fourth quarter of 2016, U. S. Steel adopted ASU 2014-15. The adoption did not have a material financial statement impact to U. S. Steel.

On May 28, 2014, the FASB and the International Accounting Standards Board issued Accounting Standards Update No. 2014-09, *Revenue from Contracts with Customers* (ASU 2014-09). ASU 2014-09 outlines a single comprehensive model for entities to use in accounting for revenue arising from contracts with customers and supersedes most current revenue recognition guidance, including industry-specific guidance. ASU 2014-09 is effective for interim and annual periods beginning after December 15, 2016; early application is not permitted. On August 12, 2015, the FASB issued ASU 2015-14, *Revenue from Contracts with Customers - Deferral of the Effective Date* (ASU 2015-14). ASU 2015-14 defers the effective date of ASU 2014-09 to annual reporting periods beginning after December 15, 2017, including interim reporting periods within that reporting period, and only permits entities to adopt the standard one year earlier as of annual reporting periods beginning after December 15, 2016, including interim reporting periods within that reporting period. U. S. Steel is currently reviewing its significant customer contracts and associated revenue streams, accounting policies, information technology systems and related internal controls in anticipation of adopting ASU 2014-09 using a full retrospective approach on January 1, 2018. U. S. Steel does not expect a material impact relating to the adoption of ASU 2014-09.

3. Segment Information

U. S. Steel has three reportable segments: Flat-Rolled Products (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 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 consists of the following three commercial entities to specifically address our customers and service their needs: (1) automotive, (2) consumer, and (3) industrial, service center and mining.

Flat-Rolled has historically supplied steel rounds and hot-rolled bands to Tubular. In the third quarter of 2015, the blast furnace and associated steelmaking operations, along with most of the flat-rolled finishing operations at Fairfield Works were shutdown. Therefore, Flat-Rolled is currently not supplying rounds to Tubular, and will not in the future.

The Flat-Rolled segment information subsequent to September 16, 2014 does not include USSC. Transactions between U. S. Steel and USSC subsequent to USSC applying for relief from its creditors pursuant to the CCAA filing are treated as related party transactions.

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. USSE primarily serves customers in the Eastern European construction, service center, conversion, container, transportation (including automotive), appliance and electrical, and oil, gas and petrochemical markets. USSE produces and sells slabs, sheet, strip mill plate, 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, in the United States, and equity investees in the United States and Brazil. 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. Additionally, we sold the assets at our McKeesport tubular operations in 2016.

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, postretirement and other benefit expenses (other than service cost and amortization of prior service cost for active employees) and certain other items that management believes are not indicative of future results. Information on segment assets is not disclosed, as it is not reviewed by the chief operating decision maker. The chief operating decision maker assesses the Company's assets on an enterprise wide level, based upon the projects that yield the greatest return to the Company as a whole, and not on an individual segment level.

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. The transfer value for steel rounds, when Flat-Rolled supplied rounds to Tubular, was based on cost. All other 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
2016							
Flat-Rolled	**$ 7,507**	**$ 25**	**$ 7,532**	**$ 106**	**$ (3)**	**$ 349**	**$ 111**
USSE	**2,243**	**3**	**2,246**	**—**	**185**	**80**	**83**
Tubular	**449**	**2**	**451**	**6**	**(304)**	**68**	**88**
Total reportable segments	**10,199**	**30**	**10,229**	**112**	**(122)**	**497**	**282**
Other Businesses	**62**	**107**	**169**	**(2)**	**63**	**10**	**24**
Reconciling Items and Eliminations	**—**	**(137)**	**(137)**	**(12)**	**(106)**	**—**	**—**
Total	**$ 10,261**	**$ —**	**$ 10,261**	**$ 98**	**$ (165)**	**$ 507**	**$ 306**
2015							
Flat-Rolled	$ 8,293	$ 268	$ 8,561	$ 49	$ (237)	$ 392	$ 280
USSE	2,323	3	2,326	—	81	81	110
Tubular	898	—	898	11	(179)	64	102
Total reportable segments	11,514	271	11,785	60	(335)	537	492
Other Businesses	60	105	165	(22)	33	10	8
Reconciling Items and Eliminations	—	(376)	(376)	—	(900)	—	—
Total	$ 11,574	$ —	$ 11,574	$ 38	$ (1,202)	$ 547	$ 500
2014							
Flat-Rolled	$ 11,708	$ 1,187	$ 12,895	$ 134	$ 709	$ 457	$ 322
USSE	2,891	45	2,936	—	133	95	74
Tubular	2,772	2	2,774	11	261	66	76
Total reportable segments	17,371	1,234	18,605	145	1,103	618	472
Other Businesses	136	133	269	(3)	82	9	8
Reconciling Items and Eliminations	—	(1,367)	(1,367)	—	(772)	—	—
Total	$ 17,507	$ —	$ 17,507	$ 142	$ 413	$ 627	$ 480

The following is a schedule of reconciling items to income (loss) from operations:

(In millions)	2016	2015	2014
Items not allocated to segments:			
Postretirement benefit income (expense)[a]	**$ 62**	$ (43)	$ (114)
Other items not allocated to segments:			
Loss on shutdown of certain tubular pipe mill assets [b]	**(126)**	—	—
Losses associated with U. S. Steel Canada Inc. (Notes 4 and 5)	**—**	(392)	(416)
Loss on shutdown of coke production facilities [b]	**—**	(153)	—
Granite City Works temporary idling charges	**(18)**	(99)	—
Loss on shutdown of Fairfield Flat-Rolled Operations[b][c]	**—**	(91)	—
Restructuring and other charges (Note 24) [b]	**2**	(78)	—
Postemployment benefit actuarial adjustment	**—**	(26)	—
Impairment of intangible assets (Note 13)	**(14)**	—	—
Impairment of equity investment (Note 11)	**(12)**	(18)	—
Impairment of carbon alloy facilities (Note 24) [b]	**—**	—	(195)
Litigation reserves (Note 25)	**—**	—	(70)
Write-off of pre-engineering costs at Keetac (Note 24) [b]	**—**	—	(37)
Loss on assets held for sale (Note 24) [b]	**—**	—	(14)
Gain on sale of real estate assets [d]	**—**	—	55
Curtailment gain (Note 17)	**—**	—	19
Total other items not allocated to segments	**$ (168)**	$ (857)	$ (658)
Total reconciling items	**$ (106)**	$ (900)	$ (772)

(a) Consists of the net periodic benefit cost elements, other than service cost and amortization of prior service cost for active employees, associated with our defined pension, retiree health care and life insurance benefit plans.

(b) Included in Restructuring and other charges on the Consolidated Statements of Operations. See Note 24 to the Consolidated Financial Statements.

(c) Fairfield Flat-Rolled Operations includes the blast furnace and associated steelmaking operations, along with most of the flat-rolled finishing operations at Fairfield Works. The #5 coating line continues to operate.

(d) Gain on sale of surface rights and mineral royalty revenue streams in the state of Alabama.

Net Sales by Product:

The following summarizes net sales by product:

(In millions)	2016	2015	2014
Flat-Rolled	**$ 8,969**	$ 10,047	$ 13,533
Tubular	**481**	929	2,818
Other [a]	**811**	598	1,156
Total	**$ 10,261**	$ 11,574	$ 17,507

(a) Primarily includes sales of steel production by-products, railroad services and real estate operations.

Geographic Area:

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

(In millions)	Year	Net Sales	Assets
North America	**2016**	**$ 8,018**	**$ 3,671** [(a)]
	2015	9,251	4,057 [(a)]
	2014	14,616	4,180 [(a)]
Europe	**2016**	**2,243**	**789**
	2015	2,323	832
	2014	2,891	890
Other Foreign Countries	**2016**	**—**	**18**
	2015	—	24
	2014	—	36
Total	**2016**	**10,261**	**4,478**
	2015	11,574	4,913
	2014	$ 17,507	$ 5,106

(a) Assets with a book value of $3,670 million, $4,047 million and $4,172 million were located in the United States at December 31, 2016, 2015 and 2014, respectively.

4. Deconsolidation of U. S. Steel Canada and other charges

Restructuring and Creditor Protection

USSC, an indirect wholly owned subsidiary of U. S. Steel, with unanimous approval from its Board of Directors applied for relief from its creditors pursuant to CCAA on September 16, 2014. The CCAA filing was approved by the Ontario Superior Court of Justice (the Court) on September 16, 2014 and grants USSC creditor protection while it formulates a plan of restructuring. To assist USSC with its plan of restructuring, the Court confirmed the engagement by USSC of a chief restructuring officer, the appointment of a monitor and certain other financial advisors. As of the date of the CCAA filing, any proceedings pending against USSC, or currently underway affecting USSC's business operations or property, have been stayed pending further order by the Court.

As a result of the CCAA proceedings, U. S. Steel no longer has a controlling financial interest over USSC, as defined under ASC 810, *Consolidation*, and therefore has deconsolidated USSC's financial position as of the end of the day on September 15, 2014. This resulted in a pretax loss on deconsolidation and other charges of $416 million, which includes approximately $20 million of professional fees in 2014. The pretax loss on deconsolidation includes the derecognition of the carrying amounts of USSC's assets and liabilities and accumulated other comprehensive loss that were previously consolidated in U. S. Steel's Consolidated Balance Sheet and the impact of recording the retained interest in USSC. Subsequent to the deconsolidation, U. S. Steel accounts for USSC using the cost method of accounting, which has been reflected as zero in U. S. Steel's Consolidated Balance Sheet as of both December 31, 2016 and December 31, 2015, due to the negative equity associated with USSC's underlying financial position. Net assets totaling $(1,704) million were deconsolidated as of the end of the day on September 15, 2014.

USSC's results of operations have been removed from U. S. Steel's Consolidated Statement of Operations beginning September 16, 2014. USSC remained a wholly owned subsidiary of U. S. Steel, as of September 30, 2014. Because USSC did not meet the requirements of a discontinued operation, USSC's results of operations continue to be included in our Consolidated Statements of Operations through September 15, 2014. Our Consolidated Statements of Operations include the following amounts for USSC's results of operations. The amounts presented are before the elimination of USSC transactions with U. S. Steel, presenting USSC as if on a stand-alone basis.

(Dollars in millions)		Period from January 1, 2014 - September 15, 2014
Total net sales	$	1,508
Total operating expenses		1,587
Loss from continuing operations		(79)
Net interest and other financial costs		121
Loss before income taxes		(200)
Income tax benefit		—
Net loss	$	(200)

Related Party Transactions

Prior to the deconsolidation, U. S. Steel made loans to USSC for the purpose of funding its operations and had net trade accounts receivable in the ordinary course of business. The loans, the corresponding interest and the net trade accounts receivable were considered intercompany transactions and were eliminated in the consolidated U. S. Steel financial statements. As of the deconsolidation date, the loans, associated interest and net trade accounts receivable are now considered third party transactions and have been recognized in U. S. Steel's Consolidated Financial Statements based upon our assessment of the recoverability of their carrying amounts and whether or not the amounts are secured or unsecured. U. S. Steel has estimated a recovery rate based upon the fair value of the net assets of USSC available for distribution to its creditors in relation to the secured and unsecured creditor claims in the CCAA filing.

Fair values of the Hamilton Works finishing operations, Hamilton Works coke operations and Lake Erie Works (the USSC Businesses) were used to determine the recoverability of the loans receivable, accrued interest receivable and the net trade accounts receivable using various valuation approaches depending on the type of assets being valued and the highest and best use of those assets. The Hamilton Works finishing operations were valued under a liquidation basis using replacement costs, market comparables, and other recoverability measures as it had negative cash flows on a discounted cash flow basis, while the remainder of the USSC Businesses were valued on a going concern basis.

The going concern fair value for the Hamilton Works coke operations and Lake Erie Works was determined based upon an income approach using a discounted cash flow (DCF) analysis, discounted at an appropriate risk-adjusted rate.

The amount and timing of future cash flows within the DCF analysis and the liquidation basis were based on the following inputs within the fair value framework prescribed by ASC Topic 820, *Fair Value Measurements*, in the table below.

Level 2 Other Observable Inputs	Level 3 Other Unobservable Inputs
Market Participant Weighted Average Cost of Capital (1)	Recent Operating Budgets
Perpetual Growth Rate (2)	Long Range Strategic Plans
Market Comparables	Estimated Shipments
Replacement Cost	Projected Raw Material Costs
	Projected Margins
	Recoverability Measures

(1) Ranged from 15.54% - 18.31%
(2) Set at approximately 2%

Actual results may differ from those assumed in U. S. Steel’s forecasts for the USSC Businesses.

The total fair values associated with the underlying net assets of the USSC Businesses were then compared to the estimated outstanding creditor claims, both secured and unsecured, to determine the expected recoverability. This resulted in a fair value of the retained interest in the intercompany loans, interest receivable and trade accounts receivable of $434 million, net of an allowance for doubtful accounts of $1,435 million as of September 16, 2014, which has been reflected as a component of the loss on deconsolidation of USSC and other charges in the Consolidated Statements of Operations. For updates to U. S. Steel's retained interest in USSC, see *USSC Retained Interest and Other Related Charges* at Note 5.

For further information regarding USSC’s related party transactions with U. S. Steel subsequent to the date of deconsolidation, see *Transactions with Related Parties* at Note 22.

5. USSC Retained Interest and Other Related Charges

Subsequent to the CCAA filing, U. S. Steel's management has continued to assess the recoverability of the Company's retained interest in USSC. During 2015, management's estimate of the recoverable retained interest was updated as a result of economic conditions impacting the steel industry in North America such as lower prices, elevated levels of imports, the strength of the U.S. dollar and depressed steel company valuations as well as the uncertainty of the ultimate outcome of USSC’s CCAA filing. As a result, an additional pre-tax charge was recognized during the fourth quarter of 2015, bringing the total charge to $392 million for the fiscal year ended December 31, 2015. U. S. Steel’s recoverability involves uncertainties from economic and other events, including developments related to the ongoing CCAA proceedings, including the appeal of the decision of the Court in the trial relating to the classification and amounts of our secured and unsecured USSC claims, which are beyond the control of U. S. Steel that could materially impact the recoverability of our retained interest.

As part of the USSC CCAA restructuring process, U. S. Steel and USSC, entered into a mutually agreed upon, court approved, transition arrangement (the transition plan) that provides for certain services to be provided by the Company to support USSC's continued operations as part of an orderly severance of the parties relationship. Additionally, the Court approved USSC's business preservation plan designed to conserve its liquidity.

