Iron and Steel Scrap

Accumulation and Availability as of December 31, 2009

SUBMITTED TO
Institute of Scrap Recycling Industries

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Executive Summary

During each year from 2004 through 2009, discarded end-use products contained an average of approximately 87.2 million tons[1] of ferrous material of which 65 million tons were recoverable scrap and 47.5 million tons were recovered, leaving 17.5 million tons of recoverable but unrecovered scrap.

After taking account of an average annual corrosion loss, 17.3 million tons were added each year to the national inventory of obsolete ferrous scrap.

After aggregating annual inventory additions from 2004 through 2009 and adjusting the end-of-year 2009 inventory to take account of cumulative corrosion losses, the national inventory of obsolete ferrous scrap stood at 1.18 billion tons as of December 31, 2009. Of this total, 103.9 million tons (9 percent) accumulated in the inventory since the end of 2003.

Discarded construction materials generated more recoverable obsolete ferrous scrap (33.2 percent) than any other end-use product category. Discarded automotive products, which were previously the leading source for recoverable scrap, continue to be a significant source, generating 30.4 percent of recoverable scrap generated from 2004 through 2009.

Additions to the inventory occurred in all nine U.S. Census districts. From 2004 through 2009, cumulative net additions to inventory occurred mainly in the South Atlantic and Pacific districts. More than one-third (34.8 percent) occurred in these two districts combined. In contrast, New England accounted for the smallest share (4.5 percent) of the cumulative increase in inventory.

We estimate that 448.7 million tons of obsolete ferrous scrap will be generated from 2010 through 2014 based on production and net imports of ferrous containing end-use products through 2009. Of this amount, 344.8 million tons will be recoverable.

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[1] All tonnage figures in this report are expressed as net tons. One net ton is equivalent to 2,000 pounds.

1. Introduction

In 1977, Nathan Associates Inc. conducted the first study of the national inventory of obsolete ferrous scrap, where inventory was defined as "potential reserves."[2] Potential reserves are:

- Quantities, either known or inferred, of ferrous material existing in discarded products,
- Quantities of material in a condition allowing for immediate use, and
- Quantities recoverable with the use of existing technology at prices higher than current prices, but not significantly higher.

Implicit in this definition of potential reserves is recognition of a price-supply continuum. As the price of scrap increases, so too does the volume of obsolete ferrous scrap recovered from the inventory and supplied to the iron and steel industry.

Nathan Associates produced five updates to its original study.[3] The first and second updated inventories to December 31, 1977 and 1979, respectively, and the third refined the scrap inventory model to incorporate new information before calculating the scrap inventory as of December 31, 1981. The fourth update incorporated revisions to government published export and import data to calculate inventory as of December 31, 1983 and revised year-end 1980 and 1981 inventories. The most recent update, which was completed in 2005, calculated the inventory through December 31, 2003. In the 2005 study, we undertook a thorough analysis of changes in the production of new iron and steel, ferrous content of end-use products, and trade flows.

In this update, we again analyzed each aspect of our inventory model, as well as short term changes in iron and steel and ferrous containing end-use product markets that have occurred since 2003. The most significant development since our 2005 study was the impact of the global recession on the production of iron and steel and the consumption of ferrous scrap.

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[2] Robert R. Nathan Associates, Inc., *Iron and Steel Scrap: Its Accumulation and Availability as of December 31, 1975*, Metal Scrap Research and Education Foundation, Washington, D.C., August 23, 1977.

[3] Robert R. Nathan Associates, Inc., *Iron and Steel Scrap: Its Accumulation and Availability Updated to December 31, 1977, 1979, 1981, 1983*, and *2003* Metal Scrap Research and Education Foundation, Washington, D.C., August 25, 1978, October 10, 1980, December 23, 1982, August 1984, and July 2005 respectively.

- The recession that began in December 2007 has had a significant impact on the production of steel in the United States. Crude steel production decreased by 7.4 percent in 2008, and 30.4 percent in 2009, after increasing by 19.2 percent between 2004 through 2007.[4] The decrease in steel production lowered domestic demand for ferrous scrap. Consumption of ferrous scrap in the United States fell by 27.3 percent in 2009.[5]

- Although product declined, the share of steel produced in electric arc furnaces (EAFs) has continued to increase, from 51 percent of total crude steel production in 2003 to 61.8 percent in 2009. Production of crude steel in EAFs accounted for 80 percent of total scrap consumption in 2008.[6]

- In our re-examination of net imports of end-use products[7] containing ferrous material (Table 1), we again found the major categories to be automotive, construction materials, and industrial machinery.

Table 1
Ferrous-Containing End-Use Product Categories

Category Number	Description
1	Agricultural machinery /a
2	Aircraft and aerospace
3	Automotive
4	Construction materials
5	Consumer durables
6	Containers
7	Electrical machinery
8	Industrial machinery
9	Materials, not elsewhere classified (nec)
10	Mining materials
11	Oil and gas materials
12	Railroad equipment
13	Railroad rails
14	Ship building and marine equipment

a. Includes agricultural machinery and other agricultural materials.

SOURCE: Nathan Associates Inc.

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4 Based on crude steel production figures published in *2009 Annual Statistical Report*, American Iron & Steel Institute (AISI).
5 *Mineral Commodity Summaries*, U.S. Geological Survey, January 2010.
6 *2009 Annual Statistical Report*, American Iron & Steel Institute (AISI).
7 Prior to our 2005 study, our analyses considered 15 ferrous-containing end-use product categories. In our 2005 study, we combine statistics on (1) agricultural machinery and (2) other agricultural materials into the single agricultural machinery category. Hence, for this update we continue to use 14 end-use product categories.

In this report, we present our estimate of the inventory (potential reserves) of obsolete ferrous scrap as of December 31, 2009. Following this introduction, we discuss the basic underlying concepts relevant to our definition of inventory, describe the ferrous material flow through the economy, and present an overview of our inventory-estimating methodology (Chapter 2). We next describe the data required by our methodology, identify data sources,, and describe key components of the methodology in more detail (Chapter 3). We conclude with a presentation of our national estimate and its regional distribution (Chapter 4). Appendices contain all the underlying data and derivations necessary to replicate our analysis.

2. Methodology

Basic Concepts

Inventory, in the normal business sense, implies a stock of on-the-shelf items that can be put into use at a chosen moment depending on demand. The "on-the-shelf" aspect of this definition is not appropriate for measuring the inventory of obsolete ferrous scrap.

For obsolete ferrous scrap, a more relevant definition of inventory can be formulated using the geologic concepts of resources and reserves. Resources are concentrations of natural deposits of elements in the earth's crust or under the sea existing in such a form that they can be extracted and used. Reserves are a subset of resources. Reserves consist of the natural deposits of elements whose extent and grade are known to a greater or lesser degree and whose physical natures are such that they may be extracted at a profit with existing technology at current prices.

However, these geologic concepts are not precisely applicable to ferrous scrap. The geologic definitions are relevant to natural deposits of elements that are presumed to exist but must be discovered in their geologic setting; measured as "proved" in terms of composition, grade, and quantity; and then recovered for current or future use or abandoned. Thus, these concepts have both technical-discovery and technical-economic dimensions.

The magnitude of the technical-discovery problem inherent in natural deposits is not inherent in ferrous scrap. Ferrous scrap is produced at mills and foundries in the production of iron and steel (home scrap), in the manufacture of ferrous-containing end-use products (prompt scrap), and when ferrous-containing end-use products reach the ends of their useful lives and are discarded (obsolete scrap).

Thus, it is the technical-economic dimension that is more relevant to a definition of ferrous scrap inventory. A three-part classification of the technical-economic dimension reveals the concept most appropriate for defining and measuring the inventory of obsolete ferrous scrap.

- ***Resources*** of obsolete ferrous scrap consist of the ferrous material in discarded end-use products located on the earth's surface or in land fills that exists in such a form that it is possible to recover, extract, and use the material;

- ***Potential reserves*** of obsolete ferrous scrap, which is a subset of resources, consist of material that is of known or inferred quantity, in a condition that allows for immediate use, and available for recovery within the constraints of known technology and higher but realistic prices;
- ***Reserves*** of obsolete ferrous scrap, which are a subset of potential reserves, consist of obsolete ferrous scrap that is economically recoverable at prevailing prices.

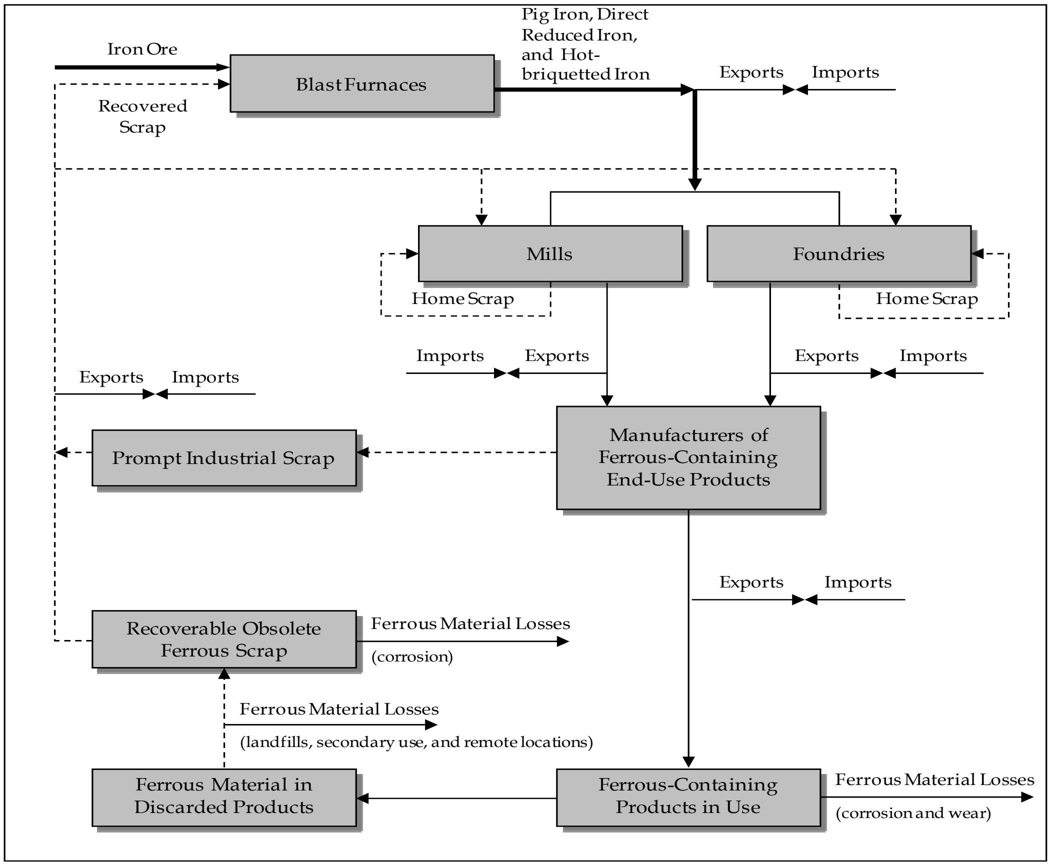
For several reasons, the concept of potential reserves is the most appropriate for defining the inventory of obsolete ferrous scrap. The broadest concept of resources, to have validity, must include difficult-to-access material that could be recovered only in emergency situations, for example, material in landfills that could be dug up and recovered to meet war-time needs. Moreover, defining the inventory of obsolete ferrous scrap using the broadest concept of resources would necessarily include material that would likely be of relatively low quality because of its destruction in secondary use, for example, iron used in copper cementation and material that has oxidized significantly. The recovery of such material would be highly uncertain. Regarding the narrowest concept of reserves, historical increases in ferrous scrap prices have resulted in significant increases in recoverable and recovered obsolete ferrous scrap. Hence, a definition of the inventory of obsolete ferrous scrap using the narrowest concept of reserves (which are based on current prices) would necessarily exclude historically significant amounts of obsolete ferrous scrap that became recoverable and were recovered at prices higher than were generally prevailing at the time. Potential reserves include material that is relatively accessible and offers the advantage of scrap, that is, it exists in a metallic state so that it can be recovered within a short time in situations when scrap demand is increasing and driving prices higher.

Flow of Ferrous Material

Conceptually, the inventory of scrap may be thought of as a pool of material, the size of which fluctuates according to the rates of additions to and withdrawals from the pool. In the case of obsolete ferrous scrap, additions to the pool occur as ferrous-containing products are discarded. Withdrawals take place as scrap is recovered and recycled.

The approach taken in this study traces the flow of ferrous materials through the U.S. economy (see Figure 1). The flow begins with the production of pig iron, hot-briquetted iron (HBI), and direct-reduced iron (DRI) which is then used by mills and foundries to produce iron and steel products, which are used by manufacturers of ferrous containing end-use products, which are consumed and eventually discarded.

Figure 1
Flow of Ferrous Material



SOURCES: U.S. Department of Commerce modified by Nathan Associates Inc.

Ferrous scrap is generated at three points in the material flow. Mills and foundries generate home scrap that is recycled within the mills and foundries. Manufacturers of ferrous-containing end-use products generate prompt scrap that is recycled through the material flow. Consumers of ferrous-containing end-use products generate obsolete scrap as they discard the products that have reached the ends of their useful lives.

At each point in the flow where ferrous material is transferred from one state into another, losses occur. A small portion of prompt scrap goes out of the flow with shop floor sweepings. Many obsolete home appliances and containers end up in landfills. Rail roof supports in coal mines are trapped by subsidence. Military goods are shipped overseas and never returned to the United States. And ferrous material in discarded end-use products oxidizes.

Although there is no precise definition for measuring system losses, in our analysis we assumed that material is lost when the object containing it is disposed of in a dump, landfill, or abandoned mine; the secondary use of the material, such as iron used in copper cementation, is destructive to the material; and when the cost to collect and process the material is prohibitive because of its remote location or dispersion.

Flow of Methodology

Our methodology consists of five major steps listed below and requires an initial benchmark estimate of the national inventory (potential reserves) of obsolete ferrous scrap.[8]

1. ***Estimate amount of ferrous material in annual U.S-production of ferrous-containing end-use products.*** Shipments from U.S. mills and foundries to U.S. manufacturers of 14 categories of end-use products are added to imports and adjusted downward to account for prompt scrap generated in the manufacture of end-use products.

   Material 1 =Shipments of Ferrous Material from Domestic and Foreign Mills and Foundries to U.S. Manufacturers of Ferrous-Containing End-Use Products - Prompt Scrap Generated in Manufacturing

2. ***Adjust estimate as necessary to account for ferrous material in end-use products exported from and imported into the U.S. economy.*** Foreign trade in each of the 14 end-use product categories is examined to determine whether net imports significantly affect the amount of ferrous material in end-use products consumed in the United States. Three categories are found to have significant net imports: automobiles, industrial machinery, and construction materials.

   Material 2 = Material 1 – Material in Exported End-Use Products + Material in Imported End-Use Products

3. ***Estimate recoverable obsolete ferrous scrap generated annually from the discard of ferrous-containing end-use products.*** End-use products have a useful life. For example, paint containers are generally discarded within a year. In contrast, structural beams can have useful lives exceeding 80 years. Product life statistics (minimum, median, and maximum ages) are used to estimate annual rates at which ferrous-containing end-use products are discarded. The amount of ferrous material in these discarded products is adjusted downward to account for losses from corrosion and wear and tear during product life as well as losses from discarded products that cannot be recovered, for example, products discarded in dumps or landfills.

   Recoverable Obsolete Ferrous Scrap = Material 2 in Discarded Products – Material 2 System Losses from Corrosion, Wear, and Tear during Product Life – Material 2 System Losses from Unrecoverable Discarded Products

4. ***Estimate annual net additions to the national inventory (potential reserves) of obsolete ferrous scrap.*** Annual net additions to inventory are calculated by subtracting the year's recovered obsolete ferrous scrap from the year's generated recoverable obsolete scrap and adjusting the difference downward to account for continuing

   Annual Net Addition to Inventory = Recoverable Obsolete Ferrous Scrap – Recovered Obsolete Ferrous Scrap – Corrosion Losses on Obsolete Ferrous Scrap

[8] Here, as in our previous studies, the benchmark year is 1955.

corrosion of the recoverable but not yet recovered scrap. At the end of any year the inventory of obsolete ferrous scrap will equal the year-end inventory of the prior year plus the current year's net addition to inventory.

5. ***Regionalize the national inventory.*** In the final step of the methodology, the national inventory (potential reserves) of obsolete ferrous scrap is disaggregated into nine U.S. Census Regions using statistics indicating the likely physical location of discarded products for each of the 14 end-use product categories.

3. Data Required by Each Step in the Methodological Flow

The volume of data required to estimate inventory is significant, requiring numerous sources. The specific data required in each step of the methodology, the sources from which we obtained these data, and details on intermediate calculations required in our methodology are described here for each step in the methodology.

Step 1: Ferrous Material in U.S. Produced End-Use Products

Estimation of ferrous material in U.S. produced end-use products requires data on domestic shipments of ferrous material to manufacturers, imports of ferrous material used in manufacturing, and prompt scrap generation rates in manufacturing.

MATERIAL SHIPPED TO MANUFACTURERS

Manufacturers of ferrous-containing end-use products obtain ferrous materials from domestic iron and steel mills and foundries, as well as foreign mills and foundries. Two sources provide data for estimating the total amount of ferrous material received by manufacturers of end-use products: the American Iron & Steel Institute (AISI) and the publication *Modern Castings*.

Domestic Mill Shipments and Net Imports

AISI publishes three series of statistics used in our analysis:

- Annual shipments from domestic mills to each of the 19 AISI-defined markets,
- Annual shipments by product and AISI-defined market, and
- Annual imports from foreign mills by product.

Mill product imports are not reported by AISI-defined market category. We must estimate imports by market. We do so using annual domestic shipments by product and market for the years 2003 and 2009. The derivation is explained following the discussion of foundry shipment data and sources.

Foundry Shipments and Net Imports

Our methodology requires domestic foundry shipments of for-sale products. In our 2005 study, production statistics were obtained from the U.S. Census Bureau's annual *Current Industrial Report* for iron and steel castings. However, this publication was discontinued after 2003. Production statistics for 2004 through 2008 were obtained from the annual *Census of World Casting*, which is published by the foundry magazine *Modern Casting*. The census has been conducted since 1967, and provides statistics on the production of iron (gray, ductile, and malleable) and steel castings in foundries for more than 30 countries. We compared the total production statistics from the *Census of World Casting* with those in the *Current Industrial Report* for the years 1998 through 2003 and found a cumulative difference of only 4 percent.

While the *Census of World Casting* provides total production figures for the United States, it does not distinguish between for-sale and own-use production. In order to derive the portion of total production that is for-sale for the years 2004 through 2008, we applied the percentage of for-sale production to total production during the period from 2000 through 2003 (84.2 percent). In addition, the *Census of World Casting* does not report statistics on the exports and imports of ferrous foundry products. In order to estimate the net imports for 2004 through 2008, we applied the percentage of net imports to total production over the period from 2000 through 2003 (2.3 percent).

Lastly, the *Census of World Casting* for 2009 production has yet to be published. Hence, we estimated for-sale production plus net imports in 2009 using the following methodology. First, for the years 2000 through 2008 we compared the year-over-year percentage difference in domestic shipments plus imports of steel with the year-over-year percentage difference in foundry products for-sale production plus net imports. We found these steel and foundry products percentage differences to be similar over time. Therefore, we estimated 2009 for-sale foundry production plus net imports by applying the 2008 to 2009 percentage difference in shipments plus imports of steel (-45 percent) to 2008 foundry for-sale production plus net imports (see Appendix C, Table C-44 for all foundry data and their specific sources; allocation factors are in Table C-45; calculation of 2009 foundry shipments are in Table C-46).

Distributing Mill and Foundry Shipments to End-Use Product Categories

Our methodology requires data on the ferrous content of each of 14 categories of ferrous-containing end-use products which will eventually be discarded. Therefore, we must convert ferrous shipments by AISI-defined market into ferrous shipments by end-use product.

We begin with mill shipment imports. Recall that AISI reported imports by product only and domestic shipments by product and market. Using the 2003 and 2009 domestic shipments by product and market, we calculated distributions of domestic shipments of mill products by market category in each of these years, and then used the distributions to allocate annual imports by product to annual imports by market.[9] The results, data, and calculations are in Appendix C, Tables C-1 through C-43.

With mill shipments net of foreign trade now quantified by AISI-defined market category, we employ a four-stage process to distribute AISI market specific mill and foundry shipments net of foreign trade into our 14 categories of ferrous-containing end-use products. The process utilizes additional information previously provided by the U.S. Bureau of Mines.

In stage one, we aggregate AISI mill shipments and Census Bureau foundry shipments into the seven demand categories of the U.S. Bureau of Mines using (Table 2). Allocations of specific AISI and Census market categories sum to 100 percent, with the exception of industrial fasteners, only half of which are allocated to demand categories.[10] For example, with respect to Census Bureau foundry shipments, 25 percent are allocated to transportation, 25 percent are allocated to construction, 35 percent are allocated to machinery, five percent are allocated to oil and gas, five percent are allocated to household appliances, and the remaining five percent are allocated to the "other" demand category.

In stage two, we disaggregate the seven Bureau of Mines demand category totals into our 14 end-use product categories. Five of the Bureau's demand categories map directly into our end-use product categories, but two (machinery and transportation) consist of more than one end-use category

Bureau of Mines Demand Category	*End-Use Product Category*
1. Appliances	1. Consumer durables
2. Containers/packaging/shipping material	2. Containers
3. Construction	3. Construction materials
4. Oil and gas	4. Oil and gas materials
5. Other	5. Material not elsewhere classified
6. Machinery	6. Agricultural machinery
	7. Electrical machinery
	8. Industrial machinery
	9. Mining materials
7. Transportation	10. Aircraft and aerospace
	11. Automotive
	Rail transportation
	12. Railroad equipment
	13. Railroad rails
	14. Ship building & marine equipment

[9] The 2003 distribution was used to allocate 2004 through 2008 imports. The 2009 distribution was used to allocate 2009 imports. We did not interpolate distributions for years in which we did not have actual data.
[10] We gross up shipments by end-use category to include the remaining half of industrial fasteners.

Table 2
Aggregation of AISI Mill Shipments and Census Bureau Foundry Shipments into Bureau of Mines Demand Categories

Bureau of Mines Demand Categories	AISI and Census Bureau Shipment Categories
1. Transportation	= Automotive
	+ Railroad
	+ Ship building and marine
	+ Aircraft
	+ 0.25 x Steel service centers
	+ 0.25 x Foundry shipments
2. Construction	= Construction, including maintenance
	+ Contractor's products
	+ 0.25 x Industrial fasteners
	+ 0.25 x Steel service centers
	+ 0.75 x Steel for converting and processing
	+ 0.60 x Non-classified
	+ 0.25 x Foundry shipments
3. Machinery	= Machinery and intustrial equipment and tools
	+ Electrical equipment
	+ Agricultural total
	+ Mining, quarrying, and lumbering
	+ Independent forging
	+ 0.60 x Other domestic and commercial equipment
	+ 0.20 x Steel service centers
	+ 0.25 x Industrial fasterners
	+ 0.35 x Foundry shipments
4. Oil and gas	= Oil and gas supply housed
	+ Oil and gas drilling
	+ 0.10 x Steel for converting and processing
	+ 0.05 x Foundry shipments
5. Household applian	= Appliances
	+ 0.40 x Other domestic and commercial equipment
	+ 0.15 x Steel service centers
	+ 0.05 x Foundry shipments
6. Containers	= Containers
7. Other	= Ordinance and military
	+ 0.15 x Steel service centers
	+ 0.05 x Foundry shipments
	+ 0.15 x Steel for converting and processing
	+ 0.40 x Non-classified

In stage three, we disaggregate the machinery and transportation demand category totals into category components using AISI component shares of AISI group totals.

AISI Market Component	*Bureau of Mines Demand Category*
Agricultural	Machinery
Electrical equipment	
Machinery, industrial equipment, & tools	
Mining, quarrying, and lumbering	
Aircraft and aerospace	Transportation
Automotive	
Rail transportation	
Ship building & marine equipment	

In the fourth and final stage, we disaggregate rail transportation market shipments into the two end-use product categories it comprises: railroad equipment and railroad rails. The allocation is based on shares of railroad equipment and railroad rail value as reported by the American Iron and Steel Institute in its *Annual Statistical Report* (Appendix A, Table A-58).

These aggregations and disaggregations of data, as well as the final distributions of annual shipments by ferrous-containing end-use product category are presented in Appendix A. See Table A-59 for the final distribution; Tables A-4 through A-30 for data that are first aggregated into the seven Bureau of Mines demand categories ; and Table A-31 through A-57 for aggregations into demand categories and disaggregations into end-use product categories.

PROMPT SCRAP

According to Hogan and Koelble, in 1974, prompt industrial scrap generated during the manufacture of ferrous-containing end-use products ranged from six percent to 31 percent of ferrous material consumed by manufacturers.[11] Across all 19 AISI-defined destination markets for steel mill products, the average prompt scrap generation rate was 16.6 percent.

In our 2005 update, we reviewed the applicability of these rates, and found that a number of researchers have checked the prompt rates over the years and found them to be generally comparable to the 1974 rate.[12] In addition, we found that the Steel Recycling Institute relies on the 1974 Hogan and Koelble estimates and considers them valid based on their knowledge of the industry,[13] and USGS estimates a prompt scrap rate of 15 percent of all steel shipments.[14]

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[11] William T. Hogan and Frank T. Koelble, *Purchased Ferrous Scrap Demand and Supply Outlook*, Industrial Economic Research Institute, Fordham University, New York, June 1977.
[12] Personal communication on 1/3/05.
[13] Personal communication with Bill Heenan, President of the Steel Recycling Institute, 1/3/05.
[14] Personal communication with Michael Fenton, Commodity Specialist, Minerals Division, 1/24/05.

Since the publication of our 2005 study, we found prompt scrap rates ranging from 6 percent to 20 percent in a presentation in 2008 to the International Iron and Steel Institute (IISI).[15]

Given these findings and the unlikelihood that prompt scrap rates would have changed substantially since 2005, we have continued to use the prompt scrap generation rates estimated by Hogan and Koelble and used in our previous studies.[16]

Because Hogan and Koelble's prompt scrap generation rates are AISI market specific, we must distribute prompt scrap generated into our 14 categories of ferrous-containing end-use products. We do so in a process parallel to the process of distributing shipments of mill and foundry products (see Appendix A, Tables A-4 through A-30 for AISI data; Tables A-31 through A-57 for aggregations of AISI data into demand categories and disaggregations into end-use product categories; and Table A-60 for final estimates of product-specific prompt scrap generated annually in manufacturing).

Step 2: Net Imports of End-Use Products Containing Ferrous Material

In our previous studies we determined that net imports of automotive, industrial machinery, and construction products were of sufficient magnitude to have effect on the potential reserves of obsolete ferrous scrap. After re-examining each of the product categories, we found that these three categories continue to be the only categories of significant effect on potential reserves. Our estimates of the ferrous content of net imports of these end-use products are in Appendix A, Table A-61. The underlying data are in Appendix E.

AUTOMOTIVE

Estimation of net imports of ferrous material contained in automotive products requires data on vehicles imported and exported and the ferrous content of those vehicles. Our analysis consists of three steps. First, we compute the number of vehicles (both passenger and commercial) exported from and imported into the United States. Second, we estimate the weight of these vehicles. Third, we estimate the proportion of the total weight that is ferrous material.

Numerous vehicle trade statistics are compiled by Wards Automotive in its annual *Motor Vehicle Facts and Figures* publication. With respect to passenger vehicles, Wards reports the

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15 "Revised Model Calculations on Medium Term Outlook of Demand and Arising of Ferrous Scrap for 1996 – 2016, Presentation made at IISI Meeting No. 8, April 10, 2008, Istanbul, Turkey.

16 Note that the prompt scrap generation rates of Hogan and Koelble are reported by AISI-defined market categories. Hence, the prompt scrap rates for each of our 14 categories of ferrous-containing end-use products are averages of the Hogan and Koelble rates weighted by our final distribution of AISI-reported shipments into our 14 end-use product categories.

number of units of passenger vehicles exported and imported, but not vehicle weight. We used data maintained by the United States National Highway Traffic Safety Administration (NHTSA) to estimate weight. These NHTSA data contain the curb weight[17] of each vehicle the NHTSA performs safety tests on. In addition, the data contain information on the make, model, and model year of each tested vehicle. To derive the annual export weight of U.S. manufactured passenger cars, in each year we calculate the average curb weight of the U.S. model cars tested by the NHTSA and apply these weights to the number of cars exported in that year.

With respect to imports of passenger vehicles, Wards reports the number of passenger vehicles imported by country of origin. We grouped these imports into five regions: Canada, Mexico, Japan, Germany, and Rest of World. For Canada and Mexico we applied the average curb weight of U.S. manufactured models in that year. For Japan, we identified the models produced by Japanese manufacturers, and calculated the average curb weight of those vehicles. The same process was followed for Germany and rest-of-world.

For commercial vehicles, Wards separates U.S. factory sales by weight class in each year. We apply this distribution to the number of commercial vehicles exported in that year to estimate the total export weight of commercial vehicles. Wards also reports retail sales of imported trucks and buses by weight class and manufacturer. We apply this distribution to the total number of imported commercial vehicles in each year to calculate the total import weight of commercial vehicles.

After computing the total weight of exported and imported passenger and commercial vehicles, it is necessary to adjust these weights downward to remove non-ferrous weight.

We rely on several sources to estimate the ferrous content of exported vehicles. Ferrous content of American manufactured passenger cars is reported in *Motor Vehicle Facts and Figures*. Through 2004 the statistics reported by Wards on ferrous content were developed by the American Metal Market (AMM). However, AMM discontinued their analysis after 2004. For the years 2004 to 2009, Wards reports data from the American Chemistry Council (ACC). We compared the ferrous content percentages from the AMM and ACC for 2003 and 2004 (two years of overlap) and found that the figures differed by only 0.3 percent and 0.2 percent, respectively. Hence, we use the ferrous content percentage from the ACC figures for the years 2005 through 2009. Wards does not provide statistics on the ferrous content of American manufactured trucks and buses. In the absence of these data, we applied the American passenger car ferrous percentages to the total weight of American manufactured exports of trucks and buses as reported by Wards Automotive. Although more specific data are

[17] Curb weight is the weight of a vehicle with a full gas tank and no passengers or cargo.

preferred, nearly two-thirds of truck and bus exports weigh less than 6,000 pounds, and these light trucks are relatively similar to passenger cars according to an industry expert.[18]

Information on the ferrous content of imported vehicles is sparse. As discussed in our 2005 study, there has been a general decline in ferrous content of automobiles as manufacturers have substituted aluminum for iron in engine blocks. For our 2005 study we consulted with an expert in the automotive and aluminum industries, and these consultations revealed that Japanese manufacturers began making this substitution five to 10 years earlier than American manufacturers. Europe also began substituting aluminum for iron earlier than America.[19] Therefore, we assumed that the average Japanese car had the ferrous content of an American car produced 10 years later than the Japanese model year. For Europe and other countries, we used five years. On the basis of these trends, we estimated the ferrous content of imported automobiles, as well as trucks and buses, 95 percent of which weighed fewer than 6,000 pounds. We used this methodology here.

INDUSTRIAL MACHINERY

The weight of industrial machinery imported and exported for 2004 through 2009 is calculated from international trade data maintained by the United Nations (COMTRADE).[20] While COMTRADE reports the total weight of imports and exports, most industrial machinery contains non-ferrous materials. A 2007 material flow model published in *Resources, Conservation and Recycling* estimates a ferrous content of 71 percent for mechanical machinery in the United Kingdom.[21] Hence, we have multiplied the total net import weight reported by COMTRADE by 0.71 to derive the ferrous weight of imports and exports of industrial machinery.[22]

CONSTRUCTION MATERIALS

The net imports of construction materials were included for the first time in our 2005 study as we found that net imports grew steadily from 767,000 tons in 1983 to over three million tons in 2003. Net imports continued to increase until 2006, reaching 4.9 million tons, and then declined with the economic downturn to two million tons in 2009. As in our 2005 study, our annual net import figures of the ferrous content of imported construction materials were

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[18] Personal communications with Dick Schultz, Project Consultant with Ducker Worldwide, previously the President of Alcoa Automotive Structures and the Director of Worldwide Automotive Products for Alcoa in Southfield, Michigan.

[19] *Ibid.*

[20] Data can be accessed online at http://comtrade.un.org.

[21] ,J. Davis et. al., “Time-dependent material flow analysis of iron and steel in the UK. Part 2: Scrap generation and recycling,” Resources, Conservation and Recycling 51 (2007).

[22] In our 2005 study, we did not adjust the total weight of the exports and imports of industrial machinery downward to account for the weight of non-ferrous materials. We have rectified this by adjusting the total weight of the net imports of industrial machinery for the years 1983 through 2003, with the same methodology used for the years 2004 through 2009.

calculated using data compiled by the American Iron and Steel Institute in its *Annual Statistical Report*.

Step 3: Recoverable Ferrous Material in Discarded End-Use Products

Products are taken out of service (discarded) at the ends of their useful economic lives. The rates at which they are discarded can significantly affect the amount of obsolete ferrous scrap generated in any year.

PRODUCT DISCARD RATES

The useful life of any ferrous containing end-use product can be considered probabilistic by nature. Seemingly identical products, such as the same car model produced on a common assembly line, can have different useful lives because of disparities in factors such as upkeep and frequency of use. Accidents, faulty construction, and misuse also influence the useful life of a product. This inherent uncertainty argues against assuming that all end-use products within a sector put into use in the same year will be discarded in the same year.

In our prior studies, we derived annual discard rates by fitting an S-shaped curve to statistics on the median and maximum lives of products. The shape of the curve was intended to represent the dynamics of product life.

Since our 2005 study, we have reviewed a number of academic studies that take a more advanced approach to modeling the process of product discard by using probability distributions. Modeling product lifetimes with probability distributions accounts for their uncertain nature. In addition, employing a probability distribution has the effect of smoothing the inflow of end-use products into the economy, which is believed to generate more realistic estimates of the quantity of discarded end-use products.[23]

Several probability distributions have been proposed to model product lifetimes. These include the Weibull,[24] beta,[25] and normal (Gaussian) distributions.[26] The Weibull distribution has been found to provide a good fit for many different types of lifetime data analyzed in reliability engineering.[27] The beta distribution is frequently used when there is little

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[23] J. Davis et. al., "Time-dependent material flow analysis of iron and steel in the UK. Part 2: Scrap generation and recycling," Resources, Conservation and Recycling 51 (2007), p. 131.
[24] *See*, for example, http://mathworld.wolfram.com/WeibullDistribution.html.
[25] *See*, for example, http://mathworld.wolfram.com/BetaDistribution.html.
[26] *See*, for example, http://mathworld.wolfram.com/NormalDistribution.html.
[27] Shigemi Kagawa, "Does product lifetime extension increase our income at the expense of energy consumption?," forthcoming, Energy Economics, available online September 2008.

information on the distribution of a random variable.[28] The normal distribution has also been used in numerous end-of-life product studies.[29] However, a prior study did not find substantial differences between these three distributions.[30]

In this study we use the normal distribution to model the useful lives of ferrous containing end-use products. In addition to the fact that prior studies have employed the distribution, we find the theoretical case compelling. Statistical theory demonstrates that the distribution of the mean of independent observations from any distribution is approximately normal.[31] Thus, irrespective of the underlying distribution of product lifetimes, the distribution of the *average* lifetime follows the normal distribution.

To employ the normal distribution, information on the minimum, maximum, and median[32] useful life is required for each end-use product category. In our 2005 study, we conducted a thorough review of the useful life literature, a detailed description of which can be found in the study. Our research for this study did not yield any new data that suggested we should change our lifetime parameters. However, the structure of the normal distribution requires us to make some modifications to the useful lives reported in our 2005 study.

The mathematical structure of the normal distribution requires that the minimum and maximum useful lives must be equidistant from the median. In several instances this would lead to a negative minimum useful life. Hence, we modified the median useful lives of some product categories. For aircraft, we modified the median useful life from 20 years to 30 years. For construction materials, the median useful life was modified from 32 years to 40.5 years. For materials not elsewhere classified, we modified the median useful life from 25 years to 27 years. In addition, the maximum useful life of automobiles was modified from 12.5 years in the 1980s and 16.9 years in the 1990s to 15 years. Table 3 lists the useful life parameters used in this study. Appendix D contains the mathematical derivations for modeling the useful lives using a normal distribution.

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[28] M.T. Melo, "Statistical analysis of metal scrap generation: the case of aluminum in Germany," Resources, Conservation and Recycling 26 (1999), p. 101.
[29] *Ibid*., p. 97.
[30] M.T. Melo, "Statistical analysis of metal scrap generation: the case of aluminum in Germany," Resources, Conservation and Recycling 26 (1999) , compares the normal, Weibull, and beta distributions; and,J. Davis et. al., "Time-dependent material flow analysis of iron and steel in the UK. Part 2: Scrap generation and recycling," Resources, Conservation and Recycling 51 (2007), compares the Weibull and beta distributions.
[31] This is the Central Limit Theorem. See, for example, DeGroot and Schervish, "Probability and Statistics," 3rd edition, Addison-Wesley, 2002, pp. 282-290.
[32] Because the normal distribution is symmetric the median is equal to the mean (or average). Hence, the median lifetimes used in our prior studies can be used as the mean in this discard analysis.

Table 3
Useful Lives of End-Use Products by Category (years)

Category Number	Description	Median Life	Maximum Life
1	Agricultural machinery /a	23	35
2	Aircraft and aerospace	30	60
3	Automotive /b	15	30
4	Construction materials	40.5	81
5	Consumer durables	18	28
6	Containers	na	1
7	Electrical machinery	24	35
8	Industrial machinery	24	35
9	Materials, nec	27	54
10	Mining materials	6	10
11	Oil and gas materials	16	30
12	Railroad equipment	19	38
13	Railroad rails	40	55
14	Ship building and marine equipment	32	40

Notes: "na" means not applicable and "nec" means not elsewhere classified.

a. Includes agricultural machinery and other agricultural materials.

b. Median lives for 1980 models and 1990 models.

SOURCES: Nathan Associates Inc. as described in Iron and Steel Scrap Accumulation and Availability as of December 31, 2009, Institute of Scrap Recycling Industries, Washington, D.C., 2010.

In addition to using this new methodology to estimate obsolete scrap generation for the years 2005 through 2009, we modified our estimates of obsolete scrap generation for the years 1983 through 2003 using this methodology. While the modification results in a cumulative difference of less than one percent compared to the figures reported in our 2005 study, we found that our new methodology estimates less generation in the early years of end-use product lives and is likely a more accurate reflection of the discard pattern of end-use products.

UNRECOVERABLE MATERIAL IN DISCARDED PRODUCTS

Many end-use products are discarded in a manner or place that does not allow for recovery of their ferrous material. Indeed, some ferrous material in these products is lost forever. Thus, system losses must be taken into account when estimating the inventory of obsolete ferrous scrap.

The first system loss we account for occurs during use of ferrous-containing end-use products. Some ferrous material is lost through corrosion, wear, and tear. We continue to account for this component of loss by using a cumulative loss rate of one percent of the ferrous content of end-use products over the entire useful lives of the products. Hence, at the time of product discard, the ferrous content of the discarded product is 99 percent of the ferrous content of the newly produced product.

The second and more substantial system loss occurs following discard of ferrous-containing products. In this analysis, we continue to consider material in products disposed of in dumps or landfills, material destroyed in secondary use, and material in products discarded in remote locations as lost material.

Originally, to quantify this second type of system loss we examined studies by the Battelle Memorial Institute, A.T. Kearney, the U.S. Bureau of Mines, and the National Center for Resource Recovery.[33] Our subsequent updates continued to rely on these studies for estimates of the amount of ferrous material in discarded end-use products that is unrecoverable. In our 2005 study we made one adjustment for ship building and marine equipment. Because vessels are scrapped and dismantled abroad, and not in the United States, the ferrous material in these discarded products is not recoverable. Hence, we modified the unrecoverable percentage to 100 percent for this product category.

After making this adjustment for ship building and marine equipment, the average percentage of obsolete ferrous scrap generated but not recoverable is 30 percent (Table 4).

Our 2005 report noted that the Steel Recycling Institute estimates that 12 percent of ferrous material in discarded products is unrecoverable.[34] In the course of our work for this study, we found a 2005 International Iron and Steel Institute (IISI) report which estimates the unrecoverable rate to be 14.1 percent.[35]

Although both the SRI and IISI studies indicate that a higher percentage of obsolete ferrous scrap is available for recovery than our model suggests, we have opted to continue to use our recovery rates because they take a more conservative position on the amount of recoverable obsolete scrap.

The details of all quantities derived at this point in the methodology are in Appendix B, Tables B-1 through B-15. Ferrous shipments, prompt scrap generated, the ferrous content of end-use products consumed in the United States, obsolete scrap generated, and the obsolete scrap that is unrecoverable are presented annually for 1983 through 2009 by end-use product category and in total across all product categories.

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[33] See Nathan Associates, 1977, pp. 63-70.

[34] Information was provided by Bill Heenan, President of the Steel Recycling Institute, in a telephone conversation on 1/19/05.

[35] Application of the IISI LCI Data to Recycling Scenarios, Draft IISI Recycling Methodology, 2005.

Table 4
Share of Generated Obsolete Ferrous Scrap that Is Not Recoverable

Category Number	Description	Share
1	Agricultural machinery /a	0.30
2	Aircraft and aerospace	0.01
3	Automotive	0.08
4	Construction materials	0.32
5	Consumer durables	0.91
6	Containers	0.97
7	Electrical machinery	0.13
8	Industrial machinery	0.12
9	Materials, nec	0.40
10	Mining materials	0.25
11	Oil and gas materials	0.50
12	Railroad equipment	0.02
13	Railroad rails	0.02
14	Ship building and marine equipment	1.00
	Weighted average /b	0.30

Note: "nec" means not elsewhere classified.

a. Includes agricultural machinery and other agricultural materials.

b. Weighted based on generated obsolete ferrous scrap from 2004 through 2009.

SOURCES: Nathan Associates Inc. as described in Iron and Steel Scrap Accumulation and Availability as of December 31, 2009, Institute of Scrap Recycling Industries, Washington, D.C., 2010.

Step 4: National Inventory of Obsolete Ferrous Scrap

The end-of-2009 national inventory of obsolete ferrous scrap equals the end-of-1955 benchmark national inventory adjusted for continuing corrosion losses plus the cumulative annual net additions to the national inventory of obsolete ferrous scrap.

An annual net addition to the inventory of obsolete ferrous scrap occurs when the amount of generated and recoverable obsolete scrap exceeds the amount of recovered obsolete scrap. The excess must be adjusted downward to account for continuing loss of material from corrosion. So, at this point in our methodology, we need to estimate the annual amount of generated obsolete ferrous scrap that is recovered and the corrosion loss on net annual additions to inventory (see Appendix A, Table A-2 for estimates of annual net additions to inventory adjusted for corrosion losses).

RECOVERED OBSOLETE FERROUS SCRAP

The *Minerals Yearbook* and, more recently, the *Minerals Industry Survey* of the USGS provide statistics from which we calculate the amount of ferrous scrap recovered annually (see Appendix A, Tables A-4 through A-30). More specifically, the statistics include annual iron and steel scrap purchases, imports, and exports.

However, these statistics are not reported by end-use product category and they do not differentiate prompt scrap from obsolete scrap. Therefore, we must first estimate the amount of prompt ferrous scrap recovered annually and then subtract it from total ferrous scrap recovered annually to derive an estimate of obsolete ferrous scrap recovered annually. As in our last study we use a prompt scrap recovery rate of 98.5 percent, which is based on an internal study conducted by the Steel Recycling Institute in 2000.[36]

CORROSION LOSSES

Corrosion losses continue to occur on inventoried obsolete ferrous scrap. Here and in our previous studies, we used an average corrosion rate of 0.36 percent per year, based on unpublished data provided by U.S. Steel.

Step 5: Inventory by Region

In our final step, we disaggregate our estimate of the year-end 2009 national inventory of obsolete ferrous scrap into nine U.S. Census Regions. The disaggregation occurs for each of the 14 categories of ferrous-containing end-use products and each year. The disaggregation was accomplished using proxies likely to indicate the location of use and disposal for each product category. Census-region distributions of each proxy were calculated for each year and then used to allocate to regions the annual net additions to the national inventory.

For all end-use product categories, the proxies used in this update are the same as the proxies used in our 2005 study. Table 5 lists the proxy used for each end-use category, and the years for which the proxy is available. The footnotes denote the source for each, which are all government institutions or industry associations. Appendix F provides detailed data for regionalizing our national inventory estimate.

However, given the timing of this update not all proxy values are available yet for 2009. When values were not available for 2009, we relied on 2008 values.

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[36] Information was provided in a telephone conversation with the Steel Recycling Institute on 1/18/05.

Table 5

Proxies Used to Regionalize the National Inventory of Obsolete Ferrous Scrap

Ferrous-Containing End-Use Product Category	Proxy	Years Available
Agricultural machinery /a	Net value added in agriculture	1983-2008
Aircraft and aerospace /b	General aviation and air taxi aircraft by state of based aircraft	1996-2008
Automotive /c	Automobile, bus, and truck registrations	1983-2008
Construction materials /d	Gross state product, construction	1983-2008
Consumer durables /e	Disposable personal income	1983-2009
Containers /f	Population	1983-2009
Electrical machinery /d	Gross state product, manufacturing	1983-2008
Industrial machinery /d	Gross state product, manufacturing	1983-2008
Materials, nec /f	Population	1983-2009
Mining materials /d	Gross state product, mine, excep oil and gas extraction	1983-2007
Oil and gas materials /g	Oil production	1984-2008
Railroad equipment /h	Rail miles	2002 & 2008
Railroad rails /h	Rail miles	2002 & 2008
Ship building and marine equipment	na	na

Note: "nec" means not elsewhere classified and "na" means not applicable.

a. U.S. Department of Agriculture, Economic Research Service at http://www.ers.usda.gov/Data/FarmIncome/finfidmu.htm.

b. Federal Aviation Administration, Aviation Policy and Plans, General Aviation and Air Taxi Acitivty Survey (upto 2003), General Aviation and Air Taxi Activity and Avionics Survey (for years 2004-2005), General Aviation and Part 135 Activity Surveys(for years 2006-2008).

c. U.S. Department of Transportation, Federal Highway Administration, Office of Highway Policy Information; 1983 - 1995 from Highway Statistics Summary to 1995, Table MV-201; 1996 - 2008 from Highway Statistics, Table MV-1.

d. U.S. Department of Commerce, Bureau of Economic Analysis, Regional Economic Accounts at http://www.bea.gov/bea/regional/gsp/.

e. U.S. Department of Commerce, Bureau of Economic Analysis, Annual State Personal Income, SA51-53-personal income at http://www.bea.gov/regional/spi/default.cfm?selTable=summary.

f. U.S. Bureau of the Census, Population Estimates Branch; 1980-1989 from the table Intercensal Estimates of the Total Resident Population of States: 1980 to 1990 at http://www.census.gov/popest/archives/1980s/st8090ts.txt; 1990-1999 from ST-99-3 State Population Estimates: Annual Time Series, July 1, 1990 to July 1, 1999 at http://www.census.gov/popest/archives/1990s/ST-99-03.txt; 2000-2009 from Table 1: Annual Estimates of the Population for the United States and States, and for Puerto Rico; April 1, 2000 to July 1, 2009 at http://www.census.gov/popest/states/tables/NST-EST2009-01.xls.

g. U.S. Department of Energy, Energy Information Administration at http://www.eia.doe.gov/pub/oil_gas/petrosystem/petrosysog.html.

h. Association of American Railroads; Statistics for 2002 available at http://www.aar.org/AboutTheIndustry/StateInformation.asp. ; Statistics for 2008 available at http://www.aar.org/~/media/AAR/InCongress_RailroadsStates/2009rankings.ashx

SOURCES: See notes.

4. Results

As of December 31, 2009 the national inventory of obsolete ferrous scrap was 1,179.9 million tons (Table 6). Each year since December 31, 2003, the inventory has increased. The 2004 through 2009 cumulative increase after accounting for corrosion losses totaled 103.9 million tons or approximately 17.3 million tons per year. The average annual amount of generated and recoverable obsolete ferrous scrap was approximately 65 million tons. The average annual amount of obsolete scrap recovered was approximately 47 million tons. All annual amounts are in Appendix A, Table A-2.

Of the 14 ferrous-containing end-use products included in our analysis, the greatest amount of obsolete ferrous scrap was generated through the discard of construction materials (Table 7), followed closely by automotive products. More than half (53.7 percent) of all obsolete ferrous scrap generated from 2004 through 2009 was generated from discarded construction materials (29.1 percent) and automotive products (24.6 percent). As with our 2005 study, discarded aircraft and aerospace equipment generated the smallest amount of recoverable obsolete ferrous scrap (0.1 percent).

The national inventory is located throughout the country (Table 8). Approximately 32.7 percent of the inventory is located in the South Atlantic (16.5 percent) and East North Central (16.2 percent) districts combined. Another 29.1 percent is located in the West North Central and West South Central districts combined. This distribution is based on a weighted average of the distribution of proxies used in our previous analyses and the distribution of our current proxies.

Looking forward to the years 2010 through 2014, based on the ferrous containing end-use products entering the U.S. economy through 2009, we estimate 448.7 million tons of obsolete ferrous scrap will be generated, of which 344.8 million tons will be recoverable. Out of this recoverable obsolete ferrous scrap, 84.9 percent will be in the form of discarded construction materials, vehicles, and machinery. Table 9 details the recoverable obsolete ferrous scrap by product category for the years 2010 through 2014. It should be noted that these figures are conservative, as they do not reflect the discard of any end-use products that will enter the U.S. economy after 2009.

Table 6
Summary of the National Inventory of Obsolete Ferrous Scrap as of December 31, 2009

Item	Amount
End-of-year 1955 resource base /a	537,000
Adjustment to potential reserves /b	(70,884)
End-of-year 1955 inventory (potential reserves)	466,116
Adjustment for corrosion	
Prior to 1956 /c	(62,926)
1956-1983 /d	(40,642)
1984-2003 /e	(26,104)
2004-2009 /f	(7,267)
Adjusted end-of-year 1955 inventory	329,178
Net additions to inventory	
1956-1983	338,921 /g
1984-2003	407,908
2004-2009	103,880
End-of-year 2003 inventory	1,179,887

a. From Battelle Memorial Institute, Final Report on a Survey and Analysis of the Supply and Availability of Obsolete Iron and Steel Scrap, prepared for US Department of Commerce, BDSA, January 15, 1957.

b. Equals 13.2 percent of the 1955 resource base. See the 1977 Nathan Associates report, page 77.

c. Equals the 1955 potential inventory multiplied by 0.36 percent per year and 37.5 years. See the 1977 Nathan Associates report, page 79.

d. Equals the 1955 potential inventory less adjustment for corrosion prior to 1956 multiplied by 0.36 percent and 28 years.

e. Equals the 1955 potential inventory less adjustments for corrosion prior to 1984 multiplied by 0.36 percent and 20 years.

f. Equal to 1955 base inventory less adjustment for corrosion prior to 2004 multiplied by 0.36 percent and 6 years.

g. Net addition is less than amount presented in 2003 study because of continuing corrosion since 2003.

SOURCES: Nathan Associates Inc. and sources cited in footnotes.

Table 7

Obsolete Ferrous Scrap Generated and Recoverable by End-Use Product Category, 2004-2009 (thousand tons except as noted)

Category Number	Description	Generated Obsolete Scrap	Share of Total	Recoverable Obsolete Scrap	Share of Total
1	Agricultural machinery /a	14,647	2.8%	10,253	2.6%
2	Aircraft and aerospace	438	0.1%	434	0.1%
3	Automotive	128,914	24.6%	118,601	30.4%
4	Construction materials	152,499	29.1%	129,624	33.2%
5	Consumer durables	32,451	6.2%	2,921	0.7%
6	Containers	17,885	3.4%	537	0.1%
7	Electrical machinery	31,559	6.0%	27,456	7.0%
8	Industrial machinery	52,793	10.1%	46,458	11.9%
9	Materials, not elsewhere classified	43,718	8.3%	26,231	6.7%
10	Mining materials	4,189	0.8%	3,141	0.8%
11	Oil and gas materials	22,968	4.4%	11,484	2.9%
12	Railroad equipment	7,193	1.4%	7,049	1.8%
13	Railroad rails	5,857	1.1%	5,740	1.5%
14	Ship building and marine equipment	8,594	1.6%	-	-
	Total	523,704	100.0%	389,928	100.0%

a. Includes agricultural machinery and other agricultural materials.

SOURCE: Nathan Associates Inc.

Table 8

Regional Distribution of the National Inventory of Obsolete Ferrous Scrap as of December 31, 2009.

Region	2003 Year-End Inventory as of End of 2009	Share of Total /a	2004-2009 Net Additions	Share of Total /b	2009 Year-End Inventory	Share of Total
New England	92.7	8.6%	4.7	4.5%	97.4	8.3%
Middle Atlantic	93.6	8.7%	11.5	11.1%	105.1	8.9%
South Atlantic	175.5	16.3%	19.2	18.4%	194.6	16.5%
East North Central	175.3	16.3%	16.2	15.6%	191.5	16.2%
West North Central	162.1	15.1%	8.0	7.7%	170.1	14.4%
East South Central	36.5	3.4%	6.0	5.8%	42.5	3.6%
West South Central	159.7	14.8%	13.4	12.9%	173.1	14.7%
Mountain	70.0	6.5%	7.9	7.6%	77.8	6.6%
Pacific	110.6	10.3%	17.0	16.4%	127.7	10.8%
All Regions	1076.0	100.0%	103.9	100.0%	1179.9	100.0%

a. Based on proxies used in previous studies.

b. Based on current set of proxies.

SOURCE: Nathan Associates Inc.

Table 9

Obsolete Ferrous Scrap Generated and Recoverable by End-Use Product Category (based on end-use products entering the U.S. economy before 2010), 2010-2014 (thousand tons except as noted)

Category Number	Description	Generated Obsolete Scrap	Share of Total	Recoverable Obsolete Scrap	Share of Total
1	Agricultural machinery /a	9,245	2.1%	6,471	1.9%
2	Aircraft and aerospace	333	0.1%	329	0.1%
3	Automotive	117,501	26.2%	108,101	31.4%
4	Construction materials	140,016	31.2%	119,014	34.5%
5	Consumer durables	29,691	6.6%	2,672	0.8%
6	Containers	-	0.0%	-	0.0%
7	Electrical machinery	26,877	6.0%	23,383	6.8%
8	Industrial machinery	40,508	9.0%	35,647	10.3%
9	Materials, not elsewhere classified	41,566	9.3%	24,940	7.2%
10	Mining materials	2,762	0.6%	2,071	0.6%
11	Oil and gas materials	23,089	5.1%	11,545	3.3%
12	Railroad equipment	4,918	1.1%	4,820	1.4%
13	Railroad rails	5,929	1.3%	5,811	1.7%
14	Ship building and marine equipment	6,359	1.4%	-	-
	Total	448,794	100.0%	344,804	100.0%

a. Includes agricultural machinery and other agricultural materials.

SOURCE: Nathan Associates Inc.

Appendix A

Aggregate Results and Underlying Calculations by Year

Table A-1

Inventory of Obsolete Ferrous Scrap as of December 31, 2009 (thousands of net tons)

Item	Amount
Resource base as of 1955 [a]	537,000
Adjustment [b]	(70,884)
Potential reserves as of 1955	466,116
Adjustments for corrosion	
Prior to 1956 [c]	(62,926)
1956-1983 [d]	(40,642)
1984-2003 [e]	(26,104)
2004-2009 [f]	(7,267)
Potential reserves as of 1955 less corrosion	329,178
Net additions to potential reserves [g]	
1956-1983	338,921
1984-2003	407,908
2004-2009	106,321
Potential reserves as of December 31, 2009	1,182,328

[a] From Battelle Memorial Institute, *Final Report on a Survey and Analysis of the Supply and Availability of Obsolete Iron and Steel Scrap*, prepared for US Department of Commerce, BDSA, January 15, 1957.

[b] Equals 13.2% of the resource base of 1955. See the 1977 Nathan Associates report, page 77.

[c] Equal to 1955 base inventory subtotal multiplied by 0.36% and 37.5 years. See the 1977 Nathan Associates report, page 79.

[d] Equal to 1955 base inventory less adjustment for corrosion prior to 1956 multiplied by 0.36% and 28 years.

[e] Equal to 1955 base inventory less adjustment for corrosion prior to 1984 multiplied by 0.36% and 20 years.

[f] Equal to 1955 base inventory less adjustment for corrosion prior to 2004 multiplied by 0.36% and 6 years.

[g] From Table A-2.

SOURCES: Nathan Associates Inc. See footnotes.

Table A-2

Net Additions to the Inventory of Obsolete Ferrous Scrap, 1956 - 2009 (thousands of net tons)

Year	Obsolete Scrap			Recovered Scrap		Inventory of Obsolete Scrap		
	Generated [a] [1]	Non-Recoverable [a] [2]	Recoverable [a] [3] = [1] - [2]	Prompt and Obsolete [b] [4]	Obsolete Only [c] [5]	Change [6] = [3] - [5]	Corrosion Loss [d] [7]	Net Change [8] = [6] - [7]
1956	35,342	12,160	23,182	43,036	28,115	(4,933)	-	(4,933)
1957	37,469	12,600	24,869	37,613	24,189	680	127	552
1958	40,394	13,334	27,060	25,886	13,025	14,035	2,577	11,458
1959	42,596	13,773	28,823	33,673	21,119	7,705	1,387	6,318
1960	43,840	14,256	29,584	33,956	20,962	8,622	1,521	7,101
1961	43,777	14,197	29,581	34,751	21,808	7,773	1,343	6,430
1962	43,618	14,350	29,268	30,186	16,848	12,420	2,102	10,319
1963	45,420	14,636	30,784	35,579	21,156	9,628	1,594	8,034
1964	49,240	15,435	33,804	39,447	23,395	10,409	1,686	8,722
1965	53,096	16,452	36,644	41,762	24,387	12,257	1,942	10,316
1966	56,216	17,455	38,761	42,122	24,178	14,584	2,258	12,326
1967	57,617	18,207	39,410	40,059	22,254	17,156	2,594	14,562
1968	58,731	18,639	40,092	39,864	21,806	18,286	2,699	15,587
1969	59,410	18,900	40,510	45,771	27,599	12,911	1,859	11,052
1970	60,662	19,431	41,231	44,209	26,531	14,700	2,064	12,636
1971	61,832	19,585	42,248	40,182	22,636	19,612	2,683	16,929
1972	62,949	19,924	43,025	48,743	29,968	13,057	1,739	11,318
1973	62,473	19,947	42,526	55,618	35,380	7,146	926	6,220
1974	65,350	21,007	44,344	59,829	40,658	3,685	464	3,221
1975	68,171	21,254	46,917	46,050	28,123	18,794	2,300	16,494
1976	71,570	21,607	49,964	48,821	31,495	18,469	2,194	16,275
1977	72,273	21,374	50,899	47,208	28,351	22,548	2,597	19,950
1978	73,948	21,783	52,164	54,314	34,698	17,466	1,949	15,517
1979	73,797	21,631	52,165	57,330	38,557	13,608	1,470	12,139
1980	74,076	21,093	52,983	51,564	33,633	19,350	2,020	17,330
1981	73,438	20,620	52,818	47,834	32,342	20,477	2,064	18,412
1982	74,837	20,334	54,502	34,324	19,614	34,889	3,391	31,498
1983	69,772	19,152	50,620	41,095	25,091	25,528	2,389	23,139
1984	71,192	19,380	51,812	44,985	28,609	23,203	2,088	21,115
1985	72,692	19,654	53,037	48,161	31,325	21,712	1,876	19,836
1986	74,256	19,987	54,270	48,963	32,212	22,057	1,826	20,231
1987	75,839	20,364	55,474	54,337	37,151	18,324	1,451	16,873
1988	77,410	20,768	56,642	58,671	41,006	15,636	1,182	14,454
1989	78,858	21,097	57,761	57,045	39,203	18,558	1,336	17,222
1990	80,176	21,358	58,817	60,345	43,337	15,481	1,059	14,422
1991	81,300	21,510	59,791	54,487	37,626	22,165	1,436	20,728
1992	82,385	21,724	60,661	55,049	37,816	22,845	1,398	21,447
1993	83,536	22,112	61,425	59,987	40,815	20,610	1,187	19,423
1994	84,445	22,395	62,051	62,908	42,469	19,581	1,057	18,524
1995	85,087	22,558	62,530	65,377	43,686	18,844	950	17,894
1996	85,446	22,591	62,855	61,552	39,271	23,584	1,104	22,480

Table A-2

Net Additions to the Inventory of Obsolete Ferrous Scrap, 1956 - 2009 (thousands of net tons)

Year	Obsolete Scrap			Recovered Scrap		Inventory of Obsolete Scrap		
	Generated [a] [1]	Non-Recoverable [a] [2]	Recoverable [a] [3] = [1] - [2]	Prompt and Obsolete [b] [4]	Obsolete Only [c] [5]	Change [6] = [3] - [5]	Corrosion Loss [d] [7]	Net Change [8] = [6] - [7]
1997	85,715	22,652	63,063	64,000	40,410	22,653	979	21,675
1998	85,923	22,728	63,195	61,189	36,945	26,250	1,040	25,211
1999	85,952	22,673	63,279	58,257	33,475	29,804	1,073	28,731
2000	85,870	22,525	63,346	62,170	38,287	25,059	812	24,247
2001	85,724	22,302	63,423	62,622	39,355	24,067	693	23,374
2002	85,592	22,047	63,545	63,735	41,548	21,997	554	21,443
2003	85,743	22,041	63,702	66,957	44,712	18,989	410	18,579
2004	85,811	21,913	63,898	66,072	42,567	21,331	384	20,947
2005	86,319	22,151	64,168	66,094	41,120	23,049	332	22,717
2006	86,953	22,408	64,545	69,423	44,910	19,635	212	19,423
2007	87,549	22,487	65,062	73,303	49,262	15,800	114	15,686
2008	88,084	22,362	65,721	75,388	56,043	9,678	35	9,644
2009	88,988	22,455	66,533	65,785	48,628	17,904	0	17,904
Subtotals								
1956-1983	1,631,913	503,135	1,128,778	1,200,826	737,916	390,861	51,941	338,921
1984-2003	1,633,142	432,464	1,200,677	1,170,796	769,257	431,420	23,512	407,908
2004-2009	523,704	133,776	389,928	416,065	282,530	107,397	1,077	106,321
Total 1956-2009	3,788,759	1,069,375	2,719,383	2,787,687	1,789,704	929,679	76,529	853,150

Note: Data in columns [1] through [6] for the years 1956 through 1982 are from *Iron and Steel Scrap: Its Accumulation and Availability Updated to December 31, 1983,* Nathan Associates Inc., August 1984, Table 3.

[a] From Appendix B, Table B-15.

[b] Equals "iron and steel scrap receipts purchases" minus "iron and steel scrap imports" plus "iron and steel scrap exports," all of which are in Tables A-4 through A-30 for years 1983 through 2009, respectively.

[c] Equals column [4] minus 98.5% of 3-year moving average of prompt scrap generated, which is from Appendix B, Table B-15.

[d] Equals column [6] multiplied by 0.36% and the difference between the year 2009 and the year of the change in inventory.

SOURCES : see footnotes.

Table A-3

Regional Distribution of Obsolete Ferrous Scrap Inventory as of December 31, 2009 (thousands of net tons unless otherwise noted)

Region	1955 Inventory [a]	Share of Total	1956-1983 Additions [b]	Share of Total	1984-2003 Additions [c]	Share of Total	2003 Inventory	Share of Total	2004-2009 Additions [c]	Share of Total	2009 Inventory	Share of Total
New England	35,880	10.9%	36,942	10.9%	19,854	4.9%	92,676	8.6%	4,813	4.5%	97,490	8.2%
Middle Atlantic	21,726	6.6%	22,369	6.6%	49,555	12.1%	93,649	8.7%	11,772	11.1%	105,421	8.9%
East North Central	51,352	15.6%	52,872	15.6%	71,047	17.4%	175,270	16.3%	16,583	15.6%	191,853	16.2%
West North Central	62,873	19.1%	64,734	19.1%	34,531	8.5%	162,138	15.1%	8,176	7.7%	170,314	14.4%
South Atlantic	52,668	16.0%	54,227	16.0%	68,563	16.8%	175,459	16.3%	19,581	18.4%	195,040	16.5%
East South Central	5,596	1.7%	5,762	1.7%	25,192	6.2%	36,549	3.4%	6,135	5.8%	42,684	3.6%
West South Central	54,973	16.7%	56,600	16.7%	48,094	11.8%	159,666	14.8%	13,783	13.0%	173,449	14.7%
Mountain	20,409	6.2%	21,013	6.2%	28,547	7.0%	69,969	6.5%	8,051	7.6%	78,020	6.6%
Pacific	23,701	7.2%	24,402	7.2%	62,527	15.3%	110,630	10.3%	17,428	16.4%	128,058	10.8%
All regions [d]	329,178	100.0%	338,921	100.0%	407,908	100.0%	1,076,007	100.0%	106,321	100.0%	1,182,328	100.0%

[a] Regional distribution is calculated using percentages from *Iron and Steel Scrap: Its Accumulation and Availability as of December 31, 1975* , Nathan Associates Inc., August 23, 1977.

[b] Regional distribution is calculated using percentages from Iron and Steel Scrap: Its Accumulation and Availability as of December 31, 1975, Nathan Associates Inc., August 23, 1977.

[c] Regional distribution is calculated in Appendix F. See Table F-1.

[d] From Table A-1.

SOURCES : See footnotes.

Table A-4

Mill and Foundry Shipments and Prompt Scrap Generated, 1983 (thousands of net tons unless otherwise noted)

Item	Amount [1]	Prompt Scrap Factor [2]	Prompt Scrap Generated [3] = [1] x [2]
Mill shipments by AISI-defined market category [a]			
1. Converting and processing	6,159	15.9%	979
2. Forgings	799	25.0%	200
3. Industrial fasteners	559	19.6%	110
4. Steel service centers and distributors	20,835	18.0%	3,750
5. Construction and contractors' products	12,670	6.0%	760
6. Automotive	14,749	30.9%	4,557
7. Rail transportation	1,111	7.8%	87
8. Ship building and marine equipment	621	13.8%	86
9. Aircraft and aerospace	33	25.0%	8
10. Oil and gas	2,219	16.7%	371
11. Mining, quarrying, and lumbering	294	16.0%	47
12. Agricultural	865	8.9%	77
13. Machinery, industrial equipment, and tools	3,233	19.2%	621
14. Electrical equipment	2,799	21.8%	610
15. Appliances, utensils, and cutlery	1,932	19.4%	375
16. Other domestic and commercial equipment	1,682	13.5%	227
17. Containers, packaging, and shipping materials	5,105	9.5%	485
18. Ordinance and other military	341	22.0%	75
19. Nonclassified shipments	7,684	16.6%	1,274
Total	83,689	-	14,698
Foundry shipments [b]	6,145		
Total mill and foundry shipments	89,834	16.6%	
Iron and steel scrap receipts purchases [c]	34,219		
Iron and steel scrap imports [d]	642		
Iron and steel scrap exports [d]	7,518		

[a] Equals domestic shipments (see Appendix C, Table C-1) plus net imports (see Appendix C, Table C-2).

[b] From Appendix C, Table C-44.

[c] Equals "Receipts from Brokers, Dealers, and Other Outside Sources" and from "Other Own Company Plants" less "Shipments" reported by USGS in Table 1: Salient U.S. Iron and Steel Scrap and Pig Iron Statistics, available online at: http://minerals.usgs.gov/minerals/pubs/commodity/iron_&_steel_scrap/stat/tbl1.txt.

[d] From U.S. Geological Survey Open-File Report 01-006, Historical Statistics for Mineral and Material Commodities in the United States, Table: Iron and Steel Scrap Statistics.

SOURCES : See footnotes.

Table A-5

Mill and Foundry Shipments and Prompt Scrap Generated, 1984 (thousands of net tons unless otherwise noted)

Item	Amount [1]	Prompt Scrap Factor [2]	Prompt Scrap Generated [3] = [1] x [2]
Mill shipments by AISI-defined market category [a]			
1. Converting and processing	7,733	15.9%	1,230
2. Forgings	1,190	25.0%	298
3. Industrial fasteners	631	19.6%	124
4. Steel service centers and distributors	24,727	18.0%	4,451
5. Construction and contractors' products	14,024	6.0%	841
6. Automotive	16,445	30.9%	5,082
7. Rail transportation	1,793	7.8%	140
8. Ship building and marine equipment	687	13.8%	95
9. Aircraft and aerospace	58	25.0%	14
10. Oil and gas	3,724	16.7%	622
11. Mining, quarrying, and lumbering	349	16.0%	56
12. Agricultural	926	8.9%	82
13. Machinery, industrial equipment, and tools	4,074	19.2%	782
14. Electrical equipment	3,084	21.8%	672
15. Appliances, utensils, and cutlery	2,099	19.4%	407
16. Other domestic and commercial equipment	1,811	13.5%	245
17. Containers, packaging, and shipping materials	5,165	9.5%	491
18. Ordinance and other military	412	22.0%	91
19. Nonclassified shipments	10,017	16.6%	1,661
Total	98,950	-	17,382
Foundry shipments [b]	7,201		
Total mill and foundry shipments	106,151	16.6%	
Iron and steel scrap receipts purchases [c]	36,060		
Iron and steel scrap imports [d]	577		
Iron and steel scrap exports [d]	9,502		

[a] Equals domestic shipments (see Appendix C, Table C-1) plus net imports (see Appendix C, Table C-2).

[b] From Appendix C, Table C-44.

[c] Equals "Receipts from Brokers, Dealers, and Other Outside Sources" and from "Other Own Company Plants" less "Shipments" reported by USGS in Table 1: Salient U.S. Iron and Steel Scrap and Pig Iron Statistics, available online at: http://minerals.usgs.gov/minerals/pubs/commodity/iron_&_steel_scrap/stat/tbl1.txt.

[d] From U.S. Geological Survey Open-File Report 01-006, Historical Statistics for Mineral and Material Commodities in the United States, Table: Iron and Steel Scrap Statistics.

SOURCES : See footnotes.

Table A-6

Mill and Foundry Shipments and Prompt Scrap Generated, 1985 (thousands of net tons unless otherwise noted)

Item	Amount [1]	Prompt Scrap Factor [2]	Prompt Scrap Generated [3] = [1] x [2]
Mill shipments by AISI-defined market category [a]			
1. Converting and processing	8,191	15.9%	1,302
2. Forgings	1,343	25.0%	336
3. Industrial fasteners	560	19.6%	110
4. Steel service centers and distributors	24,016	18.0%	4,323
5. Construction and contractors' products	14,827	6.0%	890
6. Automotive	16,131	30.9%	4,985
7. Rail transportation	1,418	7.8%	111
8. Ship building and marine equipment	532	13.8%	73
9. Aircraft and aerospace	68	25.0%	17
10. Oil and gas	3,489	16.7%	583
11. Mining, quarrying, and lumbering	346	16.0%	55
12. Agricultural	873	8.9%	78
13. Machinery, industrial equipment, and tools	3,374	19.2%	648
14. Electrical equipment	2,496	21.8%	544
15. Appliances, utensils, and cutlery	1,846	19.4%	358
16. Other domestic and commercial equipment	1,617	13.5%	218
17. Containers, packaging, and shipping materials	4,939	9.5%	469
18. Ordinance and other military	487	22.0%	107
19. Nonclassified shipments	9,795	16.6%	1,624
Total	96,348	-	16,830
Foundry shipments [b]	8,479		
Total mill and foundry shipments	104,827	16.6%	
Iron and steel scrap receipts purchases [c]	38,817		
Iron and steel scrap imports [d]	611		
Iron and steel scrap exports [d]	9,954		

[a] Equals domestic shipments (see Appendix C, Table C-1) plus net imports (see Appendix C, Table C-2).

[b] From Appendix C, Table C-44.

[c] Equals "Receipts from Brokers, Dealers, and Other Outside Sources" and from "Other Own Company Plants" less "Shipments" reported by USGS in Table 1: Salient U.S. Iron and Steel Scrap and Pig Iron Statistics, available online at: http://minerals.usgs.gov/minerals/pubs/commodity/iron_&_steel_scrap/stat/tbl1.txt.

[d] From U.S. Geological Survey Open-File Report 01-006, Historical Statistics for Mineral and Material Commodities in the United States, Table: Iron and Steel Scrap Statistics.

SOURCES : See footnotes.

Table A-7

Mill and Foundry Shipments and Prompt Scrap Generated, 1986 (thousands of net tons unless otherwise noted)

Item	Amount [1]	Prompt Scrap Factor [2]	Prompt Scrap Generated [3] = [1] x [2]
Mill shipments by AISI-defined market category [a]			
1. Converting and processing	8,009	15.9%	1,273
2. Forgings	1,084	25.0%	271
3. Industrial fasteners	585	19.6%	115
4. Steel service centers and distributors	22,136	18.0%	3,984
5. Construction and contractors' products	13,805	6.0%	828
6. Automotive	14,784	30.9%	4,568
7. Rail transportation	1,071	7.8%	84
8. Ship building and marine equipment	367	13.8%	51
9. Aircraft and aerospace	63	25.0%	16
10. Oil and gas	1,997	16.7%	334
11. Mining, quarrying, and lumbering	317	16.0%	51
12. Agricultural	815	8.9%	73
13. Machinery, industrial equipment, and tools	2,969	19.2%	570
14. Electrical equipment	2,644	21.8%	576
15. Appliances, utensils, and cutlery	2,009	19.4%	390
16. Other domestic and commercial equipment	1,541	13.5%	208
17. Containers, packaging, and shipping materials	4,850	9.5%	461
18. Ordinance and other military	409	22.0%	90
19. Nonclassified shipments	10,563	16.6%	1,751
Total	90,019	-	15,693
Foundry shipments [b]	8,267		
Total mill and foundry shipments	98,286	16.6%	
Iron and steel scrap receipts purchases [c]	38,003		
Iron and steel scrap imports [d]	724		
Iron and steel scrap exports [d]	11,684		

[a] Equals domestic shipments (see Appendix C, Table C-1) plus net imports (see Appendix C, Table C-2).

[b] From Appendix C, Table C-44.

[c] Equals "Receipts from Brokers, Dealers, and Other Outside Sources" and from "Other Own Company Plants" less "Shipments" reported by USGS in Table 1: Salient U.S. Iron and Steel Scrap and Pig Iron Statistics, available online at: http://minerals.usgs.gov/minerals/pubs/commodity/iron_&_steel_scrap/stat/tbl1.txt.

[d] From U.S. Geological Survey Open-File Report 01-006, Historical Statistics for Mineral and Material Commodities in the United States, Table: Iron and Steel Scrap Statistics.

SOURCES : See footnotes.

Table A-8

Mill and Foundry Shipments and Prompt Scrap Generated, 1987 (thousands of net tons unless otherwise noted)

Item	Amount [1]	Prompt Scrap Factor [2]	Prompt Scrap Generated [3] = [1] x [2]
Mill shipments by AISI-defined market category [a]			
1. Converting and processing	9,673	15.9%	1,538
2. Forgings	1,259	25.0%	315
3. Industrial fasteners	558	19.6%	109
4. Steel service centers and distributors	24,357	18.0%	4,384
5. Construction and contractors' products	14,223	6.0%	853
6. Automotive	14,169	30.9%	4,378
7. Rail transportation	1,000	7.8%	78
8. Ship building and marine equipment	357	13.8%	49
9. Aircraft and aerospace	62	25.0%	15
10. Oil and gas	2,416	16.7%	403
11. Mining, quarrying, and lumbering	443	16.0%	71
12. Agricultural	807	8.9%	72
13. Machinery, industrial equipment, and tools	3,171	19.2%	609
14. Electrical equipment	2,856	21.8%	623
15. Appliances, utensils, and cutlery	1,958	19.4%	380
16. Other domestic and commercial equipment	1,495	13.5%	202
17. Containers, packaging, and shipping materials	5,051	9.5%	480
18. Ordinance and other military	390	22.0%	86
19. Nonclassified shipments	11,818	16.6%	1,959
Total	96,063	-	16,605
Foundry shipments [b]	8,532		
Total mill and foundry shipments	104,595	16.6%	
Iron and steel scrap receipts purchases [c]	44,807		
Iron and steel scrap imports [d]	843		
Iron and steel scrap exports [d]	10,373		

[a] Equals domestic shipments (see Appendix C, Table C-1) plus net imports (see Appendix C, Table C-2).

[b] From Appendix C, Table C-44.

[c] Equals "Receipts from Brokers, Dealers, and Other Outside Sources" and from "Other Own Company Plants" less "Shipments" reported by USGS in Table 1: Salient U.S. Iron and Steel Scrap and Pig Iron Statistics, available online at: http://minerals.usgs.gov/minerals/pubs/commodity/iron_&_steel_scrap/stat/tbl1.txt.

[d] From U.S. Geological Survey Open-File Report 01-006, Historical Statistics for Mineral and Material Commodities in the United States, Table: Iron and Steel Scrap Statistics.

SOURCES : See footnotes.

Table A-9

Mill and Foundry Shipments and Prompt Scrap Generated, 1988 (thousands of net tons unless otherwise noted)

Item	Amount [1]	Prompt Scrap Factor [2]	Prompt Scrap Generated [3] = [1] x [2]
Mill shipments by AISI-defined market category [a]			
1. Converting and processing	12,791	15.9%	2,034
2. Forgings	1,010	25.0%	253
3. Industrial fasteners	484	19.6%	95
4. Steel service centers and distributors	25,884	18.0%	4,659
5. Construction and contractors' products	14,786	6.0%	887
6. Automotive	14,774	30.9%	4,565
7. Rail transportation	1,523	7.8%	119
8. Ship building and marine equipment	425	13.8%	59
9. Aircraft and aerospace	54	25.0%	14
10. Oil and gas	2,503	16.7%	418
11. Mining, quarrying, and lumbering	562	16.0%	90
12. Agricultural	680	8.9%	60
13. Machinery, industrial equipment, and tools	3,581	19.2%	688
14. Electrical equipment	2,940	21.8%	641
15. Appliances, utensils, and cutlery	1,905	19.4%	370
16. Other domestic and commercial equipment	1,455	13.5%	196
17. Containers, packaging, and shipping materials	5,001	9.5%	475
18. Ordinance and other military	269	22.0%	59
19. Nonclassified shipments	13,171	16.6%	2,184
Total	103,798	-	17,864
Foundry shipments [b]	9,025		
Total mill and foundry shipments	112,823	16.6%	
Iron and steel scrap receipts purchases [c]	49,612		
Iron and steel scrap imports [d]	1,038		
Iron and steel scrap exports [d]	10,097		

[a] Equals domestic shipments (see Appendix C, Table C-1) plus net imports (see Appendix C, Table C-2).

[b] From Appendix C, Table C-44.

[c] Equals "Receipts from Brokers, Dealers, and Other Outside Sources" and from "Other Own Company Plants" less "Shipments" reported by USGS in Table 1: Salient U.S. Iron and Steel Scrap and Pig Iron Statistics, available online at: http://minerals.usgs.gov/minerals/pubs/commodity/iron_&_steel_scrap/stat/tbl1.txt.

[d] From U.S. Geological Survey Open-File Report 01-006, Historical Statistics for Mineral and Material Commodities in the United States, Table: Iron and Steel Scrap Statistics.

SOURCES : See footnotes.

Table A-10

Mill and Foundry Shipments and Prompt Scrap Generated, 1989 (thousands of net tons unless otherwise noted)

Item	Amount [1]	Prompt Scrap Factor [2]	Prompt Scrap Generated [3] = [1] x [2]
Mill shipments by AISI-defined market category [a]			
1. Converting and processing	11,451	15.9%	1,821
2. Forgings	1,020	25.0%	255
3. Industrial fasteners	421	19.6%	82
4. Steel service centers and distributors	24,798	18.0%	4,464
5. Construction and contractors' products	13,693	6.0%	822
6. Automotive	13,676	30.9%	4,226
7. Rail transportation	1,491	7.8%	116
8. Ship building and marine equipment	461	13.8%	64
9. Aircraft and aerospace	57	25.0%	14
10. Oil and gas	1,979	16.7%	331
11. Mining, quarrying, and lumbering	524	16.0%	84
12. Agricultural	700	8.9%	62
13. Machinery, industrial equipment, and tools	3,047	19.2%	585
14. Electrical equipment	2,871	21.8%	626
15. Appliances, utensils, and cutlery	1,958	19.4%	380
16. Other domestic and commercial equipment	1,359	13.5%	183
17. Containers, packaging, and shipping materials	5,072	9.5%	482
18. Ordinance and other military	230	22.0%	51
19. Nonclassified shipments	13,430	16.6%	2,227
Total	98,238	-	16,873
Foundry shipments [b]	8,840		
Total mill and foundry shipments	107,078	16.6%	
Iron and steel scrap receipts purchases [c]	45,934		
Iron and steel scrap imports [d]	1,124		
Iron and steel scrap exports [d]	12,236		

[a] Equals domestic shipments (see Appendix C, Table C-1) plus net imports (see Appendix C, Table C-2).

[b] From Appendix C, Table C-44.

[c] Equals "Receipts from Brokers, Dealers, and Other Outside Sources" and from "Other Own Company Plants" less "Shipments" reported by USGS in Table 1: Salient U.S. Iron and Steel Scrap and Pig Iron Statistics, available online at: http://minerals.usgs.gov/minerals/pubs/commodity/iron_&_steel_scrap/stat/tbl1.txt.

[d] From U.S. Geological Survey Open-File Report 01-006, Historical Statistics for Mineral and Material Commodities in the United States, Table: Iron and Steel Scrap Statistics.

SOURCES : See footnotes.

Table A-11

Mill and Foundry Shipments and Prompt Scrap Generated, 1990 (thousands of net tons unless otherwise noted)

Item	Amount [1]	Prompt Scrap Factor [2]	Prompt Scrap Generated [3] = [1] x [2]
Mill shipments by AISI-defined market category [a]			
1. Converting and processing	12,776	15.9%	2,031
2. Forgings	1,126	25.0%	282
3. Industrial fasteners	435	19.6%	85
4. Steel service centers and distributors	25,278	18.0%	4,550
5. Construction and contractors' products	14,022	6.0%	841
6. Automotive	13,088	30.9%	4,044
7. Rail transportation	1,330	7.8%	104
8. Ship building and marine equipment	420	13.8%	58
9. Aircraft and aerospace	47	25.0%	12
10. Oil and gas	2,706	16.7%	452
11. Mining, quarrying, and lumbering	601	16.0%	96
12. Agricultural	804	8.9%	72
13. Machinery, industrial equipment, and tools	3,034	19.2%	582
14. Electrical equipment	2,900	21.8%	632
15. Appliances, utensils, and cutlery	1,792	19.4%	348
16. Other domestic and commercial equipment	1,298	13.5%	175
17. Containers, packaging, and shipping materials	5,080	9.5%	483
18. Ordinance and other military	190	22.0%	42
19. Nonclassified shipments	12,733	16.6%	2,111
Total	99,661	-	17,000
Foundry shipments [b]	8,196		
Total mill and foundry shipments	107,857	16.6%	
Iron and steel scrap receipts purchases [c]	49,014		
Iron and steel scrap imports [d]	1,455		
Iron and steel scrap exports [d]	12,787		

[a] Equals domestic shipments (see Appendix C, Table C-1) plus net imports (see Appendix C, Table C-2).

[b] From Appendix C, Table C-44.

[c] Equals "Receipts from Brokers, Dealers, and Other Outside Sources" and from "Other Own Company Plants" less "Shipments" reported by USGS in Table 1: Salient U.S. Iron and Steel Scrap and Pig Iron Statistics, available online at: http://minerals.usgs.gov/minerals/pubs/commodity/iron_&_steel_scrap/stat/tbl1.txt.

[d] From U.S. Geological Survey Open-File Report 01-006, Historical Statistics for Mineral and Material Commodities in the United States, Table: Iron and Steel Scrap Statistics.

SOURCES : See footnotes.

Table A-12

Mill and Foundry Shipments and Prompt Scrap Generated, 1991 (thousands of net tons unless otherwise noted)

Item	Amount [1]	Prompt Scrap Factor [2]	Prompt Scrap Generated [3] = [1] x [2]
Mill shipments by AISI-defined market category [a]			
1. Converting and processing	11,346	15.9%	1,804
2. Forgings	952	25.0%	238
3. Industrial fasteners	383	19.6%	75
4. Steel service centers and distributors	23,323	18.0%	4,198
5. Construction and contractors' products	13,071	6.0%	784
6. Automotive	11,858	30.9%	3,664
7. Rail transportation	1,246	7.8%	97
8. Ship building and marine equipment	274	13.8%	38
9. Aircraft and aerospace	32	25.0%	8
10. Oil and gas	2,276	16.7%	380
11. Mining, quarrying, and lumbering	401	16.0%	64
12. Agricultural	649	8.9%	58
13. Machinery, industrial equipment, and tools	2,590	19.2%	497
14. Electrical equipment	2,533	21.8%	552
15. Appliances, utensils, and cutlery	1,622	19.4%	315
16. Other domestic and commercial equipment	1,025	13.5%	138
17. Containers, packaging, and shipping materials	4,866	9.5%	462
18. Ordinance and other military	178	22.0%	39
19. Nonclassified shipments	11,589	16.6%	1,921
Total	90,214	-	15,334
Foundry shipments [b]	7,295		
Total mill and foundry shipments	97,509	16.6%	
Iron and steel scrap receipts purchases [c]	45,194		
Iron and steel scrap imports [d]	1,179		
Iron and steel scrap exports [d]	10,472		

[a] Equals domestic shipments (see Appendix C, Table C-1) plus net imports (see Appendix C, Table C-2).

[b] From Appendix C, Table C-44.

[c] Equals "Receipts from Brokers, Dealers, and Other Outside Sources" and from "Other Own Company Plants" less "Shipments" reported by USGS in Table 1: Salient U.S. Iron and Steel Scrap and Pig Iron Statistics, available online at: http://minerals.usgs.gov/minerals/pubs/commodity/iron_&_steel_scrap/stat/tbl1.txt.

[d] From U.S. Geological Survey Open-File Report 01-006, Historical Statistics for Mineral and Material Commodities in the United States, Table: Iron and Steel Scrap Statistics.

SOURCES : See footnotes.

Table A-13

Mill and Foundry Shipments and Prompt Scrap Generated, 1992 (thousands of net tons unless otherwise noted)

Item	Amount [1]	Prompt Scrap Factor [2]	Prompt Scrap Generated [3] = [1] x [2]
Mill shipments by AISI-defined market category [a]			
1. Converting and processing	12,750	15.9%	2,027
2. Forgings	953	25.0%	238
3. Industrial fasteners	578	19.6%	113
4. Steel service centers and distributors	25,360	18.0%	4,565
5. Construction and contractors' products	14,122	6.0%	847
6. Automotive	13,337	30.9%	4,121
7. Rail transportation	1,326	7.8%	103
8. Ship building and marine equipment	305	13.8%	42
9. Aircraft and aerospace	31	25.0%	8
10. Oil and gas	1,959	16.7%	327
11. Mining, quarrying, and lumbering	386	16.0%	62
12. Agricultural	683	8.9%	61
13. Machinery, industrial equipment, and tools	2,552	19.2%	490
14. Electrical equipment	2,578	21.8%	562
15. Appliances, utensils, and cutlery	1,775	19.4%	344
16. Other domestic and commercial equipment	1,071	13.5%	145
17. Containers, packaging, and shipping materials	4,624	9.5%	439
18. Ordinance and other military	168	22.0%	37
19. Nonclassified shipments	12,109	16.6%	2,008
Total	96,667	-	16,540
Foundry shipments [b]	7,695		
Total mill and foundry shipments	104,362	16.6%	
Iron and steel scrap receipts purchases [c]	46,297		
Iron and steel scrap imports [d]	1,455		
Iron and steel scrap exports [d]	10,207		

[a] Equals domestic shipments (see Appendix C, Table C-1) plus net imports (see Appendix C, Table C-2).

[b] From Appendix C, Table C-44.

[c] Equals "Receipts from Brokers, Dealers, and Other Outside Sources" and from "Other Own Company Plants" less "Shipments" reported by USGS in Table 1: Salient U.S. Iron and Steel Scrap and Pig Iron Statistics, available online at: http://minerals.usgs.gov/minerals/pubs/commodity/iron_&_steel_scrap/stat/tbl1.txt.

[d] From U.S. Geological Survey Open-File Report 01-006, Historical Statistics for Mineral and Material Commodities in the United States, Table: Iron and Steel Scrap Statistics.

SOURCES : See footnotes.

Table A-14

Mill and Foundry Shipments and Prompt Scrap Generated, 1993 (thousands of net tons unless otherwise noted)

Item	Amount [1]	Prompt Scrap Factor [2]	Prompt Scrap Generated [3] = [1] x [2]
Mill shipments by AISI-defined market category [a]			
1. Converting and processing	14,529	15.9%	2,310
2. Forgings	1,386	25.0%	346
3. Industrial fasteners	767	19.6%	150
4. Steel service centers and distributors	27,884	18.0%	5,019
5. Construction and contractors' products	15,534	6.0%	932
6. Automotive	14,604	30.9%	4,513
7. Rail transportation	1,623	7.8%	127
8. Ship building and marine equipment	262	13.8%	36
9. Aircraft and aerospace	47	25.0%	12
10. Oil and gas	2,225	16.7%	372
11. Mining, quarrying, and lumbering	317	16.0%	51
12. Agricultural	723	8.9%	64
13. Machinery, industrial equipment, and tools	2,833	19.2%	544
14. Electrical equipment	2,638	21.8%	575
15. Appliances, utensils, and cutlery	1,827	19.4%	354
16. Other domestic and commercial equipment	1,067	13.5%	144
17. Containers, packaging, and shipping materials	4,933	9.5%	469
18. Ordinance and other military	123	22.0%	27
19. Nonclassified shipments	13,091	16.6%	2,170
Total	106,411	-	18,215
Foundry shipments [b]	8,280		
Total mill and foundry shipments	114,691	16.6%	
Iron and steel scrap receipts purchases [c]	50,706		
Iron and steel scrap imports [d]	1,532		
Iron and steel scrap exports [d]	10,814		

[a] Equals domestic shipments (see Appendix C, Table C-1) plus net imports (see Appendix C, Table C-2).

[b] From Appendix C, Table C-44.

[c] Equals "Receipts from Brokers, Dealers, and Other Outside Sources" and from "Other Own Company Plants" less "Shipments" reported by USGS in Table 1: Salient U.S. Iron and Steel Scrap and Pig Iron Statistics, available online at: http://minerals.usgs.gov/minerals/pubs/commodity/iron_&_steel_scrap/stat/tbl1.txt.

[d] From U.S. Geological Survey Open-File Report 01-006, Historical Statistics for Mineral and Material Commodities in the United States, Table: Iron and Steel Scrap Statistics.

SOURCES : See footnotes.

Table A-15

Mill and Foundry Shipments and Prompt Scrap Generated, 1994 (thousands of net tons unless otherwise noted)

Item	Amount [1]	Prompt Scrap Factor [2]	Prompt Scrap Generated [3] = [1] x [2]
Mill shipments by AISI-defined market category [a]			
1. Converting and processing	18,630	15.9%	2,962
2. Forgings	1,681	25.0%	420
3. Industrial fasteners	756	19.6%	148
4. Steel service centers and distributors	30,912	18.0%	5,564
5. Construction and contractors' products	17,288	6.0%	1,037
6. Automotive	17,729	30.9%	5,478
7. Rail transportation	1,893	7.8%	148
8. Ship building and marine equipment	352	13.8%	49
9. Aircraft and aerospace	55	25.0%	14
10. Oil and gas	2,586	16.7%	432
11. Mining, quarrying, and lumbering	300	16.0%	48
12. Agricultural	814	8.9%	72
13. Machinery, industrial equipment, and tools	3,383	19.2%	650
14. Electrical equipment	2,955	21.8%	644
15. Appliances, utensils, and cutlery	2,158	19.4%	419
16. Other domestic and commercial equipment	1,189	13.5%	160
17. Containers, packaging, and shipping materials	5,385	9.5%	512
18. Ordinance and other military	112	22.0%	25
19. Nonclassified shipments	15,266	16.6%	2,531
Total	123,443	-	21,313
Foundry shipments [b]	9,692		
Total mill and foundry shipments	133,135	16.6%	
Iron and steel scrap receipts purchases [c]	55,115		
Iron and steel scrap imports [d]	1,918		
Iron and steel scrap exports [d]	9,711		

[a] Equals domestic shipments (see Appendix C, Table C-1) plus net imports (see Appendix C, Table C-2).

[b] From Appendix C, Table C-44.

[c] Equals "Receipts from Brokers, Dealers, and Other Outside Sources" and from "Other Own Company Plants" less "Shipments" reported by USGS in Table 1: Salient U.S. Iron and Steel Scrap and Pig Iron Statistics, available online at: http://minerals.usgs.gov/minerals/pubs/commodity/iron_&_steel_scrap/stat/tbl1.txt.

[d] From U.S. Geological Survey Open-File Report 01-006, Historical Statistics for Mineral and Material Commodities in the United States, Table: Iron and Steel Scrap Statistics.

SOURCES : See footnotes.

Table A-16

Mill and Foundry Shipments and Prompt Scrap Generated, 1995 (thousands of net tons unless otherwise noted)

Item	Amount [1]	Prompt Scrap Factor [2]	Prompt Scrap Generated [3] = [1] x [2]
Mill shipments by AISI-defined market category [a]			
1. Converting and processing	16,460	15.9%	2,617
2. Forgings	1,474	25.0%	369
3. Industrial fasteners	706	19.6%	138
4. Steel service centers and distributors	29,309	18.0%	5,276
5. Construction and contractors' products	17,564	6.0%	1,054
6. Automotive	16,950	30.9%	5,238
7. Rail transportation	1,899	7.8%	148
8. Ship building and marine equipment	404	13.8%	56
9. Aircraft and aerospace	38	25.0%	9
10. Oil and gas	3,430	16.7%	573
11. Mining, quarrying, and lumbering	235	16.0%	38
12. Agricultural	868	8.9%	77
13. Machinery, industrial equipment, and tools	3,096	19.2%	594
14. Electrical equipment	2,927	21.8%	638
15. Appliances, utensils, and cutlery	1,910	19.4%	371
16. Other domestic and commercial equipment	1,126	13.5%	152
17. Containers, packaging, and shipping materials	4,867	9.5%	462
18. Ordinance and other military	104	22.0%	23
19. Nonclassified shipments	14,092	16.6%	2,336
Total	117,461	-	20,169
Foundry shipments [b]	10,173		
Total mill and foundry shipments	127,634	16.6%	
Iron and steel scrap receipts purchases [c]	56,217		
Iron and steel scrap imports [d]	2,304		
Iron and steel scrap exports [d]	11,464		

[a] Equals domestic shipments (see Appendix C, Table C-1) plus net imports (see Appendix C, Table C-2).

[b] From Appendix C, Table C-44.

[c] Equals "Receipts from Brokers, Dealers, and Other Outside Sources" and from "Other Own Company Plants" less "Shipments" reported by USGS in Table 1: Salient U.S. Iron and Steel Scrap and Pig Iron Statistics, available online at: http://minerals.usgs.gov/minerals/pubs/commodity/iron_&_steel_scrap/stat/tbl1.txt.

[d] From U.S. Geological Survey Open-File Report 01-006, Historical Statistics for Mineral and Material Commodities in the United States, Table: Iron and Steel Scrap Statistics.

SOURCES : See footnotes.