The transition plan requires U. S. Steel to continue to provide certain shared services to USSC for up to 24 months from October 9, 2015 (the date of the transition plan), and transitions U. S. Steel away from providing any technical and engineering services associated with product development or sales with USSC immediately. In addition, U. S. Steel will not be supporting any quality claims made against USSC. Further, unless mutually agreed to, U. S. Steel will not be generating any sales orders on behalf of USSC and will fulfill its production orders with its U.S. based operating facilities.

Under the transition plan, U. S. Steel provided USSC with funds for the purpose of making payments for pension contributions which were due under the pension plan funding agreement that Stelco, now USSC, had with the Superintendent of Financial Services of Ontario that covers USSC’s four main pension plans (the Stelco Agreement) between September 1, 2015 and December 31, 2015. This funding requirement was satisfied as of December 31, 2015.

The write-down of the retained interest, Stelco funding charge and other related charges were the components of the Losses associated with U. S. Steel Canada, Inc. in the Consolidated Statement of Operations.

6. Acquisition

On May 29, 2015, the Company purchased the 50 percent joint venture interest in Double Eagle Steel Coating Company (DESCO) that it did not previously own for $25 million. DESCO's electrolytic galvanizing line (EGL) has become part of the larger operational footprint of U. S. Steel's Great Lakes Works within the Flat-Rolled segment. The EGL is increasing our ability to provide industry leading advanced high strength steels, including Gen 3 grades under development, as well as to provide high quality exposed steel for automotive body and closure applications. The Company's previously held 50 percent equity interest of $3 million was recorded at fair market value resulting in a net gain of approximately $3 million which has been recognized in the earnings from investees line in the Consolidated Statements of Operations. Goodwill of approximately $3 million was recognized and is included as a component of other noncurrent assets in the Company's Consolidated Balance Sheet. The fair value of the DESCO acquisition was measured using both cost and market approaches, Level 2 inputs, in accordance with ASC No. 820, Fair Value Measurement. Transaction costs associated with the acquisition were immaterial. The amount of revenue recognized in the Consolidated Statements of Operations as a result of the acquisition was not significant to the year ended December 31, 2015.

7. Net Interest and Other Financial Costs

(In millions)	2016	2015	2014
Interest income:			
Interest income	**$ (5)**	$ (3)	$ (12)
Interest expense and other financial costs:			
Interest incurred	**234**	228	248
Less interest capitalized	**4**	14	14
Total interest expense	**230**	214	234
Loss on debt extinguishment [(a)]	**22**	36	—
Foreign currency net gain [(b)]	**(14)**	(15)	(1)
Financial costs on:			
Sale of receivables	**—**	2	3
Amended Credit Agreement	**6**	4	4
USSK credit facilities	**3**	3	3
Other	**—**	5	—
Amortization of discounts and deferred financing costs	**9**	11	12
Total other financial costs	**4**	10	21
Net interest and other financial costs	**$ 251**	$ 257	$ 243

(a) Represents a net pretax charge of $22 million during 2016 related to the retirement of our 2017, and partial redemption of our 2018, 2020 and 2021 Senior Notes, and a $36 million pretax charge during 2015 related to the retirement of our 2019 Senior Convertible Notes.

(b) The functional currency for USSE is the euro and the functional currency for USSC was the Canadian dollar. Foreign currency net gain is a result of transactions denominated in currencies other than the euro or Canadian dollar, prior to USSC's CCAA filing on September 16, 2014. Additionally, for 2014, foreign currency net gain includes the impacts of the remeasurement of a U.S. dollar-denominated intercompany loan to a European subsidiary and the impacts of euro-U.S. dollar derivatives activity.

8. Earnings and Dividends Per Common Share

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

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 and the conversion of convertible notes, provided in each case the effect is dilutive. Prior to their extinguishment, the “treasury stock” method was used to calculate the dilutive effect of the Senior Convertible Notes due in 2019 (2019 Senior Convertible Notes) based upon our intent and policy at the time of issuance to settle the principal amount of the 2019 Senior Convertible Notes in cash if they were converted. The "if-converted" method was used to calculate the dilutive effect of the 2014 Senior Convertible Notes due May 2014 (2014 Senior Convertible Notes).

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

(Dollars in millions, except per share amounts)	2016	2015	2014
Net (loss) earnings attributable to United States Steel Corporation shareholders	**$ (440)**	$ (1,642)	$ 102
Plus income effect of assumed conversion-interest on convertible notes	**—**	—	3
Net (loss) earnings after assumed conversion	**$ (440)**	$ (1,642)	$ 105
Weighted-average shares outstanding (in thousands):			
Basic	**156,673**	146,094	145,164
Effect of convertible notes	**—**	—	5,670
Effect of stock options, restricted stock units and performance awards	—	—	1,269
Adjusted weighted-average shares outstanding, diluted	**156,673**	146,094	152,103
Basic (loss) earnings per common share	**$ (2.81)**	$ (11.24)	$ 0.71
Diluted (loss) earnings per common share	**$ (2.81)**	$ (11.24)	$ 0.69

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)	2016	2015	2014
Securities granted under the 2005 Stock Incentive Plan	**8,820**	8,298	3,223

Dividends Paid per Share

Quarterly dividends on common stock were five cents per share for each quarter in 2016, 2015 and 2014.

9. Inventories

(In millions)	December 31, 2016	December 31, 2015
Raw materials	**$ 449**	$ 766
Semi-finished products	**686**	841
Finished products	**375**	392
Supplies and sundry items	**63**	75
Total	**$ 1,573**	$ 2,074

Current acquisition costs were estimated to exceed the above inventory values at December 31 by $489 million in 2016 and $900 million in 2015. As a result of the liquidation of LIFO inventories, cost of sales increased and earnings (loss) before interest and income taxes decreased by $77 million in 2016. As a result of the liquidation of LIFO inventories, cost of sales decreased and earnings (loss) before interest and income taxes increased by $9 million and $3 million in 2015 and 2014, respectively.

Inventory includes $54 million and $64 million of land held for residential/commercial development as of December 31, 2016 and 2015, respectively.

From time to time, U. S. Steel enters into coke swap agreements designed to reduce transportation costs. U. S. Steel shipped approximately 33,000 tons and received approximately 36,000 tons during 2016. U. S. Steel shipped approximately 645,000 tons and received approximately 920,000 tons of coke under swap agreements during 2015.

The coke swaps are recorded at cost as nonmonetary transactions. There was no income statement impact related to these swaps.

10. Income Taxes

Provision for income taxes

	2016			2015			2014		
(In millions)	Current	Deferred	Total	Current	Deferred	Total	Current	Deferred	Total
Federal	**$ (18)**	**$ —**	**$ (18)**	$ (29)	$ 168	$ 139	$ —	$ 80	$ 80
State and local	**1**	**—**	**1**	(5)	33	28	(9)	(29)	(38)
Foreign	**32**	**9**	**41**	4	12	16	1	25	26
Total	**$ 15**	**$ 9**	**$ 24**	$ (30)	$ 213	$ 183	$ (8)	$ 76	$ 68

A reconciliation of the federal statutory tax rate of 35 percent to total provision follows:

(In millions)	2016	2015	2014
Statutory rate applied to earnings (loss) before income taxes	**$ (146)**	$ (511)	$ 59
Valuation allowance	**252**	804	—
Excess percentage depletion	**(49)**	(49)	(99)
State and local income taxes after federal income tax effects	**(20)**	(42)	(25)
Adjustments of prior years' federal income taxes	**(6)**	(23)	(10)
Tax credits	**(39)**	(7)	(4)
Effects of foreign operations	**36**	5	25
Loss on deconsolidation of USSC	—	—	116
Alternative minimum tax credit refund	**(18)**	—	—
Other	**14**	6	6
Total provision	**$ 24**	$ 183	$ 68

The tax provision differs from the domestic statutory rate of 35 percent as a result of the items listed above. In particular, it does not reflect any tax benefits in the United States as a valuation allowance was recorded against the net domestic deferred tax asset (excluding a deferred tax liability related to an asset with an indefinite life). Included in the 2016 tax provision is a benefit of $18 million related to the Company's election to claim a refund of deferred Alternative Minimum Tax credits pursuant to a provision in the Protecting Americans from Tax Hikes 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 does not impact the total provision because of the valuation allowance on the net domestic deferred tax asset.

Included in the 2015 tax provision is a tax benefit of $31 million relating to adjustments to tax reserves related to the conclusion of certain audits. For 2014, the tax provision does not reflect any tax benefit for pretax losses in Canada, which was deconsolidated as of the end of the day on September 15, 2014, as this is a jurisdiction where we had recorded a full valuation allowance on deferred tax assets. Included in the 2014 tax provision is a benefit of $32 million related to the loss on deconsolidation of USSC and other charges.

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 $72 million, $74 million and $112 million as of December 31, 2016, 2015 and 2014, respectively.

The total amount of unrecognized tax benefits that, if recognized, would affect the effective tax rate was $9 million as of December 31, 2016 and $12 million as of December 31, 2015.

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 $4 million and $1 million for interest and penalties related to uncertain tax positions as of December 31, 2016 and 2015, respectively.

A tabular reconciliation of unrecognized tax benefits follows:

(In millions)	2016	2015	2014
Unrecognized tax benefits, beginning of year	**$ 74**	$ 112	$ 127
Increases – tax positions taken in prior years	**—**	—	—
Decreases – tax positions taken in prior years	**(4)**	(5)	(7)
Increases – current tax positions	**3**	—	1
Settlements	**—**	(26)	—
Lapse of statute of limitations	**(1)**	(7)	(9)
Unrecognized tax benefits, end of year	**$ 72**	$ 74	$ 112

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 – 2006 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 completed its audit of U. S. Steel’s 2010 and 2011 tax returns in 2014, and the audit report was agreed to by the Company, and was approved by the Congressional Joint Committee on Taxation in the first quarter of 2015. The IRS audit of U. S. Steel's 2012 and 2013 tax returns began in 2015 and is ongoing.

Taxes on foreign income
Pretax loss for 2016 includes domestic losses of $588 million and income attributable to foreign sources of $172 million. Pretax loss and earnings for 2015 and 2014 includes domestic loss of $1,193 million and domestic income of $440 million, respectively, and losses attributable to foreign sources of $266 million and $270 million, respectively. At the end of both 2016 and 2015, U. S. Steel does not have any undistributed foreign earnings and profits for which U.S. deferred taxes have not been provided.

Deferred taxes
Deferred tax assets and liabilities resulted from the following:

	December 31,	
(In millions)	**2016**	**2015**
Deferred tax assets:		
Federal tax loss carryforwards (expiring in 2033 through 2036)	**$ 754**	$ 466
State tax credit carryforwards (expiring in 2018 through 2030)	**15**	11
State tax loss carryforwards (expiring in 2018 through 2036)	**110**	60
Minimum tax credit carryforwards	**109**	128
General business credit carryforwards (expiring in 2025 through 2036)	**85**	77
Foreign tax loss and credit carryforwards (expiring in 2017 through 2023)	**51**	16
Employee benefits	**633**	623
Receivables, payables and debt	**5**	33
Future reduction of foreign tax credits	**1**	—
Expected federal benefit for deducting state deferred income taxes	**—**	2
Inventory	**—**	123
Contingencies and accrued liabilities	**97**	95
Investments in subsidiaries and equity investees	**211**	259
Valuation allowance	**(1,113)**	(808)
Total deferred tax assets	**958**	1,085
Deferred tax liabilities:		
Property, plant and equipment	**899**	1,035
Inventory	**23**	—
Future reduction of foreign tax credits	**—**	6
Expected federal benefit for deducting state deferred income taxes	**9**	—
Indefinite-lived intangible assets	**28**	29
Other temporary differences	**21**	29
Total deferred tax liabilities	**980**	1,099
Net deferred tax liability	**$ (22)**	$ (14)

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.

Each quarter U. S. Steel analyzes the likelihood that our deferred tax assets will 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.

At December 31, 2015, we identified the following forms of negative evidence concerning U. S. Steel's ability to use some or all of its domestic deferred tax assets:

- U. S. Steel's domestic operations generated significant losses in recent years and there is uncertainty regarding the Company's ability to generate domestic income in the near term,
- some of our domestic deferred tax assets are carryforwards, which have expiration dates, and
- the global steel industry is experiencing global overcapacity, which is driving adverse economic conditions, including depressed selling prices for steel products and increased foreign steel imports into the U.S.

Most positive evidence can be categorized into one of the four sources of taxable income sequentially. These are (from least to most subjective):

- taxable income in prior carryback years, if carryback is permitted,
- future reversal of existing taxable temporary differences,
- tax planning strategies, and
- future taxable income exclusive of reversing temporary differences and carryforwards

U. S. Steel utilized all available carrybacks, and therefore, our analysis at December 31, 2015 focused on the other sources of taxable income. Our projection of the reversal of our existing temporary differences generated significant taxable income. This source of taxable income, however, was not sufficient to project full utilization of U. S. Steel’s domestic deferred tax assets. To assess the realizability of the remaining domestic deferred tax assets, U. S. Steel analyzed its prudent and feasible tax planning strategies.

After considering the income projected to be generated from such prudent and feasible tax planning strategies, U. S. Steel determined that it does not expect to realize the benefits of its net domestic deferred tax assets due to uncertainty regarding our ability to generate domestic income in the near term. As a result, a valuation allowance of $804 million was recorded against our entire net domestic deferred tax asset (excluding a deferred tax liability related to an asset with an indefinite life) as of December 31, 2015. At December 31, 2016, an incremental valuation allowance of $305 million was recorded against the increase in the net domestic deferred tax asset (excluding a deferred tax liability related to an asset with an indefinite life).

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.

The net domestic deferred tax liability was $28 million and $29 million at December 31, 2016 and 2015, respectively.

At December 31, 2016 and 2015, the net foreign deferred tax asset was $6 million and $15 million, respectively, net of established valuation allowances of $4 million and $4 million, respectively. The net foreign deferred tax asset will fluctuate as the value of the U.S. dollar changes with respect to the euro.

11. Investments and Long-Term Receivables

	December 31,	
(In millions)	**2016**	**2015**
Equity method investments	**$ 499**	$ 502
Receivables due after one year, less allowance of $10 and $7	**25**	33
Other	**4**	5
Total	**$ 528**	$ 540

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)	2016	2015	2014
Income data – year ended December 31:			
Net Sales	**$ 2,839**	$ 3,176	$ 3,794
Operating income	**345**	529	584
Net earnings	**323**	491	545
Balance sheet date – December 31:			
Current Assets	**$ 771**	$ 732	
Noncurrent Assets	**989**	988	
Current liabilities	**478**	485	
Noncurrent Liabilities	**506**	490	

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 $98 million, $38 million and $142 million for the years ended December 31, 2016, 2015 and 2014, respectively.

Investees accounted for using the equity method include:

Investee	Country	December 31, 2016 Interest
Acero Prime, S. R. L. de CV	Mexico	40%
Apolo Tubulars S.A.	Brazil	50%
Chrome Deposit Corporation	United States	50%
Daniel Ross Bridge, LLC	United States	50%
Double G Coatings Company L.P.	United States	50%
Feralloy Processing Company	United States	49%
Hibbing Development Company	United States	24.1%
Hibbing Taconite Company[(a)]	United States	14.7%
Leeds Retail Center, LLC	United States	33.3%
Patriot Premium Threading Services	United States	50%
PRO-TEC Coating Company	United States	50%
Strategic Investment Fund Partners II[(b)]	United States	5.2%
Swan Point Development Company, Inc.	United States	50%
Tilden Mining Company, L.C.[(c)]	United States	15%
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.

(c) Tilden Mining Company, L.C. is a limited liability company and in accordance with ASC Topic 323 "Partnerships and Unincorporated Joint Ventures," (ASC Topic 323) its financial activities are accounted for using the equity method.

Dividends and partnership distributions received from equity investees were $9 million in 2016, $10 million in 2015 and $8 million in 2014.

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.

During the fourth quarter of 2015, U. S. Steel completed a review of its equity method investments and determined there was an other than temporary impairment of an equity investee within a non-core operating segment of U. S. Steel. The other than temporary impairment resulted from a decision to cease the funding of the long-term development plans of the equity investment, due to our intent to sell the particular investment, thereby inhibiting sufficient recovery of the market value. Accordingly, U. S. Steel recorded an impairment charge of $18 million, which reduced the carrying amount of the equity investment to $3 million, in the fourth quarter of 2015.

During 2014, U. S. Steel's guarantee of United Spiral Pipe's (USP) bank debt was $24 million, which was subsequently paid by the Company. On February 2, 2015, the pipe making assets of USP were sold to a third party.

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 22.

12. Property, Plant and Equipment

		December 31,	
(In millions)	**Useful Lives**	**2016**	**2015**
Land and depletable property	—	**$ 204**	$ 198
Buildings	35 years	**1,051**	1,036
Machinery and equipment	5-40 years	**12,128**	12,220
Information technology	5-6 years	**777**	763
Assets under capital lease	5-15 years	**36**	36
Total		**14,196**	14,253
Less accumulated depreciation and depletion		**10,217**	9,842
Net		**$ 3,979**	$ 4,411

Amounts in accumulated depreciation and depletion for assets acquired under capital leases (including sale-leasebacks accounted for as financings) were $16 million and $14 million at December 31, 2016 and 2015, respectively.

13. Intangible Assets

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

		As of December 31, 2016			As of December 31, 2015		
(In millions)	**Useful Lives**	**Gross Carrying Amount**	**Accumulated Amortization**	**Net Amount**	**Gross Carrying Amount**	**Accumulated Amortization**	**Net Amount**
Customer relationships	10-22 Years	**$ 132**	**$ 59**	**$ 73**	$ 132	$ 52	$ 80
Other	4-20 Years	**36**	**9**	**27**	17	8	9
Total amortizable intangible assets		**$ 168**	**$ 68**	**$ 100**	$ 149	$ 60	$ 89

The carrying amount of acquired indefinite lived water rights as of December 31, 2016 totaled $75 million. 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 are now being amortized over their useful lives of approximately 11 years. The carrying amount of acquired water rights and patents with indefinite lives as of December 31, 2015 totaled $75 million and $33 million, respectively. The indefinite lived intangible assets are tested for impairment annually in the third quarter, or whenever events or circumstances indicate that the carrying value may not be recoverable. U. S. Steel performed a quantitative impairment evaluation of its indefinite-lived intangible assets, which includes its water rights and in-process research and development patents, during the third quarter of 2016. Based on the results of the evaluation, the water rights were not impaired; however, the estimated fair value of the patents had decreased below their carrying value. As a result, 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%.

Identifiable intangible assets with finite lives are reviewed for impairment whenever events or circumstances indicate that the carrying value may not be recoverable. During the fourth quarter of 2016 and 2015, due to a significant decline in energy prices and continued high levels of tubular imports, U. S. Steel completed a review of certain of its identifiable intangible assets with finite lives, primarily customer relationships with a carrying values of $73 million and $80 million and determined that the assets were not impaired.

Amortization expense was $8 million for the year ended December 31, 2016 and $7 million for the year ended December 31, 2015. The estimated future amortization expense of identifiable intangible assets during the next five years is $9 million in each year from 2017 to 2021.

14. 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. While the 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, 2016, 5,524,364 shares are 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, 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 2016, 2015 and 2014:

	Executive Stock Options	Non-executive Stock Options	Restricted Stock Units	TSR Performance Awards	ROCE Performance Awards
2016 Grants	**498,960**	**834,250**	**1,120,332**	**308,130**	**—**
2015 Grants	493,430	1,145,110	807,432	273,560	—
2014 Grants	461,960	1,054,480	746,430	282,770	262,800

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, 2016	Year Ended December 31, 2015	Year Ended December 31, 2014
Stock-based compensation expense recognized:			
Cost of sales	**$ 9**	$ 14	$ 12
Selling, general and administrative expenses	**13**	23	23
Total	**22**	37	35
Related deferred income tax benefit [(a)]	**—**	13	12
Decrease in net income	**$ 22**	$ 24	$ 23
Decrease in basic earnings per share	**0.14**	0.16	0.15
Decrease in diluted earnings per share	**0.14**	0.16	0.15

[(a)] Amounts for 2016 do not reflect a tax benefit as a result of a full valuation allowance on our domestic deferred tax assets.

As of December 31, 2016, total future compensation cost related to nonvested stock-based compensation arrangements was $24 million, and the average period over which this cost is expected to be recognized is approximately 11 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. The 2016, 2015 and 2014 awards 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.

Black-Scholes Assumptions [(a)]	2016 Grants	2015 Grants	2014 Grants
Grant date price per share of option award	**$ 14.78**	$ 24.74	$ 24.30
Exercise price per share of option award	**$ 14.78**	$ 24.74	$ 24.30
Expected annual dividends per share	**$ 0.20**	$ 0.20	$ 0.20
Expected life in years	**5.0**	5.0	5.0
Expected volatility	**53%**	47%	49%
Risk-free interest rate	**1.5%**	1.6%	1.6%
Average grant date fair value per share of unvested option awards as calculated from above	**$ 6.24**	$ 10.02	$ 9.94

(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, 2016:

	Shares	Weighted-Average Exercise Price (per share)	Weighted-Average Remaining Contractual Term (in years)	Aggregate Intrinsic Value (in millions)
Outstanding at January 1, 2016	6,865,841	$ 33.39		
Granted	1,333,210	$ 14.78		
Exercised	(1,522,345)	$ 23.49		
Forfeited or expired	(983,495)	$ 43.46		
Outstanding at December 31, 2016	5,693,211	$ 29.94	5.96	$ 53
Exercisable at December 31, 2016	3,312,330	$ 37.49	4.04	$ 21
Exercisable and expected to vest at December 31, 2016	5,325,620	$ 30.72	5.96	$ 48

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 2016 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 $13 million during the year ended December 31, 2016, immaterial during the year ended December 31, 2015 and $6 million during the year ended December 31, 2014. The total amount of cash received by U. S. Steel from the exercise of options during the year ended December 31, 2016 and December 31, 2015, was $35 million and $1 million, respectively, and the related net tax benefit realized from the exercise of these options was immaterial.

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 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 retentions grants 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.

Beginning in 2014 the Committee added return on capital employed (ROCE) as a second performance measure for the performance awards as permitted under the terms of the Plans. 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. Beginning in 2015, ROCE awards were granted and can be paid in cash if the ROCE performance goals are achieved.

The following table shows a summary of the performance awards outstanding as of December 31, 2016, and their fair market value on the respective grant date:

Performance Period	Fair Value (in millions)	Minimum Shares	Target Shares	Maximum Shares
2016 - 2019	**$ 3**	**—**	**301,440**	**602,880**
2015 - 2018	$ 6	—	229,196	458,392
2014 - 2017				
TSR	$ 5	—	220,943	441,886
ROCE	$ 5	—	205,453	410,906

The following table shows a summary of the status and activity of nonvested stock awards for the year ended December 31, 2016:

	Restricted Stock Units	TSR Performance Awards (a)	ROCE Performance Awards (a)	Total	Weighted-Average Grant-Date Fair Value
Nonvested at January 1, 2016	1,432,569	601,867	212,036	2,246,472	$ 23.37
Granted	1,120,332	308,130	—	1,428,462	13.39
Vested	(704,059)	(62,101)	—	(766,160)	22.28
Performance adjustment factor (b)	—	(58,014)	—	(58,014)	21.26
Forfeited or expired	(255,687)	(38,303)	(6,583)	(300,573)	19.75
Nonvested at December 31, 2016	1,593,155	751,579	205,453	2,550,187	$ 18.58

(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.

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

	2016	2015	2014
Number of awards granted	**1,428,462**	1,080,992	1,292,000
Weighted-average grant-date fair value per share	**$ 13.39**	$ 24.63	$ 23.80

During the years ended December 31, 2016, 2015, and 2014, the total fair value of shares vested was $17 million, $14 million, and $16 million, respectively.

15. Derivative Instruments

U. S. Steel is exposed to foreign currency exchange rate risks as a result of our European operations. USSE's revenues are primarily in euros, and costs are primarily in U.S. dollars and euros. In addition, foreign cash requirements have been, and in the future may be, funded by intercompany loans, creating intercompany monetary assets and liabilities in currencies other than the functional currency of the entities involved, which can affect income when remeasured at the end of each period.

U. S. Steel uses euro forward sales contracts with maturities no longer than 12 months to exchange euros for U.S. dollars 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 euro forward sales contracts as hedges. Therefore, changes in their fair value are recognized immediately in the Consolidated Statements of Operations.

As of December 31, 2016, U. S. Steel held euro forward sales contracts with a total notional value of approximately $176 million. We mitigate the risk of concentration of counterparty credit risk by purchasing our forward sales contracts from several counterparties.

Additionally, U. S. Steel uses fixed-price forward physical purchase contracts to partially manage our exposure to price risk related to the purchases of natural gas and certain nonferrous metals used in the production process. During 2016, 2015 and 2014, the forward physical purchase contracts for natural gas and nonferrous metals qualified for the normal purchases and normal sales exemption in ASC Topic 815 and were not subject to mark-to-market accounting.

The following summarizes the financial statement location and amounts of the fair values related to derivatives included in U. S. Steel's financial statements as of December 31, 2016 and 2015:

		Fair Value	
(In millions)	**Balance Sheet Location**	**December 31, 2016**	**December 31, 2015**
Foreign exchange forward contracts	Accounts receivable	**$ 9**	**$ 4**
Foreign exchange forward contracts	Accounts payable	**$ —**	$ 1

The following summarizes the financial statement location and amounts of the gains and losses related to derivatives included in U. S. Steel's financial statements for the years ended December 31, 2016, 2015 and 2014:

		Amount of Gain (Loss)		
(In millions)	**Statement of Operations Location**	**Year Ended December 31, 2016**	**Year Ended December 31, 2015**	**Year Ended December 31, 2014**
Foreign exchange forward contracts	Other financial costs	**$ 7**	$ 39	$ 50

In accordance with the guidance in ASC Topic 820 on fair value measurements and disclosures, the fair value of our euro forward sales contracts 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.

16. Debt

(In millions)	Interest Rates %	Maturity	December 31, 2016	2015
2037 Senior Notes	6.65	2037	**$ 350**	$ 350
2022 Senior Notes	7.50	2022	**400**	400
2021 Senior Notes	6.875	2021	**200**	275
2021 Senior Secured Notes	8.375	2021	**980**	—
2020 Senior Notes	7.375	2020	**432**	600
2018 Senior Notes	7.00	2018	**161**	500
2017 Senior Notes	6.05	2017	**—**	450
Environmental Revenue Bonds	5.50 - 6.88	2017 - 2042	**447**	490
Recovery Zone Facility Bonds	6.75	2040	**70**	70
Fairfield Caster Lease		2022	**28**	30
Other capital leases and all other obligations		2019	**1**	1
Third Amended and Restated Credit Agreement	Variable	2020	**—**	—
USSK Credit Agreement	Variable	2019	**—**	—
USSK credit facilities	Variable	2017 - 2018	**—**	—
Total debt			**3,069**	3,166
Less unamortized discount and debt issuance costs			**38**	28
Less short-term debt and long-term debt due within one year			**50**	45
Long-term debt			**$ 2,981**	$ 3,093

Senior Note Repurchases and Redemption

During 2016, the Company repurchased several tranches of its outstanding senior notes. The Company completed an optional redemption of its outstanding 6.05% Senior Notes due 2017 for an aggregate principal amount of approximately $444 million plus a total make whole premium of approximately $22 million. Pursuant to a cash tender offer, the Company repurchased approximately $326 million of its 7.00% Senior Notes dues 2018 for 107 percent of par, approximately $150 million of its 7.375% Senior Notes due 2020 at an average rate of 86 percent of par and approximately $24 million of its 6.875% Senior Notes due 2021 for 82 percent of par.

Additionally, during 2016, the Company repurchased approximately $6 million of its 6.05% Senior Notes due 2017 at an average rate of 92.30 percent of par, approximately $13 million of its 7.00% Senior Notes due 2018 at an average rate of 87.96 percent of par, approximately $18 million of its 7.375% Senior Notes due 2020 for 99.40 percent of par, and approximately $51 million of its 6.875% Senior Notes due 2021 at an average rate of 97.63 percent of par through a series of open market purchases.