Table A-17

Mill and Foundry Shipments and Prompt Scrap Generated, 1996 (thousands of net tons unless otherwise noted)

Item	Amount [1]	Prompt Scrap Factor [2]	Prompt Scrap Generated [3] = [1] x [2]
Mill shipments by AISI-defined market category [a]			
1. Converting and processing	18,135	15.9%	2,884
2. Forgings	1,541	25.0%	385
3. Industrial fasteners	801	19.6%	157
4. Steel service centers and distributors	33,662	18.0%	6,059
5. Construction and contractors' products	18,755	6.0%	1,125
6. Automotive	17,335	30.9%	5,356
7. Rail transportation	2,054	7.8%	160
8. Ship building and marine equipment	545	13.8%	75
9. Aircraft and aerospace	51	25.0%	13
10. Oil and gas	4,106	16.7%	686
11. Mining, quarrying, and lumbering	259	16.0%	41
12. Agricultural	963	8.9%	86
13. Machinery, industrial equipment, and tools	3,398	19.2%	652
14. Electrical equipment	2,952	21.8%	644
15. Appliances, utensils, and cutlery	2,032	19.4%	394
16. Other domestic and commercial equipment	1,290	13.5%	174
17. Containers, packaging, and shipping materials	4,836	9.5%	459
18. Ordinance and other military	103	22.0%	23
19. Nonclassified shipments	14,899	16.6%	2,470
Total	127,715	-	21,844
Foundry shipments [b]	9,984		
Total mill and foundry shipments	137,700	16.6%	
Iron and steel scrap receipts purchases [c]	55,115		
Iron and steel scrap imports [d]	2,866		
Iron and steel scrap exports [d]	9,303		

[a] Equals domestic shipments (see Appendix C, Table C-1) plus net imports (see Appendix C, Table C-2).

[b] From Appendix C, Table C-44.

[c] Equals "Receipts from Brokers, Dealers, and Other Outside Sources" and from "Other Own Company Plants" less "Shipments" reported by USGS in Table 1: Salient U.S. Iron and Steel Scrap and Pig Iron Statistics, available online at: http://minerals.usgs.gov/minerals/pubs/commodity/iron_&_steel_scrap/stat/tbl1.txt.

[d] From U.S. Geological Survey Open-File Report 01-006, Historical Statistics for Mineral and Material Commodities in the United States, Table: Iron and Steel Scrap Statistics.

SOURCES : See footnotes.

Table A-18

Mill and Foundry Shipments and Prompt Scrap Generated, 1997 (thousands of net tons unless otherwise noted)

Item	Amount [1]	Prompt Scrap Factor [2]	Prompt Scrap Generated [3] = [1] x [2]
Mill shipments by AISI-defined market category [a]			
1. Converting and processing	18,860	15.9%	2,999
2. Forgings	1,938	25.0%	484
3. Industrial fasteners	844	19.6%	165
4. Steel service centers and distributors	35,187	18.0%	6,334
5. Construction and contractors' products	19,304	6.0%	1,158
6. Automotive	18,303	30.9%	5,656
7. Rail transportation	2,045	7.8%	159
8. Ship building and marine equipment	388	13.8%	54
9. Aircraft and aerospace	39	25.0%	10
10. Oil and gas	4,843	16.7%	809
11. Mining, quarrying, and lumbering	406	16.0%	65
12. Agricultural	1,072	8.9%	95
13. Machinery, industrial equipment, and tools	3,335	19.2%	640
14. Electrical equipment	3,092	21.8%	674
15. Appliances, utensils, and cutlery	2,025	19.4%	393
16. Other domestic and commercial equipment	1,265	13.5%	171
17. Containers, packaging, and shipping materials	4,941	9.5%	469
18. Ordinance and other military	102	22.0%	22
19. Nonclassified shipments	16,416	16.6%	2,722
Total	134,406	-	23,080
Foundry shipments [b]	9,564		
Total mill and foundry shipments	143,970	16.6%	
Iron and steel scrap receipts purchases [c]	57,320		
Iron and steel scrap imports [d]	3,164		
Iron and steel scrap exports [d]	9,844		

[a] Equals domestic shipments (see Appendix C, Table C-1) plus net imports (see Appendix C, Table C-2).

[b] From Appendix C, Table C-44.

[c] Equals "Receipts from Brokers, Dealers, and Other Outside Sources" and from "Other Own Company Plants" less "Shipments" reported by USGS in Table 1: Salient U.S. Iron and Steel Scrap and Pig Iron Statistics, available online at: http://minerals.usgs.gov/minerals/pubs/commodity/iron_&_steel_scrap/stat/tbl1.txt.

[d] From U.S. Geological Survey Open-File Report 01-006, Historical Statistics for Mineral and Material Commodities in the United States, Table: Iron and Steel Scrap Statistics.

SOURCES : See footnotes.

Table A-19

Mill and Foundry Shipments and Prompt Scrap Generated, 1998 (thousands of net tons unless otherwise noted)

Item	Amount [1]	Prompt Scrap Factor [2]	Prompt Scrap Generated [3] = [1] x [2]
Mill shipments by AISI-defined market category [a]			
1. Converting and processing	19,611	15.9%	3,118
2. Forgings	1,823	25.0%	456
3. Industrial fasteners	480	19.6%	94
4. Steel service centers and distributors	38,705	18.0%	6,967
5. Construction and contractors' products	19,595	6.0%	1,176
6. Automotive	20,128	30.9%	6,220
7. Rail transportation	2,618	7.8%	204
8. Ship building and marine equipment	445	13.8%	61
9. Aircraft and aerospace	16	25.0%	4
10. Oil and gas	4,416	16.7%	737
11. Mining, quarrying, and lumbering	310	16.0%	50
12. Agricultural	1,099	8.9%	98
13. Machinery, industrial equipment, and tools	3,284	19.2%	631
14. Electrical equipment	2,924	21.8%	637
15. Appliances, utensils, and cutlery	2,154	19.4%	418
16. Other domestic and commercial equipment	1,461	13.5%	197
17. Containers, packaging, and shipping materials	4,638	9.5%	441
18. Ordinance and other military	54	22.0%	12
19. Nonclassified shipments	17,624	16.6%	2,922
Total	141,383	-	24,442
Foundry shipments [b]	10,282		
Total mill and foundry shipments	151,665	16.6%	
Iron and steel scrap receipts purchases [c]	58,422		
Iron and steel scrap imports [d]	3,373		
Iron and steel scrap exports [d]	6,140		

[a] Equals domestic shipments (see Appendix C, Table C-1) plus net imports (see Appendix C, Table C-2).

[b] From Appendix C, Table C-44.

[c] Equals "Receipts from Brokers, Dealers, and Other Outside Sources" and from "Other Own Company Plants" less "Shipments" reported by USGS in Table 1: Salient U.S. Iron and Steel Scrap and Pig Iron Statistics, available online at: http://minerals.usgs.gov/minerals/pubs/commodity/iron_&_steel_scrap/stat/tbl1.txt.

[d] From U.S. Geological Survey Open-File Report 01-006, Historical Statistics for Mineral and Material Commodities in the United States, Table: Iron and Steel Scrap Statistics.

SOURCES : See footnotes.

Table A-20

Mill and Foundry Shipments and Prompt Scrap Generated, 1999 (thousands of net tons unless otherwise noted)

Item	Amount [1]	Prompt Scrap Factor [2]	Prompt Scrap Generated [3] = [1] x [2]
Mill shipments by AISI-defined market category [a]			
1. Converting and processing	20,848	15.9%	3,315
2. Forgings	1,746	25.0%	437
3. Industrial fasteners	488	19.6%	96
4. Steel service centers and distributors	35,609	18.0%	6,410
5. Construction and contractors' products	22,457	6.0%	1,347
6. Automotive	20,470	30.9%	6,325
7. Rail transportation	1,876	7.8%	146
8. Ship building and marine equipment	335	13.8%	46
9. Aircraft and aerospace	15	25.0%	4
10. Oil and gas	3,535	16.7%	590
11. Mining, quarrying, and lumbering	297	16.0%	48
12. Agricultural	998	8.9%	89
13. Machinery, industrial equipment, and tools	2,659	19.2%	510
14. Electrical equipment	2,831	21.8%	617
15. Appliances, utensils, and cutlery	2,150	19.4%	417
16. Other domestic and commercial equipment	1,218	13.5%	164
17. Containers, packaging, and shipping materials	4,783	9.5%	454
18. Ordinance and other military	55	22.0%	12
19. Nonclassified shipments	17,153	16.6%	2,844
Total	139,524	-	23,872
Foundry shipments [b]	10,198		
Total mill and foundry shipments	149,722	16.6%	
Iron and steel scrap receipts purchases [c]	56,217		
Iron and steel scrap imports [d]	4,045		
Iron and steel scrap exports [d]	6,085		

[a] Equals domestic shipments (see Appendix C, Table C-1) plus net imports (see Appendix C, Table C-2).

[b] From Appendix C, Table C-44.

[c] Equals "Receipts from Brokers, Dealers, and Other Outside Sources" and from "Other Own Company Plants" less "Shipments" reported by USGS in Table 1: Salient U.S. Iron and Steel Scrap and Pig Iron Statistics, available online at: http://minerals.usgs.gov/minerals/pubs/commodity/iron_&_steel_scrap/stat/tbl1.txt.

[d] From U.S. Geological Survey Open-File Report 01-006, Historical Statistics for Mineral and Material Commodities in the United States, Table: Iron and Steel Scrap Statistics.

SOURCES : See footnotes.

Table A-21

Mill and Foundry Shipments and Prompt Scrap Generated, 2000 (thousands of net tons unless otherwise noted)

Item	Amount [1]	Prompt Scrap Factor [2]	Prompt Scrap Generated [3] = [1] x [2]
Mill shipments by AISI-defined market category [a]			
1. Converting and processing	22,485	15.9%	3,575
2. Forgings	1,436	25.0%	359
3. Industrial fasteners	490	19.6%	96
4. Steel service centers and distributors	38,423	18.0%	6,916
5. Construction and contractors' products	24,593	6.0%	1,476
6. Automotive	19,803	30.9%	6,119
7. Rail transportation	2,152	7.8%	168
8. Ship building and marine equipment	356	13.8%	49
9. Aircraft and aerospace	17	25.0%	4
10. Oil and gas	4,716	16.7%	788
11. Mining, quarrying, and lumbering	266	16.0%	43
12. Agricultural	1,159	8.9%	103
13. Machinery, industrial equipment, and tools	2,813	19.2%	540
14. Electrical equipment	2,617	21.8%	570
15. Appliances, utensils, and cutlery	2,232	19.4%	433
16. Other domestic and commercial equipment	1,412	13.5%	191
17. Containers, packaging, and shipping materials	4,532	9.5%	431
18. Ordinance and other military	58	22.0%	13
19. Nonclassified shipments	14,599	16.6%	2,421
Total	144,159	-	24,294
Foundry shipments [b]	9,689		
Total mill and foundry shipments	153,848	16.6%	
Iron and steel scrap receipts purchases [c]	59,524		
Iron and steel scrap imports [d]	3,704		
Iron and steel scrap exports [d]	6,349		

[a] Equals domestic shipments (see Appendix C, Table C-1) plus net imports (see Appendix C, Table C-2).

[b] From Appendix C, Table C-44.

[c] Equals "Receipts from Brokers, Dealers, and Other Outside Sources" and from "Other Own Company Plants" less "Shipments" reported by USGS in Table 1: Salient U.S. Iron and Steel Scrap and Pig Iron Statistics, available online at: http://minerals.usgs.gov/minerals/pubs/commodity/iron_&_steel_scrap/stat/tbl1.txt.

[d] From U.S. Geological Survey Open-File Report 01-006, Historical Statistics for Mineral and Material Commodities in the United States, Table: Iron and Steel Scrap Statistics.

SOURCES : See footnotes.

Table A-22

Mill and Foundry Shipments and Prompt Scrap Generated, 2001 (thousands of net tons unless otherwise noted)

Item	Amount [1]	Prompt Scrap Factor [2]	Prompt Scrap Generated [3] = [1] x [2]
Mill shipments by AISI-defined market category [a]			
1. Converting and processing	17,698	15.9%	2,814
2. Forgings	1,294	25.0%	324
3. Industrial fasteners	450	19.6%	88
4. Steel service centers and distributors	33,212	18.0%	5,978
5. Construction and contractors' products	25,057	6.0%	1,503
6. Automotive	16,893	30.9%	5,220
7. Rail transportation	1,626	7.8%	127
8. Ship building and marine equipment	346	13.8%	48
9. Aircraft and aerospace	15	25.0%	4
10. Oil and gas	4,837	16.7%	808
11. Mining, quarrying, and lumbering	205	16.0%	33
12. Agricultural	844	8.9%	75
13. Machinery, industrial equipment, and tools	2,297	19.2%	441
14. Electrical equipment	2,232	21.8%	487
15. Appliances, utensils, and cutlery	2,121	19.4%	412
16. Other domestic and commercial equipment	949	13.5%	128
17. Containers, packaging, and shipping materials	3,958	9.5%	376
18. Ordinance and other military	63	22.0%	14
19. Nonclassified shipments	12,388	16.6%	2,054
Total	126,486	-	20,932
Foundry shipments [b]	8,658		
Total mill and foundry shipments	135,144	16.6%	
Iron and steel scrap receipts purchases [c]	57,320		
Iron and steel scrap imports [d]	2,899		
Iron and steel scrap exports [d]	8,201		

[a] Equals domestic shipments (see Appendix C, Table C-1) plus net imports (see Appendix C, Table C-2).

[b] From Appendix C, Table C-44.

[c] Equals "Receipts from Brokers, Dealers, and Other Outside Sources" and from "Other Own Company Plants" less "Shipments" reported by USGS in Table 1: Salient U.S. Iron and Steel Scrap and Pig Iron Statistics, available online at: http://minerals.usgs.gov/minerals/pubs/commodity/iron_&_steel_scrap/stat/tbl1.txt.

[d] From U.S. Geological Survey Open-File Report 01-006, Historical Statistics for Mineral and Material Commodities in the United States, Table: Iron and Steel Scrap Statistics.

SOURCES : See footnotes.

Table A-23

Mill and Foundry Shipments and Prompt Scrap Generated, 2002 (thousands of net tons unless otherwise noted)

Item	Amount [1]	Prompt Scrap Factor [2]	Prompt Scrap Generated [3] = [1] x [2]
Mill shipments by AISI-defined market category [a]			
1. Converting and processing	18,872	15.9%	3,001
2. Forgings	1,587	25.0%	397
3. Industrial fasteners	259	19.6%	51
4. Steel service centers and distributors	33,583	18.0%	6,045
5. Construction and contractors' products	24,289	6.0%	1,457
6. Automotive	17,274	30.9%	5,338
7. Rail transportation	1,814	7.8%	141
8. Ship building and marine equipment	324	13.8%	45
9. Aircraft and aerospace	31	25.0%	8
10. Oil and gas	3,743	16.7%	625
11. Mining, quarrying, and lumbering	187	16.0%	30
12. Agricultural	704	8.9%	63
13. Machinery, industrial equipment, and tools	2,314	19.2%	444
14. Electrical equipment	1,752	21.8%	382
15. Appliances, utensils, and cutlery	1,962	19.4%	381
16. Other domestic and commercial equipment	1,050	13.5%	142
17. Containers, packaging, and shipping materials	3,833	9.5%	364
18. Ordinance and other military	75	22.0%	16
19. Nonclassified shipments	16,767	16.6%	2,780
Total	130,419	-	21,709
Foundry shipments [b]	7,983		
Total mill and foundry shipments	138,402	16.6%	
Iron and steel scrap receipts purchases [c]	57,320		
Iron and steel scrap imports [d]	3,450		
Iron and steel scrap exports [d]	9,866		

[a] Equals domestic shipments (see Appendix C, Table C-1) plus net imports (see Appendix C, Table C-2).

[b] From Appendix C, Table C-44.

[c] Equals "Receipts from Brokers, Dealers, and Other Outside Sources" and from "Other Own Company Plants" less "Shipments" reported by USGS in Table 1: Salient U.S. Iron and Steel Scrap and Pig Iron Statistics, available online at: http://minerals.usgs.gov/minerals/pubs/commodity/iron_&_steel_scrap/stat/tbl1.txt.

[d] From U.S. Geological Survey Open-File Report 01-006, Historical Statistics for Mineral and Material Commodities in the United States, Table: Iron and Steel Scrap Statistics.

SOURCES : See footnotes.

Table A-24

Mill and Foundry Shipments and Prompt Scrap Generated, 2003 (thousands of net tons unless otherwise noted)

Item	Amount [1]	Prompt Scrap Factor [2]	Prompt Scrap Generated [3] = [1] x [2]
Mill shipments by AISI-defined market category [a]			
1. Converting and processing	15,578	15.9%	2,477
2. Forgings	1,013	25.0%	253
3. Industrial fasteners	66	19.6%	13
4. Steel service centers and distributors	32,707	18.0%	5,887
5. Construction and contractors' products	27,418	6.0%	1,645
6. Automotive	17,753	30.9%	5,486
7. Rail transportation	1,173	7.8%	91
8. Ship building and marine equipment	207	13.8%	29
9. Aircraft and aerospace	25	25.0%	6
10. Oil and gas	3,624	16.7%	605
11. Mining, quarrying, and lumbering	265	16.0%	42
12. Agricultural	396	8.9%	35
13. Machinery, industrial equipment, and tools	1,602	19.2%	308
14. Electrical equipment	1,273	21.8%	278
15. Appliances, utensils, and cutlery	2,216	19.4%	430
16. Other domestic and commercial equipment	749	13.5%	101
17. Containers, packaging, and shipping materials	3,418	9.5%	325
18. Ordinance and other military	88	22.0%	19
19. Nonclassified shipments	16,633	16.6%	2,758
Total	126,204	-	20,788
Foundry shipments [b]	7,816		
Total mill and foundry shipments	134,021	16.6%	
Iron and steel scrap receipts purchases [c]	58,780		
Iron and steel scrap imports [d]	3,836		
Iron and steel scrap exports [d]	12,013		

[a] Equals domestic shipments (see Appendix C, Table C-1) plus net imports (see Appendix C, Table C-2).

[b] From Appendix C, Table C-44.

[c] Equals "Receipts from Brokers, Dealers, and Other Outside Sources" and from "Other Own Company Plants" less "Shipments" reported by USGS in Table 1: Salient U.S. Iron and Steel Scrap and Pig Iron Statistics, available online at: http://minerals.usgs.gov/minerals/pubs/commodity/iron_&_steel_scrap/stat/tbl1.txt.

[d] From U.S. Geological Survey Open-File Report 01-006, Historical Statistics for Mineral and Material Commodities in the United States, Table: Iron and Steel Scrap Statistics.

SOURCES : See footnotes.

Table A-25

Mill and Foundry Shipments and Prompt Scrap Generated, 2004 (thousands of net tons unless otherwise noted)

Item	Amount [1]	Prompt Scrap Factor [2]	Prompt Scrap Generated [3] = [1] x [2]
Mill shipments by AISI-defined market category [a]			
1. Converting and processing	17,899	15.9%	2,846
2. Forgings	1,113	25.0%	278
3. Industrial fasteners	119	19.6%	23
4. Steel service centers and distributors	41,468	18.0%	7,464
5. Construction and contractors' products	29,478	6.0%	1,769
6. Automotive	17,106	30.9%	5,286
7. Rail transportation	1,539	7.8%	120
8. Ship building and marine equipment	188	13.8%	26
9. Aircraft and aerospace	51	25.0%	13
10. Oil and gas	4,450	16.7%	743
11. Mining, quarrying, and lumbering	298	16.0%	48
12. Agricultural	507	8.9%	45
13. Machinery, industrial equipment, and tools	2,474	19.2%	475
14. Electrical equipment	2,257	21.8%	492
15. Appliances, utensils, and cutlery	1,299	19.4%	252
16. Other domestic and commercial equipment	1,074	13.5%	145
17. Containers, packaging, and shipping materials	3,103	9.5%	295
18. Ordinance and other military	90	22.0%	20
19. Nonclassified shipments	20,199	16.6%	3,349
Total	144,713	-	23,689
Foundry shipments [b]	9,026		
Total mill and foundry shipments	153,739	16.6%	
Iron and steel scrap receipts purchases [c]	58,201		
Iron and steel scrap imports [d]	5,137		
Iron and steel scrap exports [d]	13,007		

[a] Equals domestic shipments (see Appendix C, Table C-1) plus net imports (see Appendix C, Table C-2).

[b] From Appendix C, Table C-44.

[c] From U.S. Geological Survey, Minerals Yearbook, 2007, Table 1.

[d] From U.S. Geological Survey Data Series 140, Historical Statistics for Mineral and Material Commodities in the United States, Table: Iron and Steel Scrap Statistics.

SOURCES : See footnotes.

Table A-26

Mill and Foundry Shipments and Prompt Scrap Generated, 2005 (thousands of net tons unless otherwise noted)

Item	Amount [1]	Prompt Scrap Factor [2]	Prompt Scrap Generated [3] = [1] x [2]
Mill shipments by AISI-defined market category [a]			
1. Converting and processing	14,135	15.9%	2,247
2. Forgings	1,290	25.0%	323
3. Industrial fasteners	127	19.6%	25
4. Steel service centers and distributors	36,759	18.0%	6,617
5. Construction and contractors' products	28,684	6.0%	1,721
6. Automotive	17,115	30.9%	5,288
7. Rail transportation	1,599	7.8%	125
8. Ship building and marine equipment	299	13.8%	41
9. Aircraft and aerospace	25	25.0%	6
10. Oil and gas	5,334	16.7%	891
11. Mining, quarrying, and lumbering	250	16.0%	40
12. Agricultural	514	8.9%	46
13. Machinery, industrial equipment, and tools	2,270	19.2%	436
14. Electrical equipment	1,406	21.8%	307
15. Appliances, utensils, and cutlery	2,212	19.4%	429
16. Other domestic and commercial equipment	754	13.5%	102
17. Containers, packaging, and shipping materials	3,550	9.5%	337
18. Ordinance and other military	30	22.0%	6
19. Nonclassified shipments	18,074	16.6%	2,997
Total	134,427	-	21,984
Foundry shipments [b]	9,596		
Total mill and foundry shipments	144,023	16.6%	
Iron and steel scrap receipts purchases [c]	55,997		
Iron and steel scrap imports [d]	4,233		
Iron and steel scrap exports [d]	14,330		

[a] Equals domestic shipments (see Appendix C, Table C-1) plus net imports (see Appendix C, Table C-2).

[b] From Appendix C, Table C-44.

[c]From U.S. Geological Survey, Minerals Yearbook, 2007, Table 1.

[d] From U.S. Geological Survey Data Series 140, Historical Statistics for Mineral and Material Commodities in the United States, Table: Iron and Steel Scrap Statistics.

SOURCES : See footnotes.

Table A-27

Mill and Foundry Shipments and Prompt Scrap Generated, 2006 (thousands of net tons unless otherwise noted)

Item	Amount [1]	Prompt Scrap Factor [2]	Prompt Scrap Generated [3] = [1] x [2]
Mill shipments by AISI-defined market category [a]			
1. Converting and processing	20,243	15.9%	3,219
2. Forgings	1,852	25.0%	463
3. Industrial fasteners	323	19.6%	63
4. Steel service centers and distributors	39,634	18.0%	7,134
5. Construction and contractors' products	27,630	6.0%	1,658
6. Automotive	19,595	30.9%	6,055
7. Rail transportation	1,940	7.8%	151
8. Ship building and marine equipment	391	13.8%	54
9. Aircraft and aerospace	32	25.0%	8
10. Oil and gas	5,747	16.7%	960
11. Mining, quarrying, and lumbering	68	16.0%	11
12. Agricultural	655	8.9%	58
13. Machinery, industrial equipment, and tools	2,367	19.2%	454
14. Electrical equipment	1,436	21.8%	313
15. Appliances, utensils, and cutlery	2,254	19.4%	437
16. Other domestic and commercial equipment	960	13.5%	130
17. Containers, packaging, and shipping materials	3,812	9.5%	362
18. Ordinance and other military	57	22.0%	13
19. Nonclassified shipments	22,710	16.6%	3,765
Total	151,706	-	25,308
Foundry shipments [b]	9,299		
Total mill and foundry shipments	161,006	16.6%	
Iron and steel scrap receipts purchases [c]	58,312		
Iron and steel scrap imports [d]	5,313		
Iron and steel scrap exports [d]	16,424		

[a] Equals domestic shipments (see Appendix C, Table C-1) plus net imports (see Appendix C, Table C-2).

[b] From Appendix C, Table C-44.

[c]From U.S. Geological Survey, Minerals Yearbook, 2007, Table 1.

[d] From U.S. Geological Survey Data Series 140, Historical Statistics for Mineral and Material Commodities in the United States, Table: Iron and Steel Scrap Statistics.

SOURCES : See footnotes.

Table A-28

Mill and Foundry Shipments and Prompt Scrap Generated, 2007 (thousands of net tons unless otherwise noted)

Item	Amount [1]	Prompt Scrap Factor [2]	Prompt Scrap Generated [3] = [1] x [2]
Mill shipments by AISI-defined market category [a]			
1. Converting and processing	15,920	15.9%	2,531
2. Forgings	1,099	25.0%	275
3. Industrial fasteners	130	19.6%	25
4. Steel service centers and distributors	33,222	18.0%	5,980
5. Construction and contractors' products	28,342	6.0%	1,701
6. Automotive	16,166	30.9%	4,995
7. Rail transportation	1,704	7.8%	133
8. Ship building and marine equipment	310	13.8%	43
9. Aircraft and aerospace	25	25.0%	6
10. Oil and gas	5,751	16.7%	960
11. Mining, quarrying, and lumbering	144	16.0%	23
12. Agricultural	500	8.9%	44
13. Machinery, industrial equipment, and tools	2,104	19.2%	404
14. Electrical equipment	1,070	21.8%	233
15. Appliances, utensils, and cutlery	2,262	19.4%	439
16. Other domestic and commercial equipment	595	13.5%	80
17. Containers, packaging, and shipping materials	3,520	9.5%	334
18. Ordinance and other military	87	22.0%	19
19. Nonclassified shipments	23,632	16.6%	3,918
Total	136,583	-	22,145
Foundry shipments [b]	8,673		
Total mill and foundry shipments	145,256	16.6%	
Iron and steel scrap receipts purchases [c]	59,194		
Iron and steel scrap imports [d]	4,079		
Iron and steel scrap exports [d]	18,188		

[a] Equals domestic shipments (see Appendix C, Table C-1) plus net imports (see Appendix C, Table C-2).

[b] From Appendix C, Table C-44.

[c]From U.S. Geological Survey, Minerals Yearbook, 2007, Table 1.

[d] From U.S. Geological Survey Data Series 140, Historical Statistics for Mineral and Material Commodities in the United States, Table: Iron and Steel Scrap Statistics.

SOURCES : See footnotes.

Table A-29

Mill and Foundry Shipments and Prompt Scrap Generated, 2008 (thousands of net tons unless otherwise noted)

Item	Amount [1]	Prompt Scrap Factor [2]	Prompt Scrap Generated [3] = [1] x [2]
Mill shipments by AISI-defined market category [a]			
1. Converting and processing	13,199	15.9%	2,099
2. Forgings	979	25.0%	245
3. Industrial fasteners	97	19.6%	19
4. Steel service centers and distributors	32,439	18.0%	5,839
5. Construction and contractors' products	24,272	6.0%	1,456
6. Automotive	15,189	30.9%	4,693
7. Rail transportation	1,903	7.8%	148
8. Ship building and marine equipment	198	13.8%	27
9. Aircraft and aerospace	24	25.0%	6
10. Oil and gas	6,219	16.7%	1,039
11. Mining, quarrying, and lumbering	120	16.0%	19
12. Agricultural	430	8.9%	38
13. Machinery, industrial equipment, and tools	1,867	19.2%	359
14. Electrical equipment	1,195	21.8%	260
15. Appliances, utensils, and cutlery	2,072	19.4%	402
16. Other domestic and commercial equipment	539	13.5%	73
17. Containers, packaging, and shipping materials	3,246	9.5%	308
18. Ordinance and other military	90	22.0%	20
19. Nonclassified shipments	23,334	16.6%	3,869
Total	127,411	-	20,919
Foundry shipments [b]	7,947		
Total mill and foundry shipments	135,358	16.6%	
Iron and steel scrap receipts purchases [c]	55,657		
Iron and steel scrap imports [d]	3,968		
Iron and steel scrap exports [d]	23,699		

[a] Equals domestic shipments (see Appendix C, Table C-1) plus net imports (see Appendix C, Table C-2).

[b] From Appendix C, Table C-44.

[c] For 2008, iron and steel scrap receipt purchases (net of shipments) is estimated by multiplying Raw Steel Production for 2008 with the 2000-2007 average of the percentage of scrap purchases to Raw Steel Prodution. Statistics on Raw Steel Production by year is obtained from AISI, *Annual Statistical Reports* : 1998, 2003, & 2009. Data on iron and steel scrap receipts purchases taken from "*Iron and Steel Scrap: Its Accumulation and Availability Updated to December 31, 2009, Nathan Associates Inc.,* Appendix A, Table A11-A28.

[d] From U.S. Geological Survey Data Series 140, Historical Statistics for Mineral and Material Commodities in the United States, Table: Iron and Steel Scrap Statistics.

SOURCES : See footnotes.

Table A-30

Mill and Foundry Shipments and Prompt Scrap Generated, 2009 (thousands of net tons unless otherwise noted)

Item	Amount [1]	Prompt Scrap Factor [2]	Prompt Scrap Generated [3] = [1] x [2]
Mill shipments by AISI-defined market category [a]			
1. Converting and processing	6,875	15.9%	1,093
2. Forgings	151	25.0%	38
3. Industrial fasteners	125	19.6%	24
4. Steel service centers and distributors	18,823	18.0%	3,388
5. Construction and contractors' products	17,256	6.0%	1,035
6. Automotive	9,551	30.9%	2,951
7. Rail transportation	1,200	7.8%	94
8. Ship building and marine equipment	99	13.8%	14
9. Aircraft and aerospace	5	25.0%	1
10. Oil and gas	3,033	16.7%	507
11. Mining, quarrying, and lumbering	2	16.0%	0
12. Agricultural	80	8.9%	7
13. Machinery, industrial equipment, and tools	899	19.2%	173
14. Electrical equipment	559	21.8%	122
15. Appliances, utensils, and cutlery	1,390	19.4%	270
16. Other domestic and commercial equipment	235	13.5%	32
17. Containers, packaging, and shipping materials	2,687	9.5%	255
18. Ordinance and other military	52	22.0%	11
19. Nonclassified shipments	7,341	16.6%	1,217
Total	70,364	-	11,232
Foundry shipments [b]	4,389		
Total mill and foundry shipments	74,753	16.6%	
Iron and steel scrap receipts purchases [c]	44,390		
Iron and steel scrap imports [d]	3,296		
Iron and steel scrap exports [d]	24,692		

[a] Equals domestic shipments (see Appendix C, Table C-1) plus net imports (see Appendix C, Table C-2).

[b] From Appendix C, Table C-44.

[c] From U.S. Geological Survey, Mineral Industry Survey, December 2009, Table 1.

[d] From U.S. Geological Survey, Mineral Industry Survey, January 2010, Tables 7 and 9.

SOURCES : See footnotes.

Table A-31

Aggregation of 19 AISI-Defined Markets into 7 Bureau of Mines Demand Categories and Disaggregation of 7 Bureau of Mines Demand Categories into 14 Ferrous-Containing End-Use Product Categories, 1983 [a] (thousands of net tons unless otherwise noted)

U.S. Bureau of Mines Demand Category	Mill and Foundry Shipments [b]	Prompt Scrap Generated in Manufacturing End-Use Products	Ferrous-Containing End-Use Product Category	Mill and Foundry Shipments	Prompt Scrap Generated in Manufacturing End-Use Products
Rail transportation	1,111	87	1. Automotive	20,838	5,553
1. Transportation	16,513	4,738	2. Ship building and marine equipment	877	104
Transportation factor (pure number)	1.4084	1.1979	3. Aircraft and aerospace	46	10
Adjusted transportation	23,258	5,675	4 & 5. Rail transportation	1,570	106
2. Construction	28,784	3,224	Transportation subtotal	23,331	5,773
3. Household appliances	6,037	1,028	6. Industrial machinery	6,972	1,150
4. Oil and gas	3,142	468	7. Electrical machinery	6,035	1,131
5. Containers, packaging, and shipping material	5,105	485	8. Mining materials	633	87
6. Other	7,771	1,294	9. Agricultural machinery	1,866	143
7. Machinery	7,191	1,355	Machinery Subtotal	15,505	2,511
Machinery factor (pure number)	2.1495	1.8218	10. Consumer durables	6,056	1,046
Adjusted machinery	15,457	2,468	11. Containers	5,121	493
Total	89,554	14,643	12. Oil and gas materials	3,152	477
			13. Materials, nec	7,795	1,316
			14. Construction materials	28,874	3,279
			Total	89,834	14,894
Factor to gross up each end-use product category's shipments to account for all shipments of industrial fasteners:			89,834 ÷	89,554	= 1.003
Prompt scrap generated on total mill and foundry shipments (including 100% of industrial fasteners) using weighted average scrap rate:			89,834 ×	16.58%	= 14,894
Factor to gross up each end-use product category's prompt scrap generated to account for all shipments of industrial fasteners:			14,894 ÷	14,643	= 1.017

[a] Calculated using mapping equations found in the report, as well as mill and foundry shipments and prompt scrap generation rates and amounts generated in Table A-4.

[b] Total includes only 50% of AISI-defined industrial fastener market shipments. See Table A-4.

SOURCE : Nathan Associates Inc. as described in *Iron and Steel Scrap Accumulation and Availability as of December 31, 2009.* See the section titled Distributing Mill and Foundry Shipments to End-Use Product Categories.

Table A-32

Aggregation of 19 AISI-Defined Markets into 7 Bureau of Mines Demand Categories and Disaggregation of 7 Bureau of Mines Demand Categories into 14 Ferrous-Containing End-Use Product Categories, 1984 [a] (thousands of net tons unless otherwise noted)

U.S. Bureau of Mines Demand Category	Mill and Foundry Shipments [b]	Prompt Scrap Generated in Manufacturing End-Use Products	Ferrous-Containing End-Use Product Category	Mill and Foundry Shipments	Prompt Scrap Generated in Manufacturing End-Use Products
Rail transportation	1,793	140	1. Automotive	23,429	6,241
1. Transportation	18,983	5,331	2. Ship building and marine equipment	979	117
Transportation factor (pure number)	1.4205	1.2087	3. Aircraft and aerospace	82	18
Adjusted transportation	26,966	6,443	4 & 5. Rail transportation	2,555	172
2. Construction	33,973	3,904	Transportation subtotal	27,046	6,547
3. Household appliances	6,893	1,173	6. Industrial machinery	8,883	1,476
4. Oil and gas	4,858	745	7. Electrical machinery	6,725	1,269
5. Containers, packaging, and shipping material	5,165	491	8. Mining materials	762	105
6. Other	9,647	1,607	9. Agricultural machinery	2,019	156
7. Machinery	8,433	1,593	Machinery Subtotal	18,389	3,006
Machinery factor (pure number)	2.1740	1.8572	10. Consumer durables	6,913	1,192
Adjusted machinery	18,334	2,958	11. Containers	5,180	499
Total	105,836	17,321	12. Oil and gas materials	4,872	757
			13. Materials, nec	9,676	1,633
			14. Construction materials	34,075	3,967
			Total	106,151	17,600
Factor to gross up each end-use product category's shipments to account for all shipments of industrial fasteners:			106,151 ÷	105,836 =	1.003
Prompt scrap generated on total mill and foundry shipments (including 100% of industrial fasteners) using weighted average scrap rate:			106,151 ×	16.58% =	17,600
Factor to gross up each end-use product category's prompt scrap generated to account for all shipments of industrial fasteners:			17,600 ÷	17,321 =	1.016

[a] Calculated using mapping equations found in the report, as well as mill and foundry shipments and prompt scrap generation rates and amounts generated in Table A-5.

[b] Total includes only 50% of AISI-defined industrial fastener market shipments. See Table A-5.

SOURCE : Nathan Associates Inc. as described in *Iron and Steel Scrap Accumulation and Availability as of December 31, 2009*. See the section titled Distributing Mill and Foundry Shipments to End-Use Product Categories.

Table A-33

Aggregation of 19 AISI-Defined Markets into 7 Bureau of Mines Demand Categories and Disaggregation of 7 Bureau of Mines Demand Categories into 14 Ferrous-Containing End-Use Product Categories, 1985 [a] (thousands of net tons unless otherwise noted)

U.S. Bureau of Mines Demand Category	Mill and Foundry Shipments [b]	Prompt Scrap Generated in Manufacturing End-Use Products	Ferrous-Containing End-Use Product Category	Mill and Foundry Shipments	Prompt Scrap Generated in Manufacturing End-Use Products
Rail transportation	1,418	111	1. Automotive	23,414	6,241
1. Transportation	18,149	5,185	2. Ship building and marine equipment	772	92
Transportation factor (pure number)	1.4476	1.2084	3. Aircraft and aerospace	98	21
Adjusted transportation	26,273	6,266	4 & 5. Rail transportation	2,059	139
2. Construction	35,112	3,949	Transportation subtotal	26,343	6,492
3. Household appliances	6,519	1,094	6. Industrial machinery	8,262	1,359
4. Oil and gas	4,732	713	7. Electrical machinery	6,112	1,142
5. Containers, packaging, and shipping material	4,939	469	8. Mining materials	847	116
6. Other	9,660	1,600	9. Agricultural machinery	2,139	163
7. Machinery	7,088	1,325	Machinery Subtotal	17,359	2,780
Machinery factor (pure number)	2.4424	2.0256	10. Consumer durables	6,537	1,133
Adjusted machinery	17,312	2,684	11. Containers	4,953	486
Total	104,548	16,775	12. Oil and gas materials	4,745	739
			13. Materials, nec	9,686	1,658
			14. Construction materials	35,206	4,091
			Total	104,827	17,380
Factor to gross up each end-use product category's shipments to account for all shipments of industrial fasteners:			104,827 ÷	104,548	= 1.003
Prompt scrap generated on total mill and foundry shipments (including 100% of industrial fasteners) using weighted average scrap rate:			104,827 ×	16.58%	= 17,380
Factor to gross up each end-use product category's prompt scrap generated to account for all shipments of industrial fasteners:			17,380 ÷	16,775	= 1.036

[a] Calculated using mapping equations found in the report, as well as mill and foundry shipments and prompt scrap generation rates and amounts generated in Table A-6.

[b] Total includes only 50% of AISI-defined industrial fastener market shipments. See Table A-6.

SOURCE : Nathan Associates Inc. as described in *Iron and Steel Scrap Accumulation and Availability as of December 31, 2009.* See the section titled Distributing Mill and Foundry Shipments to End-Use Product Categories.

Table A-34

Aggregation of 19 AISI-Defined Markets into 7 Bureau of Mines Demand Categories and Disaggregation of 7 Bureau of Mines Demand Categories into 14 Ferrous-Containing End-Use Product Categories, 1986 [a] (thousands of net tons unless otherwise noted)

U.S. Bureau of Mines Demand Category	Mill and Foundry Shipments [b]	Prompt Scrap Generated in Manufacturing End-Use Products	Ferrous-Containing End-Use Product Category	Mill and Foundry Shipments	Prompt Scrap Generated in Manufacturing End-Use Products
Rail transportation	1,071	84	1. Automotive	21,749	5,766
1. Transportation	16,285	4,718	2. Ship building and marine equipment	541	64
Transportation factor (pure number)	1.4667	1.2111	3. Aircraft and aerospace	93	20
Adjusted transportation	23,886	5,714	4 & 5. Rail transportation	1,575	105
2. Construction	33,896	3,859	Transportation subtotal	23,958	5,956
3. Household appliances	6,359	1,071	6. Industrial machinery	7,161	1,166
4. Oil and gas	3,212	461	7. Electrical machinery	6,376	1,178
5. Containers, packaging, and shipping material	4,850	461	8. Mining materials	765	104
6. Other	9,569	1,579	9. Agricultural machinery	1,966	148
7. Machinery	6,745	1,270	Machinery Subtotal	16,269	2,596
Machinery factor (pure number)	2.4047	1.9619	10. Consumer durables	6,378	1,116
Adjusted machinery	16,221	2,491	11. Containers	4,865	480
Total	97,994	15,636	12. Oil and gas materials	3,221	480
			13. Materials, nec	9,598	1,646
			14. Construction materials	33,998	4,022
			Total	98,286	16,296
Factor to gross up each end-use product category's shipments to account for all shipments of industrial fasteners:			98,286 ÷	97,994	= 1.003
Prompt scrap generated on total mill and foundry shipments (including 100% of industrial fasteners) using weighted average scrap rate:			98,286 ×	16.58%	= 16,296
Factor to gross up each end-use product category's prompt scrap generated to account for all shipments of industrial fasteners:			16,296 ÷	15,636	= 1.042

[a] Calculated using mapping equations found in the report, as well as mill and foundry shipments and prompt scrap generation rates and amounts generated in Table A-7.

[b] Total includes only 50% of AISI-defined industrial fastener market shipments. See Table A-7.

SOURCE : Nathan Associates Inc. as described in *Iron and Steel Scrap Accumulation and Availability as of December 31, 2009.* See the section titled Distributing Mill and Foundry Shipments to End-Use Product Categories.

Table A-35

Aggregation of 19 AISI-Defined Markets into 7 Bureau of Mines Demand Categories and Disaggregation of 7 Bureau of Mines Demand Categories into 14 Ferrous-Containing End-Use Product Categories, 1987 [a] (thousands of net tons unless otherwise noted)

U.S. Bureau of Mines Demand Category	Mill and Foundry Shipments [b]	Prompt Scrap Generated in Manufacturing End-Use Products	Ferrous-Containing End-Use Product Category	Mill and Foundry Shipments	Prompt Scrap Generated in Manufacturing End-Use Products
Rail transportation	1,000	78	1. Automotive	21,701	5,700
1. Transportation	15,587	4,521	2. Ship building and marine equipment	547	64
Transportation factor (pure number)	1.5275	1.2424	3. Aircraft and aerospace	94	20
Adjusted transportation	23,809	5,617	4 & 5. Rail transportation	1,531	101
2. Construction	36,931	4,306	Transportation subtotal	23,873	5,885
3. Household appliances	6,636	1,118	6. Industrial machinery	7,616	1,260
4. Oil and gas	3,810	557	7. Electrical machinery	6,859	1,289
5. Containers, packaging, and shipping material	5,051	480	8. Mining materials	1,064	147
6. Other	10,649	1,758	9. Agricultural machinery	1,939	149
7. Machinery	7,278	1,374	Machinery Subtotal	17,478	2,844
Machinery factor (pure number)	2.3951	1.9751	10. Consumer durables	6,654	1,172
Adjusted machinery	17,431	2,714	11. Containers	5,064	503
Total	104,316	16,550	12. Oil and gas materials	3,820	584
			13. Materials, nec	10,677	1,842
			14. Construction materials	37,030	4,512
			Total	104,595	17,342
Factor to gross up each end-use product category's shipments to account for all shipments of industrial fasteners:			104,595 ÷	104,316	= 1.003
Prompt scrap generated on total mill and foundry shipments (including 100% of industrial fasteners) using weighted average scrap rate:			104,595 ×	16.58%	= 17,342
Factor to gross up each end-use product category's prompt scrap generated to account for all shipments of industrial fasteners:			17,342 ÷	16,550	= 1.048

[a] Calculated using mapping equations found in the report, as well as mill and foundry shipments and prompt scrap generation rates and amounts generated in Table A-8.

[b] Total includes only 50% of AISI-defined industrial fastener market shipments. See Table A-8.

SOURCE : Nathan Associates Inc. as described in *Iron and Steel Scrap Accumulation and Availability as of December 31, 2009.* See the section titled Distributing Mill and Foundry Shipments to End-Use Product Categories.

Table A-36

Aggregation of 19 AISI-Defined Markets into 7 Bureau of Mines Demand Categories and Disaggregation of 7 Bureau of Mines Demand Categories into 14 Ferrous-Containing End-Use Product Categories, 1988 [a] (thousands of net tons unless otherwise noted)

U.S. Bureau of Mines Demand Category	Mill and Foundry Shipments [b]	Prompt Scrap Generated in Manufacturing End-Use Products	Ferrous-Containing End-Use Product Category	Mill and Foundry Shipments	Prompt Scrap Generated in Manufacturing End-Use Products
Rail transportation	1,523	119	1. Automotive	22,508	5,967
1. Transportation	16,776	4,756	2. Ship building and marine equipment	647	77
Transportation factor (pure number)	1.5202	1.2449	3. Aircraft and aerospace	83	18
Adjusted transportation	25,504	5,921	4 & 5. Rail transportation	2,321	155
2. Construction	41,130	4,911	Transportation subtotal	25,558	6,216
3. Household appliances	6,821	1,147	6. Industrial machinery	8,369	1,369
4. Oil and gas	4,233	621	7. Electrical machinery	6,870	1,276
5. Containers, packaging, and shipping material	5,001	475	8. Mining materials	1,314	179
6. Other	11,790	1,937	9. Agricultural machinery	1,588	120
7. Machinery	7,763	1,479	Machinery Subtotal	18,141	2,945
Machinery factor (pure number)	2.3320	1.8966	10. Consumer durables	6,836	1,204
Adjusted machinery	18,103	2,805	11. Containers	5,011	499
Total	112,581	17,817	12. Oil and gas materials	4,242	652
			13. Materials, nec	11,815	2,033
			14. Construction materials	41,218	5,156
			Total	112,823	18,706

Factor to gross up each end-use product category's shipments to account for all shipments of industrial fasteners:	112,823	÷	112,581	=	1.002
Prompt scrap generated on total mill and foundry shipments (including 100% of industrial fasteners) using weighted average scrap rate:	112,823	×	16.58%	=	18,706
Factor to gross up each end-use product category's prompt scrap generated to account for all shipments of industrial fasteners:	18,706	÷	17,817	=	1.050

[a] Calculated using mapping equations found in the report, as well as mill and foundry shipments and prompt scrap generation rates and amounts generated in Table A-9.

[b] Total includes only 50% of AISI-defined industrial fastener market shipments. See Table A-9.

SOURCE : Nathan Associates Inc. as described in *Iron and Steel Scrap Accumulation and Availability as of December 31, 2009.* See the section titled Distributing Mill and Foundry Shipments to End-Use Product Categories.

Table A-37

Aggregation of 19 AISI-Defined Markets into 7 Bureau of Mines Demand Categories and Disaggregation of 7 Bureau of Mines Demand Categories into 14 Ferrous-Containing End-Use Product Categories, 1989 [a] (thousands of net tons unless otherwise noted)

U.S. Bureau of Mines Demand Category	Mill and Foundry Shipments [b]	Prompt Scrap Generated in Manufacturing End-Use Products	Ferrous-Containing End-Use Product Category	Mill and Foundry Shipments	Prompt Scrap Generated in Manufacturing End-Use Products
Rail transportation	1,491	116	1. Automotive	21,050	5,582
1. Transportation	15,684	4,420	2. Ship building and marine equipment	709	84
Transportation factor (pure number)	1.5362	1.2525	3. Aircraft and aerospace	87	19
Adjusted transportation	24,094	5,536	4 & 5. Rail transportation	2,295	154
2. Construction	38,854	4,660	Transportation subtotal	24,141	5,839
3. Household appliances	6,663	1,123	6. Industrial machinery	7,325	1,198
4. Oil and gas	3,566	513	7. Electrical machinery	6,903	1,282
5. Containers, packaging, and shipping material	5,072	482	8. Mining materials	1,259	172
6. Other	11,482	1,884	9. Agricultural machinery	1,683	128
7. Machinery	7,142	1,357	Machinery Subtotal	17,170	2,780
Machinery factor (pure number)	2.3993	1.9421	10. Consumer durables	6,676	1,184
Adjusted machinery	17,137	2,636	11. Containers	5,082	508
Total	106,867	16,832	12. Oil and gas materials	3,573	541
			13. Materials, nec	11,504	1,987
			14. Construction materials	38,931	4,915
			Total	107,078	17,753
Factor to gross up each end-use product category's shipments to account for all shipments of industrial fasteners:			107,078 ÷	106,867	= 1.002
Prompt scrap generated on total mill and foundry shipments (including 100% of industrial fasteners) using weighted average scrap rate:			107,078 ×	16.58%	= 17,753
Factor to gross up each end-use product category's prompt scrap generated to account for all shipments of industrial fasteners:			17,753 ÷	16,832	= 1.055

[a] Calculated using mapping equations found in the report, as well as mill and foundry shipments and prompt scrap generation rates and amounts generated in Table A-10.

[b] Total includes only 50% of AISI-defined industrial fastener market shipments. See Table A-10.

SOURCE : Nathan Associates Inc. as described in *Iron and Steel Scrap Accumulation and Availability as of December 31, 2009.* See the section titled Distributing Mill and Foundry Shipments to End-Use Product Categories.

Table A-38

Aggregation of 19 AISI-Defined Markets into 7 Bureau of Mines Demand Categories and Disaggregation of 7 Bureau of Mines Demand Categories into 14 Ferrous-Containing End-Use Product Categories, 1990 [a] (thousands of net tons unless otherwise noted)

U.S. Bureau of Mines Demand Category	Mill and Foundry Shipments [b]	Prompt Scrap Generated in Manufacturing End-Use Products	Ferrous-Containing End-Use Product Category	Mill and Foundry Shipments	Prompt Scrap Generated in Manufacturing End-Use Products
Rail transportation	1,330	104	1. Automotive	20,487	5,415
1. Transportation	14,885	4,218	2. Ship building and marine equipment	657	78
Transportation factor (pure number)	1.5622	1.2697	3. Aircraft and aerospace	74	16
Adjusted transportation	23,254	5,355	4 & 5. Rail transportation	2,082	139
2. Construction	39,721	4,790	Transportation subtotal	23,301	5,647
3. Household appliances	6,513	1,100	6. Industrial machinery	7,156	1,200
4. Oil and gas	4,394	655	7. Electrical machinery	6,841	1,302
5. Containers, packaging, and shipping material	5,080	483	8. Mining materials	1,418	198
6. Other	11,401	1,873	9. Agricultural machinery	1,896	147
7. Machinery	7,339	1,382	Machinery Subtotal	17,312	2,848
Machinery factor (pure number)	2.3542	1.9534	10. Consumer durables	6,526	1,160
Adjusted machinery	17,277	2,700	11. Containers	5,090	509
Total	107,639	16,957	12. Oil and gas materials	4,402	691
			13. Materials, nec	11,424	1,976
			14. Construction materials	39,802	5,052
			Total	107,857	17,883
Factor to gross up each end-use product category's shipments to account for all shipments of industrial fasteners:			107,857 ÷	107,639	= 1.002
Prompt scrap generated on total mill and foundry shipments (including 100% of industrial fasteners) using weighted average scrap rate:			107,857 ×	16.58%	= 17,883
Factor to gross up each end-use product category's prompt scrap generated to account for all shipments of industrial fasteners:			17,883 ÷	16,957	= 1.055

[a] Calculated using mapping equations found in the report, as well as mill and foundry shipments and prompt scrap generation rates and amounts generated in Table A-11.

[b] Total includes only 50% of AISI-defined industrial fastener market shipments. See Table A-11.

SOURCE : Nathan Associates Inc. as described in *Iron and Steel Scrap Accumulation and Availability as of December 31, 2009.* See the section titled Distributing Mill and Foundry Shipments to End-Use Product Categories.

Table A-39

Aggregation of 19 AISI-Defined Markets into 7 Bureau of Mines Demand Categories and Disaggregation of 7 Bureau of Mines Demand Categories into 14 Ferrous-Containing End-Use Product Categories, 1991 [a] (thousands of net tons unless otherwise noted)

U.S. Bureau of Mines Demand Category	Mill and Foundry Shipments [b]	Prompt Scrap Generated in Manufacturing End-Use Products	Ferrous-Containing End-Use Product Category	Mill and Foundry Shipments	Prompt Scrap Generated in Manufacturing End-Use Products
Rail transportation	1,246	97	1. Automotive	18,664	4,940
1. Transportation	13,409	3,807	2. Ship building and marine equipment	431	51
Transportation factor (pure number)	1.5708	1.2757	3. Aircraft and aerospace	50	11
Adjusted transportation	21,064	4,857	4 & 5. Rail transportation	1,960	131
2. Construction	36,284	4,358	Transportation subtotal	21,105	5,133
3. Household appliances	5,895	1,000	6. Industrial machinery	6,329	1,055
4. Oil and gas	3,775	560	7. Electrical machinery	6,189	1,171
5. Containers, packaging, and shipping material	4,866	462	8. Mining materials	980	136
6. Other	10,379	1,708	9. Agricultural machinery	1,587	123
7. Machinery	6,174	1,172	Machinery Subtotal	15,084	2,485
Machinery factor (pure number)	2.4384	2.0068	10. Consumer durables	5,907	1,057
Adjusted machinery	15,055	2,351	11. Containers	4,876	489
Total	97,318	15,297	12. Oil and gas materials	3,782	592
			13. Materials, nec	10,399	1,805
			14. Construction materials	36,356	4,606
			Total	97,509	16,167
Factor to gross up each end-use product category's shipments to account for all shipments of industrial fasteners:			97,509 ÷	97,318	= 1.002
Prompt scrap generated on total mill and foundry shipments (including 100% of industrial fasteners) using weighted average scrap rate:			97,509 ×	16.58%	= 16,167
Factor to gross up each end-use product category's prompt scrap generated to account for all shipments of industrial fasteners:			16,167 ÷	15,297	= 1.057

[a] Calculated using mapping equations found in the report, as well as mill and foundry shipments and prompt scrap generation rates and amounts generated in Table A-12.

[b] Total includes only 50% of AISI-defined industrial fastener market shipments. See Table A-12.

SOURCE : Nathan Associates Inc. as described in *Iron and Steel Scrap Accumulation and Availability as of December 31, 2009.* See the section titled Distributing Mill and Foundry Shipments to End-Use Product Categories.

Table A-40

Aggregation of 19 AISI-Defined Markets into 7 Bureau of Mines Demand Categories and Disaggregation of 7 Bureau of Mines Demand Categories into 14 Ferrous-Containing End-Use Product Categories, 1992 [a] (thousands of net tons unless otherwise noted)

U.S. Bureau of Mines Demand Category	Mill and Foundry Shipments [b]	Prompt Scrap Generated in Manufacturing End-Use Products	Ferrous-Containing End-Use Product Category	Mill and Foundry Shipments	Prompt Scrap Generated in Manufacturing End-Use Products
Rail transportation	1,326	103	1. Automotive	20,743	5,481
1. Transportation	14,999	4,275	2. Ship building and marine equipment	474	56
Transportation factor (pure number)	1.5510	1.2670	3. Aircraft and aerospace	49	10
Adjusted transportation	23,263	5,416	4 & 5. Rail transportation	2,062	138
2. Construction	39,358	4,742	Transportation subtotal	23,328	5,685
3. Household appliances	6,393	1,087	6. Industrial machinery	6,483	1,069
4. Oil and gas	3,618	530	7. Electrical machinery	6,549	1,226
5. Containers, packaging, and shipping material	4,624	439	8. Mining materials	980	135
6. Other	11,113	1,829	9. Agricultural machinery	1,735	133
7. Machinery	6,199	1,174	Machinery Subtotal	15,748	2,562
Machinery factor (pure number)	2.5335	2.0782	10. Consumer durables	6,410	1,141
Adjusted machinery	15,704	2,441	11. Containers	4,636	461
Total	104,073	16,483	12. Oil and gas materials	3,629	556
			13. Materials, nec	11,144	1,920
			14. Construction materials	39,467	4,978
			Total	104,362	17,303

Factor to gross up each end-use product category's shipments to account for all shipments of industrial fasteners:	104,362	÷	104,073	=	1.003
Prompt scrap generated on total mill and foundry shipments (including 100% of industrial fasteners) using weighted average scrap rate:	104,362	×	16.58%	=	17,303
Factor to gross up each end-use product category's prompt scrap generated to account for all shipments of industrial fasteners:	17,303	÷	16,483	=	1.050

[a] Calculated using mapping equations found in the report, as well as mill and foundry shipments and prompt scrap generation rates and amounts generated in Table A-13.

[b] Total includes only 50% of AISI-defined industrial fastener market shipments. See Table A-13.

SOURCE : Nathan Associates Inc. as described in *Iron and Steel Scrap Accumulation and Availability as of December 31, 2009.* See the section titled Distributing Mill and Foundry Shipments to End-Use Product Categories.

Table A-41

Aggregation of 19 AISI-Defined Markets into 7 Bureau of Mines Demand Categories and Disaggregation of 7 Bureau of Mines Demand Categories into 14 Ferrous-Containing End-Use Product Categories, 1993 [a] (thousands of net tons unless otherwise noted)

U.S. Bureau of Mines Demand Category	Mill and Foundry Shipments [b]	Prompt Scrap Generated in Manufacturing End-Use Products	Ferrous-Containing End-Use Product Category	Mill and Foundry Shipments	Prompt Scrap Generated in Manufacturing End-Use Products
Rail transportation	1,623	127	1. Automotive	22,665	5,997
1. Transportation	16,536	4,687	2. Ship building and marine equipment	407	48
Transportation factor (pure number)	1.5467	1.2677	3. Aircraft and aerospace	73	16
Adjusted transportation	25,577	5,942	4 & 5. Rail transportation	2,518	168
2. Construction	43,518	5,259	Transportation subtotal	25,663	6,229
3. Household appliances	6,850	1,165	6. Industrial machinery	7,510	1,251
4. Oil and gas	4,092	603	7. Electrical machinery	6,994	1,323
5. Containers, packaging, and shipping material	4,933	469	8. Mining materials	840	117
6. Other	12,135	1,995	9. Agricultural machinery	1,916	148
7. Machinery	6,511	1,234	Machinery Subtotal	17,260	2,839
Machinery factor (pure number)	2.6423	2.1946	10. Consumer durables	6,873	1,221
Adjusted machinery	17,203	2,708	11. Containers	4,949	491
Total	114,307	18,140	12. Oil and gas materials	4,105	632
			13. Materials, nec	12,176	2,091
			14. Construction materials	43,664	5,513
			Total	114,691	19,016
Factor to gross up each end-use product category's shipments to account for all shipments of industrial fasteners:			114,691 ÷	114,307	= 1.003
Prompt scrap generated on total mill and foundry shipments (including 100% of industrial fasteners) using weighted average scrap rate:			114,691 ×	16.58%	= 19,016
Factor to gross up each end-use product category's prompt scrap generated to account for all shipments of industrial fasteners:			19,016 ÷	18,140	= 1.048

[a] Calculated using mapping equations found in the report, as well as mill and foundry shipments and prompt scrap generation rates and amounts generated in Table A-14.

[b] Total includes only 50% of AISI-defined industrial fastener market shipments. See Table A-14.

SOURCE : Nathan Associates Inc. as described in *Iron and Steel Scrap Accumulation and Availability as of December 31, 2009.* See the section titled Distributing Mill and Foundry Shipments to End-Use Product Categories.

Table A-42

Aggregation of 19 AISI-Defined Markets into 7 Bureau of Mines Demand Categories and Disaggregation of 7 Bureau of Mines Demand Categories into 14 Ferrous-Containing End-Use Product Categories, 1994 [a] (thousands of net tons unless otherwise noted)

U.S. Bureau of Mines Demand Category	Mill and Foundry Shipments [b]	Prompt Scrap Generated in Manufacturing End-Use Products	Ferrous-Containing End-Use Product Category	Mill and Foundry Shipments	Prompt Scrap Generated in Manufacturing End-Use Products
Rail transportation	1,893	148	1. Automotive	26,790	7,086
1. Transportation	20,029	5,688	2. Ship building and marine equipment	532	63
Transportation factor (pure number)	1.5068	1.2445	3. Aircraft and aerospace	84	18
Adjusted transportation	30,179	7,079	4 & 5. Rail transportation	2,860	191
2. Construction	50,760	6,206	Transportation subtotal	30,265	7,358
3. Household appliances	7,755	1,317	6. Industrial machinery	8,928	1,471
4. Oil and gas	4,933	728	7. Electrical machinery	7,799	1,459
5. Containers, packaging, and shipping material	5,385	512	8. Mining materials	791	109
6. Other	14,134	2,316	9. Agricultural machinery	2,149	164
7. Machinery	7,453	1,414	Machinery Subtotal	19,666	3,202
Machinery factor (pure number)	2.6314	2.1783	10. Consumer durables	7,777	1,369
Adjusted machinery	19,611	3,081	11. Containers	5,400	532
Total	132,757	21,239	12. Oil and gas materials	4,947	757
			13. Materials, nec	14,175	2,407
			14. Construction materials	50,904	6,450
			Total	133,135	22,074
Factor to gross up each end-use product category's shipments to account for all shipments of industrial fasteners:			133,135 ÷	132,757	= 1.003
Prompt scrap generated on total mill and foundry shipments (including 100% of industrial fasteners) using weighted average scrap rate:			133,135 ×	16.58%	= 22,074
Factor to gross up each end-use product category's prompt scrap generated to account for all shipments of industrial fasteners:			22,074 ÷	21,239	= 1.039

[a] Calculated using mapping equations found in the report, as well as mill and foundry shipments and prompt scrap generation rates and amounts generated in Table A-15.

[b] Total includes only 50% of AISI-defined industrial fastener market shipments. See Table A-15.

SOURCE : Nathan Associates Inc. as described in *Iron and Steel Scrap Accumulation and Availability as of December 31, 2009.* See the section titled Distributing Mill and Foundry Shipments to End-Use Product Categories.

Table A-43

Aggregation of 19 AISI-Defined Markets into 7 Bureau of Mines Demand Categories and Disaggregation of 7 Bureau of Mines Demand Categories into 14 Ferrous-Containing End-Use Product Categories, 1995 [a] (thousands of net tons unless otherwise noted)

U.S. Bureau of Mines Demand Category	Mill and Foundry Shipments [b]	Prompt Scrap Generated in Manufacturing End-Use Products	Ferrous-Containing End-Use Product Category	Mill and Foundry Shipments	Prompt Scrap Generated in Manufacturing End-Use Products
Rail transportation	1,899	148	1. Automotive	25,694	6,849
1. Transportation	19,291	5,451	2. Ship building and marine equipment	613	73
Transportation factor (pure number)	1.5117	1.2420	3. Aircraft and aerospace	57	12
Adjusted transportation	29,162	6,770	4 & 5. Rail transportation	2,879	194
2. Construction	48,411	5,772	Transportation subtotal	29,243	7,128
3. Household appliances	7,266	1,223	6. Industrial machinery	8,222	1,345
4. Oil and gas	5,584	834	7. Electrical machinery	7,774	1,444
5. Containers, packaging, and shipping material	4,867	462	8. Mining materials	625	85
6. Other	13,115	2,141	9. Agricultural machinery	2,306	175
7. Machinery	7,127	1,348	Machinery Subtotal	18,929	3,050
Machinery factor (pure number)	2.6484	2.1499	10. Consumer durables	7,286	1,287
Adjusted machinery	18,876	2,897	11. Containers	4,880	487
Total	127,281	20,100	12. Oil and gas materials	5,600	879
			13. Materials, nec	13,151	2,254
			14. Construction materials	48,546	6,077
			Total	127,634	21,162
Factor to gross up each end-use product category's shipments to account for all shipments of industrial fasteners:			127,634 ÷	127,281	= 1.003
Prompt scrap generated on total mill and foundry shipments (including 100% of industrial fasteners) using weighted average scrap rate:			127,634 ×	16.58%	= 21,162
Factor to gross up each end-use product category's prompt scrap generated to account for all shipments of industrial fasteners:			21,162 ÷	20,100	= 1.053

[a] Calculated using mapping equations found in the report, as well as mill and foundry shipments and prompt scrap generation rates and amounts generated in Table A-16.

[b] Total includes only 50% of AISI-defined industrial fastener market shipments. See Table A-16.

SOURCE : Nathan Associates Inc. as described in *Iron and Steel Scrap Accumulation and Availability as of December 31, 2009.* See the section titled Distributing Mill and Foundry Shipments to End-Use Product Categories.

Table A-44

Aggregation of 19 AISI-Defined Markets into 7 Bureau of Mines Demand Categories and Disaggregation of 7 Bureau of Mines Demand Categories into 14 Ferrous-Containing End-Use Product Categories, 1996 [a] (thousands of net tons unless otherwise noted)

U.S. Bureau of Mines Demand Category	Mill and Foundry Shipments [b]	Prompt Scrap Generated in Manufacturing End-Use Products	Ferrous-Containing End-Use Product Category	Mill and Foundry Shipments	Prompt Scrap Generated in Manufacturing End-Use Products
Rail transportation	2,054	160	1. Automotive	26,878	7,137
1. Transportation	19,985	5,605	2. Ship building and marine equipment	845	100
Transportation factor (pure number)	1.5460	1.2703	3. Aircraft and aerospace	79	17
Adjusted transportation	30,896	7,119	4 & 5. Rail transportation	3,184	213
2. Construction	52,407	6,324	Transportation subtotal	30,986	7,468
3. Household appliances	8,097	1,373	6. Industrial machinery	9,142	1,521
4. Oil and gas	6,419	974	7. Electrical machinery	7,942	1,501
5. Containers, packaging, and shipping material	4,836	459	8. Mining materials	697	97
6. Other	14,331	2,352	9. Agricultural machinery	2,591	200
7. Machinery	7,572	1,423	Machinery Subtotal	20,373	3,319
Machinery factor (pure number)	2.6828	2.2233	10. Consumer durables	8,120	1,440
Adjusted machinery	20,313	3,164	11. Containers	4,850	482
Total	137,299	21,766	12. Oil and gas materials	6,438	1,022
			13. Materials, nec	14,373	2,467
			14. Construction materials	52,560	6,634
			Total	137,700	22,831
Factor to gross up each end-use product category's shipments to account for all shipments of industrial fasteners:			137,700 ÷	137,299	= 1.003
Prompt scrap generated on total mill and foundry shipments (including 100% of industrial fasteners) using weighted average scrap rate:			137,700 ×	16.58%	= 22,831
Factor to gross up each end-use product category's prompt scrap generated to account for all shipments of industrial fasteners:			22,831 ÷	21,766	= 1.049

[a] Calculated using mapping equations found in the report, as well as mill and foundry shipments and prompt scrap generation rates and amounts generated in Table A-17.

[b] Total includes only 50% of AISI-defined industrial fastener market shipments. See Table A-17.

SOURCE : Nathan Associates Inc. as described in *Iron and Steel Scrap Accumulation and Availability as of December 31, 2009.* See the section titled Distributing Mill and Foundry Shipments to End-Use Product Categories.

Table A-45

Aggregation of 19 AISI-Defined Markets into 7 Bureau of Mines Demand Categories and Disaggregation of 7 Bureau of Mines Demand Categories into 14 Ferrous-Containing End-Use Product Categories, 1997 [a] (thousands of net tons unless otherwise noted)

U.S. Bureau of Mines Demand Category	Mill and Foundry Shipments [b]	Prompt Scrap Generated in Manufacturing End-Use Products	Ferrous-Containing End-Use Product Category	Mill and Foundry Shipments	Prompt Scrap Generated in Manufacturing End-Use Products
Rail transportation	2,045	159	1. Automotive	28,242	7,451
1. Transportation	20,775	5,878	2. Ship building and marine equipment	599	71
Transportation factor (pure number)	1.5385	1.2694	3. Aircraft and aerospace	61	13
Adjusted transportation	31,963	7,462	4 & 5. Rail transportation	3,155	210
2. Construction	54,698	6,665	Transportation subtotal	32,057	7,745
3. Household appliances	8,287	1,411	6. Industrial machinery	8,969	1,519
4. Oil and gas	7,207	1,109	7. Electrical machinery	8,315	1,599
5. Containers, packaging, and shipping material	4,941	469	8. Mining materials	1,091	154
6. Other	15,254	2,511	9. Agricultural machinery	2,884	226
7. Machinery	7,904	1,475	Machinery Subtotal	21,260	3,498
Machinery factor (pure number)	2.6817	2.2851	10. Consumer durables	8,312	1,465
Adjusted machinery	21,197	3,370	11. Containers	4,956	487
Total	143,548	22,997	12. Oil and gas materials	7,228	1,151
			13. Materials, nec	15,299	2,606
			14. Construction materials	54,859	6,918
			Total	143,970	23,870
Factor to gross up each end-use product category's shipments to account for all shipments of industrial fasteners:			143,970 ÷	143,548	= 1.003
Prompt scrap generated on total mill and foundry shipments (including 100% of industrial fasteners) using weighted average scrap rate:			143,970 ×	16.58%	= 23,870
Factor to gross up each end-use product category's prompt scrap generated to account for all shipments of industrial fasteners:			23,870 ÷	22,997	= 1.038

[a] Calculated using mapping equations found in the report, as well as mill and foundry shipments and prompt scrap generation rates and amounts generated in Table A-18.

[b] Total includes only 50% of AISI-defined industrial fastener market shipments. See Table A-18.

SOURCE : Nathan Associates Inc. as described in *Iron and Steel Scrap Accumulation and Availability as of December 31, 2009.* See the section titled Distributing Mill and Foundry Shipments to End-Use Product Categories.

Table A-46

Aggregation of 19 AISI-Defined Markets into 7 Bureau of Mines Demand Categories and Disaggregation of 7 Bureau of Mines Demand Categories into 14 Ferrous-Containing End-Use Product Categories, 1998 [a] (thousands of net tons unless otherwise noted)

U.S. Bureau of Mines Demand Category	Mill and Foundry Shipments [b]	Prompt Scrap Generated in Manufacturing End-Use Products	Ferrous-Containing End-Use Product Category	Mill and Foundry Shipments	Prompt Scrap Generated in Manufacturing End-Use Products
Rail transportation	2,618	204	1. Automotive	30,799	8,132
1. Transportation	23,206	6,489	2. Ship building and marine equipment	680	80
Transportation factor (pure number)	1.5277	1.2684	3. Aircraft and aerospace	24	5
Adjusted transportation	35,453	8,231	4 & 5. Rail transportation	4,005	267
2. Construction	57,244	7,033	Transportation subtotal	35,509	8,484
3. Household appliances	9,058	1,542	6. Industrial machinery	9,404	1,564
4. Oil and gas	6,891	1,049	7. Electrical machinery	8,373	1,581
5. Containers, packaging, and shipping material	4,638	441	8. Mining materials	886	123
6. Other	16,364	2,693	9. Agricultural machinery	3,147	243
7. Machinery	7,617	1,415	Machinery Subtotal	21,810	3,511
Machinery factor (pure number)	2.8590	2.4067	10. Consumer durables	9,072	1,589
Adjusted machinery	21,776	3,406	11. Containers	4,645	454
Total	151,425	24,395	12. Oil and gas materials	6,902	1,082
			13. Materials, nec	16,390	2,776
			14. Construction materials	57,335	7,249
			Total	151,665	25,146
Factor to gross up each end-use product category's shipments to account for all shipments of industrial fasteners:				151,665 ÷ 151,425	= 1.002
Prompt scrap generated on total mill and foundry shipments (including 100% of industrial fasteners) using weighted average scrap rate:				151,665 × 16.58%	= 25,146
Factor to gross up each end-use product category's prompt scrap generated to account for all shipments of industrial fasteners:				25,146 ÷ 24,395	= 1.031

[a] Calculated using mapping equations found in the report, as well as mill and foundry shipments and prompt scrap generation rates and amounts generated in Table A-19.

[b] Total includes only 50% of AISI-defined industrial fastener market shipments. See Table A-19.

SOURCE : Nathan Associates Inc. as described in *Iron and Steel Scrap Accumulation and Availability as of December 31, 2009.* See the section titled Distributing Mill and Foundry Shipments to End-Use Product Categories.

Table A-47

Aggregation of 19 AISI-Defined Markets into 7 Bureau of Mines Demand Categories and Disaggregation of 7 Bureau of Mines Demand Categories into 14 Ferrous-Containing End-Use Product Categories, 1999 [a] (thousands of net tons unless otherwise noted)

U.S. Bureau of Mines Demand Category	Mill and Foundry Shipments [b]	Prompt Scrap Generated in Manufacturing End-Use Products	Ferrous-Containing End-Use Product Category	Mill and Foundry Shipments	Prompt Scrap Generated in Manufacturing End-Use Products
Rail transportation	1,876	146	1. Automotive	30,849	8,210
1. Transportation	22,696	6,521	2. Ship building and marine equipment	504	60
Transportation factor (pure number)	1.5046	1.2457	3. Aircraft and aerospace	22	5
Adjusted transportation	34,147	8,124	4 & 5. Rail transportation	2,828	190
2. Construction	59,959	7,166	Transportation subtotal	34,203	8,465
3. Household appliances	8,488	1,444	6. Industrial machinery	7,879	1,307
4. Oil and gas	6,130	922	7. Electrical machinery	8,391	1,580
5. Containers, packaging, and shipping material	4,783	454	8. Mining materials	880	122
6. Other	15,894	2,608	9. Agricultural machinery	2,958	227
7. Machinery	6,785	1,264	Machinery Subtotal	20,108	3,235
Machinery factor (pure number)	2.9587	2.4565	10. Consumer durables	8,502	1,505
Adjusted machinery	20,075	3,105	11. Containers	4,791	473
Total	149,478	23,824	12. Oil and gas materials	6,140	961
			13. Materials, nec	15,920	2,718
			14. Construction materials	60,057	7,467
			Total	149,722	24,824
Factor to gross up each end-use product category's shipments to account for all shipments of industrial fasteners:			149,722 ÷	149,478	= 1.002
Prompt scrap generated on total mill and foundry shipments (including 100% of industrial fasteners) using weighted average scrap rate:			149,722 ×	16.58%	= 24,824
Factor to gross up each end-use product category's prompt scrap generated to account for all shipments of industrial fasteners:			24,824 ÷	23,824	= 1.042

[a] Calculated using mapping equations found in the report, as well as mill and foundry shipments and prompt scrap generation rates and amounts generated in Table A-20.

[b] Total includes only 50% of AISI-defined industrial fastener market shipments. See Table A-20.

SOURCE : Nathan Associates Inc. as described in *Iron and Steel Scrap Accumulation and Availability as of December 31, 2009.* See the section titled Distributing Mill and Foundry Shipments to End-Use Product Categories.

Table A-48

Aggregation of 19 AISI-Defined Markets into 7 Bureau of Mines Demand Categories and Disaggregation of 7 Bureau of Mines Demand Categories into 14 Ferrous-Containing End-Use Product Categories, 2000 [a] (thousands of net tons unless otherwise noted)

U.S. Bureau of Mines Demand Category	Mill and Foundry Shipments [b]	Prompt Scrap Generated in Manufacturing End-Use Products	Ferrous-Containing End-Use Product Category	Mill and Foundry Shipments	Prompt Scrap Generated in Manufacturing End-Use Products
Rail transportation	2,152	168	1. Automotive	30,520	8,193
1. Transportation	22,328	6,340	2. Ship building and marine equipment	548	66
Transportation factor (pure number)	1.5387	1.2727	3. Aircraft and aerospace	26	6
Adjusted transportation	34,356	8,069	4 & 5. Rail transportation	3,316	225
2. Construction	62,367	7,362	Transportation subtotal	34,411	8,490
3. Household appliances	9,045	1,547	6. Industrial machinery	8,359	1,419
4. Oil and gas	7,449	1,145	7. Electrical machinery	7,775	1,498
5. Containers, packaging, and shipping material	4,532	431	8. Mining materials	792	112
6. Other	15,518	2,555	9. Agricultural machinery	3,443	271
7. Machinery	6,855	1,256	Machinery Subtotal	20,369	3,300
Machinery factor (pure number)	2.9666	2.4968	10. Consumer durables	9,059	1,627
Adjusted machinery	20,336	3,137	11. Containers	4,539	453
Total	153,603	24,246	12. Oil and gas materials	7,461	1,205
			13. Materials, nec	15,543	2,688
			14. Construction materials	62,466	7,746
			Total	153,848	25,508
Factor to gross up each end-use product category's shipments to account for all shipments of industrial fasteners:			153,848 ÷	153,603	= 1.002
Prompt scrap generated on total mill and foundry shipments (including 100% of industrial fasteners) using weighted average scrap rate:			153,848 ×	16.58%	= 25,508
Factor to gross up each end-use product category's prompt scrap generated to account for all shipments of industrial fasteners:			25,508 ÷	24,246	= 1.052

[a] Calculated using mapping equations found in the report, as well as mill and foundry shipments and prompt scrap generation rates and amounts generated in Table A-21.

[b] Total includes only 50% of AISI-defined industrial fastener market shipments. See Table A-21.

SOURCE : Nathan Associates Inc. as described in *Iron and Steel Scrap Accumulation and Availability as of December 31, 2009.* See the section titled Distributing Mill and Foundry Shipments to End-Use Product Categories.

Table A-49

Aggregation of 19 AISI-Defined Markets into 7 Bureau of Mines Demand Categories and Disaggregation of 7 Bureau of Mines Demand Categories into 14 Ferrous-Containing End-Use Product Categories, 2001 [a] (thousands of net tons unless otherwise noted)

U.S. Bureau of Mines Demand Category	Mill and Foundry Shipments [b]	Prompt Scrap Generated in Manufacturing End-Use Products	Ferrous-Containing End-Use Product Category	Mill and Foundry Shipments	Prompt Scrap Generated in Manufacturing End-Use Products
Rail transportation	1,626	127	1. Automotive	26,303	7,150
1. Transportation	18,880	5,398	2. Ship building and marine equipment	538	65
Transportation factor (pure number)	1.5544	1.2768	3. Aircraft and aerospace	23	5
Adjusted transportation	29,348	6,893	4 & 5. Rail transportation	2,532	174
2. Construction	56,344	6,363	Transportation subtotal	29,397	7,394
3. Household appliances	7,916	1,360	6. Industrial machinery	7,105	1,212
4. Oil and gas	7,040	1,089	7. Electrical machinery	6,905	1,338
5. Containers, packaging, and shipping material	3,958	376	8. Mining materials	633	90
6. Other	13,088	2,154	9. Agricultural machinery	2,611	206
7. Machinery	5,577	1,035	Machinery Subtotal	17,255	2,846
Machinery factor (pure number)	3.0886	2.5628	10. Consumer durables	7,929	1,458
Adjusted machinery	17,226	2,653	11. Containers	3,965	403
Total	134,919	20,888	12. Oil and gas materials	7,052	1,168
			13. Materials, nec	13,109	2,311
			14. Construction materials	56,438	6,825
			Total	135,144	22,407
Factor to gross up each end-use product category's shipments to account for all shipments of industrial fasteners:			135,144 ÷	134,919	= 1.002
Prompt scrap generated on total mill and foundry shipments (including 100% of industrial fasteners) using weighted average scrap rate:			135,144 ×	16.58%	= 22,407
Factor to gross up each end-use product category's prompt scrap generated to account for all shipments of industrial fasteners:			22,407 ÷	20,888	= 1.073

[a] Calculated using mapping equations found in the report, as well as mill and foundry shipments and prompt scrap generation rates and amounts generated in Table A-22.

[b] Total includes only 50% of AISI-defined industrial fastener market shipments. See Table A-22.

SOURCE : Nathan Associates Inc. as described in *Iron and Steel Scrap Accumulation and Availability as of December 31, 2009.* See the section titled Distributing Mill and Foundry Shipments to End-Use Product Categories.

Table A-50

Aggregation of 19 AISI-Defined Markets into 7 Bureau of Mines Demand Categories and Disaggregation of 7 Bureau of Mines Demand Categories into 14 Ferrous-Containing End-Use Product Categories, 2002 [a] (thousands of net tons unless otherwise noted)

U.S. Bureau of Mines Demand Category	Mill and Foundry Shipments [b]	Prompt Scrap Generated in Manufacturing End-Use Products	Ferrous-Containing End-Use Product Category	Mill and Foundry Shipments	Prompt Scrap Generated in Manufacturing End-Use Products
Rail transportation	1,814	141	1. Automotive	26,531	7,192
1. Transportation	19,443	5,532	2. Ship building and marine equipment	498	60
Transportation factor (pure number)	1.5345	1.2732	3. Aircraft and aerospace	47	10
Adjusted transportation	29,835	7,043	4 & 5. Rail transportation	2,786	191
2. Construction	58,960	6,900	Transportation subtotal	29,863	7,453
3. Household appliances	7,818	1,344	6. Industrial machinery	7,826	1,342
4. Oil and gas	6,029	925	7. Electrical machinery	5,926	1,154
5. Containers, packaging, and shipping material	3,833	364	8. Mining materials	631	90
6. Other	15,049	2,485	9. Agricultural machinery	2,381	189
7. Machinery	4,956	919	Machinery Subtotal	16,764	2,775
Machinery factor (pure number)	3.3794	2.8544	10. Consumer durables	7,826	1,422
Adjusted machinery	16,749	2,622	11. Containers	3,836	385
Total	138,272	21,683	12. Oil and gas materials	6,035	979
			13. Materials, nec	15,063	2,630
			14. Construction materials	59,015	7,302
			Total	138,402	22,947
Factor to gross up each end-use product category's shipments to account for all shipments of industrial fasteners:			138,402 ÷	138,272	= 1.001
Prompt scrap generated on total mill and foundry shipments (including 100% of industrial fasteners) using weighted average scrap rate:			138,402 ×	16.58%	= 22,947
Factor to gross up each end-use product category's prompt scrap generated to account for all shipments of industrial fasteners:			22,947 ÷	21,683	= 1.058

[a] Calculated using mapping equations found in the report, as well as mill and foundry shipments and prompt scrap generation rates and amounts generated in Table A-23.

[b] Total includes only 50% of AISI-defined industrial fastener market shipments. See Table A-23.

SOURCE : Nathan Associates Inc. as described in *Iron and Steel Scrap Accumulation and Availability as of December 31, 2009.* See the section titled Distributing Mill and Foundry Shipments to End-Use Product Categories.

Table A-51

Aggregation of 19 AISI-Defined Markets into 7 Bureau of Mines Demand Categories and Disaggregation of 7 Bureau of Mines Demand Categories into 14 Ferrous-Containing End-Use Product Categories, 2003 [a] (thousands of net tons unless otherwise noted)

U.S. Bureau of Mines Demand Category	Mill and Foundry Shipments [b]	Prompt Scrap Generated in Manufacturing End-Use Products	Ferrous-Containing End-Use Product Category	Mill and Foundry Shipments	Prompt Scrap Generated in Manufacturing End-Use Products
Rail transportation	1,173	91	1. Automotive	27,147	7,404
1. Transportation	19,157	5,612	2. Ship building and marine equipment	317	39
Transportation factor (pure number)	1.5288	1.2623	3. Aircraft and aerospace	38	8
Adjusted transportation	29,288	7,084	4 & 5. Rail transportation	1,793	123
2. Construction	59,229	6,632	Transportation subtotal	29,295	7,574
3. Household appliances	7,813	1,354	6. Industrial machinery	6,476	1,070
4. Oil and gas	5,573	853	7. Electrical machinery	5,148	966
5. Containers, packaging, and shipping material	3,418	325	8. Mining materials	1,072	148
6. Other	14,375	2,377	9. Agricultural machinery	1,600	123
7. Machinery	3,536	663	Machinery Subtotal	14,296	2,307
Machinery factor (pure number)	4.0418	3.2550	10. Consumer durables	7,815	1,447
Adjusted machinery	14,292	2,157	11. Containers	3,419	347
Total	133,987	20,782	12. Oil and gas materials	5,574	912
			13. Materials, nec	14,379	2,542
			14. Construction materials	59,243	7,092
			Total	134,021	22,221
Factor to gross up each end-use product category's shipments to account for all shipments of industrial fasteners:			134,021 ÷	133,987	= 1.000
Prompt scrap generated on total mill and foundry shipments (including 100% of industrial fasteners) using weighted average scrap rate:			134,021 ×	16.58%	= 22,221
Factor to gross up each end-use product category's prompt scrap generated to account for all shipments of industrial fasteners:			22,221 ÷	20,782	= 1.069

[a] Calculated using mapping equations found in the report, as well as mill and foundry shipments and prompt scrap generation rates and amounts generated in Table A-24.

[b] Total includes only 50% of AISI-defined industrial fastener market shipments. See Table A-24.

SOURCE : Nathan Associates Inc. as described in *Iron and Steel Scrap Accumulation and Availability as of December 31, 2009.* See the section titled Distributing Mill and Foundry Shipments to End-Use Product Categories.

Table A-52

Aggregation of 19 AISI-Defined Markets into 7 Bureau of Mines Demand Categories and Disaggregation of 7 Bureau of Mines Demand Categories into 14 Ferrous-Containing End-Use Product Categories, 2004 [a] (thousands of net tons unless otherwise noted)

U.S. Bureau of Mines Demand Category	Mill and Foundry Shipments [b]	Prompt Scrap Generated in Manufacturing End-Use Products	Ferrous-Containing End-Use Product Category	Mill and Foundry Shipments	Prompt Scrap Generated in Manufacturing End-Use Products
Rail transportation	1,539	120	1. Automotive	28,552	7,641
1. Transportation	18,884	5,444	2. Ship building and marine equipment	314	38
Transportation factor (pure number)	1.6685	1.3428	3. Aircraft and aerospace	85	18
Adjusted transportation	31,507	7,310	4 & 5. Rail transportation	2,569	174
2. Construction	67,675	7,784	Transportation subtotal	31,519	7,870
3. Household appliances	8,400	1,430	6. Industrial machinery	8,393	1,411
4. Oil and gas	6,692	1,028	7. Electrical machinery	7,658	1,461
5. Containers, packaging, and shipping material	3,103	295	8. Mining materials	1,012	142
6. Other	17,526	2,906	9. Agricultural machinery	1,721	134
7. Machinery	5,537	1,060	Machinery Subtotal	18,784	3,148
Machinery factor (pure number)	3.3910	2.7583	10. Consumer durables	8,403	1,539
Adjusted machinery	18,777	2,924	11. Containers	3,104	317
Total	153,680	23,677	12. Oil and gas materials	6,694	1,107
			13. Materials, nec	17,533	3,128
			14. Construction materials	67,701	8,381
			Total	153,739	25,490
Factor to gross up each end-use product category's shipments to account for all shipments of industrial fasteners:			153,739 ÷	153,680	= 1.000
Prompt scrap generated on total mill and foundry shipments (including 100% of industrial fasteners) using weighted average scrap rate:			153,739 ×	16.58%	= 25,490
Factor to gross up each end-use product category's prompt scrap generated to account for all shipments of industrial fasteners:			25,490 ÷	23,677	= 1.077

[a] Calculated using mapping equations found in the report, as well as mill and foundry shipments and prompt scrap generation rates and amounts generated in Table A-25.

[b] Total includes only 50% of AISI-defined industrial fastener market shipments. See Table A-25.

SOURCE : Nathan Associates Inc. as described in *Iron and Steel Scrap Accumulation and Availability as of December 31, 2009.* See the section titled Distributing Mill and Foundry Shipments to End-Use Product Categories.

Table A-53

Aggregation of 19 AISI-Defined Markets into 7 Bureau of Mines Demand Categories and Disaggregation of 7 Bureau of Mines Demand Categories into 14 Ferrous-Containing End-Use Product Categories, 2005 [a] (thousands of net tons unless otherwise noted)

U.S. Bureau of Mines Demand Category	Mill and Foundry Shipments [b]	Prompt Scrap Generated in Manufacturing End-Use Products	Ferrous-Containing End-Use Product Category	Mill and Foundry Shipments	Prompt Scrap Generated in Manufacturing End-Use Products
Rail transportation	1,599	125	1. Automotive	27,545	7,489
1. Transportation	19,039	5,461	2. Ship building and marine equipment	482	58
Transportation factor (pure number)	1.6087	1.3029	3. Aircraft and aerospace	41	9
Adjusted transportation	30,628	7,115	4 & 5. Rail transportation	2,574	177
2. Construction	61,750	6,865	Transportation subtotal	30,641	7,733
3. Household appliances	8,507	1,462	6. Industrial machinery	8,658	1,454
4. Oil and gas	7,227	1,115	7. Electrical machinery	5,362	1,022
5. Containers, packaging, and shipping material	3,550	337	8. Mining materials	952	133
6. Other	15,373	2,535	9. Agricultural machinery	1,962	153
7. Machinery	4,441	828	Machinery Subtotal	16,933	2,762
Machinery factor (pure number)	3.8116	3.0687	10. Consumer durables	8,511	1,589
Adjusted machinery	16,926	2,541	11. Containers	3,551	366
Total	143,959	21,971	12. Oil and gas materials	7,230	1,212
			13. Materials, nec	15,380	2,755
			14. Construction materials	61,777	7,461
			Total	144,023	23,879
Factor to gross up each end-use product category's shipments to account for all shipments of industrial fasteners:			144,023 ÷	143,959	= 1.000
Prompt scrap generated on total mill and foundry shipments (including 100% of industrial fasteners) using weighted average scrap rate:			144,023 ×	16.58%	= 23,879
Factor to gross up each end-use product category's prompt scrap generated to account for all shipments of industrial fasteners:			23,879 ÷	21,971	= 1.087

[a] Calculated using mapping equations found in the report, as well as mill and foundry shipments and prompt scrap generation rates and amounts generated in Table A-26.

[b] Total includes only 50% of AISI-defined industrial fastener market shipments. See Table A-26.

SOURCE : Nathan Associates Inc. as described in *Iron and Steel Scrap Accumulation and Availability as of December 31, 2009.* See the section titled Distributing Mill and Foundry Shipments to End-Use Product Categories.

Table A-54

Aggregation of 19 AISI-Defined Markets into 7 Bureau of Mines Demand Categories and Disaggregation of 7 Bureau of Mines Demand Categories into 14 Ferrous-Containing End-Use Product Categories, 2006 [a] (thousands of net tons unless otherwise noted)

U.S. Bureau of Mines Demand Category	Mill and Foundry Shipments [b]	Prompt Scrap Generated in Manufacturing End-Use Products	Ferrous-Containing End-Use Product Category	Mill and Foundry Shipments	Prompt Scrap Generated in Manufacturing End-Use Products
Rail transportation	1,940	151	1. Automotive	30,542	8,214
1. Transportation	21,959	6,268	2. Ship building and marine equipment	610	73
Transportation factor (pure number)	1.5571	1.2845	3. Aircraft and aerospace	50	11
Adjusted transportation	34,192	8,052	4 & 5. Rail transportation	3,025	205
2. Construction	68,752	8,130	Transportation subtotal	34,226	8,503
3. Household appliances	9,048	1,559	6. Industrial machinery	9,538	1,618
4. Oil and gas	8,236	1,282	7. Electrical machinery	5,786	1,114
5. Containers, packaging, and shipping material	3,812	362	8. Mining materials	274	39
6. Other	18,588	3,072	9. Agricultural machinery	2,637	207
7. Machinery	4,525	837	Machinery Subtotal	18,235	2,978
Machinery factor (pure number)	4.0253	3.3708	10. Consumer durables	9,057	1,647
Adjusted machinery	18,216	2,820	11. Containers	3,815	382
Total	160,844	25,277	12. Oil and gas materials	8,244	1,353
			13. Materials, nec	18,606	3,244
			14. Construction materials	68,821	8,586
			Total	161,006	26,695
Factor to gross up each end-use product category's shipments to account for all shipments of industrial fasteners:			161,006 ÷	160,844	= 1.001
Prompt scrap generated on total mill and foundry shipments (including 100% of industrial fasteners) using weighted average scrap rate:			161,006 ×	16.58%	= 26,695
Factor to gross up each end-use product category's prompt scrap generated to account for all shipments of industrial fasteners:			26,695 ÷	25,277	= 1.056

[a] Calculated using mapping equations found in the report, as well as mill and foundry shipments and prompt scrap generation rates and amounts generated in Table A-27.

[b] Total includes only 50% of AISI-defined industrial fastener market shipments. See Table A-27.

SOURCE : Nathan Associates Inc. as described in *Iron and Steel Scrap Accumulation and Availability as of December 31, 2009.* See the section titled Distributing Mill and Foundry Shipments to End-Use Product Categories.

Table A-55

Aggregation of 19 AISI-Defined Markets into 7 Bureau of Mines Demand Categories and Disaggregation of 7 Bureau of Mines Demand Categories into 14 Ferrous-Containing End-Use Product Categories, 2007 [a] (thousands of net tons unless otherwise noted)

U.S. Bureau of Mines Demand Category	Mill and Foundry Shipments [b]	Prompt Scrap Generated in Manufacturing End-Use Products	Ferrous-Containing End-Use Product Category	Mill and Foundry Shipments	Prompt Scrap Generated in Manufacturing End-Use Products
Rail transportation	1,704	133	1. Automotive	25,478	7,005
1. Transportation	18,205	5,177	2. Ship building and marine equipment	489	60
Transportation factor (pure number)	1.5753	1.2888	3. Aircraft and aerospace	39	9
Adjusted transportation	28,679	6,672	4 & 5. Rail transportation	2,685	186
2. Construction	64,968	7,451	Transportation subtotal	28,691	7,260
3. Household appliances	7,917	1,368	6. Industrial machinery	8,262	1,391
4. Oil and gas	7,777	1,214	7. Electrical machinery	4,204	803
5. Containers, packaging, and shipping material	3,520	334	8. Mining materials	565	79
6. Other	17,344	2,863	9. Agricultural machinery	1,962	153
7. Machinery	3,817	705	Machinery Subtotal	14,993	2,427
Machinery factor (pure number)	3.9259	3.1646	10. Consumer durables	7,920	1,488
Adjusted machinery	14,986	2,230	11. Containers	3,522	364
Total	145,191	22,133	12. Oil and gas materials	7,780	1,321
			13. Materials, nec	17,352	3,115
			14. Construction materials	64,997	8,108
			Total	145,256	24,083
Factor to gross up each end-use product category's shipments to account for all shipments of industrial fasteners:			145,256 ÷	145,191	= 1.000
Prompt scrap generated on total mill and foundry shipments (including 100% of industrial fasteners) using weighted average scrap rate:			145,256 ×	16.58%	= 24,083
Factor to gross up each end-use product category's prompt scrap generated to account for all shipments of industrial fasteners:			24,083 ÷	22,133	= 1.088

[a] Calculated using mapping equations found in the report, as well as mill and foundry shipments and prompt scrap generation rates and amounts generated in Table A-28.

[b] Total includes only 50% of AISI-defined industrial fastener market shipments. See Table A-28.

SOURCE : Nathan Associates Inc. as described in *Iron and Steel Scrap Accumulation and Availability as of December 31, 2009.* See the section titled Distributing Mill and Foundry Shipments to End-Use Product Categories.

Table A-56

Aggregation of 19 AISI-Defined Markets into 7 Bureau of Mines Demand Categories and Disaggregation of 7 Bureau of Mines Demand Categories into 14 Ferrous-Containing End-Use Product Categories, 2008 [a] (thousands of net tons unless otherwise noted)

U.S. Bureau of Mines Demand Category	Mill and Foundry Shipments [b]	Prompt Scrap Generated in Manufacturing End-Use Products	Ferrous-Containing End-Use Product Category	Mill and Foundry Shipments	Prompt Scrap Generated in Manufacturing End-Use Products
Rail transportation	1,903	148	1. Automotive	24,055	6,546
1. Transportation	17,314	4,875	2. Ship building and marine equipment	313	38
Transportation factor (pure number)	1.5831	1.2994	3. Aircraft and aerospace	38	8
Adjusted transportation	27,410	6,335	4 & 5. Rail transportation	3,014	207
2. Construction	58,292	6,816	Transportation subtotal	27,420	6,799
3. Household appliances	7,551	1,307	6. Industrial machinery	7,348	1,216
4. Oil and gas	7,936	1,248	7. Electrical machinery	4,700	883
5. Containers, packaging, and shipping material	3,246	308	8. Mining materials	473	65
6. Other	16,666	2,758	9. Agricultural machinery	1,692	130
7. Machinery	3,612	676	Machinery Subtotal	14,213	2,294
Machinery factor (pure number)	3.9332	3.1596	10. Consumer durables	7,554	1,403
Adjusted machinery	14,208	2,137	11. Containers	3,247	331
Total	135,310	20,910	12. Oil and gas materials	7,939	1,340
			13. Materials, nec	16,672	2,960
			14. Construction materials	58,313	7,316
			Total	135,358	22,442
Factor to gross up each end-use product category's shipments to account for all shipments of industrial fasteners:			135,358 ÷	135,310	= 1.000
Prompt scrap generated on total mill and foundry shipments (including 100% of industrial fasteners) using weighted average scrap rate:			135,358 ×	16.58%	= 22,442
Factor to gross up each end-use product category's prompt scrap generated to account for all shipments of industrial fasteners:			22,442 ÷	20,910	= 1.073

[a] Calculated using mapping equations found in the report, as well as mill and foundry shipments and prompt scrap generation rates and amounts generated in Table A-29.