2021 Senior Secured Notes

On May 10, 2016, U. S. Steel issued $980 million of 8.375% Senior Secured Notes due July 1, 2021 (2021 Senior Secured Notes) in a 144A private transaction exempt from the registration requirements of the Securities Act of 1933, as amended. 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. The net proceeds from the issuance of the 2021 Senior Secured Notes were used to redeem and repurchase portions of our outstanding senior notes as discussed above. Interest on the notes is payable semi-annually in arrears on January 1st and July 1st of each year commencing on January 1, 2017. The notes are secured by first-priority liens on substantially all of the tangible and intangible assets of the Company's domestic flat-rolled facilities, exclusive of the collateral required under the Third Amended and Restated Credit Agreement.

The Company may redeem the 2021 Senior Secured Notes, in whole or part, at our option on or after July 1, 2018 at the redemption price for such notes as a percentage of the principal amount, plus accrued and unpaid interest to, but excluding, the redemption date, if redeemed during the twelve-month period beginning on July 1st of each of the years indicated below.

Year	Redemption Price
2018	106.28%
2019	104.19%
2020 and thereafter	100.00%

Prior to July 1, 2018, the Company may redeem up to 35% of the original aggregate principal amount of the 2021 Senior Secured Notes with the net cash proceeds of one or more equity offerings for a price of 108.375% of principal. Upon the occurrence of certain assets sales, we may be required to offer to repurchase the 2021 Senior Secured Notes with the proceeds at a price of 100% of the principal amount thereof, plus accrued and unpaid interest if any. The indenture pursuant to which the 2021 Senior Secured Notes were issued contains additional customary financial covenants and other obligations.

Third Amended and Restated Credit Agreement

On July 27, 2015, the Company entered into a five-year revolving credit facility (Third Amended and Restated Credit Agreement) replacing the Company's former $875 million facility agreement, and concurrently terminated the Receivables Purchase Agreement. The Third Amended and Restated Credit Agreement increased the amount of the facility to $1.5 billion. As of both December 31, 2016 and 2015, there were no amounts drawn on the Third Amended and Restated Credit Agreement. However, since the value of our inventory and trade accounts receivables amounts less specified reserves calculated in accordance with the Third Amended and Restated Credit Agreement do not support the full amount of the facility at December 31, 2016, the amount available to the Company under this facility was reduced by $227 million. Additionally, 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 Third Amended and Restated Credit Agreement is less than the greater of 10 percent of the total aggregate commitments or $150 million. Based on the most recent four quarters as of December 31, 2016, we would not meet this covenant. So long as we continue to not meet this covenant, the amount available to the Company under this facility is effectively reduced by $150 million. As a result, availability under the Third Amended and Restated Credit Agreement was $1,123 million as of December 31, 2016.

The Third Amended and Restated Credit 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 Third Amended and Restated Credit Agreement expires in July 2020. 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 Third Amended and Restated Credit Agreement. Borrowings are secured by liens on certain domestic inventory and trade accounts receivable.

The Third Amended and Restated Credit Agreement permits incurrence of additional secured debt up to 15% of Consolidated Net Tangible Assets.

U. S. Steel Košice (USSK) credit facilities

At both December 31, 2016 and 2015, USSK had no borrowings under its €200 million (approximately $210 million and $218 million, respectively) unsecured revolving credit facility (the USSK Credit Agreement). The USSK Credit Agreement contains certain USSK financial covenants, including maximum leverage, maximum net debt to tangible net worth, and minimum interest cover ratios as defined in the agreement. The covenants are measured semi-annually for the period covering the last twelve calendar months. USSK may not draw on the USSK Credit Agreement if it does not comply with any of the financial covenants until the next measurement date. At both December 31, 2016 and 2015, USSK had full availability under the USSK Credit Agreement. The Credit Agreement expires in July 2019. The USSK Credit Agreement also permits up to two additional one-year extensions to the final maturity date at the mutual consent of USSK and it lenders. On January 23, 2017 USSK's lenders confirmed the first maturity extension request to July 2020 under the USSK Credit Agreement.

At December 31, 2016, USSK had no borrowings under its €40 million and €10 million unsecured credit facilities (collectively approximately $53 million) and the availability was approximately $51 million due to approximately $2 million of customs and other guarantees outstanding. At December 31, 2015, USSK had no borrowings under its €40 million and €10 million unsecured credit facilities (collectively approximately $55 million) and the availability was approximately $52 million due to approximately $3 million of customs and other guarantees outstanding. On November 2, 2016, USSK entered into an amendment to its €10 million unsecured credit agreement to extend the agreement's final maturity date from December 2016 to December 2017. The amendment also permits up to two additional one-year extensions to the final maturity date at the mutual consent of USSK and its lender.

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 $2,523 million as of December 31, 2016 (including the Senior Notes and Senior Secured Notes) may be declared due and payable; (b) the Third Amended and Restated Credit Agreement and USSK's €200 million Revolving Credit Agreement 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 $29 million or provide a letter of credit to secure the remaining obligation.

Debt Maturities – Aggregate maturities of debt are as follows (in millions):

2017	2018	2019	2020	2021	Later Years	Total
$ 50	$ 165	$ 59	$ 435	$ 1,184	$ 1,176	$ 3,069

17. Pensions and Other Benefits

U. S. Steel has defined contribution or multi-employer retirement benefits for more than two-thirds of its North American employees and non-contributory defined benefit pension plans covering the remaining North American employees. In the United States, 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 salaried non-represented employees in the United States 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 salaried non-represented employees in the United States 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, 2016, 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.

As a result of the CCAA filing, USSC benefit obligations and expenses are not included in U. S. Steel's consolidated financial results as of December 31, 2016 and 2015.

U.S. Steel's defined benefit retiree health care and life insurance plans (Other Benefits) cover the majority of its employees in North America 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.

On February 1, 2016, the USW ratified successor three year Collective Bargaining Agreements with U. S. Steel and its U. S. Steel Tubular Products, Inc. subsidiary (the 2015 Labor Agreements). The 2015 Labor Agreements are effective as of September 1, 2015 and expire on September 1, 2018.

The 2015 Labor Agreements provide for certain employee and retiree benefit modifications, as well as closure of the Other Benefits plan to represented employees hired or rehired under certain conditions on or after January 1, 2016. Instead, these employees will receive a company defined contribution into a savings account of $0.50 per hour worked.

Additionally, the 2015 Labor Agreements preserved the Company's capped amounts for retiree healthcare contributions and restructured prior contractual obligations that required U. S. Steel to make $235 million in cash contributions to our trust for represented retiree health care and life insurance benefits (VEBA). These funds will now be used to help keep healthcare affordable for our retirees.

Salaried, non-represented employees in the United States are provided, upon retirement, a flat dollar pre-Medicare benefit and a death benefit. Per an amendment effective June 30, 2014, non-represented retiree medical and retiree life insurance benefits are eliminated for non-represented employees who retire after December 31, 2017.

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.

	Pension Benefits		Other Benefits	
(In millions)	**2016**	**2015**	**2016**	**2015**
Change in benefit obligations				
Benefit obligations at January 1	**$ 6,374**	$ 7,319	**$ 2,310**	$ 2,715
Service cost	**54**	102	**20**	21
Interest cost	**258**	263	**98**	97
Plan amendments	**(25)**	—	**172**	—
Actuarial losses (gains)	**264**	(402)	**(6)**	(318)
Exchange rate (gain)/loss	**(1)**	(3)	**—**	2
Settlements, curtailments and termination benefits	**(25)**	(207)	**(1)**	—
Benefits paid	**(685)**	(698)	**(161)**	(207)
Benefit obligations at December 31	**$ 6,214**	$ 6,374	**$ 2,432**	$ 2,310
Change in plan assets				
Fair value of plan at January 1	**$ 5,639**	$ 6,353	**$ 1,990**	$ 2,120
Actual return on plan assets	**414**	(22)	**94**	(8)
Employer contributions	**113**	—	**—**	10
Benefits paid from plan assets	**(684)**	(692)	**(100)**	(132)
Fair value of plan assets at December 31	**$ 5,482**	$ 5,639	**$ 1,984**	$ 1,990
Funded status of plans at December 31	**(732)**	(735)	**(448)**	(320)

Amounts recognized in accumulated other comprehensive loss:

		2016		
(In millions)	**12/31/2015**	**Amortization**	**Activity**	**12/31/2016**
Pensions				
Prior Service Cost	$ 28	$ (11)	$ (25)	**$ (8)**
Actuarial Losses	2,431	(129)	260	**2,562**
Other Benefits				
Prior Service Cost	(167)	(26)	171	**(22)**
Actuarial Losses	94	(3)	50	**141**

As of December 31, 2016 and 2015, the following amounts were recognized in the Consolidated Balance Sheet:

	Pension Benefits		Other Benefits	
(In millions)	**2016**	**2015**	**2016**	**2015**
Current liabilities	**(3)**	(6)	**(60)**	(66)
Noncurrent liabilities	**(729)**	(729)	**(388)**	(254)
Accumulated other comprehensive loss [(a)]	**2,554**	2,459	**119**	(73)
Net amount recognized	**$ 1,822**	$ 1,724	**$ (329)**	$ (393)

(a) Accumulated other comprehensive loss effects associated with accounting for pensions and other benefits in accordance with ASC Topic 715 at December 31, 2016 and December 31, 2015, respectively, are reflected net of tax of $939 million and $938 million respectively, on the Consolidated Statements of Stockholders' Equity.

The Accumulated Benefit Obligation (ABO) for all defined benefit pension plans was $6,064 million and $6,166 million at December 31, 2016 and 2015, respectively.

	December 31,	
(In millions)	**2016**	**2015**
Information for pension plans with an accumulated benefit obligation in excess of plan assets:		
Aggregate accumulated benefit obligations (ABO)	**$ (6,064)**	$ (6,166)
Aggregate projected benefit obligations (PBO)	**(6,214)**	(6,374)
Aggregate fair value of plan assets	**5,482**	5,639

The aggregate ABO 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:

	Pension Benefits			Other Benefits		
(In millions)	**2016**	**2015**	**2014**	**2016**	**2015**	**2014**
Components of net periodic benefit cost:						
Service cost	**$ 54**	$ 102	$ 106	**$ 20**	$ 21	$ 22
Interest cost	**258**	263	396	**98**	97	132
Expected return on plan assets	**(422)**	(435)	(563)	**(151)**	(155)	(143)
Amortization - prior service costs	**11**	17	22	**26**	(6)	(16)
- actuarial losses (gains)	**129**	241	271	**3**	7	(1)
Net periodic benefit cost (benefit), excluding below	**30**	188	232	**(4)**	(36)	(6)
Multiemployer plans (a)	**63**	68	76	**—**	—	—
Settlement, termination and curtailment losses/(gains)	**13**	35	29	**(1)**	(4)	(19)
Net periodic benefit cost (benefit)	**$ 106**	$ 291	$ 337	**$ (5)**	$ (40)	$ (25)

(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 $102 million and approximately $78 million, respectively, in 2017. The pension cost projection includes approximately $57 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 2017 are as follows:

(In millions)	**Pension Benefits 2017**	**Other Benefits 2017**
Amortization of actuarial loss	$ 148	$ 3
Amortization of prior service cost	—	29
Total recognized from accumulated other comprehensive income	$ 148	$ 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	
	2016	2015	2016	2015
	U.S. and Europe	U.S. and Europe	U.S.	U.S.
Actuarial assumptions used to determine benefit obligations at December 31:				
Discount rate	**4.00%**	4.25%	**4.00%**	4.25%
Increase in compensation rate	**2.60%**	2.60%	**3.50%**	3.50%

	Pension Benefits		
	2016	2015	2014
	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	**4.25%**	3.75%	4.50%
Expected annual return on plan assets	**7.50%**	7.50%	7.75%
Increase in compensation rate	**2.60%**	3.00%	3.00%

	Other Benefits		
	2016	2015	2014
	U.S.	U.S.	U.S.
Discount rate	**4.25%**	3.75%	4.50%
Expected annual return on plan assets	**7.50%**	7.50%	7.75%
Increase in compensation rate	**3.50%**	3.50%	4.00%

The discount rate reflects the current rate at which the pension and other benefit liabilities could be effectively settled at the measurement date. In setting the domestic rates, we utilize several AAA and AA corporate bond indices as an indication of interest rate movements and levels. Based on this evaluation at December 31, 2016, U. S. Steel decreased the discount rate used to measure both domestic Pension and Other Benefits obligations to 4.00 percent.

	2016	2015
Assumed health care cost trend rates at December 31:	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	**2021**	2020

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 costs for 2017	$ (75)	$ 75
Discount rate		
Incremental (decrease) increase in:		
Net periodic pension & other benefits costs for 2017	$ (5)	$ 5
Pension & other benefits liabilities at December 31, 2016	$ (736)	$ 874
Health care cost escalation trend rates		
Incremental increase (decrease) in:		
Other postretirement benefit obligations	$ 100	$ (86)
Service and interest costs components for 2017	$ 5	$ (4)

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 2024. After 2024, 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 Partnership 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	Debt Securities - U.S.	Private Equities
Equity Securities - U.S.	Government Bonds - U.S.	Real Estate
Exchange-traded Funds	Mortgage-backed GNMAs & FNMAs	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, 2016 and 2015.

Short-term investments are valued at amortized cost which approximates fair value to the short-term maturity of the instruments. Equity securities - 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. government bonds are valued using pricing models maximizing the use of observable inputs for similar securities. Corporate 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-backed GNMAs and FNMAs are valued using quotes from a broker dealer. Internally Managed Partnerships are valued at the net asset value (NAV) of units of the partnership. NAV is used as a practical expedient to estimate fair value. Investment opportunities in these partnerships are restricted to the benefit plans of U. S. Steel, its subsidiaries and current and former affiliates. Investments in non-public investment partnerships are valued using 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, 2016 and 2015:

	Fair Value Measurements at December 31, 2016 (in millions)		
	Total	**Quoted Prices in Active Markets (Level 1)**	**Significant Unobservable Inputs (Level 3)**
Asset Classes			
Short-term investments	$ 98	$ 98	$ —
Exchange-Traded Funds	61	61	—
Equity Securities - U.S. [(a)]	124	124	—
Mineral Interests	3	—	3
Timberlands	312	—	312
Private equities [(b)]	8	—	8
Real Estate [(c)]	34	—	34
All Other [(d)]	(4)	(4)	—
Total assets in the fair value hierarchy	$ 636	$ 279	$ 357
Investments measured at net asset value [(e)]	4,846		
Investments at fair value	**$ 5,482**		

(a) Includes U. S. Steel stock.
(b) Includes investments in CAI Partners and Company III LP, Clayton Dubilier Rice Fund VI, Electra Partners Club 2007 LP and FF&P Investor 8 ERISA LP.
(c) Includes investments in the Avanti Funds and the Mariano Ranch properties.
(d) Includes $50 million of investment sales, $1 million of accrued income and $(55) million of miscellaneous payables.
(e) 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, 2016	Unfunded Commitments	Redemption Frequency	Redemption Notice Period
Private Equity Funds [(a)]	$ 273	$ 124	Not redeemable	N/A
Real Estate Funds [(a)]	252	156	**	N/A
Interest in Internally Managed Partnership - Fixed Income [(b)]	1,490	N/A	N/A	N/A
Interest in Internally Managed Partnership - Equity [(c)]	2,232	N/A	N/A	N/A
Interest in Investment Partnerships [(d)]	599	N/A	N/A	N/A
Investments measured at net asset value	**$ 4,846**			

** Not redeemable, except for JP Morgan Income & Growth, which has a quarterly redemption provision.
(a) The remaining lives of such investments range from less than one year to up to twelve years.
(b) Underlying investments include:

Debt Securities – U.S.	$ 885
Government Bonds – U.S.	564
Other[(1)]	41
Total	$ 1,490

[1)] Other includes $27 million of mortgages, $20 million of contributions, $13 million of accrued income and $(19) million of investment purchases payable.

(c) Underlying investments include:

Exchange-Traded Funds	$	100
Equity Securities – U.S.		2,038
Other[(2)]		94
Total	$	2,232

[(2)] Other includes $57 million of equity securities - foreign, $55 million of investment sales receivable, $3 million of accrued income, $1 million of short-term investment funds, $(20) million of withdrawals, and $(2) million of investment purchases payable.

(d) Investment partnerships whose investment objectives are to achieve long-term capital appreciation by investing in global equity markets.

	Fair Value Measurements at December 31, 2015 (in millions)		
	Total	**Quoted Prices in Active Markets (Level 1)**	**Significant Unobservable Inputs (Level 3)**
Asset Classes			
Short-term investments	$ 102	$ 102	$ —
Exchange-Traded Funds	106	106	—
Interest in Investment Trusts	71	71	—
Mineral Interests	3	—	3
Timberlands	282	—	282
Private equities [(a)]	12	—	12
Real Estate [(b)]	39	—	39
All Other [(c)]	(6)	(6)	—
Total assets in the fair value hierarchy	$ 609	$ 273	$ 336
Investments measured at net asset value [(d)]	5,030		
Investments at fair value	**$ 5,639**		

(a) Includes investments in CAI Partners and Company III LP, Clayton Dubilier Rice Fund VI, Electra Partners Club 2007 LP and FF&P Investor 8 ERISA LP.
(b) Includes investments in the Avanti Funds and the Mariano Ranch properties.
(c) Includes $35 million of investment sales and $(41) million of miscellaneous payables.
(d) 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, 2015	**Unfunded Commitments**	**Redemption Frequency**	**Redemption Notice Period**
Private Equity Funds [(a)]	$ 268	$ 116	Not redeemable	N/A
Real Estate Funds [(a)]	268	133	**	N/A
Interest in Internally Managed Partnership - Fixed Income [(b)]	1,550	N/A	N/A	N/A
Interest in Internally Managed Partnership - Equity [(c)]	2,350	N/A	N/A	N/A
Interest in Investment Partnerships [(d)]	594	N/A	N/A	N/A
Investments measured at net asset value	**$ 5,030**			

** 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 less than one year to up to twelve years.
(b) Underlying investments include:

Debt Securities – U.S.	$	1,070
Government Bonds – U.S.		562
Agency Mortgages		37
Other[(1)]		(119)
Total	$	1,550

(1) Other includes $16 million of accrued income, $1 million of short-term investment fund, $(101) million of investment purchases payable, and a $(35) million withdrawal.

(c) Underlying investments include:

Equity Securities – U.S.	$	2,091
Equity Securities – Foreign		107
Other [2]		152
Total	$	2,350

(2) Other includes $113 million of investment sales receivable, $33 million of exchange-traded funds, $4 million of accrued income, and $2 million of short-term investment fund.

(d) 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, 2016 and 2015 (in millions):

	Level 3 assets only			
(In millions)		**2016**		**2015**
Balance at beginning of period	**$**	**336**	$	388
Transfers in and/or out of Level 3		**—**		—
Actual return on plan assets:				
Realized (loss)/gain		**(2)**		4
Net unrealized gain/(loss)		**29**		(47)
Purchases, sales, issuances and settlements:				
Purchases		**1**		2
Sales		**(7)**		(11)
Balance at end of period	**$**	**357**	$	336

The following is a summary of U. S. Steel's Other Benefits plan assets carried at fair value at December 31, 2016 and 2015. During 2016, the VEBA Trust withdrew from the Fixed Income Internally Managed Partnership and invested in Debt securities - U.S., Government bonds - U.S. and Agency mortgages.

	Fair Value Measurements at December 31, 2016 (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	$	24	$	24		—	$	—
Equity Securities - U.S.		21		21		—		—
Debt Securities - U.S.		1,369		—		1,369		—
Government bonds - U.S.		173		—		173		—
Agency Mortgages		13		—		13		—
Timberlands		37		—		—		37
Private equities (a)		1		—		—		1
All Other (b)		18		18		—		—
Total assets in the fair value hierarchy	$	1,656	$	63	$	1,555	$	38
Investments measured at net asset value (c)		328						
Investments at fair value	**$**	**1,984**						

(a) Includes investment in Electra Parters Club 2007 LP and FF&P Investor 8 ERISA LP.
(b) Includes $15 million of investment sales, $16 million of accrued income and $(13) 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, 2016		Unfunded Commitments		Redemption Frequency	Redemption Notice Period
Private Equity Funds [a]	$	66	$	22	Not redeemable	N/A
Real Estate Funds [a]		41		21	**	N/A
Interest in Internally Managed Partnership - Equity [b]		162		N/A	N/A	N/A
Interest in Investment Partnerships [c]		59		N/A	N/A	N/A
Investments measured at net asset value	$	328				

** 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 less than one year up to twelve years.
(b) Underlying investments include:

Equity Securities – U.S.	$	160
Withdrawal [1]		(15)
Other [2]		17
Total	$	162

(1) This represents a withdrawal to rebalance the investment mix in the other benefits plan.
(2) Other includes $8 million of exchange-traded funds, $5 million in equity securities - foreign and $4 million in investment sales receivable.

(c) Investment partnerships whose investment objectives are to achieve long-term capital appreciation by investing in global equity markets.

	Fair Value Measurements at December 31, 2015 (in millions)					
		Total		Quoted Prices in Active Markets (Level 1)		Significant Unobservable Inputs (Level 3)
Asset Classes						
Short-term investments	$	28	$	28	$	—
Equity Securities - U.S.		23		23		—
Timberlands		39		—		39
Private equities [a]		2		—		2
All Other [b]		8		8		—
Total assets in the fair value hierarchy	$	100	$	59	$	41
Investments measured at net asset value [c]		1,890				
Investments at fair value	**$**	**1,990**				

(a) Includes investment in Electra Parters Club 2007 LP and FF&P Investor 8 ERISA LP.
(b) Includes $188 million of investment sales and $(180) 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, 2015		Unfunded Commitments		Redemption Frequency	Redemption Notice Period
Private Equity Funds [a]	$	58	$	29	Not redeemable	N/A
Real Estate Funds [a]		42		27	**	N/A
Interest in Internally Managed Partnership - Fixed Income [b]		692		N/A	N/A	N/A
Interest in Internally Managed Partnership - Equity [c]		973		N/A	N/A	N/A
Interest in Investment Partnerships [d]		125		N/A	N/A	N/A
Investments measured at net asset value	$	1,890				

** Not redeemable, except for JP Morgan U.S. Real Estate Income & Growth, which has quarterly redemption provisions.
(a) The remaining lives of such investments range from less than one year to up to twelve years.
(b) Underlying investments include:

Debt Securities – U.S.	$	346
Government Bonds – U.S.		181
Agency Mortgages		12
Other[1]		153
Total	$	692

[1] Other includes a $180 million contribution, $5 million of accrued income, and $(32) million of investment purchases payable.

(c) Underlying investments include:

Equity Securities – U.S.	$	1,033
Equity Securities – Foreign		53
Other[2]		(113)
Total	$	973

[2] Other includes $56 million of investment sales receivables, $16 million of an exchange-traded fund, $2 million of accrued income, $1 million of short-term investment fund, and a $(188) million withdrawal

(d) 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, 2016 and 2015 (in millions):

	Level 3 assets only	
(In millions)	**2016**	**2015**
Balance at beginning of period	**$ 41**	$ 42
Transfers in and/or out of Level 3	**—**	—
Actual return on plan assets:		
Net unrealized (loss)	**(2)**	—
Purchases, sales, issuances and settlements:		
Sales	**(1)**	(1)
Balance at end of period	**$ 38**	$ 41

U. S. Steel's investment strategy for its U.S. pension and other benefits plan assets provides for a diversified mix of public equities, high quality bonds and selected smaller investments in private equities, investment trusts and partnerships, timber and mineral interests. For its U.S. Pension, U. S. Steel has a target allocation for plan assets of 60 percent in equities (inclusive of private equity and investment trusts). The balance is primarily invested in corporate bonds, Treasury bonds and government-backed mortgages. 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 to provide protection against the impact of volatility in any single industry as well as company specific developments. U. S. Steel will use a 7.25 percent assumed rate of return on assets for the development of net periodic cost for the main defined benefit pension plan in 2017. The 2017 assumed rate of return is lower than the rate of return used for 2016 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 7.25 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 80 percent in high quality domestic bonds with the balance primarily invested in equity securities. U. S. Steel will use a 3.25 percent assumed rate of return on assets for the development of net periodic cost for its Other Benefits Plan. The 2017 assumed rate of return has been conservatively set based on the portfolio's current yield to maturity.

Steelworkers Pension Trust

U. S. Steel participates in a multi-employer defined benefit pension plan, the Steelworkers Pension Trust (SPT). 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; a rate agreed to as part of the 2015 Labor Agreements, that are set to expire on September 1, 2018. 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, 2016, 2015 and 2014.

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, 2016, 2015 and 2014 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
		2016	2015		2016	2015	2014	2016	2015	
Steelworkers Pension Trust	23-6648508/499	Green	Green	No	$ 63	$ 66	$ 73	No	No	September 1, 2018

(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 – In addition to the contributions to the SPT noted in the table above, on August 1, 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, which is the funding vehicle for the Company's main defined benefit pension plan. 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. In 2014, U. S. Steel made a $140 million voluntary contribution to its main defined benefit pension plan and $47 million in required contributions to the USSC plans prior to the CCAA filing and the deconsolidation of USSC.

For pension plans not funded by trusts, U. S. Steel made $26 million, $38 million and $87 million of pension payments not funded by trusts in 2016, 2015 and 2014, respectively.

Cash payments totaling $61 million, $75 million and $198 million were made for other postretirement benefit payments not funded by trusts in 2016, 2015 and 2014, respectively. The decrease in cash benefit payments not funded by trusts from 2014 to 2015 was due to the utilization of assets from our VEBA in the amount of $120 million to pay associated claims. In 2016, U. S. Steel continued to use VEBA assets to pay USW postretirement benefit claims. In addition, in 2015, we made a $10 million contribution to our VEBA. The 2015 Labor Agreements restructured prior contractual obligations that required U. S. Steel to make $235 million in cash contributions to the VEBA trust fund. These funds will now be used to help keep healthcare affordable for our retirees.

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
2017	$ 635	$ 170
2018	495	182
2019	485	189
2020	469	192
2021	451	191
Years 2022 - 2026	2,060	906

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, $17 million and $18 million in 2016, 2015 and 2014, 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 in 2016, $22 million in 2015 and $23 million in 2014. 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 Canadian (prior to the deconsolidation as discussed in Note 4) and Tubular hourly employees whose company contributions totaled $1 million in 2016, $1 million in 2015 and $3 million in 2014. U. S. Steel also maintains a supplemental thrift plan to provide benefits which are otherwise limited by the Internal Revenue Service for qualified plans. U. S. Steel's costs under these defined contribution plans totaled $1 million in 2016, 2015 and 2014.

Other postemployment 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 postemployment benefits, have historically been treated as accrued benefit obligations. Liabilities for these benefits recorded at December 31, 2016, totaled $114 million as compared to $128 million at December 31, 2015. Liability amounts were developed assuming a discount rate of 4.00% and 4.25% at December 31, 2016 and 2015. Net periodic benefit cost for these benefits is projected to be $12 million in 2017 compared to $3 million in 2016 and $46 million in 2015.

Non-retirement postemployment benefits

U. S. Steel incurred costs of less than $1 million and $133 million in 2016 and 2015, respectively, related to the accrual of employee costs for supplemental unemployment benefits and the continuation of health care benefits and life insurance coverage for employees associated with the temporary idling of certain facilities and reduced production at others. Payments for these benefits during 2016 and 2015 were $81 million and $33 million, respectively.

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. On August 1, 2016, the Company 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, which is the funding vehicle for the main defined benefit pension plan. The shares were valued by an independent valuation firm for 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. U. S. Steel voluntarily contributed $140 million to its main defined pension plan in 2014. U. S. Steel did not make a voluntary contribution to our main U.S. defined benefit plan in 2015.

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.

18. 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, 2016 and 2015:

	December 31,	
(In millions)	**2016**	**2015**
Balance at beginning of year	**$ 89**	$ 48
Additional obligations incurred	**2**	45 [(a)]
Obligations settled	**(15)**	(6)
Foreign currency translation effects	**—**	(1)
Accretion expense	**3**	3
Balance at end of period	**$ 79**	$ 89

(a) Additional AROs in 2015 relate to the shutdown of the coke production facilities at Gary Works and Granite City Works and the Fairfield Flat-Rolled Operations.

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.

19. 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 15 for disclosure of U. S. Steel's derivative instruments, which are accounted for at fair value on a recurring basis. Additionally, see Notes 4 and 5 for disclosure of short-term and long-term receivables from related parties (USSC Retained Interest) which is presented net of the allowance for doubtful accounts, which approximates fair value.

The following table summarizes U. S. Steel's financial assets and liabilities that were not carried at fair value at December 31, 2016 and 2015.