[b] Total includes only 50% of AISI-defined industrial fastener market shipments. See Table A-29.

SOURCE : Nathan Associates Inc. as described in *Iron and Steel Scrap Accumulation and Availability as of December 31, 2009.* See the section titled Distributing Mill and Foundry Shipments to End-Use Product Categories.

Table A-57

Aggregation of 19 AISI-Defined Markets into 7 Bureau of Mines Demand Categories and Disaggregation of 7 Bureau of Mines Demand Categories into 14 Ferrous-Containing End-Use Product Categories, 2009 [a] (thousands of net tons unless otherwise noted)

U.S. Bureau of Mines Demand Category	Mill and Foundry Shipments [b]	Prompt Scrap Generated in Manufacturing End-Use Products	Ferrous-Containing End-Use Product Category	Mill and Foundry Shipments	Prompt Scrap Generated in Manufacturing End-Use Products
Rail transportation	1,200	94	1. Automotive	14,669	4,163
1. Transportation	10,855	3,060	2. Ship building and marine equipment	152	19
Transportation factor (pure number)	1.5346	1.2768	3. Aircraft and aerospace	8	2
Adjusted transportation	16,658	3,907	4 & 5. Rail transportation	1,843	132
2. Construction	32,652	3,439	Transportation subtotal	16,672	4,316
3. Household appliances	4,527	791	6. Industrial machinery	4,183	658
4. Oil and gas	3,940	616	7. Electrical machinery	2,605	465
5. Containers, packaging, and shipping material	2,687	255	8. Mining materials	7	1
6. Other	7,062	1,170	9. Agricultural machinery	375	27
7. Machinery	1,540	302	Machinery Subtotal	7,171	1,152
Machinery factor (pure number)	4.6520	3.4532	10. Consumer durables	4,531	873
Adjusted machinery	7,165	1,043	11. Containers	2,690	282
Total	74,690	11,220	12. Oil and gas materials	3,943	680
			13. Materials, nec	7,068	1,293
			14. Construction materials	32,679	3,798
			Total	74,753	12,394
Factor to gross up each end-use product category's shipments to account for all shipments of industrial fasteners:			74,753 ÷	74,690	= 1.001
Prompt scrap generated on total mill and foundry shipments (including 100% of industrial fasteners) using weighted average scrap rate:			74,753 ×	16.58%	= 12,394
Factor to gross up each end-use product category's prompt scrap generated to account for all shipments of industrial fasteners:			12,394 ÷	11,220	= 1.105

[a] Calculated using mapping equations found in the report, as well as mill and foundry shipments and prompt scrap generation rates and amounts generated in Table A-30.

[b] Total includes only 50% of AISI-defined industrial fastener market shipments. See Table A-30.

SOURCE : Nathan Associates Inc. as described in *Iron and Steel Scrap Accumulation and Availability as of December 31, 2009.* See the section titled Distributing Mill and Foundry Shipments to End-Use Product Categories.

Table A-58

Distribution of Domestic Iron and Steel Mill Shipments in Rail Transportation, 1983-2009 (thousands of net tons unless otherwise noted)

Year	Railroad Equipment		Railroad Rails		Total
	Amount [a]	Share of Total	Amount [a]	Share of Total	
1983	217	23%	720	77%	937
1984	347	24%	1,091	76%	1,438
1985	280	26%	781	74%	1,061
1986	267	33%	531	67%	798
1987	351	46%	407	54%	758
1988	628	55%	518	45%	1,146
1989	662	54%	567	46%	1,229
1990	494	46%	586	54%	1,080
1991	443	44%	556	56%	999
1992	463	44%	589	56%	1,052
1993	501	41%	722	59%	1,223
1994	612	49%	636	51%	1,248
1995	644	47%	729	53%	1,373
1996	572	41%	828	59%	1,400
1997	472	33%	938	67%	1,410
1998	547	33%	1,110	67%	1,657
1999	299	29%	732	71%	1,031
2000	279	21%	1,028	79%	1,307
2001	157	16%	824	84%	981
2002	397	38%	645	62%	1,042
2003	249	27%	689	73%	938
2004	635	54%	550	46%	1,185
2005	707	56%	551	44%	1,258
2006	494	34%	943	66%	1,437
2007	546	45%	660	55%	1,206
2008	500	34%	978	66%	1,478
2009	792	88%	113	12%	905

[a] From American Iron and Steel Institute, *Annual Statistical Report* . Year 1983: 1983, Table 15; years 1984 - 1993: 1993, Table 12; years 1994 - 2003: 2003, Table 11; years 2004-2009: 2009, Table 11

SOURCE : See footnote.

Table A-59

Mill and Foundry Shipments, Net of Foreign Trade, by Ferrous-Containing End-Use Product Category, 1983-2009 (thousands of net tons)

Year	Auto-motive	Ship Building and Marine Equip-ment	Air-craft and Aero-space	Rail-road Equip-ment [a]	Rail-road Rails [a]	Indus-trial Machinery	Elec-trical Machinery	Mining Materials	Agricul-tural Machinery	Con-sumer Durables	Con-tainers	Oil and Gas Materials	Material Not Elsewhere Classified	Construc-tion Materials	Total
1983	20,838	877	46	364	1,206	6,972	6,035	633	1,866	6,056	5,121	3,152	7,795	28,874	89,834
1984	23,429	979	82	617	1,938	8,883	6,725	762	2,019	6,913	5,180	4,872	9,676	34,075	106,151
1985	23,414	772	98	543	1,516	8,262	6,112	847	2,139	6,537	4,953	4,745	9,686	35,206	104,827
1986	21,749	541	93	527	1,048	7,161	6,376	765	1,966	6,378	4,865	3,221	9,598	33,998	98,286
1987	21,701	547	94	709	822	7,616	6,859	1,064	1,939	6,654	5,064	3,820	10,677	37,030	104,595
1988	22,508	647	83	1,272	1,049	8,369	6,870	1,314	1,588	6,836	5,011	4,242	11,815	41,218	112,823
1989	21,050	709	87	1,236	1,059	7,325	6,903	1,259	1,683	6,676	5,082	3,573	11,504	38,931	107,078
1990	20,487	657	74	952	1,130	7,156	6,841	1,418	1,896	6,526	5,090	4,402	11,424	39,802	107,857
1991	18,664	431	50	869	1,091	6,329	6,189	980	1,587	5,907	4,876	3,782	10,399	36,356	97,509
1992	20,743	474	49	907	1,154	6,483	6,549	980	1,735	6,410	4,636	3,629	11,144	39,467	104,362
1993	22,665	407	73	1,032	1,487	7,510	6,994	840	1,916	6,873	4,949	4,105	12,176	43,664	114,691
1994	26,790	532	84	1,403	1,458	8,928	7,799	791	2,149	7,777	5,400	4,947	14,175	50,904	133,135
1995	25,694	613	57	1,350	1,528	8,222	7,774	625	2,306	7,286	4,880	5,600	13,151	48,546	127,634
1996	26,878	845	79	1,301	1,883	9,142	7,942	697	2,591	8,120	4,850	6,438	14,373	52,560	137,700
1997	28,242	599	61	1,056	2,099	8,969	8,315	1,091	2,884	8,312	4,956	7,228	15,299	54,859	143,970
1998	30,799	680	24	1,322	2,683	9,404	8,373	886	3,147	9,072	4,645	6,902	16,390	57,335	151,665
1999	30,849	504	22	820	2,008	7,879	8,391	880	2,958	8,502	4,791	6,140	15,920	60,057	149,722
2000	30,520	548	26	708	2,608	8,359	7,775	792	3,443	9,059	4,539	7,461	15,543	62,466	153,848
2001	26,303	538	23	405	2,127	7,105	6,905	633	2,611	7,929	3,965	7,052	13,109	56,438	135,144
2002	26,531	498	47	1,061	1,724	7,826	5,926	631	2,381	7,826	3,836	6,035	15,063	59,015	138,402
2003	27,147	317	38	476	1,317	6,476	5,148	1,072	1,600	7,815	3,419	5,574	14,379	59,243	134,021
2004	28,552	314	85	1,376	1,192	8,393	7,658	1,012	1,721	8,403	3,104	6,694	17,533	67,701	153,739
2005	27,545	482	41	1,447	1,127	8,658	5,362	952	1,962	8,511	3,551	7,230	15,380	61,777	144,023
2006	30,542	610	50	1,040	1,985	9,538	5,786	274	2,637	9,057	3,815	8,244	18,606	68,821	161,006
2007	25,478	489	39	1,215	1,469	8,262	4,204	565	1,962	7,920	3,522	7,780	17,352	64,997	145,256
2008	24,055	313	38	1,020	1,995	7,348	4,700	473	1,692	7,554	3,247	7,939	16,672	58,313	135,358
2009	14,669	152	8	1,613	230	4,183	2,605	7	375	4,531	2,690	3,943	7,068	32,679	74,753

[a] Equals rail transportation from Table A-31 through Table A-57 multiplied by appropriate percent of total from Table A-58.
SOURCES: From Tables A-31 through A-57.

Table A-60

Prompt Scrap Generated by Ferrous-Containing End-Use Product Category, 1983-2009 (thousands of net tons)

Year	Automotive	Ship Building and Marine Equipment	Aircraft and Aerospace	Railroad Equipment [a]	Railroad Rails [a]	Industrial Machinery	Electrical Machinery	Mining Materials	Agricultural Machinery	Consumer Durables	Containers	Oil and Gas Materials	Material Not Elsewhere Classified	Construction Materials	Total
1983	5,553	104	10	24	81	1,150	1,131	87	143	1,046	493	477	1,316	3,279	14,894
1984	6,241	117	18	41	130	1,476	1,269	105	156	1,192	499	757	1,633	3,967	17,600
1985	6,241	92	21	37	102	1,359	1,142	116	163	1,133	486	739	1,658	4,091	17,380
1986	5,766	64	20	35	70	1,166	1,178	104	148	1,116	480	480	1,646	4,022	16,296
1987	5,700	64	20	47	54	1,260	1,289	147	149	1,172	503	584	1,842	4,512	17,342
1988	5,967	77	18	85	70	1,369	1,276	179	120	1,204	499	652	2,033	5,156	18,706
1989	5,582	84	19	83	71	1,198	1,282	172	128	1,184	508	541	1,987	4,915	17,753
1990	5,415	78	16	64	75	1,200	1,302	198	147	1,160	509	691	1,976	5,052	17,883
1991	4,940	51	11	58	73	1,055	1,171	136	123	1,057	489	592	1,805	4,606	16,167
1992	5,481	56	10	61	77	1,069	1,226	135	133	1,141	461	556	1,920	4,978	17,303
1993	5,997	48	16	69	99	1,251	1,323	117	148	1,221	491	632	2,091	5,513	19,016
1994	7,086	63	18	94	97	1,471	1,459	109	164	1,369	532	757	2,407	6,450	22,074
1995	6,849	73	12	91	103	1,345	1,444	85	175	1,287	487	879	2,254	6,077	21,162
1996	7,137	100	17	87	126	1,521	1,501	97	200	1,440	482	1,022	2,467	6,634	22,831
1997	7,451	71	13	70	140	1,519	1,599	154	226	1,465	487	1,151	2,606	6,918	23,870
1998	8,132	80	5	88	179	1,564	1,581	123	243	1,589	454	1,082	2,776	7,249	25,146
1999	8,210	60	5	55	135	1,307	1,580	122	227	1,505	473	961	2,718	7,467	24,824
2000	8,193	66	6	48	177	1,419	1,498	112	271	1,627	453	1,205	2,688	7,746	25,508
2001	7,150	65	5	28	146	1,212	1,338	90	206	1,458	403	1,168	2,311	6,825	22,407
2002	7,192	60	10	73	118	1,342	1,154	90	189	1,422	385	979	2,630	7,302	22,947
2003	7,404	39	8	33	91	1,070	966	148	123	1,447	347	912	2,542	7,092	22,221
2004	7,641	38	18	93	81	1,411	1,461	142	134	1,539	317	1,107	3,128	8,381	25,490
2005	7,489	58	9	99	77	1,454	1,022	133	153	1,589	366	1,212	2,755	7,461	23,879
2006	8,214	73	11	71	135	1,618	1,114	39	207	1,647	382	1,353	3,244	8,586	26,695
2007	7,005	60	9	84	102	1,391	803	79	153	1,488	364	1,321	3,115	8,108	24,083
2008	6,546	38	8	70	137	1,216	883	65	130	1,403	331	1,340	2,960	7,316	22,442
2009	4,163	19	2	116	16	658	465	1	27	873	282	680	1,293	3,798	12,394

[a] Equals rail transportation from Table A-31 through Table A-57 multiplied by appropriate percent of total from Table A-58.
SOURCES: From Tables A-31 through A-57.

Table A-61

Ferrous Content of Net Imports of End-Use Products, 1983-2009 (thousands of net tons)

Year	Automotive	Industrial Machinery	Construction Materials	Total
1983	4,205	547	767	5,518
1984	5,522	1,800	1,193	8,516
1985	5,836	2,482	1,353	9,672
1986	5,657	3,129	1,457	10,243
1987	5,278	3,007	1,316	9,602
1988	4,902	2,484	1,698	9,084
1989	4,685	2,112	1,767	8,564
1990	4,235	1,574	1,379	7,188
1991	3,815	(101)	1,053	4,766
1992	3,944	(78)	1,143	5,009
1993	4,028	786	1,474	6,287
1994	3,965	1,955	1,411	7,331
1995	3,994	1,182	1,548	6,724
1996	3,957	(341)	1,541	5,157
1997	3,677	(420)	1,566	4,823
1998	4,299	1,268	2,076	7,644
1999	5,859	2,840	2,723	11,422
2000	6,423	2,560	3,167	12,150
2001	5,797	2,013	3,027	10,837
2002	6,197	2,643	3,433	12,272
2003	5,954	3,121	3,411	12,486
2004	5,690	2,688	3,466	11,844
2005	5,282	3,125	3,521	11,928
2006	8,509	3,230	4,885	16,624
2007	7,939	1,065	4,401	13,405
2008	6,762	1,081	3,695	11,538
2009	5,130	3,390	2,019	10,539

SOURCES: Appendix E, Tables E-1, E-19, and E-24.

Table A-62

Ferrous Content of Domestically Consumed Products by Demand Category, 1921-2009 (thousands of net tons)

Year [a]	Automotive [b]	Ship Building and Marine Equipment	Aircraft and Aerospace	Railroad Equipment [a]	Railroad Rails [a]	Industrial Machinery	Electrical Machinery	Mining Materials	Agricultural Machinery	Consumer Durables	Containers	Oil and Gas Materials	Material Not Elsewhere Classified [c]	Construction Materials [d]	Total
1921	-	-	-	-	1,427	-	-	-	-	-	-	-	-	10,147	11,574
1922	-	-	-	-	2,062	-	-	-	-	-	-	-	-	10,204	12,266
1923	-	-	-	-	2,820	-	-	-	-	-	-	-	-	10,261	13,081
1924	-	-	-	-	3,377	-	-	-	-	-	-	-	-	10,318	13,695
1925	-	-	-	-	3,298	-	-	-	-	-	-	-	-	10,376	13,674
1926	-	-	-	-	3,094	-	-	-	-	-	-	-	-	10,434	13,528
1927	-	-	-	-	2,793	-	-	-	-	-	-	-	-	10,492	13,285
1928	-	-	-	-	2,619	-	-	-	-	-	-	-	-	10,792	13,411
1929	-	-	-	-	2,404	-	-	-	-	-	-	-	3,262	10,358	16,024
1930	-	-	-	-	1,935	-	-	-	-	-	-	-	3,264	8,799	13,998
1931	-	-	-	-	1,152	-	-	-	-	-	-	-	3,266	6,028	10,446
1932	-	-	-	-	741	-	-	-	-	-	-	-	3,268	4,540	8,549
1933	-	-	-	-	665	-	-	-	-	-	-	-	3,270	4,407	8,342
1934	-	-	-	-	721	-	-	-	-	-	-	-	3,272	5,435	9,428
1935	-	-	-	-	1,014	-	-	-	-	-	-	-	3,274	7,167	11,455
1936	-	324	-	-	1,343	-	-	-	-	-	-	-	3,276	8,343	13,286
1937	-	316	-	-	1,301	-	-	-	-	-	-	-	3,278	8,334	13,229
1938	-	313	-	-	1,244	-	-	-	-	-	-	-	3,280	8,288	13,125
1939	-	507	-	-	1,190	-	-	-	-	-	-	-	3,282	8,856	13,835
1940	-	1,248	-	-	1,731	-	-	-	-	-	-	-	3,285	11,280	17,544
1941	-	4,339	-	2,976	1,932	-	-	-	2,107	2,491	-	-	3,287	13,100	30,232
1942	-	7,631	-	3,059	2,000	-	-	-	2,059	2,381	-	-	3,289	13,735	34,154
1943	-	9,993	-	3,047	1,993	4,521	2,148	-	2,222	2,034	-	-	3,291	13,514	42,763
1944	-	7,887	-	3,438	2,089	4,554	2,082	-	2,788	2,250	-	-	3,293	13,215	41,596
1945	-	4,389	-	3,420	2,029	4,668	2,168	-	2,876	2,568	-	-	3,295	13,488	38,901
1946	-	1,345	-	3,650	1,979	3,801	2,591	-	2,815	3,102	-	-	3,297	15,327	37,907
1947	-	478	-	3,715	1,838	4,255	2,884	-	2,723	3,490	-	-	3,299	16,578	39,260
1948	-	601	-	3,579	1,829	4,503	2,875	-	2,998	3,560	-	2,638	3,301	17,409	43,293
1949	-	586	-	3,149	1,853	4,831	2,979	-	3,160	3,784	-	2,784	3,096	17,982	44,204
1950	-	680	-	3,325	1,957	5,623	3,277	-	3,334	3,997	-	3,001	3,356	19,309	47,859
1951	-	838	-	3,598	1,930	6,520	3,578	-	3,282	4,225	-	3,152	3,964	20,119	51,206
1952	-	1,039	-	3,801	1,951	7,255	3,761	-	3,066	4,334	-	3,227	4,596	20,692	53,722
1953	13,587	895	-	2,670	1,669	6,865	3,513	-	2,688	4,000	-	3,127	4,181	19,249	62,444
1954	13,587	716	-	2,441	1,630	7,390	3,914	-	2,642	4,397	-	3,416	4,041	20,714	64,888
1955	14,144	683	-	2,517	1,410	7,750	4,050	-	2,500	4,480	-	3,558	3,574	21,208	65,874
1956	14,688	952	-	3,206	1,416	8,068	4,228	-	2,421	4,636	-	3,710	3,621	22,995	69,941
1957	12,344	1,051	102	2,787	1,107	6,897	3,867	-	2,306	4,192	-	3,111	3,170	21,643	62,577
1958	12,849	1,015	80	2,318	862	6,459	3,655	-	2,449	3,968	-	2,931	3,045	20,841	60,472
1959	13,380	795	75	1,938	660	6,268	3,716	-	2,420	4,027	-	2,562	3,098	20,253	59,192
1960	13,734	749	83	2,058	612	6,653	3,841	-	2,321	4,164	-	2,741	3,286	20,942	61,184
1961	13,968	760	87	1,971	552	6,464	3,877	-	2,204	4,154	-	2,523	3,254	21,113	60,927
1962	15,046	801	87	2,021	531	6,586	3,997	-	2,356	4,291	-	2,568	3,330	21,704	63,318
1963	16,663	841	82	2,628	661	7,492	4,366	-	2,547	4,621	-	2,708	3,556	23,129	69,294
1964	18,523	1,009	86	3,315	788	8,531	4,375	-	2,894	5,086	-	2,913	4,050	25,879	77,449
1965	20,049	1,172	109	3,993	982	9,842	4,915	-	3,288	5,525	-	3,078	4,580	28,074	85,607
1966	20,369	1,283	125	4,005	1,029	10,219	5,229	-	3,444	5,674	-	3,085	5,187	29,229	88,878
1967	20,049	1,273	124	3,640	1,037	9,850	5,739	846	3,326	5,638	-	3,160	5,577	28,901	89,160
1968	21,156	1,260	109	3,299	1,005	10,347	5,778	918	3,011	5,723	-	3,275	6,081	29,312	91,274
1969	21,036	1,259	93	3,206	1,080	10,603	5,725	1,031	2,812	5,836	-	3,313	6,453	29,875	92,322
1970	20,651	1,331	79	3,095	1,136	10,283	5,548	1,046	2,629	5,712	-	3,177	6,406	29,372	90,465
1971	21,202	1,326	71	2,689	1,198	10,190	5,508	1,070	2,824	5,752	-	3,164	6,558	29,440	90,992
1972	23,717	1,368	74	2,588	1,231	11,001	5,860	1,076	3,263	6,162	-	3,489	6,929	31,408	98,166

Table A-62

Ferrous Content of Domestically Consumed Products by Demand Category, 1921-2009 (thousands of net tons)

Year [a]	Auto-motive [b]	Ship Building and Marine Equip-ment	Air-craft and Aero-space	Rail-road Equip-ment [a]	Rail-road Rails [a]	Indus-trial Machinery	Elec-trical Machinery	Mining Materials	Agricul-tural Machinery	Con-sumer Durables	Con-tainers	Oil and Gas Materials	Material Not Elsewhere Classified [c]	Construc-tion Materials [d]	Total
1973	24,389	1,505	87	2,800	1,292	11,701	6,258	1,183	3,793	6,648	-	3,984	7,494	34,358	105,492
1974	22,352	1,719	88	2,895	1,305	10,159	5,649	1,207	3,680	6,057	-	4,284	6,905	32,432	98,732
1975	20,932	1,689	83	2,624	1,435	8,665	5,191	1,204	3,678	5,518	7,103	4,070	6,252	29,622	98,066
1976	22,353	1,463	76	2,400	1,546	8,941	4,939	1,121	3,604	5,291	6,722	4,083	5,921	27,331	95,791
1977	25,263	1,226	74	2,616	1,587	10,722	5,499	1,092	3,979	5,866	7,027	4,291	6,615	29,644	105,501
1978	24,747	1,237	76	3,159	1,619	12,050	5,624	1,122	4,151	6,158	6,997	4,650	7,250	31,613	110,452
1979	21,197	1,438	74	3,335	1,509	10,754	5,466	1,097	3,834	5,920	6,534	4,997	7,311	31,394	104,860
1980	19,375	1,626	66	2,798	1,447	9,408	5,386	1,100	3,431	5,732	6,096	5,481	7,371	30,968	100,284
1981	16,718	1,407	56	1,803	1,090	7,599	5,006	900	2,744	5,044	5,380	4,984	6,893	27,683	87,309
1982	17,446	1,026	47	935	898	6,704	5,300	741	2,395	4,989	5,133	3,787	7,214	26,880	83,497
1983	20,441	818	50	457	1,467	7,161	5,180	601	1,793	5,366	4,655	3,395	7,261	28,618	87,264
1984	22,071	772	59	474	1,449	8,511	5,110	644	1,854	5,378	4,592	3,599	7,516	30,132	92,162
1985	22,618	673	71	525	1,400	9,250	5,208	683	1,886	5,462	4,511	3,621	8,008	31,752	95,668
1986	22,043	546	75	553	1,053	9,547	5,246	770	1,861	5,382	4,471	3,328	8,272	32,660	95,807
1987	21,453	510	71	780	908	9,458	5,454	904	1,692	5,459	4,486	3,189	8,856	34,168	97,389
1988	20,905	559	69	1,001	911	8,978	5,595	1,046	1,605	5,535	4,549	3,286	9,378	35,897	99,316
1989	20,378	592	64	1,076	1,007	8,473	5,584	1,147	1,591	5,497	4,556	3,445	9,582	36,710	99,702
1990	18,990	528	55	951	1,020	7,359	5,393	1,051	1,590	5,236	4,514	3,311	9,186	34,884	94,068
1991	18,501	459	45	849	1,050	5,447	5,293	970	1,605	5,162	4,381	3,325	9,089	34,715	90,891
1992	19,161	386	45	874	1,161	5,571	5,337	804	1,612	5,257	4,340	3,245	9,301	35,939	93,034
1993	21,239	415	54	1,040	1,275	7,162	5,778	750	1,785	5,776	4,501	3,579	10,359	40,505	104,219
1994	22,371	456	56	1,177	1,391	8,820	6,114	649	1,962	6,019	4,573	4,129	10,916	43,102	111,734
1995	23,424	585	58	1,261	1,514	8,501	6,371	608	2,169	6,362	4,543	4,776	11,523	45,831	117,525
1996	23,749	605	52	1,153	1,714	6,975	6,496	693	2,393	6,509	4,410	5,405	11,832	46,986	118,971
1997	24,743	625	43	1,145	2,073	7,217	6,650	767	2,651	7,003	4,343	5,771	12,737	49,550	125,319
1998	26,332	524	28	995	2,112	8,556	6,773	820	2,764	7,109	4,326	5,692	13,170	52,282	131,482
1999	28,404	509	19	886	2,270	9,957	6,626	734	2,936	7,304	4,198	5,752	13,224	55,188	138,008
2000	27,796	467	19	601	2,095	9,029	6,218	660	2,769	6,967	3,988	5,773	12,285	55,475	134,142
2001	26,070	465	25	675	2,006	8,452	5,539	588	2,589	6,769	3,699	5,732	12,029	55,042	129,681
2002	25,609	396	28	603	1,605	8,570	4,841	669	2,025	6,414	3,361	5,200	11,689	54,592	125,603
2003	25,495	358	33	716	1,416	9,066	4,477	732	1,835	6,385	3,261	4,859	12,135	55,344	126,113
2004	25,927	326	43	1,025	1,129	9,219	4,906	871	1,624	6,718	3,014	5,423	12,955	58,729	131,909
2005	26,380	412	46	1,200	1,337	10,494	5,069	641	1,942	7,065	3,135	6,165	14,131	61,478	139,496
2006	28,795	463	34	1,149	1,422	10,562	4,137	513	2,016	6,921	3,259	6,456	14,075	62,031	141,833
2007	27,376	414	33	1,017	1,692	8,039	3,963	376	1,934	6,664	3,169	6,650	14,437	60,442	136,205
2008	22,259	279	22	1,193	1,146	6,591	3,119	300	1,240	5,413	2,827	5,441	11,241	49,284	110,354
2009	19,138	204	18	1,223	1,036	8,218	2,978	207	955	4,904	2,662	4,931	9,744	41,958	98,176

[a] Years 1921 - 1982 from Nathan Associates, *Iron and Steel Scrap: Its Accumulation and Availability Updated to December 31, 1983* , August 1984; years 1983 - 2009 from Appendix B, Tables B-1 through B-14.

[b] 1953 and 1954 equal to the average of 1955 to 1961.

[c] 1929 through 1947 calculated using compound annual growth rate from 1948 to 1962.

[d] 1902 through 1926 calculated using compound annual growth rate from 1927 to 1940.

SOURCES : See footnotes.

Table A-63

Total Obsolete Scrap Generation by Year of Discard & Ferrous contining End-Use Category, 1921-2009. (Thousands of net tons)

Year	Automotive	Building and Marine Equipment	Aircraft and Aerospace	Railroad Equipment	Railroad Rails	Industrial Machinery	Electrical Machinery	Mining Materials	Agricultural Machinery	Consumer Durables	Containers	Oil and Gas Materials	Material Not Elsewhere Classified	Construction Materials
1921	-	-	-	-	-	-	-	-	-	-	-	-	-	14
1922	-	-	-	-	-	-	-	-	-	-	-	-	-	17
1923	-	-	-	-	-	-	-	-	-	-	-	-	-	22
1924	-	-	-	-	-	-	-	-	-	-	-	-	-	28
1925	-	-	-	-	-	-	-	-	-	-	-	-	-	35
1926	-	-	-	-	-	-	-	-	-	-	-	-	-	44
1927	-	-	-	-	-	-	-	-	-	-	-	-	-	54
1928	-	-	-	-	-	-	-	-	-	-	-	-	-	67
1929	-	-	-	-	-	-	-	-	-	-	-	-	4	82
1930	-	-	-	-	-	-	-	-	-	-	-	-	6	98
1931	-	-	-	-	-	-	-	-	-	-	-	-	9	116
1932	-	-	-	-	-	-	-	-	-	-	-	-	12	137
1933	-	-	-	-	-	-	-	-	-	-	-	-	17	165
1934	-	-	-	-	-	-	-	-	-	-	-	-	23	198
1935	-	-	-	-	-	-	-	-	-	-	-	-	32	237
1936	-	-	-	-	-	-	-	-	-	-	-	-	42	282
1937	-	-	-	-	-	-	-	-	-	-	-	-	56	333
1938	-	-	-	-	-	-	-	-	-	-	-	-	74	390
1939	-	-	-	-	-	-	-	-	-	-	-	-	95	455
1940	-	-	-	-	-	-	-	-	-	-	-	-	122	532
1941	-	-	-	4	-	-	-	-	-	-	-	-	155	617
1942	-	-	-	7	-	-	-	-	-	-	-	-	194	711
1943	-	-	-	11	-	-	-	-	-	-	-	-	240	815
1944	-	-	-	18	-	-	-	-	-	-	-	-	295	929
1945	-	-	-	28	-	-	-	-	-	-	-	-	359	1,055
1946	-	-	-	42	2	-	-	-	-	-	-	-	431	1,195
1947	-	-	-	63	4	-	-	-	-	-	-	-	514	1,346
1948	-	-	-	91	9	-	-	-	-	-	-	-	606	1,511
1949	-	-	-	129	17	-	-	-	-	3	-	-	707	1,687
1950	-	-	-	180	30	-	-	-	-	8	-	4	818	1,878
1951	-	-	-	246	49	-	-	-	-	19	-	7	938	2,081
1952	-	-	-	329	79	-	-	-	3	42	-	14	1,066	2,297
1953	18	-	-	429	122	-	-	-	6	85	-	26	1,200	2,522
1954	34	-	-	549	183	-	-	-	13	158	-	45	1,339	2,764
1955	63	-	-	689	265	-	-	-	26	273	-	75	1,481	3,016
1956	112	-	-	849	371	6	3	-	50	437	-	122	1,626	3,282
1957	188	-	0	1,026	503	14	7	-	88	655	-	190	1,771	3,555
1958	308	-	0	1,217	660	32	15	-	148	922	-	285	1,915	3,839
1959	487	-	0	1,417	838	65	31	-	237	1,226	-	409	2,056	4,132
1960	742	0	0	1,623	1,032	125	61	-	361	1,550	-	568	2,193	4,437
1961	1,094	1	0	1,828	1,233	226	111	-	523	1,878	-	761	2,324	4,749
1962	1,560	4	1	2,026	1,429	383	191	-	724	2,198	-	986	2,448	5,070
1963	2,152	10	1	2,213	1,608	611	308	-	958	2,502	-	1,235	2,565	5,400
1964	2,878	23	1	2,382	1,760	918	469	-	1,217	2,786	-	1,499	2,675	5,740
1965	3,731	51	1	2,530	1,875	1,302	676	-	1,489	3,049	-	1,768	2,776	6,086

Table A-63

Total Obsolete Scrap Generation by Year of Discard & Ferrous contining End-Use Category, 1921-2009. (Thousands of net tons)

Year	Auto-motive	Building and Marine Equip-ment	Air-craft and Aero-space	Rail-road Equip-ment	Rail-road Rails	Indus-trial Machinery	Elec-trical Machinery	Mining Materials	Agricul-tural Machinery	Con-sumer Durables	Con-tainers	Oil and Gas Materials	Material Not Else-where Classified	Construc-tion Materials
1966	4,698	104	2	2,653	1,948	1,752	925	-	1,758	3,288	-	2,028	2,868	6,438
1967	5,753	201	2	2,751	1,976	2,246	1,207	-	2,012	3,502	-	2,266	2,953	6,796
1968	6,867	371	3	2,823	1,962	2,758	1,508	-	2,240	3,688	-	2,475	3,030	7,161
1969	8,004	660	3	2,871	1,914	3,265	1,814	1	2,433	3,848	-	2,646	3,099	7,533
1970	9,130	1,119	4	2,897	1,840	3,749	2,110	10	2,587	3,972	-	2,776	3,162	7,910
1971	10,220	1,781	5	2,904	1,752	4,205	2,386	57	2,702	4,068	-	2,867	3,220	8,294
1972	11,258	2,622	6	2,897	1,660	4,634	2,638	196	2,778	4,137	-	2,921	3,273	8,688
1973	12,231	3,532	7	2,880	1,577	5,040	2,862	443	2,818	4,181	-	2,946	3,323	9,091
1974	13,140	4,325	9	2,858	1,510	5,424	3,060	710	2,825	4,206	-	2,951	3,369	9,495
1975	13,993	4,799	10	2,834	1,464	5,782	3,233	898	2,806	4,221	7,032	2,943	3,414	9,906
1976	14,802	4,821	12	2,812	1,443	6,105	3,382	995	2,769	4,237	6,655	2,931	3,457	10,324
1977	15,577	4,390	14	2,796	1,444	6,381	3,507	1,044	2,715	4,267	6,957	2,922	3,503	10,755
1978	16,320	3,645	16	2,787	1,466	6,606	3,614	1,080	2,657	4,322	6,927	2,924	3,550	11,194
1979	17,033	2,795	19	2,791	1,503	6,759	3,695	1,119	2,602	4,410	6,469	2,935	3,600	11,639
1980	17,718	2,030	22	2,796	1,550	6,859	3,760	1,152	2,556	4,532	6,035	2,960	3,654	12,091
1981	18,366	1,464	24	2,808	1,604	6,921	3,815	1,161	2,525	4,684	5,326	3,000	3,711	12,548
1982	18,973	1,111	27	2,826	1,657	6,972	3,867	1,144	2,514	4,857	5,082	3,054	3,776	13,014
1983	19,551	928	31	2,845	1,706	7,037	3,925	1,119	2,524	5,036	4,608	3,121	3,851	13,490
1984	20,044	849	34	2,864	1,746	7,145	3,999	1,100	2,555	5,208	4,546	3,199	3,929	13,973
1985	20,476	827	38	2,880	1,776	7,316	4,096	1,080	2,604	5,365	4,466	3,288	4,015	14,463
1986	20,840	831	41	2,889	1,794	7,559	4,219	1,035	2,666	5,501	4,426	3,386	4,110	14,959
1987	21,126	844	45	2,890	1,799	7,865	4,368	946	2,734	5,614	4,441	3,491	4,215	15,460
1988	21,342	857	48	2,881	1,791	8,216	4,536	829	2,805	5,703	4,504	3,601	4,328	15,967
1989	21,480	864	51	2,860	1,770	8,593	4,717	727	2,874	5,768	4,510	3,713	4,451	16,478
1990	21,543	866	55	2,826	1,736	8,966	4,899	677	2,938	5,810	4,469	3,824	4,581	16,988
1991	21,538	862	58	2,777	1,688	9,308	5,070	689	2,998	5,829	4,337	3,926	4,719	17,501
1992	21,478	858	61	2,717	1,628	9,598	5,219	750	3,056	5,827	4,297	4,015	4,864	18,019
1993	21,375	863	64	2,644	1,558	9,831	5,341	843	3,115	5,806	4,456	4,084	5,015	18,541
1994	21,244	884	66	2,560	1,480	9,999	5,432	944	3,177	5,770	4,528	4,129	5,172	19,062
1995	21,100	924	68	2,462	1,396	10,107	5,490	1,015	3,242	5,723	4,498	4,147	5,332	19,583
1996	20,957	982	70	2,353	1,310	10,159	5,519	1,024	3,306	5,669	4,366	4,135	5,495	20,102
1997	20,831	1,047	72	2,237	1,224	10,165	5,522	971	3,361	5,608	4,299	4,098	5,661	20,621
1998	20,732	1,113	73	2,114	1,143	10,133	5,505	882	3,398	5,543	4,282	4,038	5,827	21,138
1999	20,663	1,172	74	1,986	1,070	10,066	5,475	789	3,407	5,481	4,156	3,962	5,995	21,654
2000	20,625	1,223	75	1,857	1,010	9,967	5,438	714	3,381	5,427	3,948	3,879	6,162	22,165
2001	20,621	1,266	75	1,731	963	9,832	5,398	675	3,314	5,386	3,662	3,800	6,329	22,671
2002	20,657	1,307	75	1,608	932	9,662	5,359	679	3,206	5,359	3,328	3,733	6,498	23,188
2003	20,730	1,348	75	1,494	916	9,465	5,323	713	3,061	5,347	3,229	3,688	6,667	23,687
2004	20,847	1,390	75	1,388	915	9,247	5,292	739	2,890	5,347	2,984	3,671	6,840	24,187
2005	21,020	1,426	74	1,295	928	9,030	5,267	731	2,702	5,356	3,103	3,685	7,016	24,685
2006	21,261	1,450	74	1,214	951	8,835	5,250	695	2,513	5,374	3,226	3,738	7,193	25,179
2007	21,562	1,458	73	1,148	982	8,677	5,243	663	2,333	5,402	3,137	3,826	7,373	25,671
2008	21,913	1,447	72	1,095	1,020	8,553	5,247	665	2,172	5,450	2,799	3,949	7,555	26,149
2009	22,311	1,423	71	1,053	1,062	8,451	5,259	695	2,037	5,522	2,635	4,099	7,741	26,629

SOURCES : Generated obsolete scrap is calculated using statistical techniques that model the useful lives of ferrous containing end-use products by year of discard. See Appendix D, "*Mathematical Derivations for Modeling the Useful Lives of Ferrous Containing End-Use Products*" .

Table A-64

Obosolete Ferrous Scrap Recovery Rates by End-Use Product, 1983-2009

Category	Recovery Rate
Automotive	92%
Ship building and marine equipment [a]	0%
Aircraft and aerospace	99%
Railroad equipment	98%
Railroad rails	98%
Industrial machinery	88%
Electrical machinery	87%
Mining materials	75%
Agricultural machinery	70%
Consumer durables	9%
Containers	3%
Oil and gas materials	50%
Materials not elsewhere classified	60%
Construction materials	85%

[a] When ships are discarded, they are floated overseas and disassembled. They do not contribute to the reserves of recoverable obsolete scrap and are considered entirely unrecoverable.

SOURCE: Nathan Associates Inc., *Iron and Steel Scrap: Its Accumulation and Availability as of December 31, 1975*, August 23, 1977, Table VI-1.

Appendix B

Calculation of Recoverable Scrap by Industry

Table B-1

Calculation of Recoverable Obsolete Ferrous Scrap from Automotive End-Use Products, 1983-2009 (thousands of net tons)

Year	Ferrous Shipments to Manufacturers of End-Use Products [a] [1]	3-Year Moving Average [2]	Prompt Ferrous Scrap Generated in Manu facturing [b] [3]	3-Year Moving Average [4]	Ferrous Content: Manu-factured Products [5] = [2] - [4]	Ferrous Content: Domestic Consump-tion of Products [c] [6]	Obsolete Ferrous Scrap: Gene-rated [d] [7]	Obsolete Ferrous Scrap: Non-Recov-erable [e] [8]	Obsolete Ferrous Scrap: Recov-erable [9] = [7] - [8]
1983	20,838	22,134	5,553	5,897	16,237	20,441	19,551	1,564	17,987
1984	23,429	22,561	6,241	6,012	16,549	22,071	20,044	1,604	18,440
1985	23,414	22,864	6,241	6,083	16,782	22,618	20,476	1,638	18,838
1986	21,749	22,288	5,766	5,902	16,386	22,043	20,840	1,667	19,173
1987	21,701	21,986	5,700	5,811	16,175	21,453	21,126	1,690	19,436
1988	22,508	21,753	5,967	5,750	16,003	20,905	21,342	1,707	19,635
1989	21,050	21,348	5,582	5,655	15,694	20,378	21,480	1,718	19,762
1990	20,487	20,067	5,415	5,313	14,754	18,990	21,543	1,723	19,820
1991	18,664	19,965	4,940	5,279	14,686	18,501	21,538	1,723	19,815
1992	20,743	20,690	5,481	5,473	15,218	19,161	21,478	1,718	19,760
1993	22,665	23,399	5,997	6,188	17,211	21,239	21,375	1,710	19,665
1994	26,790	25,050	7,086	6,644	18,406	22,371	21,244	1,699	19,544
1995	25,694	26,454	6,849	7,024	19,430	23,424	21,100	1,688	19,412
1996	26,878	26,938	7,137	7,146	19,792	23,749	20,957	1,677	19,280
1997	28,242	28,640	7,451	7,574	21,066	24,743	20,831	1,666	19,164
1998	30,799	29,963	8,132	7,931	22,032	26,332	20,732	1,659	19,074
1999	30,849	30,723	8,210	8,178	22,544	28,404	20,663	1,653	19,010
2000	30,520	29,224	8,193	7,851	21,373	27,796	20,625	1,650	18,975
2001	26,303	27,785	7,150	7,512	20,273	26,070	20,621	1,650	18,972
2002	26,531	26,660	7,192	7,248	19,412	25,609	20,657	1,653	19,005
2003	27,147	26,839	7,404	7,298	19,541	25,495	20,730	1,658	19,072
2004	28,552	27,748	7,641	7,511	20,237	25,927	20,847	1,668	19,179
2005	27,545	28,879	7,489	7,781	21,098	26,380	21,020	1,682	19,339
2006	30,542	27,855	8,214	7,569	20,286	28,795	21,261	1,701	19,560
2007	25,478	26,692	7,005	7,255	19,437	27,376	21,562	1,725	19,837
2008	24,055	21,401	6,546	5,904	15,496	22,259	21,913	1,753	20,160
2009	14,669	19,362	4,163	5,354	14,008	19,138	22,311	1,785	20,526
Total	667,843	669,268	178,744	179,142	490,126	631,668	567,868	45,429	522,438

[a] From Appendix A, Table A-59.

[b] From Appendix A, Table A-60.

[c] Equals ferrous content of manufactured products plus net imports (if any) from Appendix A, Table A-61.

[d] From Appendix A, Table A-63.

[e] Equals obsolete scrap generated multiplied by (1 minus recovery rate) where recovery rate is from Appendix A, Table A-64.

SOURCES : See footnotes.

Table B-2

Calculation of Recoverable Obsolete Ferrous Scrap from Ship Building and Marine Equipment End-Use Products, 1983-2009 (thousands of net tons)

Year	Ferrous Shipments to Manufacturers of End-Use Products [a] [1]	3-Year Moving Average [2]	Prompt Ferrous Scrap Generated in Manu facturing [b] [3]	3-Year Moving Average [4]	Ferrous Content: Manu-factured Products [5] = [2] - [4]	Ferrous Content: Domestic Consump-tion of Products [c] [6]	Obsolete Ferrous Scrap: Gene-rated [d] [7]	Obsolete Ferrous Scrap: Non-Recov-erable [e] [8]	Obsolete Ferrous Scrap: Recov-erable [9] = [7] - [8]
1983	877	928	104	110	818	818	928	928	0
1984	979	876	117	104	772	772	849	849	0
1985	772	764	92	91	673	673	827	827	0
1986	541	620	64	73	546	546	831	831	0
1987	547	578	64	68	510	510	844	844	0
1988	647	634	77	75	559	559	857	857	0
1989	709	671	84	79	592	592	864	864	0
1990	657	599	78	71	528	528	866	866	0
1991	431	521	51	62	459	459	862	862	0
1992	474	437	56	52	386	386	858	858	0
1993	407	471	48	56	415	415	863	863	0
1994	532	517	63	61	456	456	884	884	0
1995	613	663	73	79	585	585	924	924	0
1996	845	686	100	81	605	605	982	982	0
1997	599	708	71	84	625	625	1,047	1,047	0
1998	680	595	80	70	524	524	1,113	1,113	0
1999	504	578	60	69	509	509	1,172	1,172	0
2000	548	530	66	64	467	467	1,223	1,223	0
2001	538	528	65	64	465	465	1,266	1,266	0
2002	498	451	60	55	396	396	1,307	1,307	0
2003	317	408	39	49	358	358	1,348	1,348	0
2004	314	371	38	45	326	326	1,390	1,390	0
2005	482	469	58	56	412	412	1,426	1,426	0
2006	610	527	73	64	463	463	1,450	1,450	0
2007	489	471	60	57	414	414	1,458	1,458	0
2008	313	318	38	39	279	279	1,447	1,447	0
2009	152	232	19	29	204	204	1,423	1,423	0
Total	15,077	15,151	1,798	1,807	13,345	13,345	29,309	29,309	0

[a] From Appendix A, Table A-59.

[b] From Appendix A, Table A-60.

[c] Equals ferrous content of manufactured products plus net imports (if any) from Appendix A, Table A-61.

[d] From Appendix A, Table A-63.

[e] Equals obsolete scrap generated multiplied by (1 minus recovery rate) where recovery rate is from Appendix A, Table A-64.

SOURCES : See footnotes.

Table B-3

Calculation of Recoverable Obsolete Ferrous Scrap from Aircraft and Aerospace End-Use Products, 1983-2009 (thousands of net tons)

Year	Ferrous Shipments to Manufacturers of End-Use Products [a] [1]	3-Year Moving Average [2]	Prompt Ferrous Scrap Generated in Manu facturing [b] [3]	3-Year Moving Average [4]	Ferrous Content		Obsolete Ferrous Scrap		
					Manu-factured Products [5] = [2] - [4]	Domestic Consump-tion of Products [c] [6]	Gene-rated [d] [7]	Non-Recov-erable [e] [8]	Recov-erable [9] = [7] - [8]
1983	46	64	10	14	50	50	31	0	30
1984	82	76	18	16	59	59	34	0	34
1985	98	91	21	20	71	71	38	0	37
1986	93	95	20	20	75	75	41	0	41
1987	94	90	20	19	71	71	45	0	44
1988	83	88	18	19	69	69	48	0	48
1989	87	81	19	17	64	64	51	1	51
1990	74	71	16	15	55	55	55	1	54
1991	50	58	11	12	45	45	58	1	57
1992	49	57	10	12	45	45	61	1	60
1993	73	68	16	15	54	54	64	1	63
1994	84	71	18	15	56	56	66	1	65
1995	57	73	12	16	58	58	68	1	68
1996	79	66	17	14	52	52	70	1	69
1997	61	55	13	12	43	43	72	1	71
1998	24	36	5	8	28	28	73	1	72
1999	22	24	5	5	19	19	74	1	73
2000	26	24	6	5	19	19	75	1	74
2001	23	32	5	7	25	25	75	1	74
2002	47	36	10	8	28	28	75	1	75
2003	38	43	8	9	33	33	75	1	74
2004	85	55	18	12	43	43	75	1	74
2005	41	59	9	13	46	46	74	1	74
2006	50	43	11	10	34	34	74	1	73
2007	39	42	9	9	33	33	73	1	72
2008	38	28	8	6	22	22	72	1	71
2009	8	23	2	5	18	18	71	1	70
Total	1,552	1,549	335	334	1,215	1,215	1,686	17	1,669

[a] From Appendix A, Table A-59.

[b] From Appendix A, Table A-60.

[c] Equals ferrous content of manufactured products plus net imports (if any) from Appendix A, Table A-61.

[d] From Appendix A, Table A-63.

[e] Equals obsolete scrap generated multiplied by (1 minus recovery rate) where recovery rate is from Appendix A, Table A-64.

SOURCES : See footnotes.

Table B-4

Calculation of Recoverable Obsolete Ferrous Scrap from Railroad Equipment End-Use Products, 1983-2009 (thousands of net tons)

					Ferrous Content		Obsolete Ferrous Scrap		
Year	Ferrous Shipments to Manufacturers of End-Use Products [a] [1]	3-Year Moving Average [2]	Prompt Ferrous Scrap Generated in Manu facturing [b] [3]	3-Year Moving Average [4]	Manu-factured Products [5] = [2] - [4]	Domestic Consump-tion of Products [c] [6]	Gene-rated [d] [7]	Non-Recov-erable [e] [8]	Recov-erable [9] = [7] - [8]
1983	364	490	24	33	457	457	2,845	57	2,788
1984	617	508	41	34	474	474	2,864	57	2,807
1985	543	562	37	38	525	525	2,880	58	2,823
1986	527	593	35	40	553	553	2,889	58	2,832
1987	709	836	47	56	780	780	2,890	58	2,832
1988	1,272	1,072	85	72	1,001	1,001	2,881	58	2,823
1989	1,236	1,153	83	77	1,076	1,076	2,860	57	2,803
1990	952	1,019	64	68	951	951	2,826	57	2,770
1991	869	910	58	61	849	849	2,777	56	2,722
1992	907	936	61	63	874	874	2,717	54	2,663
1993	1,032	1,114	69	74	1,040	1,040	2,644	53	2,591
1994	1,403	1,261	94	84	1,177	1,177	2,560	51	2,508
1995	1,350	1,351	91	91	1,261	1,261	2,462	49	2,412
1996	1,301	1,236	87	83	1,153	1,153	2,353	47	2,306
1997	1,056	1,226	70	82	1,145	1,145	2,237	45	2,192
1998	1,322	1,066	88	71	995	995	2,114	42	2,072
1999	820	950	55	64	886	886	1,986	40	1,946
2000	708	644	48	44	601	601	1,857	37	1,820
2001	405	725	28	49	675	675	1,731	35	1,696
2002	1,061	648	73	44	603	603	1,608	32	1,576
2003	476	769	33	53	716	716	1,494	30	1,464
2004	1,376	1,100	93	75	1,025	1,025	1,388	28	1,361
2005	1,447	1,288	99	88	1,200	1,200	1,295	26	1,269
2006	1,040	1,234	71	85	1,149	1,149	1,214	24	1,190
2007	1,215	1,092	84	75	1,017	1,017	1,148	23	1,125
2008	1,020	1,283	70	90	1,193	1,193	1,095	22	1,073
2009	1,613	1,316	116	93	1,223	1,223	1,053	21	1,032
Total	26,641	26,382	1,803	1,785	24,597	24,597	58,669	1,173	57,495

[a] From Appendix A, Table A-59.

[b] From Appendix A, Table A-60.

[c] Equals ferrous content of manufactured products plus net imports (if any) from Appendix A, Table A-61.

[d] From Appendix A, Table A-63.

[e] Equals obsolete scrap generated multiplied by (1 minus recovery rate) where recovery rate is from Appendix A, Table A-64.

SOURCES : See footnotes.

Table B-5

Calculation of Recoverable Obsolete Ferrous Scrap from Railroad Rails End-Use Products, 1983-2009 (thousands of net tons)

Year	Ferrous Shipments to Manufacturers of End-Use Products [a] [1]	3-Year Moving Average [2]	Prompt Ferrous Scrap Generated in Manu facturing [b] [3]	3-Year Moving Average [4]	Ferrous Content: Manu-factured Products [5] = [2] - [4]	Ferrous Content: Domestic Consump-tion of Products [c] [6]	Obsolete Ferrous Scrap: Gene-rated [d] [7]	Obsolete Ferrous Scrap: Non-Recov-erable [e] [8]	Obsolete Ferrous Scrap: Recov-erable [9] = [7] - [8]
1983	1,206	1,572	81	106	1,467	1,467	1,706	34	1,671
1984	1,938	1,553	130	104	1,449	1,449	1,746	35	1,711
1985	1,516	1,501	102	101	1,400	1,400	1,776	36	1,741
1986	1,048	1,129	70	76	1,053	1,053	1,794	36	1,758
1987	822	973	54	65	908	908	1,799	36	1,763
1988	1,049	977	70	65	911	911	1,791	36	1,756
1989	1,059	1,079	71	72	1,007	1,007	1,770	35	1,735
1990	1,130	1,093	75	73	1,020	1,020	1,736	35	1,701
1991	1,091	1,125	73	75	1,050	1,050	1,688	34	1,654
1992	1,154	1,244	77	83	1,161	1,161	1,628	33	1,596
1993	1,487	1,366	99	91	1,275	1,275	1,558	31	1,527
1994	1,458	1,491	97	100	1,391	1,391	1,480	30	1,450
1995	1,528	1,623	103	109	1,514	1,514	1,396	28	1,369
1996	1,883	1,837	126	123	1,714	1,714	1,310	26	1,283
1997	2,099	2,222	140	148	2,073	2,073	1,224	24	1,199
1998	2,683	2,263	179	151	2,112	2,112	1,143	23	1,120
1999	2,008	2,433	135	163	2,270	2,270	1,070	21	1,049
2000	2,608	2,248	177	153	2,095	2,095	1,010	20	989
2001	2,127	2,153	146	147	2,006	2,006	963	19	944
2002	1,724	1,723	118	118	1,605	1,605	932	19	913
2003	1,317	1,521	91	104	1,416	1,416	916	18	898
2004	1,192	1,212	81	83	1,129	1,129	915	18	897
2005	1,127	1,435	77	98	1,337	1,337	928	19	909
2006	1,985	1,527	135	105	1,422	1,422	951	19	932
2007	1,469	1,816	102	125	1,692	1,692	982	20	962
2008	1,995	1,231	137	85	1,146	1,146	1,020	20	999
2009	230	1,112	16	77	1,036	1,036	1,062	21	1,040
Total	40,933	41,459	2,763	2,799	38,660	38,660	36,294	726	35,568

[a] From Appendix A, Table A-59.

[b] From Appendix A, Table A-60.

[c] Equals ferrous content of manufactured products plus net imports (if any) from Appendix A, Table A-61.

[d] From Appendix A, Table A-63.

[e] Equals obsolete scrap generated multiplied by (1 minus recovery rate) where recovery rate is from Appendix A, Table A-64.

SOURCES : See footnotes.

Table B-6

Calculation of Recoverable Obsolete Ferrous Scrap from Industrial Machinery End-Use Products, 1983-2009 (thousands of net tons)

					Ferrous Content		Obsolete Ferrous Scrap		
Year	Ferrous Shipments to Manufacturers of End-Use Products [a] [1]	3-Year Moving Average [2]	Prompt Ferrous Scrap Generated in Manu facturing [b] [3]	3-Year Moving Average [4]	Manu-factured Products [5] = [2] - [4]	Domestic Consump-tion of Products [c] [6]	Gene-rated [d] [7]	Non-Recov-erable [e] [8]	Recov-erable [9] = [7] - [8]
1983	6,972	7,927	1,150	1,313	6,614	7,161	7,037	844	6,193
1984	8,883	8,039	1,476	1,329	6,710	8,511	7,145	857	6,288
1985	8,262	8,102	1,359	1,334	6,768	9,250	7,316	878	6,438
1986	7,161	7,680	1,166	1,262	6,418	9,547	7,559	907	6,652
1987	7,616	7,716	1,260	1,265	6,451	9,458	7,865	944	6,921
1988	8,369	7,770	1,369	1,276	6,494	8,978	8,216	986	7,230
1989	7,325	7,617	1,198	1,256	6,361	8,473	8,593	1,031	7,562
1990	7,156	6,937	1,200	1,151	5,786	7,359	8,966	1,076	7,890
1991	6,329	6,656	1,055	1,108	5,548	5,447	9,308	1,117	8,191
1992	6,483	6,774	1,069	1,125	5,649	5,571	9,598	1,152	8,447
1993	7,510	7,640	1,251	1,264	6,377	7,162	9,831	1,180	8,651
1994	8,928	8,220	1,471	1,356	6,864	8,820	9,999	1,200	8,799
1995	8,222	8,764	1,345	1,446	7,318	8,501	10,107	1,213	8,894
1996	9,142	8,778	1,521	1,462	7,316	6,975	10,159	1,219	8,940
1997	8,969	9,172	1,519	1,535	7,637	7,217	10,165	1,220	8,945
1998	9,404	8,751	1,564	1,463	7,288	8,556	10,133	1,216	8,917
1999	7,879	8,548	1,307	1,430	7,118	9,957	10,066	1,208	8,858
2000	8,359	7,781	1,419	1,313	6,469	9,029	9,967	1,196	8,771
2001	7,105	7,764	1,212	1,324	6,439	8,452	9,832	1,180	8,652
2002	7,826	7,136	1,342	1,208	5,928	8,570	9,662	1,159	8,503
2003	6,476	7,151	1,070	1,206	5,945	9,066	9,465	1,136	8,329
2004	8,393	7,842	1,411	1,312	6,531	9,219	9,247	1,110	8,138
2005	8,658	8,863	1,454	1,494	7,369	10,494	9,030	1,084	7,946
2006	9,538	8,819	1,618	1,488	7,332	10,562	8,835	1,060	7,775
2007	8,262	8,383	1,391	1,408	6,974	8,039	8,677	1,041	7,636
2008	7,348	6,598	1,216	1,088	5,509	6,591	8,553	1,026	7,527
2009	4,183	5,766	658	937	4,829	8,218	8,451	1,014	7,437
Total	210,760	211,192	35,072	35,151	176,041	225,183	243,782	29,254	214,528

[a] From Appendix A, Table A-59.

[b] From Appendix A, Table A-60.

[c] Equals ferrous content of manufactured products plus net imports (if any) from Appendix A, Table A-61.

[d] From Appendix A, Table A-63.

[e] Equals obsolete scrap generated multiplied by (1 minus recovery rate) where recovery rate is from Appendix A, Table A-64.

SOURCES : See footnotes.

Table B-7

Calculation of Recoverable Obsolete Ferrous Scrap from Electrical Machinery End-Use Products, 1983-2009 (thousands of net tons)

Year	Ferrous Shipments to Manufacturers of End-Use Products [a] [1]	3-Year Moving Average [2]	Prompt Ferrous Scrap Generated in Manu facturing [b] [3]	3-Year Moving Average [4]	Ferrous Content: Manu-factured Products [5] = [2] - [4]	Ferrous Content: Domestic Consump-tion of Products [c] [6]	Obsolete Ferrous Scrap: Gene-rated [d] [7]	Obsolete Ferrous Scrap: Non-Recov-erable [e] [8]	Obsolete Ferrous Scrap: Recov-erable [9] = [7] - [8]
1983	6,035	6,380	1,131	1,200	5,180	5,180	3,925	510	3,415
1984	6,725	6,290	1,269	1,180	5,110	5,110	3,999	520	3,479
1985	6,112	6,404	1,142	1,196	5,208	5,208	4,096	532	3,563
1986	6,376	6,449	1,178	1,203	5,246	5,246	4,219	549	3,671
1987	6,859	6,702	1,289	1,248	5,454	5,454	4,368	568	3,800
1988	6,870	6,877	1,276	1,282	5,595	5,595	4,536	590	3,946
1989	6,903	6,871	1,282	1,287	5,584	5,584	4,717	613	4,104
1990	6,841	6,644	1,302	1,252	5,393	5,393	4,899	637	4,262
1991	6,189	6,526	1,171	1,233	5,293	5,293	5,070	659	4,411
1992	6,549	6,577	1,226	1,240	5,337	5,337	5,219	678	4,540
1993	6,994	7,114	1,323	1,336	5,778	5,778	5,341	694	4,647
1994	7,799	7,522	1,459	1,409	6,114	6,114	5,432	706	4,726
1995	7,774	7,839	1,444	1,468	6,371	6,371	5,490	714	4,777
1996	7,942	8,011	1,501	1,515	6,496	6,496	5,519	717	4,801
1997	8,315	8,210	1,599	1,560	6,650	6,650	5,522	718	4,804
1998	8,373	8,360	1,581	1,587	6,773	6,773	5,505	716	4,790
1999	8,391	8,180	1,580	1,553	6,626	6,626	5,475	712	4,763
2000	7,775	7,690	1,498	1,472	6,218	6,218	5,438	707	4,731
2001	6,905	6,869	1,338	1,330	5,539	5,539	5,398	702	4,696
2002	5,926	5,993	1,154	1,152	4,841	4,841	5,359	697	4,663
2003	5,148	5,537	966	1,060	4,477	4,477	5,323	692	4,631
2004	7,658	6,056	1,461	1,150	4,906	4,906	5,292	688	4,604
2005	5,362	6,268	1,022	1,199	5,069	5,069	5,267	685	4,582
2006	5,786	5,117	1,114	980	4,137	4,137	5,250	683	4,568
2007	4,204	4,897	803	934	3,963	3,963	5,243	682	4,562
2008	4,700	3,836	883	717	3,119	3,119	5,247	682	4,565
2009	2,605	3,653	465	674	2,978	2,978	5,259	684	4,576
Total	177,116	176,873	33,458	33,417	143,456	143,456	136,408	17,733	118,675

[a] From Appendix A, Table A-59.

[b] From Appendix A, Table A-60.

[c] Equals ferrous content of manufactured products plus net imports (if any) from Appendix A, Table A-61.

[d] From Appendix A, Table A-63.

[e] Equals obsolete scrap generated multiplied by (1 minus recovery rate) where recovery rate is from Appendix A, Table A-64.

SOURCES : See footnotes.

Table B-8

Calculation of Recoverable Obsolete Ferrous Scrap from Mining Materials End-Use Products, 1983-2009 (thousands of net tons)

Year	Ferrous Shipments to Manufacturers of End-Use Products [a] [1]	3-Year Moving Average [2]	Prompt Ferrous Scrap Generated in Manu facturing [b] [3]	3-Year Moving Average [4]	Ferrous Content		Obsolete Ferrous Scrap		
					Manu-factured Products [5] = [2] - [4]	Domestic Consump-tion of Products [c] [6]	Gene-rated [d] [7]	Non-Recov-erable [e] [8]	Recov-erable [9] = [7] - [8]
1983	633	697	87	96	601	601	1,119	280	839
1984	762	747	105	103	644	644	1,100	275	825
1985	847	791	116	108	683	683	1,080	270	810
1986	765	892	104	122	770	770	1,035	259	776
1987	1,064	1,048	147	143	904	904	946	237	710
1988	1,314	1,212	179	166	1,046	1,046	829	207	622
1989	1,259	1,330	172	183	1,147	1,147	727	182	545
1990	1,418	1,219	198	169	1,051	1,051	677	169	508
1991	980	1,126	136	156	970	970	689	172	517
1992	980	934	135	129	804	804	750	187	562
1993	840	870	117	120	750	750	843	211	633
1994	791	752	109	103	649	649	944	236	708
1995	625	704	85	97	608	608	1,015	254	761
1996	697	805	97	112	693	693	1,024	256	768
1997	1,091	892	154	125	767	767	971	243	729
1998	886	953	123	133	820	820	882	221	662
1999	880	853	122	119	734	734	789	197	592
2000	792	768	112	108	660	660	714	178	535
2001	633	685	90	97	588	588	675	169	506
2002	631	779	90	109	669	669	679	170	509
2003	1,072	851	148	119	732	732	713	178	534
2004	1,012	1,012	142	141	871	871	739	185	554
2005	952	746	133	105	641	641	731	183	548
2006	274	597	39	84	513	513	695	174	521
2007	565	437	79	61	376	376	663	166	497
2008	473	349	65	48	300	300	665	166	499
2009	7	240	1	33	207	207	695	174	522
Total	22,244	22,290	3,083	3,090	19,200	19,200	22,391	5,598	16,793

[a] From Appendix A, Table A-59.

[b] From Appendix A, Table A-60.

[c] Equals ferrous content of manufactured products plus net imports (if any) from Appendix A, Table A-61.

[d] From Appendix A, Table A-63.

[e] Equals obsolete scrap generated multiplied by (1 minus recovery rate) where recovery rate is from Appendix A, Table A-64.

SOURCES : See footnotes.

Table B-9

Calculation of Recoverable Obsolete Ferrous Scrap from Agricultural Machinery End-Use Products, 1983-2009 (thousands of net tons)

Year	Ferrous Shipments to Manufacturers of End-Use Products [a] [1]	3-Year Moving Average [2]	Prompt Ferrous Scrap Generated in Manu facturing [b] [3]	3-Year Moving Average [4]	Ferrous Content		Obsolete Ferrous Scrap		
					Manu-factured Products [5] = [2] - [4]	Domestic Consump-tion of Products [c] [6]	Gene-rated [d] [7]	Non-Recov-erable [e] [8]	Recov-erable [9] = [7] - [8]
1983	1,866	1,942	143	149	1,793	1,793	2,524	757	1,767
1984	2,019	2,008	156	154	1,854	1,854	2,555	767	1,789
1985	2,139	2,041	163	156	1,886	1,886	2,604	781	1,823
1986	1,966	2,015	148	153	1,861	1,861	2,666	800	1,866
1987	1,939	1,831	149	139	1,692	1,692	2,734	820	1,914
1988	1,588	1,737	120	132	1,605	1,605	2,805	842	1,964
1989	1,683	1,723	128	132	1,591	1,591	2,874	862	2,012
1990	1,896	1,722	147	133	1,590	1,590	2,938	881	2,057
1991	1,587	1,739	123	134	1,605	1,605	2,998	899	2,099
1992	1,735	1,746	133	134	1,612	1,612	3,056	917	2,139
1993	1,916	1,933	148	148	1,785	1,785	3,115	935	2,181
1994	2,149	2,124	164	162	1,962	1,962	3,177	953	2,224
1995	2,306	2,349	175	180	2,169	2,169	3,242	973	2,269
1996	2,591	2,594	200	200	2,393	2,393	3,306	992	2,314
1997	2,884	2,874	226	223	2,651	2,651	3,361	1,008	2,353
1998	3,147	2,996	243	232	2,764	2,764	3,398	1,019	2,379
1999	2,958	3,182	227	247	2,936	2,936	3,407	1,022	2,385
2000	3,443	3,004	271	235	2,769	2,769	3,381	1,014	2,367
2001	2,611	2,812	206	222	2,589	2,589	3,314	994	2,320
2002	2,381	2,197	189	173	2,025	2,025	3,206	962	2,244
2003	1,600	1,991	123	156	1,835	1,835	3,061	918	2,143
2004	1,721	1,761	134	136	1,624	1,624	2,890	867	2,023
2005	1,962	2,107	153	165	1,942	1,942	2,702	811	1,892
2006	2,637	2,187	207	171	2,016	2,016	2,513	754	1,759
2007	1,962	2,097	153	163	1,934	1,934	2,333	700	1,633
2008	1,692	1,343	130	103	1,240	1,240	2,172	652	1,521
2009	375	1,033	27	79	955	955	2,037	611	1,426
Total	56,754	57,089	4,386	4,412	52,676	52,676	78,370	23,511	54,859

[a] From Appendix A, Table A-59.

[b] From Appendix A, Table A-60.

[c] Equals ferrous content of manufactured products plus net imports (if any) from Appendix A, Table A-61.

[d] From Appendix A, Table A-63.

[e] Equals obsolete scrap generated multiplied by (1 minus recovery rate) where recovery rate is from Appendix A, Table A-64.

SOURCES : See footnotes.

Table B-10

Calculation of Recoverable Obsolete Ferrous Scrap from Consumer Durables End-Use Products, 1983-2009 (thousands of net tons)

Year	Ferrous Shipments to Manufacturers of End-Use Products [a] [1]	3-Year Moving Average [2]	Prompt Ferrous Scrap Generated in Manu facturing [b] [3]	3-Year Moving Average [4]	Ferrous Content		Obsolete Ferrous Scrap		
					Manu-factured Products [5] = [2] - [4]	Domestic Consump-tion of Products [c] [6]	Gene-rated [d] [7]	Non-Recov-erable [e] [8]	Recov-erable [9] = [7] - [8]
1983	6,056	6,485	1,046	1,119	5,366	5,366	5,036	4,582	453
1984	6,913	6,502	1,192	1,124	5,378	5,378	5,208	4,740	469
1985	6,537	6,609	1,133	1,147	5,462	5,462	5,365	4,882	483
1986	6,378	6,523	1,116	1,140	5,382	5,382	5,501	5,006	495
1987	6,654	6,623	1,172	1,164	5,459	5,459	5,614	5,109	505
1988	6,836	6,722	1,204	1,187	5,535	5,535	5,703	5,190	513
1989	6,676	6,679	1,184	1,183	5,497	5,497	5,768	5,249	519
1990	6,526	6,370	1,160	1,134	5,236	5,236	5,810	5,287	523
1991	5,907	6,281	1,057	1,119	5,162	5,162	5,829	5,304	525
1992	6,410	6,397	1,141	1,140	5,257	5,257	5,827	5,302	524
1993	6,873	7,020	1,221	1,244	5,776	5,776	5,806	5,284	523
1994	7,777	7,312	1,369	1,293	6,019	6,019	5,770	5,251	519
1995	7,286	7,728	1,287	1,366	6,362	6,362	5,723	5,208	515
1996	8,120	7,906	1,440	1,397	6,509	6,509	5,669	5,158	510
1997	8,312	8,501	1,465	1,498	7,003	7,003	5,608	5,103	505
1998	9,072	8,629	1,589	1,520	7,109	7,109	5,543	5,044	499
1999	8,502	8,878	1,505	1,574	7,304	7,304	5,481	4,988	493
2000	9,059	8,497	1,627	1,530	6,967	6,967	5,427	4,939	488
2001	7,929	8,271	1,458	1,503	6,769	6,769	5,386	4,902	485
2002	7,826	7,856	1,422	1,443	6,414	6,414	5,359	4,877	482
2003	7,815	7,820	1,447	1,435	6,385	6,385	5,347	4,866	481
2004	8,403	8,243	1,539	1,525	6,718	6,718	5,347	4,865	481
2005	8,511	8,657	1,589	1,592	7,065	7,065	5,356	4,874	482
2006	9,057	8,496	1,647	1,575	6,921	6,921	5,374	4,890	484
2007	7,920	8,177	1,488	1,513	6,664	6,664	5,402	4,916	486
2008	7,554	6,668	1,403	1,255	5,413	5,413	5,450	4,959	490
2009	4,531	6,042	873	1,138	4,904	4,904	5,522	5,025	497
Total	199,440	199,892	35,776	35,854	164,038	164,038	149,231	135,801	13,431

[a] From Appendix A, Table A-59.

[b] From Appendix A, Table A-60.

[c] Equals ferrous content of manufactured products plus net imports (if any) from Appendix A, Table A-61.

[d] From Appendix A, Table A-63.

[e] Equals obsolete scrap generated multiplied by (1 minus recovery rate) where recovery rate is from Appendix A, Table A-64.

SOURCES : See footnotes.

Table B-11

Calculation of Recoverable Obsolete Ferrous Scrap from Containers End-Use Products, 1983-2009 (thousands of net tons)

					Ferrous Content		Obsolete Ferrous Scrap		
Year	Ferrous Shipments to Manufacturers of End-Use Products [a] [1]	3-Year Moving Average [2]	Prompt Ferrous Scrap Generated in Manu facturing [b] [3]	3-Year Moving Average [4]	Manu-factured Products [5] = [2] - [4]	Domestic Consump-tion of Products [c] [6]	Gene-rated [d] [7]	Non-Recov-erable [e] [8]	Recov-erable [9] = [7] - [8]
1983	5,121	5,151	493	496	4,655	4,655	4,608	4,470	138
1984	5,180	5,085	499	493	4,592	4,592	4,546	4,410	136
1985	4,953	4,999	486	488	4,511	4,511	4,466	4,332	134
1986	4,865	4,961	480	490	4,471	4,471	4,426	4,293	133
1987	5,064	4,980	503	494	4,486	4,486	4,441	4,308	133
1988	5,011	5,052	499	503	4,549	4,549	4,504	4,369	135
1989	5,082	5,061	508	505	4,556	4,556	4,510	4,375	135
1990	5,090	5,016	509	502	4,514	4,514	4,469	4,335	134
1991	4,876	4,867	489	486	4,381	4,381	4,337	4,207	130
1992	4,636	4,820	461	480	4,340	4,340	4,297	4,168	129
1993	4,949	4,995	491	495	4,501	4,501	4,456	4,322	134
1994	5,400	5,076	532	503	4,573	4,573	4,528	4,392	136
1995	4,880	5,043	487	500	4,543	4,543	4,498	4,363	135
1996	4,850	4,895	482	485	4,410	4,410	4,366	4,235	131
1997	4,956	4,817	487	474	4,343	4,343	4,299	4,170	129
1998	4,645	4,797	454	472	4,326	4,326	4,282	4,154	128
1999	4,791	4,658	473	460	4,198	4,198	4,156	4,032	125
2000	4,539	4,432	453	443	3,988	3,988	3,948	3,830	118
2001	3,965	4,113	403	414	3,699	3,699	3,662	3,553	110
2002	3,836	3,740	385	379	3,361	3,361	3,328	3,228	100
2003	3,419	3,628	347	366	3,261	3,261	3,229	3,132	97
2004	3,104	3,358	317	344	3,014	3,014	2,984	2,895	90
2005	3,551	3,490	366	355	3,135	3,135	3,103	3,010	93
2006	3,815	3,630	382	371	3,259	3,259	3,226	3,129	97
2007	3,522	3,528	364	359	3,169	3,169	3,137	3,043	94
2008	3,247	3,153	331	326	2,827	2,827	2,799	2,715	84
2009	2,690	2,968	282	306	2,662	2,662	2,635	2,556	79
Total	120,038	120,315	11,965	11,990	108,325	108,325	107,242	104,024	3,217

[a] From Appendix A, Table A-59.

[b] From Appendix A, Table A-60.

[c] Equals ferrous content of manufactured products plus net imports (if any) from Appendix A, Table A-61.

[d] From Appendix A, Table A-63.

[e] Equals obsolete scrap generated multiplied by (1 minus recovery rate) where recovery rate is from Appendix A, Table A-64.

SOURCES : See footnotes.

Table B-12

Calculation of Recoverable Obsolete Ferrous Scrap from Oil and Gas Materials End-Use Products, 1983-2009 (thousands of net tons)

					Ferrous Content		Obsolete Ferrous Scrap		
Year	Ferrous Shipments to Manufacturers of End-Use Products [a] [1]	3-Year Moving Average [2]	Prompt Ferrous Scrap Generated in Manu facturing [b] [3]	3-Year Moving Average [4]	Manu-factured Products [5] = [2] - [4]	Domestic Consump-tion of Products [c] [6]	Gene-rated [d] [7]	Non-Recov-erable [e] [8]	Recov-erable [9] = [7] - [8]
1983	3,152	4,012	477	617	3,395	3,395	3,121	1,560	1,560
1984	4,872	4,256	757	657	3,599	3,599	3,199	1,600	1,600
1985	4,745	4,279	739	659	3,621	3,621	3,288	1,644	1,644
1986	3,221	3,929	480	601	3,328	3,328	3,386	1,693	1,693
1987	3,820	3,761	584	572	3,189	3,189	3,491	1,745	1,745
1988	4,242	3,879	652	592	3,286	3,286	3,601	1,801	1,801
1989	3,573	4,073	541	628	3,445	3,445	3,713	1,857	1,857
1990	4,402	3,919	691	608	3,311	3,311	3,824	1,912	1,912
1991	3,782	3,938	592	613	3,325	3,325	3,926	1,963	1,963
1992	3,629	3,839	556	593	3,245	3,245	4,015	2,007	2,007
1993	4,105	4,227	632	648	3,579	3,579	4,084	2,042	2,042
1994	4,947	4,884	757	756	4,129	4,129	4,129	2,065	2,065
1995	5,600	5,662	879	886	4,776	4,776	4,147	2,073	2,073
1996	6,438	6,422	1,022	1,017	5,405	5,405	4,135	2,068	2,068
1997	7,228	6,856	1,151	1,085	5,771	5,771	4,098	2,049	2,049
1998	6,902	6,757	1,082	1,064	5,692	5,692	4,038	2,019	2,019
1999	6,140	6,834	961	1,082	5,752	5,752	3,962	1,981	1,981
2000	7,461	6,884	1,205	1,111	5,773	5,773	3,879	1,940	1,940
2001	7,052	6,849	1,168	1,117	5,732	5,732	3,800	1,900	1,900
2002	6,035	6,220	979	1,020	5,200	5,200	3,733	1,867	1,867
2003	5,574	5,805	912	946	4,859	4,859	3,688	1,844	1,844
2004	6,694	6,500	1,107	1,077	5,423	5,423	3,671	1,835	1,835
2005	7,230	7,390	1,212	1,224	6,165	6,165	3,685	1,843	1,843
2006	8,244	7,752	1,353	1,295	6,456	6,456	3,738	1,869	1,869
2007	7,780	7,988	1,321	1,338	6,650	6,650	3,826	1,913	1,913
2008	7,939	6,554	1,340	1,114	5,441	5,441	3,949	1,974	1,974
2009	3,943	5,941	680	1,010	4,931	4,931	4,099	2,049	2,049
Total	148,752	149,408	23,827	23,930	125,478	125,478	102,226	51,113	51,113

[a] From Appendix A, Table A-59.

[b] From Appendix A, Table A-60.

[c] Equals ferrous content of manufactured products plus net imports (if any) from Appendix A, Table A-61.

[d] From Appendix A, Table A-63.

[e] Equals obsolete scrap generated multiplied by (1 minus recovery rate) where recovery rate is from Appendix A, Table A-64.

SOURCES : See footnotes.

Table B-13

Calculation of Recoverable Obsolete Ferrous Scrap from Materials, Not Elsewhere Classified, End-Use Products, 1983-2009 (thousands of net tons)

					Ferrous Content		Obsolete Ferrous Scrap		
Year	Ferrous Shipments to Manufacturers of End-Use Products [a] [1]	3-Year Moving Average [2]	Prompt Ferrous Scrap Generated in Manu facturing [b] [3]	3-Year Moving Average [4]	Manu-factured Products [5] = [2] - [4]	Domestic Consump-tion of Products [c] [6]	Gene-rated [d] [7]	Non-Recov-erable [e] [8]	Recov-erable [9] = [7] - [8]
1983	7,795	8,735	1,316	1,475	7,261	7,261	3,851	1,540	2,311
1984	9,676	9,052	1,633	1,536	7,516	7,516	3,929	1,571	2,357
1985	9,686	9,653	1,658	1,646	8,008	8,008	4,015	1,606	2,409
1986	9,598	9,987	1,646	1,715	8,272	8,272	4,110	1,644	2,466
1987	10,677	10,697	1,842	1,840	8,856	8,856	4,215	1,686	2,529
1988	11,815	11,332	2,033	1,954	9,378	9,378	4,328	1,731	2,597
1989	11,504	11,581	1,987	1,999	9,582	9,582	4,451	1,780	2,671
1990	11,424	11,109	1,976	1,923	9,186	9,186	4,581	1,832	2,749
1991	10,399	10,989	1,805	1,900	9,089	9,089	4,719	1,887	2,831
1992	11,144	11,240	1,920	1,939	9,301	9,301	4,864	1,945	2,918
1993	12,176	12,498	2,091	2,139	10,359	10,359	5,015	2,006	3,009
1994	14,175	13,167	2,407	2,251	10,916	10,916	5,172	2,069	3,103
1995	13,151	13,899	2,254	2,376	11,523	11,523	5,332	2,133	3,199
1996	14,373	14,274	2,467	2,443	11,832	11,832	5,495	2,198	3,297
1997	15,299	15,354	2,606	2,617	12,737	12,737	5,661	2,264	3,396
1998	16,390	15,870	2,776	2,700	13,170	13,170	5,827	2,331	3,496
1999	15,920	15,951	2,718	2,727	13,224	13,224	5,995	2,398	3,597
2000	15,543	14,858	2,688	2,572	12,285	12,285	6,162	2,465	3,697
2001	13,109	14,572	2,311	2,543	12,029	12,029	6,329	2,532	3,798
2002	15,063	14,184	2,630	2,494	11,689	11,689	6,498	2,599	3,899
2003	14,379	14,721	2,542	2,586	12,135	12,135	6,667	2,667	4,000
2004	17,533	15,764	3,128	2,808	12,955	12,955	6,840	2,736	4,104
2005	15,380	17,173	2,755	3,042	14,131	14,131	7,016	2,806	4,209
2006	18,606	17,113	3,244	3,038	14,075	14,075	7,193	2,877	4,316
2007	17,352	17,544	3,115	3,106	14,437	14,437	7,373	2,949	4,424
2008	16,672	13,698	2,960	2,456	11,241	11,241	7,555	3,022	4,533
2009	7,068	11,870	1,293	2,126	9,744	9,744	7,741	3,096	4,645
Total	355,908	356,885	61,802	61,952	294,933	294,933	150,932	60,373	90,559

[a] From Appendix A, Table A-59.

[b] From Appendix A, Table A-60.

[c] Equals ferrous content of manufactured products plus net imports (if any) from Appendix A, Table A-61.

[d] From Appendix A, Table A-63.

[e] Equals obsolete scrap generated multiplied by (1 minus recovery rate) where recovery rate is from Appendix A, Table A-64.

SOURCES : See footnotes.

Table B-14

Calculation of Recoverable Obsolete Ferrous Scrap from Construction Materials End-Use Products, 1983-2009 (thousands of net tons)

Year	Ferrous Shipments to Manufacturers of End-Use Products [a] [1]	3-Year Moving Average [2]	Prompt Ferrous Scrap Generated in Manu facturing [b] [3]	3-Year Moving Average [4]	Ferrous Content		Obsolete Ferrous Scrap		
					Manu-factured Products [5] = [2] - [4]	Domestic Consump-tion of Products [c] [6]	Gene-rated [d] [7]	Non-Recov-erable [e] [8]	Recov-erable [9] = [7] - [8]
1983	28,874	31,474	3,279	3,623	27,851	28,618	13,490	2,024	11,467
1984	34,075	32,718	3,967	3,779	28,939	30,132	13,973	2,096	11,877
1985	35,206	34,426	4,091	4,027	30,399	31,752	14,463	2,170	12,294
1986	33,998	35,411	4,022	4,208	31,203	32,660	14,959	2,244	12,715
1987	37,030	37,415	4,512	4,563	32,852	34,168	15,460	2,319	13,141
1988	41,218	39,060	5,156	4,861	34,199	35,897	15,967	2,395	13,572
1989	38,931	39,984	4,915	5,041	34,943	36,710	16,478	2,472	14,006
1990	39,802	38,363	5,052	4,858	33,505	34,884	16,988	2,548	14,439
1991	36,356	38,541	4,606	4,879	33,663	34,715	17,501	2,625	14,876
1992	39,467	39,829	4,978	5,032	34,796	35,939	18,019	2,703	15,316
1993	43,664	44,678	5,513	5,647	39,032	40,505	18,541	2,781	15,760
1994	50,904	47,705	6,450	6,013	41,691	43,102	19,062	2,859	16,203
1995	48,546	50,670	6,077	6,387	44,283	45,831	19,583	2,937	16,646
1996	52,560	51,988	6,634	6,543	45,445	46,986	20,102	3,015	17,086
1997	54,859	54,918	6,918	6,934	47,984	49,550	20,621	3,093	17,528
1998	57,335	57,417	7,249	7,212	50,206	52,282	21,138	3,171	17,968
1999	60,057	59,953	7,467	7,487	52,465	55,188	21,654	3,248	18,406
2000	62,466	59,654	7,746	7,346	52,308	55,475	22,165	3,325	18,840
2001	56,438	59,306	6,825	7,291	52,015	55,042	22,671	3,401	19,271
2002	59,015	58,232	7,302	7,073	51,159	54,592	23,188	3,478	19,710
2003	59,243	59,129	7,092	7,197	51,932	55,344	23,687	3,553	20,134
2004	67,701	62,907	8,381	7,644	55,263	58,729	24,187	3,628	20,559
2005	61,777	66,100	7,461	8,143	57,957	61,478	24,685	3,703	20,982
2006	68,821	65,198	8,586	8,052	57,146	62,031	25,179	3,777	21,403
2007	64,997	64,044	8,108	8,003	56,040	60,442	25,671	3,851	21,820
2008	58,313	51,996	7,316	6,407	45,589	49,284	26,149	3,922	22,226
2009	32,679	45,496	3,798	5,557	39,939	41,958	26,629	3,994	22,635
Total	1,324,330	1,326,612	163,501	163,807	1,162,805	1,223,295	542,210	81,331	460,878

[a] From Appendix A, Table A-59.

[b] From Appendix A, Table A-60.

[c] Equals ferrous content of manufactured products plus net imports (if any) from Appendix A, Table A-61.

[d] From Appendix A, Table A-63.

[e] Equals obsolete scrap generated multiplied by (1 minus recovery rate) where recovery rate is from Appendix A, Table A-64.

SOURCES : See footnotes.

Table B-15

Recoverable Obsolete Ferrous Scrap from All 14 Categories of Ferrrous-Containing End-Use Products, 1983-2009 (thousands of net tons)

Year	Ferrous Shipments to Manufacturers of End-Use Products [1]	3-Year Moving Average [2]	Prompt Ferrous Scrap Generated in Manufacturing [3]	3-Year Moving Average [4]	Ferrous Content: Manu-factured Products [5] = [2] - [4]	Ferrous Content: Domestic Consumption of Products [6]	Obsolete Ferrous Scrap: Generated [7]	Obsolete Ferrous Scrap: Non-Recoverable [8]	Obsolete Ferrous Scrap: Recoverable [9] = [7] - [8]
1983	89,834	97,993	14,894	16,247	81,745	87,264	69,772	19,152	50,620
1984	106,151	100,271	17,600	16,625	83,646	92,162	71,192	19,380	51,812
1985	104,827	103,088	17,380	17,092	85,996	95,668	72,692	19,654	53,037
1986	98,286	102,570	16,296	17,006	85,564	95,807	74,256	19,987	54,270
1987	104,595	105,235	17,342	17,448	87,787	97,389	75,839	20,364	55,474
1988	112,823	108,165	18,706	17,934	90,232	99,316	77,410	20,768	56,642
1989	107,078	109,252	17,753	18,114	91,138	99,702	78,858	21,097	57,761
1990	107,857	104,148	17,883	17,268	86,880	94,068	80,176	21,358	58,817
1991	97,509	103,243	16,167	17,118	86,125	90,891	81,300	21,510	59,791
1992	104,362	105,520	17,303	17,495	88,025	93,034	82,385	21,724	60,661
1993	114,691	117,396	19,016	19,464	97,932	104,219	83,536	22,112	61,425
1994	133,135	125,153	22,074	20,750	104,403	111,734	84,445	22,395	62,051
1995	127,634	132,823	21,162	22,022	110,801	117,525	85,087	22,558	62,530
1996	137,700	136,434	22,831	22,621	113,814	118,971	85,446	22,591	62,855
1997	143,970	144,445	23,870	23,949	120,496	125,319	85,715	22,652	63,063
1998	151,665	148,452	25,146	24,613	123,839	131,482	85,923	22,728	63,195
1999	149,722	151,745	24,824	25,159	126,586	138,008	85,952	22,673	63,279
2000	153,848	146,238	25,508	24,246	121,992	134,142	85,870	22,525	63,346
2001	135,144	142,464	22,407	23,621	118,844	129,681	85,724	22,302	63,423
2002	138,402	135,855	22,947	22,525	113,331	125,603	85,592	22,047	63,545
2003	134,021	136,211	22,221	22,584	113,627	126,113	85,743	22,041	63,702
2004	153,739	143,928	25,490	23,863	120,064	131,909	85,811	21,913	63,898
2005	144,023	152,923	23,879	25,355	127,568	139,496	86,319	22,151	64,168
2006	161,006	150,095	26,695	24,886	125,209	141,833	86,953	22,408	64,545
2007	145,256	147,207	24,083	24,407	122,800	136,205	87,549	22,487	65,062
2008	135,358	118,456	22,442	19,640	98,816	110,354	88,084	22,362	65,721
2009	74,753	105,055	12,394	17,418	87,637	98,176	88,988	22,455	66,533
Total	3,367,387	3,374,364	558,313	559,470	2,814,895	3,066,069	2,226,617	585,392	1,641,225

Note: Data are totals of amounts in 14 product categories. See Tables B-1 through B-14 for amounts by product category.
SOURCE : Nathan Associates Inc.

Appendix C

Shipment Data

Table C-1

Domestic Iron and Steel Shipments, 1983 - 2009 (thousands of net tons)

AISI Categories	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Converting and Processing	4,403	5,136	5,484	5,635	7,195	8,792	8,235	9,441	8,265	9,226	9,451	10,502	10,440	10,245	11,263	9,975	11,309	12,708	10,311	9,710	9,448	8,151	5,562	8,475	7,960	6,011	3,816
Forgings	573	775	708	538	668	804	852	958	793	782	936	991	979	869	1,338	1,245	1,043	723	725	894	594	474	703	1,065	531	480	91
Industrial Fasteners	440	455	386	427	396	402	351	373	327	509	534	443	443	496	538	388	384	380	347	152	56	104	114	306	117	87	109
Steel Service Centers and Distributors	16,710	18,364	18,439	17,478	19,840	21,037	20,769	21,111	19,464	21,328	23,714	24,153	23,751	27,124	27,800	27,751	28,089	30,108	27,072	27,473	28,551	34,667	30,558	30,130	26,460	25,507	15,186
Construction and Contractors' Products	9,974	10,153	11,230	10,614	11,018	12,102	11,500	12,115	11,467	12,230	13,429	14,283	14,892	15,561	15,885	15,289	18,428	20,290	21,543	20,536	23,787	23,810	23,967	20,966	23,760	20,366	14,836
Automotive	12,320	12,882	12,950	11,889	11,343	12,555	11,763	11,100	10,015	11,092	12,719	14,753	14,622	14,665	15,251	15,842	16,771	16,063	14,059	13,988	15,883	13,858	14,477	15,528	13,632	12,842	8,043
Rail Transportation	937	1,438	1,061	798	758	1,146	1,229	1,080	999	1,052	1,223	1,248	1,373	1,400	1,410	1,657	1,031	1,307	981	1,042	938	1,185	1,258	1,437	1,206	1,478	905
Shipbuilding and Marine Equipment	471	471	337	211	202	303	364	339	215	236	226	289	345	463	312	288	256	275	292	266	183	146	257	326	263	152	80
Aircraft and Aerospace	21	37	39	39	36	37	43	33	18	17	24	19	13	16	9	8	6	8	8	22	11	30	6	6	6	7	4
Oil and Gas	1,296	2,003	2,044	1,023	1,489	1,477	1,203	1,892	1,425	1,454	1,526	1,703	2,643	3,254	3,811	2,649	2,151	2,885	2,953	2,098	2,112	2,487	3,062	2,737	2,574	2,405	932
Mining, Quarrying, and Lumbering	262	298	298	275	402	493	463	545	349	328	284	252	187	205	346	227	239	202	164	140	229	243	202	2	96	79	1
Agricultural	699	673	629	601	590	568	605	712	566	586	621	674	746	830	918	827	761	907	641	477	338	418	434	541	412	345	44
Machinery, Industrial Equipment, and Tools	2,484	2,886	2,271	2,076	2,277	2,798	2,409	2,388	1,982	1,951	2,191	2,427	2,310	2,410	2,355	2,147	1,722	1,784	1,456	1,402	1,178	1,853	1,653	1,522	1,399	1,145	598
Electrical Equipment	2,337	2,365	1,869	2,113	2,373	2,459	2,449	2,453	2,102	2,136	2,213	2,299	2,397	2,401	2,434	2,255	2,267	2,055	1,684	1,341	1,099	2,026	1,183	1,103	814	938	456
Appliances, Utensils, and Cutlery	1,618	1,635	1,466	1,648	1,633	1,638	1,721	1,540	1,388	1,503	1,592	1,736	1,589	1,713	1,635	1,729	1,789	1,907	1,820	1,714	2,018	919	1,925	1,741	1,993	1,848	1,210
Other Domestic and Commercial Equipment	1,363	1,339	1,215	1,173	1,149	1,200	1,140	1,077	822	836	907	910	904	1,064	992	1,086	939	1,136	734	851	589	790	558	691	456	424	197
Containers, Packaging, and Shipping Materials	4,532	4,352	4,089	4,113	4,372	4,421	4,459	4,474	4,278	3,974	4,355	4,495	4,139	4,101	4,163	3,829	3,842	3,708	3,232	3,237	3,028	2,592	3,022	3,105	2,912	2,819	2,244
Ordinance and Other Military	244	242	267	228	199	192	169	125	117	103	79	43	54	33	41	31	28	31	42	48	75	71	12	34	69	75	42
Nonclassified Shipments	6,355	7,807	7,767	8,885	10,199	10,483	11,193	10,736	9,777	10,249	10,886	12,157	11,225	11,701	12,748	12,640	12,738	9,725	8,342	12,342	12,962	15,081	13,365	16,718	18,679	18,476	5,355
Subtotal	67,039	73,311	72,549	69,764	76,139	82,907	80,917	82,492	74,369	79,592	86,910	93,377	93,052	98,551	103,249	99,863	103,793	106,202	96,406	97,733	103,079	108,905	102,318	106,433	103,339	95,484	54,149

SOURCES: American Iron and Steel Institute, *Annual Statistical Report* . Year 1983: 1983, Table 15; years 1984 - 1993: 1993, Table 12; years 1994 - 2003: 2003, Table 11; years 2004-2009: 2009, Table 11

Table C-2

Imported Iron and Steel Shipments, 1983 - 2009 (thousands of net tons)

AISI Categories	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Converting and Processing	1,756	2,597	2,707	2,374	2,478	3,999	3,216	3,335	3,081	3,524	5,078	8,128	6,020	7,890	7,597	9,636	9,539	9,777	7,387	9,162	6,130	9,748	8,573	11,768	7,960	7,188	3,059
Forgings	226	415	635	546	591	206	168	168	159	171	450	690	495	672	600	578	703	713	569	693	419	639	587	787	568	499	60
Industrial Fasteners	119	176	174	158	162	82	70	62	56	69	233	313	263	305	306	92	104	110	103	107	10	15	13	17	13	10	16
Steel Service Centers and Distributors	4,125	6,363	5,577	4,658	4,517	4,847	4,029	4,167	3,859	4,032	4,170	6,759	5,558	6,538	7,387	10,954	7,520	8,315	6,140	6,110	4,156	6,801	6,201	9,504	6,762	6,932	3,637
Construction and Contractors' Products	2,696	3,871	3,597	3,191	3,205	2,684	2,193	1,907	1,604	1,892	2,105	3,005	2,672	3,194	3,419	4,306	4,029	4,303	3,514	3,753	3,631	5,668	4,717	6,664	4,582	3,906	2,420
Automotive	2,429	3,563	3,181	2,895	2,826	2,219	1,913	1,988	1,843	2,245	1,885	2,976	2,328	2,670	3,052	4,286	3,699	3,740	2,834	3,286	1,870	3,248	2,638	4,067	2,534	2,347	1,508
Rail Transportation	174	355	357	273	242	377	262	250	247	274	400	645	526	654	635	961	845	845	645	772	235	354	341	503	498	425	295
Shipbuilding and Marine Equipment	150	216	195	156	155	122	97	81	59	69	36	63	59	82	76	157	79	81	54	58	24	42	42	65	47	46	19
Aircraft and Aerospace	12	21	29	24	26	17	14	14	14	14	23	36	25	35	30	8	9	9	7	9	14	21	19	26	19	17	1
Oil and Gas	923	1,721	1,445	974	927	1,026	776	814	851	505	699	883	787	852	1,032	1,767	1,384	1,831	1,884	1,645	1,512	1,963	2,272	3,010	3,177	3,814	2,101
Mining, Quarrying, and Lumbering	32	51	48	42	41	69	61	56	52	58	33	48	48	54	60	83	58	64	41	47	36	55	48	66	48	41	1
Agricultural	166	253	244	214	217	112	95	92	83	97	102	140	122	133	154	272	237	252	203	227	58	89	80	114	88	85	36
Machinery, Industrial Equipment, and Tools	749	1,188	1,103	893	894	783	638	646	608	601	642	956	786	988	980	1,137	937	1,029	841	912	424	621	617	845	705	722	301
Electrical Equipment	462	719	627	531	483	481	422	447	431	442	425	656	530	551	658	669	564	562	548	411	174	231	223	333	256	257	103
Appliances, Utensils, and Cutlery	314	464	380	361	325	267	237	252	234	272	235	422	321	319	390	425	361	325	301	248	198	380	287	513	269	224	180
Other Domestic and Commercial Equipment	319	472	402	368	346	255	219	221	203	235	160	279	222	226	273	375	279	276	215	199	160	284	196	269	139	115	38
Containers, Packaging, and Shipping Materials	573	813	850	737	679	580	613	606	588	650	578	890	728	735	778	809	941	824	726	596	390	511	528	707	608	427	443
Ordinance and Other Military	97	170	220	181	191	77	61	65	61	65	44	69	50	70	61	23	27	27	21	27	13	19	18	23	18	15	10
Nonclassified Shipments	1,329	2,210	2,028	1,678	1,619	2,688	2,237	1,997	1,812	1,860	2,205	3,109	2,867	3,198	3,668	4,984	4,415	4,874	4,046	4,425	3,671	5,118	4,709	5,992	4,953	4,858	1,986
Subtotal	16,650	25,639	23,799	20,255	19,924	20,891	17,321	17,169	15,845	17,075	19,501	30,066	24,409	29,164	31,157	41,520	35,731	37,957	30,080	32,686	23,125	35,808	32,109	45,273	33,244	31,927	16,215

SOURCE : Appendix Tables C-17 through C-43.