	December 31, 2016		December 31, 2015	
(In millions)	**Fair Value**	**Carrying Amount**	**Fair Value**	**Carrying Amount**
Financial liabilities:				
Long-term debt [(a)]	**$ 3,139**	**$ 3,002**	$ 1,896	$ 3,107

(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 25.

20. Reclassifications from Other Comprehensive (Loss) Income (AOCI)

(In millions) [a]	Pension and Other Benefit Items	Foreign Currency Items	Other	Total
Balance at December 31, 2014	$ (1,852)	$ 416	$ (5)	$ (1,441)
Other comprehensive income (loss) before reclassifications	196	(104)	(25)	67
Amounts reclassified from AOCI	177 [b]	—	28	205
Net current-period other comprehensive income (loss)	373	(104)	3	272
Balance at December 31, 2015	$ (1,479)	$ 312	$ (2)	$ (1,169)
Other comprehensive income before reclassifications	**(111)**	**(38)**	**20**	**(129)**
Amounts reclassified from AOCI	**(181)**	**—**	**(18)**	**(199)**
Net current-period other comprehensive (loss) income	**(292)**	**(38)**	**2**	**(328)**
Balance at December 31, 2016	**$ (1,771)**	**$ 274**	**$ —**	**$ (1,497)**

(a) Amounts for 2016 do not reflect a tax benefit as a result of a full valuation allowance on our domestic deferred tax assets. Amounts for 2015 are shown net of tax. Amounts in parentheses indicate decreases in AOCI.

(b) See table below for further details. The amount for 2015 also includes $17 million for a postemployment benefits actuarial adjustment.

(In millions) [a]	Details about AOCI components	Amount reclassified from AOCI		
		2016	2015	2014
	Amortization of pension and other benefit items			
	Prior service costs [b]	**$ (37)**	$ (11)	$ (6)
	Actuarial losses [b]	**(132)**	(265)	(270)
	Settlements, termination and curtailment losses [b]	**(12)**	—	(10)
	Total before tax	**(181)**	(276)	(286)
	Tax benefit	**—**	99	109
	Net of tax [c]	**$ (181)**	$ (177)	$ (177)

(a) Amounts in parentheses indicate decreases in AOCI.

(b) These AOCI components are included in the computation of net periodic benefit cost (see Note 17 for additional details).

(c) Amounts for 2016 do not reflect a tax benefit as a result of a full valuation allowance on our domestic deferred tax assets.

21. Supplemental Cash Flow Information

	Year Ended December 31,		
(In millions)	**2016**	**2015**	**2014**
Net cash used in operating activities included:			
Interest and other financial costs paid (net of amount capitalized)	**$ (193)**	$ (229)	$ (236)
Income taxes (paid) refunded	**$ (6)**	$ —	$ 157
Non-cash investing and financing activities:			
Change in accrued capital expenditures [(a)]	**$ —**	$ 59	$ 12
U. S. Steel common stock issued for employee stock plans	**$ 32**	$ 18	$ 17
U. S. Steel common stock issued for defined benefit pension plans	**$ 100**	$ —	$ —

[(a)] The 2014 amount has been revised to correct a prior period error that resulted in a decrease to the change in accrued capital expenditures of $61 million.

22. 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 CCAA filing on September 16, 2014. Generally, transactions are conducted under long-term contractual arrangements. Related party sales and service transactions were $1,216 million, $1,463 million and $1,358 million in 2016, 2015 and 2014, respectively.

Purchases from related parties for outside processing services provided by equity investees and USSC after the CCAA filing on September 16, 2014 amounted to $80 million, $383 million and $147 million during 2016, 2015 and 2014, respectively. Purchases of iron ore pellets from related parties amounted to $177 million, $203 million and $269 million for the years ended December 31, 2016, 2015 and 2014, respectively.

Accounts payable to related parties include balances due to PRO-TEC Coating Company (PRO-TEC) of $63 million and $66 million at December 31, 2016 and 2015, respectively for invoicing and receivables collection services provided by U. S. Steel. 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, including USSC after the CCAA filing on September 16, 2014, totaled $3 million and $15 million at December 31, 2016 and 2015, respectively.

23. 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**
2017	$ 5	$ 72
2018	5	50
2019	5	28
2020	5	14
2021	5	11
Later years	12	66
Sublease rentals	—	—
Total minimum lease payments	$ 37	$ 241
Less imputed interest costs	9	
Present value of net minimum lease payments included in long-term debt (see Note 16)	$ 28	

Operating lease rental expense:

(In millions)	Year Ended December 31, 2016	2015	2014
Minimum rentals	**$ 115**	$ 117	$ 111
Contingent rentals	**8**	11	12
Sublease rentals	**—**	—	—
Net rental expense	**$ 123**	$ 128	$ 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 25. Contingent rental payments are determined based on operating lease agreements that include floating rental charges that are directly associated to variable operating components.

24. Restructuring and Other Charges

During 2016, the Company 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.

As a result of lower steel prices, decreased demand for steel products and the continued high level of imports, during the year ended December 31, 2015, the Company took actions to make changes to its operational footprint. As a result of these actions, U. S. Steel recorded restructuring charges of $322 million, primarily related to the permanent shutdown of the Fairfield Flat-Rolled Operations and the cokemaking operations at Gary Works and Granite City Works, within our Flat-Rolled segment and headcount reductions across the Company. Cash payments were made related to severance and exit costs of $28 million. Favorable adjustments for changes in estimates on restructuring reserves were made for $21 million, primarily related to employee and environmental costs associated with the shutdown of our cokemaking operations at Gary Works and Granite City Works within our Flat-Rolled segment.

During the year ended December 31, 2014, the Company implemented certain headcount reductions and recorded severance related charges of $16 million. The headcount reductions related to our Canadian operations, within our Flat-Rolled segment; certain of our Tubular operations in Bellville, Texas and McKeesport, Pennsylvania within our Tubular segment; and our USSK operations within our USSE segment as well as headcount reductions principally within the Company’s corporate functions. The Company also recorded charges of $195 million and $37 million, related to the impairment of carbon alloy facilities and the write-off of pre-engineering costs associated with a proposed Keetac expansion, respectively, within our Flat-Rolled segment. Additionally, an asset impairment charge of $14 million was taken for certain of the Company's non-strategic assets that were designated as held for sale in our Other Businesses. Cash payments were made related to severance and exit costs of $16 million. Favorable adjustments for changes in estimates on and the removal of restructuring reserves as a result of the deconsolidation of USSC were made for $17 million within our Flat-Rolled segment.

Charges for restructuring and ongoing cost reduction initiatives are recorded in the period the Company 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 and include employee related costs (severance, supplemental unemployment benefits, and continuation of health care benefits), accelerated depreciation, pension and other benefits curtailment charges, charges associated with take or pay contracts, asset impairments, environmental and other closure costs.

The activity in the accrued balances and the non-cash charges and credits incurred in relation to restructuring and other cost reduction programs during the years ended December 31, 2016 and December 31, 2015 and recorded in the restructuring and other charges line in the Consolidated Statements of Operations are as follows:

(in millions)	Employee Related Costs	Pension and Other Benefits Charges	Exit Costs	Non-cash Charges	Total
Balance at December 31, 2014	$ 5	$ —	$ —	$ —	$ 5
Additional charges	77	18	122 [(a)]	126 [(b)]	343
Cash payments/utilization	(19)	(18)	(9)	(126)	(172)
Other adjustments and reclasses	(15)	—	(6)	—	(21)
Balance at December 31, 2015	**$ 48**	**$ —**	**$ 107**	**$ —**	**$ 155**
Additional charges	**24**	**—**	**—**	**124** [(c)]	**148**
Cash payments/utilization	**(40)**	**—**	**(39)**	**(124)**	**(203)**
Other adjustments and reclasses	**(18)**	**—**	**(8)**	**—**	**(26)**
Balance at December 31, 2016	**$ 14**	**$ —**	**$ 60**	**$ —**	**$ 74**

[(a)] Primarily environmental costs and charges associated with take or pay contracts.
[(b)] Charges are primarily related to asset impairments and accelerated depreciation associated with the permanent shutdown of the Fairfield Flat-Rolled Operations and the cokemaking operations at Gary Works and Granite City Works.
[(c)] Charges are primarily related to the write down of inventory and assets associated with the permanent shutdown of the Lorain #4 and Lone Star #1 pipe mills and Bellville Operations within our Tubular segment.

Accrued liabilities for restructuring and other cost reduction programs are included in the following balance sheet lines:

(in millions)	December 31, 2016	December 31, 2015
Accounts payable	**$ 50**	**$ 90**
Payroll and benefits payable	**11**	**48**
Employee benefits	**1**	**—**
Deferred credits and other noncurrent liabilities	**12**	**17**
Total	**$ 74**	**$ 155**

25. 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 determinable.

Asbestos matters – As of December 31, 2016, U. S. Steel was a defendant in approximately 845 active cases involving approximately 3,340 plaintiffs. The vast majority of these cases involve multiple defendants. As of December 31, 2015, U. S. Steel was a defendant in approximately 820 cases involving approximately 3,315 plaintiffs. About 2,500, or approximately 75 percent, of these plaintiff claims are currently pending in jurisdictions which permit filings with massive numbers of 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. During 2016, settlements and other dispositions resolved approximately 225 cases, and new case filings added approximately 250 cases. During 2015, settlements and other dispositions resolved approximately 415 cases, and new case filings added approximately 275 cases.

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	New Claims	Closing Number of Claims
December 31, 2014	3,320	190	325	3,455
December 31, 2015	3,455	415	275	3,315
December 31, 2016	3,315	225	250	3,340

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. 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, although the resolution of such matters could significantly impact results of operations for a particular quarter.

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:

	Year Ended December 31,	
(In millions)	**2016**	**2015**
Beginning of period	**$ 197**	$ 212
Accruals for environmental remediation deemed probable and reasonably estimable	**1**	—
Adjustments for changes in estimates	**(7)**	(5)
Obligations settled	**(12)**	(10)
End of period	**$ 179**	$ 197

Accrued liabilities for remediation activities are included in the following balance sheet lines:

(In millions)	December 31, 2016	December 31, 2015
Accounts payable	**$ 19**	$ 14
Deferred credits and other noncurrent liabilities	**160**	183
Total	**$ 179**	$ 197

Expenses related to remediation are recorded in cost of sales and were immaterial for the years ended December 31, 2016 and December 31, 2015, and totaled $5 million for the year ended December 31, 2014. 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:

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, 2016, 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.

Significant Projects with Defined Scope – Projects with significant accrued liabilities with a defined scope. As of December 31, 2016, there are three significant projects with defined scope greater than or equal to $5 million each, with a total accrued liability of $139 million. These projects are: Gary RCRA (accrued liability of $28 million), the former Geneva facility (accrued liability of $63 million), and the former Duluth facility St. Louis River Estuary (accrued liability of $48 million).

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 three 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, 2016 was $6 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 each had an accrued liability of less than $1 million. The total accrued liability for these projects at December 31, 2016 was approximately $4 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 $23 million at December 31, 2016 and were based on known scopes of work.

Administrative and Legal Costs – As of December 31, 2016, U. S. Steel had an accrued liability of $6 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 bring existing facilities into compliance with various laws relating to the environment. In 2016 and 2015, such capital expenditures totaled $31 million and $88 million, respectively. U. S. Steel anticipates making additional expenditures in the future; however, the exact amounts and timing of such expenditures are uncertain because of the continuing evolution of specific regulatory requirements.

EU Environmental Requirements – Slovakia adopted a new waste code in March 2015 that became effective January 1, 2016. This legislation implements the EU Waste Framework Directive that strictly regulates waste disposal and encourages recycling, among other provisions, by increasing fees for waste disposed of in landfills, including privately owned industrial landfills. The impact of compliance with the legislation is estimated to be €2 million (approximately $2 million) annually.

Under the Emission Trading System (ETS) USSK's final allocation of free allowances for the Phase III period, which covers the years 2013 through 2020 is approximately 48 million allowances. However, following the recent judgment of the Court of Justice of the European Union in April 2016, the volume of free allocations for the years 2018-2020 will be reduced. Until a new calculation by the European Commission (EC) is adopted, we cannot reliably estimate the impact on USSK's free allocation volume. Prior to the recent ruling we estimated a shortfall of approximately 16 million allowances for the entire Phase III period. The actual shortfall will depend upon the reductions resulting from the recent Court of Justice ruling. Based on 2016 emission intensity levels and projected future production levels, and as a result of carryover allowances from the NAP II period, the earliest we anticipate having to purchase allowances to meet the annual compliance submission would be the first quarter of 2018.

However, due to a number of variables such as the future market value of allowances, future production levels and future emission intensity levels, we cannot reliably estimate the full cost of complying with the ETS regulations at this time.

U. S. Steel entered into transactions to sell and swap a portion of our emission allowances and recognized a gain of $17 million during the fiscal year ended December 31, 2014, reflected as a net gain on disposal of assets. There were no such transactions for the fiscal years ended December 31, 2016 and 2015.

The EU's Industry Emission Directive will require implementation of EU determined best available techniques (BAT) to reduce environmental impacts as well as compliance with BAT associated emission levels. Our most recent broad estimate of likely capital expenditures for projects to comply with or go beyond BAT requirements is €138 million (approximately $145 million) over the 2017 to 2020 period. There are ongoing efforts to seek EU grants to fund a portion of these capital expenditures. The actual amount spent will depend largely upon the amount of EU incentive grants received.

Due to other EU legislation, we will be 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, which will result 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 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 emission ceilings for each category of emissions (Total Suspended Particulate, SO_2 and NOx) for both stacks within the Power Plant. The allowable amount of discharged emissions will decrease each year until mid 2020. An emission ceiling will be a limiting factor for future operation of the boilers. The boiler projects have been approved by our Board of Directors and we are now in the execution phase. These projects will result in a reduction in electricity, CO_2 emissions, and operating maintenance and waste disposal costs once completed. The construction of the new boiler is complete with a total final projected cost of €75 million (approximately $79 million). Reconstruction of the existing boiler with a projected cost of €52 million (approximately $55 million) is in progress. The total remaining to be spent on the projects is projected to be €44 million (approximately $46 million). Broad legislative changes were enacted by the Slovak Republic to extend the scope of support for renewable sources of energy, that are intended to allow USSK to participate in Slovakia's renewable energy incentive program once the boiler projects are completed.

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 $179 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 of unconsolidated entities of U. S. Steel totaled $4 million at December 31, 2016.

EPA Region V Federal Lawsuit – This is a CAA enforcement action pending in Federal Court in the Northern District of Indiana. The U.S. Government, joined by the States of Illinois, Indiana, and Michigan initiated the action alleging the Company violated the CAA and failed to have in place appropriate pollution control equipment at Gary Works, Granite City Works, and Great Lakes Works. The parties have reached a tentative settlement agreement in this matter pursuant to which U. S. Steel will expend approximately $3 million for environmental projects and pay a civil penalty of approximately $2 million. The tentative settlement agreement is subject to court approval.

CCAA - On September 16, 2014, USSC commenced court-supervised restructuring proceedings under CCAA before the Ontario Superior Court of Justice (the Court). As part of the CCAA proceedings, U. S. Steel submitted both secured and unsecured claims of approximately C$2.2 billion which were verified by the court-appointed Monitor. U. S. Steel's claims were challenged by a number of interested parties, and on February 29, 2016, the Court denied those challenges and verified U. S. Steel's secured claims in the amount of approximately $119 million and unsecured claims of approximately C$1.8 billion and $120 million. The interested parties have appealed the determinations of the Court.

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 $7 million at December 31, 2016). 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 $160 million as of December 31, 2016, 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 letters of credit are collateralized by our Third 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 $37 million at December 31, 2016 and December 31, 2015 respectively, all of which was classified as noncurrent.

Capital Commitments – At December 31, 2016, U. S. Steel's contractual commitments to acquire property, plant and equipment totaled $106 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):

2017	2018	2019	2020	2021	Later years	Total
$733	$658	$327	$306	$298	$1,172	$3,494

The majority of U. S. Steel's unconditional purchase obligations relate to the supply of industrial gases, and certain energy and utility services with terms ranging from two to 16 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, 2016, if U. S. Steel were to terminate the agreement, it may be obligated to pay in excess of $200 million.

Total payments relating to unconditional purchase obligations were approximately $457 million in 2016, $408 million in 2015 and $510 million in 2014.

26. Common Stock Issuance

On August 15, 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.

SELECTED QUARTERLY FINANCIAL DATA (Unaudited)

	2016				2015			
(In millions, except per share data)	**4th Qtr.**	**3rd Qtr.**	**2nd Qtr.**	**1st Qtr.**	**4th Qtr.**	**3rd Qtr.**	**2nd Qtr.**	**1st Qtr.**
Net sales	**$ 2,650**	**$ 2,686**	**$ 2,584**	**$ 2,341**	$ 2,572	$ 2,830	$ 2,900	$ 3,272
Segment (loss) earnings before interest and income taxes:								
Flat-rolled	**65**	**114**	**6**	**(188)**	(88)	(18)	(64)	(67)
USSE	**63**	**81**	**55**	**(14)**	6	18	20	37
Tubular	**(87)**	**(75)**	**(78)**	**(64)**	(64)	(50)	(66)	1
Total reportable segments	**$ 41**	**$ 120**	**$ (17)**	**$ (266)**	$ (146)	$ (50)	$ (110)	$ (29)
Other Businesses	**21**	**18**	**10**	**14**	9	10	6	8
Items not allocated to segments	**(126)**	**(6)**	**35**	**(9)**	(316)	(130)	(288)	(166)
Total (loss) earnings before interest and income taxes	**$ (64)**	**$ 132**	**$ 28**	**$ (261)**	$ (453)	$ (170)	$ (392)	$ (187)
Net (loss) earnings	**(105)**	**51**	**(46)**	**(340)**	(1,133)	(173)	(261)	(75)
Net (loss) earnings attributable to United States Steel Corporation	**$ (105)**	**$ 51**	**$ (46)**	**$ (340)**	$ (1,133)	$ (173)	$ (261)	$ (75)
Gross profit (loss)	**$ 220**	**$ 326**	**$ 187**	**$ (95)**	$ (57)	$ 176	$ 108	$ 206
Common stock data								
Net (loss) earnings per share attributable to United States Steel Corporation								
- Basic	**$ (0.61)**	**$ 0.32**	**$ (0.32)**	**$ (2.32)**	$ (7.74)	$ (1.18)	$ (1.79)	$ (0.52)
- Diluted	**$ (0.61)**	**$ 0.32**	**$ (0.32)**	**$ (2.32)**	$ (7.74)	$ (1.18)	$ (1.79)	$ (0.52)
Dividends paid per share	**$ 0.05**	**$ 0.05**	**$ 0.05**	**$ 0.05**	$ 0.05	$ 0.05	$ 0.05	$ 0.05
Price range of common stock								
- Low	**$ 16.17**	**$ 15.72**	**$ 12.77**	**$ 6.15**	$ 6.80	$ 10.02	$ 20.26	$ 20.13
- High	**$ 39.14**	**$ 27.64**	**$ 20.55**	**$ 17.04**	$ 13.48	$ 21.49	$ 27.68	$ 27.49

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. U. S. Steel owns interests in the iron ore mining assets of Tilden Mining Company, L.C. and Hibbing Taconite Company.

The following table provides a summary of our reserves and minerals production by mining complex:

	Proven and Probable Reserves As of December 31, 2016			Production		
(Millions of short tons)	**Owned**	**Leased**	**Total**	**2016**	**2015**	**2014**
Iron ore pellets:						
Minntac Mine and Pellet Plant	111	385	496	**15.0**	13.6	16.4
Keetac Mine and Pellet Plant	19	365	384	**—**	1.9	5.8
Tilden Mining Company, L.C.*	23	—	23	**1.3**	0.6	1.5
Hibbing Taconite Company*	—	10	10	**1.3**	1.3	1.3
Total	153	760	913	**17.6**	17.4	25.0

* Represents U. S. Steel's proportionate share of proven and probable reserves and production as these investments are unconsolidated equity affiliates.

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, 2016, all 913 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 reviews for Tilden Mining Company, L.C. and Hibbing Taconite Company were conducted in 2015.

FIVE-YEAR OPERATING SUMMARY (Unaudited)

(Thousands of tons, unless otherwise noted)	2016	2015	2014	2013	2012
Raw Steel Production					
Gary, IN	**5,608**	5,172	5,936	6,396	6,230
Great Lakes, MI	**2,543**	2,257	2,442	2,883	2,839
Mon Valley, PA	**2,555**	2,266	2,563	2,918	2,835
Granite City, IL	**—**	1,162	2,285	2,538	2,421
Fairfield, AL[(a)]	**—**	480	1,992	1,943	2,341
Lake Erie, Ontario, Canada[(a)]	**—**	—	1,744	1,189	2,450
Hamilton, Ontario, Canada[(b)]	**—**	—	—	—	—
Total Flat-Rolled facilities	**10,706**	11,337	16,962	17,867	19,116
U. S. Steel Košice	**4,967**	4,669	4,788	4,598	4,434
U. S. Steel Serbia[(c)]	**—**	—	—	—	88
Total USSE facilities	**4,967**	4,669	4,788	4,598	4,522
Total	**15,673**	16,006	21,750	22,465	23,638
Raw Steel Capability					
Flat-Rolled[(a)]	**17,000**	17,000	19,400	24,300	24,300
USSE	**5,000**	5,000	5,000	5,000	5,000
Total	**22,000**	22,000	24,400	29,300	29,300
Production as % of total capability:					
Flat-Rolled	**63%**	60%	80%	74%	78%
USSE	**99%**	93%	96%	92%	87%
Coke Production					
Flat-Rolled[(a)]	**2,961**	3,957	5,406	6,494	6,156
USSE	**1,545**	1,600	1,539	1,508	1,537
Total	**4,506**	5,557	6,945	8,002	7,693
Iron Ore Pellet Production[(d)]					
Total	**17,635**	17,422	24,959	24,151	24,271
Steel Shipments by Segment[(e)]					
Flat-Rolled[(a)]	**10,094**	10,595	13,908	14,644	15,974
USSE	**4,496**	4,357	4,179	4,000	3,816
Tubular	**400**	593	1,744	1,757	1,886
Total steel shipments	**14,990**	15,545	19,831	20,401	21,676
Average Realized Price (dollars per net ton)					
Flat-Rolled	**$ 666**	$ 695	$ 772	$ 735	$ 750
USSE	**$ 483**	$ 516	$ 667	$ 706	$ 742
Tubular	**$ 1,071**	$ 1,464	$ 1,538	$ 1,530	$ 1,687

(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) On December 31, 2013, U. S. Steel permanently shut down its iron and steelmaking facilities at Hamilton Works.

(c) On January 31, 2012, U. S. Steel sold U. S. Steel Serbia.

(d) Includes our share of production from Hibbing and Tilden.

(e) 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.

FIVE-YEAR OPERATING SUMMARY (Unaudited) (Continued)

(Thousands of net tons)	2016	2015	2014	2013	2012
Steel Shipments by Market - North American Facilities[(a)](b)					
Steel service centers	**1,765**	1,702	2,578	2,721	2,882
Further conversion:					
Trade customers	**2,650**	3,039	4,013	4,409	5,119
Joint ventures	**1,423**	1,254	1,519	1,664	1,823
Transportation (including automotive)	**1,725**	2,011	2,445	2,480	2,511
Construction and construction products	**765**	704	897	905	1,013
Containers	**600**	692	1,287	1,259	1,290
Appliances & electrical equipment	**420**	429	616	666	727
Oil, gas and petrochemicals	**340**	513	1,545	1,540	1,601
Export from the United States	**456**	259	340	450	550
All other	**350**	585	412	307	344
Total	**10,494**	11,188	15,652	16,401	17,860
Steel Shipments by Market - USSE					
Steel service centers	**801**	718	682	560	567
Further conversion:					
Trade customers	**274**	304	299	286	310
Transportation (including automotive)	**660**	705	674	709	650
Construction and construction products	**1,811**	1,703	1,584	1,501	1,350
Containers	**436**	424	403	393	387
Appliances & electrical equipment	**236**	236	267	275	272
Oil, gas and petrochemicals	**4**	—	3	15	20
All other	**274**	267	267	261	260
Total	**4,496**	4,357	4,179	4,000	3,816

(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)

(Dollars in millions, except per share amounts)	2016	2015	2014	2013	2012
Net sales by segment:					
Flat-Rolled[(a)]	**$ 7,532**	$ 8,561	$ 12,895	$ 12,830	$ 14,555
USSE[(b)]	**2,246**	2,326	2,936	2,944	3,094
Tubular	**451**	898	2,774	2,777	3,291
Total reportable segments	**$ 10,229**	$ 11,785	$ 18,605	$ 18,551	$ 20,940
Other Businesses	**169**	165	269	273	327
Intersegment sales	**(137)**	(376)	(1,367)	(1,400)	(1,939)
Total	**$ 10,261**	$ 11,574	$ 17,507	$ 17,424	$ 19,328
Segment (loss) earnings before interest and income taxes:					
Flat-Rolled[(a)]	**$ (3)**	$ (237)	$ 709	$ 105	$ 400
USSE[(b)]	**185**	81	133	28	34
Tubular	**(304)**	(179)	261	190	366
Total reportable segments	**$ (122)**	$ (335)	$ 1,103	$ 323	$ 800
Other Businesses	**63**	33	82	77	55
Items not allocated to segments[(c)]	**(106)**	(900)	(772)	(2,300)	(608)
Total (loss) earnings before interest and income taxes	**$ (165)**	$ (1,202)	$ 413	$ (1,900)	$ 247
Net interest and other financial costs	**251**	257	243	332	241
Income tax provision (benefit)	**24**	183	68	(587)	131
Net (loss) earnings attributable to United States Steel Corporation	**$ (440)**	$ (1,642)	$ 102	$ (1,645)	$ (124)
Per common share:					
- Basic	**$ (2.81)**	$ (11.24)	$ 0.71	$ (11.37)	$ (0.86)
- Diluted	**$ (2.81)**	$ (11.24)	$ 0.69	$ (11.37)	$ (0.86)

(a) Excludes the results of USSC beginning September 16, 2014 as a result of the CCAA filing. See Note 4 to the Consolidated Financial Statements.
(b) Includes the results of USSS through the disposition date of January 31, 2012.
(c) See Note 3 to the Consolidated Financial Statements.

FIVE-YEAR FINANCIAL SUMMARY (Unaudited) (Continued)

	2016	2015	2014	2013	2012
Balance Sheet Position at Year-End (dollars in millions) [a]					
Current assets	**$ 4,356**	$ 3,917	$ 5,829	$ 5,502	$ 5,203
Net property, plant & equipment	**3,979**	4,411	4,574	5,922	6,408
Total assets	**9,160**	9,167 [b]	11,975 [b][c]	12,679 [b][c]	15,171 [b]
Short-term debt and current maturities of long-term debt	**50**	45	378	323	2
Other current liabilities	**2,331**	2,148	3,191	2,922	2,988
Long-term debt	**2,981**	3,093 [b]	3,082 [b]	3,569 [b]	3,890 [b]
Employee benefits	**1,216**	1,101	1,117	2,064	4,416
Total United States Steel Corporation stockholders' equity	**2,274**	2,436	3,799	3,375	3,477
Cash Flow Data (dollars in millions)					
Net cash provided by operating activities[a] [d]	**$ 727**	$ 359	$ 1,553	$ 405	$ 1,150
Capital expenditures[a] [d]	**306**	500	480	468	738
Dividends paid	**31**	29	29	29	29
Employee Data					
Total employment costs (dollars in millions)[a]	**$ 2,342**	$ 2,780	$ 3,408	$ 3,611	$ 3,710 [e]
Average North America employment costs (dollars per hour)[a]	**$ 61.75**	$ 65.64	$ 57.55	$ 55.06	$ 56.47
Average number of North America employees[a]	**15,048**	19,391	22,408	25,621	25,925
Average number of USSE employees	**11,927**	12,052	12,272	12,470	12,858 [e]
Number of pensioners at year-end	**47,765**	49,802	52,483	68,221	70,822
Stockholder Data at Year-End					
Common shares outstanding, net of treasury shares (millions)	**173.8**	146.3	145.7	144.7	144.3
Registered shareholders (thousands)	**14.8**	15.4	16.1	16.8	17.8
Market price of common stock	**$ 33.01**	$ 7.98	$ 26.74	$ 29.50	$ 23.85

(a) Excludes the results of USSC beginning September 16, 2014 as a result of the CCAA filing. See Note 4 to the Consolidated Financial Statements.