Table C-3

Domestic Mill Shipments [a] by Product and AISI-Defined Market Category, 1983 (thousands of net tons)

	Steel for Converting and Processing																					
Products [b]	Total Shipments	Less Shipments to Reporting Companies	Net Shipments	Forgings (Not elsewhere classified)	Indus-trial Fasteners	Steel Service Centers and Distributors	Construc-tion and Contractors' Products	Auto-motive	Rail Transpor-tation	Ship Building and Marine Equipment	Aircraft and Aerospace	Oil and Gas Industry	Mining, Quarrying, and Lumbering	Agricul-tural	Machinery, Industrial Equipment, and Tools	Electrical Equipment	Appliances, Utensils, and Cutlery	Other Domestic and Commer-cial Equipment	Containers, Packaging, and Shipping Materials	Ordnance and Other Military	Non-classified Shipments	Total
Ingots, blooms, slabs, billets	334.1	50.7	283.5	240.6	9.8	72.4	23.8	114.4	1.3	0.0	9.2	17.4	1.5	17.1	51.0	0.0	-	0.0	11.8	62.3	23.0	939.2
Wire rods	1,525.7	210.3	1,315.4	0.0	144.2	15.7	619.6	111.2	0.1	0.0	0.0	1.6	0.0	26.9	412.6	8.6	0.7	129.0	0.7	-	69.3	2,855.6
Structural shapes(3" & over)	15.5	-	15.5	0.0	-	516.2	1,778.0	10.9	26.9	54.1	0.1	10.7	1.6	10.9	69.0	2.1	-	2.0	-	0.2	839.1	3,337.4
Steel piling	-	-	0.0	-	-	20.3	225.4	-	3.4	0.4	-	0.4	0.1	-	-	-	-	-	-	-	-	250.0
Plates cut lengths & coils	64.7	4.3	60.5	1.0	0.6	1,259.3	914.8	68.1	85.2	383.8	5.4	149.9	19.0	45.1	470.9	79.9	3.2	13.1	2.0	63.5	156.4	3,781.9
Rails & railroad accessories	0.0	0.0	0.0	0.0	0.0	86.8	18.1	-	647.7	0.9	-	-	1.6	-	4.3	-	-	-	-	-	46.3	805.6
Bars																						
Hot rolled (including light shapes)	752.4	517.8	234.6	331.1	133.5	900.8	336.2	1,454.3	72.0	10.2	9.5	133.7	158.6	95.0	401.6	38.5	11.9	25.8	0.9	45.8	1,759.3	6,153.1
Reinforcing	46.8	31.0	15.8	0.0	0.3	453.5	1,716.9	-	-	-	-	5.3	39.2	0.5	5.9	-	-	0.0	-	-	1,980.2	4,217.6
Cold finished	26.0	0.4	25.6	0.3	11.8	304.7	11.6	118.4	0.9	2.1	1.9	2.5	2.5	12.2	139.1	13.6	10.8	11.8	0.0	12.0	493.1	1,174.7
Bars Subtotal	825.2	549.2	276.0	331.4	145.6	1,658.9	2,064.7	1,572.7	72.9	12.2	11.3	141.5	200.3	107.7	546.6	52.1	22.7	37.6	1.0	57.8	4,232.6	11,545.4
Tool steel	0.3	0.3	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	45.6	45.6
Pipe and Tubing																						
Standard	36.5	15.8	20.7	-	-	555.9	39.2	0.3	0.3	0.4	-	55.7	0.4	1.8	3.7	56.4	0.5	6.0	-	12.8	41.1	795.1
Oil Country Goods	21.6	18.5	3.0	-	-	44.2	11.3	-	-	-	0.0	540.8	-	-	-	-	-	-	-	-	70.2	669.5
Line	1.3	0.7	0.6	-	-	174.6	25.7	-	-	-	-	322.5	0.0	0.0	4.8	16.0	-	0.0	0.6	-	75.8	620.5
Mechanical	25.7	20.8	4.9	0.1	0.1	139.1	10.4	120.4	0.3	0.1	1.2	14.1	1.1	9.2	190.8	3.4	4.8	16.3	0.0	2.3	214.5	732.8
Pressure	0.1	0.1	0.1	-	-	33.6	0.4	0.0	-	0.3	-	1.9	-	-	32.8	0.0	-	0.0	3.7	3.2	11.9	87.7
Structural	2.3	0.6	1.7	-	-	142.0	25.6	1.7	0.1	12.5	-	27.9	0.0	3.7	0.5	10.9	-	0.5	-	-	10.3	237.4
Pipe for Piling	-	-	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0
Stainless	1.6	1.2	0.4	-	-	16.3	2.5	0.8	-	0.8	0.2	0.6	-	0.0	8.1	0.0	0.1	0.3	0.0	0.0	25.6	55.6
Pipe and Tubing Subtotal	89.0	57.7	31.4	0.1	0.1	1,105.6	115.0	123.3	0.6	14.1	1.4	963.4	1.5	14.7	240.7	86.7	5.4	23.0	4.2	18.2	449.4	3,198.8
Wire-Drawn and/or rolled	190.6	14.8	175.9	0.0	68.5	83.5	294.2	39.3	0.6	0.0	0.1	0.1	1.2	2.2	48.8	12.1	17.2	82.1	15.9	0.2	166.4	1,008.3
Black plate	23.6	2.2	21.4	-	-	65.2	42.9	7.1	0.0	-	-	-	-	0.0	2.4	7.0	9.5	32.2	154.8	-	0.0	342.5
Tin plate	16.3	-	16.3	-	-	249.3	0.7	63.6	0.0	-	-	-	-	0.0	3.5	12.3	20.2	22.3	2,459.3	-	-	2,847.5
Tin free steel	0.5	-	0.5	-	-	28.4	0.0	1.7	-	-	-	-	-	-	0.1	7.4	0.2	1.2	900.2	-	-	939.7
Tin coated sheets	-	-	0.0	-	-	24.3	0.5	36.5	-	-	-	-	-	-	1.7	0.4	2.1	2.4	0.8	-	-	68.6
Sheets																						
Hot Rolled	2,557.7	1,051.3	1,506.3	0.2	12.9	4,879.9	919.6	2,931.5	25.0	2.2	0.6	3.6	31.3	166.8	230.8	416.4	83.8	163.3	222.2	9.8	-	11,606.3
Cold Rolled	682.1	103.2	578.9	-	1.6	4,107.5	780.1	4,432.9	2.1	1.0	0.7	4.3	0.9	38.0	196.4	1,146.3	1,148.9	709.7	591.8	10.1	-	13,751.2
Sheets and Strip																						
Galvanized	61.1	14.4	46.7	-	30.8	2,002.4	1,753.2	1,908.4	1.0	1.2	0.0	-	0.7	213.3	39.9	92.2	218.4	89.9	22.0	1.9	5.7	6,427.7
All Other Metallic Coated	10.6	-	10.6	-	-	166.7	229.5	395.4	-	0.0	-	-	0.6	6.1	12.9	6.5	26.9	11.6	4.2	0.1	32.8	903.9
Electrical	29.4	29.2	0.2	-	-	47.0	0.6	3.6	0.4	0.2	-	1.1	0.0	0.0	12.4	365.9	6.9	2.3	-	-	0.4	440.9
Strip																						
Hot Rolled	118.8	106.5	12.3	0.0	14.7	48.7	37.2	317.8	0.7	-	2.0	2.1	1.5	43.1	77.6	20.8	4.6	10.5	13.1	1.8	15.0	623.4
Cold Rolled	50.5	5.4	45.1	-	11.4	79.9	43.0	181.5	1.3	0.3	0.6	0.0	0.0	1.5	55.0	18.0	47.3	31.2	127.6	18.6	233.5	896.0
Total All Grades	6,595.9	2,199.5	4,396.4	573.3	440.1	16,517.9	9,860.9	12,319.9	869.3	470.7	31.3	####	261.7	693.4	2,476.9	2,334.7	1,617.8	1,363.3	4,531.7	244.5	6,315.3	66,615.2

[a] Excludes Exports (reporting companies only).

[b] Excludes Skelp, Wheels (rolled and forged), Axles, Wire-Nails and Staples, and Wire-Other Merchant Wire Products. In subsequent years, these products were primarily classified as "Other Steel Products" and not "Steel Mill Products."

SOURCE: American Iron and Steel Institute, *Annual Statistical Report*, 1983, Table 16.

Table C-4

Domestic Mill Shipments [a] by Product and AISI-Defined Market Category, 1988 (thousands of net tons)

	Steel for Converting and Processing																					
Products	Total Shipments	Less Shipments to Reporting Companies	Net Shipments	Forgings (Not elsewhere classified)	Indus-trial Fasteners	Steel Service Centers and Distributors	Construc-tion and Contrac-tors' Products	Auto-motive	Rail Transpor-tation	Ship Building and Marine Equipment	Aircraft and Aerospace	Oil and Gas Industry	Mining, Quarrying, and Lumbering	Agricul-tural	Machinery, Industrial Equipment, and Tools	Electrical Equipment	Appliances, Utensils, and Cutlery	Other Domestic and Commer-cial Equipment	Containers, Packaging, and Shipping Materials	Ordnance and Other Military	Non-classified Shipments	Total
Ingots, blooms, slabs, billets	2,619.0	2,013.4	605.6	205.4	-	109.3	100.2	71.2	68.3	0.1	18.6	42.0	23.3	3.5	187.9	0.2	-	0.3	13.4	73.6	346.7	1,869.4
Wire rods	1,829.8	50.9	1,778.9	0.0	96.5	26.3	894.0	107.9	1.8	3.0	0.7	5.3	0.1	50.7	242.1	23.1	2.0	130.5	0.1	-	684.4	4,047.6
Structural shapes(3" & over)	56.2	-	56.2	-	-	1,054.5	2,054.5	12.0	37.0	168.0	0.2	2.6	2.4	26.4	12.6	1.9	-	0.3	0.1	-	1,419.1	4,847.6
Steel piling	-	-	0.0	-	-	111.2	224.3	-	2.3	0.1	-	-	-	-	-	-	-	-	-	-	6.5	344.4
Plates cut lengths & coils	1,447.4	511.7	935.6	0.2	8.1	2,737.9	892.8	617.0	380.8	246.9	4.4	77.1	19.1	60.9	655.8	53.5	7.3	22.0	7.4	47.3	443.0	7,217.1
Rails & railroad accessories	-	-	0.0	-	-	32.6	1.5	-	455.4	-	-	-	0.4	-	-	-	-	-	-	-	123.9	613.8
Bars																						
Hot rolled (including light shapes)	1,400.8	643.7	757.0	593.4	167.7	1,100.6	683.2	1,416.8	96.1	7.0	4.8	36.3	273.8	107.9	567.6	30.0	14.2	37.9	1.1	24.3	1,888.6	7,808.2
Reinforcing	836.1	-	836.1	-	1.2	204.8	2,832.1	-	3.0	-	-	2.5	125.0	0.0	0.5	0.0	-	-	-	-	1,080.1	5,085.5
Cold finished	20.5	1.6	18.9	2.4	7.7	364.7	6.4	104.8	0.7	0.9	1.1	4.7	4.3	16.7	173.1	5.1	7.5	7.5	0.0	9.0	760.0	1,495.4
Bars Subtotal	2,257.4	645.3	1,612.1	595.8	176.6	1,670.0	3,521.7	1,521.6	99.8	7.9	5.9	43.5	403.1	124.5	741.2	35.1	21.7	45.4	1.1	33.3	3,728.6	14,389.1
Tool steel	2.0	2.0	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	62.3	62.3
Pipe and Tubing																						
Standard	23.1	16.7	6.4	-	0.0	831.4	60.0	4.0	1.7	-	-	132.1	0.1	1.7	1.8	121.3	-	2.8	-	-	62.7	1,226.1
Oil Country Goods	24.6	24.6	0.0	-	-	179.9	-	-	0.1	-	-	821.4	-	-	-	0.0	-	-	-	-	69.1	1,070.5
Line	1.6	0.5	1.1	-	-	270.7	2.2	-	0.1	-	-	311.1	-	0.0	0.1	0.1	-	0.2	-	-	219.1	804.5
Mechanical	20.2	2.4	17.8	0.0	0.1	195.4	22.3	151.1	0.7	0.1	1.3	25.4	1.9	13.9	280.4	2.7	9.6	14.9	0.1	4.8	143.4	885.7
Pressure	0.4	0.1	0.3	-	-	9.9	1.1	0.0	-	0.0	-	0.9	-	-	12.9	0.1	-	-	-	-	31.6	56.8
Structural	0.1	0.0	0.1	-	-	100.7	21.6	-	-	-	-	1.4	-	1.6	7.5	23.2	-	0.2	-	-	21.3	177.8
Pipe for Piling	-	-	0.0	-	-	10.1	14.5	-	-	-	-	3.8	-	-	-	-	-	-	-	-	45.7	74.0
Stainless	2.8	0.7	2.1	-	-	17.1	1.6	0.0	0.0	0.0	0.3	0.0	-	-	5.2	0.5	0.0	0.0	-	0.0	28.0	54.8
Pipe and Tubing Subtotal	72.8	45.0	27.7	0.0	0.1	1,615.1	123.1	155.1	2.5	0.1	1.6	1,296.2	2.0	17.3	307.9	147.8	9.6	18.1	0.1	4.8	620.9	4,350.2
Wire-Drawn and/or rolled	145.3	0.3	144.9	0.0	34.4	232.9	43.2	23.3	0.4	0.6	0.1	3.9	3.9	4.1	49.3	7.3	5.2	67.3	1.5	1.0	446.6	1,069.7
Black plate	22.6	-	22.6	-	-	82.9	55.5	3.2	-	-	-	-	-	-	1.2	1.3	2.8	17.2	86.8	0.6	-	274.0
Tin plate	44.1	-	44.1	-	-	192.6	0.1	54.7	-	-	-	-	-	0.4	11.1	2.5	5.9	8.9	2,385.4	0.1	-	2,706.0
Tin free steel	6.9	-	6.9	-	-	29.3	0.1	1.3	-	-	-	-	-	-	0.1	7.1	0.0	3.8	831.0	-	-	879.5
Tin coated sheets	0.0	-	0.0	-	-	28.1	0.4	40.3	-	-	-	-	-	-	0.2	1.7	1.3	0.3	8.8	-	-	81.2
Sheets																						
Hot Rolled	2,902.9	1,046.0	1,856.9	-	16.2	5,576.3	728.6	1,967.0	89.8	1.4	0.4	4.1	29.1	79.3	132.1	410.9	68.9	112.0	204.7	0.8	978.1	12,256.6
Cold Rolled	1,244.4	120.7	1,123.7	-	7.9	4,312.5	876.1	2,993.0	0.8	0.3	0.2	0.6	4.7	34.8	190.4	1,292.7	1,194.7	639.6	670.5	11.3	453.9	13,807.9
Sheets and Strip																						
Galvanized	96.3	6.5	89.8	-	22.1	2,453.1	2,039.1	4,181.4	1.5	-	0.0	0.1	-	89.0	56.7	109.6	218.9	85.4	29.1	0.6	624.2	10,000.5
All Other Metallic Coated	7.8	-	7.8	-	-	227.7	475.7	385.2	-	-	-	-	-	8.3	10.5	0.6	39.7	13.4	1.5	0.0	35.8	1,206.3
Electrical	12.6	6.4	6.2	-	-	30.5	2.5	0.3	1.4	-	0.0	-	-	-	10.7	335.9	10.7	2.4	-	-	73.9	474.6
Strip																						
Hot Rolled	222.4	91.8	130.5	2.6	34.4	397.0	36.7	243.6	3.7	0.3	3.0	1.5	4.6	67.2	127.2	5.4	5.3	8.0	4.2	1.3	107.3	1,183.6
Cold Rolled	52.0	9.6	42.4	-	6.0	116.9	31.8	177.0	0.3	0.0	1.9	0.0	0.0	1.4	61.5	22.3	43.8	24.8	175.1	17.4	203.3	926.0
Total All Grades	13,041.8	4,549.9	8,491.9	804.0	402.3	21,036.8	12,101.9	12,555.3	1,145.8	428.6	37.2	1,477.1	492.7	567.8	2,798.4	2,458.7	1,637.9	1,199.8	4,420.8	192.1	#####	82,607.7

[a] Excludes Exports (reporting companies only).

SOURCES: American Iron and Steel Institute, Annual Statistical Report , 1988, Table 13.

Table C-5

Domestic Mill Shipments [a] by Product and AISI-Defined Market Category, 1993 (thousands of net tons)

	Steel for Converting and Processing																					
Product	Total Shipments	Less Shipments to Reporting Companies	Net Shipments	Forgings Not Elsewhere Classified	Indus-trial Fasteners	Steel Service Centers and Distributors	Construc-tion and Contrac-tors' Products	Auto-motive	Rail Transpor-tation	Ship Building and Marine Equipment	Aircraft and Aerospace	Oil and Gas Industry	Mining, Quarrying, and Lumbering	Agricul-tural	Machinery, Industrial Equipment, and Tools	Electrical Equipment	Appliances, Utensils, and Cutlery	Other Domestic and Commer-cial Equipment	Containers, Packaging, and Shipping Materials	Ordnance and Other Military	Non-Classified Shipments	Total
Ingots, blooms, slabs, billets	1,767.9	718.5	1,049.4	208.0	56.0	113.9	200.7	93.8	110.5	-	11.4	17.3	0.0	0.4	139.0	-	0.0	2.1	25.3	19.7	19.3	2,067.0
Wire rods	1,589.3	1.5	1,587.9	0.1	86.8	14.8	969.5	67.9	2.0	2.0	0.0	3.5	-	61.5	73.8	27.0	3.1	13.2	0.0	-	1,876.5	4,789.5
Structural shapes(3" & over)	150.6	-	150.6	-	-	1,270.0	2,531.4	55.3	64.0	40.0	-	0.5	5.0	2.4	59.2	-	-	12.9	81.9	-	593.8	4,867.1
Steel piling	-	-	0.0	-	-	89.8	334.8	-	-	0.0	-	-	-	-	-	-	-	-	-	-	-	424.6
Plates cut lengths & coils	1,455.4	581.8	873.6	3.1	0.1	3,482.1	648.3	522.7	320.8	178.2	5.1	57.2	28.4	22.5	588.3	28.5	15.4	36.6	5.7	28.5	513.2	7,358.2
Rails & railroad accessories	-	-	0.0	-	-	45.2	10.6	-	588.1	-	-	-	7.3	-	-	-	-	-	-	-	-	651.3
Bars																						
Hot rolled (including light shapes)	1,329.5	376.7	952.8	689.8	201.5	1,320.4	1,118.7	1,160.6	52.7	5.0	2.3	67.9	138.5	133.1	531.7	18.1	15.8	33.7	0.6	17.9	1,134.7	7,595.9
Reinforcing	752.2	-	752.2	-	0.0	496.2	3,462.7	-	-	-	-	-	73.5	-	2.5	-	-	-	-	-	196.4	4,983.5
Cold finished	9.1	0.3	8.8	9.1	9.6	391.8	10.5	174.6	2.8	0.2	0.4	5.6	3.6	16.3	165.4	13.5	6.9	7.4	0.0	10.5	724.3	1,561.5
Bars Subtotal	2,090.8	377.0	1,713.8	698.9	211.2	2,208.5	4,591.9	1,335.2	55.5	5.2	2.7	73.5	215.6	149.4	699.6	31.7	22.7	41.2	0.6	28.4	2,055.4	14,140.9
Tool steel	1.7	1.7	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	67.0	67.0
Pipe and Tubing																						
Standard	20.9	21.0	-0.1	-	-	797.4	30.2	7.7	0.0	-	-	44.7	-	0.1	2.8	124.5	0.8	0.0	-	-	100.2	1,108.4
Oil Country Goods	-0.3	-	-0.3	-	-	234.8	-	-	-	-	-	896.8	-	-	-	-	-	-	-	-	137.8	1,269.1
Line	5.3	0.2	5.1	1.1	-	243.3	3.4	0.0	0.1	-	-	385.3	-	-	-	0.2	-	0.0	-	-	159.2	797.8
Mechanical	11.2	1.3	9.9	0.0	0.0	195.0	12.1	153.8	0.7	-	1.1	27.3	0.0	15.3	241.9	1.3	2.6	3.9	-	-	191.4	856.3
Pressure	0.0	-	0.0	-	-	8.5	-	-	0.0	-	-	0.1	-	-	8.7	0.0	-	-	-	-	31.0	48.3
Structural	0.1	-	0.1	-	-	144.5	5.9	0.2	-	-	-	11.6	-	5.6	3.9	0.3	-	0.1	0.1	-	1.1	173.2
Pipe for Piling	2.4	-	2.4	-	-	15.3	13.4	-	-	-	-	-	-	-	-	-	-	-	-	-	4.7	35.8
Stainless	1.0	0.0	1.0	-	-	10.3	1.6	0.0	-	0.0	0.1	0.1	-	-	5.0	0.0	-	-	-	-	5.7	23.7
Pipe and Tubing Subtotal	40.7	22.5	18.2	1.1	0.0	1,649.0	66.6	161.7	0.8	0.0	1.2	1,365.8	0.0	20.9	262.2	126.2	3.4	4.1	0.1	0.0	631.1	4,312.6
Wire-Drawn and/or rolled	82.1	0.0	82.1	0.0	110.9	190.3	30.1	6.7	0.2	-	0.0	-	0.3	1.0	12.1	0.2	7.4	27.4	0.8	0.3	330.7	800.4
Black plate	109.8	44.2	65.6	-	-	90.7	20.5	3.8	-	-	-	-	-	-	4.7	2.0	0.8	36.5	73.1	-	0.2	297.8
Tin plate	97.7	0.1	97.7	-	-	212.0	2.9	52.5	-	-	-	-	-	0.3	6.8	2.9	10.1	2.3	2,279.1	0.5	-	2,667.1
Tin free steel	27.6	-	27.6	-	-	40.1	1.1	6.1	-	-	-	-	-	-	-	2.5	0.9	2.0	830.3	-	-	910.6
Tin coated sheets	0.6	-	0.6	-	-	37.3	0.4	49.8	-	-	-	-	-	-	0.3	1.1	0.4	0.2	6.8	-	-	96.9
Sheets																						
Hot Rolled	3,516.6	691.1	2,825.5	0.1	4.8	5,837.1	653.1	2,145.4	54.1	0.4	2.9	3.4	23.4	66.8	117.2	271.2	69.9	83.0	181.9	0.0	2,400.6	14,740.8
Cold Rolled	1,846.2	1,194.9	651.3	0.0	4.5	4,687.3	614.3	2,426.6	10.1	0.0	0.1	-	0.8	81.1	69.0	1,204.4	1,069.1	570.4	605.1	0.8	581.1	12,575.8
Sheets and Strip																						
Galvanized	183.2	68.4	114.8	5.3	17.0	3,198.6	2,108.0	5,008.3	7.7	0.1	-	1.2	-	160.1	23.8	152.9	295.8	44.1	39.8	-	1,563.2	12,740.6
All Other Metallic Coated	25.1	0.2	24.9	-	0.0	385.0	570.7	437.0	0.6	-	0.0	-	1.3	1.0	9.5	2.6	53.5	8.5	0.8	-	1.6	1,497.0
Electrical	2.9	-	2.9	-	-	26.2	0.0	6.9	6.3	-	0.0	0.0	-	-	5.8	333.4	-	0.1	-	-	1.5	383.2
Strip																						
Hot Rolled	123.1	2.8	120.4	19.7	38.7	36.5	39.0	123.6	2.3	-	0.0	2.4	1.5	54.3	72.0	4.8	0.3	8.8	2.4	0.0	89.9	616.7
Cold Rolled	49.4	5.1	44.3	0.2	3.7	100.0	34.9	215.5	0.1	0.0	0.9	0.9	-	0.0	47.9	21.4	39.7	13.9	221.4	1.0	160.9	906.6
Total All Grades	13,160.9	3,709.7	9,451.2	936.5	533.6	23,714.4	13,429.0	12,718.7	1,223.1	226.0	24.4	1,525.8	283.6	621.7	2,191.3	2,212.8	1,592.3	907.2	4,355.1	79.2	10,886.1	86,911.8

[a] Excludes Exports (reporting companies only).

SOURCES: American Iron and Steel Institute, *Annual Statistical Report*, 1993, Table 13.

Table C-6

Domestic Mill Shipments [a] by Product and AISI-Defined Market Category, 1998 (thousands of net tons)

	Steel for Converting and Processing																					
Product	Total Shipments	Less Shipments to Reporting Companies	Net Shipments	Forgings Not Elsewhere Classified	Indus-trial Fasteners	Steel Service Centers and Distributors	Construc-tion and Contrac-tors' Products	Auto-motive	Rail Transpor-tation	Ship Building and Marine Equipment	Aircraft and Aerospace	Oil and Gas Industry	Mining, Quarrying, and Lumbering	Agricul-tural	Machinery, Industrial Equipment, and Tools	Electrical Equipment	Appliances, Utensils, and Cutlery	Other Domestic and Commer-cial Equipment	Containers, Packaging, and Shipping Materials	Ordnance and Other Military	Non-Classified Shipments	Total
Ingots, blooms, slabs, billets	2,202.4	1,152.2	1,050.2	185.4	-	107.9	204.7	176.4	148.1	-	2.7	10.8	-	9.8	116.7	-	0.0	0.2	33.5	8.0	24.0	2,078.6
Wire rods	1,110.9	1.5	1,109.4	-	68.8	40.3	1,117.3	282.7	2.0	2.0	0.0	3.1	-	82.9	54.5	22.0	3.0	37.1	-	-	2,274.0	5,099.2
Structural shapes(3" & over)	257.0	-	257.0	-	-	2,939.6	1,230.4	168.7	5.9	0.8	-	-	-	1.7	16.6	-	-	13.7	-	-	492.5	5,126.8
Steel piling	-	-	-	-	-	319.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	319.2
Plates cut lengths & coils	1,829.6	365.0	1,464.6	-	-	4,226.7	679.0	445.1	436.6	262.9	0.9	334.7	26.1	68.6	585.9	31.5	2.2	31.3	83.1	3.0	-	8,682.5
Rails & railroad accessories	-	-	-	-	-	-	8.2	-	832.4	-	-	-	3.5	-	-	-	-	-	-	-	27.9	872.0
Bars																						
Hot rolled (including light shapes)	1,609.5	576.8	1,032.7	861.6	245.3	1,851.3	2,164.6	1,238.7	114.8	19.7	1.1	98.6	50.5	220.8	400.1	12.2	20.3	23.5	0.2	11.2	1,993.3	10,360.6
Reinforcing	965.9	-	965.9	-	-	555.4	4,133.0	-	-	-	-	-	52.7	-	-	-	-	-	-	-	56.0	5,762.9
Cold finished	26.2	0.1	26.0	68.8	12.8	385.8	6.7	223.1	0.1	-	0.6	1.4	0.8	16.3	116.5	15.6	7.8	7.4	0.1	8.0	853.6	1,751.4
Bars Subtotal	2,601.6	576.9	2,024.7	930.3	258.1	2,792.6	6,304.3	1,461.7	114.9	19.7	1.7	100.0	103.9	237.1	516.6	27.8	28.2	30.9	0.4	19.2	2,902.9	17,874.9
Tool steel	0.5	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	49.8	49.8
Pipe and Tubing																						
Standard	66.4	11.4	55.1	-	-	662.6	27.8	13.8	-	-	-	334.5	-	4.4	5.4	131.6	0.4	-	-	-	84.0	1,319.4
Oil Country Goods	-	-	-	-	-	155.3	-	-	-	-	-	1,063.3	-	-	-	-	-	-	-	-	3.9	1,222.4
Line	111.2	0.0	111.2	-	-	271.1	28.7	-	-	-	-	496.2	-	-	-	0.4	-	-	-	-	281.6	1,189.2
Mechanical	44.1	10.4	33.7	1.7	0.8	282.5	10.1	170.2	1.4	0.0	0.5	18.8	0.1	13.8	292.9	0.4	1.3	0.5	-	0.1	226.2	1,055.0
Pressure	-	-	-	-	-	6.4	0.0	0.0	-	-	-	0.0	-	-	0.1	0.2	-	-	-	-	30.5	37.2
Structural	0.4	0.1	0.3	-	-	64.2	37.0	-	-	-	-	-	-	5.2	3.9	1.9	-	-	-	-	-	112.6
Pipe for Piling	25.8	-	25.8	-	-	19.7	17.1	-	-	-	-	1.5	-	-	-	-	-	-	-	-	-	64.1
Stainless	1.0	0.2	0.9	-	-	19.5	1.3	-	-	0.0	0.2	0.1	-	-	2.0	0.0	-	0.1	-	0.1	3.1	27.4
Pipe and Tubing Subtotal	248.9	22.0	226.9	1.7	0.8	1,481.3	122.0	183.9	1.4	0.0	0.7	1,914.5	0.1	23.3	304.3	134.6	1.7	0.7	0.0	0.2	629.2	5,027.2
Wire-Drawn and/or rolled	55.4	0.0	55.4	0.1	5.5	69.3	3.9	75.7	0.0	-	-	0.0	-	0.9	7.9	0.1	-	0.1	-	0.3	505.0	724.1
Black plate	140.8	110.5	30.3	-	-	99.9	39.7	3.1	-	-	-	0.1	-	-	0.6	0.1	2.1	3.7	59.4	-	0.0	238.9
Tin plate	8.0	-	8.0	-	-	180.7	2.4	59.6	8.2	-	-	0.0	-	0.1	13.8	5.0	4.7	3.1	2,111.0	-	1.1	2,397.6
Tin free steel	1.4	-	1.4	-	-	30.9	0.3	1.0	-	-	-	0.0	-	-	1.3	9.1	0.0	0.3	733.1	-	-	777.4
Tin coated sheets	0.3	-	0.3	-	-	29.1	0.8	50.7	-	-	-	-	-	-	0.5	-	0.3	0.3	14.6	-	0.1	96.8
Sheets																						
Hot Rolled	3,361.8	1,057.1	2,304.8	-	0.2	5,258.8	810.3	2,676.0	95.2	2.3	1.0	245.8	88.8	137.2	297.6	91.7	123.1	285.1	160.6	-	3,005.9	15,584.2
Cold Rolled	2,549.3	1,502.2	1,047.1	-	0.1	5,073.4	515.9	2,274.0	0.0	0.1	0.1	36.6	4.2	54.9	90.8	1,233.3	1,021.8	584.5	424.1	0.0	546.3	12,907.4
Sheets and Strip																						
Galvanized	289.1	228.2	61.0	-	13.1	4,450.1	3,106.2	7,091.9	8.8	-	-	1.1	0.0	176.6	24.5	152.5	426.3	76.0	40.2	-	1,123.7	16,752.0
All Other Metallic Coated	52.7	0.8	52.0	-	-	391.6	1,087.3	427.1	-	-	-	-	-	4.2	3.5	48.9	75.0	8.6	-	-	0.7	2,098.8
Electrical	0.1	-	0.1	-	-	32.2	-	4.1	2.1	-	0.0	-	-	-	1.2	492.5	-	0.0	-	-	-	532.2
Strip																						
Hot Rolled	242.7	6.1	236.6	127.7	41.1	140.2	35.7	157.2	0.7	-	-	0.1	0.2	30.1	69.6	-	0.6	0.2	3.1	-	22.1	865.3
Cold Rolled	50.8	5.6	45.1	-	0.8	87.2	21.0	303.8	0.6	0.0	1.3	2.6	0.1	-	41.4	5.5	40.1	9.8	165.5	0.0	1,034.2	1,758.9
Total All Grades	15,003.5	5,028.6	9,974.9	1,245.2	388.4	27,751.1	15,289.2	15,842.5	1,656.9	287.8	8.4	2,649.2	226.8	827.5	2,147.4	2,254.5	1,729.2	1,085.6	3,828.7	30.7	12,639.6	99,863.8

[a] Excludes Exports (reporting companies only).

SOURCES: American Iron and Steel Institute, *Annual Statistical Report*, 1998, Table 12.

Table C-7

Domestic Mill Shipments [a] by Product and AISI-Defined Market Category, 2003 (thousands of net tons)

	Steel for Converting and Processing																					
Product	Total Shipments	Less Shipments to Reporting Companies	Net Shipments	Forgings Not Elsewhere Classified	Indus-trial Fasteners	Steel Service Centers and Distributors	Construc-tion and Contrac-tors' Products	Auto-motive	Rail Transpor-tation	Ship Building and Marine Equipment	Aircraft and Aerospace	Oil and Gas Industry	Mining, Quarrying, and Lumbering	Agricul-tural	Machinery, Industrial Equipment, and Tools	Electrical Equipment	Appliances, Utensils, and Cutlery	Other Domestic and Commer-cial Equipment	Containers, Packaging, and Shipping Materials	Ordnance and Other Military	Non-Classified Shipments	Total
Ingots, blooms, slabs, billets	1,930.4	830.1	1,100.3	159.2	0.0	26.0	16.3	0.8	22.4	-	5.9	0.5	-	-	68.1	-	-	0.0	5.6	-	-	1,405.2
Wire rods	1,288.8	-	1,288.8	-	1.0	7.7	897.0	0.1	-	-	-	-	-	-	2.7	-	-	186.6	-	-	1,036.7	3,420.6
Structural shapes(3" & over)	-	-	-	-	-	546.9	4,019.7	79.1	20.9	-	-	-	-	-	64.3	-	-	-	-	-	1,972.3	6,703.2
Steel piling	-	-	-	-	-	-	88.5	-	-	-	-	-	-	-	-	-	-	-	-	-	441.2	529.8
Plates cut lengths & coils	1,476.6	70.8	1,405.8	0.0	-	5,221.5	761.2	259.8	218.8	149.3	0.5	258.8	19.8	19.5	295.3	18.4	0.7	3.0	3.3	9.0	436.6	9,081.5
Rails & railroad accessories	-	-	-	-	-	68.4	3.6	-	615.3	-	-	-	-	-	-	-	-	-	-	-	12.4	699.7
Bars																						
Hot rolled (including light shapes)	879.0	288.3	590.7	425.3	43.1	984.2	727.3	1,355.9	19.5	33.6	2.9	116.5	95.6	110.3	362.8	0.2	5.6	18.8	15.3	54.2	2,619.6	7,581.4
Reinforcing	-	-	-	-	-	-	7,788.3	0.7	-	-	-	-	58.1		-	-	-	-	-	-	266.8	8,113.9
Cold finished	11.8	0.0	11.8	9.2	8.6	208.9	464.9	303.4	-	-	0.1	0.6	0.1	36.3	61.6	12.4	4.7	8.6	-	10.7	269.5	1,411.3
Bars Subtotal	890.8	288.3	602.5	434.5	51.7	1,193.0	8,980.6	1,660.1	19.5	33.6	3.0	117.1	153.8	146.6	424.4	12.6	10.2	27.4	15.3	64.9	3,155.9	17,106.6
Tool steel	3.3	3.0	0.3	-	-	7.7	-	-	-	-	-	-	-	-	0.4	-	-	-	-	0.1	14.8	23.4
Pipe and Tubing																						
Standard	21.0	13.8	7.2	-	-	538.0	49.2	-	-	-	-	205.4	-	-	-	24.6	-	-	-	-	303.7	1,127.9
Oil Country Goods	-	-	-	-	-	251.5	-	-	-	-	-	1,204.8	-	-	-	-	-	-	-	-	160.4	1,616.7
Line	14.5	-	14.5	-	-	65.6	-	-	-	-	-	250.0	-	-	-	-	-	-	-	-	361.5	691.5
Mechanical	36.5	-	36.5	0.0	0.1	271.1	0.7	157.3	0.0	-	0.2	11.5	0.4	10.5	148.4	0.6	-	0.2	0.0	0.3	101.3	739.0
Pressure	-	-	-	-	-	18.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.1	18.9
Structural	9.5	-	9.5	-	-	51.8	-	1.6	-	-	-	-	1.1	6.1	14.0	-	-	-	-	-	62.0	146.1
Pipe for Piling	3.7	-	3.7	-	-	4.5	12.4	-	-	-	-	2.5	-	-	-	-	-	-	-	-	18.9	42.1
Stainless	-	-	-	-	-	7.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.0	15.4
Pipe and Tubing Subtotal	85.1	13.8	71.3	0.0	0.1	1,208.6	62.3	158.9	0.0	0.0	0.2	1,674.2	1.5	16.6	162.4	25.2	0.0	0.2	0.0	0.3	1,015.9	4,397.6
Wire-Drawn and/or rolled	35.8	-	35.8	0.0	0.3	1.6	0.0	0.0	-	-	-	-	-	-	0.2	0.0	-	0.0	-	-	529.6	567.6
Black plate	87.6	36.5	51.1	-	-	150.4	35.7	0.1	-	-	-	-	-	-	-	-	0.1	0.1	58.3	-	0.0	295.8
Tin plate	0.8	-	0.8	-	-	253.9	0.0	24.5	-	-	-	-	-	-	-	1.1	6.3	-	1,765.4	-	263.4	2,315.4
Tin free steel	0.6	-	0.6	-	-	27.4	0.0	0.2	-	-	-	-	-	-	-	-	-	0.0	623.2	-	14.4	665.9
Tin coated sheets	0.0	-	0.0	-	-	52.4	0.0	21.8	-	-	-	-	-	-	-	-	13.1	-	21.2	-	3.6	112.1
Sheets																						
Hot Rolled	4,328.4	782.3	3,546.1	-	0.1	9,968.4	3,636.7	3,603.3	22.9	0.1	0.0	51.6	52.3	29.4	71.0	24.3	127.5	94.8	181.9	0.0	-	21,410.3
Cold Rolled	1,742.9	633.8	1,109.1	-	0.4	5,322.4	473.4	2,601.9	12.4	0.1	0.1	8.5	1.4	27.4	58.5	622.7	1,399.5	247.3	339.0	0.1	886.1	13,110.3
Sheets and Strip																						
Galvanized	172.7	14.4	158.3	-	1.0	4,019.2	3,620.2	7,001.5	2.7	-	-	0.3	-	97.5	15.5	97.2	399.1	19.5	13.2	-	1,858.3	17,303.5
All Other Metallic Coated	17.2	-	17.2	-	0.5	398.1	1,162.0	202.0	-	-	-	-	-	1.9	0.0	11.2	40.7	2.8	1.2	-	114.9	1,952.5
Electrical	1.2	-	1.2	-	-	15.6	3.3	2.4	2.4	-	-	-	-	-	-	280.8	-	-	-	-	1.6	307.3
Strip																						
Hot Rolled	12.6	4.5	8.1	-	-	6.2	1.5	25.2	-	-	-	0.5	-	-	0.0	-	-	-	-	-	26.5	67.9
Cold Rolled	55.5	4.6	50.9	-	0.9	55.8	24.7	241.2	0.5	0.0	1.7	0.1	0.3	0.0	15.3	5.0	20.7	7.4	0.9	0.6	1,178.0	1,604.2
Total All Grades	12,130.4	2,682.1	9,448.3	593.8	56.0	28,551.2	23,786.8	15,882.8	937.8	183.0	11.4	2,111.5	229.0	338.8	1,178.1	1,098.6	2,017.9	589.2	3,028.6	74.9	12,962.3	103,080.1

[a] Excludes Exports (reporting companies only).

SOURCE: American Iron and Steel Institute, *Annual Statistical Report*, 2003, Table 12.

Table C-8

Domestic Mill Shipments [a] by Product Group [b] and AISI-Defined Market Category, 2003 (thousands of net tons)

Product	Steel for Converting and Processing			Forgings Not Elsewhere Classified	Indus-trial Fasteners	Steel Service Centers and Distributors	Construc-tion and Contrac-tors' Products	Auto-motive	Rail Transpor-tation	Ship Building and Marine Equipment	Aircraft and Aerospace	Oil and Gas Industry	Mining, Quarrying, and Lumbering	Agricul-tural	Machinery, Industrial Equipment, and Tools	Electrical Equipment	Appliances, Utensils, and Cutlery	Other Domestic and Commer-cial Equipment	Containers, Packaging, and Shipping Materials	Ordnance and Other Military	Non-Classified Shipments	Total
	Total Shipments	Less Shipments to Reporting Companies	Net Shipments																			
Ingots, blooms, slabs, billets	1,930.4	830.1	1,100.3	159.2	0.0	26.0	16.3	0.8	22.4	-	5.9	0.5	-	-	68.1	-	-	0.0	5.6	-	-	1,405.2
Wire rods	1,288.8	-	1,288.8	-	1.0	7.7	897.0	0.1	-	-	-	-	-	-	2.7	-	-	186.6	-	-	1,036.7	3,420.6
Structural shapes and pilings	-	-	-	-	-	546.9	4,108.2	79.1	20.9	-	-	-	-	-	64.3	-	-	-	-	-	2,413.5	7,233.0
Plates cut lengths & coils	1,476.6	70.8	1,405.8	0.0	-	5,221.5	761.2	259.8	218.8	149.3	0.5	258.8	19.8	19.5	295.3	18.4	0.7	3.0	3.3	9.0	436.6	9,081.5
Rails & railroad accessories	-	-	-	-	-	68.4	3.6	-	615.3	-	-	-	-	-	-	-	-	-	-	-	12.4	699.7
Bars and tool steel	894.1	291.3	602.8	434.5	51.7	1,200.7	8,980.6	1,660.1	19.5	33.6	3.0	117.1	153.8	146.6	424.9	12.6	10.2	27.4	15.3	65.0	3,170.7	17,130.0
Pipe and Tubing Subtotal	85.1	13.8	71.3	0.0	0.1	1,208.6	62.3	158.9	0.0	0.0	0.2	1,674.2	1.5	16.6	162.4	25.2	0.0	0.2	0.0	0.3	1,015.9	4,397.6
Wire-Drawn and/or rolled	35.8	-	35.8	0.0	0.3	1.6	0.0	0.0	-	-	-	-	-	-	0.2	0.0	-	0.0	-	-	529.6	567.6
Tin mill products	89.0	36.5	52.5	0.0	0.0	484.2	35.7	46.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	19.5	0.2	2,468.2	0.0	281.4	3,389.2
Sheets and Strip	6,330.6	1,439.6	4,891.0	0.0	2.9	19,785.6	8,921.8	13,677.5	40.9	0.1	1.8	60.9	53.9	156.2	160.2	1,041.3	1,987.4	371.7	536.4	0.7	4,065.5	55,755.9
Total All Grades	12,130.4	2,682.1	9,448.3	593.8	56.0	28,551.2	23,786.8	15,882.8	937.8	183.0	11.4	2,111.5	229.0	338.8	1,178.1	1,098.6	2,017.9	589.2	3,028.6	74.9	12,962.3	103,080.1

[a] Excludes Exports (reporting companies only).

[b] Used to calculate *Domestic Mill Shipments Distribution by Product Groups and AISI-Defined Market Category, 2003* in Appendix C, Table C-15.

SOURCE: American Iron and Steel Institute, *Annual Statistical Report*, 2003, Table 12.

Table C-9

Domestic Mill Shipments [a] by Product and AISI-Defined Market Category, 2009 (thousands of net tons)

	Steel for Converting and Processing																					
Product	Total Shipments	Less Shipments to Reporting Companies	Net Shipments	Forgings Not Elsewhere Classified	Indus-trial Fasteners	Steel Service Centers and Distributors	Construc-tion and Contrac-tors' Products	Auto-motive	Rail Transpor-tation	Ship Building and Marine Equipment	Aircraft and Aerospace	Oil and Gas Industry	Mining, Quarrying, and Lumbering	Agricul-tural	Machinery, Industrial Equipment, and Tools	Electrical Equipment	Appliances, Utensils, and Cutlery	Other Domestic and Commer-cial Equipment	Containers, Packaging, and Shipping Materials	Ordnance and Other Military	Non-Classified Shipments	Total
Ingots, blooms, slabs, billets	1,450.0	1,134.8	315.2	39.3	-	18.4	11.9	9.0	4.5	-	0.4	0.1	-	2.6	12.1	-	-	-	3.4	-		416.9
Wire rods	421.2	84.8	336.4	-	0.8	329.4	239.3	49.4	0.2	-	-	-	-	0.1	4.9	-	-	26.2	6.1	-	494.4	1,487.2
Structural shapes(3" & over)	-	-	-	0.6	-	104.6	2,984.9	-	2.1	-	-	-		-	-	-	-	-	-	-	67.0	3,159.1
Steel piling	-	-	-	-	-	-	388.1	-	-	-	-	-		-	-	-	-	-	-	-	-	388.1
Plates cut lengths & coils	773.0	70.4	702.6	0.3	0.0	2,607.5	814.3	106.7	66.3	79.6	1.4	40.9	-	3.8	167.8	25.8	0.2	6.4	-	31.2	526.0	5,180.7
Rails & railroad accessories	0.0	-	0.0	-	-	45.0	0.3	-	825.1	-	-	-	-	-	-	-	-	-	-	-	-	870.3
Bars																						
Hot rolled (including light shapes)	130.2	17.7	112.5	49.2	3.3	947.4	1,109.2	443.6	0.3	-	1.2	36.5	0.7	1.1	271.9	0.0	9.7	0.0	8.6	9.1	1,078.9	4,083.4
Reinforcing	-	-	-	-	-	168.6	4,488.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4,656.9
Cold finished	1.2	-	1.2	0.6	97.1	79.2	11.2	285.0	-	0.0	0.1	0.0	0.1	0.2	8.3	1.2	0.3	0.5	-	0.9	305.0	791.1
Bars Subtotal	131.4	17.7	113.7	49.9	100.4	1,195.2	5,608.8	728.6	0.3	0.0	1.3	36.5	0.8	1.2	280.3	1.2	10.0	0.5	8.6	10.0	1,383.9	9,531.4
Tool steel	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.6	7.6
Pipe and Tubing																						
Standard	37.7	37.4	0.2	-	-	268.3	-	0.5	-	-	-	221.3	-	-	-	-	-	-	-	-	18.6	508.9
Oil Country Goods	-	-	-	-	-	6.9	-	-	-	-	-	540.7	-	-	-	-	-	-	-	-	192.1	739.7
Line	-	-	-	-	-	19.7	-	-	-	-	-	72.9	-	-	-	-	-	-	-	-	6.8	99.4
Mechanical	4.0	1.0	3.0	0.6	-	124.1	0.1	133.8	-	-	0.0	10.1	0.2	9.8	59.4	-	-	0.1	-	0.3	41.1	382.5
Pressure	-	-	-	-	-	15.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.0	21.4
Structural	0.0	0.0	0.0	-	-	3.0	-	1.3	-	-	-	-	-	1.8	19.7	-	-	-	-	-	25.8	51.6
Pipe for Piling	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0
Stainless	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9.8	9.8
Pipe and Tubing Subtotal	41.7	38.5	3.2	0.6	0.0	437.3	0.1	135.6	0.0	0.0	0.0	845.0	0.2	11.6	79.1	0.0	0.0	0.1	0.0	0.3	300.2	1,813.2
Wire-Drawn and/or rolled	25.8	-	25.8	-	-	24.7	29.6	2.2	-	-	-	-	-	-	-	-	-	-	-	-	77.5	159.8
Black plate	61.0	56.1	4.9	-	-	29.2	1.9	-	-	-	-	-	-	-	-	-	-	-	30.6	-	0.7	67.2
Tin plate	5.3	0.9	4.3	-	-	121.0	-	10.8	-	-	-	-	-	-	-	-	1.0	-	1,365.2	-	-	1,502.3
Tin free steel	1.4	0.6	0.8	-	-	16.6	-	-	-	-	-	-	-	-	-	-	0.8	-	473.4	-	-	491.6
Tin coated sheets	0.1	-	0.1	-	-	38.8	-	9.2	-	-	-	-	-	-	-	-	1.9	-	21.7	-	1.5	73.3
Sheets																						
Hot Rolled	2,362.5	700.6	1,662.0	-	6.7	5,405.3	2,061.7	1,845.4	1.1	-	-	2.7	0.1	17.1	39.9	2.3	131.5	29.0	63.8	0.3	1,335.0	12,603.8
Cold Rolled	1,182.2	734.2	448.1	-	0.2	2,291.7	788.9	1,357.6	0.4	-	0.0	5.3	0.2	2.4	10.9	251.4	698.4	117.0	222.9	0.1	638.6	6,834.0
Sheets and Strip																						
Galvanized	196.0	30.6	165.5	-	-	2,287.5	1,412.2	3,562.3	0.0	-	-	0.1	-	5.4	1.2	18.8	347.5	16.6	48.0	-	241.4	8,106.6
All Other Metallic Coated	2.7	0.5	2.2	-	-	119.3	453.8	59.8	-	-	-	-	-	-	-	-	14.8	-	-	-	6.5	656.4
Electrical	11.4	-	11.4	-	-	6.7	-	-	5.0	-	-	-	-	-	-	155.4	-	-	-	-	2.7	181.2
Strip																						
Hot Rolled	7.7	2.2	5.5	-	-	-	-	-	-	-	-	0.1	-	-	-	-	-	-	-	-	6.6	12.2
Cold Rolled	17.5	3.0	14.6	0.0	0.5	107.8	40.0	166.6	0.1	-	0.6	1.1	-	0.1	1.3	1.2	3.8	1.5	-	0.0	266.2	605.4
Total All Grades	6,691.0	2,874.9	3,816.1	90.6	108.6	15,185.9	14,835.7	8,043.3	905.0	79.6	3.8	931.8	1.2	44.3	597.5	456.2	1,209.9	197.3	2,243.7	42.0	5,355.7	54,148.3

[a] Excludes Exports (reporting companies only).

SOURCE : American Iron and Steel Institute, *Annual Statistical Report* , 2009, Table 12.

Table C-10

Domestic Mill Shipments Distribution by Product and AISI-Defined Market Category, 1983 (share of total)

Products	Steel for Converting and Processing	Forgings (Not elsewhere classified)	Industrial Fasteners	Steel Service Centers and Distributors	Construction and Contractors' Products	Automotive	Rail Trans-portation	Ship Building and Marine Equipment	Aircraft and Aero-space	Oil and Gas Industry	Mining, Quarrying, and Lumbering	Agricultural	Machinery, Industrial Equipment, and Tools	Elec - trical Equip-ment	Appliances, Utensils, and Cutlery	Other Domestic and Commercial Equipment	Containers, Packaging, and Shipping Materials	Ordnance and Other Military	Non-classified Shipments	Total
Ingots, Blooms, Slabs, and Billets	33.8%	24.3%	1.0%	7.3%	2.4%	11.6%	0.1%	0.0%	0.9%	1.8%	0.2%	1.7%	5.2%	0.0%	-	0.0%	1.2%	6.3%	2.3%	100.0%
Wire Rods	49.8%	0.0%	4.7%	0.5%	20.2%	3.6%	0.0%	0.0%	0.0%	0.1%	0.0%	0.9%	13.5%	0.3%	0.0%	4.2%	0.0%	-	2.3%	100.0%
Structural Shapes (3 inches and over)	0.5%	0.0%	-	15.5%	53.3%	0.3%	0.8%	1.6%	0.0%	0.3%	0.0%	0.3%	2.1%	0.1%	-	0.1%	-	0.0%	25.1%	100.0%
Steel Piling	-	-	-	8.1%	90.2%	-	1.3%	0.2%	-	0.2%	0.0%	-	-	-	-	-	-	-	-	100.0%
Plates: Cut Lengths and Coils	1.7%	0.0%	0.0%	33.3%	24.2%	1.8%	2.3%	10.1%	0.1%	4.0%	0.5%	1.2%	12.4%	2.1%	0.1%	0.3%	0.1%	1.7%	4.1%	100.0%
Rail and Track Accessories	0.0%	0.0%	0.0%	10.8%	2.3%	-	80.4%	0.1%	-	-	0.2%	-	0.5%	-	-	-	-	-	5.7%	100.0%
Bars																				
Hot rolled (including light shapes)	11.3%	5.0%	2.0%	13.5%	5.0%	21.8%	1.1%	0.2%	0.1%	2.0%	2.4%	1.4%	6.0%	0.6%	0.2%	0.4%	0.0%	0.7%	26.4%	100.0%
Reinforcing	1.1%	0.0%	0.0%	10.7%	40.4%	-	-	-	-	0.1%	0.9%	0.0%	0.1%	-	-	0.0%	-	-	46.6%	100.0%
Cold Finished	2.2%	0.0%	1.0%	25.9%	1.0%	10.1%	0.1%	0.2%	0.2%	0.2%	0.2%	1.0%	11.8%	1.2%	0.9%	1.0%	0.0%	1.0%	42.0%	100.0%
Bars Subtotal	6.8%	2.7%	1.2%	13.7%	17.1%	13.0%	0.6%	0.1%	0.1%	1.2%	1.7%	0.9%	4.5%	0.4%	0.2%	0.3%	0.0%	0.5%	35.0%	100.0%
Tool Steel	0.7%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	99.3%	100.0%
Pipe and Tubing																				
Standard	4.5%	-	-	68.6%	4.8%	0.0%	0.0%	0.0%	-	6.9%	0.1%	0.2%	0.5%	7.0%	0.1%	0.7%	-	1.6%	5.1%	100.0%
Oil Country Goods	3.1%	-	-	6.4%	1.6%	-	-	-	0.0%	78.6%	-	-	-	-	-	-	-	-	10.2%	100.0%
Line Pipe	0.2%	-	-	28.1%	4.1%	-	-	-	-	51.9%	0.0%	0.0%	0.8%	2.6%	-	0.0%	0.1%	-	12.2%	100.0%
Mechanical Tubing	3.4%	0.0%	0.0%	18.5%	1.4%	16.0%	0.0%	0.0%	0.2%	1.9%	0.1%	1.2%	25.3%	0.5%	0.6%	2.2%	0.0%	0.3%	28.5%	100.0%
Pressure Tubing	0.1%	-	-	38.2%	0.4%	0.1%	-	0.3%	-	2.2%	-	-	37.3%	0.0%	-	0.0%	4.2%	3.6%	13.5%	100.0%
Structural Pipe and Tubing	1.0%	-	-	59.6%	10.8%	0.7%	0.0%	5.3%	-	11.7%	0.0%	1.6%	0.2%	4.6%	-	0.2%	-	-	4.3%	100.0%
Pipe for Piling	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0%
Stainless	2.8%	-	-	28.6%	4.4%	1.5%	-	1.4%	0.3%	1.1%	-	0.0%	14.2%	0.0%	0.1%	0.5%	0.0%	0.1%	45.1%	100.0%
Pipe and Tubing Subtotal	2.7%	0.0%	0.0%	34.0%	3.5%	3.8%	0.0%	0.4%	0.0%	29.6%	0.0%	0.5%	7.4%	2.7%	0.2%	0.7%	0.1%	0.6%	13.8%	100.0%
Wire-Drawn and/or Rolled	18.6%	0.0%	6.7%	8.2%	28.8%	3.8%	0.1%	0.0%	0.0%	0.0%	0.1%	0.2%	4.8%	1.2%	1.7%	8.0%	1.6%	0.0%	16.3%	100.0%
Black Plate	6.8%	-	-	18.9%	12.4%	2.1%	0.0%	-	-	-	-	0.0%	0.7%	2.0%	2.7%	9.3%	44.9%	-	0.0%	100.0%
Tin Plate	0.6%	-	-	8.8%	0.0%	2.2%	0.0%	-	-	-	-	0.0%	0.1%	0.4%	0.7%	0.8%	86.4%	-	-	100.0%
Tin Free	0.1%	-	-	3.0%	0.0%	0.2%	-	-	-	-	-	-	0.0%	0.8%	0.0%	0.1%	95.8%	-	-	100.0%
Tin Coated Sheets	-	-	-	35.5%	0.7%	53.2%	-	-	-	-	-	-	2.5%	0.6%	3.0%	3.4%	1.2%	-	-	100.0%
Sheets																				
Hot Rolled	20.2%	0.0%	0.1%	38.6%	7.3%	23.2%	0.2%	0.0%	0.0%	0.0%	0.2%	1.3%	1.8%	3.3%	0.7%	1.3%	1.8%	0.1%	-	100.0%
Cold Rolled	4.9%	-	0.0%	29.6%	5.6%	32.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	1.4%	8.3%	8.3%	5.1%	4.3%	0.1%	-	100.0%
Sheets and Strip																				
Galvanized	0.9%	-	0.5%	31.1%	27.2%	29.6%	0.0%	0.0%	0.0%	-	0.0%	3.3%	0.6%	1.4%	3.4%	1.4%	0.3%	0.0%	0.1%	100.0%
All Other Metallic Coated	1.2%	-	-	18.4%	25.4%	43.7%	-	0.0%	-	-	0.1%	0.7%	1.4%	0.7%	3.0%	1.3%	0.5%	0.0%	3.6%	100.0%
Electrical	6.3%	-	-	10.0%	0.1%	0.8%	0.1%	0.0%	-	0.2%	0.0%	0.0%	2.6%	77.8%	1.5%	0.5%	-	-	0.1%	100.0%
Strip																				
Hot Rolled	16.3%	0.0%	2.0%	6.7%	5.1%	43.5%	0.1%	-	0.3%	0.3%	0.2%	5.9%	10.6%	2.8%	0.6%	1.4%	1.8%	0.2%	2.1%	100.0%
Cold Rolled	5.6%	-	1.3%	8.9%	4.8%	20.1%	0.1%	0.0%	0.1%	0.0%	0.0%	0.2%	6.1%	2.0%	5.2%	3.5%	14.2%	2.1%	25.9%	100.0%
Total All Grades	9.6%	0.8%	0.6%	24.0%	14.3%	17.9%	1.3%	0.7%	0.0%	1.9%	0.4%	1.0%	3.6%	3.4%	2.4%	2.0%	6.6%	0.4%	9.2%	100.0%

Note: Individual figures calculated as percentage of (Total plus Steel for Converting and Processing: Less Shipments to Reporting Companies) from Appendix Table C-3.

SOURCE: Appendix Table C-3.

Table C-11

Domestic Mill Shipments Distribution by Product and AISI-Defined Market Category, 1988 (share of total)

Products	Steel for Converting and Processing	Forgings (Not elsewhere classified)	Industrial Fasteners	Steel Service Centers and Distributors	Construction and Contractors' Products	Automotive	Rail Trans-portation	Ship Building and Marine Equipment	Aircraft and Aero-space	Oil and Gas Industry	Mining, Quarrying, and Lumbering	Agricultural	Machinery, Industrial Equipment, and Tools	Elec - trical Equip-ment	Appliances, Utensils, and Cutlery	Other Domestic and Commercial Equipment	Containers, Packaging, and Shipping Materials	Ordnance and Other Military	Non-classified Shipments	Total
Ingots, Blooms, Slabs, and Billets	67.4%	5.3%	-	2.8%	2.6%	1.8%	1.8%	0.0%	0.5%	1.1%	0.6%	0.1%	4.8%	0.0%	-	0.0%	0.3%	1.9%	8.9%	100.0%
Wire Rods	44.6%	0.0%	2.4%	0.6%	21.8%	2.6%	0.0%	0.1%	0.0%	0.1%	0.0%	1.2%	5.9%	0.6%	0.0%	3.2%	0.0%	-	16.7%	100.0%
Structural Shapes (3 inches and over)	1.2%	-	-	21.8%	42.4%	0.2%	0.8%	3.5%	0.0%	0.1%	0.0%	0.5%	0.3%	0.0%	-	0.0%	0.0%	-	29.3%	100.0%
Steel Piling	-	-	-	32.3%	65.1%	-	0.7%	0.0%	-	-	-	-	-	-	-	-	-	-	1.9%	100.0%
Plates: Cut Lengths and Coils	18.7%	0.0%	0.1%	35.4%	11.6%	8.0%	4.9%	3.2%	0.1%	1.0%	0.2%	0.8%	8.5%	0.7%	0.1%	0.3%	0.1%	0.6%	5.7%	100.0%
Rail and Track Accessories	-	-	-	5.3%	0.2%	-	74.2%	-	-	-	0.1%	-	-	-	-	-	-	-	20.2%	100.0%
Bars																				
Hot rolled (including light shapes)	16.6%	7.0%	2.0%	13.0%	8.1%	16.8%	1.1%	0.1%	0.1%	0.4%	3.2%	1.3%	6.7%	0.4%	0.2%	0.4%	0.0%	0.3%	22.3%	100.0%
Reinforcing	16.4%	-	0.0%	4.0%	55.7%	-	0.1%	-	-	0.0%	2.5%	0.0%	0.0%	0.0%	-	-	-	-	21.2%	100.0%
Cold Finished	1.4%	0.2%	0.5%	24.4%	0.4%	7.0%	0.0%	0.1%	0.1%	0.3%	0.3%	1.1%	11.6%	0.3%	0.5%	0.5%	0.0%	0.6%	50.8%	100.0%
Bars Subtotal	15.0%	4.0%	1.2%	11.1%	23.4%	10.1%	0.7%	0.1%	0.0%	0.3%	2.7%	0.8%	4.9%	0.2%	0.1%	0.3%	0.0%	0.2%	24.8%	100.0%
Tool Steel	3.2%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	96.8%	100.0%
Pipe and Tubing																				
Standard	1.9%	-	0.0%	66.9%	4.8%	0.3%	0.1%	-	-	10.6%	0.0%	0.1%	0.1%	9.8%	-	0.2%	-	-	5.0%	100.0%
Oil Country Goods	2.2%	-	-	16.4%	-	-	0.0%	-	-	75.0%	-	-	-	0.0%	-	-	-	-	6.3%	100.0%
Line Pipe	0.2%	-	-	33.6%	0.3%	-	0.0%	-	-	38.6%	-	0.0%	0.0%	0.0%	-	0.0%	-	-	27.2%	100.0%
Mechanical Tubing	2.3%	0.0%	0.0%	22.0%	2.5%	17.0%	0.1%	0.0%	0.1%	2.9%	0.2%	1.6%	31.6%	0.3%	1.1%	1.7%	0.0%	0.5%	16.1%	100.0%
Pressure Tubing	0.8%	-	-	17.3%	1.8%	0.0%	-	0.0%	-	1.7%	-	-	22.7%	0.1%	-	-	-	-	55.5%	100.0%
Structural Pipe and Tubing	0.1%	-	-	56.6%	12.2%	-	-	-	-	0.8%	-	0.9%	4.2%	13.1%	-	0.1%	-	-	12.0%	100.0%
Pipe for Piling	-	-	-	13.6%	19.5%	-	-	-	-	5.1%	-	-	-	-	-	-	-	-	61.8%	100.0%
Stainless	5.0%	-	-	30.8%	2.8%	0.0%	0.0%	0.0%	0.5%	0.1%	-	-	9.4%	0.9%	0.0%	0.0%	-	0.0%	50.5%	100.0%
Pipe and Tubing Subtotal	1.7%	0.0%	0.0%	36.7%	2.8%	3.5%	0.1%	0.0%	0.0%	29.5%	0.0%	0.4%	7.0%	3.4%	0.2%	0.4%	0.0%	0.1%	14.1%	100.0%
Wire-Drawn and/or Rolled	13.6%	0.0%	3.2%	21.8%	4.0%	2.2%	0.0%	0.1%	0.0%	0.4%	0.4%	0.4%	4.6%	0.7%	0.5%	6.3%	0.1%	0.1%	41.7%	100.0%
Black Plate	8.3%	-	-	30.3%	20.2%	1.2%	-	-	-	-	-	-	0.4%	0.5%	1.0%	6.3%	31.7%	0.2%	-	100.0%
Tin Plate	1.6%	-	-	7.1%	0.0%	2.0%	-	-	-	-	-	0.0%	0.4%	0.1%	0.2%	0.3%	88.2%	0.0%	-	100.0%
Tin Free	0.8%	-	-	3.3%	0.0%	0.1%	-	-	-	-	-	-	0.0%	0.8%	0.0%	0.4%	94.5%	-	-	100.0%
Tin Coated Sheets	0.0%	-	-	34.7%	0.5%	49.7%	-	-	-	-	-	-	0.2%	2.1%	1.6%	0.4%	10.8%	-	-	100.0%
Sheets																				
Hot Rolled	21.8%	-	0.1%	41.9%	5.5%	14.8%	0.7%	0.0%	0.0%	0.0%	0.2%	0.6%	1.0%	3.1%	0.5%	0.8%	1.5%	0.0%	7.4%	100.0%
Cold Rolled	8.9%	-	0.1%	31.0%	6.3%	21.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	1.4%	9.3%	8.6%	4.6%	4.8%	0.1%	3.3%	100.0%
Sheets and Strip																				
Galvanized	1.0%	-	0.2%	24.5%	20.4%	41.8%	0.0%	-	0.0%	0.0%	-	0.9%	0.6%	1.1%	2.2%	0.9%	0.3%	0.0%	6.2%	100.0%
All Other Metallic Coated	0.6%	-	-	18.9%	39.4%	31.9%	-	-	-	-	-	0.7%	0.9%	0.0%	3.3%	1.1%	0.1%	0.0%	3.0%	100.0%
Electrical	2.6%	-	-	6.3%	0.5%	0.1%	0.3%	-	0.0%	-	-	-	2.2%	69.8%	2.2%	0.5%	-	-	15.4%	100.0%
Strip																				
Hot Rolled	17.4%	0.2%	2.7%	31.1%	2.9%	19.1%	0.3%	0.0%	0.2%	0.1%	0.4%	5.3%	10.0%	0.4%	0.4%	0.6%	0.3%	0.1%	8.4%	100.0%
Cold Rolled	5.6%	-	0.6%	12.5%	3.4%	18.9%	0.0%	0.0%	0.2%	0.0%	0.0%	0.2%	6.6%	2.4%	4.7%	2.7%	18.7%	1.9%	21.7%	100.0%
Total All Grades	15.0%	0.9%	0.5%	24.1%	13.9%	14.4%	1.3%	0.5%	0.0%	1.7%	0.6%	0.7%	3.2%	2.8%	1.9%	1.4%	5.1%	0.2%	11.9%	100.0%

Note: Individual figures calculated as percentage of (Total plus Steel for Converting and Processing: Less Shipments to Reporting Companies) from Appendix Table C-4.

SOURCE: Appendix Table C-4.

Table C-12

Domestic Mill Shipments Distribution by Product and AISI-Defined Market Category, 1993 (share of total)

Products	Steel for Converting and Processing	Forgings (Not elsewhere classified)	Industrial Fasteners	Steel Service Centers and Distributors	Construction and Contractors' Products	Automotive	Rail Trans-portation	Ship Building and Marine Equipment	Aircraft and Aero-space	Oil and Gas Industry	Mining, Quarrying, and Lumbering	Agricultural	Machinery, Industrial Equipment, and Tools	Elec - trical Equip-ment	Appliances, Utensils, and Cutlery	Other Domestic and Commercial Equipment	Containers, Packaging, and Shipping Materials	Ordnance and Other Military	Non-classified Shipments	Total
Ingots, Blooms, Slabs, and Billets	63.5%	7.5%	2.0%	4.1%	7.2%	3.4%	4.0%	-	0.4%	0.6%	0.0%	0.0%	5.0%	-	0.0%	0.1%	0.9%	0.7%	0.7%	100.0%
Wire Rods	33.2%	0.0%	1.8%	0.3%	20.2%	1.4%	0.0%	0.0%	0.0%	0.1%	-	1.3%	1.5%	0.6%	0.1%	0.3%	0.0%	-	39.2%	100.0%
Structural Shapes (3 inches and over)	3.1%	-	-	26.1%	52.0%	1.1%	1.3%	0.8%	-	0.0%	0.1%	0.0%	1.2%	-	-	0.3%	1.7%	-	12.2%	100.0%
Steel Piling	-	-	-	21.1%	78.8%	-	-	0.0%	-	-	-	-	-	-	-	-	-	-	-	100.0%
Plates: Cut Lengths and Coils	18.3%	0.0%	0.0%	43.9%	8.2%	6.6%	4.0%	2.2%	0.1%	0.7%	0.4%	0.3%	7.4%	0.4%	0.2%	0.5%	0.1%	0.4%	6.5%	100.0%
Rail and Track Accessories	-	-	-	6.9%	1.6%	-	90.3%	-	-	-	1.1%	-	-	-	-	-	-	-	-	100.0%
Bars																				
Hot rolled (including light shapes)	16.7%	8.7%	2.5%	16.6%	14.0%	14.6%	0.7%	0.1%	0.0%	0.9%	1.7%	1.7%	6.7%	0.2%	0.2%	0.4%	0.0%	0.2%	14.2%	100.0%
Reinforcing	15.1%	-	0.0%	10.0%	69.5%	-	-	-	-	-	1.5%	-	0.1%	-	-	-	-	-	3.9%	100.0%
Cold Finished	0.6%	0.6%	0.6%	25.1%	0.7%	11.2%	0.2%	0.0%	0.0%	0.4%	0.2%	1.0%	10.6%	0.9%	0.4%	0.5%	0.0%	0.7%	46.4%	100.0%
Bars Subtotal	14.4%	4.8%	1.5%	15.2%	31.6%	9.2%	0.4%	0.0%	0.0%	0.5%	1.5%	1.0%	4.8%	0.2%	0.2%	0.3%	0.0%	0.2%	14.2%	100.0%
Tool Steel	2.4%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	97.6%	100.0%
Pipe and Tubing																				
Standard	1.9%	-	-	70.6%	2.7%	0.7%	0.0%	-	-	4.0%	-	0.0%	0.2%	11.0%	0.1%	0.0%	-	-	8.9%	100.0%
Oil Country Goods	0.0%	-	-	18.5%	-	-	-	-	-	70.7%	-	-	-	-	-	-	-	-	10.9%	100.0%
Line Pipe	0.7%	0.1%	-	30.5%	0.4%	0.0%	0.0%	-	-	48.3%	-	-	-	0.0%	-	0.0%	-	-	20.0%	100.0%
Mechanical Tubing	1.3%	0.0%	0.0%	22.7%	1.4%	17.9%	0.1%	-	0.1%	3.2%	0.0%	1.8%	28.2%	0.1%	0.3%	0.5%	-	-	22.3%	100.0%
Pressure Tubing	0.1%	-	-	17.6%	-	-	0.0%	-	-	0.2%	-	-	17.9%	0.0%	-	-	-	-	64.2%	100.0%
Structural Pipe and Tubing	0.1%	-	-	83.4%	3.4%	0.1%	-	-	-	6.7%	-	3.2%	2.2%	0.2%	-	0.1%	0.1%	-	0.6%	100.0%
Pipe for Piling	6.7%	-	-	42.7%	37.4%	-	-	-	-	-	-	-	-	-	-	-	-	-	13.2%	100.0%
Stainless	4.3%	-	-	43.4%	6.7%	0.0%	-	0.0%	0.4%	0.3%	-	-	20.9%	0.1%	-	-	-	-	23.9%	100.0%
Pipe and Tubing Subtotal	0.9%	0.0%	0.0%	38.0%	1.5%	3.7%	0.0%	0.0%	0.0%	31.5%	0.0%	0.5%	6.0%	2.9%	0.1%	0.1%	0.0%	-	14.6%	100.0%
Wire-Drawn and/or Rolled	10.3%	0.0%	13.9%	23.8%	3.8%	0.8%	0.0%	-	0.0%	-	0.0%	0.1%	1.5%	0.0%	0.9%	3.4%	0.1%	0.0%	41.3%	100.0%
Black Plate	32.1%	-	-	26.5%	6.0%	1.1%	-	-	-	-	-	-	1.4%	0.6%	0.2%	10.7%	21.4%	-	0.1%	100.0%
Tin Plate	3.7%	-	-	7.9%	0.1%	2.0%	-	-	-	-	-	0.0%	0.3%	0.1%	0.4%	0.1%	85.5%	0.0%	-	100.0%
Tin Free	3.0%	-	-	4.4%	0.1%	0.7%	-	-	-	-	-	-	-	0.3%	0.1%	0.2%	91.2%	-	-	100.0%
Tin Coated Sheets	0.6%	-	-	38.5%	0.4%	51.4%	-	-	-	-	-	-	0.3%	1.2%	0.4%	0.2%	7.0%	-	-	100.0%
Sheets																				
Hot Rolled	22.8%	0.0%	0.0%	37.8%	4.2%	13.9%	0.4%	0.0%	0.0%	0.0%	0.2%	0.4%	0.8%	1.8%	0.5%	0.5%	1.2%	0.0%	15.6%	100.0%
Cold Rolled	13.4%	0.0%	0.0%	34.0%	4.5%	17.6%	0.1%	0.0%	0.0%	-	0.0%	0.6%	0.5%	8.7%	7.8%	4.1%	4.4%	0.0%	4.2%	100.0%
Sheets and Strip																				
Galvanized	1.4%	0.0%	0.1%	25.0%	16.5%	39.1%	0.1%	0.0%	-	0.0%	-	1.3%	0.2%	1.2%	2.3%	0.3%	0.3%	-	12.2%	100.0%
All Other Metallic Coated	1.7%	-	0.0%	25.7%	38.1%	29.2%	0.0%	-	0.0%	-	0.1%	0.1%	0.6%	0.2%	3.6%	0.6%	0.1%	-	0.1%	100.0%
Electrical	0.8%	-	-	6.8%	0.0%	1.8%	1.6%	-	0.0%	0.0%	-	-	1.5%	87.0%	-	0.0%	-	-	0.4%	100.0%
Strip																				
Hot Rolled	19.9%	3.2%	6.2%	5.9%	6.3%	20.0%	0.4%	-	0.0%	0.4%	0.2%	8.8%	11.6%	0.8%	0.0%	1.4%	0.4%	0.0%	14.5%	100.0%
Cold Rolled	5.4%	0.0%	0.4%	11.0%	3.8%	23.6%	0.0%	0.0%	0.1%	0.1%	-	0.0%	5.3%	2.3%	4.4%	1.5%	24.3%	0.1%	17.6%	100.0%
Total All Grades	14.5%	1.0%	0.6%	26.2%	14.8%	14.0%	1.3%	0.2%	0.0%	1.7%	0.3%	0.7%	2.4%	2.4%	1.8%	1.0%	4.8%	0.1%	12.0%	100.0%

Note: Individual figures calculated as percentage of (Total plus Steel for Converting and Processing: Less Shipments to Reporting Companies) from Appendix Table C-5.

SOURCE : Appendix Table C-5.

Table C-13

Domestic Mill Shipments Distribution by Product and AISI-Defined Market Category, 1998 (share of total)

Products	Steel for Converting and Processing	Forgings (Not elsewhere classified)	Industrial Fasteners	Steel Service Centers and Distributors	Construction and Contractors' Products	Automotive	Rail Trans-portation	Ship Building and Marine Equipment	Aircraft and Aero-space	Oil and Gas Industry	Mining, Quarrying, and Lumbering	Agricultural	Machinery, Industrial Equipment, and Tools	Elec - trical Equip-ment	Appliances, Utensils, and Cutlery	Other Domestic and Commercial Equipment	Containers, Packaging, and Shipping Materials	Ordnance and Other Military	Non-classified Shipments	Total
Ingots, Blooms, Slabs, and Billets	68.2%	5.7%	-	3.3%	6.3%	5.5%	4.6%	-	0.1%	0.3%	-	0.3%	3.6%	-	0.0%	0.0%	1.0%	0.2%	0.7%	100.0%
Wire Rods	21.8%	-	1.3%	0.8%	21.9%	5.5%	0.0%	0.0%	0.0%	0.1%	-	1.6%	1.1%	0.4%	0.1%	0.7%	-	-	44.6%	100.0%
Structural Shapes (3 inches and over)	5.0%	-	-	57.3%	24.0%	3.3%	0.1%	0.0%	-	-	-	0.0%	0.3%	-	-	0.3%	-	-	9.6%	100.0%
Steel Piling	-	-	-	100.0%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0%
Plates: Cut Lengths and Coils	20.2%	-	-	46.7%	7.5%	4.9%	4.8%	2.9%	0.0%	3.7%	0.3%	0.8%	6.5%	0.3%	0.0%	0.3%	0.9%	0.0%	-	100.0%
Rail and Track Accessories	-	-	-	-	0.9%	-	95.5%	-	-	-	0.4%	-	-	-	-	-	-	-	3.2%	100.0%
Bars																				
Hot rolled (including light shapes)	14.7%	7.9%	2.2%	16.9%	19.8%	11.3%	1.0%	0.2%	0.0%	0.9%	0.5%	2.0%	3.7%	0.1%	0.2%	0.2%	0.0%	0.1%	18.2%	100.0%
Reinforcing	16.8%	-	-	9.6%	71.7%	-	-	-	-	-	0.9%	-	-	-	-	-	-	-	1.0%	100.0%
Cold Finished	1.5%	3.9%	0.7%	22.0%	0.4%	12.7%	0.0%	-	0.0%	0.1%	0.0%	0.9%	6.7%	0.9%	0.4%	0.4%	0.0%	0.5%	48.7%	100.0%
Bars Subtotal	14.1%	5.0%	1.4%	15.1%	34.2%	7.9%	0.6%	0.1%	0.0%	0.5%	0.6%	1.3%	2.8%	0.2%	0.2%	0.2%	0.0%	0.1%	15.7%	100.0%
Tool Steel	1.0%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	99.0%	100.0%
Pipe and Tubing																				
Standard	5.0%	-	-	49.8%	2.1%	1.0%	-	-	-	25.1%	-	0.3%	0.4%	9.9%	0.0%	-	-	-	6.3%	100.0%
Oil Country Goods	-	-	-	12.7%	-	-	-	-	-	87.0%	-	-	-	-	-	-	-	-	0.3%	100.0%
Line Pipe	9.3%	-	-	22.8%	2.4%	-	-	-	-	41.7%	-	-	-	0.0%	-	-	-	-	23.7%	100.0%
Mechanical Tubing	4.1%	0.2%	0.1%	26.5%	0.9%	16.0%	0.1%	0.0%	0.0%	1.8%	0.0%	1.3%	27.5%	0.0%	0.1%	0.1%	-	0.0%	21.2%	100.0%
Pressure Tubing	-	-	-	17.1%	0.1%	0.1%	-	-	-	0.1%	-	-	0.2%	0.5%	-	-	-	-	82.0%	100.0%
Structural Pipe and Tubing	0.4%	-	-	57.0%	32.9%	-	-	-	-	-	-	4.6%	3.4%	1.7%	-	-	-	-	-	100.0%
Pipe for Piling	40.2%	-	-	30.8%	26.6%	-	-	-	-	2.4%	-	-	-	-	-	-	-	-	-	100.0%
Stainless	3.7%	-	-	70.7%	4.7%	-	-	0.0%	0.8%	0.5%	-	-	7.3%	0.1%	-	0.5%	-	0.4%	11.3%	100.0%
Pipe and Tubing Subtotal	4.9%	0.0%	0.0%	29.3%	2.4%	3.6%	0.0%	0.0%	0.0%	37.9%	0.0%	0.5%	6.0%	2.7%	0.0%	0.0%	-	0.0%	12.5%	100.0%
Wire-Drawn and/or Rolled	7.7%	0.0%	0.8%	9.6%	0.5%	10.4%	0.0%	-	-	0.0%	-	0.1%	1.1%	0.0%	-	0.0%	-	0.0%	69.7%	100.0%
Black Plate	40.3%	-	-	28.6%	11.4%	0.9%	-	-	-	0.0%	-	-	0.2%	0.0%	0.6%	1.1%	17.0%	-	0.0%	100.0%
Tin Plate	0.3%	-	-	7.5%	0.1%	2.5%	0.3%	-	-	0.0%	-	0.0%	0.6%	0.2%	0.2%	0.1%	88.0%	-	0.0%	100.0%
Tin Free	0.2%	-	-	4.0%	0.0%	0.1%	-	-	-	0.0%	-	-	0.2%	1.2%	0.0%	0.0%	94.3%	-	-	100.0%
Tin Coated Sheets	0.3%	-	-	30.0%	0.8%	52.4%	-	-	-	-	-	-	0.5%	-	0.3%	0.3%	15.1%	-	0.1%	100.0%
Sheets																				
Hot Rolled	20.2%	-	0.0%	31.6%	4.9%	16.1%	0.6%	0.0%	0.0%	1.5%	0.5%	0.8%	1.8%	0.6%	0.7%	1.7%	1.0%	-	18.1%	100.0%
Cold Rolled	17.7%	-	0.0%	35.2%	3.6%	15.8%	0.0%	0.0%	0.0%	0.3%	0.0%	0.4%	0.6%	8.6%	7.1%	4.1%	2.9%	0.0%	3.8%	100.0%
Sheets and Strip																				
Galvanized	1.7%	-	0.1%	26.2%	18.3%	41.8%	0.1%	-	-	0.0%	0.0%	1.0%	0.1%	0.9%	2.5%	0.4%	0.2%	-	6.6%	100.0%
All Other Metallic Coated	2.5%	-	-	18.7%	51.8%	20.3%	-	-	-	-	-	0.2%	0.2%	2.3%	3.6%	0.4%	-	-	0.0%	100.0%
Electrical	0.0%	-	-	6.1%	-	0.8%	0.4%	-	0.0%	-	-	-	0.2%	92.5%	-	0.0%	-	-	-	100.0%
Strip																				
Hot Rolled	27.9%	14.7%	4.7%	16.1%	4.1%	18.0%	0.1%	-	-	0.0%	0.0%	3.5%	8.0%	-	0.1%	0.0%	0.4%	-	2.5%	100.0%
Cold Rolled	2.9%	-	0.0%	4.9%	1.2%	17.2%	0.0%	0.0%	0.1%	0.1%	0.0%	-	2.3%	0.3%	2.3%	0.6%	9.4%	0.0%	58.6%	100.0%
Total All Grades	14.3%	1.2%	0.4%	26.5%	14.6%	15.1%	1.6%	0.3%	0.0%	2.5%	0.2%	0.8%	2.0%	2.1%	1.6%	1.0%	3.7%	0.0%	12.1%	100.0%

Note: Individual figures calculated as percentage of (Total plus Steel for Converting and Processing: Less Shipments to Reporting Companies) from Appendix Table C-6.

SOURCE: Appendix Table C-6.

Table C-14

Domestic Mill Shipments Distribution by Product and AISI-Defined Market Category, 2003 (share of total)

Products	Steel for Converting and Processing	Forgings (Not elsewhere classified)	Industrial Fasteners	Steel Service Centers and Distributors	Construction and Contractors' Products	Automotive	Rail Trans-portation	Ship Building and Marine Equipment	Aircraft and Aero-space	Oil and Gas Industry	Mining, Quarrying, and Lumbering	Agricultural	Machinery, Industrial Equipment, and Tools	Elec - trical Equip-ment	Appliances, Utensils, and Cutlery	Other Domestic and Commercial Equipment	Containers, Packaging, and Shipping Materials	Ordnance and Other Military	Non-classified Shipments	Total
Ingots, Blooms, Slabs, and Billets	86.4%	7.1%	0.0%	1.2%	0.7%	0.0%	1.0%	-	0.3%	0.0%	-	-	3.0%	-	-	0.0%	0.2%	-	-	100.0%
Wire Rods	37.7%	-	0.0%	0.2%	26.2%	0.0%	-	-	-	-	-	-	0.1%	-	-	5.5%	-	-	30.3%	100.0%
Structural Shapes (3 inches and over)	-	-	-	8.2%	60.0%	1.2%	0.3%	-	-	-	-	-	1.0%	-	-	-	-	-	29.4%	100.0%
Steel Piling	-	-	-	-	16.7%	-	-	-	-	-	-	-	-	-	-	-	-	-	83.3%	100.0%
Plates: Cut Lengths and Coils	16.1%	0.0%	-	57.1%	8.3%	2.8%	2.4%	1.6%	0.0%	2.8%	0.2%	0.2%	3.2%	0.2%	0.0%	0.0%	0.0%	0.1%	4.8%	100.0%
Rail and Track Accessories	-	-	-	9.8%	0.5%	-	87.9%	-	-	-	-	-	-	-	-	-	-	-	1.8%	100.0%
Bars																				
Hot rolled (including light shapes)	11.2%	5.4%	0.5%	12.5%	9.2%	17.2%	0.2%	0.4%	0.0%	1.5%	1.2%	1.4%	4.6%	0.0%	0.1%	0.2%	0.2%	0.7%	33.3%	100.0%
Reinforcing	-	-	-	-	96.0%	0.0%	-	-	-	-	0.7%	-	-	-	-	-	-	-	3.3%	100.0%
Cold Finished	0.8%	0.7%	0.6%	14.8%	32.9%	21.5%	-	-	0.0%	0.0%	0.0%	2.6%	4.4%	0.9%	0.3%	0.6%	-	0.8%	19.1%	100.0%
Bars Subtotal	5.1%	2.5%	0.3%	6.9%	51.6%	9.5%	0.1%	0.2%	0.0%	0.7%	0.9%	0.8%	2.4%	0.1%	0.1%	0.2%	0.1%	0.4%	18.1%	100.0%
Tool Steel	12.6%	-	-	29.2%	-	-	-	-	-	-	-	-	1.7%	-	-	-	-	0.4%	56.1%	100.0%
Pipe and Tubing																				
Standard	1.8%	-	-	47.1%	4.3%	-	-	-	-	18.0%	-	-	-	2.2%	-	-	-	-	26.6%	100.0%
Oil Country Goods	-	-	-	15.6%	-	-	-	-	-	74.5%	-	-	-	-	-	-	-	-	9.9%	100.0%
Line Pipe	2.1%	-	-	9.5%	-	-	-	-	-	36.2%	-	-	-	-	-	-	-	-	52.3%	100.0%
Mechanical Tubing	4.9%	0.0%	0.0%	36.7%	0.1%	21.3%	0.0%	-	0.0%	1.6%	0.1%	1.4%	20.1%	0.1%	-	0.0%	0.0%	0.0%	13.7%	100.0%
Pressure Tubing	-	-	-	99.3%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.7%	100.0%
Structural Pipe and Tubing	6.5%	-	-	35.5%	-	1.1%	-	-	-	-	0.7%	4.2%	9.6%	-	-	-	-	-	42.4%	100.0%
Pipe for Piling	8.7%	-	-	10.8%	29.6%	-	-	-	-	5.9%	-	-	-	-	-	-	-	-	45.0%	100.0%
Stainless	-	-	-	47.9%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	52.1%	100.0%
Pipe and Tubing Subtotal	1.9%	0.0%	0.0%	27.4%	1.4%	3.6%	0.0%	-	0.0%	38.0%	0.0%	0.4%	3.7%	0.6%	-	0.0%	0.0%	0.0%	23.0%	100.0%
Wire-Drawn and/or Rolled	6.3%	0.0%	0.1%	0.3%	0.0%	0.0%	-	-	-	-	-	-	0.0%	0.0%	-	0.0%	-	-	93.3%	100.0%
Black Plate	26.4%	-	-	45.2%	10.7%	0.0%	-	-	-	-	-	-	-	-	0.0%	0.0%	17.6%	-	0.0%	100.0%
Tin Plate	0.0%	-	-	11.0%	0.0%	1.1%	-	-	-	-	-	-	-	0.0%	0.3%	-	76.2%	-	11.4%	100.0%
Tin Free	0.1%	-	-	4.1%	0.0%	0.0%	-	-	-	-	-	-	-	-	-	0.0%	93.6%	-	2.2%	100.0%
Tin Coated Sheets	0.0%	-	-	46.8%	0.0%	19.4%	-	-	-	-	-	-	-	-	11.7%	-	18.9%	-	3.2%	100.0%
Sheets																				
Hot Rolled	19.5%	-	0.0%	44.9%	16.4%	16.2%	0.1%	0.0%	0.0%	0.2%	0.2%	0.1%	0.3%	0.1%	0.6%	0.4%	0.8%	0.0%	-	100.0%
Cold Rolled	12.7%	-	0.0%	38.7%	3.4%	18.9%	0.1%	0.0%	0.0%	0.1%	0.0%	0.2%	0.4%	4.5%	10.2%	1.8%	2.5%	0.0%	6.4%	100.0%
Sheets and Strip																				
Galvanized	1.0%	-	0.0%	23.2%	20.9%	40.4%	0.0%	-	-	0.0%	-	0.6%	0.1%	0.6%	2.3%	0.1%	0.1%	-	10.7%	100.0%
All Other Metallic Coated	0.9%	-	0.0%	20.4%	59.5%	10.3%	-	-	-	-	-	0.1%	0.0%	0.6%	2.1%	0.1%	0.1%	-	5.9%	100.0%
Electrical	0.4%	-	-	5.1%	1.1%	0.8%	0.8%	-	-	-	-	-	-	91.4%	-	-	-	-	0.5%	100.0%
Strip																				
Hot Rolled	17.4%	-	-	8.5%	2.1%	34.7%	-	-	-	0.6%	-	-	0.0%	-	-	-	-	-	36.6%	100.0%
Cold Rolled	3.4%	-	0.1%	3.5%	1.5%	15.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	1.0%	0.3%	1.3%	0.5%	0.1%	0.0%	73.2%	100.0%
Total All Grades	11.5%	0.6%	0.1%	27.0%	22.5%	15.0%	0.9%	0.2%	0.0%	2.0%	0.2%	0.3%	1.1%	1.0%	1.9%	0.6%	2.9%	0.1%	12.3%	100.0%

Note: Individual figures calculated as percentage of (Total plus Steel for Converting and Processing: Less Shipments to Reporting Companies) from Appendix Table C-7.

SOURCE: Appendix Table C-7.

Table C-15

Domestic Mill Shipments [a] Distribution by Product Group and AISI-Defined Market Category, 2003 (share of total)

Products	Steel for Converting and Processing	Forgings (Not elsewhere classified)	Industrial Fasteners	Steel Service Centers and Distributors	Construction and Contractors' Products	Automotive	Rail Transportation	Ship Building and Marine Equipment	Aircraft and Aerospace	Oil and Gas Industry	Mining, Quarrying, and Lumbering	Agricultural	Machinery, Industrial Equipment, and Tools	Electrical Equipment	Appliances, Utensils, and Cutlery	Other Domestic and Commercial Equipment	Containers, Packaging, and Shipping Materials	Ordnance and Other Military	Nonclassified Shipments	Total
Ingots, Blooms, Slabs, and Billets	86.4%	7.1%	0.0%	1.2%	0.7%	0.0%	1.0%	-	0.3%	0.0%	-	-	3.0%	-	-	0.0%	0.2%	-	-	100.0%
Wire Rods	37.7%	-	0.0%	0.2%	26.2%	0.0%	-	-	-	-	-	-	0.1%	-	-	5.5%	-	-	30.3%	100.0%
Structural shapes and pilings	-	-	-	7.6%	56.8%	1.1%	0.3%	-	-	-	-	-	0.9%	-	-	-	-	-	33.4%	100.0%
Plates: Cut Lengths and Coils	16.1%	0.0%	-	57.1%	8.3%	2.8%	2.4%	1.6%	0.0%	2.8%	0.2%	0.2%	3.2%	0.2%	0.0%	0.0%	0.0%	0.1%	4.8%	100.0%
Rail and Track Accessories	-	-	-	9.8%	0.5%	-	87.9%	-	-	-	-	-	-	-	-	-	-	-	1.8%	100.0%
Bars and tool steel	5.1%	2.5%	0.3%	6.9%	51.5%	9.5%	0.1%	0.2%	0.0%	0.7%	0.9%	0.8%	2.4%	0.1%	0.1%	0.2%	0.1%	0.4%	18.2%	100.0%
Pipe and Tubing Subtotal	1.9%	0.0%	0.0%	27.4%	1.4%	3.6%	0.0%	-	0.0%	38.0%	0.0%	0.4%	3.7%	0.6%	-	0.0%	0.0%	0.0%	23.0%	100.0%
Wire-Drawn and/or Rolled	6.3%	0.0%	0.1%	0.3%	0.0%	0.0%	-	-	-	-	-	-	0.0%	0.0%	-	0.0%	-	-	93.3%	100.0%
Tin mill products	2.6%	-	-	14.1%	1.0%	1.4%	-	-	-	-	-	-	-	0.0%	0.6%	0.0%	72.0%	-	8.2%	100.0%
Sheets and Strip	11.1%	-	0.0%	34.6%	15.6%	23.9%	0.1%	0.0%	0.0%	0.1%	0.1%	0.3%	0.3%	1.8%	3.5%	0.6%	0.9%	0.0%	7.1%	100.0%
Total All Grades	11.5%	0.6%	0.1%	27.0%	22.5%	15.0%	0.9%	0.2%	0.0%	2.0%	0.2%	0.3%	1.1%	1.0%	1.9%	0.6%	2.9%	0.1%	12.3%	100.0%

Note: Individual figures calculated as percentage of (Total plus Steel for Converting and Processing: Less Shipments to Reporting Companies) from Appendix Table C-8.

[a] Used to calculate the imports of ferrous shipments by products and AISI-Defined Market for 2004 in Appendix C, Table C-38.

SOURCE : Appendix Table C-8.

Table C-16

Domestic Mill Shipments [a] Distribution by Product and AISI-Defined Market Category, 2009 (share of total)

Products	Steel for Converting and Processing	Forgings (Not elsewhere classified)	Industrial Fasteners	Steel Service Centers and Distributors	Construction and Contractors' Products	Automotive	Rail Trans-portation	Ship Building and Marine Equipment	Aircraft and Aerospace	Oil and Gas Industry	Mining, Quarrying, and Lumbering	Agricultural	Machinery, Industrial Equipment, and Tools	Electrical Equipment	Appliances, Utensils, and Cutlery	Other Domestic and Commercial Equipment	Containers, Packaging, and Shipping Materials	Ordnance and Other Military	Nonclassified Shipments	Total
Ingots, Blooms, Slabs, and Billets	93.4%	2.5%	-	1.2%	0.8%	0.6%	0.3%	-	0.0%	0.0%	-	0.2%	0.8%	-	-	-	0.2%	-	-	100.0%
Wire Rods	26.8%	-	0.0%	21.0%	15.2%	3.1%	0.0%	-	-	-	-	0.0%	0.3%	-	-	1.7%	0.4%	-	31.5%	100.0%
Structural Shapes (3 inches and over)	-	0.0%	-	3.3%	94.5%	-	0.1%	-	-	-	-	-	-	-	-	-	-	-	2.1%	100.0%
Steel Piling	-	-	-	-	100.0%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0%
Plates: Cut Lengths and Coils	14.7%	0.0%	0.0%	49.7%	15.5%	2.0%	1.3%	1.5%	0.0%	0.8%	-	0.1%	3.2%	0.5%	0.0%	0.1%	-	0.6%	10.0%	100.0%
Rail and Track Accessories	0.0%	-	-	5.2%	0.0%	-	94.8%	-	-	-	-	-	-	-	-	-	-	-	-	100.0%
Bars																				
Hot rolled (including light shapes)	3.2%	1.2%	0.1%	23.1%	27.0%	10.8%	0.0%	-	0.0%	0.9%	0.0%	0.0%	6.6%	0.0%	0.2%	0.0%	0.2%	0.2%	26.3%	100.0%
Reinforcing	-	-	-	3.6%	96.4%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0%
Cold Finished	0.1%	0.1%	12.3%	10.0%	1.4%	36.0%	-	0.0%	0.0%	0.0%	0.0%	0.0%	1.1%	0.2%	0.0%	0.1%	-	0.1%	38.6%	100.0%
Bars Subtotal	1.4%	0.5%	1.1%	12.5%	58.7%	7.6%	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	2.9%	0.0%	0.1%	0.0%	0.1%	0.1%	14.5%	100.0%
Tool Steel	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0%	100.0%
Pipe and Tubing																				
Standard	6.9%	-	-	49.1%	-	0.1%	-	-	-	40.5%	-	-	-	-	-	-	-	-	3.4%	100.0%
Oil Country Goods	-	-	-	0.9%	-	-	-	-	-	73.1%	-	-	-	-	-	-	-	-	26.0%	100.0%
Line Pipe	-	-	-	19.8%	-	-	-	-	-	73.3%	-	-	-	-	-	-	-	-	6.9%	100.0%
Mechanical Tubing	1.0%	0.1%	-	32.3%	0.0%	34.9%	-	-	0.0%	2.6%	0.0%	2.6%	15.5%	-	-	0.0%	-	0.1%	10.7%	100.0%
Pressure Tubing	-	-	-	71.9%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	28.1%	100.0%
Structural Pipe and Tubing	0.1%	-	-	5.9%	-	2.5%	-	-	-	-	-	3.5%	38.2%	-	-	-	-	-	49.9%	100.0%
Pipe for Piling	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0%
Stainless	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0%	100.0%
Pipe and Tubing Subtotal	2.3%	0.0%	-	23.6%	0.0%	7.3%	-	-	0.0%	45.6%	0.0%	0.6%	4.3%	-	-	0.0%	-	0.0%	16.2%	100.0%
Wire-Drawn and/or Rolled	16.2%	-	-	15.5%	18.5%	1.4%	-	-	-	-	-	-	-	-	-	-	-	-	48.5%	100.0%
Black Plate	49.5%	-	-	23.7%	1.5%	-	-	-	-	-	-	-	-	-	-	-	24.8%	-	0.6%	100.0%
Tin Plate	0.3%	-	-	8.0%	-	0.7%	-	-	-	-	-	-	-	-	0.1%	-	90.8%	-	-	100.0%
Tin Free	0.3%	-	-	3.4%	-	-	-	-	-	-	-	-	-	-	0.2%	-	96.2%	-	-	100.0%
Tin Coated Sheets	0.2%	-	-	52.9%	-	12.6%	-	-	-	-	-	-	-	-	2.6%	-	29.6%	-	2.1%	100.0%
Sheets																				
Hot Rolled	17.8%	-	0.1%	40.6%	15.5%	13.9%	0.0%	-	-	0.0%	0.0%	0.1%	0.3%	0.0%	1.0%	0.2%	0.5%	0.0%	10.0%	100.0%
Cold Rolled	15.6%	-	0.0%	30.3%	10.4%	17.9%	0.0%	-	0.0%	0.1%	0.0%	0.0%	0.1%	3.3%	9.2%	1.5%	2.9%	0.0%	8.4%	100.0%
Sheets and Strip																				
Galvanized	2.4%	-	-	28.1%	17.4%	43.8%	0.0%	-	-	0.0%	-	0.1%	0.0%	0.2%	4.3%	0.2%	0.6%	-	3.0%	100.0%
All Other Metallic Coated	0.4%	-	-	18.2%	69.1%	9.1%	-	-	-	-	-	-	-	-	2.3%	-	-	-	1.0%	100.0%
Electrical	6.3%	-	-	3.7%	-	-	2.8%	-	-	-	-	-	-	85.8%	-	-	-	-	1.5%	100.0%
Strip																				
Hot Rolled	53.5%	-	-	-	-	-	-	-	-	0.4%	-	-	-	-	-	-	-	-	46.1%	100.0%
Cold Rolled	2.9%	0.0%	0.1%	17.7%	6.6%	27.4%	0.0%	-	0.1%	0.2%	-	0.0%	0.2%	0.2%	0.6%	0.2%	-	0.0%	43.8%	100.0%
Total All Grades	11.7%	0.2%	0.2%	26.6%	26.0%	14.1%	1.6%	0.1%	0.0%	1.6%	0.0%	0.1%	1.0%	0.8%	2.1%	0.3%	3.9%	0.1%	9.4%	100.0%

Note: Individual figures calculated as percentage of (Total plus Steel for Converting and Processing: Less Shipments to Reporting Companies) from Appendix Table C-9.

SOURCE: Appendix Table C-9.

Table C-17

Imports of Ferrous Shipments by Product and AISI-Defined Market, 1983 (thousands of net tons)

Products	Steel for Converting and Processing	Forgings (Not elsewhere classified)	Industrial Fasteners	Steel Service Centers and Distributors	Construction and Contractors' Products	Automotive	Rail Transportation	Ship Building and Marine Equipment	Aircraft and Aerospace	Oil and Gas Industry	Mining, Quarrying, and Lumbering	Agricultural	Machinery, Industrial Equipment, and Tools	Electrical Equipment	Appliances, Utensils, and Cutlery	Other Domestic and Commercial Equipment	Containers, Packaging, and Shipping Materials	Ordnance and Other Military	Nonclassified Shipments	Total
Steel Mill Products																				
Ingots, Blooms, Slabs, and Billets	277.6	199.9	8.2	60.1	19.8	95.0	1.1	0.0	7.6	14.4	1.2	14.2	42.4	0.0	-	0.0	9.8	51.8	19.1	822.5
Wire Rods	589.9	0.0	55.7	6.1	239.6	43.0	0.0	0.0	0.0	0.6	0.0	10.4	159.5	3.3	0.3	49.9	0.3	-	26.8	1,185.3
Structural Shapes (3 inches and over)	6.7	0.0	-	223.5	769.7	4.7	11.7	23.4	0.0	4.7	0.7	4.7	29.9	0.9	-	0.9	-	0.1	363.3	1,444.7
Steel Piling	-	-	-	9.2	102.4	-	1.5	0.2	-	0.2	0.0	-	-	-	-	-	-	-	-	113.6
Plates																				
Cut Lengths	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Coils [a]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Plates Subtotal	18.9	0.3	0.2	366.9	266.6	19.8	24.8	111.8	1.6	43.7	5.5	13.1	137.2	23.3	0.9	3.8	0.6	18.5	45.6	1,103.2
Rail and Track Accessories	0.0	0.0	0.0	16.5	3.4	-	122.9	0.2	-	-	0.3	-	0.8	-	-	-	-	-	8.8	152.9
Bars																				
Hot rolled	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	457.1
Shapes under 3 inches	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	88.3
Concrete Reinforcing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	208.3
Cold Finished	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	191.6
Bars Subtotal	64.5	25.9	11.4	129.7	161.4	122.9	5.7	1.0	0.9	11.1	15.7	8.4	42.7	4.1	1.8	2.9	0.1	4.5	330.8	945.3
Tool Steel	0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	30.2	30.4
Pipe and Tubing																				
Standard Pipe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	971.4
Oil Country Goods	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	564.8
Line Pipe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	494.4
Mechanical Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	40.1
Pressure Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	48.5
Structural Pipe and Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	186.6
Pipe for Piling	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Stainless Pipe and Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	19.2
Nonclassified Pipe and Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	537.1
Pipe and Tubing Subtotal	78.3	0.1	0.1	971.7	101.1	108.3	0.5	12.4	1.2	846.7	1.4	12.9	211.6	76.2	4.7	20.3	3.7	16.0	395.0	2,862.1
Wire-Drawn and/or Rolled	85.5	0.0	30.7	37.4	131.9	17.6	0.3	0.0	0.0	0.0	0.5	1.0	21.9	5.4	7.7	36.8	7.1	0.1	74.6	458.6
Black Plate	11.7	-	-	32.2	21.2	3.5	0.0	-	-	-	-	0.0	1.2	3.5	4.7	15.9	76.5	-	0.0	170.4
Tin Plate	1.7	-	-	25.4	0.1	6.5	0.0	-	-	-	-	0.0	0.4	1.3	2.1	2.3	250.9	-	-	290.5
Tin Free	0.0	-	-	1.9	0.0	0.1	-	-	-	-	-	-	0.0	0.5	0.0	0.1	59.6	-	-	62.2
Sheets																				
Hot Rolled	468.1	0.0	2.4	893.2	168.3	536.6	4.6	0.4	0.1	0.7	5.7	30.5	42.2	76.2	15.3	29.9	40.7	1.8	-	2,316.8
Cold Rolled	119.0	-	0.3	716.6	136.1	773.4	0.4	0.2	0.1	0.8	0.2	6.6	34.3	200.0	200.5	123.8	103.3	1.8	-	2,417.2
Sheets and Strip																				
Galvanized																				
Hot Dipped	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Electrolytic	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Galvanized Subtotal	17.3	-	8.7	567.0	496.5	540.4	0.3	0.4	0.0	-	0.2	60.4	11.3	26.1	61.8	25.5	6.2	0.5	1.6	1,824.2
All Other Metallic Coated	3.3	-	-	52.8	72.7	125.2	-	0.0	-	-	0.2	1.9	4.1	2.1	8.5	3.7	1.3	0.0	10.4	286.3
Electrical	2.9	-	-	4.7	0.1	0.4	0.0	0.0	-	0.1	0.0	0.0	1.2	36.3	0.7	0.2	-	-	0.0	46.6
Strip																				
Hot Rolled	5.3	0.0	0.7	2.2	1.7	14.2	0.0	-	0.1	0.1	0.1	1.9	3.5	0.9	0.2	0.5	0.6	0.1	0.7	32.5
Cold Rolled	4.7	-	1.1	7.5	4.0	17.0	0.1	0.0	0.1	0.0	0.0	0.1	5.2	1.7	4.4	2.9	12.0	1.8	21.9	84.6
Total Steel Mill Products	1,755.6	226.2	119.3	4,124.6	2,696.3	2,428.8	174.0	150.0	11.7	923.0	31.7	166.4	749.4	461.7	313.6	319.3	572.7	96.9	1,328.7	16,649.8

[a] Included in Sheets: Hot Rolled.

SOURCE: Total from American Iron and Steel Institute, *Annual Statistical Report*, 1983, Table 21. All other values calculated using percentage distributions from Appendix Table C-10.

Table C-18

Imports of Ferrous Shipments by Product and AISI-Defined Market, 1984 (thousands of net tons)

Products	Steel for Converting and Processing	Forgings (Not elsewhere classified)	Industrial Fasteners	Steel Service Centers and Distributors	Construction and Contractors' Products	Automotive	Rail Transportation	Ship Building and Marine Equipment	Aircraft and Aerospace	Oil and Gas Industry	Mining, Quarrying, and Lumbering	Agricultural	Machinery, Industrial Equipment, and Tools	Electrical Equipment	Appliances, Utensils, and Cutlery	Other Domestic and Commercial Equipment	Containers, Packaging, and Shipping Materials	Ordnance and Other Military	Nonclassified Shipments	Total
Steel Mill Products																				
Ingots, Blooms, Slabs, and Billets	511.7	368.4	15.0	110.8	36.5	175.2	2.0	0.1	14.1	26.6	2.3	26.2	78.2	0.0	-	0.0	18.1	95.4	35.3	1,515.8
Wire Rods	791.2	0.0	74.8	8.1	321.3	57.7	0.0	0.0	0.0	0.8	0.0	14.0	214.0	4.5	0.3	66.9	0.4	-	35.9	1,589.8
Structural Shapes (3 inches and over)	9.5	0.0	-	316.6	1,090.3	6.7	16.5	33.2	0.0	6.6	1.0	6.7	42.3	1.3	-	1.2	-	0.1	514.6	2,046.6
Steel Piling	-	-	-	8.9	98.3	-	1.5	0.2	-	0.2	0.0	-	-	-	-	-	-	-	-	109.0
Plates																				
Cut Lengths	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,538.5
Coils [a]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Plates Subtotal	26.3	0.4	0.3	511.7	371.7	27.7	34.6	156.0	2.2	60.9	7.7	18.3	191.4	32.5	1.3	5.3	0.8	25.8	63.5	1,538.5
Rail and Track Accessories	0.0	0.0	0.0	37.7	7.9	-	281.6	0.4	-	-	0.7	-	1.9	-	-	-	-	-	20.1	350.3
Bars																				
Hot rolled	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	750.0
Shapes under 3 inches	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	174.8
Concrete Reinforcing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	434.1
Cold Finished	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	328.4
Bars Subtotal	115.1	46.2	20.3	231.4	288.1	219.4	10.2	1.7	1.6	19.7	27.9	15.0	76.3	7.3	3.2	5.2	0.1	8.1	590.5	1,687.4
Tool Steel	0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	31.8	32.1
Pipe and Tubing																				
Standard Pipe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,068.8
Oil Country Goods	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2,206.6
Line Pipe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	982.7
Mechanical Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	283.2
Pressure Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	51.7
Structural Pipe and Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	320.7
Pipe for Piling	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Stainless Pipe and Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	32.2
Nonclassified Pipe and Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	475.9
Pipe and Tubing Subtotal	148.2	0.1	0.1	1,840.7	191.5	205.2	1.0	23.4	2.3	1,604.0	2.6	24.5	400.8	144.4	8.9	38.4	7.0	30.3	748.2	5,421.7
Wire-Drawn and/or Rolled	126.4	0.0	45.4	55.4	195.1	26.1	0.4	0.0	0.0	0.1	0.8	1.5	32.4	8.0	11.4	54.5	10.5	0.1	110.3	678.4
Black Plate	19.0	-	-	52.5	34.6	5.8	0.0	-	-	-	-	0.0	2.0	5.7	7.6	25.9	124.9	-	0.0	278.0
Tin Plate	2.0	-	-	31.1	0.1	7.9	0.0	-	-	-	-	0.0	0.4	1.5	2.5	2.8	307.3	-	-	355.8
Tin Free	0.1	-	-	3.1	0.0	0.2	-	-	-	-	-	-	0.0	0.8	0.0	0.1	99.6	-	-	104.0
Sheets																				
Hot Rolled	612.9	0.1	3.1	1,169.4	220.4	702.5	6.0	0.5	0.1	0.9	7.5	40.0	55.3	99.8	20.1	39.1	53.3	2.4	-	3,033.2
Cold Rolled	177.0	-	0.4	1,065.7	202.4	1,150.2	0.5	0.3	0.2	1.1	0.2	9.9	51.0	297.4	298.1	184.2	153.6	2.6	-	3,594.7
Sheets and Strip																				
Galvanized																				
Hot Dipped	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Electrolytic	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Galvanized Subtotal	25.9	-	13.0	848.4	742.9	808.6	0.4	0.5	0.0	-	0.3	90.4	16.9	39.1	92.5	38.1	9.3	0.8	2.4	2,729.6
All Other Metallic Coated	2.6	-	-	41.4	56.9	98.1	-	0.0	-	-	0.1	1.5	3.2	1.6	6.7	2.9	1.1	0.0	8.1	224.2
Electrical	5.6	-	-	8.9	0.1	0.7	0.1	0.0	-	0.2	0.0	0.0	2.4	69.5	1.3	0.4	-	-	0.1	89.3
Strip																				
Hot Rolled	13.0	0.0	1.6	5.3	4.1	34.7	0.1	-	0.2	0.2	0.2	4.7	8.5	2.3	0.5	1.1	1.4	0.2	1.6	79.6
Cold Rolled	10.2	-	2.3	16.1	8.7	36.5	0.3	0.1	0.1	0.0	0.0	0.3	11.1	3.6	9.5	6.3	25.7	3.8	47.0	181.3
Total Steel Mill Products	2,596.9	415.2	176.3	6,363.4	3,870.7	3,563.0	355.3	216.4	20.8	1,721.3	51.3	252.9	1,187.8	719.3	464.0	472.5	813.0	169.6	2,209.5	25,639.3

[a] Included in Sheets: Hot Rolled.

SOURCE: Total from American Iron and Steel Institute, *Annual Statistical Report*, 1988, Table 18. All other values calculated using percentage distributions from Appendix Table C-10.

Table C-19

Imports of Ferrous Shipments by Product and AISI-Defined Market, 1985 (thousands of net tons)

Products	Steel for Converting and Processing	Forgings (Not elsewhere classified)	Industrial Fasteners	Steel Service Centers and Distributors	Construction and Contractors' Products	Automotive	Rail Transportation	Ship Building and Marine Equipment	Aircraft and Aerospace	Oil and Gas Industry	Mining, Quarrying, and Lumbering	Agricultural	Machinery, Industrial Equipment, and Tools	Electrical Equipment	Appliances, Utensils, and Cutlery	Other Domestic and Commercial Equipment	Containers, Packaging, and Shipping Materials	Ordnance and Other Military	Nonclassified Shipments	Total
Steel Mill Products																				
Ingots, Blooms, Slabs, and Billets	823.8	593.1	24.2	178.4	58.8	282.0	3.2	0.1	22.6	42.8	3.7	42.2	125.8	0.1	-	0.0	29.2	153.6	56.8	2,440.4
Wire Rods	736.1	0.0	69.6	7.6	299.0	53.7	0.0	0.0	0.0	0.8	0.0	13.0	199.1	4.1	0.3	62.2	0.3	-	33.4	1,479.2
Structural Shapes (3 inches and over)	9.2	0.0	-	306.1	1,054.2	6.4	16.0	32.1	0.0	6.4	0.9	6.5	40.9	1.2	-	1.2	-	0.1	497.5	1,978.7
Steel Piling	-	-	-	11.4	126.1	-	1.9	0.2	-	0.2	0.1	-	-	-	-	-	-	-	-	139.8
Plates																				
Cut Lengths	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,377.9
Coils [a]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Plates Subtotal	23.6	0.4	0.2	458.3	332.9	24.8	31.0	139.7	2.0	54.6	6.9	16.4	171.4	29.1	1.2	4.8	0.7	23.1	56.9	1,377.9
Rail and Track Accessories	0.0	0.0	0.0	38.6	8.1	-	288.2	0.4	-	-	0.7	-	1.9	-	-	-	-	-	20.6	358.4
Bars																				
Hot rolled	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	645.6
Shapes under 3 inches	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	140.3
Concrete Reinforcing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	411.5
Cold Finished	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	314.9
Bars Subtotal	103.2	41.4	18.2	207.4	258.2	196.6	9.1	1.5	1.4	17.7	25.0	13.5	68.3	6.5	2.8	4.7	0.1	7.2	529.2	1,512.3
Tool Steel	0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	36.9	37.1
Pipe and Tubing																				
Standard Pipe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	977.5
Oil Country Goods	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,498.0
Line Pipe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,042.4
Mechanical Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	328.3
Pressure Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	44.0
Structural Pipe and Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	502.1
Pipe for Piling	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Stainless Pipe and Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	33.9
Nonclassified Pipe and Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	37.6
Pipe and Tubing Subtotal	122.0	0.1	0.1	1,515.4	157.7	169.0	0.8	19.3	1.9	1,320.6	2.1	20.2	329.9	118.9	7.3	31.6	5.8	25.0	616.0	4,463.7
Wire-Drawn and/or Rolled	116.1	0.0	41.7	50.8	179.2	23.9	0.4	0.0	0.0	0.0	0.7	1.3	29.7	7.4	10.5	50.0	9.7	0.1	101.3	623.1
Black Plate	16.5	-	-	45.6	30.0	5.0	0.0	-	-	-	-	0.0	1.7	4.9	6.6	22.5	108.4	-	0.0	241.4
Tin Plate	2.3	-	-	34.9	0.1	8.9	0.0	-	-	-	-	0.0	0.5	1.7	2.8	3.1	344.2	-	-	398.6
Tin Free	0.1	-	-	4.4	0.0	0.3	-	-	-	-	-	-	0.0	1.1	0.0	0.2	139.5	-	-	145.6
Sheets																				
Hot Rolled	562.9	0.1	2.8	1,073.9	202.4	645.1	5.5	0.5	0.1	0.8	6.9	36.7	50.8	91.6	18.4	35.9	48.9	2.2	-	2,785.6
Cold Rolled	133.0	-	0.3	801.0	152.1	864.4	0.4	0.2	0.1	0.8	0.2	7.4	38.3	223.5	224.0	138.4	115.4	2.0	-	2,701.6
Sheets and Strip																				
Galvanized																				
Hot Dipped	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Electrolytic	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Galvanized Subtotal	23.4	-	11.8	766.3	671.0	730.4	0.4	0.5	0.0	-	0.3	81.6	15.3	35.3	83.6	34.4	8.4	0.7	2.2	2,465.4
All Other Metallic Coated	2.4	-	-	37.7	51.8	89.4	-	0.0	-	-	0.1	1.4	2.9	1.5	6.1	2.6	1.0	0.0	7.4	204.3
Electrical	7.4	-	-	11.9	0.1	0.9	0.1	0.1	-	0.3	0.0	0.0	3.1	92.5	1.7	0.6	-	-	0.1	118.8
Strip																				
Hot Rolled	10.1	0.0	1.3	4.1	3.2	27.1	0.1	-	0.2	0.2	0.1	3.7	6.6	1.8	0.4	0.9	1.1	0.1	1.3	62.2
Cold Rolled	14.9	-	3.4	23.5	12.7	53.4	0.4	0.1	0.2	0.0	0.0	0.4	16.2	5.3	13.9	9.2	37.6	5.5	68.7	265.3
Total Steel Mill Products	2,707.2	635.0	173.5	5,577.4	3,597.4	3,181.3	357.5	194.7	28.6	1,445.1	47.7	244.3	1,102.6	626.6	379.8	402.3	850.3	219.6	2,028.3	23,799.3

[a] Included in Sheets: Hot Rolled.

SOURCE: Total from American Iron and Steel Institute, *Annual Statistical Report*, 1988, Table 18. All other values calculated using percentage distributions from Appendix Table C-10.

Table C-20

Imports of Ferrous Shipments by Product and AISI-Defined Market, 1986 (thousands of net tons)

Products	Steel for Converting and Processing	Forgings (Not elsewhere classified)	Industrial Fasteners	Steel Service Centers and Distributors	Construction and Contractors' Products	Automotive	Rail Transportation	Ship Building and Marine Equipment	Aircraft and Aerospace	Oil and Gas Industry	Mining, Quarrying, and Lumbering	Agricultural	Machinery, Industrial Equipment, and Tools	Electrical Equipment	Appliances, Utensils, and Cutlery	Other Domestic and Commercial Equipment	Containers, Packaging, and Shipping Materials	Ordnance and Other Military	Nonclassified Shipments	Total
Steel Mill Products																				
Ingots, Blooms, Slabs, and Billets	703.5	506.5	20.7	152.4	50.2	240.8	2.8	0.1	19.3	36.6	3.1	36.0	107.5	0.1	-	0.0	24.9	131.2	48.5	2,084.1
Wire Rods	675.7	0.0	63.9	7.0	274.4	49.3	0.0	0.0	0.0	0.7	0.0	11.9	182.7	3.8	0.3	57.1	0.3	-	30.7	1,357.9
Structural Shapes (3 inches and over)	8.1	0.0	-	270.5	931.6	5.7	14.1	28.4	0.0	5.6	0.8	5.7	36.2	1.1	-	1.0	-	0.1	439.7	1,748.6
Steel Piling	-	-	-	8.7	96.5	-	1.4	0.2	-	0.2	0.0	-	-	-	-	-	-	-	-	107.0
Plates																				
Cut Lengths	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,106.9
Coils [a]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Plates Subtotal	18.9	0.3	0.2	368.2	267.5	19.9	24.9	112.2	1.6	43.8	5.6	13.2	137.7	23.4	0.9	3.8	0.6	18.6	45.7	1,106.9
Rail and Track Accessories	0.0	0.0	0.0	28.7	6.0	-	213.9	0.3	-	-	0.5	-	1.4	-	-	-	-	-	15.3	266.1
Bars																				
Hot rolled	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	582.6
Shapes under 3 inches	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	166.4
Concrete Reinforcing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	454.7
Cold Finished	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	224.7
Bars Subtotal	97.5	39.1	17.2	195.9	243.8	185.7	8.6	1.4	1.3	16.7	23.7	12.7	64.6	6.1	2.7	4.4	0.1	6.8	499.9	1,428.4
Tool Steel	0.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	44.5	44.7
Pipe and Tubing																				
Standard Pipe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	697.0
Oil Country Goods	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	616.7
Line Pipe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	817.9
Mechanical Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	237.2
Pressure Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	24.0
Structural Pipe and Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	479.8
Pipe for Piling	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Stainless Pipe and Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	35.7
Nonclassified Pipe and Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	28.5
Pipe and Tubing Subtotal	80.3	0.1	0.1	997.1	103.7	111.2	0.6	12.7	1.2	868.8	1.4	13.3	217.1	78.2	4.8	20.8	3.8	16.4	405.3	2,936.8
Wire-Drawn and/or Rolled	110.8	0.0	39.8	48.5	170.9	22.8	0.4	0.0	0.0	0.0	0.7	1.3	28.4	7.0	10.0	47.7	9.2	0.1	96.7	594.4
Black Plate	14.1	-	-	38.9	25.6	4.3	0.0	-	-	-	-	0.0	1.5	4.2	5.6	19.2	92.5	-	0.0	205.9
Tin Plate	2.1	-	-	31.5	0.1	8.0	0.0	-	-	-	-	0.0	0.4	1.6	2.6	2.8	310.6	-	-	359.7
Tin Free	0.1	-	-	3.3	0.0	0.2	-	-	-	-	-	-	0.0	0.9	0.0	0.1	105.9	-	-	110.6
Sheets																				
Hot Rolled	484.1	0.0	2.4	923.7	174.1	554.9	4.7	0.4	0.1	0.7	5.9	31.6	43.7	78.8	15.9	30.9	42.1	1.9	-	2,395.9
Cold Rolled	132.6	-	0.3	798.4	151.6	861.6	0.4	0.2	0.1	0.8	0.2	7.4	38.2	222.8	223.3	137.9	115.0	2.0	-	2,692.8
Sheets and Strip																				
Galvanized																				
Hot Dipped	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Electrolytic	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Galvanized Subtotal	22.0	-	11.1	721.5	631.7	687.6	0.4	0.4	0.0	-	0.3	76.9	14.4	33.2	78.7	32.4	7.9	0.7	2.0	2,321.1
All Other Metallic Coated	2.5	-	-	38.7	53.2	91.7	-	0.0	-	-	0.1	1.4	3.0	1.5	6.2	2.7	1.0	0.0	7.6	209.7
Electrical	5.1	-	-	8.2	0.1	0.6	0.1	0.0	-	0.2	0.0	0.0	2.1	63.6	1.2	0.4	-	-	0.1	81.7
Strip																				
Hot Rolled	7.1	0.0	0.9	2.9	2.2	19.0	0.0	-	0.1	0.1	0.1	2.6	4.6	1.2	0.3	0.6	0.8	0.1	0.9	43.6
Cold Rolled	8.9	-	2.0	14.1	7.6	32.0	0.2	0.1	0.1	0.0	0.0	0.3	9.7	3.2	8.4	5.5	22.5	3.3	41.2	159.1
Total Steel Mill Products	2,373.6	546.0	158.5	4,658.0	3,190.9	2,895.4	272.6	156.5	24.0	974.4	42.4	214.2	893.1	530.7	360.9	367.6	737.3	181.1	1,677.9	20,255.1

[a] Included in Sheets: Hot Rolled.

SOURCE: Total from American Iron and Steel Institute, *Annual Statistical Report*, 1988, Table 18. All other values calculated using percentage distributions from Appendix Table C-10.

Table C-21

Imports of Ferrous Shipments by Product and AISI-Defined Market, 1987 (thousands of net tons)

Products	Steel for Converting and Processing	Forgings (Not elsewhere classified)	Industrial Fasteners	Steel Service Centers and Distributors	Construction and Contractors' Products	Automotive	Rail Transportation	Ship Building and Marine Equipment	Aircraft and Aerospace	Oil and Gas Industry	Mining, Quarrying, and Lumbering	Agricultural	Machinery, Industrial Equipment, and Tools	Electrical Equipment	Appliances, Utensils, and Cutlery	Other Domestic and Commercial Equipment	Containers, Packaging, and Shipping Materials	Ordnance and Other Military	Nonclassified Shipments	Total
Steel Mill Products																				
Ingots, Blooms, Slabs, and Billets	770.5	554.7	22.6	166.9	55.0	263.8	3.0	0.1	21.2	40.1	3.4	39.5	117.7	0.1	-	0.0	27.3	143.7	53.1	2,282.7
Wire Rods	730.1	0.0	69.0	7.5	296.5	53.2	0.0	0.0	0.0	0.7	0.0	12.9	197.4	4.1	0.3	61.7	0.3	-	33.1	1,467.0
Structural Shapes (3 inches and over)	8.3	0.0	-	275.1	947.4	5.8	14.4	28.8	0.0	5.7	0.8	5.8	36.8	1.1	-	1.1	-	0.1	447.1	1,778.3
Steel Piling	-	-	-	8.9	98.9	-	1.5	0.2	-	0.2	0.0	-	-	-	-	-	-	-	-	109.7
Plates																				
Cut Lengths	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,096.4
Coils [a]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Plates Subtotal	18.7	0.3	0.2	364.7	264.9	19.7	24.7	111.2	1.6	43.4	5.5	13.0	136.4	23.2	0.9	3.8	0.6	18.4	45.3	1,096.4
Rail and Track Accessories	0.0	0.0	0.0	24.5	5.1	-	183.2	0.3	-	-	0.4	-	1.2	-	-	-	-	-	13.1	227.9
Bars																				
Hot rolled	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	610.3
Shapes under 3 inches	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	140.5
Concrete Reinforcing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	351.6
Cold Finished	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	213.5
Bars Subtotal	89.8	36.1	15.8	180.5	224.6	171.1	7.9	1.3	1.2	15.4	21.8	11.7	59.5	5.7	2.5	4.1	0.1	6.3	460.5	1,315.8
Tool Steel	0.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	40.3	40.6
Pipe and Tubing																				
Standard Pipe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	859.2
Oil Country Goods	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	570.4
Line Pipe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	550.1
Mechanical Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	283.6
Pressure Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	26.5
Structural Pipe and Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	428.8
Pipe for Piling	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Stainless Pipe and Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	28.2
Nonclassified Pipe and Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	23.3
Pipe and Tubing Subtotal	75.7	0.1	0.1	940.5	97.9	104.9	0.5	12.0	1.2	819.5	1.3	12.5	204.8	73.8	4.6	19.6	3.6	15.5	382.3	2,770.2
Wire-Drawn and/or Rolled	105.9	0.0	38.0	46.4	163.4	21.8	0.4	0.0	0.0	0.0	0.6	1.2	27.1	6.7	9.6	45.6	8.8	0.1	92.4	568.4
Black Plate	12.7	-	-	35.2	23.1	3.9	0.0	-	-	-	-	0.0	1.3	3.8	5.1	17.3	83.5	-	0.0	186.0
Tin Plate	1.9	-	-	29.1	0.1	7.4	0.0	-	-	-	-	0.0	0.4	1.4	2.4	2.6	287.0	-	-	332.3
Tin Free	0.1	-	-	3.1	0.0	0.2	-	-	-	-	-	-	0.0	0.8	0.0	0.1	96.9	-	-	101.2
Sheets																				
Hot Rolled	508.2	0.0	2.6	969.7	182.7	582.5	5.0	0.4	0.1	0.7	6.2	33.1	45.9	82.7	16.6	32.4	44.2	2.0	-	2,515.2
Cold Rolled	110.5	-	0.3	665.6	126.4	718.3	0.3	0.2	0.1	0.7	0.1	6.2	31.8	185.7	186.2	115.0	95.9	1.6	-	2,245.0
Sheets and Strip																				
Galvanized																				
Hot Dipped	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Electrolytic	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Galvanized Subtotal	21.9	-	11.0	716.8	627.6	683.2	0.3	0.4	0.0	-	0.3	76.4	14.3	33.0	78.2	32.2	7.9	0.7	2.0	2,306.2
All Other Metallic Coated	3.8	-	-	59.7	82.2	141.6	-	0.0	-	-	0.2	2.2	4.6	2.3	9.6	4.2	1.5	0.0	11.7	323.7
Electrical	4.4	-	-	7.0	0.1	0.5	0.1	0.0	-	0.2	0.0	0.0	1.8	54.3	1.0	0.3	-	-	0.1	69.8
Strip																				
Hot Rolled	7.0	0.0	0.9	2.9	2.2	18.8	0.0	-	0.1	0.1	0.1	2.5	4.6	1.2	0.3	0.6	0.8	0.1	0.9	43.2
Cold Rolled	8.1	-	1.8	12.8	6.9	29.1	0.2	0.1	0.1	0.0	0.0	0.2	8.8	2.9	7.6	5.0	20.5	3.0	37.4	144.5
Total Steel Mill Products	2,477.9	591.2	162.3	4,516.7	3,205.1	2,825.9	241.6	155.0	25.6	926.8	40.9	217.3	894.5	482.9	324.8	345.7	678.9	191.4	1,619.4	19,924.1

[a] Included in Sheets: Hot Rolled.

SOURCE: Total from American Iron and Steel Institute, *Annual Statistical Report*, 1988, Table 18. All other values calculated using percentage distributions from Appendix Table C-10.

Table C-22

Imports of Ferrous Shipments by Product and AISI-Defined Market, 1988 (thousands of net tons)

Products	Steel for Converting and Processing	Forgings (Not elsewhere classified)	Industrial Fasteners	Steel Service Centers and Distributors	Construction and Contractors' Products	Automotive	Rail Transportation	Ship Building and Marine Equipment	Aircraft and Aerospace	Oil and Gas Industry	Mining, Quarrying, and Lumbering	Agricultural	Machinery, Industrial Equipment, and Tools	Electrical Equipment	Appliances, Utensils, and Cutlery	Other Domestic and Commercial Equipment	Containers, Packaging, and Shipping Materials	Ordnance and Other Military	Nonclassified Shipments	Total
Steel Mill Products																				
Ingots, Blooms, Slabs, and Billets	1,918.9	150.5	-	80.1	73.4	52.2	50.0	0.1	13.7	30.8	17.0	2.5	137.7	0.1	-	0.2	9.8	53.9	254.0	2,845.0
Wire Rods	666.9	0.0	35.2	9.6	325.9	39.3	0.7	1.1	0.3	1.9	0.0	18.5	88.2	8.4	0.7	47.6	0.0	-	249.5	1,493.8
Structural Shapes (3 inches and over)	21.4	-	-	401.8	782.9	4.6	14.1	64.0	0.1	1.0	0.9	10.1	4.8	0.7	-	0.1	0.0	-	540.8	1,847.3
Steel Piling	-	-	-	36.2	73.0	-	0.7	0.0	-	-	-	-	-	-	-	-	-	-	2.1	112.1
Plates																				
Cut Lengths	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,175.5
Coils	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	557.7
Plates Subtotal	324.6	0.0	1.8	614.0	200.2	138.4	85.4	55.4	1.0	17.3	4.3	13.7	147.1	12.0	1.6	4.9	1.7	10.6	99.3	1,733.2
Rail and Track Accessories	-	-	-	14.3	0.6	-	199.2	-	-	-	0.2	-	-	-	-	-	-	-	54.2	268.5
Bars																				
Hot rolled	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	679.5
Shapes under 3 inches	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	125.7
Concrete Reinforcing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	357.3
Cold Finished	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	235.8
Bars Subtotal	209.9	55.4	16.4	155.3	327.5	141.5	9.3	0.7	0.6	4.0	37.5	11.6	68.9	3.3	2.0	4.2	0.1	3.1	346.8	1,398.2
Tool Steel	1.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	42.7	44.1
Pipe and Tubing																				
Standard Pipe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	964.0
Oil Country Goods	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	988.2
Line Pipe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	552.0
Mechanical Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	381.7
Pressure Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	50.9
Structural Pipe and Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	278.9
Pipe for Piling	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Stainless Pipe and Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	38.5
Nonclassified Pipe and Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	28.4
Pipe and Tubing Subtotal	54.4	0.0	0.1	1,206.3	91.9	115.9	1.9	0.1	1.2	968.1	1.5	12.9	230.0	110.4	7.2	13.5	0.0	3.6	463.7	3,282.7
Wire-Drawn and/or Rolled	75.0	0.0	17.7	120.3	22.3	12.0	0.2	0.3	0.1	2.0	2.0	2.1	25.5	3.7	2.7	34.8	0.8	0.5	230.7	552.8
Black Plate	12.7	-	-	46.7	31.2	1.8	-	-	-	-	-	-	0.7	0.7	1.6	9.7	48.8	0.3	-	154.2
Tin Plate	4.8	-	-	21.0	0.0	6.0	-	-	-	-	-	0.0	1.2	0.3	0.6	1.0	259.7	0.0	-	294.6
Tin Free	0.8	-	-	3.2	0.0	0.1	-	-	-	-	-	-	0.0	0.8	0.0	0.4	92.1	-	-	97.5
Sheets																				
Hot Rolled	481.5	-	2.7	925.0	120.8	326.3	14.9	0.2	0.1	0.7	4.8	13.2	21.9	68.2	11.4	18.6	34.0	0.1	162.2	2,206.6
Cold Rolled	188.1	-	1.2	652.0	132.5	452.5	0.1	0.0	0.0	0.1	0.7	5.3	28.8	195.4	180.6	96.7	101.4	1.7	68.6	2,105.8
Sheets and Strip																				
Galvanized																				
Hot Dipped	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Electrolytic	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Galvanized Subtotal	18.7	-	4.3	477.7	397.1	814.3	0.3	-	0.0	0.0	-	17.3	11.0	21.3	42.6	16.6	5.7	0.1	121.6	1,948.8
All Other Metallic Coated	1.6	-	-	46.8	97.9	79.2	-	-	-	-	-	1.7	2.2	0.1	8.2	2.8	0.3	0.0	7.4	248.1
Electrical	1.9	-	-	4.7	0.4	0.0	0.2	-	0.0	-	-	-	1.6	51.7	1.7	0.4	-	-	11.4	74.0
Strip																				
Hot Rolled	8.6	0.1	1.3	15.4	1.4	9.5	0.1	0.0	0.1	0.1	0.2	2.6	4.9	0.2	0.2	0.3	0.2	0.0	4.2	49.6
Cold Rolled	7.5	-	0.9	16.8	4.6	25.4	0.0	0.0	0.3	0.0	0.0	0.2	8.8	3.2	6.3	3.6	25.1	2.5	29.2	134.2
Total Steel Mill Products	3,998.9	206.1	81.6	4,847.1	2,683.7	2,219.0	377.2	122.0	17.3	1,026.0	69.2	111.7	783.3	480.6	267.4	255.3	579.6	76.6	2,688.3	20,890.9

SOURCE: Total from American Iron and Steel Institute, *Annual Statistical Report*, 1988, Table 18. All other values calculated using percentage distributions from Appendix Table C-11.

Table C-23

Imports of Ferrous Shipments by Product and AISI-Defined Market, 1989 (thousands of net tons)

Products	Steel for Converting and Processing	Forgings (Not elsewhere classified)	Industrial Fasteners	Steel Service Centers and Distributors	Construction and Contractors' Products	Automotive	Rail Transportation	Ship Building and Marine Equipment	Aircraft and Aerospace	Oil and Gas Industry	Mining, Quarrying, and Lumbering	Agricultural	Machinery, Industrial Equipment, and Tools	Electrical Equipment	Appliances, Utensils, and Cutlery	Other Domestic and Commercial Equipment	Containers, Packaging, and Shipping Materials	Ordnance and Other Military	Nonclassified Shipments	Total
Steel Mill Products																				
Ingots, Blooms, Slabs, and Billets	1,482.4	116.2	-	61.9	56.7	40.3	38.6	0.1	10.6	23.8	13.2	2.0	106.4	0.1	-	0.2	7.6	41.7	196.2	2,197.8
Wire Rods	494.4	0.0	26.1	7.1	241.6	29.2	0.5	0.8	0.2	1.4	0.0	13.7	65.4	6.2	0.6	35.3	0.0	-	185.0	1,107.5
Structural Shapes (3 inches and over)	16.2	-	-	304.4	593.1	3.5	10.7	48.5	0.1	0.7	0.7	7.6	3.6	0.6	-	0.1	0.0	-	409.7	1,399.4
Steel Piling	-	-	-	27.9	56.2	-	0.6	0.0	-	-	-	-	-	-	-	-	-	-	1.6	86.3
Plates																				
Cut Lengths	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	937.5
Coils	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	499.6
Plates Subtotal	269.1	0.0	1.5	509.1	166.0	114.7	70.8	45.9	0.8	14.3	3.5	11.3	121.9	9.9	1.4	4.1	1.4	8.8	82.4	1,437.1
Rail and Track Accessories	-	-	-	8.4	0.4	-	116.8	-	-	-	0.1	-	-	-	-	-	-	-	31.8	157.4
Bars																				
Hot rolled	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	775.7
Shapes under 3 inches	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	109.6
Concrete Reinforcing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	233.7
Cold Finished	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	188.6
Bars Subtotal	196.4	51.8	15.4	145.3	306.3	132.4	8.7	0.7	0.5	3.8	35.1	10.8	64.5	3.1	1.9	3.9	0.1	2.9	324.3	1,307.7
Tool Steel	2.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	88.2	91.1
Pipe and Tubing																				
Standard Pipe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	806.3
Oil Country Goods	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	429.9
Line Pipe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	527.0
Mechanical Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	281.1
Pressure Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	44.9
Structural Pipe and Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	323.9
Pipe for Piling	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10.3
Stainless Pipe and Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	37.3
Nonclassified Pipe and Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12.6
Pipe and Tubing Subtotal	41.0	0.0	0.1	908.9	69.3	87.3	1.4	0.0	0.9	729.4	1.1	9.7	173.3	83.2	5.4	10.2	0.0	2.7	349.4	2,473.3
Wire-Drawn and/or Rolled	67.1	0.0	15.9	107.6	19.9	10.8	0.2	0.3	0.0	1.8	1.8	1.9	22.8	3.4	2.4	31.1	0.7	0.5	206.3	494.3
Black Plate	11.9	-	-	43.8	29.3	1.7	-	-	-	-	-	-	0.6	0.7	1.5	9.1	45.8	0.3	-	144.6
Tin Plate	5.5	-	-	24.0	0.0	6.8	-	-	-	-	-	0.0	1.4	0.3	0.7	1.1	297.4	0.0	-	337.3
Tin Free	0.9	-	-	3.8	0.0	0.2	-	-	-	-	-	-	0.0	0.9	0.0	0.5	108.6	-	-	114.9
Sheets																				
Hot Rolled	414.3	-	2.3	795.8	104.0	280.7	12.8	0.2	0.1	0.6	4.1	11.3	18.9	58.6	9.8	16.0	29.2	0.1	139.6	1,898.5
Cold Rolled	167.7	-	1.1	581.1	118.1	403.3	0.1	0.0	0.0	0.1	0.6	4.7	25.7	174.2	161.0	86.2	90.4	1.5	61.2	1,877.0
Sheets and Strip																				
Galvanized																				
Hot Dipped	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,297.4
Electrolytic	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	327.8
Galvanized Subtotal	15.6	-	3.6	398.4	331.2	679.1	0.3	-	0.0	0.0	-	14.5	9.2	17.8	35.5	13.9	4.7	0.1	101.4	1,625.2
All Other Metallic Coated	1.5	-	-	44.5	93.0	75.3	-	-	-	-	-	1.6	2.0	0.1	7.8	2.6	0.3	0.0	7.0	235.8
Electrical	2.2	-	-	5.4	0.4	0.1	0.2	-	0.0	-	-	-	1.9	59.6	1.9	0.4	-	-	13.1	85.3
Strip																				
Hot Rolled	19.3	0.2	3.0	34.4	3.2	21.1	0.3	0.0	0.3	0.1	0.4	5.8	11.0	0.5	0.5	0.7	0.4	0.1	9.3	110.5
Cold Rolled	7.7	-	0.9	17.4	4.7	26.4	0.0	0.0	0.3	0.0	0.0	0.2	9.2	3.3	6.5	3.7	26.1	2.6	30.3	139.6
Total Steel Mill Products	3,216.3	168.4	69.7	4,029.2	2,193.4	1,912.8	262.1	96.6	13.7	776.1	60.7	95.2	637.8	422.5	236.8	219.0	612.6	61.3	2,236.8	17,321.0

SOURCE: Total from American Iron and Steel Institute, *Annual Statistical Report*, 1993, Table 18. All other values calculated using percentage distributions from Appendix Table C-11.

Table C-24

Imports of Ferrous Shipments by Product and AISI-Defined Market, 1990 (thousands of net tons)

Products	Steel for Converting and Processing	Forgings (Not elsewhere classified)	Industrial Fasteners	Steel Service Centers and Distributors	Construction and Contractors' Products	Automotive	Rail Transportation	Ship Building and Marine Equipment	Aircraft and Aerospace	Oil and Gas Industry	Mining, Quarrying, and Lumbering	Agricultural	Machinery, Industrial Equipment, and Tools	Electrical Equipment	Appliances, Utensils, and Cutlery	Other Domestic and Commercial Equipment	Containers, Packaging, and Shipping Materials	Ordnance and Other Military	Nonclassified Shipments	Total
Steel Mill Products																				
Ingots, Blooms, Slabs, and Billets	1,593.7	125.0	-	66.5	60.9	43.3	41.6	0.1	11.3	25.6	14.2	2.1	114.3	0.1	-	0.2	8.1	44.8	211.0	2,362.8
Wire Rods	428.6	0.0	22.6	6.2	209.4	25.3	0.4	0.7	0.2	1.2	0.0	11.9	56.7	5.4	0.5	30.6	0.0	-	160.3	960.0
Structural Shapes (3 inches and over)	9.6	-	-	179.7	350.2	2.0	6.3	28.6	0.0	0.4	0.4	4.5	2.1	0.3	-	0.0	0.0	-	241.9	826.3
Steel Piling	-	-	-	29.0	58.5	-	0.6	0.0	-	-	-	-	-	-	-	-	-	-	1.7	89.7
Plates																				
Cut Lengths	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	958.5
Coils	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	614.2
Plates Subtotal	294.5	0.0	1.6	557.1	181.7	125.6	77.5	50.2	0.9	15.7	3.9	12.4	133.4	10.9	1.5	4.5	1.5	9.6	90.1	1,572.7
Rail and Track Accessories	-	-	-	7.0	0.3	-	98.4	-	-	-	0.1	-	-	-	-	-	-	-	26.8	132.6
Bars																				
Hot rolled	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	677.2
Shapes under 3 inches	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	92.4
Concrete Reinforcing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	147.9
Cold Finished	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	162.3
Bars Subtotal	162.1	42.8	12.7	119.9	252.9	109.3	7.2	0.6	0.4	3.1	29.0	8.9	53.2	2.5	1.6	3.3	0.1	2.4	267.8	1,079.8
Tool Steel	1.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	57.0	58.9
Pipe and Tubing																				
Standard Pipe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	951.6
Oil Country Goods	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	387.6
Line Pipe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	695.9
Mechanical Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	186.2
Pressure Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	38.0
Structural Pipe and Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	275.4
Pipe for Piling	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.3
Stainless Pipe and Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	47.2
Nonclassified Pipe and Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9.6
Pipe and Tubing Subtotal	43.0	0.0	0.1	954.0	72.7	91.6	1.5	0.0	0.9	765.6	1.2	10.2	181.9	87.3	5.7	10.7	0.0	2.8	366.7	2,596.0
Wire-Drawn and/or Rolled	58.7	0.0	13.9	94.1	17.4	9.4	0.2	0.2	0.0	1.6	1.6	1.7	19.9	2.9	2.1	27.2	0.6	0.4	180.4	432.3
Black Plate	12.1	-	-	44.2	29.6	1.7	-	-	-	-	-	-	0.7	0.7	1.5	9.2	46.3	0.3	-	146.1
Tin Plate	5.1	-	-	22.3	0.0	6.3	-	-	-	-	-	0.0	1.3	0.3	0.7	1.0	276.4	0.0	-	313.6
Tin Free	0.9	-	-	3.8	0.0	0.2	-	-	-	-	-	-	0.0	0.9	0.0	0.5	107.8	-	-	114.0
Sheets																				
Hot Rolled	497.9	-	2.8	956.5	125.0	337.4	15.4	0.2	0.1	0.7	5.0	13.6	22.7	70.5	11.8	19.2	35.1	0.1	167.8	2,281.7
Cold Rolled	183.0	-	1.2	634.3	128.9	440.2	0.1	0.0	0.0	0.1	0.7	5.1	28.0	190.1	175.7	94.1	98.6	1.7	66.8	2,048.7
Sheets and Strip																				
Galvanized																				
Hot Dipped	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,263.3
Electrolytic	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	386.0
Galvanized Subtotal	15.9	-	3.6	404.3	336.1	689.1	0.3	-	0.0	0.0	-	14.7	9.3	18.1	36.1	14.1	4.8	0.1	102.9	1,649.3
All Other Metallic Coated	1.3	-	-	36.3	75.9	61.5	-	-	-	-	-	1.3	1.7	0.1	6.3	2.1	0.2	0.0	5.7	192.5
Electrical	2.0	-	-	4.8	0.4	0.0	0.2	-	0.0	-	-	-	1.7	53.2	1.7	0.4	-	-	11.7	76.2
Strip																				
Hot Rolled	16.8	0.2	2.6	30.0	2.8	18.4	0.3	0.0	0.2	0.1	0.3	5.1	9.6	0.4	0.4	0.6	0.3	0.1	8.1	96.5
Cold Rolled	7.7	-	0.9	17.4	4.7	26.3	0.0	0.0	0.3	0.0	0.0	0.2	9.1	3.3	6.5	3.7	26.0	2.6	30.2	139.0
Total Steel Mill Products	3,334.7	168.0	62.0	4,167.5	1,907.4	1,987.7	249.9	80.8	14.5	814.2	56.3	91.8	645.7	447.1	252.0	221.3	605.9	65.0	1,996.9	17,168.6

SOURCE: Total from American Iron and Steel Institute, *Annual Statistical Report*, 1993, Table 18. All other values calculated using percentage distributions from Appendix Table C-11.

Table C-25

Imports of Ferrous Shipments by Product and AISI-Defined Market, 1991 (thousands of net tons)

Products	Steel for Converting and Processing	Forgings (Not elsewhere classified)	Industrial Fasteners	Steel Service Centers and Distributors	Construction and Contractors' Products	Automotive	Rail Transportation	Ship Building and Marine Equipment	Aircraft and Aerospace	Oil and Gas Industry	Mining, Quarrying, and Lumbering	Agricultural	Machinery, Industrial Equipment, and Tools	Electrical Equipment	Appliances, Utensils, and Cutlery	Other Domestic and Commercial Equipment	Containers, Packaging, and Shipping Materials	Ordnance and Other Military	Nonclassified Shipments	Total
Steel Mill Products																				
Ingots, Blooms, Slabs, and Billets	1,522.9	119.4	-	63.6	58.2	41.4	39.7	0.1	10.8	24.4	13.5	2.0	109.3	0.1	-	0.2	7.8	42.8	201.6	2,257.8
Wire Rods	368.9	0.0	19.5	5.3	180.2	21.8	0.4	0.6	0.1	1.1	0.0	10.2	48.8	4.7	0.4	26.3	0.0	-	138.0	826.3
Structural Shapes (3 inches and over)	5.3	-	-	100.0	194.9	1.1	3.5	15.9	0.0	0.2	0.2	2.5	1.2	0.2	-	0.0	0.0	-	134.6	459.9
Steel Piling	-	-	-	20.4	41.2	-	0.4	0.0	-	-	-	-	-	-	-	-	-	-	1.2	63.3
Plates																				
Cut Lengths	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	801.3
Coils	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	489.8
Plates Subtotal	241.8	0.0	1.3	457.4	149.1	103.1	63.6	41.2	0.7	12.9	3.2	10.2	109.5	8.9	1.2	3.7	1.2	7.9	74.0	1,291.1
Rail and Track Accessories	-	-	-	8.3	0.4	-	115.3	-	-	-	0.1	-	-	-	-	-	-	-	31.4	155.4
Bars																				
Hot rolled	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	665.0
Shapes under 3 inches	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	71.8
Concrete Reinforcing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	107.3
Cold Finished	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	152.1
Bars Subtotal	149.6	39.5	11.7	110.7	233.4	100.8	6.6	0.5	0.4	2.9	26.7	8.3	49.1	2.3	1.4	3.0	0.1	2.2	247.1	996.3
Tool Steel	2.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	63.9	66.0
Pipe and Tubing																				
Standard Pipe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	836.9
Oil Country Goods	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	412.6
Line Pipe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,003.5
Mechanical Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	169.8
Pressure Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	35.9
Structural Pipe and Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	209.8
Pipe for Piling	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11.9
Stainless Pipe and Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	48.2
Nonclassified Pipe and Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.7
Pipe and Tubing Subtotal	45.3	0.0	0.1	1,005.2	76.6	96.6	1.6	0.0	1.0	806.7	1.3	10.8	191.6	92.0	6.0	11.3	0.0	3.0	386.4	2,735.4
Wire-Drawn and/or Rolled	53.2	0.0	12.6	85.3	15.8	8.5	0.1	0.2	0.0	1.4	1.4	1.5	18.0	2.7	1.9	24.6	0.6	0.4	163.5	391.8
Black Plate	10.7	-	-	39.2	26.2	1.5	-	-	-	-	-	-	0.6	0.6	1.3	8.1	41.0	0.3	-	129.5
Tin Plate	5.1	-	-	22.2	0.0	6.3	-	-	-	-	-	0.0	1.3	0.3	0.7	1.0	274.4	0.0	-	311.3
Tin Free	0.9	-	-	3.8	0.0	0.2	-	-	-	-	-	-	0.0	0.9	0.0	0.5	108.0	-	-	114.3
Sheets																				
Hot Rolled	462.8	-	2.6	889.0	116.2	313.6	14.3	0.2	0.1	0.7	4.6	12.6	21.1	65.5	11.0	17.9	32.6	0.1	155.9	2,120.8
Cold Rolled	168.6	-	1.1	584.4	118.7	405.6	0.1	0.0	0.0	0.1	0.6	4.7	25.8	175.2	161.9	86.7	90.9	1.5	61.5	1,887.4
Sheets and Strip																				
Galvanized																				
Hot Dipped	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,272.6
Electrolytic	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	247.4
Galvanized Subtotal	14.6	-	3.3	372.6	309.7	635.1	0.2	-	0.0	0.0	-	13.5	8.6	16.6	33.2	13.0	4.4	0.1	94.8	1,520.0
All Other Metallic Coated	1.2	-	-	35.8	74.9	60.6	-	-	-	-	-	1.3	1.6	0.1	6.3	2.1	0.2	0.0	5.6	189.9
Electrical	2.2	-	-	5.2	0.4	0.0	0.2	-	0.0	-	-	-	1.8	57.3	1.8	0.4	-	-	12.6	82.0
Strip																				
Hot Rolled	18.4	0.2	2.8	32.9	3.0	20.2	0.3	0.0	0.3	0.1	0.4	5.6	10.5	0.4	0.4	0.7	0.3	0.1	8.9	105.7
Cold Rolled	7.9	-	0.9	17.7	4.8	26.8	0.0	0.0	0.3	0.0	0.0	0.2	9.3	3.4	6.6	3.7	26.5	2.6	30.7	141.4
Total Steel Mill Products	3,081.4	159.2	55.9	3,858.8	1,603.9	1,843.2	246.5	58.9	13.8	850.5	52.1	83.5	608.3	431.2	234.2	203.2	588.1	61.0	1,811.8	15,845.5

SOURCE: Total from American Iron and Steel Institute, *Annual Statistical Report*, 1993, Table 18. All other values calculated using percentage distributions from Appendix Table C-11.

Table C-26

Imports of Ferrous Shipments by Product and AISI-Defined Market, 1992 (thousands of net tons)

Products	Steel for Converting and Processing	Forgings (Not elsewhere classified)	Industrial Fasteners	Steel Service Centers and Distributors	Construction and Contractors' Products	Automotive	Rail Transportation	Ship Building and Marine Equipment	Aircraft and Aerospace	Oil and Gas Industry	Mining, Quarrying, and Lumbering	Agricultural	Machinery, Industrial Equipment, and Tools	Electrical Equipment	Appliances, Utensils, and Cutlery	Other Domestic and Commercial Equipment	Containers, Packaging, and Shipping Materials	Ordnance and Other Military	Nonclassified Shipments	Total
Steel Mill Products																				
Ingots, Blooms, Slabs, and Billets	1,614.9	126.6	-	67.4	61.8	43.9	42.1	0.1	11.5	25.9	14.3	2.1	115.9	0.1	-	0.2	8.2	45.4	213.8	2,394.3
Wire Rods	499.0	0.0	26.3	7.2	243.8	29.4	0.5	0.8	0.2	1.4	0.0	13.8	66.0	6.3	0.6	35.6	0.0	-	186.6	1,117.6
Structural Shapes (3 inches and over)	5.2	-	-	97.6	190.1	1.1	3.4	15.5	0.0	0.2	0.2	2.4	1.2	0.2	-	0.0	0.0	-	131.3	448.5
Steel Piling	-	-	-	18.8	37.9	-	0.4	0.0	-	-	-	-	-	-	-	-	-	-	1.1	58.2
Plates																				
Cut Lengths	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	903.1
Coils	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	705.1
Plates Subtotal	301.2	0.0	1.7	569.7	185.8	128.4	79.2	51.4	0.9	16.0	4.0	12.7	136.5	11.1	1.5	4.6	1.5	9.8	92.2	1,608.2
Rail and Track Accessories	-	-	-	8.6	0.4	-	120.4	-	-	-	0.1	-	-	-	-	-	-	-	32.8	162.3
Bars																				
Hot rolled	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	751.5
Shapes under 3 inches	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	91.3
Concrete Reinforcing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	119.3
Cold Finished	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	152.6
Bars Subtotal	167.4	44.2	13.1	123.8	261.1	112.8	7.4	0.6	0.4	3.2	29.9	9.2	55.0	2.6	1.6	3.4	0.1	2.5	276.5	1,114.7
Tool Steel	2.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	64.8	66.9
Pipe and Tubing																				
Standard Pipe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	583.0
Oil Country Goods	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.6
Line Pipe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	404.2
Mechanical Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	147.7
Pressure Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	27.5
Structural Pipe and Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	227.3
Pipe for Piling	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.6
Stainless Pipe and Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	42.6
Nonclassified Pipe and Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.8
Pipe and Tubing Subtotal	25.6	0.0	0.1	567.2	43.2	54.5	0.9	0.0	0.5	455.2	0.7	6.1	108.1	51.9	3.4	6.4	0.0	1.7	218.0	1,543.5
Wire-Drawn and/or Rolled	58.5	0.0	13.8	93.8	17.4	9.4	0.2	0.2	0.0	1.6	1.6	1.7	19.8	2.9	2.1	27.1	0.6	0.4	179.9	431.0
Black Plate	12.6	-	-	46.1	30.9	1.8	-	-	-	-	-	-	0.7	0.7	1.5	9.6	48.3	0.3	-	152.4
Tin Plate	5.2	-	-	22.9	0.0	6.5	-	-	-	-	-	0.0	1.3	0.3	0.7	1.1	283.6	0.0	-	321.7
Tin Free	1.0	-	-	4.4	0.0	0.2	-	-	-	-	-	-	0.0	1.1	0.0	0.6	125.0	-	-	132.3
Sheets																				
Hot Rolled	583.7	-	3.3	1,121.3	146.5	395.5	18.1	0.3	0.1	0.8	5.8	15.9	26.6	82.6	13.9	22.5	41.2	0.2	196.7	2,674.9
Cold Rolled	190.2	-	1.2	659.2	133.9	457.5	0.1	0.0	0.0	0.1	0.7	5.3	29.1	197.6	182.6	97.8	102.5	1.7	69.4	2,129.0
Sheets and Strip																				
Galvanized																				
Hot Dipped	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,727.1
Electrolytic	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	319.4
Galvanized Subtotal	19.7	-	4.5	501.7	417.0	855.1	0.3	-	0.0	0.0	-	18.2	11.6	22.4	44.8	17.5	6.0	0.1	127.7	2,046.5
All Other Metallic Coated	1.8	-	-	53.6	111.9	90.6	-	-	-	-	-	2.0	2.5	0.1	9.3	3.2	0.3	0.0	8.4	283.8
Electrical	2.2	-	-	5.2	0.4	0.0	0.2	-	0.0	-	-	-	1.8	57.2	1.8	0.4	-	-	12.6	81.8
Strip																				
Hot Rolled	23.9	0.3	3.7	42.7	3.9	26.2	0.4	0.0	0.3	0.2	0.5	7.2	13.7	0.6	0.6	0.9	0.5	0.1	11.5	137.3
Cold Rolled	9.4	-	1.1	21.2	5.8	32.1	0.1	0.0	0.3	0.0	0.0	0.3	11.1	4.0	7.9	4.5	31.7	3.2	36.9	169.6
Total Steel Mill Products	3,523.6	171.2	68.8	4,032.3	1,891.8	2,245.1	273.7	69.0	14.5	504.8	57.9	97.0	600.8	441.8	272.3	235.1	649.6	65.4	1,860.0	17,074.5

SOURCE: Total from American Iron and Steel Institute, *Annual Statistical Report*, 1993, Table 18. All other values calculated using percentage distributions from Appendix Table C-11.

Table C-27

Imports of Ferrous Shipments by Product and AISI-Defined Market, 1993 (thousands of net tons)

Products	Steel for Converting and Processing	Forgings (Not elsewhere classified)	Industrial Fasteners	Steel Service Centers and Distributors	Construction and Contractors' Products	Automotive	Rail Transportation	Ship Building and Marine Equipment	Aircraft and Aerospace	Oil and Gas Industry	Mining, Quarrying, and Lumbering	Agricultural	Machinery, Industrial Equipment, and Tools	Electrical Equipment	Appliances, Utensils, and Cutlery	Other Domestic and Commercial Equipment	Containers, Packaging, and Shipping Materials	Ordnance and Other Military	Nonclassified Shipments	Total
Steel Mill Products																				
Ingots, Blooms, Slabs, and Billets	3,168.8	372.8	100.4	204.2	359.8	168.1	198.1	-	20.5	31.1	0.0	0.7	249.1	-	0.1	3.8	45.3	35.2	34.7	4,992.6
Wire Rods	451.2	0.0	24.6	4.2	275.3	19.3	0.6	0.6	0.0	1.0	-	17.5	20.9	7.7	0.9	3.7	0.0	-	532.8	1,360.2
Structural Shapes (3 inches and over)	16.3	-	-	137.4	273.8	6.0	6.9	4.3	-	0.1	0.5	0.3	6.4	-	-	1.4	8.9	-	64.2	526.5
Steel Piling	-	-	-	15.4	57.4	-	-	0.0	-	-	-	-	-	-	-	-	-	-	-	72.8
Plates																				
Cut Lengths	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	762.9
Coils	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	604.7
Plates Subtotal	250.7	0.5	0.0	599.7	111.7	90.0	55.3	30.7	0.9	9.8	4.9	3.9	101.3	4.9	2.6	6.3	1.0	4.9	88.4	1,367.6
Rail and Track Accessories	-	-	-	9.2	2.2	-	119.9	-	-	-	1.5	-	-	-	-	-	-	-	-	132.8
Bars																				
Hot rolled	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	959.5
Shapes under 3 inches	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	125.9
Concrete Reinforcing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	120.7
Cold Finished	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	257.1
Bars Subtotal	210.7	70.4	21.3	222.6	462.8	134.6	5.6	0.5	0.3	7.4	21.7	15.1	70.5	3.2	2.3	4.1	0.1	2.9	207.2	1,463.2
Tool Steel	2.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	86.3	88.4
Pipe and Tubing																				
Standard Pipe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	604.8
Oil Country Goods	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	353.3
Line Pipe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	514.2
Mechanical Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	195.9
Pressure Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	37.4
Structural Pipe and Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	288.7
Pipe for Piling	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.8
Stainless Pipe and Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	43.5
Nonclassified Pipe and Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10.5
Pipe and Tubing Subtotal	19.3	0.5	0.0	782.1	31.6	76.7	0.4	0.0	0.6	647.8	0.0	9.9	124.4	59.9	1.6	1.9	0.0	-	299.4	2,056.1
Wire-Drawn and/or Rolled	54.2	0.0	73.2	125.6	19.9	4.4	0.1	-	0.0	-	0.2	0.6	8.0	0.2	4.9	18.1	0.5	0.2	218.2	528.2
Black Plate	27.3	-	-	22.6	5.1	0.9	-	-	-	-	-	-	1.2	0.5	0.2	9.1	18.2	-	0.0	85.2
Tin Plate	9.5	-	-	20.7	0.3	5.1	-	-	-	-	-	0.0	0.7	0.3	1.0	0.2	222.2	0.1	-	260.0
Tin Free	3.9	-	-	5.6	0.2	0.9	-	-	-	-	-	-	-	0.3	0.1	0.3	115.9	-	-	127.1
Sheets																				
Hot Rolled	517.1	0.0	0.7	858.4	96.0	315.5	7.9	0.1	0.4	0.5	3.4	9.8	17.2	39.9	10.3	12.2	26.8	0.0	353.0	2,269.3
Cold Rolled	284.1	0.0	0.7	721.4	94.5	373.5	1.5	0.0	0.0	-	0.1	12.5	10.6	185.4	164.5	87.8	93.1	0.1	89.4	2,119.4
Sheets and Strip																				
Galvanized																				
Hot Dipped	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,269.7
Electrolytic	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	204.3
Galvanized Subtotal	21.1	0.6	2.0	368.1	242.6	576.3	0.9	0.0	-	0.1	-	18.4	2.7	17.6	34.0	5.1	4.6	-	179.9	1,474.0
All Other Metallic Coated	2.5	-	0.0	37.8	56.1	42.9	0.1	-	0.0	-	0.1	0.1	0.9	0.3	5.3	0.8	0.1	-	0.2	147.1
Electrical	0.9	-	-	7.8	0.0	2.1	1.9	-	0.0	0.0	-	-	1.7	99.9	-	0.0	-	-	0.4	114.9
Strip																				
Hot Rolled	29.6	4.7	9.3	8.8	9.4	29.7	0.6	-	0.0	0.6	0.4	13.1	17.3	1.1	0.1	2.1	0.6	0.0	21.6	148.8
Cold Rolled	9.0	0.0	0.7	18.2	6.4	39.3	0.0	0.0	0.2	0.2	-	0.0	8.7	3.9	7.2	2.5	40.4	0.2	29.4	166.4
Total Steel Mill Products	5,078.4	449.8	232.8	4,169.8	2,104.9	1,885.3	399.8	36.2	22.8	698.6	32.9	101.8	641.8	425.0	235.1	159.6	577.6	43.6	2,204.9	19,500.5

SOURCE: Total from American Iron and Steel Institute, *Annual Statistical Report*, 1993, Table 18. All other values calculated using percentage distributions from Appendix Table C-12.

Table C-28

Imports of Ferrous Shipments by Product and AISI-Defined Market, 1994 (thousands of net tons)

Products	Steel for Converting and Processing	Forgings (Not elsewhere classified)	Industrial Fasteners	Steel Service Centers and Distributors	Construction and Contractors' Products	Automotive	Rail Transportation	Ship Building and Marine Equipment	Aircraft and Aerospace	Oil and Gas Industry	Mining, Quarrying, and Lumbering	Agricultural	Machinery, Industrial Equipment, and Tools	Electrical Equipment	Appliances, Utensils, and Cutlery	Other Domestic and Commercial Equipment	Containers, Packaging, and Shipping Materials	Ordnance and Other Military	Nonclassified Shipments	Total
Steel Mill Products																				
Ingots, Blooms, Slabs, and Billets	5,037.6	592.7	159.6	324.6	571.9	267.2	314.9	-	32.5	49.4	0.0	1.2	396.1	-	0.1	6.1	72.0	56.0	55.1	7,937.2
Wire Rods	556.9	0.0	30.4	5.2	339.7	23.8	0.7	0.7	0.0	1.2	-	21.6	25.8	9.5	1.1	4.6	0.0	-	657.5	1,678.7
Structural Shapes (3 inches and over)	22.6	-	-	190.4	379.4	8.3	9.6	6.0	-	0.1	0.7	0.4	8.9	-	-	1.9	12.3	-	89.0	729.6
Steel Piling	-	-	-	14.4	53.8	-	-	0.0	-	-	-	-	-	-	-	-	-	-	-	68.3
Plates																				
Cut Lengths	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,479.7
Coils	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	981.2
Plates Subtotal	451.1	1.0	0.0	1,079.2	200.9	162.0	99.4	55.2	1.6	17.7	8.8	7.0	182.3	8.8	4.8	11.3	1.8	8.8	159.1	2,460.9
Rail and Track Accessories	-	-	-	14.6	3.4	-	190.4	-	-	-	2.4	-	-	-	-	-	-	-	-	210.8
Bars																				
Hot rolled	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,139.2
Shapes under 3 inches	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	127.7
Concrete Reinforcing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	328.0
Cold Finished	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	299.6
Bars Subtotal	272.8	91.2	27.6	288.2	599.2	174.2	7.2	0.7	0.4	9.6	28.1	19.5	91.3	4.1	3.0	5.4	0.1	3.7	268.2	1,894.5
Tool Steel	2.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	115.1	118.0
Pipe and Tubing																				
Standard Pipe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	828.3
Oil Country Goods	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	341.9
Line Pipe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	651.7
Mechanical Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	263.1
Pressure Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	35.8
Structural Pipe and Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	359.4
Pipe for Piling	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.7
Stainless Pipe and Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	49.0
Nonclassified Pipe and Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12.6
Pipe and Tubing Subtotal	23.9	0.6	0.0	969.4	39.2	95.1	0.5	0.0	0.7	802.9	0.0	12.3	154.1	74.2	2.0	2.4	0.1	-	371.0	2,548.3
Wire-Drawn and/or Rolled	60.8	0.0	82.2	141.0	22.3	4.9	0.1	-	0.0	-	0.2	0.7	9.0	0.2	5.5	20.3	0.6	0.2	245.0	593.0
Black Plate	52.3	-	-	43.2	9.8	1.8	-	-	-	-	-	-	2.2	0.9	0.4	17.4	34.8	-	0.1	162.9
Tin Plate	13.5	-	-	29.2	0.4	7.2	-	-	-	-	-	0.0	0.9	0.4	1.4	0.3	314.3	0.1	-	367.8
Tin Free	5.4	-	-	7.8	0.2	1.2	-	-	-	-	-	-	-	0.5	0.2	0.4	161.0	-	-	176.6
Sheets																				
Hot Rolled	1,004.0	0.0	1.4	1,666.6	186.5	612.5	15.4	0.1	0.8	1.0	6.7	19.1	33.5	77.4	20.0	23.7	51.9	0.0	685.4	4,405.9
Cold Rolled	557.4	0.0	1.3	1,415.1	185.4	732.6	3.0	0.0	0.0	-	0.2	24.5	20.8	363.6	322.8	172.2	182.7	0.2	175.4	4,157.4
Sheets and Strip																				
Galvanized																				
Hot Dipped	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,681.7
Electrolytic	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	224.4
Galvanized Subtotal	27.3	0.8	2.5	476.0	313.7	745.3	1.1	0.0	-	0.2	-	23.8	3.5	22.7	44.0	6.6	5.9	-	232.6	1,906.1
All Other Metallic Coated	3.7	-	0.0	56.4	83.6	64.1	0.1	-	0.0	-	0.2	0.1	1.4	0.4	7.8	1.2	0.1	-	0.2	219.4
Electrical	0.8	-	-	6.9	0.0	1.8	1.7	-	0.0	0.0	-	-	1.5	87.8	-	0.0	-	-	0.4	100.9
Strip																				
Hot Rolled	23.1	3.7	7.3	6.8	7.3	23.2	0.4	-	0.0	0.5	0.3	10.2	13.5	0.9	0.1	1.6	0.5	0.0	16.8	116.1
Cold Rolled	11.6	0.0	0.9	23.5	8.2	50.6	0.0	0.0	0.2	0.2	-	0.0	11.2	5.0	9.3	3.3	51.9	0.2	37.8	213.9
Total Steel Mill Products	8,127.5	690.1	313.1	6,758.5	3,005.1	2,975.8	644.7	62.8	36.3	882.7	47.7	140.3	956.2	656.5	422.2	278.7	890.0	69.3	3,108.7	30,066.3

SOURCE: Total from American Iron and Steel Institute, *Annual Statistical Report*, 1998, Table 17. All other values calculated using percentage distributions from Appendix Table C-12.

Table C-29

Imports of Ferrous Shipments by Product and AISI-Defined Market, 1995 (thousands of net tons)

Products	Steel for Converting and Processing	Forgings (Not elsewhere classified)	Industrial Fasteners	Steel Service Centers and Distributors	Construction and Contractors' Products	Automotive	Rail Transportation	Ship Building and Marine Equipment	Aircraft and Aerospace	Oil and Gas Industry	Mining, Quarrying, and Lumbering	Agricultural	Machinery, Industrial Equipment, and Tools	Electrical Equipment	Appliances, Utensils, and Cutlery	Other Domestic and Commercial Equipment	Containers, Packaging, and Shipping Materials	Ordnance and Other Military	Nonclassified Shipments	Total
Steel Mill Products																				
Ingots, Blooms, Slabs, and Billets	3,302.3	388.5	104.6	212.8	374.9	175.2	206.5	-	21.3	32.4	0.0	0.8	259.6	-	0.1	4.0	47.2	36.7	36.1	5,203.0
Wire Rods	619.8	0.0	33.8	5.8	378.0	26.5	0.8	0.8	0.0	1.4	-	24.0	28.8	10.5	1.2	5.1	0.0	-	731.7	1,868.2
Structural Shapes (3 inches and over)	20.7	-	-	174.2	347.2	7.6	8.8	5.5	-	0.1	0.7	0.3	8.1	-	-	1.8	11.2	-	81.4	667.5
Steel Piling	-	-	-	16.1	60.2	-	-	0.0	-	-	-	-	-	-	-	-	-	-	-	76.3
Plates																				
Cut Lengths	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,452.8
Coils	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	870.1
Plates Subtotal	425.8	0.9	0.0	1,018.7	189.7	152.9	93.9	52.1	1.5	16.7	8.3	6.6	172.1	8.3	4.5	10.7	1.7	8.3	150.2	2,322.9
Rail and Track Accessories	-	-	-	14.7	3.5	-	191.1	-	-	-	2.4	-	-	-	-	-	-	-	-	211.6
Bars																				
Hot rolled	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,150.6
Shapes under 3 inches	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	158.8
Concrete Reinforcing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	532.3
Cold Finished	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	283.9
Bars Subtotal	306.1	102.3	30.9	323.4	672.3	195.5	8.1	0.8	0.4	10.8	31.6	21.9	102.4	4.6	3.3	6.0	0.1	4.2	300.9	2,125.7
Tool Steel	3.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	125.1	128.2
Pipe and Tubing																				
Standard Pipe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	755.0
Oil Country Goods	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	180.4
Line Pipe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	495.2
Mechanical Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	305.6
Pressure Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	43.9
Structural Pipe and Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	441.8
Pipe for Piling	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10.6
Stainless Pipe and Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	52.9
Nonclassified Pipe and Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12.5
Pipe and Tubing Subtotal	21.6	0.6	0.0	874.1	35.3	85.7	0.4	0.0	0.6	724.0	0.0	11.1	139.0	66.9	1.8	2.2	0.0	-	334.6	2,297.9
Wire-Drawn and/or Rolled	62.2	0.0	84.1	144.3	22.8	5.0	0.1	-	0.0	-	0.2	0.7	9.2	0.2	5.6	20.7	0.6	0.2	250.6	606.7
Black Plate	46.0	-	-	38.0	8.6	1.6	-	-	-	-	-	-	2.0	0.8	0.3	15.3	30.6	-	0.1	143.3
Tin Plate	11.0	-	-	23.8	0.3	5.9	-	-	-	-	-	0.0	0.8	0.3	1.1	0.3	256.0	0.1	-	299.6
Tin Free	5.1	-	-	7.4	0.2	1.1	-	-	-	-	-	-	-	0.5	0.2	0.4	152.4	-	-	167.2
Sheets																				
Hot Rolled	730.9	0.0	1.0	1,213.2	135.7	445.9	11.2	0.1	0.6	0.7	4.9	13.9	24.4	56.4	14.5	17.3	37.8	0.0	499.0	3,207.5
Cold Rolled	416.2	0.0	1.0	1,056.6	138.5	547.0	2.3	0.0	0.0	-	0.2	18.3	15.5	271.5	241.0	128.6	136.4	0.2	131.0	3,104.1
Sheets and Strip																				
Galvanized																				
Hot Dipped	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,261.2
Electrolytic	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	213.2
Galvanized Subtotal	21.1	0.6	2.0	368.2	242.6	576.5	0.9	0.0	-	0.1	-	18.4	2.7	17.6	34.0	5.1	4.6	-	179.9	1,474.4
All Other Metallic Coated	2.2	-	0.0	33.8	50.2	38.4	0.1	-	0.0	-	0.1	0.1	0.8	0.2	4.7	0.7	0.1	-	0.1	131.6
Electrical	0.8	-	-	6.8	0.0	1.8	1.6	-	0.0	0.0	-	-	1.5	87.2	-	0.0	-	-	0.4	100.3
Strip																				
Hot Rolled	14.5	2.3	4.6	4.3	4.6	14.6	0.3	-	0.0	0.3	0.2	6.4	8.5	0.6	0.0	1.0	0.3	0.0	10.6	73.0
Cold Rolled	10.8	0.0	0.8	21.9	7.6	47.2	0.0	0.0	0.2	0.2	-	0.0	10.5	4.7	8.7	3.0	48.5	0.2	35.3	199.8
Total Steel Mill Products	6,020.1	495.4	262.8	5,558.1	2,672.3	2,328.4	526.0	59.3	24.7	786.6	48.5	122.5	786.0	530.4	321.1	222.2	727.6	49.9	2,867.0	24,408.6

SOURCE : Total from American Iron and Steel Institute, *Annual Statistical Report* , 1998, Table 17. All other values calculated using percentage distributions from Appendix Table C-12.

Table C-30

Imports of Ferrous Shipments by Product and AISI-Defined Market, 1996 (thousands of net tons)

Products	Steel for Converting and Processing	Forgings (Not elsewhere classified)	Industrial Fasteners	Steel Service Centers and Distributors	Construction and Contractors' Products	Automotive	Rail Transportation	Ship Building and Marine Equipment	Aircraft and Aerospace	Oil and Gas Industry	Mining, Quarrying, and Lumbering	Agricultural	Machinery, Industrial Equipment, and Tools	Electrical Equipment	Appliances, Utensils, and Cutlery	Other Domestic and Commercial Equipment	Containers, Packaging, and Shipping Materials	Ordnance and Other Military	Nonclassified Shipments	Total
Steel Mill Products																				
Ingots, Blooms, Slabs, and Billets	4,779.3	562.3	151.4	308.0	542.6	253.5	298.8	-	30.9	46.9	0.0	1.1	375.7	-	0.1	5.8	68.3	53.2	52.3	7,530.1
Wire Rods	647.0	0.0	35.3	6.0	394.7	27.7	0.8	0.8	0.0	1.4	-	25.0	30.0	11.0	1.3	5.4	0.0	-	763.9	1,950.5
Structural Shapes (3 inches and over)	31.8	-	-	268.3	534.7	11.7	13.5	8.4	-	0.1	1.1	0.5	12.5	-	-	2.7	17.3	-	125.4	1,028.1
Steel Piling	-	-	-	14.5	54.0	-	-	0.0	-	-	-	-	-	-	-	-	-	-	-	68.5
Plates																				
Cut Lengths	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,886.8
Coils	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,321.3
Plates Subtotal	588.1	1.3	0.0	1,406.9	262.0	211.2	129.6	72.0	2.0	23.1	11.5	9.1	237.7	11.5	6.2	14.8	2.3	11.5	207.4	3,208.1
Rail and Track Accessories	-	-	-	14.0	3.3	-	182.2	-	-	-	2.3	-	-	-	-	-	-	-	-	201.7
Bars																				
Hot rolled	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,178.2
Shapes under 3 inches	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	157.4
Concrete Reinforcing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	581.7
Cold Finished	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	260.3
Bars Subtotal	313.6	104.8	31.7	331.3	688.8	200.3	8.3	0.8	0.4	11.0	32.3	22.4	104.9	4.8	3.4	6.2	0.1	4.3	308.3	2,177.7
Tool Steel	3.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	133.6	136.9
Pipe and Tubing																				
Standard Pipe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	755.9
Oil Country Goods	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	231.5
Line Pipe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	611.1
Mechanical Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	328.1
Pressure Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	48.4
Structural Pipe and Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	385.2
Pipe for Piling	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.7
Stainless Pipe and Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	56.6
Nonclassified Pipe and Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13.4
Pipe and Tubing Subtotal	22.9	0.6	0.0	927.4	37.5	90.9	0.4	0.0	0.7	768.1	0.0	11.8	147.4	71.0	1.9	2.3	0.1	-	354.9	2,437.9
Wire-Drawn and/or Rolled	57.4	0.0	77.5	133.0	21.0	4.7	0.1	-	0.0	-	0.2	0.7	8.5	0.2	5.2	19.1	0.6	0.2	231.0	559.3
Black Plate	42.4	-	-	35.0	7.9	1.5	-	-	-	-	-	-	1.8	0.8	0.3	14.1	28.2	-	0.1	132.1
Tin Plate	10.1	-	-	21.9	0.3	5.4	-	-	-	-	-	0.0	0.7	0.3	1.0	0.2	235.3	0.1	-	275.4
Tin Free	5.1	-	-	7.5	0.2	1.1	-	-	-	-	-	-	-	0.5	0.2	0.4	154.4	-	-	169.3
Sheets																				
Hot Rolled	944.5	0.0	1.3	1,567.7	175.4	576.2	14.5	0.1	0.8	0.9	6.3	17.9	31.5	72.8	18.8	22.3	48.9	0.0	644.8	4,144.7
Cold Rolled	395.6	0.0	1.0	1,004.2	131.6	519.9	2.2	0.0	0.0	-	0.2	17.4	14.8	258.0	229.0	122.2	129.7	0.2	124.5	2,950.4
Sheets and Strip																				
Galvanized																				
Hot Dipped	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,567.1
Electrolytic	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	158.3
Galvanized Subtotal	24.7	0.7	2.3	430.9	284.0	674.6	1.0	0.0	-	0.2	-	21.6	3.2	20.6	39.8	5.9	5.4	-	210.6	1,725.4
All Other Metallic Coated	2.0	-	0.0	30.2	44.8	34.3	0.0	-	0.0	-	0.1	0.1	0.7	0.2	4.2	0.7	0.1	-	0.1	117.6
Electrical	0.8	-	-	7.4	0.0	2.0	1.8	-	0.0	0.0	-	-	1.6	94.5	-	0.0	-	-	0.4	108.6
Strip																				
Hot Rolled	12.0	1.9	3.8	3.6	3.8	12.1	0.2	-	0.0	0.2	0.1	5.3	7.0	0.5	0.0	0.9	0.2	0.0	8.8	60.4
Cold Rolled	9.8	0.0	0.7	19.9	7.0	42.9	0.0	0.0	0.2	0.2	-	0.0	9.6	4.3	7.9	2.8	44.1	0.2	32.1	181.7
Total Steel Mill Products	7,890.4	671.8	304.9	6,537.7	3,193.6	2,669.9	653.6	82.2	35.0	852.1	54.1	132.9	987.8	550.9	319.3	225.7	734.8	69.6	3,198.1	29,164.4

SOURCE: Total from American Iron and Steel Institute, *Annual Statistical Report*, 1998, Table 17. All other values calculated using percentage distributions from Appendix Table C-12.

Table C-31

Imports of Ferrous Shipments by Product and AISI-Defined Market, 1997 (thousands of net tons)

Products	Steel for Converting and Processing	Forgings (Not elsewhere classified)	Industrial Fasteners	Steel Service Centers and Distributors	Construction and Contractors' Products	Automotive	Rail Transportation	Ship Building and Marine Equipment	Aircraft and Aerospace	Oil and Gas Industry	Mining, Quarrying, and Lumbering	Agricultural	Machinery, Industrial Equipment, and Tools	Electrical Equipment	Appliances, Utensils, and Cutlery	Other Domestic and Commercial Equipment	Containers, Packaging, and Shipping Materials	Ordnance and Other Military	Nonclassified Shipments	Total
Steel Mill Products																				
Ingots, Blooms, Slabs, and Billets	4,035.6	474.8	127.8	260.1	458.2	214.1	252.3	-	26.1	39.6	0.0	0.9	317.3	-	0.1	4.9	57.7	44.9	44.1	6,358.3
Wire Rods	742.0	0.0	40.5	6.9	452.6	31.7	0.9	0.9	0.0	1.6	-	28.7	34.4	12.6	1.4	6.2	0.0	-	876.0	2,236.6
Structural Shapes (3 inches and over)	31.8	-	-	268.4	535.0	11.7	13.5	8.5	-	0.1	1.1	0.5	12.5	-	-	2.7	17.3	-	125.5	1,028.6
Steel Piling	-	-	-	23.7	88.5	-	-	0.0	-	-	-	-	-	-	-	-	-	-	-	112.2
Plates																				
Cut Lengths	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,387.9
Coils	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,550.7
Plates Subtotal	538.7	1.2	0.0	1,288.7	239.9	193.5	118.7	65.9	1.9	21.2	10.5	8.3	217.7	10.6	5.7	13.5	2.1	10.5	189.9	2,938.6
Rail and Track Accessories	-	-	-	16.5	3.9	-	215.1	-	-	-	2.7	-	-	-	-	-	-	-	-	238.2
Bars																				
Hot rolled	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,286.8
Shapes under 3 inches	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	200.3
Concrete Reinforcing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	701.3
Cold Finished	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	307.4
Bars Subtotal	359.4	120.1	36.3	379.7	789.4	229.5	9.5	0.9	0.5	12.6	37.1	25.7	120.3	5.4	3.9	7.1	0.1	4.9	353.4	2,495.8
Tool Steel	3.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	128.2	131.4
Pipe and Tubing																				
Standard Pipe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	744.4
Oil Country Goods	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	411.8
Line Pipe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	917.1
Mechanical Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	391.8
Pressure Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	38.9
Structural Pipe and Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	444.4
Pipe for Piling	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	14.1
Stainless Pipe and Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	54.0
Nonclassified Pipe and Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13.7
Pipe and Tubing Subtotal	28.4	0.8	0.0	1,152.7	46.6	113.0	0.6	0.0	0.8	954.7	0.0	14.6	183.3	88.2	2.4	2.8	0.1	-	441.2	3,030.2
Wire-Drawn and/or Rolled	67.2	0.0	90.7	155.7	24.6	5.4	0.1	-	0.0	-	0.2	0.8	9.9	0.2	6.0	22.4	0.7	0.2	270.4	654.7
Black Plate	64.0	-	-	52.9	12.0	2.2	-	-	-	-	-	-	2.7	1.1	0.5	21.3	42.6	-	0.1	199.4
Tin Plate	10.5	-	-	22.8	0.3	5.6	-	-	-	-	-	0.0	0.7	0.3	1.1	0.2	245.3	0.1	-	287.1
Tin Free	4.6	-	-	6.7	0.2	1.0	-	-	-	-	-	-	-	0.4	0.1	0.3	137.7	-	-	151.0
Sheets																				
Hot Rolled	1,162.4	0.0	1.6	1,929.5	215.9	709.2	17.9	0.1	0.9	1.1	7.7	22.1	38.8	89.7	23.1	27.4	60.1	0.0	793.5	5,101.2
Cold Rolled	494.8	0.0	1.2	1,256.2	164.6	650.3	2.7	0.0	0.0	-	0.2	21.7	18.5	322.8	286.5	152.9	162.2	0.2	155.7	3,690.6
Sheets and Strip																				
Galvanized																				
Hot Dipped	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,827.2
Electrolytic	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	198.0
Galvanized Subtotal	29.0	0.8	2.7	505.7	333.3	791.9	1.2	0.0	-	0.2	-	25.3	3.8	24.2	46.8	7.0	6.3	-	247.2	2,025.3
All Other Metallic Coated	1.9	-	0.0	29.1	43.1	33.0	0.0	-	0.0	-	0.1	0.1	0.7	0.2	4.0	0.6	0.1	-	0.1	113.1
Electrical	0.8	-	-	7.6	0.0	2.0	1.8	-	0.0	0.0	-	-	1.7	96.9	-	0.0	-	-	0.4	111.4
Strip																				
Hot Rolled	12.8	2.1	4.0	3.8	4.1	12.9	0.2	-	0.0	0.3	0.2	5.7	7.5	0.5	0.0	0.9	0.3	0.0	9.4	64.5
Cold Rolled	10.2	0.0	0.8	20.6	7.2	44.5	0.0	0.0	0.2	0.2	-	0.0	9.9	4.4	8.2	2.9	45.7	0.2	33.2	188.3
Total Steel Mill Products	7,597.4	599.9	305.6	7,387.4	3,419.4	3,051.6	634.8	76.4	30.4	1,031.6	59.8	154.5	979.7	657.5	389.9	273.2	778.2	61.0	3,668.4	31,156.6

SOURCE: Total from American Iron and Steel Institute, *Annual Statistical Report*, 1998, Table 17. All other values calculated using percentage distributions from Appendix Table C-12.

Table C-32

Imports of Ferrous Shipments by Product and AISI-Defined Market, 1998 (thousands of net tons)

Products	Steel for Converting and Processing	Forgings (Not elsewhere classified)	Industrial Fasteners	Steel Service Centers and Distributors	Construction and Contractors' Products	Automotive	Rail Transportation	Ship Building and Marine Equipment	Aircraft and Aerospace	Oil and Gas Industry	Mining, Quarrying, and Lumbering	Agricultural	Machinery, Industrial Equipment, and Tools	Electrical Equipment	Appliances, Utensils, and Cutlery	Other Domestic and Commercial Equipment	Containers, Packaging, and Shipping Materials	Ordnance and Other Military	Nonclassified Shipments	Total
Steel Mill Products																				
Ingots, Blooms, Slabs, and Billets	4,619.1	388.9	-	226.2	429.2	369.9	310.6	-	5.8	22.7	-	20.5	244.8	-	0.1	0.4	70.3	16.8	50.4	6,775.8
Wire Rods	515.4	-	31.9	18.7	518.3	131.1	0.9	0.9	0.0	1.4	-	38.5	25.3	10.2	1.4	17.2	-	-	1,054.9	2,366.2
Structural Shapes (3 inches and over)	139.2	-	-	1,591.7	666.2	91.3	3.2	0.4	-	-	-	0.9	9.0	-	-	7.4	-	-	266.7	2,776.0
Steel Piling	-	-	-	218.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	218.2
Plates																				
Cut Lengths	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2,124.7
Coils	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3,051.3
Plates Subtotal	1,046.7	-	-	2,418.1	388.5	254.7	249.8	150.4	0.5	191.5	14.9	39.3	335.2	18.0	1.3	17.9	47.5	1.7	-	5,176.0
Rail and Track Accessories	-	-	-	-	3.2	-	322.0	-	-	-	1.4	-	-	-	-	-	-	-	10.8	337.3
Bars																				
Hot rolled	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,557.4
Shapes under 3 inches	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	310.4
Concrete Reinforcing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,229.2
Cold Finished	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	347.9
Bars Subtotal	485.7	173.7	48.2	521.4	1,177.0	272.9	21.5	3.7	0.3	18.7	19.4	44.3	96.4	5.2	5.3	5.8	0.1	3.6	542.0	3,444.9
Tool Steel	1.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	158.9	160.5
Pipe and Tubing																				
Standard Pipe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	914.2
Oil Country Goods	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	343.2
Line Pipe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,258.8
Mechanical Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	487.9
Pressure Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	67.3
Structural Pipe and Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	500.5
Pipe for Piling	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22.8
Stainless Pipe and Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	70.5
Nonclassified Pipe and Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15.7
Pipe and Tubing Subtotal	181.5	1.2	0.6	1,079.8	88.9	134.1	1.0	0.0	0.5	1,395.7	0.0	17.0	221.8	98.1	1.2	0.5	-	0.2	458.7	3,680.9
Wire-Drawn and/or Rolled	53.4	0.1	5.3	66.8	3.8	72.9	0.0	-	-	0.0	-	0.9	7.6	0.1	-	0.1	-	0.3	486.3	697.4
Black Plate	70.8	-	-	50.2	20.0	1.5	-	-	-	0.0	-	-	0.3	0.0	1.1	1.9	29.9	-	0.0	175.7
Tin Plate	1.1	-	-	24.2	0.3	8.0	1.1	-	-	0.0	-	0.0	1.9	0.7	0.6	0.4	282.3	-	0.1	320.6
Tin Free	0.3	-	-	6.4	0.1	0.2	-	-	-	0.0	-	-	0.3	1.9	0.0	0.1	151.8	-	-	161.0
Sheets																				
Hot Rolled	1,726.6	-	0.1	2,700.9	416.1	1,374.4	48.9	1.2	0.5	126.2	45.6	70.5	152.9	47.1	63.2	146.4	82.5	-	1,543.8	8,546.8
Cold Rolled	723.8	-	0.0	1,440.5	146.5	645.7	0.0	0.0	0.0	10.4	1.2	15.6	25.8	350.2	290.1	166.0	120.4	0.0	155.1	4,091.5
Sheets and Strip																				
Galvanized																				
Hot Dipped	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,852.0
Electrolytic	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	180.4
Galvanized Subtotal	34.6	-	1.6	532.6	371.8	848.9	1.1	-	-	0.1	0.0	21.1	2.9	18.2	51.0	9.1	4.8	-	134.5	2,032.4
All Other Metallic Coated	3.4	-	-	25.3	70.2	27.6	-	-	-	-	-	0.3	0.2	3.2	4.8	0.6	-	-	0.0	135.5
Electrical	0.0	-	-	7.6	-	1.0	0.5	-	0.0	-	-	-	0.3	115.4	-	0.0	-	-	-	124.7
Strip																				
Hot Rolled	26.6	14.0	4.5	15.4	3.9	17.2	0.1	-	-	0.0	0.0	3.3	7.6	-	0.1	0.0	0.3	-	2.4	95.4
Cold Rolled	5.8	-	0.1	10.0	2.4	34.9	0.1	0.0	0.1	0.3	0.0	-	4.8	0.6	4.6	1.1	19.0	0.0	118.9	202.8
Total Steel Mill Products	9,635.5	577.9	92.2	10,953.9	4,306.4	4,286.1	960.6	156.6	7.8	1,767.0	82.5	272.1	1,137.0	669.0	424.8	374.9	809.0	22.5	4,983.7	41,519.7

SOURCE: Total from American Iron and Steel Institute, *Annual Statistical Report*, 1998, Table 17. All other values calculated using percentage distributions from Appendix Table C-13.