(b) 2015, 2014, 2013 and 2012 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 and 2013 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. The amounts for 2012 were not affected by the adoption.

(d) 2014, 2013 and 2012 amounts have been revised to correct a prior period error that resulted in an increase in capital expenditures of $61 million, a decrease in capital expenditures of $9 million, and an increase in capital expenditures of $15 million, respectively with an offsetting change to net cash provided by operating activities.

(e) The 2012 average is reflective of the average number of employees at USSK only. USSS employed 5,350 individuals for the month of January 2012 at a total cost of approximately $1 million, which is not reflected in this amount. USSS was sold on January 31, 2012.

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 2016 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 2017 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 2017 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 2017 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 2017 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 2017 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 2017 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)]	9,559,564	$29.94	5,524,364[(b)]
Equity compensation plans not approved by security holders[(c)]	5,055	(one for one)	—
Total	9,564,619	—	5,524,364

(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, 2016. (For more information, see Note 14 to the Consolidated Financial Statements. Column (1) includes (i) 359,134 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) 1,914,064 shares that could be issued for the 957,032 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 1,914,064 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, 2016, 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 shareholder 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 2017 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 2017 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 2017 Annual Meeting of Stockholders.

PART IV

Item 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULE

A. Documents Filed as Part of the Report

1. **Financial Statements**
   Financial Statements filed as part of this report are included in “Item 8 – Financial Statements and Supplementary Data” beginning on page F-1.

2. **Financial Statement Schedules and Supplementary Data**
   “Schedule II – Valuation and Qualifying Accounts and Reserves” 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

Exhibits 10(a) through 10(h) and Exhibits 10(n) through 10(ll) are management contracts or compensatory plans or arrangements.

Exhibit No.

2. Plan of acquisition, reorganization, arrangement, liquidation or succession

(a)	Master Share Purchase Agreement by and between U. S. Steel Serbia B.V. and U. S. Steel Košice s.r.o., wholly owned subsidiaries of U. S. Steel, and the Republic of Serbia.	Incorporated by reference to Exhibit 2.1 to United States Steel Corporation’s Form 8-K filed on February 6, 2012, Commission File Number 1-16811.

3. Articles of Incorporation and By-Laws

(a)	United States Steel Corporation Restated Certificate of Incorporation dated September 30, 2003.	Incorporated by reference to Exhibit 3.1 to United States Steel Corporation’s Form 10-Q for the quarter ended September 30, 2003, Commission File Number 1-16811.
(b)	Certificate of Amendment to Restated Certificate of Incorporation of United States Steel Corporation dated as of April 30, 2014.	Incorporated by reference to Exhibit 3.B to United States Steel Corporation’s Form 10-K for the year ended December 31, 2015, Commission File Number 1-16811.
(c)	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.
(d)	Certificate of Amendment to Restated Certificate of Incorporation of United States Steel Corporation, Dated April 21, 2016	Incorporated by reference to Exhibit 3.1 to United States Steel Corporation’s Form 10-Q for the quarter ended June 30, 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)	Second Supplemental Indenture dated as of December 10, 2007, between United States Steel Corporation and The Bank of New York Mellon, formerly known as The Bank of New York, regarding 7.00% Senior Notes due February 1, 2018.	Incorporated by reference to Exhibit 4.1 to United States Steel Corporation’s Form 8-K filed on December 10, 2007, Commission File Number 1-16811.
(d)	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.
(e)	Fifth Supplemental Indenture dated as of March 15, 2012, between United States Steel Corporation and The Bank of New York Mellon, formerly known as The Bank of New York, regarding 7.50% Senior Notes due March 15, 2022.	Incorporated by reference to Exhibit 4.1 to United States Steel Corporation’s Form 8-K filed on March 16, 2012, Commission File Number 1-16811.
(f)	Sixth Supplemental Indenture dated as of March 26, 2013, between United States Steel Corporation and The Bank of New York Mellon, formerly known as The Bank of New York, regarding 6.875% Senior Notes due April 1, 2021.	Incorporated by reference to Exhibit 4.1 to United States Steel Corporation’s Form 8-K filed on March 27, 2013, Commission File Number 1-16811.
(g)	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.
(h)	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.

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 Mario Longhi.	Incorporated by reference to Exhibit 10.1 to United States Steel Corporation's Form 8-K filed on July 2, 2012, Commission File Number 1-16811.
(f)	Exhibit A to Offer Letter to Mario Longhi – Supplemental Account as Amended and Restated (effective November 1, 2013, the Supplemental Account was merged into the Supplemental Retirement Account Program filed as Exhibit 10(b)).	Incorporated by reference to Exhibit 10.10 to United States Steel Corporation's Form 10-Q for the quarter ended September 30, 2013, Commission File Number 1-16811.
(g)	Form of Non-Compete Agreement attached to Offer Letter to Mario Longhi.	Incorporated by reference to Exhibit 10.4 to United States Steel Corporation's Form 8-K filed on July 2, 2012, Commission File Number 1-16811.
(h)	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.
(i)	Tax Sharing Agreement between USX Corporation (renamed Marathon Oil Corporation) and United States Steel Corporation.	Incorporated by reference to Exhibit 99.3 to United States Steel Corporation's Form 8-K filed on January 3, 2002, Commission File Number 1-16811.
(j)	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.
(k)	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.
(l)	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.

(m)	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.
(n)	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 sporiteĺňa, 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.
(o)	Summary of non-employee director fee arrangements.	Incorporated by reference to Exhibit 10(bb) to United States Steel Corporation's Form 10-K for the year ended December 31, 2013, Commission File Number 1-16811.
(p)	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.
(q)	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.
(r)	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.
(s)	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.
(t)	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.
(u)	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.
(v)	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 10.5 to United States Steel Corporation's Form 8-K filed on March 3, 2014, Commission File Number 1-16811.
(w)	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.

(x)	Non-Employee Director Stock Program, a program under the 2005 Stock Incentive Plan.	Incorporated by reference to Exhibit 10.1 to United States Steel Corporation's Form 8-K filed on May 31, 2005, Commission File Number 1-16811.
(y)	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.
(z)	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 8-K filed on March 3, 2011, Commission File Number 1-16811.
(aa)	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.
(bb)	Form of Restricted Stock Unit Retention 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.
(cc)	Form of Restricted Stock Unit Annual 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.
(dd)	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.
(ee)	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.
(ff)	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.
(gg)	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.
(hh)	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.
(ii)	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.

(jj)	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.
(kk)	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.
(ll)	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.
(mm)	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.
(nn)	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.
(oo)	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.
(pp)	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.
(qq)	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.
(rr)	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.
(ss)	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.
(tt)	Purchase Agreement, dated May 3, 2016, by and among United States Steel Corporation, the subsidiary guarantor named therein and J.P. Morgan Securities LLC, for itself and on behalf of the several initial purchasers listed in Schedule 1 thereto.	Incorporated by reference to Exhibit 10.1 to United States Steel Corporation's Form 8-K filed on May 3, 2016, Commission File Number 1-16811.
(uu)	Collateral Agreement, dated as of May 10, 2016, by and among United States Steel Corporation, certain of its subsidiaries and U.S. Bank National Association, as collateral agent.	Incorporated by reference to Exhibit 10.1 to United States Steel Corporation's Form 8-K filed on May 10, 2016, Commission File Number 1-16811.

(vv)	Underwriting Agreement for Common Stock dated August 9, 2016	Incorporated by reference to Exhibit 1.1 to United States Steel Corporation's Form 8-K filed on August 15, 2016, Commission File Number 1-16811.

10.1. **Form of United States Steel Corporation 2016 Omnibus Incentive Compensation Plan Restricted Stock Unit Grant Agreement (Annual Grant)**

10.2. **Form of United States Steel Corporation 2016 Omnibus Incentive Compensation Plan Restricted Stock Unit Grant Agreement (Retention Grant)**

10.3. **Form of United States Steel Corporation 2016 Omnibus Incentive Compensation Plan Non-Qualified Stock Option Grant Agreement**

10.4 **Form of United States Steel Corporation 2016 Omnibus Incentive Compensation Plan Performance Share Award Grant Agreement**

10.5 **Form of United States Steel Corporation 2016 Omnibus Incentive Compensation Plan Performance Cash Award Grant Agreement**

10.6 **Administrative Procedures for the Executive Management Annual Incentive Compensation Program under the United States Steel Corporation 2016 Omnibus Incentive Compensation Plan effective February 28, 2017**

12.1. **Computation of Ratio of Earnings to Fixed Charges**

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**

Item 16. FORM 10-K SUMMARY

None.

SCHEDULE II – VALUATION AND QUALIFYING ACCOUNTS AND RESERVES
YEARS ENDED DECEMBER 31, 2016, 2015 AND 2014
(Millions of Dollars)

Description	Balance at Beginning of Period	Additions: Charged to Costs and Expenses	Additions: Charged to Other Accounts	Deductions: Charged to Costs and Expenses	Deductions: Charged to Other Accounts	Balance at End of Period
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**
Year ended December 31, 2015:						
Reserves deducted in the balance sheet from the assets to which they apply:						
Allowance for doubtful accounts	$ 45	$ —	$ —	$ 11	$ 6	$ 28
Allowance for related party doubtful accounts	218	74	—	—	38	254
Investments and long-term receivables reserve	8	—	—	—	1	7
Long-term receivables from related parties reserve	1,188	465	—	—	207	1,446
Deferred tax valuation allowance:						
State	—	753	51	—	—	804
Foreign	5	—	—	1	—	4
Year ended December 31, 2014:						
Reserves deducted in the balance sheet from the assets to which they apply:						
Allowance for doubtful accounts	$ 53	$ —	$ —	$ —	$ 8	$ 45
Allowance for related party doubtful accounts	—	—	218 (a)	—	—	218
Investments and long-term receivables reserve	10	—	—	—	2	8
Long-term receivables from related parties reserve	—	—	1,188 (a)	—	—	1,188
Deferred tax valuation allowance:						
Foreign	1,028	—	—	—	1,023 (b)	5

(a) Represents the reserve for related party notes and trade accounts payable due from USSC after the deconsolidation as of the end of the day on September 15, 2014 (See Note 4). U. S. Steel has estimated a recovery rate based upon the fair value of the net assets of USSC available for distribution to its creditors in relation to the secured and unsecured creditor claims in the CCAA filing.

(b) As a result of USSC's CCAA filing, the Canadian deferred tax asset and the related valuation allowance were deconsolidated from U. S. Steel's balance sheet as of the end of the day on September 15, 2014 (See Note 4).

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacity indicated on February 28, 2017.

UNITED STATES STEEL CORPORATION

By: */s/ Colleen M. Darragh*

Colleen M. Darragh

Vice President & Controller

Signature	Title
/s/ Mario Longhi **Mario Longhi**	President & Chief Executive Officer & Director
/s/ David B. Burritt **David B. Burritt**	Executive Vice President & Chief Financial Officer
/s/ Colleen M. Darragh **Colleen M. Darragh**	Vice President & Controller
* **Patricia Diaz Dennis**	Director
* **Dan O. Dinges**	Director
* **John G. Drosdick**	Director
* **John J. Engel**	Director
* **Murry S. Gerber**	Director
* **Stephen J. Girsky**	Director
* **Paul A. Mascarenas**	Director
* **Glenda G. McNeal**	Director
* **Robert J. Stevens**	Director
* **David S. Sutherland**	Director
* **Patricia A. Tracey**	Director

*

BY:	*/s/ David B. Burritt*

David B. Burritt
Attorney-in-Fact

GLOSSARY OF CERTAIN DEFINED TERMS

The following definitions apply to terms used in this document:

Acero Prime	Acero Prime, S.R.L. de CV
AD	antidumping
ARO	Asset Retirement Obligation
ASC	Accounting Standards Codification
Apolo	Apolo Tubulars S.A.
BAT	Best Available Technique
CAA	Clean Air Act
CAL	continuous annealing line
CCAA	Canada's Companies' Creditors Arrangement Act
CDC	Chrome Deposit Corporation
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CMS	Corrective Measure Study
Commerce	U.S. Department of Commerce
CO_2	carbon dioxide
CORE	corrosion-resistant
CVD	countervailing duties
CWA	Clean Water Act
DESCO	Double Eagle Steel Coating Company
Double G	Double G Coatings Company LLC
EAF	Electric Arc Furnace
EBITDA	earnings before interest, taxes, depreciation and amortization
EC	European Commission
Economic Profit	After tax income from operations in excess of weighted average cost of capital
ERB	Environmental Revenue Bond
ERP	Enterprise resource planning
ERW	electric resistance welded
ETS	Emissions Trading System
EU	European Union
Eurofer	European Confederation of Iron and Steel Industries
Flat-Rolled	Flat-Rolled Products segment
FPC	Feralloy Processing Company
Gateway	Gateway Energy & Coke Company, LLC, a subsidiary of SunCoke Energy
GHG	greenhouse gas
Hibbing	Hibbing Taconite Company
HWD	hazardous waste disposal
HWT	hazardous waste treatment
Keetac	U. S. Steel’s iron ore operations at Keewatin, Minnesota
MACT	Maximum Achievable Control Technology
Minntac	U. S. Steel’s iron ore operations at Mt. Iron, Minnesota
NAAQS	National Ambient Air Quality Standards
NESHAP	National Emission Standards for Hazardous Air Pollutants
NPDES	National Pollutant Discharge Elimination System
OCTG	oil country tubular goods
O. D.	outer diameter
OSHA	Occupational Safety and Health Administration
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
REACH	Registration, Evaluation, Authorization and Restriction of Chemicals, Regulation 1907/2006
RFI	RCRA Facility Investigation
SEC	Securities and Exchange Commission
SIP	State Implementation Plan
SPT	Steelworkers Pension Trust
Tilden	Tilden Mining Company

tons	net tons
Tubular	Tubular Products segment
U.S. EPA	U.S. Environmental Protection Agency
U.S. GAAP	accounting standards generally accepted in the United States
UPI	USS-POSCO Industries, U. S. Steel and POSCO joint venture
USSC	U. S. Steel Canada Inc.
USSE	U. S. Steel Europe segment
USITC	U.S. International Trade Commission
USSK	U. S. Steel Košice
USSS	U. S. Steel Serbia
USSTP	U. S. Steel Tubular Products
USW	United Steelworkers
Worthington	Worthington Specialty Processing, U. S. Steel and Worthington Industries, Inc. joint venture
WTO	World Trade Organization