Table C-33

Imports of Ferrous Shipments by Product and AISI-Defined Market, 1999 (thousands of net tons)

Products	Steel for Converting and Processing	Forgings (Not elsewhere classified)	Industrial Fasteners	Steel Service Centers and Distributors	Construction and Contractors' Products	Automotive	Rail Transpor-tation	Ship Building and Marine Equipment	Aircraft and Aero-space	Oil and Gas Industry	Mining, Quarrying, and Lumbering	Agricultural	Machinery, Industrial Equipment, and Tools	Electrical Equipment	Appliances, Utensils, and Cutlery	Other Domestic and Commercial Equipment	Containers, Packaging, and Shipping Materials	Ordnance and Other Military	Non-classified Shipments	Total
Steel Mill Products																				
Ingots, Blooms, Slabs, and Billets	5,848.8	492.5	-	286.4	543.5	468.4	393.3	-	7.3	28.8	-	25.9	310.0	-	0.1	0.6	89.0	21.3	63.9	8,579.7
Wire Rods	602.2	-	37.3	21.8	605.7	153.2	1.1	1.1	0.0	1.7	-	45.0	29.6	11.9	1.6	20.1	-	-	1,232.7	2,765.0
Structural Shapes (3 inches and over)	71.2	-	-	814.1	340.8	46.7	1.6	0.2	-	-	-	0.5	4.6	-	-	3.8	-	-	136.4	1,419.8
Steel Piling	-	-	-	129.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	129.8
Plates																				
Cut Lengths	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	914.3
Coils	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,582.3
Plates Subtotal	504.9	-	-	1,166.3	187.4	122.8	120.5	72.6	0.3	92.3	7.2	18.9	161.7	8.7	0.6	8.6	22.9	0.8	-	2,496.6
Rail and Track Accessories	-	-	-	-	2.7	-	271.5	-	-	-	1.1	-	-	-	-	-	-	-	9.1	284.4
Bars																				
Hot rolled	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,499.0
Shapes under 3 inches	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	292.3
Concrete Reinforcing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,832.6
Cold Finished	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	305.7
Bars Subtotal	554.0	198.1	55.0	594.7	1,342.6	311.3	24.5	4.2	0.4	21.3	22.1	50.5	110.0	5.9	6.0	6.6	0.1	4.1	618.2	3,929.6
Tool Steel	1.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	162.3	163.9
Pipe and Tubing																				
Standard Pipe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	856.7
Oil Country Goods	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	170.2
Line Pipe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	928.8
Mechanical Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	439.6
Pressure Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	51.3
Structural Pipe and Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	475.2
Pipe for Piling	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	21.2
Stainless Pipe and Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	83.3
Nonclassified Pipe and Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	27.2
Pipe and Tubing Subtotal	150.5	1.0	0.5	895.7	73.8	111.2	0.8	0.0	0.4	1,157.7	0.0	14.1	184.0	81.4	1.0	0.4	-	0.1	380.5	3,053.3
Wire-Drawn and/or Rolled	56.5	0.1	5.6	70.7	4.0	77.2	0.0	-	-	0.0	-	0.9	8.0	0.1	-	0.1	-	0.3	515.0	738.5
Black Plate	67.1	-	-	47.6	18.9	1.5	-	-	-	0.0	-	-	0.3	0.0	1.0	1.8	28.3	-	0.0	166.5
Tin Plate	1.6	-	-	37.2	0.5	12.3	1.7	-	-	0.0	-	0.0	2.8	1.0	1.0	0.6	434.2	-	0.2	493.1
Tin Free	0.4	-	-	8.2	0.1	0.3	-	-	-	0.0	-	-	0.4	2.4	0.0	0.1	193.7	-	-	205.5
Sheets																				
Hot Rolled	1,002.7	-	0.0	1,568.6	241.7	798.2	28.4	0.7	0.3	73.3	26.5	40.9	88.8	27.3	36.7	85.0	47.9	-	896.6	4,963.6
Cold Rolled	604.5	-	0.0	1,203.1	122.3	539.3	0.0	0.0	0.0	8.7	1.0	13.0	21.5	292.5	242.3	138.6	100.6	0.0	129.6	3,417.1
Sheets and Strip																				
Galvanized																				
Hot Dipped	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2,110.6
Electrolytic	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	188.7
Galvanized Subtotal	39.2	-	1.8	602.6	420.6	960.3	1.2	-	-	0.1	0.0	23.9	3.3	20.6	57.7	10.3	5.4	-	152.2	2,299.3
All Other Metallic Coated	5.8	-	-	42.9	119.1	46.8	-	-	-	-	-	0.5	0.4	5.4	8.2	0.9	-	-	0.1	230.0
Electrical	0.0	-	-	7.0	-	0.9	0.5	-	0.0	-	-	-	0.3	106.4	-	0.0	-	-	-	115.0
Strip																				
Hot Rolled	22.5	11.8	3.8	13.0	3.3	14.6	0.1	-	-	0.0	0.0	2.8	6.5	-	0.1	0.0	0.3	-	2.1	80.8
Cold Rolled	5.7	-	0.1	9.8	2.4	34.3	0.1	0.0	0.1	0.3	0.0	-	4.7	0.6	4.5	1.1	18.7	0.0	116.7	199.0
Total Steel Mill Products	9,539.4	703.5	104.1	7,519.6	4,029.2	3,699.1	845.2	78.7	8.8	1,384.3	58.0	237.0	936.7	564.4	360.9	278.7	941.1	26.6	4,415.3	35,730.5

SOURCE: Total from American Iron and Steel Institute, *Annual Statistical Report*, 2003, Table 17. All other values calculated using percentage distributions from Appendix Table C-13.

Table C-34

Imports of Ferrous Shipments by Product and AISI-Defined Market, 2000 (thousands of net tons)

Products	Steel for Converting and Processing	Forgings (Not elsewhere classified)	Industrial Fasteners	Steel Service Centers and Distributors	Construction and Contractors' Products	Automotive	Rail Transportation	Ship Building and Marine Equipment	Aircraft and Aerospace	Oil and Gas Industry	Mining, Quarrying, and Lumbering	Agricultural	Machinery, Industrial Equipment, and Tools	Electrical Equipment	Appliances, Utensils, and Cutlery	Other Domestic and Commercial Equipment	Containers, Packaging, and Shipping Materials	Ordnance and Other Military	Nonclassified Shipments	Total
Steel Mill Products																				
Ingots, Blooms, Slabs, and Billets	5,832.6	491.1	-	285.6	542.0	467.1	392.2	-	7.3	28.7	-	25.9	309.1	-	0.1	0.6	88.8	21.2	63.7	8,555.9
Wire Rods	647.2	-	40.1	23.5	650.9	164.7	1.2	1.2	0.0	1.8	-	48.3	31.8	12.8	1.7	21.6	-	-	1,324.8	2,971.5
Structural Shapes (3 inches and over)	97.3	-	-	1,113.4	466.0	63.9	2.2	0.3	-	-	-	0.6	6.3	-	-	5.2	-	-	186.5	1,941.8
Steel Piling	-	-	-	200.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	200.7
Plates																				
Cut Lengths	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	988.8
Coils	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,555.5
Plates Subtotal	514.5	-	-	1,188.7	191.0	125.2	122.8	73.9	0.3	94.1	7.3	19.3	164.8	8.9	0.6	8.8	23.4	0.8	-	2,544.4
Rail and Track Accessories	-	-	-	-	2.6	-	262.4	-	-	-	1.1	-	-	-	-	-	-	-	8.8	274.9
Bars																				
Hot rolled	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,746.0
Shapes under 3 inches	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	351.7
Concrete Reinforcing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,669.8
Cold Finished	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	411.0
Bars Subtotal	589.1	210.7	58.5	632.4	1,427.6	331.0	26.0	4.5	0.4	22.6	23.5	53.7	117.0	6.3	6.4	7.0	0.1	4.4	657.4	4,178.5
Tool Steel	1.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	177.3	179.1
Pipe and Tubing																				
Standard Pipe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,273.0
Oil Country Goods	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	720.3
Line Pipe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	891.5
Mechanical Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	562.2
Pressure Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	56.6
Structural Pipe and Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	525.1
Pipe for Piling	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	37.7
Stainless Pipe and Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	96.7
Nonclassified Pipe and Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	27.5
Pipe and Tubing Subtotal	206.6	1.4	0.7	1,229.4	101.2	152.7	1.1	0.0	0.6	1,589.0	0.0	19.4	252.5	111.7	1.4	0.6	-	0.2	522.2	4,190.7
Wire-Drawn and/or Rolled	56.4	0.1	5.6	70.6	4.0	77.0	0.0	-	-	0.0	-	0.9	8.0	0.1	-	0.1	-	0.3	514.1	737.2
Black Plate	58.3	-	-	41.4	16.4	1.3	-	-	-	0.0	-	-	0.2	0.0	0.9	1.5	24.6	-	0.0	144.8
Tin Plate	1.3	-	-	29.8	0.4	9.8	1.3	-	-	0.0	-	0.0	2.3	0.8	0.8	0.5	348.3	-	0.2	395.5
Tin Free	0.3	-	-	7.3	0.1	0.2	-	-	-	0.0	-	-	0.3	2.2	0.0	0.1	174.1	-	-	184.7
Sheets																				
Hot Rolled	1,194.1	-	0.1	1,867.9	287.8	950.5	33.8	0.8	0.4	87.3	31.5	48.7	105.7	32.6	43.7	101.3	57.0	-	1,067.7	5,910.7
Cold Rolled	512.6	-	0.0	1,020.1	103.7	457.2	0.0	0.0	0.0	7.4	0.8	11.0	18.2	248.0	205.5	117.5	85.3	0.0	109.8	2,897.3
Sheets and Strip																				
Galvanized																				
Hot Dipped	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,757.9
Electrolytic	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	259.8
Galvanized Subtotal	34.4	-	1.6	528.8	369.1	842.7	1.0	-	-	0.1	0.0	21.0	2.9	18.1	50.7	9.0	4.8	-	133.5	2,017.7
All Other Metallic Coated	6.6	-	-	48.8	135.5	53.2	-	-	-	-	-	0.5	0.4	6.1	9.3	1.1	-	-	0.1	261.7
Electrical	0.0	-	-	7.4	-	0.9	0.5	-	0.0	-	-	-	0.3	113.5	-	0.0	-	-	-	122.6
Strip																				
Hot Rolled	18.1	9.5	3.1	10.5	2.7	11.7	0.1	-	-	0.0	0.0	2.2	5.2	-	0.0	0.0	0.2	-	1.7	65.1
Cold Rolled	5.2	-	0.1	9.0	2.2	31.3	0.1	0.0	0.1	0.3	0.0	-	4.3	0.6	4.1	1.0	17.1	0.0	106.6	182.0
Total Steel Mill Products	9,776.5	712.8	109.6	8,315.3	4,303.2	3,740.5	844.8	80.7	9.0	1,831.3	64.4	251.7	1,029.4	561.6	325.3	275.8	823.7	26.9	4,874.4	37,956.7

SOURCE: Total from American Iron and Steel Institute, *Annual Statistical Report*, 2003, Table 17. All other values calculated using percentage distributions from Appendix Table C-13.

Table C-35

Imports of Ferrous Shipments by Product and AISI-Defined Market, 2001 (thousands of net tons)

Products	Steel for Converting and Processing	Forgings (Not elsewhere classified)	Industrial Fasteners	Steel Service Centers and Distributors	Construction and Contractors' Products	Automotive	Rail Transportation	Ship Building and Marine Equipment	Aircraft and Aerospace	Oil and Gas Industry	Mining, Quarrying, and Lumbering	Agricultural	Machinery, Industrial Equipment, and Tools	Electrical Equipment	Appliances, Utensils, and Cutlery	Other Domestic and Commercial Equipment	Containers, Packaging, and Shipping Materials	Ordnance and Other Military	Nonclassified Shipments	Total
Steel Mill Products																				
Ingots, Blooms, Slabs, and Billets	4,390.2	369.6	-	215.0	408.0	351.6	295.2	-	5.5	21.6	-	19.5	232.7	-	0.1	0.4	66.8	16.0	47.9	6,440.0
Wire Rods	656.2	-	40.6	23.8	660.0	167.0	1.2	1.2	0.0	1.8	-	49.0	32.2	13.0	1.8	21.9	-	-	1,343.3	3,013.0
Structural Shapes (3 inches and over)	49.4	-	-	564.9	236.5	32.4	1.1	0.2	-	-	-	0.3	3.2	-	-	2.6	-	-	94.6	985.3
Steel Piling	-	-	-	159.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	159.0
Plates																				
Cut Lengths	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	941.6
Coils	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	715.5
Plates Subtotal	335.1	-	-	774.1	124.4	81.5	80.0	48.2	0.2	61.3	4.8	12.6	107.3	5.8	0.4	5.7	15.2	0.5	-	1,657.1
Rail and Track Accessories	-	-	-	-	2.2	-	226.6	-	-	-	1.0	-	-	-	-	-	-	-	7.6	237.4
Bars																				
Hot rolled	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,464.4
Shapes under 3 inches	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	178.5
Concrete Reinforcing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,758.2
Cold Finished	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	347.4
Bars Subtotal	528.5	189.0	52.4	567.3	1,280.8	297.0	23.3	4.0	0.3	20.3	21.1	48.2	104.9	5.6	5.7	6.3	0.1	3.9	589.7	3,748.6
Tool Steel	1.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	154.5	156.1
Pipe and Tubing																				
Standard Pipe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,147.9
Oil Country Goods	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	912.8
Line Pipe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,348.7
Mechanical Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	497.6
Pressure Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	79.5
Structural Pipe and Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	449.7
Pipe for Piling	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	21.0
Stainless Pipe and Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	92.9
Nonclassified Pipe and Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	27.3
Pipe and Tubing Subtotal	225.7	1.5	0.7	1,342.8	110.6	166.7	1.3	0.0	0.6	1,735.6	0.1	21.2	275.9	122.0	1.5	0.6	-	0.2	570.4	4,577.4
Wire-Drawn and/or Rolled	52.6	0.1	5.2	65.8	3.7	71.8	0.0	-	-	0.0	-	0.9	7.5	0.1	-	0.1	-	0.3	478.9	686.8
Black Plate	59.5	-	-	42.2	16.8	1.3	-	-	-	0.0	-	-	0.2	0.0	0.9	1.6	25.1	-	0.0	147.6
Tin Plate	1.3	-	-	28.5	0.4	9.4	1.3	-	-	0.0	-	0.0	2.2	0.8	0.7	0.5	332.9	-	0.2	378.1
Tin Free	0.3	-	-	6.5	0.1	0.2	-	-	-	0.0	-	-	0.3	1.9	0.0	0.1	152.9	-	-	162.2
Sheets																				
Hot Rolled	486.9	-	0.0	761.6	117.3	387.5	13.8	0.3	0.1	35.6	12.9	19.9	43.1	13.3	17.8	41.3	23.3	-	435.3	2,410.0
Cold Rolled	543.4	-	0.0	1,081.5	110.0	484.7	0.0	0.0	0.0	7.8	0.9	11.7	19.3	262.9	217.8	124.6	90.4	0.0	116.5	3,071.6
Sheets and Strip																				
Galvanized																				
Hot Dipped	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,474.8
Electrolytic	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	175.7
Galvanized Subtotal	28.1	-	1.3	432.6	301.9	689.4	0.9	-	-	0.1	0.0	17.2	2.4	14.8	41.4	7.4	3.9	-	109.2	1,650.6
All Other Metallic Coated	6.7	-	-	49.4	137.3	53.9	-	-	-	-	-	0.5	0.4	6.2	9.5	1.1	-	-	0.1	265.1
Electrical	0.0	-	-	6.6	-	0.8	0.4	-	0.0	-	-	-	0.2	101.1	-	0.0	-	-	-	109.3
Strip																				
Hot Rolled	16.8	8.8	2.8	9.7	2.5	10.9	0.0	-	-	0.0	0.0	2.1	4.8	-	0.0	0.0	0.2	-	1.5	60.2
Cold Rolled	4.7	-	0.1	8.1	2.0	28.4	0.1	0.0	0.1	0.2	0.0	-	3.9	0.5	3.7	0.9	15.5	0.0	96.6	164.7
Total Steel Mill Products	7,386.8	569.0	103.2	6,139.5	3,514.2	2,834.5	645.2	53.8	6.9	1,884.4	40.7	202.9	840.6	548.1	301.5	215.1	726.3	20.9	4,046.5	30,080.0

SOURCE: Total from American Iron and Steel Institute, *Annual Statistical Report*, 2003, Table 17. All other values calculated using percentage distributions from Appendix Table C-13.

Table C-36

Imports of Ferrous Shipments by Product and AISI-Defined Market, 2002 (thousands of net tons)

Products	Steel for Converting and Processing	Forgings (Not elsewhere classified)	Industrial Fasteners	Steel Service Centers and Distributors	Construction and Contractors' Products	Automotive	Rail Transportation	Ship Building and Marine Equipment	Aircraft and Aerospace	Oil and Gas Industry	Mining, Quarrying, and Lumbering	Agricultural	Machinery, Industrial Equipment, and Tools	Electrical Equipment	Appliances, Utensils, and Cutlery	Other Domestic and Commercial Equipment	Containers, Packaging, and Shipping Materials	Ordnance and Other Military	Nonclassified Shipments	Total
Steel Mill Products																				
Ingots, Blooms, Slabs, and Billets	6,028.8	507.6	-	295.3	560.2	482.8	405.4	-	7.5	29.7	-	26.7	319.5	-	0.1	0.6	91.8	21.9	65.8	8,843.7
Wire Rods	760.2	-	47.1	27.6	764.6	193.4	1.4	1.4	0.0	2.1	-	56.7	37.3	15.1	2.1	25.4	-	-	1,556.1	3,490.4
Structural Shapes (3 inches and over)	36.3	-	-	415.0	173.7	23.8	0.8	0.1	-	-	-	0.2	2.3	-	-	1.9	-	-	69.5	723.8
Steel Piling	-	-	-	159.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	159.3
Plates																				
Cut Lengths	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	843.0
Coils	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	974.1
Plates Subtotal	367.5	-	-	848.9	136.4	89.4	87.7	52.8	0.2	67.2	5.2	13.8	117.7	6.3	0.4	6.3	16.7	0.6	-	1,817.1
Rail and Track Accessories	-	-	-	-	2.3	-	229.7	-	-	-	1.0	-	-	-	-	-	-	-	7.7	240.6
Bars																				
Hot rolled	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,615.8
Shapes under 3 inches	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	188.0
Concrete Reinforcing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,276.2
Cold Finished	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	289.7
Bars Subtotal	475.1	169.9	47.1	510.0	1,151.3	266.9	21.0	3.6	0.3	18.3	19.0	43.3	94.3	5.1	5.1	5.6	0.1	3.5	530.1	3,369.7
Tool Steel	1.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	154.0	155.5
Pipe and Tubing																				
Standard Pipe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,090.4
Oil Country Goods	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	489.5
Line Pipe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,133.4
Mechanical Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	538.3
Pressure Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	104.1
Structural Pipe and Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	387.2
Pipe for Piling	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15.2
Stainless Pipe and Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	83.3
Nonclassified Pipe and Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22.9
Pipe and Tubing Subtotal	190.5	1.3	0.6	1,133.6	93.3	140.8	1.1	0.0	0.5	1,465.2	0.0	17.9	232.9	103.0	1.3	0.5	-	0.2	481.6	3,864.2
Wire-Drawn and/or Rolled	58.8	0.1	5.8	73.6	4.2	80.3	0.0	-	-	0.0	-	1.0	8.3	0.1	-	0.1	-	0.3	535.8	768.3
Black Plate	39.8	-	-	28.3	11.2	0.9	-	-	-	0.0	-	-	0.2	0.0	0.6	1.1	16.8	-	0.0	98.9
Tin Plate	0.9	-	-	21.1	0.3	7.0	1.0	-	-	0.0	-	0.0	1.6	0.6	0.5	0.4	246.3	-	0.1	279.8
Tin Free	0.2	-	-	4.6	0.0	0.1	-	-	-	0.0	-	-	0.2	1.4	0.0	0.1	109.0	-	-	115.6
Sheets																				
Hot Rolled	784.9	-	0.0	1,227.9	189.2	624.8	22.2	0.5	0.2	57.4	20.7	32.0	69.5	21.4	28.7	66.6	37.5	-	701.8	3,885.5
Cold Rolled	338.1	-	0.0	673.0	68.4	301.6	0.0	0.0	0.0	4.9	0.6	7.3	12.0	163.6	135.5	77.5	56.3	0.0	72.5	1,911.3
Sheets and Strip																				
Galvanized																				
Hot Dipped	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2,116.4
Electrolytic	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	183.4
Galvanized Subtotal	39.2	-	1.8	602.7	420.7	960.5	1.2	-	-	0.1	0.0	23.9	3.3	20.7	57.7	10.3	5.4	-	152.2	2,299.8
All Other Metallic Coated	8.3	-	-	61.6	171.0	67.2	-	-	-	-	-	0.7	0.6	7.7	11.8	1.3	-	-	0.1	330.1
Electrical	0.0	-	-	4.3	-	0.5	0.3	-	0.0	-	-	-	0.2	65.6	-	0.0	-	-	-	70.9
Strip																				
Hot Rolled	27.5	14.4	4.6	15.9	4.0	17.8	0.1	-	-	0.0	0.0	3.4	7.9	-	0.1	0.0	0.4	-	2.5	98.6
Cold Rolled	4.7	-	0.1	8.0	1.9	28.0	0.1	0.0	0.1	0.2	0.0	-	3.8	0.5	3.7	0.9	15.3	0.0	95.4	162.8
Total Steel Mill Products	9,162.3	693.3	107.2	6,110.5	3,752.8	3,285.9	771.8	58.4	8.9	1,645.1	46.5	227.0	911.7	411.0	247.8	198.6	595.5	26.5	4,425.3	32,686.0

SOURCE: Total from American Iron and Steel Institute, *Annual Statistical Report*, 2003, Table 17. All other values calculated using percentage distributions from Appendix Table C-13.

Table C-37

Imports of Ferrous Shipments by Product and AISI-Defined Market, 2003 (thousands of net tons)

Products	Steel for Converting and Processing	Forgings (Not elsewhere classified)	Industrial Fasteners	Steel Service Centers and Distributors	Construction and Contractors' Products	Automotive	Rail Transportatio n	Ship Building and Marine Equipment	Aircraft and Aerospace	Oil and Gas Industry	Mining, Quarrying, and Lumbering	Agricultural	Machinery, Industrial Equipment, and Tools	Electrical Equipment	Appliances, Utensils, and Cutlery	Other Domestic and Commercial Equipment	Containers, Packaging, and Shipping Materials	Ordnance and Other Military	Nonclassified Shipments	Total
Steel Mill Products																				
Ingots, Blooms, Slabs, and Billets	4,159.4	343.1	0.1	56.1	35.2	1.7	48.3	-	12.7	1.0	-	-	146.7	-	-	0.1	12.0	-	-	4,816.3
Wire Rods	816.2	-	0.6	4.9	568.1	0.1	-	-	-	-	-	-	1.7	-	-	118.2	-	-	656.6	2,166.3
Structural Shapes (3 inches and over)	-	-	-	44.6	328.0	6.5	1.7	-	-	-	-	-	5.2	-	-	-	-	-	160.9	547.0
Steel Piling	-	-	-	-	16.8	-	-	-	-	-	-	-	-	-	-	-	-	-	83.7	100.5
Plates																				
Cut Lengths	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	566.2
Coils	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	554.1
Plates Subtotal	180.7	0.0	-	639.1	93.2	31.8	26.8	18.3	0.1	31.7	2.4	2.4	36.1	2.3	0.1	0.4	0.4	1.1	53.4	1,120.3
Rail and Track Accessories	-	-	-	16.7	0.9	-	150.0	-	-	-	-	-	-	-	-	-	-	-	3.0	170.5
Bars																				
Hot rolled	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,536.5
Shapes under 3 inches	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	197.9
Concrete Reinforcing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,019.0
Cold Finished	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	271.7
Bars Subtotal	154.9	75.6	9.0	207.5	1,561.8	288.7	3.4	5.8	0.5	20.4	26.7	25.5	73.8	2.2	1.8	4.8	2.7	11.3	548.9	3,025.2
Tool Steel	22.6	-	-	52.4	-	-	-	-	-	-	-	-	3.0	-	-	-	-	0.7	100.5	179.2
Pipe and Tubing																				
Standard Pipe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	986.4
Oil Country Goods	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	758.5
Line Pipe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	946.5
Mechanical Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	534.2
Pressure Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	71.0
Structural Pipe and Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	403.7
Pipe for Piling	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11.0
Stainless Pipe and Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	95.2
Nonclassified Pipe and Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	19.4
Pipe and Tubing Subtotal	73.8	0.0	0.1	1,048.2	54.0	137.8	0.0	-	0.1	1,452.0	1.3	14.4	140.8	21.9	-	0.2	0.0	0.2	881.1	3,826.0
Wire-Drawn and/or Rolled	47.8	0.0	0.4	2.1	0.0	0.0	-	-	-	-	-	-	0.3	0.0	-	0.0	-	-	705.9	756.6
Black Plate	12.3	-	-	21.2	5.0	0.0	-	-	-	-	-	-	-	-	0.0	0.0	8.2	-	0.0	46.8
Tin Plate	0.1	-	-	34.1	0.0	3.3	-	-	-	-	-	-	-	0.1	0.8	-	237.0	-	35.4	310.9
Tin Free	0.1	-	-	3.4	0.0	0.0	-	-	-	-	-	-	-	-	-	0.0	76.8	-	1.8	82.1
Sheets																				
Hot Rolled	451.4	-	0.0	1,039.7	379.3	375.8	2.4	0.0	0.0	5.4	5.5	3.1	7.4	2.5	13.3	9.9	19.0	0.0	-	2,314.7
Cold Rolled	168.0	-	0.0	513.1	45.6	250.9	1.2	0.0	0.0	0.8	0.1	2.6	5.6	60.0	134.9	23.8	32.7	0.0	85.4	1,325.1
Sheets and Strip																				
Galvanized																				
Hot Dipped	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,564.8
Electrolytic	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	121.2
Galvanized Subtotal	16.8	-	0.1	391.3	352.4	681.6	0.3	-	-	0.0	-	9.5	1.5	9.5	38.9	1.9	1.3	-	180.9	1,686.0
All Other Metallic Coated	2.7	-	0.1	63.4	185.0	32.2	-	-	-	-	-	0.3	0.0	1.8	6.5	0.4	0.2	-	18.3	310.9
Electrical	0.3	-	-	4.1	0.9	0.6	0.6	-	-	-	-	-	-	73.5	-	-	-	-	0.4	80.5
Strip																				
Hot Rolled	17.2	-	-	8.4	2.0	34.3	-	-	-	0.6	-	-	0.0	-	-	-	-	-	36.1	98.6
Cold Rolled	5.6	-	0.1	5.6	2.5	24.3	0.1	0.0	0.2	0.0	0.0	0.0	1.5	0.5	2.1	0.7	0.1	0.1	118.6	162.0
Total Steel Mill Products	6,130.1	418.7	10.5	4,155.8	3,630.8	1,869.5	234.6	24.1	13.6	1,511.9	36.1	57.7	424.0	174.3	198.4	160.4	390.4	13.4	3,671.0	23,125.3

SOURCE: Total from American Iron and Steel Institute, *Annual Statistical Report*, 2003, Table 17. All other values calculated using percentage distributions from Appendix Table C-14.

Table C-38

Imports of Ferrous Shipments by Product and AISI-Defined Market, 2004 (thousands of net tons)

Products	Steel for Converting and Processing	Forgings (Not elsewhere classified)	Industrial Fasteners	Steel Service Centers and Distributors	Construction and Contractors' Products	Automotive	Rail Transportatio n	Ship Building and Marine Equipment	Aircraft and Aerospace	Oil and Gas Industry	Mining, Quarrying, and Lumbering	Agricultural	Machinery, Industrial Equipment, and Tools	Electrical Equipment	Appliances, Utensils, and Cutlery	Other Domestic and Commercial Equipment	Containers, Packaging, and Shipping Materials	Ordnance and Other Military	Nonclassified Shipments	Total
Steel Mill Products																				
Ingots, blooms, billets, slabs, etc.	6,407.4	528.5	0.1	86.3	54.2	2.6	74.3	-	19.5	1.5	-	-	226.0	-	-	0.2	18.5	-	-	7,419.3
Wire Rods	1,422.0	-	1.1	8.5	989.7	0.1	-	-	-	-	-	-	3.0	-	-	205.9	-	-	1,143.9	3,774.2
Structural shapes and pilings	-	-	-	55.6	418.0	8.1	2.1	-	-	-	-	-	6.5	-	-	-	-	-	245.6	735.9
Plates	333.0	0.0	-	1,177.6	171.7	58.6	49.3	33.7	0.1	58.4	4.5	4.4	66.6	4.2	0.2	0.7	0.7	2.0	98.5	2,064.1
Rail and accessories	-	-	-	24.0	1.3	-	215.4	-	-	-	-	-	-	-	-	-	-	-	4.3	245.0
Bars and tool steel	227.0	110.3	13.1	304.8	2,279.6	421.4	5.0	8.5	0.8	29.7	39.0	37.2	107.8	3.2	2.6	7.0	3.9	16.5	804.8	4,422.1
Pipe and Tubing	94.7	0.0	0.1	1,344.4	69.3	176.7	0.0	-	0.2	1,862.4	1.6	18.4	180.6	28.1	-	0.2	0.0	0.3	1,130.1	4,907.2
Wire Drawn	59.7	0.0	0.5	2.7	0.0	0.0	-	-	-	-	-	-	0.4	0.0	-	0.0	-	-	882.2	945.4
Tin mill products	13.9	-	-	75.8	5.6	7.3	-	-	-	-	-	-	-	0.2	3.0	0.0	386.5	-	44.1	536.5
Sheets and Strip	1,190.8	-	0.6	3,721.7	1,678.2	2,572.8	7.7	0.0	0.3	11.5	10.1	29.4	30.1	195.9	373.8	69.9	100.9	0.1	764.7	10,758.6
Total Steel Mill Products	9,748.4	638.9	15.5	6,801.4	5,667.5	3,247.6	353.9	42.2	20.9	1,963.5	55.3	89.4	621.2	231.4	379.7	283.8	510.6	18.9	5,118.1	35,808.2

SOURCE: Total from American Iron and Steel Institute, *Annual Statistical Report*, 2009, Table 18. All other values calculated using percentage distributions from Appendix Table C-15.

Table C-39

Imports of Ferrous Shipments by Product and AISI-Defined Market, 2005 (thousands of net tons)

Products	Steel for Converting and Processing	Forgings (Not elsewhere classified)	Industrial Fasteners	Steel Service Centers and Distributors	Construction and Contractors' Products	Automotive	Rail Transportation	Ship Building and Marine Equipment	Aircraft and Aerospace	Oil and Gas Industry	Mining, Quarrying, and Lumbering	Agricultural	Machinery, Industrial Equipment, and Tools	Electrical Equipment	Appliances, Utensils, and Cutlery	Other Domestic and Commercial Equipment	Containers, Packaging, and Shipping Materials	Ordnance and Other Military	Nonclassified Shipments	Total
Steel Mill Products																				
Ingots, Blooms, Slabs, and Billets	5,973.1	492.7	0.1	80.5	50.6	2.5	69.3	-	18.2	1.4	-	-	210.7	-	-	0.1	17.2	-	-	6,916.5
Wire Rods	944.3	-	0.7	5.6	657.3	0.1	-	-	-	-	-	-	2.0	-	-	136.7	-	-	759.6	2,506.4
Structural Shapes (3 inches and over)	-	-	-	51.7	380.2	7.5	2.0	-	-	-	-	-	6.1	-	-	-	-	-	186.6	634.1
Steel Piling	-	-	-	-	17.4	-	-	-	-	-	-	-	-	-	-	-	-	-	86.6	104.0
Plates																				
Cut Lengths	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,099.6
Coils	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,038.0
Plates Subtotal	344.9	0.0	-	1,219.6	177.8	60.7	51.1	34.9	0.1	60.5	4.6	4.6	69.0	4.3	0.2	0.7	0.8	2.1	102.0	2,137.7
Rail and Track Accessories	-	-	-	23.2	1.2	-	208.5	-	-	-	-	-	-	-	-	-	-	-	4.2	237.1
Bars																				
Hot rolled	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,658.4
Shapes under 3 inches	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	247.9
Concrete Reinforcing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,424.4
Cold Finished	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	456.3
Bars Subtotal	193.9	94.6	11.2	259.7	1,955.1	361.4	4.2	7.3	0.7	25.5	33.5	31.9	92.4	2.7	2.2	6.0	3.3	14.1	687.1	3,786.9
Tool Steel	26.6	-	-	61.7	-	-	-	-	-	-	-	-	3.6	-	-	-	-	0.9	118.5	211.3
Pipe and Tubing																				
Standard Pipe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,309.7
Oil Country Goods	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,662.1
Line Pipe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,195.5
Mechanical Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	719.9
Pressure Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	104.7
Structural Pipe and Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	564.9
Pipe for Piling	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	23.8
Stainless Pipe and Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	134.4
Nonclassified Pipe and Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16.2
Pipe and Tubing Subtotal	110.5	0.0	0.1	1,570.2	80.9	206.4	0.0	-	0.2	2,175.1	1.9	21.5	211.0	32.8	-	0.2	0.1	0.3	1,319.9	5,731.3
Wire-Drawn and/or Rolled	54.0	0.0	0.4	2.4	0.0	0.0	-	-	-	-	-	-	0.4	0.0	-	0.0	-	-	798.4	855.7
Black Plate	10.6	-	-	18.2	4.3	0.0	-	-	-	-	-	-	-	-	0.0	0.0	7.1	-	0.0	40.2
Tin Plate	0.2	-	-	47.2	0.0	4.6	-	-	-	-	-	-	-	0.2	1.2	-	328.4	-	49.0	430.7
Tin Free	0.1	-	-	4.2	0.0	0.0	-	-	-	-	-	-	-	-	-	0.0	95.2	-	2.2	101.7
Sheets																				
Hot Rolled	617.3	-	0.0	1,421.6	518.6	513.9	3.3	0.0	0.0	7.4	7.5	4.2	10.1	3.5	18.2	13.5	25.9	0.0	-	3,164.9
Cold Rolled	243.2	-	0.1	742.8	66.1	363.1	1.7	0.0	0.0	1.2	0.2	3.8	8.2	86.9	195.3	34.5	47.3	0.0	123.7	1,918.2
Sheets and Strip																				
Galvanized																				
Hot Dipped	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2,319.4
Electrolytic	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	161.6
Galvanized Subtotal	24.7	-	0.1	575.8	518.6	1,003.1	0.4	-	-	0.0	-	14.0	2.2	13.9	57.2	2.8	1.9	-	266.2	2,481.0
All Other Metallic Coated	4.2	-	0.1	96.8	282.5	49.1	-	-	-	-	-	0.5	0.0	2.7	9.9	0.7	0.3	-	27.9	474.7
Electrical	0.3	-	-	4.2	0.9	0.7	0.6	-	-	-	-	-	-	75.5	-	-	-	-	0.4	82.6
Strip																				
Hot Rolled	18.4	-	-	9.0	2.2	36.7	-	-	-	0.7	-	-	0.0	-	-	-	-	-	38.7	105.7
Cold Rolled	6.5	-	0.1	6.5	2.9	28.2	0.1	0.0	0.2	0.0	0.0	0.0	1.8	0.6	2.4	0.9	0.1	0.1	137.7	188.0
Total Steel Mill Products	8,573.0	587.4	13.1	6,201.0	4,716.6	2,637.8	341.2	42.2	19.4	2,271.8	47.7	80.4	617.4	223.1	286.6	196.2	527.6	17.5	4,708.7	32,108.5

SOURCE: Total from American Iron and Steel Institute, *Annual Statistical Report*, 2009, Table 17. All other values calculated using percentage distributions from Appendix Table C-14.

Table C-40

Imports of Ferrous Shipments by Product and AISI-Defined Market, 2006 (thousands of net tons)

Products	Steel for Converting and Processing	Forgings (Not elsewhere classified)	Industrial Fasteners	Steel Service Centers and Distributors	Construction and Contractors' Products	Automotive	Rail Transportation	Ship Building and Marine Equipment	Aircraft and Aerospace	Oil and Gas Industry	Mining, Quarrying, and Lumbering	Agricultural	Machinery, Industrial Equipment, and Tools	Electrical Equipment	Appliances, Utensils, and Cutlery	Other Domestic and Commercial Equipment	Containers, Packaging, and Shipping Materials	Ordnance and Other Military	Nonclassified Shipments	Total
Steel Mill Products																				
Ingots, Blooms, Slabs, and Billets	8,048.6	663.9	0.1	108.5	68.1	3.3	93.4	-	24.5	1.9	-	-	283.9	-	-	0.2	23.2	-	-	9,319.7
Wire Rods	1,147.7	-	0.9	6.8	798.8	0.1	-	-	-	-	-	-	2.4	-	-	166.2	-	-	923.2	3,046.1
Structural Shapes (3 inches and over)	-	-	-	84.8	623.3	12.3	3.2	-	-	-	-	-	10.0	-	-	-	-	-	305.8	1,039.4
Steel Piling	-	-	-	-	17.9	-	-	-	-	-	-	-	-	-	-	-	-	-	89.2	107.1
Plates																				
Cut Lengths	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,669.6
Coils	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,745.9
Plates Subtotal	551.0	0.0	-	1,948.6	284.1	97.0	81.6	55.7	0.2	96.6	7.4	7.3	110.2	6.9	0.3	1.1	1.2	3.4	162.9	3,415.5
Rail and Track Accessories	-	-	-	34.4	1.8	-	309.7	-	-	-	-	-	-	-	-	-	-	-	6.2	352.2
Bars																				
Hot rolled	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,618.2
Shapes under 3 inches	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	313.7
Concrete Reinforcing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2,587.4
Cold Finished	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	415.5
Bars Subtotal	252.7	123.3	14.7	338.4	2,547.7	470.9	5.5	9.5	0.9	33.2	43.6	41.6	120.4	3.6	2.9	7.8	4.3	18.4	895.3	4,934.8
Tool Steel	22.1	-	-	51.4	-	-	-	-	-	-	-	-	3.0	-	-	-	-	0.7	98.6	175.8
Pipe and Tubing																				
Standard Pipe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,609.7
Oil Country Goods	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2,081.3
Line Pipe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,992.0
Mechanical Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	831.4
Pressure Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	110.4
Structural Pipe and Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	705.3
Pipe for Piling	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	39.0
Stainless Pipe and Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	156.5
Nonclassified Pipe and Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	19.0
Pipe and Tubing Subtotal	145.5	0.1	0.2	2,067.0	106.5	271.7	0.0	-	0.3	2,863.3	2.5	28.3	277.7	43.1	-	0.3	0.1	0.4	1,737.5	7,544.7
Wire-Drawn and/or Rolled	57.0	0.0	0.5	2.5	0.0	0.0	-	-	-	-	-	-	0.4	0.0	-	0.0	-	-	842.9	903.4
Black Plate	22.1	-	-	38.0	9.0	0.0	-	-	-	-	-	-	-	-	0.0	0.0	14.7	-	0.0	84.0
Tin Plate	0.2	-	-	59.8	0.0	5.8	-	-	-	-	-	-	-	0.2	1.5	-	415.6	-	62.0	545.0
Tin Free	0.1	-	-	4.9	0.0	0.0	-	-	-	-	-	-	-	-	-	0.0	112.0	-	2.6	119.7
Sheets																				
Hot Rolled	990.0	-	0.0	2,280.0	831.8	824.1	5.2	0.0	0.0	11.8	12.0	6.7	16.2	5.6	29.2	21.7	41.6	0.0	-	5,075.9
Cold Rolled	464.3	-	0.1	1,417.8	126.1	693.1	3.3	0.0	0.0	2.3	0.4	7.3	15.6	165.9	372.8	65.9	90.3	0.0	236.0	3,661.2
Sheets and Strip																				
Galvanized																				
Hot Dipped	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3,647.8
Electrolytic	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	193.3
Galvanized Subtotal	38.3	-	0.2	891.5	803.0	1,552.9	0.6	-	-	0.1	-	21.6	3.4	21.6	88.5	4.3	2.9	-	412.2	3,841.1
All Other Metallic Coated	6.5	-	0.2	150.8	440.1	76.5	-	-	-	-	-	0.7	0.0	4.2	15.4	1.0	0.5	-	43.5	739.5
Electrical	0.4	-	-	4.5	1.0	0.7	0.7	-	-	-	-	-	-	81.2	-	-	-	-	0.5	88.9
Strip																				
Hot Rolled	14.5	-	-	7.1	1.7	28.9	-	-	-	0.5	-	-	0.0	-	-	-	-	-	30.5	83.2
Cold Rolled	6.8	-	0.1	6.8	3.0	29.3	0.1	0.0	0.2	0.0	0.0	0.0	1.9	0.6	2.5	0.9	0.1	0.1	143.3	195.7
Total Steel Mill Products	11,767.8	787.3	17.0	9,503.6	6,663.9	4,066.8	503.5	65.3	26.1	3,009.7	65.9	113.5	845.1	332.9	513.1	269.5	706.6	23.0	5,992.4	45,273.1

SOURCE: Total from American Iron and Steel Institute, *Annual Statistical Report*, 2009, Table 17. All other values calculated using percentage distributions from Appendix Table C-14.

Table C-41

Imports of Ferrous Shipments by Product and AISI-Defined Market, 2007 (thousands of net tons)

Products	Steel for Converting and Processing	Forgings (Not elsewhere classified)	Industrial Fasteners	Steel Service Centers and Distributors	Construction and Contractors' Products	Automotive	Rail Transportatio n	Ship Building and Marine Equipment	Aircraft and Aerospace	Oil and Gas Industry	Mining, Quarrying, and Lumbering	Agricultural	Machinery, Industrial Equipment, and Tools	Electrical Equipment	Appliances, Utensils, and Cutlery	Other Domestic and Commercial Equipment	Containers, Packaging, and Shipping Materials	Ordnance and Other Military	Nonclassified Shipments	Total
Steel Mill Products																				
Ingots, Blooms, Slabs, and Billets	5,748.3	474.2	0.1	77.5	48.7	2.4	66.7	-	17.5	1.4	-	-	202.8	-	-	0.1	16.6	-	-	6,656.2
Wire Rods	579.6	-	0.5	3.4	403.4	0.0	-	-	-	-	-	-	1.2	-	-	83.9	-	-	466.2	1,538.2
Structural Shapes (3 inches and over)	-	-	-	69.4	509.9	10.0	2.7	-	-	-	-	-	8.2	-	-	-	-	-	250.2	850.2
Steel Piling	-	-	-	-	18.4	-	-	-	-	-	-	-	-	-	-	-	-	-	91.6	110.0
Plates																				
Cut Lengths	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,421.7
Coils	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,035.3
Plates Subtotal	396.4	0.0	-	1,401.8	204.4	69.8	58.7	40.1	0.1	69.5	5.3	5.2	79.3	4.9	0.2	0.8	0.9	2.4	117.2	2,457.0
Rail and Track Accessories	-	-	-	40.0	2.1	-	359.5	-	-	-	-	-	-	-	-	-	-	-	7.2	408.8
Bars																				
Hot rolled	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,322.9
Shapes under 3 inches	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	239.2
Concrete Reinforcing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,860.9
Cold Finished	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	345.5
Bars Subtotal	193.0	94.1	11.2	258.5	1,945.6	359.6	4.2	7.3	0.7	25.4	33.3	31.8	91.9	2.7	2.2	5.9	3.3	14.1	683.7	3,768.5
Tool Steel	20.2	-	-	46.8	-	-	-	-	-	-	-	-	2.7	-	-	-	-	0.7	89.9	160.3
Pipe and Tubing																				
Standard Pipe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,417.9
Oil Country Goods	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,944.0
Line Pipe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2,991.4
Mechanical Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	708.8
Pressure Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	121.2
Structural Pipe and Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	678.2
Pipe for Piling	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	41.1
Stainless Pipe and Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	171.2
Nonclassified Pipe and Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	23.0
Pipe and Tubing Subtotal	156.2	0.1	0.2	2,218.2	114.3	291.6	0.0	-	0.3	3,072.8	2.7	30.4	298.1	46.3	-	0.3	0.1	0.5	1,864.6	8,096.7
Wire-Drawn and/or Rolled	50.9	0.0	0.4	2.3	0.0	0.0	-	-	-	-	-	-	0.3	0.0	-	0.0	-	-	752.6	806.6
Black Plate	12.8	-	-	22.0	5.2	0.0	-	-	-	-	-	-	-	-	0.0	0.0	8.5	-	0.0	48.6
Tin Plate	0.2	-	-	56.9	0.0	5.5	-	-	-	-	-	-	-	0.2	1.4	-	395.8	-	59.0	519.1
Tin Free	0.1	-	-	5.1	0.0	0.0	-	-	-	-	-	-	-	-	-	0.0	114.7	-	2.7	122.5
Sheets																				
Hot Rolled	523.6	-	0.0	1,205.8	439.9	435.9	2.8	0.0	0.0	6.2	6.3	3.6	8.6	2.9	15.4	11.5	22.0	0.0	-	2,684.5
Cold Rolled	228.4	-	0.1	697.5	62.0	341.0	1.6	0.0	0.0	1.1	0.2	3.6	7.7	81.6	183.4	32.4	44.4	0.0	116.1	1,801.2
Sheets and Strip																				
Galvanized																				
Hot Dipped	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2,010.6
Electrolytic	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	199.4
Galvanized Subtotal	22.0	-	0.1	512.9	462.0	893.5	0.3	-	-	0.0	-	12.4	2.0	12.4	50.9	2.5	1.7	-	237.2	2,210.0
All Other Metallic Coated	5.3	-	0.2	123.4	360.2	62.6	-	-	-	-	-	0.6	0.0	3.5	12.6	0.9	0.4	-	35.6	605.2
Electrical	0.4	-	-	5.6	1.2	0.9	0.9	-	-	-	-	-	-	101.1	-	-	-	-	0.6	110.6
Strip																				
Hot Rolled	15.8	-	-	7.7	1.9	31.5	-	-	-	0.6	-	-	0.0	-	-	-	-	-	33.2	90.7
Cold Rolled	6.9	-	0.1	6.9	3.0	29.8	0.1	0.0	0.2	0.0	0.0	0.0	1.9	0.6	2.6	0.9	0.1	0.1	145.5	198.7
Total Steel Mill Products	7,960.1	568.4	12.8	6,761.6	4,582.1	2,534.1	497.5	47.4	18.8	3,177.0	47.9	87.6	704.6	256.3	268.8	139.3	608.5	17.7	4,953.1	33,243.6

SOURCE : Total from American Iron and Steel Institute, *Annual Statistical Report* , 2009, Table 17. All other values calculated using percentage distributions from Appendix Table C-14.

Table C-42

Imports of Ferrous Shipments by Product and AISI-Defined Market, 2008 (thousands of net tons)

Products	Steel for Converting and Processing	Forgings (Not elsewhere classified)	Industrial Fasteners	Steel Service Centers and Distributors	Construction and Contractors' Products	Automotive	Rail Transportation	Ship Building and Marine Equipment	Aircraft and Aerospace	Oil and Gas Industry	Mining, Quarrying, and Lumbering	Agricultural	Machinery, Industrial Equipment, and Tools	Electrical Equipment	Appliances, Utensils, and Cutlery	Other Domestic and Commercial Equipment	Containers, Packaging, and Shipping Materials	Ordnance and Other Military	Nonclassified Shipments	Total
Steel Mill Products																				
Ingots, Blooms, Slabs, and Billets	5,156.5	425.4	0.1	69.5	43.6	2.1	59.8	-	15.7	1.2	-	-	181.9	-	-	0.1	14.9	-	-	5,970.9
Wire Rods	463.2	-	0.4	2.8	322.4	0.0	-	-	-	-	-	-	1.0	-	-	67.1	-	-	372.6	1,229.4
Structural Shapes (3 inches and over)	-	-	-	58.9	432.9	8.5	2.3	-	-	-	-	-	6.9	-	-	-	-	-	212.4	721.9
Steel Piling	-	-	-	-	17.5	-	-	-	-	-	-	-	-	-	-	-	-	-	87.4	105.0
Plates																				
Cut Lengths	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,237.1
Coils	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,213.1
Plates Subtotal	395.3	0.0	-	1,397.9	203.8	69.6	58.6	40.0	0.1	69.3	5.3	5.2	79.1	4.9	0.2	0.8	0.9	2.4	116.9	2,450.2
Rail and Track Accessories	-	-	-	32.9	1.8	-	296.0	-	-	-	-	-	-	-	-	-	-	-	5.9	336.6
Bars																				
Hot rolled	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,487.0
Shapes under 3 inches	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	166.8
Concrete Reinforcing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	970.8
Cold Finished	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	311.6
Bars Subtotal	150.4	73.3	8.7	201.4	1,515.9	280.2	3.3	5.7	0.5	19.8	26.0	24.7	71.6	2.1	1.7	4.6	2.6	10.9	532.7	2,936.2
Tool Steel	20.5	-	-	47.5	-	-	-	-	-	-	-	-	2.8	-	-	-	-	0.7	91.2	162.6
Pipe and Tubing																				
Standard Pipe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,180.4
Oil Country Goods	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3,973.9
Line Pipe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3,223.3
Mechanical Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	606.9
Pressure Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	142.0
Structural Pipe and Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	487.5
Pipe for Piling	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	19.1
Stainless Pipe and Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	140.3
Nonclassified Pipe and Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	17.2
Pipe and Tubing Subtotal	188.8	0.1	0.2	2,682.3	138.2	352.6	0.0	-	0.4	3,715.7	3.3	36.7	360.4	56.0	-	0.4	0.1	0.6	2,254.7	9,790.5
Wire-Drawn and/or Rolled	44.8	0.0	0.4	2.0	0.0	0.0	-	-	-	-	-	-	0.3	0.0	-	0.0	-	-	661.7	709.2
Black Plate	6.2	-	-	10.6	2.5	0.0	-	-	-	-	-	-	-	-	0.0	0.0	4.1	-	0.0	23.4
Tin Plate	0.1	-	-	35.2	0.0	3.4	-	-	-	-	-	-	-	0.1	0.9	-	244.8	-	36.5	321.1
Tin Free	0.1	-	-	4.4	0.0	0.0	-	-	-	-	-	-	-	-	-	0.0	99.3	-	2.3	106.0
Sheets																				
Hot Rolled	540.2	-	0.0	1,244.2	453.9	449.7	2.9	0.0	0.0	6.4	6.5	3.7	8.9	3.0	15.9	11.8	22.7	0.0	-	2,769.9
Cold Rolled	182.5	-	0.0	557.3	49.6	272.4	1.3	0.0	0.0	0.9	0.1	2.9	6.1	65.2	146.5	25.9	35.5	0.0	92.8	1,439.0
Sheets and Strip																				
Galvanized																				
Hot Dipped	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,821.9
Electrolytic	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	187.5
Galvanized Subtotal	20.0	-	0.1	466.3	420.0	812.4	0.3	-	-	0.0	-	11.3	1.8	11.3	46.3	2.3	1.5	-	215.6	2,009.4
All Other Metallic Coated	4.4	-	0.1	102.4	298.9	52.0	-	-	-	-	-	0.5	0.0	2.9	10.5	0.7	0.3	-	29.6	502.2
Electrical	0.5	-	-	6.1	1.3	1.0	0.9	-	-	-	-	-	-	110.4	-	-	-	-	0.6	120.9
Strip																				
Hot Rolled	8.5	-	-	4.2	1.0	17.0	-	-	-	0.3	-	-	0.0	-	-	-	-	-	17.9	48.9
Cold Rolled	6.0	-	0.1	6.0	2.7	26.0	0.1	0.0	0.2	0.0	0.0	0.0	1.7	0.5	2.2	0.8	0.1	0.1	127.2	173.7
Total Steel Mill Products	7,188.0	498.8	10.1	6,931.7	3,906.0	2,347.0	425.4	45.6	16.9	3,813.6	41.2	85.0	722.4	256.6	224.2	114.5	426.7	14.7	4,858.1	31,926.9

SOURCE: Total from American Iron and Steel Institute, *Annual Statistical Report*, 2009, Table 17. All other values calculated using percentage distributions from Appendix Table C-14.

Table C-43

Imports of Ferrous Shipments by Product and AISI-Defined Market, 2009 (thousands of net tons)

Products	Steel for Converting and Processing	Forgings (Not elsewhere classified)	Industrial Fasteners	Steel Service Centers and Distributors	Construction and Contractors' Products	Automotive	Rail Transportation	Ship Building and Marine Equipment	Aircraft and Aerospace	Oil and Gas Industry	Mining, Quarrying, and Lumbering	Agricultural	Machinery, Industrial Equipment, and Tools	Electrical Equipment	Appliances, Utensils, and Cutlery	Other Domestic and Commercial Equipment	Containers, Packaging, and Shipping Materials	Ordnance and Other Military	Nonclassified Shipments	Total
Steel Mill Products																				
Ingots, Blooms, Slabs, and Billets	1,902.8	51.6	-	24.2	15.6	11.9	5.9	-	0.6	0.1	-	3.4	15.9	-	-	-	4.4	-	-	2,036.3
Wire Rods	204.5	-	0.4	160.0	116.2	24.0	0.1	-	-	-	-	0.0	2.4	-	-	12.7	3.0	-	240.1	763.4
Structural Shapes (3 inches and over)	-	0.1	-	12.3	350.9	-	0.2	-	-	-	-	-	-	-	-	-	-	-	7.9	371.4
Steel Piling	-	-	-	-	54.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	54.4
Plates																				
Cut Lengths	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	530.2
Coils	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	710.9
Plates Subtotal	182.7	0.1	0.0	616.3	192.5	25.2	15.7	18.8	0.3	9.7	-	0.9	39.7	6.1	0.0	1.5	-	7.4	124.3	1,241.1
Rail and Track Accessories	0.0	-	-	14.8	0.1	-	270.8	-	-	-	-	-	-	-	-	-	-	-	-	285.6
Bars																				
Hot rolled	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	674.4
Shapes under 3 inches	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	86.2
Concrete Reinforcing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	419.4
Cold Finished	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	186.0
Bars Subtotal	18.8	7.1	14.4	171.0	802.3	104.2	0.0	0.0	0.2	5.2	0.1	0.2	40.1	0.2	1.4	0.1	1.2	1.4	198.0	1,366.0
Tool Steel	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	56.9	56.9
Pipe and Tubing																				
Standard Pipe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	593.4
Oil Country Goods	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,602.1
Line Pipe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,603.4
Mechanical Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	332.7
Pressure Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	62.6
Structural Pipe and Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	254.2
Pipe for Piling	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15.8
Stainless Pipe and Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	89.6
Nonclassified Pipe and Tubing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	14.3
Pipe and Tubing Subtotal	102.9	1.4	-	1,078.9	0.1	334.5	-	-	0.0	2,084.6	0.5	28.6	195.2	-	-	0.2	-	0.8	740.5	4,568.0
Wire-Drawn and/or Rolled	78.5	-	-	75.2	90.1	6.8	-	-	-	-	-	-	-	-	-	-	-	-	235.7	486.3
Black Plate	20.6	-	-	9.8	0.6	-	-	-	-	-	-	-	-	-	-	-	10.3	-	0.2	41.6
Tin Plate	1.1	-	-	26.0	-	2.3	-	-	-	-	-	-	-	-	0.2	-	293.3	-	-	323.0
Tin Free	0.2	-	-	2.9	-	-	-	-	-	-	-	-	-	-	0.1	-	82.6	-	-	85.9
Sheets																				
Hot Rolled	308.8	-	0.9	706.6	269.5	241.2	0.1	-	-	0.4	0.0	2.2	5.2	0.3	17.2	3.8	8.3	0.0	174.5	1,739.2
Cold Rolled	177.7	-	0.0	344.5	118.6	204.1	0.1	-	0.0	0.8	0.0	0.4	1.6	37.8	105.0	17.6	33.5	0.0	96.0	1,137.6
Sheets and Strip																				
Galvanized																				
Hot Dipped	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,033.0
Electrolytic	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	93.3
Galvanized Subtotal	27.1	-	-	316.6	195.5	493.1	0.0	-	-	0.0	-	0.8	0.2	2.6	48.1	2.3	6.6	-	33.4	1,126.3
All Other Metallic Coated	1.2	-	-	54.1	205.9	27.1	-	-	-	-	-	-	-	-	6.7	-	-	-	3.0	298.1
Electrical	4.1	-	-	2.4	-	-	1.8	-	-	-	-	-	-	56.3	-	-	-	-	1.0	65.6
Strip																				
Hot Rolled	24.1	-	-	-	-	-	-	-	-	0.2	-	-	-	-	-	-	-	-	20.8	45.1
Cold Rolled	3.6	0.0	0.1	21.8	8.1	33.7	0.0	-	0.1	0.2	-	0.0	0.3	0.2	0.8	0.3	-	0.0	53.9	123.1
Total Steel Mill Products	3,058.9	60.3	15.7	3,637.3	2,420.4	1,508.1	294.8	18.8	1.2	2,101.1	0.6	36.5	300.5	103.5	179.6	38.5	443.3	9.7	1,986.1	16,214.9

SOURCE: Total from American Iron and Steel Institute, *Annual Statistical Report*, 2009, Table 17. All other values calculated using percentage distributions from Appendix Table C-16.

Table C-44

Foundry Shipments, 1983 - 2009 (thousands of net tons)

AISI Categories	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009[e]
Domestic Production [a]																											
For Sale	6,249	7,289	8,348	8,140	8,400	8,886	8,703	8,070	7,182	7,576	8,152	9,542	10,016	9,827	9,914	10,116	10,005	9,525	8,396	7,778	7,565	8,789	9,344	9,055	8,445	7,738	-
For Own Use	4,004	4,551	1,668	1,626	1,679	1,775	1,739	1,612	1,435	1,514	1,629	1,907	2,001	2,201	2,093	2,086	2,106	1,838	1,492	1,490	1,406	1,643	1,747	1,693	1,579	1,447	-
Subtotal	10,253	11,840	10,016	9,766	10,079	10,661	10,442	9,682	8,617	9,090	9,781	11,449	12,017	12,028	12,007	12,201	12,111	11,362	9,887	9,268	8,971	10,432	11,091	10,748	10,024	9,185	-
International Trade [b]																											
Exports	113	105	-	-	-	-	-	-	-	-	-	-	-	-	459	183	157	150	165	195	160	-	-	-	-	-	-
Imports	9	17	-	-	-	-	-	-	-	-	-	-	-	-	109	350	351	315	427	400	412	-	-	-	-	-	-
Subtotal [c]	(104)	(88)	131	128	132	139	137	127	113	119	128	150	157	157	(350)	167	193	165	262	204	252	238	253	245	228	209	-
Total [d]	6,145	7,201	8,479	8,267	8,532	9,025	8,840	8,196	7,295	7,695	8,280	9,692	10,173	9,984	9,564	10,282	10,198	9,689	8,658	7,983	7,816	9,026	9,596	9,299	8,673	7,947	4,389

[a] All values for years 1983-1984 from US Census Bureau, *Current Industrial Reports*, Series MA33A, Table 1A. Subtotal for years 1985-1986 from US Census Bureau, *Statistical Abstract of the US*, 1991, Table No. 1331; subtotal for year 1987-1995 from US EPA, *Economic Impact Analysis of Proposed Iron and Steel Foundries NESHAP*, November 2002, Table 2-11. For Sale and For Own Use for 1985-1995 calculated using averages from 1996-2003 from Appendix Table C-45. All values for years 1996-2003 from US Census Bureau, *Current Industrial Reports*, Series MA331A(03)-1, Table 3. Subtotal for years 2004-2008 taken from Census of World Casting Production 2004-2008 respectively. For Sale and For Own Use for 2004-2008 calculated using averages from 2000-2003 from Appendix Table C-45.

[b] Subtotal for years 1985-1996 calculated using average from years 1997-2003 from Appendix Table C-45. All values for years 1983-1984 from US Census Bureau, *Current Industrial Reports*, Series MA33, Table 6; all values for years 1997-2003 from US Census Bureau, *Current Industrial Reports*, Series MA331A(03)-1, Table 4. Subtotal for years 2000-2004 calculated using average from years 2000-2003 from Appendix Table C-45.

[c] Equal to Imports minus Exports.

[d] Equal to Domestic Production: For Sale plus International Trade: Subtotal.

[e] Total foundry shipments for 2009 is estimated using the annual growth rate of iron and steel shipments (domestic and imported) by steel mills for 2009. See Appendix C, Table C-46.

Sources: See footnotes.

Table C-45

Calculation of Domestic Production and International Trade Percentages, Selected Years (thousand net tons)

Year	For Sale		Net Imports		Domestic Total
	Value	Percent of Domestic Total	Value	Percent of Domestic Total	
1983	6,249	60.9%	-104	-1.0%	10,253
1984	7,289	61.6%	-88	-0.7%	11,840
…	…	…	…	…	…
1996	9,827	81.7%	-	-	12,028
1997	9,914	82.6%	-350	-2.9%	12,007
1998	10,116	82.9%	167	1.4%	12,201
1999	10,005	82.6%	193	1.6%	12,111
2000	9,525	83.8%	165	1.4%	11,362
2001	8,396	84.9%	262	2.7%	9,887
2002	7,778	83.9%	204	2.2%	9,268
2003	7,565	84.3%	252	2.8%	8,971
Average 1996-2003	**-**	**83.3%**	**-**	**1.3%**	**-**
Average 2000-2003	**-**	**84.2%**	**-**	**2.3%**	**-**

SOURCE: Appendix Table C-44.

Table C-46

Calculation of Foundry Shipments, 2009 (thousand net tons)

Year	Iron and steel shipments (domestic+imported) [a]	Foundry shipments (domestic+Trade) [b]	Annual Growth rate of Iron & steel shipments	Annual Growth rate of Foundry shipments
2000	144,159	9,689	-	-
2001	126,486	8,658	-12%	-11%
2002	130,419	7,983	3%	-8%
2003	126,204	7,816	-3%	-2%
2004	144,713	9,026	15%	15%
2005	134,427	9,596	-7%	6%
2006	151,706	9,299	13%	-3%
2007	136,583	8,673	-10%	-7%
2008	127,411	7,947	-7%	-8%
2009	70,364	4,389 [c]	-45%	

[a] From Appendix C, Table-1 and Table-2.

[b] 2000 through 2008 values from Appendix C, Table-44. Domestic foundry shipment takes into account "For Sale" domestic production only. Trade accounts for net imports (Imports *minus* Exports).

[c] 2009 foundry shipment is calculated by applying the Iron and Steel Shipments annual growth rate for 2009 to Foundry Shipments for 2008. Estimated total foundry shipment for 2009 is used in Appendix C, Table C-44.

Appendix D

Derivation of Probability Density Functions for Modeling the Useful Lives of Ferrous-Containing End-Use Products

Appendix D

Derivation of probability density functions for modeling the useful lives of ferrous-containing end-use products

Lifetimes of ferrous containing end-use products are considered to follow the normal (or Gaussian) distribution. The normal distribution has the probability density function (pdf) in equation (1).

$$f(t, \mu, \sigma) = \left[\frac{1}{\sigma.\left(\sqrt{2.\pi}\right)}\right] e^{\frac{-(t-\mu)^2}{2.\sigma^2}} \qquad (1)$$

t is time in years, μ is the average lifetime, and σ is the standard deviation. μ is set equal to the average lifetimes listed in Table 2. σ is derived based on properties of the normal distribution and the maximum lifetimes parameters listed in Table 2.

It can be shown that 99.7% of the area of the normal distribution is within three standard deviations of the mean. Hence, if we set the maximum life to be exactly three standard deviations away from the mean, we ensure that virtually 100 percent of ferrous content is discarded between the minimum (min) and maximum (max) values. Either the minimum or the maximum value is sufficient to find the standard deviation. Using the maximum value, the standard deviation can be found using algebra:

$$\max = \mu - 3.\sigma \Longrightarrow \sigma = \frac{1}{3} \cdot \mu - \frac{1}{3} \cdot \max \qquad (2)$$

Because the normal distribution is symmetric around μ, it follows that:

$$\mu = \frac{\min + \max}{2} \qquad (3)$$

Substituting (3) for μ in (2) we can solve for σ:

$$\sigma = \frac{1}{3} \cdot \frac{\min + \max}{2} - \frac{1}{3} \cdot \min = \left(\frac{\min + \max}{6}\right) - \frac{2\min}{6} = \frac{\min + \max - 2\min}{6} = \frac{\max - \min}{6} \qquad (4)$$

Using equation (4), we can calculate σ for each of the thirteen end-use product categories, excluding containers. Containers do not enter the life-time analysis because they have a maximum life of one year. Table D-1 shows the mean and standard deviation for each of the thirteen product categories. The mean and standard deviation define a unique normal probability density function.

Table D-1

Probability Density Parameters by End-Use Product Category

Category Name	Minimum Useful life	Average (Median) Useful Life	Maximum Useful Life	Mean (μ)	Standard Deviation (σ)
	(1)	(2)	(3)	(4) = (2)	(5) = [(3)-(1)]/6
Agricultural machinery	11	23	35	23	4.0
Aircraft and aerospace	0	30	60	30	10.0
Automotive	0	15	30	15	5.0
Construction materials	0	40.5	81	40.5	13.5
Consumer durables	8	18	28	18	3.3
Electrical machinery	13	24	35	24	3.7
Industrial machinery	13	24	35	24	3.7
Materials, nec	0	27	54	27	9.0
Mining materials	2	6	10	6	1.3
Oil and gas materials	2	16	30	16	4.7
Railroad equipment	0	19	38	19	6.3
Railroad rails	25	40	55	40	5.0
Ship building and marine equipment	24	32	40	32	2.7

The probability density functions are applied by product category and year to the ferrous material in end-use products entering the U.S. economy to determine the amount of ferrous material discarded in future years. The distributions are applied as follows:

Let $FM_{s,t}$ be the ferrous material (FM) in product category *s* entering the U.S. economy in year *t*. The probability density function (PDF) for a product category *s* is given by:

$$\mathrm{PDF}(s) = f(t, \mu_s, \sigma_s) = \left[\frac{1}{\sigma_s.\left(\sqrt{2.\pi}\right)}\right] e^{\frac{-(t-\mu_s)^2}{2.\sigma_s{}^2}} \qquad (5)$$

Where μ_s and σ_s are the product category specific means and standard deviations listed in Table D-1. The proportion of $FM_{s,t}$ that is discarded in a future year *y*, is given by the area under the probability density function during that period, calculable with the integral:

$$\int_{n}^{n+1} \left[\frac{1}{\sigma_s.\left(\sqrt{2.\pi}\right)}\right] e^{\frac{-(t-\mu_s)^2}{2.\sigma_s{}^2}} dt \qquad (6)$$

For each of the values of $FM_{s,t}$ in our study (for 89 years and 13 product categories), we determine the quantity discarded in each future year y, denoted $D_{s,t,y}$, by calculating the following:

$$D_{s,t,y} = FM_{s,t} \int_{(min+i)}^{(min+i+1)} \left[\frac{1}{\sigma_s.\left(\sqrt{2.\pi}\right)}\right] e^{\frac{-(t-\mu_s)^2}{2.\sigma_s^{\ 2}}} dt \qquad (6)$$

For i = 0 … (max-min-1). The year of discard, y, is: $y = (t + \text{min} + i)$.

After performing these calculations for all values of $FM_{s,t}$, we adjust the figure downward by 1% to account for losses during use (corrosion and wear and tear). We then sum by product category and year of discard to calculate product category specific obsolete scrap generation in each year. These figures are in Appendix A, Table A-63.

Appendix E

Trade Data

Table E-1

Net Imports of Ferrous Material in Motor Vehicles (thousands of tons)

Year	Cars			Trucks and Buses			Total		
	Imports [a] [1]	Exports [b] [2]	Net [3] = [1] - [2]	Imports [a] [4]	Exports [b] [5]	Net [6] = [4] - [5]	Imports [7] = [1] + [4]	Exports [8] = [2] + [5]	Net [9] = [7] + [8]
1983	3,314	561	2,753	1,807	356	1,451	5,121	916	4,205
1984	4,287	643	3,644	2,358	480	1,878	6,645	1,122	5,522
1985	4,203	684	3,519	2,856	539	2,317	7,059	1,223	5,836
1986	3,968	708	3,261	3,056	660	2,396	7,024	1,367	5,657
1987	4,002	670	3,332	2,656	710	1,946	6,658	1,380	5,278
1988	4,386	867	3,520	2,112	729	1,383	6,498	1,596	4,902
1989	3,953	829	3,124	2,150	589	1,561	6,103	1,419	4,685
1990	3,884	891	2,992	1,697	454	1,243	5,580	1,345	4,235
1991	3,606	814	2,792	1,582	559	1,023	5,188	1,373	3,815
1992	3,617	954	2,664	1,731	452	1,280	5,349	1,405	3,944
1993	3,965	990	2,975	1,560	507	1,053	5,524	1,497	4,028
1994	4,390	1,208	3,182	1,568	785	783	5,959	1,994	3,965
1995	4,379	1,134	3,245	1,473	724	749	5,852	1,858	3,994
1996	4,416	1,139	3,277	1,526	846	680	5,942	1,985	3,957
1997	4,712	1,267	3,445	1,636	1,405	232	6,349	2,672	3,677
1998	4,992	1,076	3,915	1,373	988	384	6,364	2,065	4,299
1999	6,009	1,103	4,906	1,815	861	954	7,824	1,964	5,859
2000	6,697	1,139	5,558	1,769	904	864	8,466	2,044	6,423
2001	6,171	1,442	4,729	1,760	691	1,068	7,930	2,133	5,797
2002	6,941	1,653	5,288	1,719	810	909	8,659	2,463	6,197
2003	6,692	1,617	5,075	1,713	834	879	8,404	2,451	5,954
2004	6,907	1,759	5,148	1,519	977	542	8,426	2,736	5,690
2005	6,889	2,127	4,762	1,546	1,026	520	8,435	3,153	5,282
2006	10,109	2,155	7,954	1,582	1,027	555	11,691	3,182	8,509
2007	10,130	2,556	7,575	1,538	1,173	365	11,668	3,729	7,939
2008	8,950	2,078	6,872	894	1,004	(110)	9,844	3,081	6,762
2009	6,455	1,009	5,447	628	945	(317)	7,083	1,954	5,130
Totals:	148,025	33,071	114,954	47,621	21,033	26,589	195,646	54,104	141,542

[a] From Table E-2.

[b] From Table E-12.

SOURCES: See footnotes.

Table E-2

Total Imports of Ferrous Material in Motor Vehicles (thousands of tons)

Year	Cars [a]	Trucks and Buses [b]	Total
1983	3,314	1,807	5,121
1984	4,287	2,358	6,645
1985	4,203	2,856	7,059
1986	3,968	3,056	7,024
1987	4,002	2,656	6,658
1988	4,386	2,112	6,498
1989	3,953	2,150	6,103
1990	3,884	1,697	5,580
1991	3,606	1,582	5,188
1992	3,617	1,731	5,349
1993	3,965	1,560	5,524
1994	4,390	1,568	5,959
1995	4,379	1,473	5,852
1996	4,416	1,526	5,942
1997	4,712	1,636	6,349
1998	4,992	1,373	6,364
1999	6,009	1,815	7,824
2000	6,697	1,769	8,466
2001	6,171	1,760	7,930
2002	6,941	1,719	8,659
2003	6,692	1,713	8,404
2004	6,907	1,519	8,426
2005	6,889	1,546	8,435
2006	10,109	1,582	11,691
2007	10,130	1,538	11,668
2008	8,950	894	9,844
2009	6,455	628	7,083
Total	148,025	47,621	195,646

[a] From Table E-3.

[b] From Table E-4.

SOURCES: See footnotes.

Talbe E-3
Derivation of Ferrous Content of Car Imports, 1983-2009

	Passenger Car Imports (thousands of units)						Average Vehicle Weight of Car Imports (pounds per unit)					Average Ferrous Content of Car Imports				
Year	Canada	Mexico	Japan	Germany	Other	Total	Canada [a]	Mexico [a]	Japan	Germany	Other	Canada [b]	Mexico [b]	Japan	Germany	Other
1983	837	0	2,112	330	388	3,667	2,862.0	2,862.0	2,484.6	2,316.5	3,071.5	71%	71%	68%	70%	70%
1984	1,073	134	2,692	399	581	4,880	3,053.9	3,053.9	2,350.8	2,316.5	2,523.2	71%	71%	68%	70%	70%
1985	1,145	14	2,527	473	236	4,395	2,764.8	2,764.8	2,820.4	2,748.0	2,830.0	71%	71%	68%	68%	68%
1986	1,162	42	2,619	452	417	4,691	2,970.1	2,970.1	2,297.6	2,125.0	2,531.0	71%	71%	67%	68%	68%
1987	927	126	2,418	378	741	4,589	3,009.5	3,009.5	2,478.2	2,140.0	2,424.0	70%	70%	67%	68%	68%
1988	1,191	148	2,123	264	723	4,450	3,186.6	3,186.6	2,738.0	2,860.0	2,895.0	70%	70%	67%	68%	68%
1989	1,151	133	2,052	217	490	4,043	3,060.0	3,060.0	2,813.8	2,680.0	2,930.0	70%	70%	66%	68%	68%
1990	1,220	216	1,868	245	395	3,945	3,313.9	3,313.9	2,845.0	2,988.6	2,200.0	68%	68%	65%	68%	68%
1991	1,196	249	1,789	172	329	3,736	3,172.4	3,172.4	2,837.6	3,002.5	2,200.7	68%	68%	64%	67%	67%
1992	1,200	266	1,678	206	265	3,615	3,286.6	3,286.6	2,886.6	3,030.0	2,497.1	68%	68%	64%	67%	67%
1993	1,468	300	1,597	184	259	3,808	3,374.2	3,374.2	2,945.7	3,440.0	2,658.4	68%	68%	64%	67%	67%
1994	1,591	360	1,593	188	364	4,097	3,502.0	3,502.0	3,066.0	3,525.0	2,505.0	68%	68%	64%	66%	66%
1995	1,678	463	1,387	207	378	4,114	3,396.5	3,396.5	3,126.9	3,061.8	2,721.3	68%	68%	64%	65%	65%
1996	1,688	551	1,191	234	401	4,064	3,490.1	3,490.1	3,078.2	3,066.7	3,086.5	67%	67%	64%	64%	64%
1997	1,722	539	1,384	298	414	4,357	3,530.6	3,530.6	3,115.3	3,066.7	2,891.9	67%	67%	64%	64%	64%
1998	1,818	587	1,318	373	406	4,501	3,602.4	3,602.4	3,130.3	3,531.3	2,905.3	67%	67%	64%	64%	64%
1999	2,126	637	1,561	456	619	5,400	3,697.0	3,697.0	3,223.6	3,139.3	2,946.0	66%	66%	64%	64%	64%
2000	2,076	928	1,662	489	851	6,006	3,677.3	3,677.3	3,304.4	3,134.2	3,174.0	65%	65%	64%	64%	64%
2001	1,089	853	1,617	492	1,701	5,753	3,803.5	3,803.5	3,339.3	3,134.7	2,921.9	64%	64%	64%	64%	64%
2002	1,815	839	1,827	571	1,027	6,080	3,907.9	3,907.9	3,405.5	3,121.8	3,297.8	64%	64%	64%	64%	64%
2003	1,752	678	1,576	560	1,182	5,747	3,967.8	3,967.8	3,386.9	3,361.2	3,493.7	64%	64%	64%	64%	64%
2004	2,005	650	1,539	546	1,333	6,073	3,896.2	3,896.2	3,334.1	3,302.7	3,439.7	64%	64%	63%	63%	63%
2005	1,955	693	1,628	545	1,151	5,972	3,976.6	3,976.6	3,361.6	3,385.1	3,393.2	64%	64%	63%	63%	63%
2006	1,927	946	3,693	695	1,370	8,632	4,064.1	4,064.1	3,590.4	3,528.6	3,400.1	63%	63%	63%	63%	63%
2007	1,908	875	3,504	754	1,398	8,439	4,151.1	4,151.1	3,683.7	3,583.3	3,531.6	64%	64%	63%	63%	63%
2008	1,598	913	3,120	680	1,226	7,537	4,159.7	4,159.7	3,643.0	3,446.1	3,510.7	63%	63%	63%	63%	63%
2009	1,161	641	2,030	527	1,008	5,366	4,248.4	4,248.4	3,671.6	3,530.7	3,530.0	63%	63%	63%	63%	63%

(continued)

Talbe E-3 (continued)

Derivation of Ferrous Content of Car Imports, 1980-2003

	Total Weight of Car Imports (thousands of tons)					Ferrous Content of Car Imports (thousands of tons)					
Year	Canada [b]	Mexico [b]	Japan	Germany	Other	Canada	Mexico	Japan	Germany	Other	Total
1983	1,197	0	2,624	383	596	852	0	1,781	266	415	3,314
1984	1,639	205	3,164	462	733	1,166	146	2,142	322	511	4,287
1985	1,583	19	3,564	650	334	1,117	13	2,406	440	226	4,203
1986	1,726	62	3,008	480	527	1,222	44	2,017	326	358	3,968
1987	1,395	190	2,996	404	898	981	134	2,000	276	612	4,002
1988	1,898	236	2,906	378	1,047	1,322	164	1,933	257	711	4,386
1989	1,761	204	2,886	291	718	1,227	142	1,902	197	486	3,953
1990	2,022	358	2,657	367	435	1,370	242	1,730	247	294	3,884
1991	1,897	396	2,538	259	362	1,290	269	1,631	174	243	3,606
1992	1,973	437	2,422	312	331	1,345	298	1,545	208	221	3,617
1993	2,477	506	2,353	317	344	1,682	343	1,500	211	229	3,965
1994	2,786	631	2,442	331	456	1,887	427	1,557	218	301	4,390
1995	2,850	787	2,169	317	515	1,924	531	1,383	206	335	4,379
1996	2,946	961	1,832	360	618	1,975	644	1,168	231	397	4,416
1997	3,040	952	2,155	457	599	2,029	636	1,374	291	382	4,712
1998	3,274	1,057	2,062	658	590	2,178	703	1,315	420	376	4,992
1999	3,930	1,178	2,516	716	912	2,590	777	1,604	457	582	6,009
2000	3,817	1,705	2,746	766	1,351	2,486	1,111	1,751	489	861	6,697
2001	2,071	1,623	2,700	771	2,485	1,331	1,042	1,721	492	1,585	6,171
2002	3,547	1,639	3,112	892	1,694	2,262	1,045	1,984	568	1,080	6,941
2003	3,476	1,345	2,668	942	2,064	2,216	857	1,701	601	1,316	6,692
2004	3,906	1,267	2,565	901	2,293	2,480	805	1,614	567	1,442	6,907
2005	3,887	1,377	2,737	922	1,953	2,480	879	1,722	580	1,229	6,889
2006	3,916	1,922	6,630	1,227	2,330	2,483	1,218	4,171	772	1,466	10,109
2007	3,960	1,817	6,455	1,351	2,468	2,514	1,154	4,060	850	1,553	10,130
2008	3,324	1,899	5,683	1,171	2,153	2,091	1,194	3,574	737	1,354	8,950
2009	2,467	1,362	3,726	930	1,779	1,551	857	2,344	585	1,119	6,455

[a] Equals average U.S. passenger vehicle weight.

[b] Equals average U.S. passenger vehicle ferrous content.

SOURCES : Imported units from *Automotive Facts and Figures* . Curb weights from NHTSA NCAP database. Ferrous content percentages based on *Motor Vehicle Facts and Figures* and AISI data compiled by Al Wrigley.

Table E-4

Ferrous Content of Truck and Bus Imports, 1983-2009 (thousands of tons)

Year	Canada [a]	Mexico [b]	Japan [c]	Germany [d]	Other [e]	Total
1983	833	0	970	0	4	1,807
1984	1,067	13	1,274	0	4	2,358
1985	990	71	1,793	1	1	2,856
1986	838	43	2,174	0	1	3,056
1987	917	26	1,712	0	0	2,656
1988	912	0	1,196	0	4	2,112
1989	1,173	24	919	9	25	2,150
1990	988	43	654	1	12	1,697
1991	950	27	604	0	1	1,582
1992	1,247	55	417	0	12	1,731
1993	1,159	71	327	0	3	1,560
1994	1,107	89	360	4	9	1,568
1995	1,020	246	192	2	14	1,473
1996	954	449	110	1	11	1,526
1997	990	508	113	5	21	1,636
1998	770	496	93	6	7	1,373
1999	1,133	594	71	5	12	1,815
2000	1,081	617	58	3	10	1,769
2001	963	735	47	7	8	1,760
2002	994	671	46	3	5	1,719
2003	982	675	49	2	6	1,713
2004	838	605	64	4	8	1,519
2005	827	641	63	5	10	1,546
2006	706	785	71	4	16	1,582
2007	727	742	44	8	17	1,538
2008	264	594	20	8	8	894
2009	80	532	9	3	4	628
Total	24,509	9,352	13,448	81	231	47,621

[a] From Table E-6.
[b] From Table E-7.
[c] From Table E-8.
[d] From Table E-9.
[e] From Table E-10.
SOURCES: See footnotes.

Table E-5

Weight Distribution of Retail Sales of Truck and Bus Imports, 1986-1997, and 2003-2009.

Year	≤ 6000 pounds		> 6,000 and ≤ 10,000 pounds		> 10,000 and ≤ 14,000 pounds		> 14,000 and ≤ 16,000 pounds		> 16,000 and ≤ 19,500 pounds		> 19,500 and ≤ 26,000 pounds		> 26,000 and ≤ 33,000 pounds		> 33,000 pounds		Total
	Units	Share	Units	Share	Units	Share	Units	Share	Units	Share	Units	Share	Units	Share	Units	Share	
1986	922,838	97.29%	0	0.00%	6,747	0.71%	0	0.00%	264	0.03%	5,145	0.54%	12,540	1.32%	1,057	0.11%	948,591
1987	823,957	96.07%	0	0.00%	9,476	1.10%	683	0.08%	2,262	0.26%	5,951	0.69%	14,411	1.68%	896	0.10%	857,636
1988	604,445	94.31%	0	0.00%	10,425	1.63%	1,210	0.19%	2,926	0.46%	5,599	0.87%	15,811	2.47%	489	0.08%	640,905
1989	504,003	93.65%	0	0.00%	12,115	2.25%	1,157	0.21%	2,981	0.55%	5,209	0.97%	12,397	2.30%	340	0.06%	538,202
1990	598,924	94.89%	0	0.00%	13,017	2.06%	1,210	0.19%	3,366	0.53%	5,432	0.86%	9,023	1.43%	187	0.03%	631,159
1991	527,348	95.62%	0	0.00%	10,661	1.93%	1,330	0.24%	3,263	0.59%	3,545	0.64%	5,284	0.96%	68	0.01%	551,499
1992	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
1993	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
1994	394,833	92.76%	0	0.00%	15,594	3.66%	4,929	1.16%	3,664	0.86%	4,095	0.96%	2,515	0.59%	0	0.00%	425,630
1995	390,517	93.60%	0	0.00%	11,660	2.79%	6,362	1.52%	3,050	0.73%	3,565	0.85%	2,049	0.49%	0	0.00%	417,203
1996	431,214	95.45%	0	0.00%	7,802	1.73%	5,436	1.20%	3,026	0.67%	2,983	0.66%	1,328	0.29%	0	0.00%	451,789
1997	571,131	96.35%	0	0.00%	7,836	1.32%	6,919	1.17%	3,210	0.54%	2,565	0.43%	1,094	0.18%	0	0.00%	592,755
1998	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
1999	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
2000	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
2001	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
2002	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
2003	1,220,379	97.94%	1,941	0.16%	4,860	0.39%	9,750	0.78%	6,066	0.49%	2,380	0.19%	664	0.05%	0	0.00%	1,246,040
2004	1,230,347	96.93%	10,232	0.81%	5,679	0.45%	13,263	1.04%	6,673	0.53%	2,592	0.20%	477	0.04%	0	0.00%	1,269,263
2005	1,189,622	96.15%	19,662	1.59%	6,031	0.49%	13,308	1.08%	6,372	0.52%	2,049	0.17%	224	0.02%	0	0.00%	1,237,268
2006	1,319,447	96.35%	21,961	1.60%	5,342	0.39%	13,461	0.98%	6,411	0.47%	2,422	0.18%	330	0.02%	0	0.00%	1,369,374
2007	1,366,968	97.07%	16,586	1.18%	4,531	0.32%	11,585	0.82%	6,172	0.44%	2,160	0.15%	234	0.02%	0	0.00%	1,408,236
2008	1,079,625	97.51%	14,600	1.32%	2,244	0.20%	5,403	0.49%	3,811	0.34%	1,205	0.11%	280	0.03%	0	0.00%	1,107,168
2009	875,696	98.28%	7,154	0.80%	1,392	0.16%	3,549	0.40%	2,315	0.26%	637	0.07%	252	0.03%	0	0.00%	890,995
Average(1986-1997)		95.00%		0.00%		1.92%		0.60%		0.52%		0.75%		1.17%		0.04%	

Note: "na" means not available.

SOURCE: *Motor Vehicle Facts and Figures,* U.S. retail sales of trucks.

Table E-6

Derivation of Ferrous Content of Truck and Bus Imports from Canada, 1983-2009

Year	Truck and Bus Units [a]									Average Ferrous Content [c]	Ferrous Content (thousands of tons) [d]								
	≤ 6000 pounds	> 6,000 and ≤ 10,000 pounds	> 10,000 and ≤ 14,000 pounds	> 14,000 and ≤ 16,000 pounds	> 16,000 and ≤ 19,500 pounds	> 19,500 and ≤ 26,000 pounds	> 26,000 and ≤ 33,000 pounds	> 33,000 pounds	Total [b]		≤ 6000 pounds	> 6,000 and ≤ 10,000 pounds	> 10,000 and ≤ 14,000 pounds	> 14,000 and ≤ 16,000 pounds	> 16,000 and ≤ 19,500 pounds	> 19,500 and ≤ 26,000 pounds	> 26,000 and ≤ 33,000 pounds	> 33,000 pounds	Total
1983	335,126	0	6,773	2,117	1,834	2,646	4,127	141	352,764	71%	715	0	29	11	12	21	43	2	833
1984	428,836	0	8,667	2,708	2,347	3,386	5,281	181	451,406	71%	915	0	37	14	15	27	55	2	1,067
1985	401,107	0	8,107	2,533	2,196	3,167	4,940	169	422,218	71%	850	0	34	13	14	25	51	2	990
1986	338,487	0	6,841	2,138	1,853	2,672	4,169	143	356,302	71%	719	0	29	11	12	22	44	2	838
1987	373,211	0	7,543	2,357	2,043	2,946	4,596	157	392,854	70%	787	0	32	12	13	24	48	2	917
1988	374,539	0	7,570	2,366	2,050	2,957	4,613	158	394,252	70%	782	0	32	12	13	23	47	2	912
1989	481,881	0	9,739	3,043	2,638	3,804	5,935	203	507,243	70%	1,007	0	41	16	16	30	61	2	1,173
1990	417,059	0	8,429	2,634	2,283	3,293	5,136	176	439,009	68%	848	0	34	13	14	25	51	2	988
1991	399,813	0	8,080	2,525	2,188	3,156	4,924	168	420,856	68%	815	0	33	13	13	24	49	2	950
1992	523,027	0	10,571	3,303	2,863	4,129	6,441	220	550,555	68%	1,070	0	43	17	17	32	65	2	1,247
1993	488,380	0	9,870	3,085	2,673	3,856	6,015	206	514,084	68%	995	0	40	16	16	30	60	2	1,159
1994	467,655	0	9,452	2,954	2,560	3,692	5,760	197	492,268	68%	950	0	38	15	15	28	58	2	1,107
1995	432,168	0	8,734	2,729	2,366	3,412	5,322	182	454,914	68%	875	0	35	14	14	26	53	2	1,020
1996	406,822	0	8,222	2,569	2,227	3,212	5,010	171	428,234	67%	818	0	33	13	13	24	50	2	954
1997	424,302	0	8,575	2,680	2,322	3,350	5,226	179	446,634	67%	850	0	34	13	14	25	51	2	990
1998	331,168	0	6,693	2,092	1,813	2,614	4,079	139	348,598	67%	661	0	27	10	11	20	40	2	770
1999	491,808	0	9,940	3,106	2,692	3,883	6,057	207	517,693	66%	972	0	39	15	16	29	59	2	1,133
2000	475,062	0	9,601	3,000	2,600	3,750	5,851	200	500,065	65%	928	0	38	15	15	28	56	2	1,081
2001	428,870	0	8,668	2,709	2,347	3,386	5,282	181	451,442	64%	826	0	33	13	13	25	50	2	963
2002	445,664	0	9,007	2,815	2,439	3,518	5,489	188	469,120	64%	853	0	34	13	14	26	52	2	994
2003	440,350	0	8,900	2,781	2,410	3,476	5,423	185	463,526	64%	842	0	34	13	14	25	51	2	982
2004	410,124	3,411	1,893	4,421	2,224	864	159	0	423,096	64%	781	9	7	21	13	6	1	0	838
2005	398,833	6,592	2,022	4,462	2,136	687	75	0	414,807	64%	763	17	8	21	12	5	1	0	827
2006	344,306	5,731	1,394	3,513	1,673	632	86	0	357,334	63%	655	15	5	17	9	5	1	0	706
2007	358,725	4,353	1,189	3,040	1,620	567	61	0	369,555	64%	683	11	5	14	9	4	1	0	727
2008	133,297	1,803	277	667	471	149	35	0	136,698	63%	252	5	1	3	3	1	0	0	264
2009	41,022	335	65	166	108	30	12	0	41,739	63%	77	1	0	1	1	0	0	0	80

[a] Trucks and Bus units for 1983 through 2003 are derived by multiplying average 1986 through 1997 weight class percentage in Table E-5 by total units, which are from Table E-11. For 2004 through 2009, these units are derived by multiplying the weight class percentages of respective years in Table E-5 by total units, which are form Table E-11.

[b] From Table E-11.

[c] From Table E-3.

[d] Derived by multiplying units in weight class interval by mid-point of weight class interval (6,000 pounds in first interval and 33,001 pounds in last interval) and ferrous content percentage.

SOURCES : See footnotes.

Table E-7

Derivation of Ferrous Content of Truck and Bus Imports from Mexico, 1983-2009

Year	Truck and Bus Units [a]									Average Ferrous Content [c]	Ferrous Content (thousands of tons) [d]								
	≤ 6000 pounds	> 6,000 and ≤ 10,000 pounds	> 10,000 and ≤ 14,000 pounds	> 14,000 and ≤ 16,000 pounds	> 16,000 and ≤ 19,500 pounds	> 19,500 and ≤ 26,000 pounds	> 26,000 and ≤ 33,000 pounds	> 33,000 pounds	Total [b]		≤ 6000 pounds	> 6,000 and ≤ 10,000 pounds	> 10,000 and ≤ 14,000 pounds	> 14,000 and ≤ 16,000 pounds	> 16,000 and ≤ 19,500 pounds	> 19,500 and ≤ 26,000 pounds	> 26,000 and ≤ 33,000 pounds	> 33,000 pounds	Total
1983	23	0	0	0	0	0	0	0	24	71%	0	0	0	0	0	0	0	0	0
1984	5,284	0	107	33	29	42	65	2	5,562	71%	11	0	0	0	0	0	1	0	13
1985	28,855	0	583	182	158	228	355	12	30,374	71%	61	0	2	1	1	2	4	0	71
1986	17,205	0	348	109	94	136	212	7	18,111	71%	37	0	1	1	1	1	2	0	43
1987	10,729	0	217	68	59	85	132	5	11,294	70%	23	0	1	0	0	1	1	0	26
1988	32	0	1	0	0	0	0	0	34	70%	0	0	0	0	0	0	0	0	0
1989	9,886	0	200	62	54	78	122	4	10,406	70%	21	0	1	0	0	1	1	0	24
1990	17,957	0	363	113	98	142	221	8	18,902	68%	36	0	1	1	1	1	2	0	43
1991	11,341	0	229	72	62	90	140	5	11,938	68%	23	0	1	0	0	1	1	0	27
1992	23,204	0	469	147	127	183	286	10	24,425	68%	47	0	2	1	1	1	3	0	55
1993	30,057	0	607	190	165	237	370	13	31,639	68%	61	0	2	1	1	2	4	0	71
1994	37,512	0	758	237	205	296	462	16	39,486	68%	76	0	3	1	1	2	5	0	89
1995	104,041	0	2,103	657	569	821	1,281	44	109,517	68%	211	0	9	3	3	6	13	0	246
1996	191,660	0	3,874	1,210	1,049	1,513	2,360	81	201,747	67%	386	0	16	6	6	12	23	1	449
1997	217,776	0	4,401	1,375	1,192	1,719	2,682	92	229,238	67%	436	0	18	7	7	13	26	1	508
1998	213,531	0	4,316	1,349	1,169	1,686	2,630	90	224,769	67%	426	0	17	7	7	13	26	1	496
1999	257,966	0	5,214	1,629	1,412	2,037	3,177	109	271,543	66%	510	0	21	8	8	15	31	1	594
2000	270,858	0	5,474	1,711	1,483	2,138	3,336	114	285,114	65%	529	0	21	8	9	16	32	1	617
2001	327,292	0	6,615	2,067	1,791	2,584	4,031	138	344,518	64%	631	0	25	10	10	19	38	1	735
2002	301,006	0	6,083	1,901	1,648	2,376	3,707	127	316,848	64%	576	0	23	9	9	17	35	1	671
2003	302,699	0	6,118	1,912	1,657	2,390	3,728	127	318,631	64%	579	0	23	9	9	17	35	1	675
2004	295,876	2,461	1,366	3,190	1,605	623	115	0	305,235	64%	564	6	5	15	9	5	1	0	605
2005	309,242	5,111	1,568	3,459	1,656	533	58	0	321,628	64%	592	13	6	17	9	4	1	0	641
2006	382,759	6,371	1,550	3,905	1,860	703	96	0	397,242	63%	728	16	6	19	10	5	1	0	785
2007	365,910	4,440	1,213	3,101	1,652	578	63	0	376,957	64%	697	11	5	15	9	4	1	0	742
2008	299,501	4,050	623	1,499	1,057	334	78	0	307,142	63%	565	10	2	7	6	2	1	0	594
2009	271,972	2,222	432	1,102	719	198	78	0	276,724	63%	513	6	2	5	4	1	1	0	532

[a] Trucks and Bus units for 1983 through 2003 are derived by multiplying average 1986 through 1997 weight class percentage in Table E-5 by total units, which are from Table E-11. For 2004 through 2009, these units are derived by multiplying the weight class percentages of respective years in Table E-5 by total units, which are form Table E-11.

[b] From Table E-11.

[c] From Table E-3.

[d] Derived by multiplying units in weight class interval by mid-point of weight class interval (6,000 pounds in first interval and 33,001 pounds in last interval) and ferrous content percentage.

SOURCES : See footnotes.

Table E-8

Derivation of Ferrous Content of Truck and Bus Imports from Japan, 1983-2009

	Truck and Bus Units [a]										Ferrous Content (thousands of tons) [d]								
Year	≤ 6000 pounds	> 6,000 and ≤ 10,000 pounds	> 10,000 and ≤ 14,000 pounds	> 14,000 and ≤ 16,000 pounds	> 16,000 and ≤ 19,500 pounds	> 19,500 and ≤ 26,000 pounds	> 26,000 and ≤ 33,000 pounds	> 33,000 pounds	Total [b]	Average Ferrous Content [c]	≤ 6000 pounds	and ≤ 10,000 pounds	> 10,000 and ≤ 14,000 pounds	> 14,000 and ≤ 16,000 pounds	> 16,000 and ≤ 19,500 pounds	> 19,500 and ≤ 26,000 pounds	> 26,000 and ≤ 33,000 pounds	> 33,000 pounds	Total
1983	408,842	0	8,263	2,582	2,238	3,228	5,035	172	430,360	68%	833	0	34	13	13	25	50	2	970
1984	538,209	0	10,877	3,399	2,946	4,249	6,628	227	566,536	68%	1,093	0	44	17	18	33	66	3	1,274
1985	759,862	0	15,357	4,799	4,159	5,999	9,358	320	799,855	68%	1,539	0	62	24	25	46	93	4	1,793
1986	927,577	0	18,747	5,858	5,077	7,323	11,424	391	976,397	67%	1,866	0	75	29	30	56	113	4	2,174
1987	733,620	0	14,827	4,633	4,016	5,792	9,035	309	772,232	67%	1,469	0	59	23	24	44	89	3	1,712
1988	514,539	0	10,399	3,250	2,816	4,062	6,337	217	541,620	67%	1,027	0	41	16	17	31	62	2	1,196
1989	398,975	0	8,064	2,520	2,184	3,150	4,914	168	419,974	66%	789	0	32	12	13	24	48	2	919
1990	287,347	0	5,807	1,815	1,573	2,269	3,539	121	302,471	65%	561	0	23	9	9	17	34	1	654
1991	268,869	0	5,434	1,698	1,472	2,123	3,311	113	283,020	64%	518	0	21	8	8	16	31	1	604
1992	186,939	0	3,778	1,181	1,023	1,476	2,302	79	196,778	64%	358	0	14	6	6	11	22	1	417
1993	146,521	0	2,961	925	802	1,157	1,805	62	154,233	64%	280	0	11	4	5	8	17	1	327
1994	161,590	0	3,266	1,021	884	1,276	1,990	68	170,095	64%	309	0	12	5	5	9	19	1	360
1995	85,951	0	1,737	543	470	679	1,059	36	90,475	64%	164	0	7	3	3	5	10	0	192
1996	49,386	0	998	312	270	390	608	21	51,985	64%	94	0	4	1	2	3	6	0	110
1997	50,492	0	1,020	319	276	399	622	21	53,149	64%	97	0	4	2	2	3	6	0	113
1998	41,668	0	842	263	228	329	513	18	43,861	64%	80	0	3	1	1	2	5	0	93
1999	31,980	0	646	202	175	252	394	13	33,663	64%	61	0	2	1	1	2	4	0	71
2000	26,045	0	526	164	143	206	321	11	27,416	64%	50	0	2	1	1	1	3	0	58
2001	21,039	0	425	133	115	166	259	9	22,146	64%	40	0	2	1	1	1	2	0	47
2002	20,715	0	419	131	113	164	255	9	21,805	64%	40	0	2	1	1	1	2	0	46
2003	21,932	0	443	139	120	173	270	9	23,086	64%	42	0	2	1	1	1	3	0	49
2004	31,390	261	145	338	170	66	12	0	32,383	63%	59	1	1	2	1	0	0	0	64
2005	30,634	506	155	343	164	53	6	0	31,861	63%	58	1	1	2	1	0	0	0	63
2006	34,820	580	141	355	169	64	9	0	36,138	63%	66	1	1	2	1	0	0	0	71
2007	21,796	264	72	185	98	34	4	0	22,454	63%	41	1	0	1	1	0	0	0	44
2008	10,163	137	21	51	36	11	3	0	10,422	63%	19	0	0	0	0	0	0	0	20
2009	4,580	37	7	19	12	3	1	0	4,660	63%	9	0	0	0	0	0	0	0	9

[a] Trucks and Bus units for 1983 through 2003 are derived by multiplying average 1986 through 1997 weight class percentage in Table E-5 by total units, which are from Table E-11. For 2004 through 2009, these units are derived by multiplying the weight class percentages of respective years in Table E-5 by total units, which are form Table E-11.

[b] From Table E-11.

[c] From Table E-3.

[d] Derived by multiplying units in weight class interval by mid-point of weight class interval (6,000 pounds in first interval and 33,001 pounds in last interval) and ferrous content percentage.

SOURCES : See footnotes.

Table E-9

Derivation of Ferrous Content of Truck and Bus Imports from Germany, 1983-2009

	Truck and Bus Units [a]										Ferrous Content (thousands of tons) [d]								
Year	≤ 6000 pounds	> 6,000 and ≤ 10,000 pounds	> 10,000 and ≤ 14,000 pounds	> 14,000 and ≤ 16,000 pounds	> 16,000 and ≤ 19,500 pounds	> 19,500 and ≤ 26,000 pounds	> 26,000 and ≤ 33,000 pounds	> 33,000 pounds	Total [b]	Average Ferrous Content [c]	≤ 6000 pounds	and ≤ 10,000 pounds	> 10,000 and ≤ 14,000 pounds	> 14,000 and ≤ 16,000 pounds	> 16,000 and ≤ 19,500 pounds	> 19,500 and ≤ 26,000 pounds	> 26,000 and ≤ 33,000 pounds	> 33,000 pounds	Total
1983	132	0	3	1	1	1	2	0	139	70%	0	0	0	0	0	0	0	0	0
1984	147	0	3	1	1	1	2	0	155	70%	0	0	0	0	0	0	0	0	0
1985	294	0	6	2	2	2	4	0	309	68%	1	0	0	0	0	0	0	0	1
1986	130	0	3	1	1	1	2	0	137	68%	0	0	0	0	0	0	0	0	0
1987	105	0	2	1	1	1	1	0	111	68%	0	0	0	0	0	0	0	0	0
1988	162	0	3	1	1	1	2	0	171	68%	0	0	0	0	0	0	0	0	0
1989	3,667	0	74	23	20	29	45	2	3,860	68%	7	0	0	0	0	0	0	0	9
1990	269	0	5	2	1	2	3	0	283	68%	1	0	0	0	0	0	0	0	1
1991	74	0	1	0	0	1	1	0	78	67%	0	0	0	0	0	0	0	0	0
1992	41	0	1	0	0	0	1	0	43	67%	0	0	0	0	0	0	0	0	0
1993	78	0	2	0	0	1	1	0	82	67%	0	0	0	0	0	0	0	0	0
1994	1,792	0	36	11	10	14	22	1	1,886	66%	4	0	0	0	0	0	0	0	4
1995	972	0	20	6	5	8	12	0	1,023	65%	2	0	0	0	0	0	0	0	2
1996	482	0	10	3	3	4	6	0	507	64%	1	0	0	0	0	0	0	0	1
1997	2,114	0	43	13	12	17	26	1	2,225	64%	4	0	0	0	0	0	0	0	5
1998	2,859	0	58	18	16	23	35	1	3,009	64%	5	0	0	0	0	0	0	0	6
1999	2,233	0	45	14	12	18	28	1	2,351	64%	4	0	0	0	0	0	0	0	5
2000	1,208	0	24	8	7	10	15	1	1,272	64%	2	0	0	0	0	0	0	0	3
2001	3,011	0	61	19	16	24	37	1	3,169	64%	6	0	0	0	0	0	0	0	7
2002	1,205	0	24	8	7	10	15	1	1,268	64%	2	0	0	0	0	0	0	0	3
2003	890	0	18	6	5	7	11	0	937	64%	2	0	0	0	0	0	0	0	2
2004	1,990	17	9	21	11	4	1	0	2,053	63%	4	0	0	0	0	0	0	0	4
2005	2,326	38	12	26	12	4	0	0	2,419	63%	4	0	0	0	0	0	0	0	5
2006	2,118	35	9	22	10	4	1	0	2,198	63%	4	0	0	0	0	0	0	0	4
2007	3,926	48	13	33	18	6	1	0	4,045	63%	7	0	0	0	0	0	0	0	8
2008	3,964	54	8	20	14	4	1	0	4,065	63%	7	0	0	0	0	0	0	0	8
2009	1,385	11	2	6	4	1	0	0	1,409	63%	3	0	0	0	0	0	0	0	3

[a] Trucks and Bus units for 1983 through 2003 are derived by multiplying average 1986 through 1997 weight class percentage in Table E-5 by total units, which are from Table E-11. For 2004 through 2009, these units are derived by multiplying the weight class percentages of respective years in Table E-5 by total units, which are form Table E-11.

[b] From Table E-11.

[c] From Table E-3.

[d] Derived by multiplying units in weight class interval by mid-point of weight class interval (6,000 pounds in first interval and 33,001 pounds in last interval) and ferrous content percentage.

SOURCES : See footnotes.

Table E-10

Derivation of Ferrous Content of Truck and Bus Imports from Other Countries, 1983-2009

Year	Truck and Bus Units [a]									Average Ferrous Content [c]	Ferrous Content (thousands of tons) [d]								
	≤ 6000 pounds	> 6,000 and ≤ 10,000 pounds	> 10,000 and ≤ 14,000 pounds	> 14,000 and ≤ 16,000 pounds	> 16,000 and ≤ 19,500 pounds	> 19,500 and ≤ 26,000 pounds	> 26,000 and ≤ 33,000 pounds	> 33,000 pounds	Total [b]		≤ 6000 pounds	and ≤ 10,000 pounds	> 10,000 and ≤ 14,000 pounds	> 14,000 and ≤ 16,000 pounds	> 16,000 and ≤ 19,500 pounds	> 19,500 and ≤ 26,000 pounds	> 26,000 and ≤ 33,000 pounds	> 33,000 pounds	Total
1983	1,451	0	29	9	8	11	18	1	1,527	70%	3	0	0	0	0	0	0	0	4
1984	1,590	0	32	10	9	13	20	1	1,674	70%	3	0	0	0	0	0	0	0	4
1985	409	0	8	3	2	3	5	0	430	68%	1	0	0	0	0	0	0	0	1
1986	374	0	8	2	2	3	5	0	394	68%	1	0	0	0	0	0	0	0	1
1987	140	0	3	1	1	1	2	0	147	68%	0	0	0	0	0	0	0	0	0
1988	1,592	0	32	10	9	13	20	1	1,676	68%	3	0	0	0	0	0	0	0	4
1989	10,548	0	213	67	58	83	130	4	11,103	68%	21	0	1	0	0	1	1	0	25
1990	5,076	0	103	32	28	40	63	2	5,343	68%	10	0	0	0	0	0	1	0	12
1991	540	0	11	3	3	4	7	0	568	67%	1	0	0	0	0	0	0	0	1
1992	5,279	0	107	33	29	42	65	2	5,557	67%	11	0	0	0	0	0	1	0	12
1993	1,176	0	24	7	6	9	14	0	1,238	67%	2	0	0	0	0	0	0	0	3
1994	3,708	0	75	23	20	29	46	2	3,903	66%	7	0	0	0	0	0	0	0	9
1995	6,079	0	123	38	33	48	75	3	6,399	65%	12	0	0	0	0	0	1	0	14
1996	5,095	0	103	32	28	40	63	2	5,363	64%	10	0	0	0	0	0	1	0	11
1997	9,392	0	190	59	51	74	116	4	9,886	64%	18	0	1	0	0	1	1	0	21
1998	3,169	0	64	20	17	25	39	1	3,336	64%	6	0	0	0	0	0	0	0	7
1999	5,310	0	107	34	29	42	65	2	5,589	64%	10	0	0	0	0	0	1	0	12
2000	4,420	0	89	28	24	35	54	2	4,653	64%	8	0	0	0	0	0	1	0	10
2001	3,604	0	73	23	20	28	44	2	3,794	64%	7	0	0	0	0	0	0	0	8
2002	2,282	0	46	14	12	18	28	1	2,402	64%	4	0	0	0	0	0	0	0	5
2003	2,529	0	51	16	14	20	31	1	2,662	64%	5	0	0	0	0	0	0	0	6
2004	3,725	31	17	40	20	8	1	0	3,843	63%	7	0	0	0	0	0	0	0	8
2005	4,893	81	25	55	26	8	1	0	5,089	63%	9	0	0	0	0	0	0	0	10
2006	7,635	127	31	78	37	14	2	0	7,924	63%	14	0	0	0	0	0	0	0	16
2007	8,420	102	28	71	38	13	1	0	8,674	63%	16	0	0	0	0	0	0	0	17
2008	3,885	53	8	19	14	4	1	0	3,984	63%	7	0	0	0	0	0	0	0	8
2009	2,240	18	4	9	6	2	1	0	2,279	63%	4	0	0	0	0	0	0	0	4

[a] Trucks and Bus units for 1983 through 2003 are derived by multiplying average 1986 through 1997 weight class percentage in Table E-5 by total units, which are from Table E-11. For 2004 through 2009, these units are derived by multiplying the weight class percentages of respective years in Table E-5 by total units, which are form Table E-11.

[b] From Table E-11.

[c] From Table E-3.

[d] Derived by multiplying units in weight class interval by mid-point of weight class interval (6,000 pounds in first interval and 33,001 pounds in last interval) and ferrous content percentage.

SOURCES : See footnotes.

Table E-11

U.S. Imports of Motor Vehicles by Country, 1983-2009 (units)

Year	Passenger Cars						Trucks and Buses					
	Canada	Mexico	Japan	Germany	Other	Total	Canada	Mexico	Japan	Germany	Other	Total
1983	836,756	2	2,112,011	330,263	387,991	3,667,023	352,764	24	430,360	139	1,527	784,814
1984	1,073,425	134,465	2,691,537	399,006	581,127	4,879,560	451,406	5,562	566,536	155	1,674	1,025,333
1985	1,144,770	13,647	2,527,479	473,110	235,902	4,394,908	422,218	30,374	799,855	309	430	1,253,186
1986	1,162,226	41,983	2,618,711	451,699	416,678	4,691,297	356,302	18,111	976,397	137	394	1,351,341
1987	926,927	126,266	2,417,509	377,542	740,766	4,589,010	392,854	11,294	772,232	111	147	1,176,638
1988	1,191,357	148,065	2,123,051	264,249	723,491	4,450,213	394,252	34	541,620	171	1,676	937,753
1989	1,151,122	133,049	2,051,525	216,881	490,151	4,042,728	507,243	10,406	419,974	3,860	11,103	952,586
1990	1,220,221	215,986	1,867,794	245,286	395,315	3,944,602	439,009	18,902	302,471	283	5,343	766,008
1991	1,195,987	249,499	1,789,138	172,446	329,392	3,736,462	420,856	11,938	283,020	78	568	716,460
1992	1,200,358	266,149	1,677,811	206,124	265,025	3,615,467	550,555	24,425	196,778	43	5,557	777,358
1993	1,468,272	299,634	1,597,391	184,356	258,807	3,808,460	514,084	31,639	154,233	82	1,238	701,276
1994	1,591,326	360,370	1,593,169	187,999	364,150	4,097,014	492,268	39,486	170,095	1,886	3,903	707,638
1995	1,678,276	463,305	1,387,193	206,892	378,251	4,113,917	454,914	109,517	90,475	1,023	6,399	662,328
1996	1,688,123	550,622	1,190,581	234,480	400,641	4,064,447	428,234	201,747	51,985	507	5,363	687,836
1997	1,722,199	539,384	1,383,519	298,032	414,086	4,357,220	446,634	229,238	53,149	2,225	9,886	741,132
1998	1,817,836	586,973	1,317,702	372,632	406,296	4,501,439	348,598	224,769	43,861	3,009	3,336	623,573
1999	2,125,876	637,486	1,560,857	456,246	619,351	5,399,816	517,693	271,543	33,663	2,351	5,589	830,839
2000	2,076,181	927,574	1,661,906	489,086	851,087	6,005,834	500,065	285,114	27,416	1,272	4,653	818,520
2001	1,089,236	853,264	1,616,950	492,177	1,700,998	5,752,625	451,442	344,518	22,146	3,169	3,794	825,069
2002	1,815,323	838,829	1,827,434	571,164	1,027,407	6,080,157	469,120	316,848	21,805	1,268	2,402	811,443
2003	1,751,958	677,771	1,575,599	560,381	1,181,645	5,747,354	463,526	318,631	23,086	937	2,662	808,842
2004	2,004,890	650,400	1,538,805	545,634	1,333,222	6,072,951	423,096	305,235	32,383	2,053	3,843	766,610
2005	1,955,072	692,659	1,628,313	544,971	1,151,242	5,972,257	414,807	321,628	31,861	2,419	5,089	775,804
2006	1,927,382	945,726	3,693,385	695,364	1,370,498	8,632,355	357,334	397,242	36,138	2,198	7,924	800,836
2007	1,907,775	875,417	3,504,443	753,898	1,397,847	8,439,380	369,555	376,957	22,454	4,045	8,674	781,685
2008	1,598,115	912,841	3,119,746	679,624	1,226,243	7,536,569	136,698	307,142	10,422	4,065	3,984	462,311
2009	1,161,188	641,089	2,029,754	526,570	1,007,802	5,366,403	41,739	276,724	4,660	1,409	2,279	326,811
Total	42,343,421	12,782,484	59,829,451	12,120,595	20,197,336	147,273,287	11,978,924	4,489,080	7,034,281	39,577	112,746	23,654,608

SOURCE: *Motor Vehicle Facts and Figures* , 1981-1987, 1989-2003, 2004-2010.

Table E-12

Total Exports of Ferrous Material in Motor Vehicles (thousands of tons)

Year	Cars [a]	Trucks and Buses [b]	Total
1983	561	356	916
1984	643	480	1,122
1985	684	539	1,223
1986	708	660	1,367
1987	670	710	1,380
1988	867	729	1,596
1989	829	589	1,419
1990	891	454	1,345
1991	814	559	1,373
1992	954	452	1,405
1993	990	507	1,497
1994	1,208	785	1,994
1995	1,134	724	1,858
1996	1,139	846	1,985
1997	1,267	1,405	2,672
1998	1,076	988	2,065
1999	1,103	861	1,964
2000	1,139	904	2,044
2001	1,442	691	2,133
2002	1,653	810	2,463
2003	1,617	834	2,451
2004	1,759	977	2,736
2005	2,127	1,026	3,153
2006	2,155	1,027	3,182
2007	2,556	1,173	3,729
2008	2,078	1,004	3,081
2009	1,009	945	1,954
Total	34,674	21,927	56,600

[a] From Table E-13.

[b] From Table E-15.

SOURCES: See footnotes.

Table E-13

Ferrous Content of Car Exports, 1983-2009

Year	Exported Cars (units) [1]	Average Vehicle Weight (pounds) [a] [2]	Vehicle Ferrous Content [b] [3]	Average Vehicle Ferrous Content Weight (pounds) [4] = [2] x [3]	Total Weight of Exported Cars (thousands of tons) [5] = [1] x [2]	Ferrous Content of Car Exports (thousands of tons) [6] = [3] x [5]
1983	550,792	2,862.0	71%	2,035.3	788	561
1984	591,454	3,053.9	71%	2,172.8	903	643
1985	700,809	2,764.8	71%	1,952.0	969	684
1986	672,994	2,970.1	71%	2,103.1	999	708
1987	633,250	3,009.5	70%	2,116.0	953	670
1988	781,171	3,186.6	70%	2,218.7	1,245	867
1989	778,373	3,060.0	70%	2,131.3	1,191	829
1990	793,757	3,313.9	68%	2,245.1	1,315	891
1991	754,950	3,172.4	68%	2,156.7	1,198	814
1992	851,074	3,286.6	68%	2,241.6	1,399	954
1993	864,238	3,374.2	68%	2,290.6	1,458	990
1994	1,019,258	3,502.0	68%	2,371.1	1,785	1,208
1995	989,367	3,396.5	68%	2,292.7	1,680	1,134
1996	973,634	3,490.1	67%	2,340.4	1,699	1,139
1997	1,075,303	3,530.6	67%	2,356.6	1,898	1,267
1998	898,636	3,602.4	67%	2,395.7	1,619	1,076
1999	905,410	3,697.0	66%	2,436.2	1,674	1,103
2000	951,284	3,677.3	65%	2,394.8	1,749	1,139
2001	1,180,229	3,803.5	64%	2,443.1	2,244	1,442
2002	1,326,262	3,907.9	64%	2,492.5	2,591	1,653
2003	1,277,847	3,967.8	64%	2,530.0	2,535	1,617
2004	1,421,815	3,896.2	64%	2,474.1	2,770	1,759
2005	1,676,725	3,976.6	64%	2,537.1	3,334	2,127
2006	1,672,640	4,064.1	63%	2,576.6	3,399	2,155
2007	1,939,144	4,151.1	64%	2,636.0	4,025	2,556
2008	1,588,076	4,159.7	63%	2,616.5	3,303	2,078
2009	755,093	4,248.4	63%	2,672.2	1,604	1,009
Total	29,157,996	na	na	na	52,532	34,674

Note: "na" means not applicable.

[a] From NHTSA NCAP database.

[b] Vehicle ferrous content percentage calculated from *Motor Vehicle Facts and Figures* vehicle data in Table E-14. 2009 percentage equals to 2008.

SOURCES: *Motor Vehicle Facts and Figures*, 1981-1987, 1989-1996, 2000-2003, 2004-2010; Al Wrigley, *Automotive Material Content* (Received from AISI - not published as received); and NHTSA NCAP database.

Table E-14

Ferrous Content of Car Exports Using MVFF Vehicle Data, 1983-2009 [a]

Year [b]	Average Vehicle Weight (pounds) [a] [1]	Average Vehicle Ferrous Content Weight (pounds) [2]	Ferrous Content Weight Share [3] = [2] ÷ [1]
Based on American Metal Market			
1983	3,173.0	2,256.5	71%
1984	3,232.0	2,299.5	71%
1985	3,187.5	2,250.5	71%
1986	3,170.5	2,245.0	71%
1987	3,178.0	2,234.5	70%
1988	3,167.0	2,205.0	70%
1989	3,140.0	2,187.0	70%
1990	2,896.0	1,962.0	68%
1991	3,015.8	2,050.3	68%
1992	3,135.5	2,138.5	68%
1993	3,149.5	2,138.0	68%
1994	3,171.0	2,147.0	68%
1995	3,208.0	2,165.5	68%
1996	3,236.0	2,170.0	67%
1997	3,248.0	2,168.0	67%
1998	3,261.5	2,169.0	67%
1999	3,274.0	2,157.5	66%
2000	3,286.0	2,140.0	65%
2001	3,309.0	2,125.5	64%
2002	3,357.5	2,141.5	64%
2003	3,358.5	2,141.5	64%
Based on American Chemistry Council			
2004	4,034.0	2,564.0	64%
2005	4,017.0	2,559.0	64%
2006	4,044.0	2,561.0	63%
2007	4,076.0	2,593.0	64%
2008	4,070.0	2,562.0	63%
2009	4,070.0	2,562.0	63%

Note: "na" means not applicable.
[a] In previous table (Table E-13), the NHTSA NCAP database was used instead of the MVFF data.
[b] Vehicle and material weights for 1983 and 1991 equal average weights for the previous and following years; 2009 vehicle and material weights equal to 2008.
SOURCES: *Motor Vehicle Facts and Figures* , 1981-1987, 1989-1996, 2000-2003, 2004-2010; U.S. Census Bureau for exports; and Al Wrigley, *Automotive Material Content* (Received from AISI - not published as received).

Table E-15

U.S. Exports of Trucks and Buses by Weight Class, 1983-2009

Year	Truck and Bus Units Exported [a]									Total Exported Weight (thousands of tons) [c]							
	≤ 6000 pounds	> 6,000 and ≤ 10,000 pounds	> 10,000 and ≤ 14,000 pounds	> 14,000 and ≤ 16,000 pounds	> 16,000 and ≤ 19,500 pounds	> 19,500 and ≤ 26,000 pounds	> 26,000 and ≤ 33,000 pounds	> 33,000 pounds	Total [b]	≤ 6000 pounds	> 6,000 and ≤ 10,000 pounds	> 10,000 and ≤ 14,000 pounds	> 14,000 and ≤ 16,000 pounds	> 16,000 and ≤ 19,500 pounds	> 19,500 and ≤ 26,000 pounds	> 26,000 and ≤ 33,000 pounds	> 33,000 pounds
1983	51,167	42,936	154	0	76	4,523	3,751	4,035	106,643	154	172	1	0	1	51	55	67
1984	66,927	44,644	1,131	0	146	5,831	5,841	8,127	132,646	201	179	7	0	1	66	86	134
1985	92,643	47,124	46	-	154	4,947	6,676	8,488	160,078	278	189	0	-	1	56	98	140
1986	131,462	55,271	-	-	144	3,943	7,258	9,886	207,964	394	221	-	-	1	45	107	163
1987	148,722	55,564	-	32	177	4,343	7,379	10,969	227,187	446	222	-	0	2	49	109	181
1988	150,809	61,234	-	70	275	4,468	7,080	11,635	235,571	452	245	-	1	2	51	104	192
1989	133,136	46,812	0	59	229	3,226	5,392	8,532	197,385	399	187	0	0	2	37	80	141
1990	111,976	33,993	-	57	48	2,345	5,037	5,853	159,308	336	136	-	0	0	27	74	97
1991	155,299	39,412	-	168	17	1,824	5,018	6,205	207,944	466	158	-	1	0	21	74	102
1992	119,753	29,453	-	261	0	1,270	4,351	6,332	161,419	359	118	-	2	0	14	64	104
1993	128,460	39,441	-	222	-	1,140	3,915	7,934	181,111	385	158	-	2	-	13	58	131
1994	183,927	68,416	0	627	9	784	6,875	13,289	273,927	552	274	0	5	0	9	101	219
1995	170,944	63,363	61	833	39	670	5,826	12,456	254,193	513	253	0	6	0	8	86	206
1996	224,331	71,323	579	1,560	43	397	5,355	12,334	315,921	673	285	3	12	0	5	79	204
1997	375,487	101,644	1,655	2,998	97	838	8,800	24,171	515,690	1,126	407	10	22	1	10	130	399
1998	240,783	75,613	3,598	2,307	987	511	6,258	19,121	349,178	722	302	22	17	9	6	92	316
1999	205,582	81,798	2,195	3,363	1,048	566	4,500	14,715	313,767	617	327	13	25	9	6	66	243
2000	219,814	102,477	1,231	6,242	1,202	532	3,118	12,274	346,891	659	410	7	47	11	6	46	203
2001	186,780	80,253	2,595	1,311	1,108	420	2,446	7,196	282,109	560	321	16	10	10	5	36	119
2002	218,773	97,336	1,907	1,109	791	436	2,603	9,304	332,260	656	389	11	8	7	5	38	154
2003	214,475	103,990	1,877	986	911	356	2,709	10,787	336,092	643	416	11	7	8	4	40	178
2004	213,653	132,492	2,430	1,306	1,319	774	2,990	16,865	371,830	641	530	15	10	12	9	44	278
2005	237,024	122,211	2,271	1,397	1,894	537	2,798	19,343	387,474	711	489	14	10	17	6	41	319
2006	225,258	127,511	1,828	1,101	1,467	654	2,839	21,393	382,052	676	510	11	8	13	7	42	353
2007	258,269	168,643	5,203	1,659	1,778	510	2,127	18,233	456,423	775	675	31	12	16	6	31	301
2008	197,863	151,843	4,384	1,005	1,298	606	3,252	17,835	378,086	594	607	26	8	12	7	48	294
2009	142,464	183,321	5,412	1,340	1,833	688	1,829	14,998	351,885	427	733	32	10	16	8	27	247

(continued)

Table E-15 (continued)

U.S. Exports of Trucks and Buses by Weight Class, 1983-2009

Year	Average Ferrous Content [d]	Ferrous Content Exported (thousands of tons)								
		≤ 6000 pounds	> 6,000 and ≤ 10,000 pounds	> 10,000 and ≤ 14,000 pounds	> 14,000 and ≤ 16,000 pounds	> 16,000 and ≤ 19,500 pounds	> 19,500 and ≤ 26,000 pounds	> 26,000 and ≤ 33,000 pounds	> 33,000 pounds	Total
1983	71%	109	122	1	0	0	37	39	47	356
1984	71%	143	127	5	0	1	47	61	95	480
1985	71%	196	133	0	-	1	40	70	99	539
1986	71%	279	157	-	-	1	32	76	116	660
1987	70%	314	156	-	0	1	35	77	127	710
1988	70%	315	171	-	0	2	35	73	134	729
1989	70%	278	130	0	0	1	26	55	98	589
1990	68%	228	92	-	0	0	18	50	65	454
1991	68%	317	107	-	1	0	14	50	70	559
1992	68%	245	80	-	1	0	10	44	71	452
1993	68%	262	107	-	1	-	9	39	89	507
1994	68%	374	185	0	3	0	6	69	148	785
1995	68%	346	171	0	4	0	5	58	139	724
1996	67%	451	191	2	8	0	3	53	136	846
1997	67%	752	271	7	15	1	6	87	266	1,405
1998	67%	480	201	14	12	6	4	61	210	988
1999	66%	406	216	9	17	6	4	44	160	861
2000	65%	429	267	5	30	7	4	30	132	904
2001	64%	360	206	10	6	6	3	23	76	691
2002	64%	419	248	7	5	4	3	24	98	810
2003	64%	410	265	7	5	5	3	25	113	834
2004	64%	407	337	9	6	7	6	28	177	977
2005	64%	454	312	9	7	11	4	26	204	1,026
2006	63%	428	323	7	5	8	5	27	224	1,027
2007	64%	492	428	20	8	10	4	20	191	1,173
2008	63%	373	382	17	5	7	4	30	185	1,004
2009	63%	269	461	20	6	10	5	17	156	945

[a] Derived by multiplying weight class percentage in Table E-17 by total units in Table E-16.

[b] From Table E-16.

[c] Derived by multiplying units in weight class interval by mid-point of weight class interval (6,000 pounds in first interval and 33,001 pounds in last interval).

[d] From Table E-13.

SOURCES : See footnotes.

Table E-16

U.S. Exports of Trucks and Buses, 1983-2009 (units)

Year	Trucks	Buses	Total
1983 [a]	na	na	106,643
1984 [a]	na	na	132,646
1985 [a]	na	na	160,078
1986	205,088	2,876	207,964
1987	221,996	5,191	227,187
1988	230,014	5,557	235,571
1989	188,682	8,703	197,385
1990	151,272	8,036	159,308
1991	199,803	8,141	207,944
1992	151,972	9,447	161,419
1993	171,677	9,434	181,111
1994	266,998	6,929	273,927
1995	245,953	8,240	254,193
1996	308,455	7,466	315,921
1997	502,003	13,687	515,690
1998	339,934	9,244	349,178
1999	306,344	7,423	313,767
2000	336,364	10,527	346,891
2001	274,056	8,053	282,109
2002	322,398	9,862	332,260
2003	324,454	11,638	336,092
2004	357,265	14,565	371,830
2005	371,584	15,890	387,474
2006	369,286	12,766	382,052
2007	441,162	15,261	456,423
2008	360,308	17,778	378,086
2009	339,342	12,543	351,885

Note: "na" means not available.

[a] From Table E-18.

SOURCE : *Motor Vehicle Facts and Figures* , 1981-1987, 1989-1996, 1999, 2000-2003, 2004-2010.

Table E-17

Weight Distribution of U.S. Export Factory Sales of Trucks and Buses, 1983-2009

	Calculated Units of Trucks and Buses [a]																	Actual Reported Units [b]		
	≤ 6000 pounds		> 6,000 and ≤ 10,000 pounds		> 10,000 and ≤ 14,000 pounds		> 14,000 and ≤ 16,000 pounds		> 16,000 and ≤ 19,500 pounds		> 19,500 and ≤ 26,000 pounds		> 26,000 and ≤ 33,000 pounds		> 33,000 pounds		Total Trucks and Buses			
Year	Units	Share	Units	Share	Units	Share	Units	Share	Units	Share	Units	Share	Units	Share	Units	Share		Trucks	Buses	Total
1983 [c]	73,751	48.0%	61,887	40.3%	222	0.1%	0	0.0%	109	0.1%	6,520	4.2%	5,406	3.5%	5,816	3.8%	153,711	-	-	-
1984 [c]	96,466	50.5%	64,348	33.7%	1,630	0.9%	0	0.0%	211	0.1%	8,404	4.4%	8,419	4.4%	11,714	6.1%	191,192	-	-	-
1985 [c]	133,533	57.9%	67,923	29.4%	66	0.0%	-	-	222	0.1%	7,131	3.1%	9,622	4.2%	12,234	5.3%	230,731	-	-	-
1986	166,042	63.2%	69,810	26.6%	-	-	-	-	182	0.1%	4,980	1.9%	9,167	3.5%	12,487	4.8%	262,668	205,088	2,876	207,964
1987	204,452	65.5%	76,385	24.5%	-	-	44	0.0%	244	0.1%	5,971	1.9%	10,144	3.2%	15,079	4.8%	312,319	221,996	5,191	227,187
1988	208,243	64.0%	84,554	26.0%	-	-	96	0.0%	380	0.1%	6,170	1.9%	9,777	3.0%	16,066	4.9%	325,286	230,014	5,557	235,571
1989	209,122	67.5%	73,529	23.7%	0	0.0%	92	0.0%	359	0.1%	5,067	1.6%	8,469	2.7%	13,402	4.3%	310,040	188,682	8,703	197,385
1990	190,179	70.3%	57,733	21.3%	-	-	96	0.0%	82	0.0%	3,982	1.5%	8,554	3.2%	9,941	3.7%	270,567	151,272	8,036	159,308
1991	252,143	74.7%	63,990	19.0%	-	-	273	0.1%	28	0.0%	2,962	0.9%	8,147	2.4%	10,075	3.0%	337,618	199,803	8,141	207,944
1992	267,042	74.2%	65,678	18.2%	-	-	581	0.2%	0	0.0%	2,833	0.8%	9,702	2.7%	14,120	3.9%	359,956	151,972	9,447	161,419
1993	300,547	70.9%	92,277	21.8%	-	-	519	0.1%	-	-	2,666	0.6%	9,160	2.2%	18,562	4.4%	423,731	171,677	9,434	181,111
1994	336,793	67.1%	125,278	25.0%	0	0.0%	1,148	0.2%	17	0.0%	1,436	0.3%	12,589	2.5%	24,333	4.9%	501,594	266,998	6,929	273,927
1995	337,677	67.2%	125,165	24.9%	121	0.0%	1,646	0.3%	78	0.0%	1,323	0.3%	11,509	2.3%	24,605	4.9%	502,124	245,953	8,240	254,193
1996	374,393	71.0%	119,034	22.6%	966	0.2%	2,603	0.5%	71	0.0%	662	0.1%	8,937	1.7%	20,585	3.9%	527,251	308,455	7,466	315,921
1997	483,118	72.8%	130,780	19.7%	2,129	0.3%	3,858	0.6%	125	0.0%	1,078	0.2%	11,323	1.7%	31,099	4.7%	663,510	502,003	13,687	515,690
1998	405,449	69.0%	127,324	21.7%	6,058	1.0%	3,884	0.7%	1,662	0.3%	861	0.1%	10,538	1.8%	32,198	5.5%	587,974	339,934	9,244	349,178
1999	423,202	65.5%	168,385	26.1%	4,519	0.7%	6,922	1.1%	2,157	0.3%	1,166	0.2%	9,264	1.4%	30,291	4.7%	645,906	306,344	7,423	313,767
2000	463,574	63.4%	216,118	29.5%	2,596	0.4%	13,165	1.8%	2,535	0.3%	1,122	0.2%	6,575	0.9%	25,886	3.5%	731,571	336,364	10,527	346,891
2001	404,405	66.2%	173,759	28.4%	5,619	0.9%	2,838	0.5%	2,400	0.4%	910	0.1%	5,295	0.9%	15,580	2.6%	610,806	274,056	8,053	282,109
2002	452,010	65.8%	201,108	29.3%	3,940	0.6%	2,291	0.3%	1,634	0.2%	900	0.1%	5,379	0.8%	19,224	2.8%	686,486	322,398	9,862	332,260
2003	419,375	63.8%	203,337	30.9%	3,671	0.6%	1,928	0.3%	1,782	0.3%	696	0.1%	5,298	0.8%	21,093	3.2%	657,180	324,454	11,638	336,092
2004	381,525	57.5%	236,594	35.6%	4,340	0.7%	2,333	0.4%	2,356	0.4%	1,383	0.2%	5,339	0.8%	30,116	4.5%	663,986	357,265	14,565	371,830
2005	489,740	61.2%	252,513	31.5%	4,693	0.6%	2,886	0.4%	3,913	0.5%	1,109	0.1%	5,781	0.7%	39,967	5.0%	800,602	371,584	15,890	387,474
2006	453,414	59.0%	256,663	33.4%	3,679	0.5%	2,216	0.3%	2,953	0.4%	1,316	0.2%	5,715	0.7%	43,062	5.6%	769,018	369,286	12,766	382,052
2007	487,296	56.6%	318,191	36.9%	9,816	1.1%	3,131	0.4%	3,355	0.4%	963	0.1%	4,014	0.5%	34,402	4.0%	861,168	441,162	15,261	456,423
2008	342,422	52.3%	262,779	40.2%	7,587	1.2%	1,740	0.3%	2,247	0.3%	1,048	0.2%	5,628	0.9%	30,865	4.7%	654,316	360,308	17,778	378,086
2009	138,910	40.5%	178,748	52.1%	5,277	1.5%	1,307	0.4%	1,787	0.5%	671	0.2%	1,783	0.5%	14,624	4.3%	343,107	339,342	12,543	351,885
Total	8,633,279	62.1%	4,146,790	29.8%	68,130	0.5%	56,559	0.4%	33,218	0.2%	111,649	0.8%	230,081	1.7%	622,758	4.5%	13,902,464	6,986,410	239,257	7,225,667

[a] Calculated truck and bus exports are derived from total and domestic factory sales figures.

[b] MVFF data compiled from U.S. Census Bureau.

SOURCE : *Motor Vehicle Facts and Figures* , 1981-1987, 1989-1996, 1999, 2000-2003, 2004-2010.

Table E-18

Derivation of "Reported" U.S. Exports of Trucks and Buses, 1983-1985

Year	Reported Units [1]	Calculated Units [2]	Ratio of Reported to Calculated Units [3] = [1] ÷ [2]	Weighted Ratio (1986-1990 Calculated to Reported Units) [a] [4]	Backward Extrapolation of Reported Units [5] = [4] x [2]
1983	na	153,711	na	0.6938	106,643
1984	na	191,192	na	0.6938	132,646
1985	na	230,731	na	0.6938	160,078
1986	207,964	262,668	0.7917	na	na
1987	227,187	312,319	0.7274	na	na
1988	235,571	325,286	0.7242	na	na
1989	197,385	310,040	0.6366	na	na
1990	159,308	270,567	0.5888	na	na
1991	207,944	337,618	0.6159	na	na
1992	161,419	359,956	0.4484	na	na
1993	181,111	423,731	0.4274	na	na
1994	273,927	501,594	0.5461	na	na
1995	254,193	502,124	0.5062	na	na
1996	315,921	527,251	0.5992	na	na
1997	515,690	663,510	0.7772	na	na
1998	349,178	587,974	0.5939	na	na
1999	313,767	645,906	0.4858	na	na
2000	346,891	731,571	0.4742	na	na
2001	282,109	610,806	0.4619	na	na
2002	332,260	686,486	0.4840	na	na
2003	336,092	657,180	0.5114	na	na
Total	na	na	0.693787	na	na

Note: "na" means not applicable.

[a] Ratio equal to the sum of reported units divided by the sum of calculated units for 1986-1990. A graphical analysis of the time period, showed reported units tracking calculated units relatively closely, at a lower level, during this time.

[b] Calculated truck and bus exports are derived from total and domestic factory sales data.

SOURCE: *Motor Vehicle Facts and Figures*, 1981-1987, 1989-1996, 1999, 2000-2003.

Table E-19

Net Imports of Other Steel Products, 1983-2009 [a] (thousands of tons)

Products	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004[b]	2005	2006	2007	2008	2009
Construction and contractors' products	767	1,193	1,353	1,457	1,316	1,698	1,767	1,379	1,053	1,143	1,474	1,411	1,548	1,541	1,566	2,076	2,723	3,167	3,027	3,433	3,411	3,466	3,521	4,885	4,401	3,695	2,019
Rail transportation	(37)	(61)	(112)	(81)	(63)	(1)	90	156	78	87	63	202	237	272	334	359	412	325	224	279	256	na	236	354	221	220	88
Total	730	1,132	1,241	1,377	1,254	1,697	1,858	1,534	1,131	1,230	1,537	1,613	1,784	1,813	1,900	2,435	3,135	3,493	3,250	3,712	3,667	3,466	3,757	5,239	4,622	3,915	2,107

"na" stands for "not available"

[a] Equals gross imports of other steel products from Table E-21 minus gross exports of other steel products from Table E-20.

[b] Construction and contractors' products for 2004 is estimated by taking the average of net imports for 2003 and 2005, in Table E-19.

SOURCES : See footnote.

Table E-20

Gross Exports of Other Steel Products, 1983-2009 (thousands of tons)

Products	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Construction and contractors' products	302	317	249	205	274	348	450	639	700	681	689	951	1,001	1,078	1,246	1,309	1,197	1,100	1,021	939	1,010	na	1,749	1,574	1,630	2,015	1,700
Rail transportation	37	61	112	81	63	52	69	59	67	47	70	75	76	60	87	95	98	86	56	23	68	na	141	128	102	166	82
Total	339	378	361	286	336	400	520	698	767	728	758	1,026	1,077	1,138	1,333	1,404	1,295	1,186	1,077	962	1,078	na	1,889	1,702	1,731	2,181	1,782

"na" stands for "not available".

SOURCE: American Iron and Steel Institute, *Annual Statistical Report,* various years. Year 1983: 1983, Table 17; years 1984-1993: 1988 and 1993, Table 14; years 1994-2003: 1998 and 2003, Table 13; 2005-2009:2009, Table 13.

Table E-21

Gross Imports of Other Steel Products, 1983-2009 (thousands of tons)

Products	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Construction and contractors' products	1,069	1,510	1,602	1,662	1,590	2,047	2,218	2,018	1,752	1,824	2,162	2,362	2,549	2,619	2,812	3,385	3,920	4,268	4,048	4,372	4,421	na	5,270	6,458	6,031	5,710	3,720
Rail transportation [a]	0	0	0	0	0	51	160	214	145	134	133	277	313	332	420	454	510	411	280	301	324	na	377	482	323	386	170
Total	1,069	1,510	1,602	1,662	1,590	2,098	2,378	2,232	1,897	1,958	2,295	2,639	2,861	2,951	3,233	3,839	4,430	4,679	4,328	4,674	4,745	na	5,647	6,941	6,354	6,095	3,890

"na" stands for "not available".

[a] Prior to 1988, rail transportation was classified elsewhere.

SOURCE: American Iron and Steel Institute, *Annual Statistical Report,* various years. Year 1983: 1983, Table 21; years 1984-1993: 1988 and 1993, Table 18; years 1994-2003: 1998 and 2003, Table 17; years 2005-2009: 2009, Table 17.

Table E-22

Net Imports of Industrial Machinery, 1983-2003 (thousands of tons)

Year	Waterborne Transportation Only [a]			All Modes of Transportation [b]				
	Imports	Exports	Net Imports	Import Factor	Export Factor	Imports	Exports	Net Imports
1983	1,989	1,475	513	1.50	1.50	2,983	2,213	770
1984	3,012	1,320	1,692	1.53	1.57	4,602	2,066	2,536
1985	3,657	1,344	2,313	1.56	1.63	5,691	2,196	3,496
1986	4,144	1,268	2,876	1.59	1.71	6,570	2,163	4,407
1987	4,082	1,323	2,758	1.61	1.78	6,592	2,356	4,236
1988	4,046	1,699	2,346	1.65	1.86	6,655	3,157	3,498
1989	4,490	2,346	2,144	1.68	1.94	7,523	4,549	2,974
1990	4,093	2,357	1,736	1.71	2.02	6,987	4,771	2,216
1991	3,445	2,903	542	1.74	2.11	5,991	6,134	(143)
1992	3,736	3,050	686	1.77	2.21	6,617	6,726	(109)
1993	4,189	2,803	1,386	1.80	2.30	7,558	6,451	1,106
1994	5,250	2,870	2,380	1.84	2.40	9,648	6,894	2,754
1995	5,213	3,228	1,985	1.87	2.51	9,759	8,093	1,665
1996	4,457	3,431	1,026	1.91	2.62	8,499	8,979	(480)
1997	5,063	3,817	1,246	1.94	2.73	9,834	10,426	(591)
1998	5,947	3,501	2,446	1.98	2.85	11,767	9,981	1,786
1999	6,102	2,789	3,313	2.02	2.98	12,298	8,299	4,000
2000	5,971	2,786	3,185	2.05	3.11	12,259	8,652	3,606
2001	5,564	2,715	2,849	2.09	3.24	11,636	8,801	2,835
2002	5,994	2,674	3,320	2.13 [c]	3.38 [c]	12,769	9,047	3,722
2003	6,477	2,665	3,812	2.06 [c]	3.36 [c]	13,342	8,947	4,395
Total	102,466	59,779	42,686	na	na	179,581	130,901	48,680

Note: "na" means not applicable.

[a] From the U.S. Army Corps of Engineers, special data request.

[b] Derived by grossing up waterborne trade statistics to account for all tranportation modes. Import and export factors for 1983 reflect judgement of Nathan Associates based on data presented in Table E-25. Factors for 2002 and 2003 are calculated in Table E-25. Factors for 1984 through 2001 are interpolated from 1983 and 2002 factors.

[c] From Table E-25.

SOURCES : See footnotes.

Table E-23

Net Imports of Industrial Machinery,2004-2009 (thousands of tons)

Year	Indusrial Machinery
2004	3,786
2005	4,402
2006	4,550
2007	1,500
2008	1,523
2009	4,774

SOURCE: Selected industrial machinery codes, U.N. Comtrade Statistics.

Table E-24

Net Imports of ferrous materials in Industrial Machinery, 1983-2009 (thousands of tons)

Year	Ferrous content of Industrial Machinery		
	Net Imports [a] [1]	Ferrous content % [b] [2]	Total Ferrous Content [1] x[2]
1983	770	71%	547
1984	2,536	71%	1,800
1985	3,496	71%	2,482
1986	4,407	71%	3,129
1987	4,236	71%	3,007
1988	3,498	71%	2,484
1989	2,974	71%	2,112
1990	2,216	71%	1,574
1991	(143)	71%	(101)
1992	(109)	71%	(78)
1993	1,106	71%	786
1994	2,754	71%	1,955
1995	1,665	71%	1,182
1996	(480)	71%	(341)
1997	(591)	71%	(420)
1998	1,786	71%	1,268
1999	4,000	71%	2,840
2000	3,606	71%	2,560
2001	2,835	71%	2,013
2002	3,722	71%	2,643
2003	4,395	71%	3,121
2004	3,786	71%	2,688
2005	4,402	71%	3,125
2006	4,550	71%	3,230
2007	1,500	71%	1,065
2008	1,523	71%	1,081
2009	4,774	71%	3,390
Total	69,214	na	49,142

Note: "na" means not applicable.

[a] Net imports for industrial machinery for 1983 through 2003 obtained from Appendix E, Table E-22; 2004-2009 from Appendix E, Table E-23.

[b] Ferrous content percentage from J. Davis et. al., "Time-dependent material flow analysis of iron and steel in the UK. Part 2: Scrap generation and recycling," Resources, Conservation and Recycling 51 (2007).

SOURCES : See footnotes.

Table E-25

Worksheet for Calculating Import and Export Factors Used to Derive Net Imports of Industrial Machinery for All Transport Modes

Year	SITC	Description	Import Customs Value	Import Vessel Weight	Import Vessel Value	Ratio of Customs Value to Vessel Value	Year	Import Customs Value	Import Vessel Weight	Import Vessel Value	Ratio of Customs Value to Vessel Value
2002	71	Power generating	$34,032	1,557	$12,471	2.73	2003	$32,485	1,413	$11,746	2.77
	72	Specialized	$18,433	1,772	$11,042	1.67		$20,841	1,994	$12,825	1.62
	73	Metalworking	$5,082	275	$3,052	1.66		$5,335	288	$3,416	1.56
	74	General industrial	$35,201	2,921	$16,974	2.07		$38,467	3,161	$19,164	2.01
	75	Office machines	$76,970	1,544	$23,871	3.22		$80,826	1,603	$26,991	2.99
	76	Telecommunications	$66,268	1,823	$21,796	3.04		$71,137	1,789	$21,782	3.27
	77	Electrical	$81,225	3,027	$19,738	4.12		$82,433	3,233	$21,231	3.88
	78	Road vehicles	$168,173	9,176	$89,396	1.88		$172,578	9,264	$93,885	1.84
	79	Transport equipment	$20,259	142	$3,267	6.20		$19,515	182	$3,290	5.93
		Total SITC 71-79	$505,644	22,237	$201,607			$523,617	22,927	$214,330	
Year	**SITC**	**Description**	**Export Customs Value**	**Export Vessel Weight**	**Export Vessel Value**	**Ratio of Customs Value to Vessel Value**	**Year**	**Export Customs Value**	**Export Vessel Weight**	**Export Vessel Value**	**Ratio of Customs Value to Vessel Value**
2002	71	Power generating	$34,381	434	$6,655	5.17	2003	$33,642	409	$6,271	5.36
	72	Specialized	$25,091	1,206	$9,997	2.51		$22,351	1,222	$9,726	2.30
	73	Metalworking	$4,664	89	$1,184	3.94		$4,592	111	$1,244	3.69
	74	General industrial	$31,839	1,069	$10,531	3.02		$31,203	1,042	$10,100	3.09
	75	Office machines	$39,744	138	$2,131	18.65		$41,054	149	$2,290	17.93
	76	Telecommunications	$24,882	120	$2,753	9.04		$23,706	121	$2,568	9.23
	77	Electrical	$82,657	611	$5,563	14.86		$85,910	540	$5,096	16.86
	78	Road vehicles	$60,329	1,499	$13,526	4.46		$63,130	1,724	$16,031	3.94
	79	Transport equipment	$46,148	156	$3,674	12.56		$42,510	185	$3,556	11.95
		Total SITC 71-79	$349,736	5,324	$56,014			$348,099	5,503	$56,882	

Item		Calculation of Import and Export Factors									
		2002					2003				
Subtotals for SITC 71-74:	Imports	$92,748	6,525	$43,538	2.13 [a]	13,900	$97,128	6,856	$47,152	2.06 [a]	14,123
	Exports	$95,976	2,799	$28,367	3.38 [a]	9,469	$91,789	2,784	$27,342	3.36 [a]	9,346
	Total trade	$188,724	9,324	$71,906	2.62	24,471	$188,917	9,640	$74,494	2.54	4,777

Note: The U.S. Census Bureau reports waterborne trade weight (vessel weight), waterborne trade value (vessel value) , and total trade value (customs value), but not total trade weight which is required to estimate weight of ferrous content in traded end-use products. This worksheet derives ratios of trade customs value to trade vessel value for 2002 and 2003 and then applies those ratios to waterborne trade weight statistics from the U.S. Army Corps of Engineers to calculate total (all tranportation modes) trade weight. See Table E-22 for the derivations.

[a] Used in Table E-22 to calculate total exports and imports of industrial machinery.

SOURCE: U.S. Census Bureau.

Appendix F

Regional Distribution

Table F-1

Net Amount Remaining in Inventory in 2009 by Region, 1983-2009 (thousands of net tons)

Region	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
New England	1,155	1,070	1,023	1,068	928	784	907	711	983	996	900	845	833	1,046	1,033	1,194	1,367	1,154	1,102	1,020	888	972	1,029	876	705	431	800
Middle Atlantic	2,928	2,665	2,529	2,619	2,214	1,911	2,256	1,868	2,640	2,684	2,396	2,239	2,121	2,624	2,503	2,892	3,310	2,785	2,675	2,469	2,152	2,336	2,505	2,113	1,726	1,082	2,010
East North Central	3,922	3,629	3,398	3,439	2,848	2,459	2,975	2,463	3,564	3,750	3,427	3,331	3,184	3,981	3,829	4,456	5,056	4,239	4,074	3,723	3,221	3,437	3,575	2,989	2,388	1,471	2,723
West North Central	2,059	1,887	1,771	1,775	1,469	1,222	1,439	1,221	1,751	1,837	1,634	1,608	1,523	1,944	1,830	2,122	2,375	2,017	1,895	1,714	1,498	1,653	1,747	1,467	1,185	747	1,378
South Atlantic	3,615	3,373	3,222	3,379	2,843	2,439	2,900	2,421	3,440	3,561	3,225	3,073	3,008	3,772	3,648	4,277	4,858	4,141	4,048	3,712	3,224	3,810	4,218	3,654	2,909	1,745	3,245
East South Central	1,434	1,302	1,218	1,233	1,034	889	1,047	878	1,281	1,356	1,237	1,174	1,148	1,391	1,343	1,557	1,751	1,484	1,444	1,303	1,124	1,222	1,314	1,121	897	554	1,028
West South Central	3,091	2,749	2,505	2,425	1,919	1,639	1,941	1,661	2,423	2,522	2,296	2,198	2,126	2,645	2,538	2,943	3,387	2,820	2,710	2,491	2,157	2,601	2,876	2,483	2,055	1,317	2,450
Mountain	1,570	1,382	1,275	1,276	1,050	880	1,054	894	1,328	1,416	1,354	1,314	1,306	1,674	1,630	1,895	2,190	1,834	1,807	1,612	1,375	1,528	1,709	1,492	1,212	736	1,373
Pacific	3,364	3,058	2,896	3,017	2,567	2,231	2,703	2,304	3,319	3,325	2,954	2,742	2,645	3,403	3,321	3,875	4,436	3,773	3,619	3,398	2,941	3,389	3,745	3,227	2,609	1,559	2,897
All regions	23,139	21,115	19,836	20,231	16,873	14,454	17,222	14,422	20,728	21,447	19,423	18,524	17,894	22,480	21,675	25,211	28,731	24,247	23,374	21,443	18,579	20,947	22,717	19,423	15,686	9,644	17,904

SOURCE : Equals percentages from Table F-3 multiplied by net amounts remaining in inventory in 2009 from Appendix A, Table A-2.

Table F-2

Recoverable Obsolete Ferrous Scrap by Region, 1983-2009 (thousands of net tons)

Region	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
New England	2,527	2,625	2,736	2,866	3,052	3,073	3,042	2,901	2,834	2,818	2,845	2,831	2,912	2,926	3,005	2,993	3,011	3,014	2,989	3,024	3,044	2,964	2,907	2,910	2,926	2,938	2,974
Middle Atlantic	6,405	6,540	6,761	7,025	7,280	7,490	7,567	7,619	7,616	7,593	7,578	7,501	7,413	7,336	7,281	7,250	7,290	7,277	7,259	7,316	7,379	7,126	7,076	7,020	7,158	7,375	7,469
East North Central	8,579	8,904	9,086	9,224	9,363	9,636	9,979	10,046	10,282	10,605	10,839	11,160	11,126	11,130	11,140	11,170	11,137	11,075	11,055	11,035	11,042	10,484	10,099	9,935	9,904	10,024	10,118
West North Central	4,503	4,630	4,734	4,762	4,830	4,789	4,827	4,979	5,049	5,196	5,166	5,386	5,322	5,437	5,324	5,319	5,230	5,269	5,143	5,079	5,136	5,042	4,934	4,876	4,914	5,091	5,119
South Atlantic	7,909	8,276	8,614	9,064	9,349	9,558	9,725	9,875	9,923	10,071	10,200	10,295	10,510	10,547	10,614	10,720	10,700	10,819	10,984	10,999	11,054	11,621	11,913	12,142	12,066	11,896	12,059
East South Central	3,138	3,195	3,255	3,307	3,400	3,482	3,510	3,581	3,694	3,835	3,912	3,932	4,013	3,889	3,906	3,902	3,857	3,877	3,917	3,863	3,854	3,727	3,710	3,726	3,719	3,776	3,818
West South Central	6,763	6,745	6,698	6,505	6,308	6,421	6,510	6,775	6,988	7,134	7,260	7,362	7,430	7,397	7,386	7,377	7,460	7,367	7,352	7,382	7,395	7,933	8,124	8,253	8,525	8,974	9,105
Mountain	3,435	3,392	3,408	3,424	3,453	3,449	3,536	3,646	3,830	4,005	4,283	4,401	4,562	4,680	4,743	4,750	4,824	4,791	4,904	4,776	4,715	4,660	4,827	4,959	5,029	5,019	5,103
Pacific	7,359	7,505	7,744	8,092	8,441	8,743	9,066	9,395	9,574	9,404	9,343	9,184	9,241	9,514	9,664	9,714	9,771	9,857	9,819	10,071	10,082	10,338	10,578	10,725	10,822	10,628	10,767
All regions	50,620	51,812	53,037	54,270	55,474	56,642	57,761	58,817	59,791	60,661	61,425	62,051	62,530	62,855	63,063	63,195	63,279	63,346	63,423	63,545	63,702	63,898	64,168	64,545	65,062	65,721	66,533

SOURCES: Tables F-4 through F-12.

Table F-3

Regional Distribution of Recoverable Obsolete Ferrous Scrap, 1983-2009

Region	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
New England	5.0%	5.1%	5.2%	5.3%	5.5%	5.4%	5.3%	4.9%	4.7%	4.6%	4.6%	4.6%	4.7%	4.7%	4.8%	4.7%	4.8%	4.8%	4.7%	4.8%	4.8%	4.6%	4.5%	4.5%	4.5%	4.5%	4.5%
Middle Atlantic	12.7%	12.6%	12.7%	12.9%	13.1%	13.2%	13.1%	13.0%	12.7%	12.5%	12.3%	12.1%	11.9%	11.7%	11.5%	11.5%	11.5%	11.5%	11.4%	11.5%	11.6%	11.2%	11.0%	10.9%	11.0%	11.2%	11.2%
East North Central	16.9%	17.2%	17.1%	17.0%	16.9%	17.0%	17.3%	17.1%	17.2%	17.5%	17.6%	18.0%	17.8%	17.7%	17.7%	17.7%	17.6%	17.5%	17.4%	17.4%	17.3%	16.4%	15.7%	15.4%	15.2%	15.3%	15.2%
West North Central	8.9%	8.9%	8.9%	8.8%	8.7%	8.5%	8.4%	8.5%	8.4%	8.6%	8.4%	8.7%	8.5%	8.6%	8.4%	8.4%	8.3%	8.3%	8.1%	8.0%	8.1%	7.9%	7.7%	7.6%	7.6%	7.7%	7.7%
South Atlantic	15.6%	16.0%	16.2%	16.7%	16.9%	16.9%	16.8%	16.8%	16.6%	16.6%	16.6%	16.6%	16.8%	16.8%	16.8%	17.0%	16.9%	17.1%	17.3%	17.3%	17.4%	18.2%	18.6%	18.8%	18.5%	18.1%	18.1%
East South Central	6.2%	6.2%	6.1%	6.1%	6.1%	6.1%	6.1%	6.1%	6.2%	6.3%	6.4%	6.3%	6.4%	6.2%	6.2%	6.2%	6.1%	6.1%	6.2%	6.1%	6.1%	5.8%	5.8%	5.8%	5.7%	5.7%	5.7%
West South Central	13.4%	13.0%	12.6%	12.0%	11.4%	11.3%	11.3%	11.5%	11.7%	11.8%	11.8%	11.9%	11.9%	11.8%	11.7%	11.7%	11.8%	11.6%	11.6%	11.6%	11.6%	12.4%	12.7%	12.8%	13.1%	13.7%	13.7%
Mountain	6.8%	6.5%	6.4%	6.3%	6.2%	6.1%	6.1%	6.2%	6.4%	6.6%	7.0%	7.1%	7.3%	7.4%	7.5%	7.5%	7.6%	7.6%	7.7%	7.5%	7.4%	7.3%	7.5%	7.7%	7.7%	7.6%	7.7%
Pacific	14.5%	14.5%	14.6%	14.9%	15.2%	15.4%	15.7%	16.0%	16.0%	15.5%	15.2%	14.8%	14.8%	15.1%	15.3%	15.4%	15.4%	15.6%	15.5%	15.8%	15.8%	16.2%	16.5%	16.6%	16.6%	16.2%	16.2%
All regions	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

SOURCE: Table F-2.

Table F-4

New England: Recoverable Obsolete Ferrous Scrap by End-Use Product Category, 1983-2009 (thousands of net tons)

End-Use Product Category	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Automotive [a]	953	979	990	999	1,021	1,003	998	987	970	954	973	962	1,002	989	1,026	995	996	983	949	972	986	976	966	958	966	982	1,000
Ship building and marine equipment [b]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aircraft and aerospace [c]	1	1	1	1	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Railroad equipment [d]	75	76	76	77	77	76	76	75	74	72	70	68	65	62	59	56	53	49	46	43	40	34	32	30	28	27	26
Railroad rails [e]	45	46	47	48	48	48	47	46	45	43	41	39	37	35	32	30	28	27	26	25	24	23	23	23	24	25	26
Industrial machinery [f]	430	441	453	463	479	472	491	498	509	498	486	478	487	497	498	496	493	488	482	473	464	403	382	391	394	383	378
Electrical machinery [g]	237	244	251	256	263	257	267	269	274	268	261	257	262	267	267	267	265	263	261	260	258	228	220	230	235	232	233
Mining materials [h]	4	5	5	5	7	6	3	4	4	5	6	5	6	6	6	5	5	4	4	4	4	8	8	7	8	8	9
Agricultural machinery [i]	25	21	22	24	24	26	23	26	26	29	28	27	27	25	23	24	26	28	24	25	20	20	20	19	19	15	14
Consumer durables [j]	27	28	29	30	31	33	33	32	31	31	31	30	30	29	29	28	28	28	28	28	28	27	27	27	27	27	28
Containers [k]	7	7	7	7	7	7	7	7	7	7	7	7	7	7	6	6	6	6	5	5	5	4	4	5	4	4	4
Oil and gas materials [l]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Materials, nec [m]	124	126	129	132	135	139	143	146	148	151	154	158	162	166	170	174	178	183	187	191	195	199	202	206	210	214	218
Construction materials [n]	599	651	724	824	958	1,005	952	810	744	758	786	797	825	842	886	908	930	952	974	996	1,018	1,038	1,020	1,011	1,007	1,018	1,037
Total	2,527	2,625	2,736	2,866	3,052	3,073	3,042	2,901	2,834	2,818	2,845	2,831	2,912	2,926	3,005	2,993	3,011	3,014	2,989	3,024	3,044	2,964	2,907	2,910	2,926	2,938	2,974

[a] Equals recoverable scrap from Appendix B, Table B-1 multiplied by appropriate percentage from Table F-23.

[b] When ships are discarded, they are floated overseas and disassembled. Hence, ferrous content in discarded products in the ship building and marine equipment category does not enter into recoverable obsolete ferrous scrap inventory.

[c] Equals recoverable scrap from Appendix B, Table B-3 multiplied by appropriate percentage from Table F-24.

[d] Equals recoverable scrap from Appendix B, Table B-4 multiplied by appropriate percentage from Table F-25.

[e] Equals recoverable scrap from Appendix B, Table B-5 multiplied by appropriate percentage from Table F-25.

[f] Equals recoverable scrap from Appendix B, Table B-6 multiplied by appropriate percentage from Table F-26.

[g] Equals recoverable scrap from Appendix B, Table B-7 multiplied by appropriate percentage from Table F-26.

[h] Equals recoverable scrap from Appendix B, Table B-8 multiplied by appropriate percentage from Table F-27.

[i] Equals recoverable scrap from Appendix B, Table B-9 multiplied by appropriate percentage from Table F-28.

[j] Equals recoverable scrap from Appendix B, Table B-10 multiplied by appropriate percentage from Table F-29.

[k] Equals recoverable scrap from Appendix B, Table B-11 multiplied by appropriate percentage from Table F-30.

[l] Equals recoverable scrap from Appendix B, Table B-12 multiplied by appropriate percentage from Table F-31.

[m] Equals recoverable scrap from Appendix B, Table B-13 multiplied by appropriate percentage from Table F-30.

[n] Equals recoverable scrap from Appendix B, Table B-14 multiplied by appropriate percentage from Table F-32.

SOURCES : See footnotes.

Table F-5

Middle Atlantic: Recoverable Obsolete Ferrous Scrap by End-Use Product Category, 1983-2009 (thousands of net tons)

End-Use Product Category	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Automotive [a]	2,219	2,287	2,350	2,431	2,472	2,486	2,486	2,501	2,457	2,444	2,441	2,420	2,375	2,345	2,354	2,270	2,273	2,218	2,174	2,207	2,245	2,194	2,244	2,174	2,221	2,250	2,291
Ship building and marine equipment [b]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aircraft and aerospace [c]	2	3	3	3	3	4	4	4	4	4	5	5	5	5	5	5	6	5	5	6	6	5	5	5	5	5	5
Railroad equipment [d]	191	192	193	194	194	193	192	190	186	182	177	172	165	158	150	142	133	125	116	108	100	94	88	82	78	74	71
Railroad rails [e]	114	117	119	120	121	120	119	116	113	109	104	99	94	88	82	77	72	68	65	62	61	62	63	64	66	69	72
Industrial machinery [f]	1,043	1,028	1,036	1,040	1,066	1,127	1,141	1,190	1,239	1,245	1,248	1,224	1,225	1,218	1,172	1,169	1,161	1,149	1,134	1,114	1,091	948	899	890	869	866	856
Electrical machinery [g]	575	569	574	574	585	615	619	643	667	669	670	657	658	654	630	628	624	620	615	611	607	536	518	523	519	525	527
Mining materials [h]	74	73	70	66	57	46	38	35	34	41	44	48	52	55	58	52	47	42	40	40	42	42	38	34	33	34	35
Agricultural machinery [i]	69	63	67	74	72	67	72	71	69	76	78	70	71	74	59	73	76	85	83	76	72	70	69	68	68	53	49
Consumer durables [j]	79	81	82	84	86	89	90	90	90	89	87	85	84	83	82	80	78	77	75	74	74	72	72	72	73	74	75
Containers [k]	22	21	21	21	21	21	21	20	19	19	20	20	20	19	18	18	18	17	15	14	13	12	13	13	13	11	11
Oil and gas materials [l]	0	0	0	3	2	2	2	2	2	2	2	2	2	2	1	2	2	2	2	3	3	4	5	5	5	4	5
Materials, nec [m]	366	371	376	382	390	398	407	415	424	434	444	454	465	475	485	495	506	520	531	542	553	564	575	585	595	606	618
Construction materials [n]	1,652	1,734	1,871	2,032	2,210	2,322	2,378	2,343	2,311	2,278	2,257	2,244	2,199	2,160	2,186	2,241	2,295	2,350	2,403	2,458	2,511	2,523	2,488	2,505	2,614	2,803	2,854
Total	6,405	6,540	6,761	7,025	7,280	7,490	7,567	7,619	7,616	7,593	7,578	7,501	7,413	7,336	7,281	7,250	7,290	7,277	7,259	7,316	7,379	7,126	7,076	7,020	7,158	7,375	7,469

[a] Equals recoverable scrap from Appendix B, Table B-1 multiplied by appropriate percentage from Table F-23.

[b] When ships are discarded, they are floated overseas and disassembled. Hence, ferrous content in discarded products in the ship building and marine equipment category does not enter into recoverable obsolete ferrous scrap inventory.

[c] Equals recoverable scrap from Appendix B, Table B-3 multiplied by appropriate percentage from Table F-24.

[d] Equals recoverable scrap from Appendix B, Table B-4 multiplied by appropriate percentage from Table F-25.

[e] Equals recoverable scrap from Appendix B, Table B-5 multiplied by appropriate percentage from Table F-25.

[f] Equals recoverable scrap from Appendix B, Table B-6 multiplied by appropriate percentage from Table F-26.

[g] Equals recoverable scrap from Appendix B, Table B-7 multiplied by appropriate percentage from Table F-26.

[h] Equals recoverable scrap from Appendix B, Table B-8 multiplied by appropriate percentage from Table F-27.

[i] Equals recoverable scrap from Appendix B, Table B-9 multiplied by appropriate percentage from Table F-28.

[j] Equals recoverable scrap from Appendix B, Table B-10 multiplied by appropriate percentage from Table F-29.

[k] Equals recoverable scrap from Appendix B, Table B-11 multiplied by appropriate percentage from Table F-30.

[l] Equals recoverable scrap from Appendix B, Table B-12 multiplied by appropriate percentage from Table F-31.

[m] Equals recoverable scrap from Appendix B, Table B-13 multiplied by appropriate percentage from Table F-30.

[n] Equals recoverable scrap from Appendix B, Table B-14 multiplied by appropriate percentage from Table F-32.

SOURCES : See footnotes.

Table F-6

East North Central: Recoverable Obsolete Ferrous Scrap by End-Use Product Category, 1983-2009 (thousands of net tons)

End-Use Product Category	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Automotive [a]	3,146	3,206	3,222	3,209	3,252	3,374	3,435	3,325	3,394	3,381	3,368	3,429	3,422	3,343	3,335	3,339	3,308	3,240	3,208	3,212	3,191	3,112	3,048	3,107	3,110	3,210	3,269
Ship building and marine equipment [b]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aircraft and aerospace [c]	4	5	5	6	6	7	7	8	8	8	9	9	9	10	10	10	11	10	10	10	10	10	10	9	10	9	9
Railroad equipment [d]	470	473	476	478	478	476	473	467	459	449	437	423	407	389	370	349	328	307	286	266	247	236	220	207	196	186	179
Railroad rails [e]	282	289	294	297	297	296	293	287	279	269	258	245	231	216	202	189	177	167	159	154	151	156	158	162	167	174	181
Industrial machinery [f]	1,472	1,533	1,574	1,623	1,621	1,674	1,735	1,781	1,819	1,955	2,056	2,166	2,125	2,114	2,087	2,080	2,066	2,046	2,018	1,983	1,943	1,877	1,755	1,644	1,599	1,550	1,531
Electrical machinery [g]	812	848	871	896	890	914	942	962	980	1,051	1,104	1,163	1,141	1,135	1,121	1,117	1,111	1,104	1,095	1,088	1,080	1,062	1,012	966	955	940	942
Mining materials [h]	111	120	120	120	108	85	71	62	66	76	79	89	84	87	79	72	64	58	55	55	58	62	56	51	47	47	49
Agricultural machinery [i]	188	286	307	289	277	250	327	294	249	287	287	288	278	320	333	325	301	300	300	262	275	288	226	248	243	257	241
Consumer durables [j]	79	81	83	85	85	86	86	86	86	86	86	86	85	84	82	81	79	78	76	75	75	73	72	71	70	70	71
Containers [k]	24	24	23	23	23	23	23	23	22	22	22	23	22	22	21	21	20	19	18	16	15	14	14	15	14	13	12
Oil and gas materials [l]	17	18	18	18	17	16	17	18	20	23	22	25	26	28	28	28	27	25	23	21	21	25	23	23	21	21	22
Materials, nec [m]	409	414	419	426	434	443	453	464	476	489	503	517	531	546	559	573	586	593	605	618	631	643	655	667	679	691	704
Construction materials [n]	1,565	1,606	1,674	1,756	1,874	1,993	2,118	2,270	2,424	2,509	2,608	2,697	2,764	2,836	2,912	2,985	3,058	3,130	3,201	3,274	3,345	2,925	2,848	2,765	2,792	2,856	2,909
Total	8,579	8,904	9,086	9,224	9,363	9,636	9,979	10,046	10,282	10,605	10,839	11,160	11,126	11,130	11,140	11,170	11,137	11,075	11,055	11,035	11,042	10,484	10,099	9,935	9,904	10,024	10,118

[a] Equals recoverable scrap from Appendix B, Table B-1 multiplied by appropriate percentage from Table F-23.

[b] When ships are discarded, they are floated overseas and disassembled. Hence, ferrous content in discarded products in the ship building and marine equipment category does not enter into recoverable obsolete ferrous scrap inventory.

[c] Equals recoverable scrap from Appendix B, Table B-3 multiplied by appropriate percentage from Table F-24.

[d] Equals recoverable scrap from Appendix B, Table B-4 multiplied by appropriate percentage from Table F-25.

[e] Equals recoverable scrap from Appendix B, Table B-5 multiplied by appropriate percentage from Table F-25.

[f] Equals recoverable scrap from Appendix B, Table B-6 multiplied by appropriate percentage from Table F-26.

[g] Equals recoverable scrap from Appendix B, Table B-7 multiplied by appropriate percentage from Table F-26.

[h] Equals recoverable scrap from Appendix B, Table B-8 multiplied by appropriate percentage from Table F-27.

[i] Equals recoverable scrap from Appendix B, Table B-9 multiplied by appropriate percentage from Table F-28.

[j] Equals recoverable scrap from Appendix B, Table B-10 multiplied by appropriate percentage from Table F-29.

[k] Equals recoverable scrap from Appendix B, Table B-11 multiplied by appropriate percentage from Table F-30.

[l] Equals recoverable scrap from Appendix B, Table B-12 multiplied by appropriate percentage from Table F-31.

[m] Equals recoverable scrap from Appendix B, Table B-13 multiplied by appropriate percentage from Table F-30.

[n] Equals recoverable scrap from Appendix B, Table B-14 multiplied by appropriate percentage from Table F-32.

SOURCES : See footnotes.

Table F-7

West North Central: Recoverable Obsolete Ferrous Scrap by End-Use Product Category, 1983-2009 (thousands of net tons)

End-Use Product Category	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Automotive [a]	1,508	1,514	1,575	1,547	1,564	1,540	1,519	1,551	1,528	1,541	1,556	1,582	1,532	1,504	1,495	1,505	1,472	1,518	1,445	1,454	1,473	1,484	1,464	1,497	1,506	1,536	1,564
Ship building and marine equipment [b]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aircraft and aerospace [c]	3	3	4	4	4	5	5	5	6	6	6	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Railroad equipment [d]	526	530	533	535	535	533	529	523	514	503	489	474	456	435	414	391	368	344	320	298	276	250	234	219	207	197	190
Railroad rails [e]	316	323	329	332	333	332	328	321	312	301	288	274	258	242	226	211	198	187	178	172	170	165	167	171	177	184	192
Industrial machinery [f]	434	451	456	471	496	521	549	579	609	630	631	647	664	667	675	673	669	662	653	642	629	633	610	595	589	592	585
Electrical machinery [g]	239	250	252	260	272	284	298	313	328	339	339	347	357	358	363	362	360	357	355	352	350	358	352	349	352	359	360
Mining materials [h]	56	56	52	43	40	35	32	30	31	14	39	43	46	48	40	37	33	30	28	28	30	38	42	41	37	37	39
Agricultural machinery [i]	404	459	490	505	500	456	454	497	469	494	400	515	482	619	546	547	507	520	482	421	463	477	442	396	396	462	433
Consumer durables [j]	32	33	34	35	35	34	35	35	35	35	34	35	34	34	34	33	33	32	32	31	31	32	31	31	31	32	32
Containers [k]	10	10	10	10	10	10	10	10	9	9	9	10	9	9	9	9	9	8	7	7	7	6	6	6	6	6	5
Oil and gas materials [l]	61	63	68	64	62	69	73	72	79	81	83	86	89	84	80	73	69	63	57	54	53	46	45	45	45	47	49
Materials, nec [m]	171	174	176	179	182	186	190	195	200	205	211	217	224	230	236	242	248	252	258	264	269	275	281	288	294	301	308
Construction materials [n]	742	764	756	778	798	784	806	849	929	1,039	1,079	1,151	1,164	1,199	1,200	1,230	1,260	1,289	1,319	1,349	1,378	1,272	1,252	1,230	1,265	1,331	1,355
Total	4,503	4,630	4,734	4,762	4,830	4,789	4,827	4,979	5,049	5,196	5,166	5,386	5,322	5,437	5,324	5,319	5,230	5,269	5,143	5,079	5,136	5,042	4,934	4,876	4,914	5,091	5,119

[a] Equals recoverable scrap from Appendix B, Table B-1 multiplied by appropriate percentage from Table F-23.

[b] When ships are discarded, they are floated overseas and disassembled. Hence, ferrous content in discarded products in the ship building and marine equipment category does not enter into recoverable obsolete ferrous scrap inventory.

[c] Equals recoverable scrap from Appendix B, Table B-3 multiplied by appropriate percentage from Table F-24.

[d] Equals recoverable scrap from Appendix B, Table B-4 multiplied by appropriate percentage from Table F-25.

[e] Equals recoverable scrap from Appendix B, Table B-5 multiplied by appropriate percentage from Table F-25.

[f] Equals recoverable scrap from Appendix B, Table B-6 multiplied by appropriate percentage from Table F-26.

[g] Equals recoverable scrap from Appendix B, Table B-7 multiplied by appropriate percentage from Table F-26.

[h] Equals recoverable scrap from Appendix B, Table B-8 multiplied by appropriate percentage from Table F-27.

[i] Equals recoverable scrap from Appendix B, Table B-9 multiplied by appropriate percentage from Table F-28.

[j] Equals recoverable scrap from Appendix B, Table B-10 multiplied by appropriate percentage from Table F-29.

[k] Equals recoverable scrap from Appendix B, Table B-11 multiplied by appropriate percentage from Table F-30.

[l] Equals recoverable scrap from Appendix B, Table B-12 multiplied by appropriate percentage from Table F-31.

[m] Equals recoverable scrap from Appendix B, Table B-13 multiplied by appropriate percentage from Table F-30.

[n] Equals recoverable scrap from Appendix B, Table B-14 multiplied by appropriate percentage from Table F-32.

SOURCES : See footnotes.

Table F-8

South Atlantic: Recoverable Obsolete Ferrous Scrap by End-Use Product Category, 1983-2009 (thousands of net tons)

End-Use Product Category	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Automotive [a]	3,128	3,268	3,359	3,500	3,567	3,601	3,633	3,640	3,590	3,637	3,545	3,539	3,519	3,473	3,455	3,490	3,434	3,467	3,576	3,600	3,633	3,667	3,727	3,846	3,885	3,934	4,006
Ship building and marine equipment [b]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aircraft and aerospace [c]	5	6	6	7	7	8	9	9	10	10	11	11	11	11	11	13	12	13	13	13	13	13	13	12	13	12	12
Railroad equipment [d]	385	388	390	391	391	390	387	382	376	368	358	346	333	318	303	286	269	251	234	218	202	190	178	166	157	150	144
Railroad rails [e]	231	236	240	243	243	242	240	235	228	220	211	200	189	177	166	155	145	137	130	126	124	126	127	130	135	140	146
Industrial machinery [f]	884	900	935	1,001	1,052	1,072	1,142	1,193	1,260	1,315	1,330	1,334	1,370	1,361	1,345	1,341	1,332	1,319	1,301	1,278	1,252	1,240	1,215	1,174	1,143	1,116	1,103
Electrical machinery [g]	488	498	518	552	578	585	620	644	678	707	714	716	736	731	722	720	716	711	706	701	696	702	700	690	683	677	678
Mining materials [h]	199	187	189	179	158	138	120	113	113	125	127	146	153	160	153	139	124	112	106	107	112	118	108	99	92	93	97
Agricultural machinery [i]	232	222	214	224	230	280	281	274	334	313	322	340	365	324	346	359	344	377	382	315	276	234	257	236	179	156	146
Consumer durables [j]	71	75	78	82	85	87	89	90	91	91	91	91	91	90	89	88	88	87	88	88	88	89	91	92	92	92	94
Containers [k]	23	23	23	23	23	23	24	24	23	23	24	24	24	24	23	23	23	22	20	19	18	17	18	19	18	16	15
Oil and gas materials [l]	4	4	3	2	2	2	2	2	1	2	2	2	2	2	2	2	2	2	1	1	1	26	27	29	30	31	32
Materials, nec [m]	384	395	407	420	434	450	465	482	499	516	533	552	572	592	613	633	654	681	702	725	747	774	800	826	850	873	896
Construction materials [n]	1,875	2,075	2,252	2,441	2,577	2,679	2,715	2,787	2,719	2,744	2,933	2,992	3,147	3,283	3,387	3,472	3,557	3,641	3,724	3,809	3,891	4,426	4,653	4,824	4,791	4,606	4,691
Total	7,909	8,276	8,614	9,064	9,349	9,558	9,725	9,875	9,923	10,071	10,200	10,295	10,510	10,547	10,614	10,720	10,700	10,819	10,984	10,999	11,054	11,621	11,913	12,142	12,066	11,896	12,059

[a] Equals recoverable scrap from Appendix B, Table B-1 multiplied by appropriate percentage from Table F-23.

[b] When ships are discarded, they are floated overseas and disassembled. Hence, ferrous content in discarded products in the ship building and marine equipment category does not enter into recoverable obsolete ferrous scrap inventory.

[c] Equals recoverable scrap from Appendix B, Table B-3 multiplied by appropriate percentage from Table F-24.

[d] Equals recoverable scrap from Appendix B, Table B-4 multiplied by appropriate percentage from Table F-25.

[e] Equals recoverable scrap from Appendix B, Table B-5 multiplied by appropriate percentage from Table F-25.

[f] Equals recoverable scrap from Appendix B, Table B-6 multiplied by appropriate percentage from Table F-26.

[g] Equals recoverable scrap from Appendix B, Table B-7 multiplied by appropriate percentage from Table F-26.

[h] Equals recoverable scrap from Appendix B, Table B-8 multiplied by appropriate percentage from Table F-27.

[i] Equals recoverable scrap from Appendix B, Table B-9 multiplied by appropriate percentage from Table F-28.

[j] Equals recoverable scrap from Appendix B, Table B-10 multiplied by appropriate percentage from Table F-29.

[k] Equals recoverable scrap from Appendix B, Table B-11 multiplied by appropriate percentage from Table F-30.

[l] Equals recoverable scrap from Appendix B, Table B-12 multiplied by appropriate percentage from Table F-31.

[m] Equals recoverable scrap from Appendix B, Table B-13 multiplied by appropriate percentage from Table F-30.

[n] Equals recoverable scrap from Appendix B, Table B-14 multiplied by appropriate percentage from Table F-32.

SOURCES : See footnotes.

Table F-9

East South Central: Recoverable Obsolete Ferrous Scrap by End-Use Product Category, 1983-2009 (thousands of net tons)

End-Use Product Category	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Automotive [a]	1,193	1,223	1,262	1,292	1,310	1,351	1,334	1,362	1,354	1,338	1,316	1,279	1,322	1,218	1,219	1,210	1,174	1,191	1,231	1,222	1,192	1,199	1,197	1,224	1,249	1,256	1,279
Ship building and marine equipment [b]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aircraft and aerospace [c]	1	2	2	2	2	2	2	3	3	3	3	3	3	3	3	4	3	4	4	4	4	4	4	4	4	3	3
Railroad equipment [d]	219	221	222	223	223	222	221	218	214	210	204	197	190	182	173	163	153	143	133	124	115	108	101	94	89	85	82
Railroad rails [e]	132	135	137	138	139	138	137	134	130	126	120	114	108	101	94	88	83	78	74	72	71	71	72	74	76	79	82
Industrial machinery [f]	393	396	410	425	456	477	503	520	554	602	623	634	644	621	616	614	610	604	595	585	573	580	557	548	525	517	511
Electrical machinery [g]	217	219	227	234	250	260	273	281	298	324	334	341	346	334	331	330	328	326	323	321	319	328	321	322	314	313	314
Mining materials [h]	143	144	140	125	110	87	76	72	72	83	95	99	101	101	98	89	80	72	68	68	72	69	64	58	54	54	57
Agricultural machinery [i]	115	128	112	95	110	129	129	120	145	146	144	151	148	142	151	155	150	162	164	116	131	132	138	111	78	78	73
Consumer durables [j]	22	23	24	25	25	26	26	26	26	27	27	27	27	27	26	26	25	25	25	25	25	25	25	24	25	25	25
Containers [k]	9	9	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	7	7	6	6	5	6	6	6	5	5
Oil and gas materials [l]	35	36	35	39	41	43	42	43	45	54	55	61	59	57	57	57	56	51	50	49	48	48	45	44	36	34	36
Materials, nec [m]	147	149	152	154	157	160	164	168	172	178	183	189	195	201	207	213	219	223	228	233	239	245	251	257	264	270	276
Construction materials [n]	512	512	525	546	569	579	596	627	672	739	800	827	861	894	923	946	969	992	1,014	1,037	1,060	914	932	960	999	1,056	1,075
Total	3,138	3,195	3,255	3,307	3,400	3,482	3,510	3,581	3,694	3,835	3,912	3,932	4,013	3,889	3,906	3,902	3,857	3,877	3,917	3,863	3,854	3,727	3,710	3,726	3,719	3,776	3,818

[a] Equals recoverable scrap from Appendix B, Table B-1 multiplied by appropriate percentage from Table F-23.

[b] When ships are discarded, they are floated overseas and disassembled. Hence, ferrous content in discarded products in the ship building and marine equipment category does not enter into recoverable obsolete ferrous scrap inventory.

[c] Equals recoverable scrap from Appendix B, Table B-3 multiplied by appropriate percentage from Table F-24.

[d] Equals recoverable scrap from Appendix B, Table B-4 multiplied by appropriate percentage from Table F-25.

[e] Equals recoverable scrap from Appendix B, Table B-5 multiplied by appropriate percentage from Table F-25.

[f] Equals recoverable scrap from Appendix B, Table B-6 multiplied by appropriate percentage from Table F-26.

[g] Equals recoverable scrap from Appendix B, Table B-7 multiplied by appropriate percentage from Table F-26.

[h] Equals recoverable scrap from Appendix B, Table B-8 multiplied by appropriate percentage from Table F-27.

[i] Equals recoverable scrap from Appendix B, Table B-9 multiplied by appropriate percentage from Table F-28.

[j] Equals recoverable scrap from Appendix B, Table B-10 multiplied by appropriate percentage from Table F-29.

[k] Equals recoverable scrap from Appendix B, Table B-11 multiplied by appropriate percentage from Table F-30.

[l] Equals recoverable scrap from Appendix B, Table B-12 multiplied by appropriate percentage from Table F-31.

[m] Equals recoverable scrap from Appendix B, Table B-13 multiplied by appropriate percentage from Table F-30.

[n] Equals recoverable scrap from Appendix B, Table B-14 multiplied by appropriate percentage from Table F-32.

SOURCES : See footnotes.

Table F-10

West South Central: Recoverable Obsolete Ferrous Scrap by End-Use Product Category, 1983-2009 (thousands of net tons)

End-Use Product Category	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Automotive [a]	2,063	2,133	2,167	2,142	2,082	2,058	2,061	2,088	2,095	2,086	2,086	2,114	2,065	2,011	1,923	1,931	1,962	1,926	1,903	1,926	1,942	2,081	2,161	2,131	2,185	2,236	2,276
Ship building and marine equipment [b]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aircraft and aerospace [c]	4	4	5	5	6	6	6	7	7	8	8	8	9	9	9	9	9	10	9	9	9	9	9	9	9	9	9
Railroad equipment [d]	373	376	378	379	379	378	375	371	364	356	347	336	323	309	293	277	260	244	227	211	196	190	177	166	157	150	144
Railroad rails [e]	224	229	233	235	236	235	232	228	221	214	204	194	183	172	160	150	140	132	126	122	120	125	127	130	135	140	145
Industrial machinery [f]	528	522	529	533	573	658	702	756	759	748	781	823	865	852	891	889	883	874	862	847	830	999	1,042	1,064	1,061	1,067	1,054
Electrical machinery [g]	291	289	293	294	315	359	381	408	409	402	419	442	465	458	479	477	475	471	468	465	462	565	601	625	634	647	649
Mining materials [h]	32	36	37	43	35	27	21	18	18	20	23	26	30	31	30	28	25	22	21	21	22	33	30	24	24	24	25
Agricultural machinery [i]	252	207	210	199	225	254	229	249	260	270	298	286	283	247	287	270	337	284	291	320	306	267	237	201	183	146	137
Consumer durables [j]	47	48	49	49	48	48	48	49	50	50	51	51	51	51	51	51	50	50	51	50	50	50	51	52	52	54	54
Containers [k]	15	15	15	15	15	15	15	14	14	14	14	15	15	14	14	14	14	13	12	11	11	10	11	11	11	10	9
Oil and gas materials [l]	950	974	970	993	978	993	1,019	1,038	1,036	1,035	1,046	1,026	1,014	1,014	1,001	976	940	915	898	857	846	847	845	888	924	990	1,027
Materials, nec [m]	254	260	266	273	277	281	287	295	304	315	326	338	350	362	375	388	400	413	426	439	452	464	478	491	509	525	542
Construction materials [n]	1,729	1,652	1,546	1,346	1,141	1,110	1,133	1,256	1,450	1,616	1,656	1,705	1,779	1,867	1,871	1,918	1,965	2,011	2,057	2,104	2,149	2,292	2,356	2,460	2,642	2,977	3,032
Total	6,763	6,745	6,698	6,505	6,308	6,421	6,510	6,775	6,988	7,134	7,260	7,362	7,430	7,397	7,386	7,377	7,460	7,367	7,352	7,382	7,395	7,933	8,124	8,253	8,525	8,974	9,105

[a] Equals recoverable scrap from Appendix B, Table B-1 multiplied by appropriate percentage from Table F-23.

[b] When ships are discarded, they are floated overseas and disassembled. Hence, ferrous content in discarded products in the ship building and marine equipment category does not enter into recoverable obsolete ferrous scrap inventory.

[c] Equals recoverable scrap from Appendix B, Table B-3 multiplied by appropriate percentage from Table F-24.

[d] Equals recoverable scrap from Appendix B, Table B-4 multiplied by appropriate percentage from Table F-25.

[e] Equals recoverable scrap from Appendix B, Table B-5 multiplied by appropriate percentage from Table F-25.

[f] Equals recoverable scrap from Appendix B, Table B-6 multiplied by appropriate percentage from Table F-26.

[g] Equals recoverable scrap from Appendix B, Table B-7 multiplied by appropriate percentage from Table F-26.

[h] Equals recoverable scrap from Appendix B, Table B-8 multiplied by appropriate percentage from Table F-27.

[i] Equals recoverable scrap from Appendix B, Table B-9 multiplied by appropriate percentage from Table F-28.

[j] Equals recoverable scrap from Appendix B, Table B-10 multiplied by appropriate percentage from Table F-29.

[k] Equals recoverable scrap from Appendix B, Table B-11 multiplied by appropriate percentage from Table F-30.

[l] Equals recoverable scrap from Appendix B, Table B-12 multiplied by appropriate percentage from Table F-31.

[m] Equals recoverable scrap from Appendix B, Table B-13 multiplied by appropriate percentage from Table F-30.

[n] Equals recoverable scrap from Appendix B, Table B-14 multiplied by appropriate percentage from Table F-32.

SOURCES : See footnotes.

Table F-11

Mountain: Recoverable Obsolete Ferrous Scrap by End-Use Product Category, 1983-2009 (thousands of net tons)

End-Use Product Category	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Automotive [a]	1,119	1,103	1,101	1,124	1,191	1,176	1,212	1,229	1,223	1,211	1,230	1,172	1,182	1,224	1,242	1,210	1,269	1,250	1,318	1,140	1,094	1,108	1,116	1,134	1,148	1,164	1,185
Ship building and marine equipment [b]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aircraft and aerospace [c]	3	4	4	4	5	5	5	6	6	6	7	7	7	7	7	8	8	7	8	8	8	9	9	9	9	9	9
Railroad equipment [d]	313	315	317	318	318	317	314	311	305	299	291	281	271	259	246	232	218	204	190	177	164	149	139	131	124	118	113
Railroad rails [e]	187	192	195	197	198	197	195	191	186	179	171	163	153	144	134	126	118	111	106	102	101	99	100	102	106	110	114
Industrial machinery [f]	176	178	182	196	206	213	219	232	264	294	326	363	362	384	395	394	391	387	382	375	368	331	323	314	312	309	305
Electrical machinery [g]	97	98	101	108	113	116	119	125	142	158	175	195	195	206	212	211	210	209	207	206	204	188	186	184	186	187	188
Mining materials [h]	193	172	163	156	156	163	153	141	145	165	182	205	238	223	206	187	167	151	143	144	151	143	165	167	163	164	171
Agricultural machinery [i]	145	118	109	126	134	146	155	163	180	161	199	147	181	155	165	188	202	174	203	220	183	154	154	130	135	114	106
Consumer durables [j]	23	23	24	25	25	25	25	26	26	27	27	28	29	29	29	29	29	29	30	30	30	30	31	32	32	33	33
Containers [k]	7	7	7	7	7	7	7	7	7	7	8	8	8	8	8	8	8	8	7	7	6	6	6	7	7	6	6
Oil and gas materials [l]	204	209	226	227	250	254	277	303	322	359	392	408	416	423	432	446	448	455	459	470	465	452	466	490	494	505	524
Materials, nec [m]	122	125	129	133	137	141	146	151	158	165	173	183	192	200	209	217	226	239	248	258	267	278	289	302	314	325	335
Construction materials [n]	846	848	850	801	714	689	709	761	867	975	1,102	1,240	1,329	1,418	1,458	1,494	1,531	1,567	1,603	1,639	1,674	1,714	1,842	1,957	1,999	1,977	2,013
Total	3,435	3,392	3,408	3,424	3,453	3,449	3,536	3,646	3,830	4,005	4,283	4,401	4,562	4,680	4,743	4,750	4,824	4,791	4,904	4,776	4,715	4,660	4,827	4,959	5,029	5,019	5,103

[a] Equals recoverable scrap from Appendix B, Table B-1 multiplied by appropriate percentage from Table F-23.

[b] When ships are discarded, they are floated overseas and disassembled. Hence, ferrous content in discarded products in the ship building and marine equipment category does not enter into recoverable obsolete ferrous scrap inventory.

[c] Equals recoverable scrap from Appendix B, Table B-3 multiplied by appropriate percentage from Table F-24.

[d] Equals recoverable scrap from Appendix B, Table B-4 multiplied by appropriate percentage from Table F-25.

[e] Equals recoverable scrap from Appendix B, Table B-5 multiplied by appropriate percentage from Table F-25.

[f] Equals recoverable scrap from Appendix B, Table B-6 multiplied by appropriate percentage from Table F-26.

[g] Equals recoverable scrap from Appendix B, Table B-7 multiplied by appropriate percentage from Table F-26.

[h] Equals recoverable scrap from Appendix B, Table B-8 multiplied by appropriate percentage from Table F-27.

[i] Equals recoverable scrap from Appendix B, Table B-9 multiplied by appropriate percentage from Table F-28.

[j] Equals recoverable scrap from Appendix B, Table B-10 multiplied by appropriate percentage from Table F-29.

[k] Equals recoverable scrap from Appendix B, Table B-11 multiplied by appropriate percentage from Table F-30.

[l] Equals recoverable scrap from Appendix B, Table B-12 multiplied by appropriate percentage from Table F-31.

[m] Equals recoverable scrap from Appendix B, Table B-13 multiplied by appropriate percentage from Table F-30.

[n] Equals recoverable scrap from Appendix B, Table B-14 multiplied by appropriate percentage from Table F-32.

SOURCES : See footnotes.

Table F-12

Pacific: Recoverable Obsolete Ferrous Scrap by End-Use Product Category, 1983-2009 (thousands of net tons)

End-Use Product Category	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Automotive [a]	2,657	2,727	2,813	2,928	2,978	3,046	3,084	3,136	3,204	3,167	3,153	3,046	2,992	3,175	3,115	3,124	3,122	3,184	3,167	3,272	3,316	3,359	3,416	3,488	3,566	3,591	3,656
Ship building and marine equipment [b]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aircraft and aerospace [c]	6	7	8	8	9	10	10	11	12	12	13	13	14	15	15	15	15	15	15	15	15	15	15	14	14	14	13
Railroad equipment [d]	235	237	238	239	239	238	236	233	229	224	218	211	203	194	185	175	164	153	143	133	123	108	100	94	89	85	82
Railroad rails [e]	141	144	147	148	149	148	146	143	139	134	129	122	115	108	101	94	88	83	80	77	76	71	72	74	76	79	82
Industrial machinery [f]	832	838	863	900	972	1,017	1,081	1,142	1,178	1,160	1,170	1,130	1,153	1,225	1,266	1,262	1,254	1,242	1,225	1,204	1,179	1,125	1,164	1,156	1,144	1,128	1,114
Electrical machinery [g]	459	464	477	497	534	555	587	617	635	624	629	607	619	658	680	678	674	670	665	660	656	637	671	679	684	684	686
Mining materials [h]	28	31	34	38	38	35	32	33	33	34	38	47	52	56	59	54	48	44	41	41	43	42	38	40	38	38	39
Agricultural machinery [i]	336	285	290	328	342	357	341	363	367	361	425	399	435	408	443	438	443	438	391	488	416	381	347	351	332	240	225
Consumer durables [j]	74	76	79	82	84	86	87	89	89	89	88	86	85	84	83	83	82	81	81	81	81	83	82	83	84	84	85
Containers [k]	20	20	20	20	20	21	21	21	21	21	21	22	21	21	21	21	20	19	18	16	16	14	15	16	15	13	13
Oil and gas materials [l]	290	298	325	347	393	420	425	435	457	452	440	455	465	458	446	436	438	428	409	411	406	388	387	346	359	342	355
Materials, nec [m]	334	344	355	368	382	398	415	434	450	466	481	495	509	525	544	562	581	592	611	629	647	661	678	694	710	728	748
Construction materials [n]	1,947	2,036	2,095	2,190	2,301	2,411	2,599	2,737	2,760	2,659	2,538	2,550	2,577	2,586	2,706	2,773	2,841	2,908	2,975	3,042	3,108	3,456	3,593	3,691	3,712	3,602	3,668
Total	7,359	7,505	7,744	8,092	8,441	8,743	9,066	9,395	9,574	9,404	9,343	9,184	9,241	9,514	9,664	9,714	9,771	9,857	9,819	10,071	10,082	10,338	10,578	10,725	10,822	10,628	10,767

[a] Equals recoverable scrap from Appendix B, Table B-1 multiplied by appropriate percentage from Table F-23.

[b] When ships are discarded, they are floated overseas and disassembled. Hence, ferrous content in discarded products in the ship building and marine equipment category does not enter into recoverable obsolete ferrous scrap inventory.

[c] Equals recoverable scrap from Appendix B, Table B-3 multiplied by appropriate percentage from Table F-24.

[d] Equals recoverable scrap from Appendix B, Table B-4 multiplied by appropriate percentage from Table F-25.

[e] Equals recoverable scrap from Appendix B, Table B-5 multiplied by appropriate percentage from Table F-25.

[f] Equals recoverable scrap from Appendix B, Table B-6 multiplied by appropriate percentage from Table F-26.

[g] Equals recoverable scrap from Appendix B, Table B-7 multiplied by appropriate percentage from Table F-26.

[h] Equals recoverable scrap from Appendix B, Table B-8 multiplied by appropriate percentage from Table F-27.

[i] Equals recoverable scrap from Appendix B, Table B-9 multiplied by appropriate percentage from Table F-28.

[j] Equals recoverable scrap from Appendix B, Table B-10 multiplied by appropriate percentage from Table F-29.

[k] Equals recoverable scrap from Appendix B, Table B-11 multiplied by appropriate percentage from Table F-30.

[l] Equals recoverable scrap from Appendix B, Table B-12 multiplied by appropriate percentage from Table F-31.

[m] Equals recoverable scrap from Appendix B, Table B-13 multiplied by appropriate percentage from Table F-30.

[n] Equals recoverable scrap from Appendix B, Table B-14 multiplied by appropriate percentage from Table F-32.

SOURCES : See footnotes.

Table F-13

Automobile, Bus, and Truck Registrations by State, 1983-2009 (million)

Region	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
New England																											
Connecticut	2.31	2.37	2.46	2.56	2.61	2.65	2.65	2.62	2.59	2.57	2.59	2.60	2.62	2.61	2.66	2.70	2.77	2.85	2.92	2.91	2.96	3.04	3.06	3.05	3.05	3.09	-
Maine	0.77	0.80	0.84	0.87	0.93	0.94	0.94	0.98	0.98	0.98	1.03	0.95	0.97	0.96	1.06	0.93	0.92	1.02	1.02	0.97	1.05	1.07	1.07	1.07	1.08	1.07	-
Massachusetts	3.84	3.79	3.74	3.84	3.89	3.82	3.80	3.73	3.66	3.66	3.84	4.03	4.50	4.70	5.07	5.16	5.33	5.27	5.20	5.41	5.48	5.46	5.42	5.39	5.37	5.33	-
New Hampshire	0.80	0.87	0.97	0.83	0.87	0.89	0.94	0.95	0.91	0.89	0.96	0.99	1.12	1.11	1.13	1.04	1.05	1.05	1.10	1.14	1.14	1.18	1.17	1.06	1.18	1.21	-
Rhode Island	0.60	0.62	0.61	0.63	0.65	0.67	0.67	0.67	0.63	0.62	0.70	0.70	0.70	0.70	0.71	0.72	0.75	0.76	0.76	0.78	0.81	0.81	0.81	0.81	0.80	0.79	-
Vermont	0.37	0.38	0.40	0.42	0.44	0.45	0.46	0.46	0.45	0.46	0.48	0.49	0.49	0.50	0.50	0.50	0.52	0.51	0.53	0.54	0.52	0.52	0.51	0.59	0.56	0.58	-
Subtotal	8.68	8.82	9.02	9.16	9.40	9.42	9.46	9.40	9.21	9.19	9.60	9.75	10.40	10.58	11.12	11.04	11.33	11.47	11.53	11.75	11.96	12.08	12.05	11.96	12.04	12.09	-
Middle Atlantic																											
New Jersey	4.94	4.90	5.16	5.29	5.52	5.74	5.64	5.65	5.52	5.59	5.64	5.84	5.91	5.82	5.82	5.78	6.10	6.39	6.58	6.69	6.71	6.22	6.26	5.96	6.25	6.25	-
New York	8.42	8.64	9.04	9.52	9.59	9.84	10.02	10.20	9.77	9.78	10.16	10.20	10.27	10.64	10.87	10.42	10.76	10.23	10.20	10.46	10.80	11.10	11.86	11.28	11.49	11.09	-
Pennsylvania	6.84	7.08	7.21	7.48	7.64	7.77	7.91	7.97	8.04	8.18	8.28	8.48	8.48	8.64	8.82	8.98	9.01	9.26	9.63	9.52	9.72	9.82	9.86	9.89	9.94	10.37	-
Subtotal	20.20	20.62	21.41	22.28	22.75	23.34	23.57	23.82	23.33	23.55	24.09	24.52	24.66	25.10	25.51	25.18	25.87	25.88	26.41	26.67	27.24	27.14	27.99	27.14	27.68	27.70	-
East North Central																											
Illinois	7.51	7.60	7.53	7.42	7.66	7.86	8.02	7.87	8.19	7.98	8.07	8.70	8.97	8.82	8.44	9.31	9.36	8.97	9.86	9.58	9.25	9.23	9.46	9.88	9.76	9.79	-
Indiana	3.85	3.95	3.82	3.87	3.71	4.17	4.32	4.37	4.41	4.52	4.67	4.89	5.07	5.22	5.35	5.37	5.50	5.57	5.63	5.66	5.74	5.52	4.96	4.96	4.96	5.85	-
Michigan	6.29	6.37	6.73	6.83	6.94	7.14	7.14	7.21	7.24	7.31	7.40	7.57	7.67	8.01	8.02	8.13	8.29	8.44	8.45	8.53	8.54	8.40	8.25	8.15	8.19	7.95	-
Ohio	7.77	7.89	8.10	8.16	8.52	8.61	9.51	8.41	8.68	9.03	9.28	9.66	9.81	9.77	10.11	10.04	10.24	10.47	10.55	10.47	10.54	10.64	10.63	10.83	10.85	10.93	-
Wisconsin	3.21	3.09	3.19	3.12	3.10	3.90	3.57	3.81	3.68	3.73	3.81	3.93	3.99	3.97	4.23	4.20	4.27	4.37	4.47	4.56	4.65	4.71	4.73	4.97	5.02	5.0	-
Subtotal	28.64	28.91	29.37	29.40	29.93	31.69	32.56	31.67	32.22	32.57	33.23	34.75	35.52	35.78	36.15	37.05	37.64	37.81	38.97	38.80	38.71	38.50	38.02	38.79	38.77	39.52	-
West North Central																											
Iowa	2.48	2.44	2.70	2.64	2.70	2.57	2.58	2.63	2.67	2.71	2.74	2.77	2.81	2.87	2.85	3.05	3.05	3.11	3.32	3.31	3.37	3.37	3.40	3.35	3.36	3.43	-
Kansas	2.05	2.12	2.15	2.18	2.19	2.21	1.99	2.01	1.88	1.92	1.92	2.08	2.08	2.11	2.15	2.12	2.22	2.30	2.33	2.34	2.31	2.35	2.37	2.39	2.43	2.45	-
Minnesota	3.24	2.97	3.39	3.09	3.17	3.21	3.28	3.51	3.27	3.48	3.72	4.06	3.88	3.86	3.93	4.18	4.01	4.63	4.55	4.52	4.53	4.59	4.65	4.70	4.76	4.78	-
Missouri	3.43	3.52	3.56	3.68	3.71	3.79	3.84	3.90	3.95	4.0	4.07	4.21	4.26	4.35	4.35	4.38	4.40	4.58	4.21	4.24	4.46	4.81	4.59	4.96	4.92	4.87	-
Nebraska	1.23	1.26	1.26	1.28	1.30	1.33	1.36	1.38	1.40	1.36	1.44	1.46	1.47	1.48	1.51	1.53	1.57	1.62	1.63	1.66	1.68	1.69	1.70	1.73	1.74	1.76	-
North Dakota	0.67	0.69	0.66	0.65	0.65	0.66	0.64	0.63	0.63	0.66	0.66	0.68	0.69	0.68	0.70	0.67	0.70	0.69	0.71	0.70	0.69	0.70	0.70	0.71	0.71	0.72	-
South Dakota	0.63	0.64	0.66	0.66	0.67	0.69	0.71	0.70	0.70	0.72	0.81	0.77	0.71	0.75	0.72	0.77	0.78	0.79	0.80	0.81	0.83	0.84	0.85	0.84	0.86	0.91	-
Subtotal	13.73	13.65	14.36	14.18	14.40	14.46	14.40	14.77	14.51	14.84	15.35	16.03	15.91	16.10	16.20	16.70	16.74	17.72	17.56	17.57	17.87	18.35	18.25	18.69	18.78	18.91	-
South Atlantic																											
Delaware	0.43	0.46	0.47	0.48	0.49	0.51	0.52	0.53	0.53	0.54	0.55	0.58	0.59	0.59	0.61	0.62	0.62	0.63	0.65	0.67	0.69	0.71	0.74	0.81	0.85	0.87	-
District of Columbia	0.30	0.31	0.31	0.29	0.27	0.26	0.26	0.26	0.25	0.26	0.26	0.25	0.24	0.24	0.23	0.23	0.24	0.24	0.25	0.24	0.23	0.24	0.24	0.22	0.22	0.22	-
Florida	8.81	9.39	9.86	10.36	10.68	10.98	11.21	10.95	9.98	10.23	10.17	10.25	10.37	10.89	10.87	11.28	11.39	11.78	14.34	13.96	14.53	15.06	15.69	16.37	16.47	16.46	-
Georgia	4.21	4.46	4.58	4.84	5.03	5.20	5.27	5.49	5.71	5.90	5.63	5.99	6.12	6.28	6.24	6.89	6.97	7.16	7.30	7.65	7.73	7.88	8.06	8.29	8.51	8.57	-
Maryland	3.01	3.19	3.28	3.36	3.31	3.47	3.53	3.61	3.63	3.69	3.56	3.64	3.65	3.63	3.79	3.75	3.90	3.85	3.94	3.88	3.88	4.12	4.32	4.49	4.51	4.53	-

Table F-13

Automobile, Bus, and Truck Registrations by State, 1983-2009 (million)

Region	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
North Carolina	4.60	4.37	4.50	4.74	4.87	5.02	5.11	5.16	5.22	5.31	5.36	5.44	5.68	5.76	5.79	5.86	5.69	6.22	6.18	6.15	6.12	6.20	6.15	6.30	6.32	6.25	-
South Carolina	2.06	2.13	2.22	2.30	2.37	2.41	2.47	2.52	2.47	2.60	2.68	2.74	2.83	2.79	2.85	2.89	3.03	3.09	3.14	3.20	3.16	3.26	3.34	3.45	3.52	3.60	-
Virginia	3.89	4.05	4.25	4.53	4.63	4.67	4.86	4.94	5.02	5.24	5.41	5.51	5.61	5.58	5.71	5.82	5.87	6.05	6.17	6.27	6.35	6.50	6.59	6.64	6.61	6.53	-
West Virginia	1.18	1.11	1.14	1.17	1.19	1.29	1.21	1.22	1.27	1.27	1.35	1.46	1.43	1.41	1.35	1.38	1.38	1.44	1.45	1.46	1.41	1.40	1.35	1.44	1.41	1.40	-
Subtotal	28.48	29.46	30.61	32.08	32.84	33.82	34.44	34.68	34.09	35.04	34.98	35.86	36.53	37.17	37.45	38.72	39.08	40.46	43.43	43.49	44.08	45.36	46.48	48.01	48.43	48.43	-
East South Central																											
Alabama	3.14	3.20	3.38	3.46	3.55	3.88	3.62	3.74	3.48	3.30	3.39	3.18	3.55	3.32	3.67	3.86	3.96	3.96	4.24	4.43	4.33	4.51	4.54	4.63	4.68	4.73	-
Kentucky	2.62	2.59	2.61	2.69	2.72	2.80	2.84	2.91	2.94	2.98	2.63	2.67	2.63	2.70	2.78	2.84	2.66	2.83	3.63	3.60	3.39	3.32	3.43	3.56	3.55	3.60	-
Mississippi	1.56	1.67	1.75	1.77	1.76	1.79	1.87	1.88	1.89	1.95	2.0	2.06	2.14	2.18	2.23	2.26	2.32	2.29	1.95	1.95	1.95	1.96	1.98	2.0	2.01	2.03	-
Tennessee	3.54	3.57	3.75	3.93	4.03	4.23	4.32	4.44	4.54	4.65	4.96	5.06	5.40	4.83	4.53	4.47	4.43	4.82	5.14	4.78	4.80	5.03	4.98	5.09	5.34	5.10	-
Subtotal	10.86	11.03	11.50	11.84	12.05	12.69	12.65	12.97	12.86	12.89	12.98	12.96	13.73	13.03	13.22	13.43	13.36	13.90	14.95	14.76	14.46	14.83	14.93	15.28	15.57	15.47	-
West South Central																											
Arkansas	1.44	1.32	1.38	1.43	1.44	1.43	1.43	1.45	1.48	1.50	1.53	1.57	1.61	1.63	1.63	1.75	1.82	1.84	1.86	1.87	1.89	1.92	1.94	1.99	2.01	2.04	-
Louisiana	2.88	2.96	3.01	2.89	2.89	2.94	2.98	2.99	3.05	3.09	3.17	3.43	3.29	3.32	3.41	3.43	3.50	3.56	3.61	3.66	3.71	3.77	3.82	3.87	3.93	3.98	-
Oklahoma	2.77	2.78	2.91	2.90	2.53	2.55	2.57	2.65	2.67	2.74	2.77	2.81	2.86	3.08	2.88	2.92	2.93	3.01	3.28	3.07	3.07	3.15	3.73	3.20	3.22	3.29	-
Texas	11.69	12.17	12.44	12.41	12.30	12.41	12.56	12.80	12.70	12.77	13.12	13.63	13.68	13.49	12.92	13.32	14.07	14.07	14.36	14.66	14.89	16.91	17.47	17.54	18.07	18.21	-
Subtotal	18.78	19.23	19.75	19.62	19.16	19.32	19.54	19.89	19.89	20.10	20.58	21.42	21.44	21.52	20.85	21.43	22.32	22.48	23.11	23.27	23.56	25.74	26.95	26.61	27.23	27.52	-
Mountain																											
Arizona	2.29	2.11	2.24	2.35	2.64	2.70	2.78	2.83	2.85	2.80	2.89	2.81	2.87	2.98	3.14	2.94	3.61	3.79	3.97	3.94	3.57	3.78	3.97	4.18	4.37	4.37	-
Colorado	2.65	2.75	2.76	2.76	3.03	2.92	3.15	3.16	3.05	2.92	3.03	2.75	2.81	3.43	3.52	3.47	3.86	3.63	4.65	2.15	2.03	2.02	1.81	1.81	1.71	1.62	-
Idaho	0.88	0.85	0.85	0.86	0.95	0.96	1.04	1.05	1.06	1.03	1.02	1.03	1.04	1.06	1.08	1.12	1.13	1.18	1.32	1.39	1.30	1.34	1.37	1.28	1.28	1.32	-
Montana	0.83	0.68	0.65	0.67	0.65	0.72	0.74	0.78	0.77	0.91	0.94	0.95	0.97	0.97	0.98	0.99	1.0	1.03	1.03	1.06	1.01	1.01	1.01	1.07	0.95	0.93	-
Nevada	0.73	0.74	0.71	0.77	0.81	0.82	0.83	0.85	0.88	0.92	0.94	0.98	1.05	1.10	1.15	1.22	1.16	1.22	1.28	1.25	1.22	1.28	1.35	1.37	1.42	1.42	-
New Mexico	1.24	1.22	1.23	1.32	1.28	1.27	1.29	1.30	1.32	1.35	1.42	1.42	1.48	1.54	1.51	1.59	1.58	1.53	1.43	1.54	1.51	1.54	1.55	1.58	1.60	1.57	-
Utah	1.07	1.09	1.10	1.11	1.11	1.16	1.17	1.21	1.23	1.25	1.33	1.41	1.45	1.45	1.53	1.53	1.58	1.63	1.75	1.85	2.01	2.08	2.21	2.24	2.32	2.44	-
Wyoming	0.50	0.49	0.50	0.47	0.48	0.48	0.49	0.53	0.47	0.48	0.56	0.51	0.60	0.56	0.55	0.56	0.53	0.59	0.57	0.60	0.62	0.64	0.65	0.65	0.65	0.66	-
Subtotal	10.19	9.95	10.03	10.30	10.96	11.04	11.49	11.71	11.61	11.66	12.14	11.88	12.28	13.10	13.47	13.42	14.44	14.59	16.01	13.77	13.27	13.70	13.92	14.16	14.31	14.33	-
Pacific																											
Alaska	0.35	0.37	0.35	0.36	0.36	0.36	0.41	0.48	0.47	0.49	0.49	0.53	0.54	0.53	0.54	0.55	0.57	0.59	0.60	0.62	0.64	0.66	0.67	0.68	0.68	0.69	-
California	17.77	17.97	18.90	19.76	20.29	21.34	21.62	21.93	22.25	22.20	22.82	22.34	22.43	25.21	24.94	25.60	26.36	27.70	28.78	29.62	30.25	31.40	32.49	33.18	33.94	33.48	-
Hawaii	0.61	0.64	0.65	0.69	0.69	0.70	0.74	0.77	0.79	0.77	0.76	0.78	0.80	0.79	0.69	0.70	0.72	0.74	0.87	0.89	0.90	0.95	0.95	1.01	0.99	0.95	-
Oregon	2.12	2.18	2.20	2.26	2.24	2.32	2.38	2.45	2.51	2.58	2.62	2.75	2.78	2.85	2.89	2.98	3.01	3.02	3.04	3.07	3.06	3.0	2.90	2.98	3.09	3.11	-
Washington	3.34	3.43	3.53	3.75	3.83	3.89	4.09	4.26	4.40	4.47	4.41	4.47	4.50	4.60	4.70	4.82	4.86	5.12	5.18	5.34	5.38	5.54	5.60	5.69	5.76	5.98	-
Subtotal	24.19	24.58	25.63	26.83	27.41	28.61	29.24	29.88	30.42	30.51	31.11	30.87	31.06	33.98	33.77	34.65	35.53	37.17	38.46	39.54	40.23	41.55	42.60	43.54	44.45	44.20	-
All regions	163.75	166.25	171.69	175.70	178.91	184.39	187.36	188.80	188.14	190.36	194.06	198.05	201.53	206.37	207.75	211.62	216.31	221.48	230.43	229.62	231.39	237.24	241.19	244.17	247.26	248.16	-

SOURCES : U.S. Department of Transportation, Federal Highway Administration, Office of Highway Policy Information. Years 1983 - 1995 from *Highway Statistics Summary To 1995* , Table MV-201; years 1996 - 2003 from *Highway Statistics* , Table MV-1, various years; 2004-2008 from *Highway Statistics,* Table MV-1, various years.

Table F-14

General Aviation and Air Taxi Total Population by State of Based Aircraft, 1983-2009 (thousands)

Region	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
New England																											
Connecticut	-	-	-	-	-	-	-	-	-	-	-	-	-	1.9	1.8	2.3	2.2	2.2	2.0	2.0	2.2	2.3	2.6	2.8	3.0	2.6	-
Maine	-	-	-	-	-	-	-	-	-	-	-	-	-	1.4	1.6	1.3	1.7	1.5	1.6	1.3	1.6	1.7	1.7	1.4	1.9	1.7	-
Massachusetts	-	-	-	-	-	-	-	-	-	-	-	-	-	3.2	3.1	3.2	3.2	3.3	3.3	3.4	3.3	3.5	3.3	3.5	3.3	3.2	-
New Hampshire	-	-	-	-	-	-	-	-	-	-	-	-	-	1.7	1.4	1.8	1.9	2.0	2.2	1.9	2.0	2.1	1.8	1.9	1.9	2.2	-
Rhode Island	-	-	-	-	-	-	-	-	-	-	-	-	-	0.4	0.5	0.3	0.4	0.5	0.3	0.3	0.4	0.5	0.6	0.4	0.3	0.4	-
Vermont	-	-	-	-	-	-	-	-	-	-	-	-	-	0.5	0.9	0.6	0.8	0.7	0.7	0.8	0.8	1.0	0.6	0.8	0.6	0.8	-
Subtotal	-	-	-	-	-	-	-	-	-	-	-	-	-	9.0	9.3	9.5	10.2	10.1	10.0	9.9	10.3	10.9	10.7	10.9	11.1	11.0	-
Middle Atlantic																											
New Jersey	-	-	-	-	-	-	-	-	-	-	-	-	-	4.4	4.5	3.9	4.7	4.5	4.5	4.5	4.1	4.2	4.9	4.8	4.1	4.9	-
New York	-	-	-	-	-	-	-	-	-	-	-	-	-	7.3	7.2	7.0	8.1	8.4	7.5	8.1	8.4	7.9	7.2	7.3	7.8	7.6	-
Pennsylvania	-	-	-	-	-	-	-	-	-	-	-	-	-	7.6	7.2	7.0	8.5	8.1	8.1	7.9	7.9	8.1	8.1	9.1	9.0	10.7	-
Subtotal	-	-	-	-	-	-	-	-	-	-	-	-	-	19.3	18.9	18.0	21.3	21.0	20.1	20.5	20.4	20.3	20.1	21.1	20.9	23.2	-
East North Central																											
Illinois	-	-	-	-	-	-	-	-	-	-	-	-	-	7.8	8.5	8.5	9.2	9.3	7.9	8.0	8.1	8.8	8.1	7.9	9.3	7.7	-
Indiana	-	-	-	-	-	-	-	-	-	-	-	-	-	4.9	4.7	4.7	5.4	5.3	5.4	4.7	5.4	5.4	5.2	5.1	6.4	5.1	-
Michigan	-	-	-	-	-	-	-	-	-	-	-	-	-	8.7	8.5	8.2	9.1	9.7	8.1	9.0	8.0	9.6	8.5	8.7	9.1	10.9	-
Ohio	-	-	-	-	-	-	-	-	-	-	-	-	-	8.3	8.6	8.5	9.7	9.0	9.7	8.8	10.1	9.0	9.4	9.5	8.5	9.0	-
Wisconsin	-	-	-	-	-	-	-	-	-	-	-	-	-	5.9	6.0	5.4	6.7	6.0	5.8	6.2	6.7	5.8	6.8	6.9	7.5	5.8	-
Subtotal	-	-	-	-	-	-	-	-	-	-	-	-	-	35.6	36.4	35.4	40.2	39.1	36.9	36.7	38.3	38.6	38.0	38.0	40.7	38.4	-
West North Central																											
Iowa	-	-	-	-	-	-	-	-	-	-	-	-	-	3.3	3.3	3.2	3.3	3.6	3.9	3.6	3.8	3.9	3.9	3.6	3.8	4.4	-
Kansas	-	-	-	-	-	-	-	-	-	-	-	-	-	3.9	4.1	4.8	5.0	4.8	4.5	4.2	4.3	4.9	4.6	4.8	4.2	5.1	-
Minnesota	-	-	-	-	-	-	-	-	-	-	-	-	-	6.2	6.2	6.1	6.6	7.3	8.2	7.1	6.5	6.8	7.6	7.5	6.8	7.1	-
Missouri	-	-	-	-	-	-	-	-	-	-	-	-	-	5.4	4.8	5.2	5.3	5.3	4.9	5.5	5.8	5.4	5.3	6.0	6.4	5.5	-
Nebraska	-	-	-	-	-	-	-	-	-	-	-	-	-	2.3	2.0	2.2	2.7	2.6	2.4	2.2	2.2	2.4	2.8	2.6	3.1	2.6	-
North Dakota	-	-	-	-	-	-	-	-	-	-	-	-	-	1.7	2.1	1.8	1.3	2.0	2.0	1.6	1.9	1.2	1.7	1.9	1.9	1.8	-
South Dakota	-	-	-	-	-	-	-	-	-	-	-	-	-	1.5	1.7	1.7	1.7	1.9	1.4	1.8	1.4	1.8	2.1	2.0	1.9	2.3	-
Subtotal	-	-	-	-	-	-	-	-	-	-	-	-	-	24.2	24.3	25.1	25.9	27.4	27.3	25.9	25.8	26.3	28.0	28.4	28.1	28.8	-
South Atlantic																											
Delaware	-	-	-	-	-	-	-	-	-	-	-	-	-	2.1	2.3	6.3	1.7	2.9	2.8	2.7	3.2	3.1	3.6	3.4	3.1	2.6	-
District of Columbia	-	-	-	-	-	-	-	-	-	-	-	-	-	0.1	0.1	0.0	0.0	0.2	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	-
Florida	-	-	-	-	-	-	-	-	-	-	-	-	-	15.5	16.5	15.7	18.9	18.4	18.6	16.8	18.2	19.7	20.1	18.6	21.7	20.9	-
Georgia	-	-	-	-	-	-	-	-	-	-	-	-	-	5.8	5.7	5.9	6.6	6.4	6.8	7.7	6.9	6.8	6.6	7.7	6.9	9.1	-
Maryland	-	-	-	-	-	-	-	-	-	-	-	-	-	3.1	3.1	2.8	3.9	4.2	3.6	3.0	3.7	3.3	4.0	2.9	3.0	3.3	-

Table F-14

General Aviation and Air Taxi Total Population by State of Based Aircraft, 1983-2009 (thousands)

Region	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
North Carolina	-	-	-	-	-	-	-	-	-	-	-	-	-	5.6	5.2	6.0	6.9	7.5	6.7	6.6	7.0	7.2	7.8	7.7	7.6	6.0	-
South Carolina	-	-	-	-	-	-	-	-	-	-	-	-	-	2.2	2.1	2.3	2.8	3.3	2.6	3.1	3.1	3.0	3.4	2.9	4.0	3.3	-
Virginia	-	-	-	-	-	-	-	-	-	-	-	-	-	3.8	3.6	4.1	4.9	4.3	5.7	5.6	5.7	5.7	5.6	6.2	5.7	7.1	-
West Virginia	-	-	-	-	-	-	-	-	-	-	-	-	-	1.2	1.2	1.1	1.3	1.6	1.5	1.4	1.1	1.3	1.4	1.3	1.5	1.4	-
Subtotal	-	-	-	-	-	-	-	-	-	-	-	-	-	39.5	39.9	44.3	47.0	48.6	48.3	47.0	49.0	50.1	52.5	50.8	53.5	53.7	-
East South Central																											
Alabama	-	-	-	-	-	-	-	-	-	-	-	-	-	3.6	3.7	4.2	3.8	4.2	3.9	4.1	3.9	4.7	4.5	5.3	4.8	4.7	-
Kentucky	-	-	-	-	-	-	-	-	-	-	-	-	-	1.8	1.9	2.0	2.3	2.8	2.8	2.6	2.9	2.2	2.5	2.3	2.9	2.3	-
Mississippi	-	-	-	-	-	-	-	-	-	-	-	-	-	2.4	2.1	2.3	2.4	2.7	2.5	2.5	2.8	3.1	2.5	2.6	2.2	1.8	-
Tennessee	-	-	-	-	-	-	-	-	-	-	-	-	-	4.1	3.7	4.1	4.3	5.3	4.4	4.7	5.0	4.7	5.0	5.8	5.6	5.5	-
Subtotal	-	-	-	-	-	-	-	-	-	-	-	-	-	11.8	11.4	12.6	12.8	15.1	13.6	13.9	14.6	14.7	14.5	16.0	15.4	14.3	-
West South Central																											
Arkansas	-	-	-	-	-	-	-	-	-	-	-	-	-	3.3	3.5	3.0	3.7	3.4	3.3	3.7	4.0	3.3	3.3	3.2	3.6	3.3	-
Louisiana	-	-	-	-	-	-	-	-	-	-	-	-	-	3.3	3.5	3.4	4.4	4.0	3.0	3.1	3.6	3.2	3.6	3.4	3.9	3.8	-
Oklahoma	-	-	-	-	-	-	-	-	-	-	-	-	-	4.7	4.8	4.8	5.9	5.9	4.8	5.3	5.0	5.4	5.0	6.0	5.6	6.5	-
Texas	-	-	-	-	-	-	-	-	-	-	-	-	-	19.3	19.9	19.9	19.9	26.1	23.8	22.3	22.5	23.8	24.4	24.0	25.2	26.0	-
Subtotal	-	-	-	-	-	-	-	-	-	-	-	-	-	30.6	31.7	31.1	33.9	39.4	34.9	34.4	35.0	35.7	36.3	36.6	38.3	39.6	-
Mountain																											
Arizona	-	-	-	-	-	-	-	-	-	-	-	-	-	6.2	6.9	6.4	7.3	8.4	8.2	7.0	7.2	8.6	7.9	8.8	9.6	8.9	-
Colorado	-	-	-	-	-	-	-	-	-	-	-	-	-	5.5	5.4	5.6	7.0	6.8	6.6	7.2	7.2	7.0	7.6	7.2	7.1	7.6	-
Idaho	-	-	-	-	-	-	-	-	-	-	-	-	-	2.6	2.4	2.6	2.4	3.2	2.9	3.3	3.2	2.9	3.5	3.7	3.4	4.2	-
Montana	-	-	-	-	-	-	-	-	-	-	-	-	-	2.5	2.6	2.8	3.3	3.0	2.8	3.0	3.2	3.1	3.2	3.9	4.1	2.9	-
Nevada	-	-	-	-	-	-	-	-	-	-	-	-	-	3.0	3.1	3.2	3.0	3.5	3.2	3.4	3.0	4.1	4.2	4.7	4.2	4.2	-
New Mexico	-	-	-	-	-	-	-	-	-	-	-	-	-	2.7	2.5	2.7	3.0		3.2	2.9	3.9	4.0	4.1	4.6	5.1	4.7	-
Utah	-	-	-	-	-	-	-	-	-	-	-	-	-	1.9	1.7	2.3	1.9	2.2	2.1	2.5	2.1	2.6	2.4	2.4	2.6	3.5	-
Wyoming	-	-	-	-	-	-	-	-	-	-	-	-	-	1.0	1.4	1.1	1.4	1.2	1.5	1.3	2.0	1.7	1.4	1.8	1.6	1.9	-
Subtotal	-	-	-	-	-	-	-	-	-	-	-	-	-	25.4	26.0	26.9	29.2	28.2	30.4	30.6	31.7	34.0	34.3	37.1	37.5	37.9	-
Pacific																											
Alaska	-	-	-	-	-	-	-	-	-	-	-	-	-	7.5	8.1	8.0	8.1	8.0	8.0	7.9	8.1	8.7	8.8	8.8	8.9	9.1	-
California	-	-	-	-	-	-	-	-	-	-	-	-	-	29.6	29.8	27.9	31.2	31.2	30.7	30.5	31.1	30.3	32.3	31.6	31.4	31.2	-
Hawaii	-	-	-	-	-	-	-	-	-	-	-	-	-	0.5	0.6	0.6	0.5	0.5	0.5	0.5	0.6	0.4	0.6	0.8	0.7	0.9	-
Oregon	-	-	-	-	-	-	-	-	-	-	-	-	-	5.9	6.4	6.9	7.0	7.2	7.1	7.1	6.6	7.4	7.1	7.0	7.6	6.8	-
Washington	-	-	-	-	-	-	-	-	-	-	-	-	-	8.6	8.2	8.5	8.9	10.0	9.7	8.4	8.9	9.8	10.2	10.0	10.4	10.4	-
Subtotal	-	-	-	-	-	-	-	-	-	-	-	-	-	52.1	53.1	51.9	55.7	56.9	56.1	54.4	55.2	56.6	59.0	58.1	59.0	58.3	-
All regions	-	-	-	-	-	-	-	-	-	-	-	-	-	247.5	251.0	254.6	276.0	285.9	277.6	273.3	280.3	287.2	293.5	297.1	304.6	305.2	-

SOURCE: Federal Aviation Administration, Aviation Policy and Plans, General Aviation and Air Taxi Activity Survey, 1996 - 2003; for 2004-2005, General Aviation and Air Taxi Activity and Avionics Survey; for years 2006-2008, General Aviation and Part 135 Activity Surveys, available at: http://www.faa.gov/data_research/aviation_data_statistics/general_aviation/.

Table F-15

Total Rail Miles by State, 1983-2009 (thousands)

Region	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
New England																											
Connecticut	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.6	-	-	-	-	-	0.3	-
Maine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.2	-	-	-	-	-	1.2	-
Massachusetts	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.1	-	-	-	-	-	1.0	-
New Hampshire	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.4	-	-	-	-	-	0.4	-
Rhode Island	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.1	-	-	-	-	-	0.1	-
Vermont	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.5	-	-	-	-	-	0.6	-
Subtotal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.8	-	-	-	-	-	3.5	-
Middle Atlantic																											
New Jersey	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.9	-	-	-	-	-	1.0	-
New York	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.7	-	-	-	-	-	3.5	-
Pennsylvania	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.1	-	-	-	-	-	5.1	-
Subtotal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9.7	-	-	-	-	-	9.7	-
East North Central																											
Illinois	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.3	-	-	-	-	-	7.3	-
Indiana	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.3	-	-	-	-	-	4.4	-
Michigan	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.7	-	-	-	-	-	3.7	-
Ohio	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.2	-	-	-	-	-	5.3	-
Wisconsin	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.5	-	-	-	-	-	3.5	-
Subtotal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	23.9	-	-	-	-	-	24.3	-
West North Central																											
Iowa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.1	-	-	-	-	-	3.9	-
Kansas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.1	-	-	-	-	-	4.8	-
Minnesota	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.6	-	-	-	-	-	4.5	-
Missouri	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.2	-	-	-	-	-	4.1	-
Nebraska	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.5	-	-	-	-	-	3.2	-
North Dakota	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.7	-	-	-	-	-	3.5	-
South Dakota	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.8	-	-	-	-	-	1.7	-
Subtotal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	26.8	-	-	-	-	-	25.7	-
South Atlantic																											
Delaware	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2	-	-	-	-	-	0.2	-
District of Columbia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-	-	-	-	0.0	-
Florida	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.8	-	-	-	-	-	2.9	-
Georgia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.7	-	-	-	-	-	4.7	-
Maryland	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.8	-	-	-	-	-	0.8	-
North Carolina	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.3	-	-	-	-	-	3.3	-

Table F-15

Total Rail Miles by State, 1983-2009 (thousands)

Region	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
South Carolina	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.3	-	-	-	-	-	2.3	-
Virginia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.3	-	-	-	-	-	3.2	-
West Virginia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.2	-	-	-	-	-	2.2	-
Subtotal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	19.6	-	-	-	-	-	19.6	-
East South Central																											
Alabama	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.4	-	-	-	-	-	3.3	-
Kentucky	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.7	-	-	-	-	-	2.6	-
Mississippi	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.5	-	-	-	-	-	2.6	-
Tennessee	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.6	-	-	-	-	-	2.6	-
Subtotal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11.2	-	-	-	-	-	11.1	-
West South Central																											
Arkansas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.7	-	-	-	-	-	2.8	-
Louisiana	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.7	-	-	-	-	-	2.8	-
Oklahoma	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.2	-	-	-	-	-	3.2	-
Texas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10.3	-	-	-	-	-	10.7	-
Subtotal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	19.0	-	-	-	-	-	19.6	-
Mountain																											
Arizona	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.8	-	-	-	-	-	1.7	-
Colorado	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.7	-	-	-	-	-	2.7	-
Idaho	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.6	-	-	-	-	-	1.6	-
Montana	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.3	-	-	-	-	-	3.2	-
Nevada	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.2	-	-	-	-	-	1.2	-
New Mexico	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.0	-	-	-	-	-	1.8	-
Utah	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.4	-	-	-	-	-	1.4	-
Wyoming	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.9	-	-	-	-	-	1.9	-
Subtotal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15.9	-	-	-	-	-	15.4	-
Pacific																											
Alaska	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.5	-	-	-	-	-	0.5	-
California	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.9	-	-	-	-	-	5.2	-
Hawaii	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-	-	-	-	0.0	-
Oregon	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.4	-	-	-	-	-	2.2	-
Washington	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.1	-	-	-	-	-	3.2	-
Subtotal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12.0	-	-	-	-	-	11.1	-
All regions	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	142.0	-	-	-	-	-	139.9	-

SOURCE : Association of American Railroads. For 2002 statistics available online at: http://www.aar.org/AboutTheIndustry/StateInformation.asp. For 2008, statistics obtained from U.S. Freight Railroad Industry Snapshot, State rankings, Total Rail Miles by State: 2008, available online at: http://www.aar.org/~/media/AAR/InCongress_RailroadsStates/2009rankings.ashx.

Table F-16

Gross State Product for Manufacturing by State, 1983-2009 ($ billions)

Region	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
New England																											
Connecticut	14.5	15.9	16.1	16.7	17.5	18.0	18.4	19.7	19.7	19.4	18.4	18.9	20.1	21.3	23.4	21.5	20.5	21.0	21.4	20.9	19.1	21.6	22.6	27.1	28.5	28.9	-
Maine	3.1	3.5	3.4	3.5	3.9	4.4	4.5	4.4	4.2	4.1	4.3	4.7	5.4	5.1	5.1	4.5	4.7	5.2	4.6	4.5	4.4	4.9	4.9	5.1	5.2	5.5	-
Massachusetts	22.1	25.4	26.8	27.3	29.1	29.4	30.5	28.7	28.4	27.9	28.1	29.5	30.3	31.0	33.2	32.2	32.6	37.2	32.8	32.3	33.5	31.1	31.0	33.5	35.6	34.8	-
New Hampshire	3.3	4.1	4.4	4.3	4.9	5.3	5.5	5.2	5.3	5.6	5.3	6.0	7.5	8.8	9.0	8.3	7.1	7.4	6.2	6.2	6.1	6.1	6.1	6.2	6.4	6.5	-
Rhode Island	3.1	3.5	3.7	3.8	3.8	3.9	4.3	4.3	4.3	4.2	4.4	4.3	4.3	4.4	4.5	3.9	3.8	4.0	3.9	4.1	3.8	4.3	3.9	4.5	4.7	4.7	-
Vermont	1.5	1.6	1.6	1.7	1.8	2.2	2.5	2.6	2.5	2.6	2.6	2.6	2.6	2.7	2.9	2.6	2.7	2.9	3.0	2.8	2.7	2.7	2.6	2.8	2.8	2.9	-
Subtotal	47.6	54.1	56.0	57.3	61.0	63.2	65.7	64.7	64.4	63.7	63.1	66.1	70.2	73.3	78.2	73.1	71.4	77.7	71.9	70.8	69.6	70.8	71.2	79.3	83.4	83.2	-
Middle Atlantic																											
New Jersey	26.1	28.8	29.7	30.5	32.7	36.2	36.5	36.4	36.5	36.4	37.9	37.8	38.7	39.8	39.7	37.4	39.0	41.3	41.4	38.7	40.2	39.5	37.5	41.4	42.8	43.9	-
New York	52.3	57.1	58.0	58.0	59.4	66.3	65.9	67.6	67.1	67.7	66.3	69.5	69.9	72.2	73.0	59.1	58.3	60.3	57.1	59.9	57.6	59.8	61.7	66.7	67.7	69.1	-
Pennsylvania	37.1	40.4	40.4	40.3	43.7	48.5	50.0	50.8	53.0	55.3	57.9	61.8	68.0	67.6	71.3	68.1	67.7	69.5	69.1	71.0	70.2	67.0	68.3	72.5	73.4	75.5	-
Subtotal	115.6	126.4	128.1	128.8	135.8	151.0	152.5	154.8	156.7	159.4	162.1	169.1	176.6	179.6	184.0	164.6	165.0	171.1	167.6	169.6	168.0	166.3	167.5	180.6	183.9	188.5	-
East North Central																											
Illinois	36.8	40.5	41.4	43.2	45.9	50.6	52.1	53.1	52.9	55.1	58.0	66.9	68.0	68.0	72.8	66.7	66.9	69.0	66.2	65.0	65.7	70.4	71.3	74.3	77.3	78.8	-
Indiana	21.7	25.5	25.5	26.5	28.3	31.1	33.8	33.1	33.1	37.9	40.4	44.9	47.3	48.8	50.4	53.0	54.6	57.9	53.1	58.7	60.9	64.6	62.7	63.3	64.1	63.8	-
Michigan	41.8	49.1	51.1	53.3	51.8	54.1	54.5	52.1	51.3	57.2	63.2	75.3	72.9	73.1	76.5	70.3	75.9	76.3	68.6	75.8	77.2	68.7	66.2	64.0	64.5	61.8	-
Ohio	44.4	51.9	54.3	55.2	56.4	61.5	63.5	64.8	64.0	68.6	72.3	76.6	80.5	82.4	86.8	85.0	83.5	84.0	76.8	80.4	78.5	82.4	82.9	84.6	85.0	84.1	-
Wisconsin	18.5	21.3	22.2	22.7	24.0	26.9	28.1	28.6	28.8	31.5	33.2	35.5	37.7	39.4	41.1	40.0	41.4	43.0	41.7	41.8	41.8	43.3	43.9	47.3	47.7	48.9	-
Subtotal	163.1	188.4	194.5	200.9	206.4	224.2	231.9	231.7	230.0	250.2	267.0	299.2	306.4	311.7	327.6	314.9	322.2	330.2	306.4	321.7	324.1	329.4	327.0	333.5	338.6	337.2	-
West North Central																											
Iowa	8.9	9.7	9.9	9.8	10.8	12.7	13.3	14.7	14.6	14.8	16.0	17.3	18.0	18.6	20.7	18.7	19.2	20.0	19.8	20.8	21.3	23.5	23.5	25.6	26.9	28.2	-
Kansas	6.7	6.9	7.6	7.6	8.3	8.6	8.7	9.4	9.9	10.1	10.4	10.9	11.2	11.9	12.9	12.7	12.6	13.8	13.9	14.1	13.2	13.3	14.1	17.4	18.0	18.6	-
Minnesota	13.5	15.8	16.9	17.5	19.4	21.2	21.4	21.4	20.8	22.6	22.5	24.5	25.6	26.9	28.8	25.8	26.5	28.7	26.4	27.1	28.5	31.0	31.8	32.4	33.1	33.7	-
Missouri	14.7	18.1	16.8	18.3	19.2	21.4	23.5	22.6	24.3	25.2	24.5	27.5	30.5	30.7	32.7	31.2	29.4	29.7	28.8	29.8	30.4	31.2	31.1	30.9	31.5	32.0	-
Nebraska	3.0	3.5	3.6	3.6	3.8	4.1	4.5	5.1	5.1	5.5	5.6	6.2	6.5	6.4	6.9	6.7	7.1	7.6	7.4	7.1	7.2	7.3	7.8	8.8	9.3	9.9	-
North Dakota	0.5	0.5	0.5	0.5	0.6	0.6	0.7	0.8	0.8	0.8	0.8	1.0	1.1	1.3	1.4	1.5	1.6	1.5	1.7	1.8	1.9	1.9	2.3	2.5	2.6	2.8	-
South Dakota	0.9	0.9	0.9	1.0	1.0	1.1	1.2	1.4	1.5	1.7	2.2	2.0	2.7	2.5	2.7	2.7	2.7	3.1	2.8	3.5	2.5	2.8	3.0	3.1	3.3	3.5	-
Subtotal	48.1	55.5	56.3	58.3	63.1	69.8	73.3	75.3	77.1	80.6	82.0	89.4	95.7	98.3	106.0	99.3	99.0	104.3	100.7	104.3	105.0	111.0	113.7	120.7	124.7	128.8	-
South Atlantic																											
Delaware	3.5	3.9	4.1	4.0	4.2	4.4	4.8	4.7	4.7	4.4	4.6	5.1	5.5	5.4	5.1	3.3	3.7	3.7	4.0	3.0	3.0	4.2	4.3	4.4	4.7	4.6	-
District of Columbia	0.9	0.9	1.1	1.1	1.2	1.4	1.4	1.4	1.3	1.3	1.2	1.2	1.1	1.2	1.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	-
Florida	15.0	18.1	17.7	19.0	21.3	22.5	23.9	24.4	24.5	25.3	25.7	26.6	28.1	28.5	30.3	28.8	28.9	30.0	28.6	29.1	28.7	31.2	33.3	36.1	36.0	35.7	-
Georgia	16.8	18.8	20.6	22.4	24.2	25.1	25.6	25.9	26.9	29.8	30.9	33.5	37.2	39.0	41.5	42.1	46.6	46.0	43.4	43.4	42.1	44.4	45.4	44.1	43.3	43.3	-
Maryland	7.9	8.5	8.9	9.0	9.5	10.6	10.9	11.2	10.8	10.4	10.5	11.2	11.9	12.5	13.3	13.1	13.1	13.0	13.1	13.6	12.5	13.3	12.8	13.9	14.9	15.2	-
North Carolina	25.5	28.4	30.5	33.0	35.0	38.5	42.0	42.5	43.7	47.7	48.1	51.5	54.9	54.9	58.5	60.9	65.6	66.9	66.7	66.5	66.2	64.7	68.3	75.3	77.7	78.0	-
South Carolina	10.2	11.8	11.7	12.9	14.4	15.4	16.8	16.6	18.0	19.2	20.1	22.3	23.3	22.9	23.8	23.8	23.2	23.5	24.0	25.4	26.8	23.4	23.6	24.5	24.6	25.2	-
Virginia	15.0	16.5	17.2	18.6	20.1	20.8	22.0	23.6	24.7	25.4	26.3	27.0	28.9	29.6	30.8	29.0	31.0	33.8	35.9	33.1	31.3	30.6	32.3	33.2	34.0	34.1	-
West Virginia	3.2	3.8	3.9	3.8	4.2	5.0	5.2	5.0	4.8	4.8	5.2	5.9	6.6	6.6	6.6	5.9	6.4	5.6	5.2	5.4	5.2	5.6	6.1	6.5	6.5	6.6	-
Subtotal	98.0	110.6	115.6	123.9	134.0	143.6	152.6	155.1	159.3	168.3	172.6	184.3	197.5	200.7	211.1	207.2	218.9	222.7	221.2	219.6	216.1	217.6	226.3	238.2	242.0	242.8	-

Table F-16

Gross State Product for Manufacturing by State, 1983-2009 ($ billions)

Region	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
East South Central																											
Alabama	10.9	11.9	12.6	13.0	14.9	16.6	16.4	16.7	16.7	18.2	18.4	19.8	21.8	21.6	22.2	20.5	21.1	21.1	20.1	20.4	21.4	25.3	26.6	28.6	28.6	29.3	-
Kentucky	11.3	13.1	14.0	14.2	14.9	16.7	18.0	18.5	18.5	20.2	21.6	23.7	25.4	26.2	28.4	29.0	29.5	24.2	23.5	24.8	25.3	25.3	25.8	28.6	28.9	28.8	-
Mississippi	6.1	6.8	6.9	7.3	8.2	9.0	9.5	9.6	10.0	11.2	11.8	12.7	13.4	12.8	12.8	11.6	12.0	11.3	10.9	10.8	11.8	12.1	12.5	13.7	13.7	13.7	-
Tennessee	15.2	16.8	17.2	18.1	20.0	21.6	23.2	22.9	24.9	27.5	29.1	31.4	32.2	31.0	33.3	32.5	33.7	33.2	32.9	34.8	35.8	39.2	38.9	40.2	39.9	40.6	-
Subtotal	43.6	48.6	50.7	52.6	58.0	63.8	67.2	67.7	70.1	77.0	80.9	87.6	92.8	91.6	96.6	93.6	96.3	89.7	87.3	90.9	94.4	101.8	103.7	111.1	111.2	112.4	-
West South Central																											
Arkansas	6.3	6.9	6.5	7.1	8.1	8.6	9.5	9.6	10.1	10.7	11.6	12.8	13.5	13.7	13.9	14.0	14.8	14.7	13.7	14.8	14.8	15.9	16.3	17.0	17.1	17.1	-
Louisiana	8.8	8.9	9.1	9.7	11.7	14.6	16.0	17.5	17.0	15.0	15.2	17.0	21.1	18.5	20.6	17.8	18.7	17.3	14.8	18.1	21.6	28.6	39.7	38.7	38.7	40.5	-
Oklahoma	6.0	7.1	8.0	7.5	7.7	9.1	9.7	10.3	10.8	11.3	11.6	11.3	12.0	12.9	13.7	11.7	12.0	12.3	11.5	10.8	11.4	11.8	12.5	14.4	14.8	15.7	-
Texas	37.5	41.3	41.7	41.7	45.5	55.9	58.7	61.0	58.0	58.8	63.1	72.5	78.1	80.5	91.7	97.9	91.6	93.0	92.3	94.5	93.2	119.0	125.5	145.9	154.1	158.8	-
Subtotal	58.6	64.2	65.4	66.0	72.9	88.2	93.9	98.3	95.9	95.7	101.4	113.6	124.8	125.7	139.9	141.4	137.1	137.2	132.3	138.2	140.9	175.3	194.1	215.9	224.6	232.2	-
Mountain																											
Arizona	5.4	6.2	6.1	7.4	8.3	8.9	8.6	8.9	9.1	10.9	11.9	14.3	15.3	16.8	18.5	21.0	21.9	20.7	21.1	19.5	20.8	17.5	17.2	19.1	19.5	19.5	-
Colorado	6.3	7.2	7.4	7.6	8.5	9.1	8.9	9.2	9.7	10.9	11.5	12.6	13.1	13.6	15.0	13.6	13.6	15.0	13.2	13.2	12.2	12.8	13.8	15.0	15.4	15.9	-
Idaho	2.0	2.1	2.1	2.1	2.4	2.8	3.2	3.0	3.1	3.4	4.2	4.9	6.0	5.7	6.1	3.8	5.1	5.7	4.9	4.4	4.5	5.6	6.3	5.1	5.3	5.2	-
Montana	0.7	0.8	0.8	0.9	0.9	0.9	1.1	1.1	1.0	1.1	1.3	1.3	1.4	1.4	1.4	1.4	1.2	1.3	1.2	1.2	1.3	1.4	1.4	1.4	1.4	1.5	-
Nevada	0.8	0.8	0.9	0.9	0.9	1.1	1.1	1.3	1.3	1.4	1.6	2.0	2.2	2.5	2.7	2.5	2.4	2.8	2.8	3.1	3.4	4.6	5.1	5.3	5.6	5.7	-
New Mexico	1.1	1.2	1.4	1.6	1.4	1.4	1.6	1.6	3.6	4.3	6.1	8.6	7.0	7.5	9.4	7.2	8.3	6.9	4.7	3.7	4.8	6.4	5.7	5.2	5.4	5.3	-
Utah	2.9	3.2	3.5	3.4	3.5	3.9	4.2	4.6	5.0	5.1	5.2	5.9	6.6	8.1	7.9	7.8	7.8	8.4	7.6	7.9	8.3	9.0	9.8	11.5	12.4	13.0	-
Wyoming	0.4	0.4	0.3	0.3	0.3	0.5	0.5	0.6	0.6	0.6	0.6	0.7	0.7	1.0	1.0	0.9	0.9	1.0	1.2	0.9	0.9	0.9	0.9	1.0	1.0	1.1	-
Subtotal	19.5	21.8	22.5	24.3	26.2	28.5	29.2	30.2	33.3	37.6	42.4	50.1	52.2	56.6	62.0	58.3	61.1	61.9	56.8	53.9	56.1	58.2	60.1	63.7	66.1	67.2	-
Pacific																											
Alaska	0.5	0.5	0.5	0.5	0.8	0.9	1.1	1.2	1.2	1.1	1.2	1.1	1.2	1.1	1.1	0.8	0.7	0.6	0.7	0.7	0.8	0.9	0.9	0.9	1.0	1.0	-
California	73.3	81.5	84.8	87.6	97.4	106.5	112.0	116.0	117.2	115.3	116.0	118.7	127.0	134.6	150.2	148.2	160.1	183.0	154.7	139.8	141.2	147.1	161.8	174.7	179.1	181.1	-
Hawaii	0.8	0.8	0.9	0.9	1.0	1.1	1.2	1.2	1.2	1.2	1.1	1.1	1.1	1.1	1.1	0.8	0.8	0.8	0.8	0.9	0.9	0.9	1.0	1.0	1.1	1.1	-
Oregon	6.9	8.2	8.4	8.7	9.7	10.8	11.5	11.0	11.1	11.8	13.7	14.6	17.0	22.6	24.1	19.1	17.6	21.8	16.7	18.2	18.2	24.6	23.9	29.5	30.2	30.2	-
Washington	10.7	11.9	12.0	13.7	14.9	17.0	18.7	19.2	18.3	19.1	20.0	20.7	20.0	21.3	22.4	22.6	23.0	25.4	24.1	24.2	24.0	24.0	29.4	28.4	31.0	32.0	-
Subtotal	92.2	102.9	106.6	111.4	123.8	136.3	144.6	148.6	149.0	148.6	152.0	156.2	166.2	180.6	198.8	191.6	202.1	231.5	197.1	183.8	185.1	197.4	216.9	234.5	242.3	245.4	-
All regions	686.1	772.5	795.9	823.5	881.2	968.5	1,010.9	1,026.3	1,035.8	1,081.3	1,123.4	1,215.6	1,282.3	1,318.1	1,404.3	1,343.9	1,373.1	1,426.2	1,341.3	1,352.6	1,359.3	1,427.9	1,480.6	1,577.4	1,616.8	1,637.7	-

SOURCE: U.S. Department of Commerce, Bureau of Economic Analysis, Regional Economic Accounts. Relevant statistics available online at: http://www.bea.gov/bea/regional/gsp/.

Table F-17

Gross State Product for Mining, Except Oil and Gas Extraction by State, 1983-2009 ($ billions)

Region	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
New England																											
Connecticut	0.06	0.07	0.07	0.08	0.10	0.09	0.08	0.07	0.05	0.06	0.06	0.05	0.06	0.07	0.08	0.04	0.05	0.07	0.08	0.09	0.10	0.09	0.11	0.13	0.14	-	-
Maine	0.00	0.00	0.00	0.00	-	0.01	0.01	0.01	0.01	0.01	0.01	-	-	-	-	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-
Massachusetts	0.04	0.05	0.05	0.07	0.10	0.10	0.08	0.07	0.07	0.10	0.10	0.10	0.10	0.10	0.09	0.10	0.11	0.12	0.15	0.15	0.16	0.18	0.19	0.23	0.38	-	-
New Hampshire	-	-	0.02	-	-	-	-	0.02	0.02	0.03	0.02	-	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.04	0.04	-	-
Rhode Island	0.01	0.01	0.01	0.01	0.01	0.01	-	-	-	-	-	-	-	-	-	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-
Vermont	-	0.02	-	-	0.03	0.03	-	0.04	0.03	0.04	0.03	0.04	0.03	0.03	0.04	0.03	0.04	0.06	0.08	0.10	0.11	0.10	0.14	0.16	0.15	-	-
Subtotal	0.11	0.15	0.15	0.17	0.24	0.24	0.16	0.20	0.18	0.22	0.22	0.19	0.22	0.23	0.24	0.21	0.24	0.28	0.35	0.39	0.40	0.44	0.51	0.60	0.75	-	-
Middle Atlantic																											
New Jersey	0.07	0.08	0.08	0.10	0.12	0.12	0.12	0.11	0.10	0.12	0.15	0.18	0.19	0.18	0.22	0.21	0.22	0.21	0.22	0.17	0.19	0.23	0.28	0.27	0.43	-	-
New York	0.17	0.24	0.26	0.32	0.33	0.32	0.31	0.31	0.28	0.30	0.34	0.35	0.34	0.36	0.38	0.33	0.36	0.37	0.37	0.37	0.39	0.42	0.47	0.56	0.56	-	-
Pennsylvania	1.65	1.79	1.58	1.61	1.57	1.44	1.43	1.38	1.27	1.39	1.24	1.37	1.41	1.58	1.78	1.72	1.65	1.57	1.61	1.54	1.50	1.63	1.79	1.97	2.06	-	-
Subtotal	1.89	2.11	1.93	2.03	2.02	1.88	1.86	1.79	1.66	1.81	1.72	1.90	1.93	2.12	2.39	2.26	2.22	2.14	2.20	2.08	2.07	2.28	2.54	2.80	3.05	-	-
East North Central																											
Illinois	1.23	1.42	1.33	1.50	1.46	1.29	1.28	1.21	1.24	1.27	0.94	1.12	1.04	1.07	0.97	1.01	1.10	0.99	1.05	1.03	1.01	1.06	1.20	1.34	1.35	-	-
Indiana	0.51	0.62	0.59	0.64	0.68	0.59	0.62	0.63	0.57	0.62	0.60	0.67	0.59	0.65	0.72	0.69	0.71	0.63	0.77	0.77	0.76	0.77	0.79	0.93	0.98	-	-
Michigan	0.25	0.37	0.36	0.37	0.44	0.51	0.52	0.41	0.50	0.53	0.47	0.50	0.49	0.48	0.42	0.36	0.36	0.40	0.40	0.37	0.35	0.40	0.49	0.57	0.53	-	-
Ohio	0.81	0.98	0.95	1.08	1.10	0.92	0.88	0.82	0.71	0.73	0.80	0.89	0.77	0.86	0.90	0.86	0.84	0.93	0.82	0.72	0.76	0.82	0.90	0.97	0.98	-	-
Wisconsin	0.05	0.07	0.07	0.10	0.12	0.13	0.12	0.15	0.18	0.20	0.27	0.30	0.25	0.25	0.26	0.23	0.24	0.26	0.25	0.26	0.28	0.34	0.36	0.44	0.41	-	-
Subtotal	2.84	3.47	3.30	3.69	3.80	3.45	3.44	3.22	3.20	3.35	3.08	3.48	3.14	3.31	3.27	3.14	3.26	3.21	3.29	3.16	3.16	3.39	3.75	4.24	4.25	-	-
West North Central																											
Iowa	0.07	0.08	0.07	0.09	0.11	0.10	0.09	0.10	0.12	0.13	0.14	0.17	0.16	0.18	-	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	-	-
Kansas	0.06	0.07	0.06	0.08	0.09	0.06	0.07	0.06	0.06	0.06	0.07	0.08	0.08	0.09	0.10	0.09	0.10	0.11	0.10	0.11	0.12	0.13	0.16	0.17	0.18	-	-
Minnesota	0.71	0.83	0.65	0.44	0.44	0.50	0.59	0.64	0.62	-	0.59	0.65	0.72	0.71	0.78	0.69	0.66	0.72	0.58	0.64	0.63	0.82	1.18	1.52	1.40	-	-
Missouri	0.30	0.33	0.32	0.36	0.40	0.41	0.42	0.40	0.35	-	0.28	0.37	0.37	0.45	0.42	0.40	0.43	0.42	0.42	0.42	0.46	0.54	0.83	1.00	1.01	-	-
Nebraska	0.03	0.04	0.05	0.05	0.06	0.05	0.06	0.05	0.05	0.06	0.06	0.07	0.06	0.06	0.06	0.04	0.06	0.05	0.07	0.09	0.09	0.09	0.12	0.12	0.22	-	-
North Dakota	0.12	0.13	0.14	0.13	0.13	0.11	0.12	0.13	0.13	0.15	0.17	0.16	0.17	0.17	0.16	0.17	0.18	0.18	0.19	0.19	0.19	0.19	0.18	0.19	0.20	-	-
South Dakota	0.14	0.14	0.14	0.16	0.19	0.20	0.20	0.20	0.21	0.22	0.21	0.19	0.17	0.17	0.15	0.10	0.11	0.10	0.11	0.10	0.10	0.10	0.11	0.10	0.11	-	-
Subtotal	1.43	1.62	1.42	1.32	1.41	1.44	1.54	1.58	1.52	0.63	1.52	1.69	1.73	1.83	1.67	1.67	1.72	1.75	1.65	1.72	1.76	2.07	2.83	3.38	3.40	-	-
South Atlantic																											
Delaware	0.00	0.00	0.00	0.00	-	0.00	0.01	0.01	-	0.00	-	-	-	0.01	-	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-
District of Columbia	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.01	0.01	0.01	0.00	0.00	0.00	0.00	(L)	0.00	0.00	0.00	0.00	0.00	-	-
Florida	0.50	0.68	0.67	0.66	0.68	0.67	0.75	0.74	0.73	0.72	0.60	0.58	0.58	0.67	0.65	0.56	0.60	0.55	0.54	0.57	0.59	0.66	0.85	0.89	1.01	-	-
Georgia	0.37	0.48	0.48	0.66	0.76	0.77	0.72	0.73	0.65	0.64	0.73	0.87	0.95	1.09	1.13	1.01	1.04	1.04	1.00	1.00	1.07	1.18	1.27	1.36	1.45	-	-
Maryland	0.08	-	0.09	0.13	0.14	0.12	0.11	0.11	0.11	0.10	0.10	0.12	0.12	0.14	0.16	0.12	0.12	0.14	0.15	0.17	0.17	0.20	0.23	0.26	0.27	-	-
North Carolina	0.27	-	-	-	-	0.38	0.33	0.26	0.22	0.19	0.23	0.30	0.35	0.39	0.49	0.43	0.45	0.44	0.44	0.40	0.41	0.50	0.57	0.57	0.64	-	-

Table F-17

Gross State Product for Mining, Except Oil and Gas Extraction by State, 1983-2009 ($ billions)

Region	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
South Carolina	0.07	0.10	0.10	0.12	0.14	0.14	0.19	0.20	0.15	0.15	0.16	0.18	0.17	0.17	0.18	0.18	0.19	0.20	0.18	0.19	0.21	0.25	0.27	0.33	0.26	-	-
Virginia	0.95	1.06	1.01	1.03	1.07	0.98	0.98	1.00	0.89	0.98	0.90	0.89	0.85	0.91	0.95	0.80	0.78	0.79	0.88	0.85	0.92	1.03	1.11	1.39	1.21	-	-
West Virginia	2.86	3.07	2.83	2.88	2.80	2.54	2.75	2.80	2.77	2.78	2.24	2.78	2.69	2.75	2.77	2.67	2.46	2.37	2.67	2.52	2.37	2.64	2.94	3.38	3.57	-	-
Subtotal	5.10	5.39	5.19	5.48	5.59	5.60	5.82	5.84	5.51	5.57	4.95	5.72	5.71	6.12	6.33	5.77	5.65	5.53	5.87	5.71	5.75	6.47	7.26	8.19	8.42	-	-
East South Central																											
Alabama	0.81	0.90	0.84	0.79	0.74	0.70	0.74	0.78	0.73	0.74	0.78	0.78	0.82	0.91	0.96	0.92	0.84	0.76	0.76	0.69	0.72	0.87	0.97	0.96	1.10	-	-
Kentucky	2.54	2.90	2.66	2.67	2.78	2.45	2.54	2.52	2.40	2.55	2.55	2.73	2.54	2.49	2.56	2.32	2.29	2.13	2.27	2.34	2.19	2.33	2.64	3.11	3.08	-	-
Mississippi	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.04	0.03	0.04	0.04	0.04	0.04	0.06	0.07	0.09	0.10	0.11	0.12	0.15	0.14	0.14	0.15	-	-
Tennessee	0.27	0.32	0.31	0.33	0.35	0.35	0.38	0.38	0.34	0.35	0.33	0.35	0.39	0.43	0.50	0.44	0.47	0.46	0.45	0.44	0.42	0.46	0.55	0.59	0.61	-	-
Subtotal	3.65	4.14	3.84	3.82	3.90	3.52	3.69	3.70	3.50	3.67	3.70	3.89	3.78	3.87	4.06	3.74	3.68	3.43	3.58	3.58	3.44	3.80	4.30	4.80	4.94	-	-
West South Central																											
Arkansas	0.06	0.08	0.08	0.09	0.09	0.10	0.11	0.09	0.09	0.10	0.09	0.12	0.13	0.12	0.14	0.17	0.18	0.19	0.19	0.19	0.20	0.23	0.25	0.29	0.43	-	-
Louisiana	0.17	0.24	0.25	0.28	0.28	0.25	0.20	0.18	0.18	0.17	0.14	0.21	0.25	0.25	0.28	0.22	0.26	0.24	0.25	0.25	0.29	0.30	0.30	0.30	0.31	-	-
Oklahoma	0.15	0.18	0.14	0.14	0.13	0.10	0.09	0.10	0.11	0.10	0.11	0.13	0.13	0.14	0.15	0.16	0.17	0.18	0.19	0.20	0.21	0.22	0.26	0.29	0.31	-	-
Texas	0.46	0.56	0.56	0.82	0.75	0.66	0.62	0.56	0.52	0.53	0.54	0.55	0.60	0.69	0.70	0.76	0.93	0.92	0.97	0.91	0.95	1.04	1.17	1.13	1.13	-	-
Subtotal	0.82	1.05	1.03	1.32	1.25	1.11	1.02	0.93	0.90	0.89	0.88	1.01	1.10	1.20	1.26	1.31	1.54	1.53	1.59	1.55	1.65	1.79	1.98	2.01	2.19	-	-
Mountain																											
Arizona	0.68	0.71	0.68	0.65	0.74	1.15	1.33	1.30	1.30	1.41	1.19	1.54	2.00	1.77	1.89	1.38	1.37	1.48	1.24	1.17	1.27	1.68	2.77	3.77	4.11	-	-
Colorado	0.50	0.47	0.43	0.39	0.34	0.33	0.40	0.35	0.33	0.38	0.42	0.47	0.60	0.55	0.68	0.76	0.81	0.78	0.77	0.90	0.95	1.01	1.76	1.73	1.92	-	-
Idaho	0.24	0.26	0.22	0.16	0.19	0.19	0.24	0.26	-	-	-	-	0.28	0.25	0.21	0.15	0.15	0.14	0.12	0.11	0.11	0.14	0.42	0.37	0.37	-	-
Montana	0.53	0.51	0.43	0.45	0.50	0.59	0.59	0.55	0.60	0.61	0.57	0.72	0.66	0.59	0.61	0.51	0.55	0.56	0.55	0.49	0.51	0.57	0.73	0.86	1.04	-	-
Nevada	0.49	0.49	0.43	0.66	0.99	1.33	1.57	1.68	1.62	1.67	1.61	1.84	1.72	1.74	1.74	1.33	1.33	1.35	1.24	1.23	1.31	1.45	1.79	2.50	2.47	-	-
New Mexico	0.62	0.63	0.56	0.63	0.73	0.91	0.99	0.90	0.84	0.87	0.90	0.98	1.01	0.92	0.92	0.68	0.62	0.57	0.47	0.44	0.42	0.50	0.63	0.75	0.76	-	-
Utah	0.48	0.47	0.38	0.44	0.60	0.75	0.85	0.77	0.77	0.72	0.83	0.90	0.97	0.98	0.83	0.62	0.59	0.59	0.56	0.47	0.52	0.57	0.97	1.30	1.27	-	-
Wyoming	1.38	1.42	1.37	1.41	1.42	1.38	1.44	1.49	1.58	1.67	1.55	1.61	1.63	1.71	1.65	1.46	1.55	1.52	1.58	1.78	1.86	1.91	2.00	2.56	2.94	-	-
Subtotal	4.93	4.95	4.50	4.79	5.51	6.62	7.41	7.30	7.04	7.32	7.07	8.05	8.89	8.51	8.53	6.87	6.97	6.98	6.53	6.61	6.94	7.82	11.07	13.83	14.89	-	-
Pacific																											
Alaska	0.03	0.03	0.04	0.05	0.09	0.08	0.13	0.33	0.26	0.23	0.17	0.25	0.31	0.33	0.59	0.42	0.43	0.38	0.27	0.24	0.25	0.31	0.34	0.69	0.82	-	-
California	0.50	0.67	0.71	0.86	0.99	1.03	1.10	1.05	1.02	0.96	1.02	1.14	1.15	1.23	1.33	1.21	1.34	1.33	1.36	1.40	1.39	1.56	1.68	2.08	2.01	-	-
Hawaii	-	-	0.01	0.01	-	-	0.02	0.02	0.03	-	-	0.04	0.04	0.05	0.04	0.02	0.02	0.03	0.03	0.03	0.04	0.04	0.04	0.05	0.08	-	-
Oregon	0.05	0.06	0.05	0.06	0.07	0.06	-	-	-	-	-	-	-	0.12	0.13	0.12	0.13	0.14	0.14	0.15	0.15	0.17	0.21	0.22	0.26	-	-
Washington	0.13	0.13	0.13	0.19	0.22	0.25	0.29	0.30	0.30	0.31	0.31	0.42	0.43	0.42	0.36	0.29	0.30	0.27	0.23	0.23	0.23	0.22	0.25	0.30	0.26	-	-
Subtotal	0.71	0.89	0.94	1.16	1.36	1.42	1.53	1.70	1.61	1.50	1.49	1.85	1.93	2.14	2.46	2.05	2.22	2.14	2.01	2.04	2.05	2.29	2.52	3.35	3.43	-	-
All regions	21.48	23.77	22.28	23.78	25.07	25.27	26.46	26.26	25.13	24.96	24.63	27.77	28.42	29.34	30.20	27.03	27.49	26.99	27.08	26.83	27.24	30.33	36.75	43.20	45.31	-	-

SOURCE : U.S. Department of Commerce, Bureau of Economic Analysis, Regional Economic Accounts. Relevant statistics available online at: http://www.bea.gov/bea/regional/gsp/.

Table F-18

Net Value-Added in the Agricultural Sector by State, 1983-2009 ($ billions)

Region	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
New England																											
Connecticut	0.15	0.17	0.18	0.19	0.19	0.21	0.20	0.26	0.23	0.27	0.29	0.29	0.25	0.24	0.22	0.25	0.27	0.32	0.29	0.23	0.26	0.31	0.32	0.28	0.31	0.33	-
Maine	0.12	0.16	0.15	0.14	0.20	0.18	0.20	0.23	0.17	0.26	0.22	0.22	0.19	0.22	0.16	0.21	0.23	0.24	0.21	0.18	0.21	0.28	0.28	0.28	0.31	0.29	-
Massachusetts	0.21	0.23	0.21	0.23	0.21	0.25	0.23	0.23	0.25	0.26	0.25	0.25	0.23	0.26	0.26	0.16	0.17	0.19	0.17	0.18	0.18	0.25	0.24	0.24	0.26	0.32	-
New Hampshire	0.04	0.03	0.04	0.04	0.06	0.07	0.06	0.07	0.06	0.07	0.06	0.06	0.05	0.06	0.05	0.05	0.06	0.06	0.06	0.05	0.06	0.09	0.09	0.08	0.08	0.08	-
Rhode Island	0.04	0.04	0.05	0.06	0.05	0.06	0.05	0.05	0.05	0.05	0.04	0.04	0.04	0.04	0.02	0.02	0.03	0.03	0.03	0.03	0.03	0.04	0.04	0.04	0.04	0.04	-
Vermont	0.14	0.12	0.14	0.14	0.17	0.18	0.18	0.17	0.15	0.23	0.18	0.19	0.17	0.21	0.17	0.20	0.22	0.23	0.23	0.20	0.21	0.28	0.30	0.20	0.34	0.27	-
Subtotal	0.69	0.75	0.78	0.81	0.89	0.94	0.91	1.01	0.91	1.13	1.05	1.06	0.92	1.04	0.90	0.90	0.97	1.08	0.98	0.86	0.95	1.25	1.26	1.11	1.34	1.33	-
Middle Atlantic																											
New Jersey	0.28	0.26	0.31	0.31	0.34	0.34	0.36	0.34	0.32	0.34	0.38	0.43	0.40	0.44	0.37	0.37	0.32	0.46	0.40	0.39	0.37	0.50	0.53	0.57	0.61	0.61	-
New York	0.79	0.82	0.86	0.96	1.07	0.98	1.12	1.09	0.93	1.05	1.09	1.02	0.92	1.16	0.79	1.07	1.24	1.23	1.44	1.18	1.35	1.61	1.68	1.46	1.95	1.95	-
Pennsylvania	0.85	1.16	1.17	1.21	1.22	1.13	1.40	1.38	1.17	1.54	1.40	1.31	1.06	1.54	1.14	1.25	1.26	1.59	1.52	1.09	1.69	2.26	2.21	1.88	2.28	2.13	-
Subtotal	1.91	2.24	2.33	2.48	2.63	2.45	2.87	2.81	2.42	2.94	2.87	2.76	2.39	3.14	2.30	2.69	2.82	3.28	3.36	2.66	3.41	4.37	4.42	3.91	4.84	4.69	-
East North Central																											
Illinois	1.24	3.45	4.03	3.48	3.33	2.95	4.38	3.83	2.88	4.10	3.75	4.29	2.80	5.03	4.45	3.81	3.38	3.91	3.93	2.82	3.81	6.29	3.88	4.14	5.42	8.29	-
Indiana	0.75	2.03	1.85	1.59	1.87	1.53	2.18	2.04	1.28	1.95	2.05	1.89	1.55	2.54	2.50	2.10	1.76	2.21	2.45	1.53	2.49	3.75	2.90	2.73	3.19	4.58	-
Michigan	0.90	1.04	1.18	0.97	1.12	1.05	1.43	1.20	1.08	1.09	1.16	0.96	1.24	1.14	1.15	1.19	1.49	1.10	1.04	1.11	1.33	2.01	2.04	2.17	2.27	3.01	-
Ohio	0.83	1.68	1.69	1.43	1.53	1.75	2.10	2.16	1.58	2.03	1.86	2.08	1.96	2.32	2.86	2.41	1.98	2.34	2.34	1.49	2.58	2.64	2.42	2.27	2.55	2.95	-
Wisconsin	1.49	1.96	1.90	2.17	2.28	1.80	2.87	2.38	1.88	2.0	1.76	2.06	1.77	2.49	2.04	2.49	2.57	2.09	2.42	2.26	2.79	3.33	3.21	3.04	4.0	4.13	-
Subtotal	5.21	10.17	10.66	9.64	10.12	9.08	12.96	11.60	8.71	11.17	10.58	11.28	9.33	13.51	13.01	11.99	11.17	11.65	12.18	9.21	13.01	18.02	14.45	14.34	17.43	22.96	-
West North Central																											
Iowa	2.41	4.25	4.39	4.60	4.77	4.03	4.63	4.76	4.0	4.90	2.85	5.27	4.63	6.88	6.31	5.03	4.40	5.23	4.96	4.62	4.50	8.15	6.88	5.79	7.36	10.32	-
Kansas	1.65	1.99	2.21	2.18	2.42	2.38	2.03	2.83	2.19	2.85	2.74	3.06	2.20	3.45	3.37	2.93	2.99	2.45	2.62	1.47	2.81	3.43	3.71	2.60	3.13	5.25	-
Minnesota	1.91	2.84	2.66	2.95	3.33	2.73	3.37	3.35	2.40	2.49	1.36	2.70	2.15	3.66	2.44	3.10	2.98	3.04	2.61	2.44	3.15	4.60	5.23	4.76	4.86	7.86	-
Missouri	1.09	1.41	1.78	1.49	1.69	1.70	1.91	1.65	1.48	1.78	1.41	1.68	1.29	2.36	2.31	1.75	1.46	2.07	2.12	1.42	2.37	3.88	2.92	2.90	3.03	4.28	-
Nebraska	1.92	2.92	3.11	2.92	3.08	3.56	3.46	3.83	3.51	3.68	3.27	3.60	3.14	5.16	3.81	3.48	3.36	3.20	3.66	2.43	4.79	5.26	4.78	3.80	4.85	6.08	-
North Dakota	1.25	1.52	1.56	1.40	1.46	0.79	1.21	1.51	1.30	1.84	1.49	1.83	1.33	2.16	1.14	1.85	1.59	1.99	1.65	1.36	2.19	1.65	2.01	1.48	2.35	3.31	-
South Dakota	0.96	1.38	1.32	1.29	1.51	1.40	1.40	1.70	1.55	1.69	1.65	2.0	1.47	2.42	1.92	2.03	2.06	2.20	1.96	1.03	2.10	2.88	2.71	1.55	2.80	4.13	-
Subtotal	11.20	16.31	17.03	16.82	18.27	16.58	18.0	19.63	16.42	19.23	14.77	20.14	16.20	26.09	21.30	20.18	18.84	20.18	19.57	14.77	21.91	29.86	28.23	22.88	28.39	41.24	-
South Atlantic																											
Delaware	0.12	0.13	0.16	0.20	0.17	0.25	0.27	0.21	0.19	0.18	0.17	0.19	0.15	0.20	0.16	0.21	0.20	0.21	0.29	0.14	0.23	0.40	0.44	0.33	0.34	0.30	-
District of Columbia																											
Florida	2.67	2.61	2.72	2.83	3.08	3.67	3.83	3.18	3.59	3.87	3.65	3.53	3.20	3.35	3.56	4.07	3.89	3.92	3.92	3.78	3.19	3.99	4.55	4.25	3.72	3.58	-
Georgia	1.24	1.59	1.35	1.34	1.42	1.74	1.99	1.84	2.14	2.26	2.05	2.68	2.45	2.70	2.62	2.58	2.73	2.65	3.10	2.42	3.59	3.36	3.60	2.66	2.98	3.63	-
Maryland	0.27	0.39	0.43	0.43	0.47	0.55	0.57	0.56	0.49	0.55	0.52	0.54	0.44	0.66	0.50	0.55	0.57	0.63	0.65	0.41	0.59	0.82	0.77	0.67	0.65	0.72	-
North Carolina	1.39	1.95	1.78	1.70	2.06	2.43	2.74	3.29	3.54	3.54	3.86	4.41	4.30	4.92	5.03	4.39	3.94	5.29	5.42	3.27	3.55	3.74	4.56	3.83	3.49	3.70	-

Table F-18

Net Value-Added in the Agricultural Sector by State, 1983-2009 ($ billions)

Region	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
South Carolina	0.30	0.51	0.42	0.28	0.45	0.55	0.58	0.50	0.60	0.58	0.55	0.74	0.61	0.73	0.73	0.55	0.63	0.77	0.94	0.38	0.88	1.02	1.02	0.82	0.63	0.91	-
Virginia	0.39	0.63	0.53	0.58	0.71	0.92	1.07	1.13	1.03	1.08	0.94	1.09	0.99	1.04	0.82	0.84	0.77	1.08	1.05	0.64	0.95	1.17	1.33	0.97	0.91	0.97	-
West Virginia	0.04	0.07	0.07	0.10	0.05	0.06	0.10	0.12	0.10	0.13	0.15	0.15	0.11	0.09	0.07	0.07	0.06	0.10	0.12	0.03	0.08	0.16	0.15	0.10	0.08	0.07	-
Subtotal	6.42	7.90	7.45	7.45	8.40	10.18	11.14	10.82	11.68	12.18	11.88	13.33	12.25	13.68	13.50	13.26	12.79	14.66	15.49	11.07	13.07	14.65	16.42	13.63	12.79	13.89	-
East South Central																											
Alabama	0.74	0.82	0.78	0.77	0.88	1.18	1.36	1.26	1.53	1.44	1.45	1.59	1.31	1.45	1.53	1.65	1.81	1.64	2.0	1.50	1.89	2.53	2.39	1.63	1.46	1.76	-
Kentucky	0.93	1.75	1.40	1.10	1.22	1.25	1.66	1.63	1.67	1.95	1.78	1.87	1.49	1.97	1.96	1.82	1.64	2.46	2.0	1.18	1.74	2.17	2.64	2.24	1.76	2.25	-
Mississippi	0.84	1.08	0.96	0.70	1.12	1.31	1.12	0.98	0.98	1.22	1.05	1.32	1.17	1.63	1.51	1.50	1.49	1.29	1.65	0.88	1.70	2.51	2.46	1.47	1.82	1.88	-
Tennessee	0.68	0.90	0.76	0.61	0.79	0.95	0.99	0.89	0.89	1.08	1.05	1.15	1.0	0.92	0.90	0.76	0.65	0.91	0.99	0.53	0.88	1.07	1.32	1.05	0.58	1.02	-
Subtotal	3.19	4.55	3.90	3.18	4.01	4.69	5.13	4.76	5.07	5.69	5.33	5.93	4.97	5.97	5.90	5.73	5.59	6.29	6.64	4.09	6.21	8.29	8.80	6.39	5.61	6.92	-
West South Central																											
Arkansas	1.17	1.50	1.52	1.32	1.52	1.99	1.93	1.72	1.75	2.17	1.97	2.26	2.17	2.88	2.72	2.45	2.75	2.44	2.60	1.75	2.68	3.78	2.78	2.39	2.97	4.10	-
Louisiana	0.88	0.85	0.68	0.62	0.86	1.09	0.95	0.87	0.80	1.01	0.99	1.11	1.10	1.38	1.13	0.90	1.11	1.03	1.07	0.73	1.23	1.30	1.14	1.15	1.30	1.29	-
Oklahoma	1.10	1.10	1.11	1.33	1.23	1.44	1.52	1.58	1.31	1.50	1.55	1.60	0.97	1.10	1.50	1.28	1.63	1.66	1.57	1.73	2.54	2.23	2.34	1.57	1.47	1.87	-
Texas	3.84	3.89	4.01	3.37	4.61	4.70	4.68	5.65	5.26	5.83	6.51	6.23	5.25	5.07	5.84	5.33	7.02	5.89	6.57	7.04	8.01	9.38	8.88	6.52	7.36	5.80	-
Subtotal	6.99	7.34	7.31	6.64	8.22	9.22	9.08	9.82	9.12	10.50	11.01	11.20	9.49	10.44	11.18	9.96	12.51	11.01	11.82	11.24	14.46	16.69	15.14	11.63	13.09	13.06	-
Mountain																											
Arizona	0.59	0.91	0.82	0.78	0.98	1.12	1.08	1.0	1.07	0.97	1.08	0.83	1.13	1.15	1.10	1.25	1.21	1.09	1.37	1.82	1.46	1.77	1.67	1.23	1.55	1.28	-
Colorado	0.96	1.05	1.04	0.97	1.05	1.20	1.30	1.42	1.26	1.29	1.46	1.17	1.20	1.45	1.39	1.55	1.69	1.43	1.86	1.41	1.89	1.92	2.10	1.68	2.14	2.20	-
Idaho	1.07	1.02	0.96	0.93	1.09	1.18	1.47	1.61	1.35	1.42	1.66	1.35	1.47	1.66	1.40	1.62	1.71	1.73	1.90	1.98	1.98	2.30	2.05	1.87	2.58	2.85	-
Montana	0.69	0.50	0.18	0.69	0.78	0.61	0.94	0.91	1.07	0.97	1.31	0.90	0.91	0.84	0.83	0.81	0.97	0.76	0.86	0.72	1.06	1.20	1.40	0.80	1.15	1.33	-
Nevada	0.08	0.08	0.08	0.07	0.09	0.12	0.14	0.14	0.13	0.11	0.17	0.13	0.12	0.13	0.12	0.15	0.15	0.18	0.19	0.16	0.19	0.22	0.24	0.23	0.21	0.27	-
New Mexico	0.34	0.33	0.41	0.38	0.44	0.53	0.63	0.67	0.67	0.71	0.79	0.76	0.64	0.67	0.83	0.86	0.96	0.82	1.10	0.87	1.05	1.22	1.24	0.92	1.25	1.24	-
Utah	0.18	0.18	0.18	0.21	0.26	0.35	0.35	0.38	0.36	0.41	0.44	0.37	0.33	0.36	0.39	0.43	0.45	0.42	0.56	0.46	0.57	0.63	0.65	0.47	0.59	0.64	-
Wyoming	0.13	0.12	0.12	0.17	0.19	0.20	0.23	0.31	0.39	0.38	0.42	0.26	0.28	0.25	0.39	0.27	0.37	0.31	0.39	0.31	0.47	0.40	0.49	0.31	0.23	0.33	-
Subtotal	4.03	4.18	3.79	4.20	4.88	5.30	6.14	6.45	6.29	6.26	7.34	5.77	6.07	6.52	6.45	6.95	7.51	6.74	8.23	7.73	8.67	9.65	9.84	7.51	9.70	10.13	-
Pacific																											
Alaska	0.01	0.01	0.01	0.01	0.02	0.02	0.01	0.02	0.02	0.01	0.02	0.02	0.02	0.02	0.03	0.02	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.01	-
California	6.54	7.41	7.60	7.94	9.24	9.58	9.77	10.44	8.99	9.73	10.77	11.04	10.25	11.96	12.47	11.50	12.22	12.21	11.61	12.70	15.02	18.08	17.06	15.01	17.86	15.16	-
Hawaii	0.37	0.33	0.31	0.36	0.35	0.37	0.37	0.40	0.33	0.31	0.30	0.30	0.28	0.29	0.31	0.31	0.33	0.33	0.32	0.33	0.34	0.36	0.37	0.35	0.35	0.35	-
Oregon	0.78	0.79	0.82	0.94	1.05	1.27	1.32	1.36	1.32	1.48	1.77	1.67	1.55	1.68	1.78	1.57	1.52	1.62	1.49	1.49	1.78	2.12	2.03	2.15	2.06	2.08	-
Washington	1.62	1.58	1.35	1.68	1.83	1.75	2.02	2.10	2.19	2.52	2.82	2.58	2.53	3.26	2.71	2.77	2.36	2.81	2.40	2.59	2.51	3.25	2.65	2.73	3.51	3.85	-
Subtotal	9.32	10.11	10.09	10.94	12.48	12.99	13.50	14.32	12.84	14.06	15.67	15.61	14.62	17.21	17.28	16.17	16.46	16.99	15.85	17.14	19.68	23.84	22.13	20.26	23.79	21.46	-
All regions	48.97	63.55	63.34	62.16	69.90	71.43	79.73	81.21	73.45	83.18	80.49	87.06	76.23	97.60	91.82	87.83	88.67	91.89	94.12	78.77	101.36	126.61	120.69	101.68	116.99	135.69	-

SOURCE: U.S. Department of Agriculture, Economic Research Service. Relevant statistics available online at: http://www.ers.usda.gov/Data/FarmIncome/finfidmu.htm.

Table F-19

Disposable Personal Income by Region, 1983-2009 ($ billions)

Region	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
New England	173.5	195.0	183.4	196.8	212.8	236.7	252.5	261.3	265.8	279.9	286.8	298.5	311.7	325.7	341.1	363.3	380.7	411.9	432.9	454.0	469.0	506.2	519.0	557.9	579.4	601.2	615.3
Middle Atlantic	513.1	566.1	523.4	556.0	588.4	645.8	692.5	736.2	760.7	801.2	816.6	841.9	883.7	924.2	966.5	1,021.3	1,058.4	1,132.9	1,155.5	1,205.2	1,250.1	1,332.0	1,380.2	1,478.5	1,563.3	1,621.4	1,645.5
East North Central	514.1	568.6	531.6	559.1	582.8	624.7	666.8	704.0	729.0	781.4	807.1	854.7	891.7	930.5	976.7	1,036.7	1,077.6	1,145.7	1,174.2	1,219.1	1,270.2	1,350.9	1,380.4	1,447.8	1,498.5	1,547.0	1,557.4
West North Central	208.0	232.3	218.5	228.7	239.1	250.0	267.3	282.9	295.2	315.6	322.7	344.3	358.0	382.9	400.7	427.6	444.8	473.4	489.9	510.2	533.1	588.6	602.5	635.4	665.9	702.4	705.8
South Atlantic	465.1	522.3	501.4	538.8	577.1	632.6	686.7	734.3	768.7	818.3	856.5	901.5	951.5	1,004.7	1,058.0	1,131.6	1,193.1	1,285.9	1,352.7	1,422.5	1,485.8	1,648.6	1,745.9	1,874.1	1,957.3	2,024.3	2,058.3
East South Central	145.3	162.1	155.3	163.4	173.2	186.1	199.7	211.9	224.4	242.4	253.3	268.5	282.8	295.9	311.0	331.3	345.4	367.6	382.7	400.4	421.2	452.7	474.0	500.5	525.3	546.7	554.6
West South Central	303.4	333.3	317.1	323.8	327.9	348.7	371.5	399.8	421.7	455.0	477.0	503.7	531.0	562.8	602.4	648.1	683.7	741.2	782.2	805.2	839.6	916.7	979.3	1,054.8	1,120.8	1,181.0	1,190.8
Mountain	146.7	161.9	155.2	163.2	170.7	181.7	196.3	210.2	223.1	240.2	257.5	277.6	299.2	320.0	342.2	370.9	394.7	430.6	459.4	480.8	503.8	562.0	604.1	653.1	693.0	720.6	720.9
Pacific	480.7	534.2	509.1	542.3	574.8	627.3	672.9	729.9	758.4	805.9	824.9	853.7	892.1	934.7	983.5	1,058.9	1,111.2	1,198.6	1,252.7	1,321.0	1,375.4	1,524.3	1,584.0	1,703.4	1,786.7	1,850.0	1,866.5
All regions	2,949.9	3,275.8	3,095.0	3,272.0	3,446.7	3,733.6	4,006.2	4,270.5	4,447.0	4,739.9	4,902.5	5,144.2	5,401.6	5,681.3	5,982.0	6,389.7	6,689.8	7,187.6	7,482.1	7,818.3	8,148.2	8,882.1	9,269.4	9,905.4	10,390.3	10,794.5	10,915.1

SOURCE: U.S. Department of Commerce, Bureau of Economic Analysis, Annual State Personal Income, SA51-53 - Personal income, available online at http://www.bea.gov/regional/spi/default.cfm?selTable=summary.

Table F-20

Annual Population Estimates by State, 1983-2009 (millions)

Region	As of July 1983	As of July 1984	As of July 1985	As of July 1986	As of July 1987	As of July 1988	As of July 1989	As of July 1990	As of July 1991	As of July 1992	As of July 1993	As of July 1994	As of July 1995	As of July 1996	As of July 1997	As of July 1998	As of July 1999	As of July 2000	As of July 2001	As of July 2002	As of July 2003	As of July 2004	As of July 2005	As of July 2006	As of July 2007	As of July 2008	As of July 2009
New England																											
Connecticut	3.16	3.18	3.20	3.22	3.25	3.27	3.28	3.29	3.29	3.27	3.27	3.27	3.27	3.27	3.27	3.27	3.28	3.41	3.43	3.46	3.49	3.47	3.48	3.49	3.49	3.50	3.52
Maine	1.14	1.16	1.16	1.17	1.18	1.20	1.22	1.23	1.24	1.24	1.24	1.24	1.24	1.24	1.25	1.25	1.25	1.28	1.29	1.30	1.31	1.31	1.31	1.31	1.32	1.32	1.32
Massachusetts	5.80	5.84	5.88	5.90	5.94	5.98	6.02	6.02	6.0	5.99	6.01	6.03	6.06	6.09	6.12	6.14	6.18	6.36	6.40	6.41	6.42	6.45	6.45	6.47	6.50	6.54	6.59
New Hampshire	0.96	0.98	1.0	1.03	1.05	1.08	1.10	1.11	1.11	1.11	1.12	1.13	1.15	1.16	1.17	1.19	1.20	1.24	1.26	1.28	1.29	1.29	1.30	1.31	1.32	1.32	1.32
Rhode Island	0.96	0.96	0.97	0.98	0.99	1.0	1.0	1.0	1.0	1.0	1.0	0.99	0.99	0.99	0.99	0.99	0.99	1.05	1.06	1.07	1.08	1.07	1.06	1.06	1.06	1.05	1.05
Vermont	0.52	0.53	0.53	0.53	0.54	0.55	0.56	0.56	0.57	0.57	0.57	0.58	0.58	0.59	0.59	0.59	0.59	0.61	0.61	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62
Subtotal	12.54	12.64	12.74	12.83	12.95	13.08	13.18	13.22	13.20	13.19	13.22	13.24	13.28	13.33	13.38	13.43	13.50	13.95	14.05	14.13	14.20	14.22	14.23	14.26	14.30	14.36	14.43
Middle Atlantic																											
New Jersey	7.47	7.52	7.57	7.62	7.67	7.71	7.73	7.76	7.78	7.83	7.87	7.92	7.97	8.01	8.05	8.10	8.14	8.43	8.51	8.58	8.64	8.61	8.62	8.62	8.64	8.66	8.71
New York	17.69	17.75	17.79	17.83	17.87	17.94	17.98	18.0	18.03	18.08	18.14	18.16	18.15	18.14	18.14	18.16	18.20	19.0	19.09	19.15	19.21	19.30	19.33	19.36	19.42	19.47	19.54
Pennsylvania	11.84	11.82	11.77	11.78	11.81	11.85	11.87	11.90	11.94	11.98	12.02	12.04	12.04	12.04	12.02	12.0	11.99	12.29	12.30	12.33	12.37	12.39	12.42	12.47	12.52	12.57	12.60
Subtotal	36.99	37.08	37.13	37.24	37.35	37.50	37.58	37.66	37.76	37.89	38.04	38.12	38.16	38.19	38.21	38.26	38.33	39.72	39.89	40.06	40.23	40.30	40.37	40.45	40.58	40.70	40.85
East North Central																											
Illinois	11.41	11.41	11.40	11.39	11.39	11.39	11.41	11.45	11.54	11.64	11.73	11.80	11.88	11.95	12.01	12.07	12.13	12.44	12.52	12.59	12.65	12.65	12.67	12.72	12.78	12.84	12.91
Indiana	5.45	5.46	5.46	5.45	5.47	5.49	5.52	5.56	5.60	5.65	5.70	5.75	5.79	5.83	5.87	5.91	5.94	6.09	6.13	6.16	6.20	6.21	6.25	6.30	6.35	6.39	6.42
Michigan	9.05	9.05	9.08	9.13	9.19	9.22	9.25	9.31	9.40	9.47	9.53	9.58	9.66	9.74	9.79	9.82	9.86	9.96	10.0	10.04	10.08	10.09	10.09	10.08	10.05	10.0	9.97
Ohio	10.74	10.74	10.73	10.73	10.76	10.80	10.83	10.86	10.93	11.01	11.07	11.11	11.16	11.19	11.21	11.24	11.26	11.36	11.39	11.41	11.44	11.46	11.48	11.49	11.52	11.53	11.54
Wisconsin	4.72	4.74	4.75	4.76	4.78	4.82	4.86	4.90	4.95	5.0	5.06	5.10	5.14	5.17	5.20	5.22	5.25	5.37	5.41	5.44	5.47	5.51	5.54	5.57	5.60	5.63	5.65
Subtotal	41.37	41.39	41.42	41.46	41.59	41.72	41.87	42.08	42.42	42.77	43.08	43.34	43.63	43.89	44.08	44.26	44.44	45.23	45.44	45.64	45.84	45.93	46.03	46.17	46.30	46.39	46.50
West North Central																											
Iowa	2.87	2.86	2.83	2.79	2.77	2.77	2.77	2.78	2.79	2.81	2.82	2.83	2.84	2.85	2.85	2.86	2.87	2.93	2.93	2.93	2.94	2.94	2.95	2.96	2.98	2.99	3.01
Kansas	2.42	2.42	2.43	2.43	2.45	2.46	2.47	2.48	2.50	2.53	2.55	2.57	2.59	2.60	2.62	2.64	2.65	2.69	2.70	2.71	2.72	2.73	2.74	2.76	2.78	2.80	2.82
Minnesota	4.14	4.16	4.18	4.21	4.24	4.30	4.34	4.39	4.43	4.47	4.52	4.57	4.61	4.65	4.69	4.73	4.78	4.93	4.99	5.03	5.06	5.08	5.11	5.15	5.19	5.23	5.27
Missouri	4.94	4.98	5.0	5.02	5.06	5.08	5.10	5.13	5.16	5.19	5.24	5.28	5.32	5.37	5.41	5.44	5.47	5.61	5.64	5.68	5.72	5.76	5.81	5.86	5.91	5.96	5.99
Nebraska	1.58	1.59	1.58	1.57	1.57	1.57	1.57	1.58	1.59	1.60	1.61	1.62	1.64	1.65	1.66	1.66	1.67	1.71	1.72	1.73	1.74	1.74	1.75	1.76	1.77	1.78	1.80
North Dakota	0.68	0.68	0.68	0.67	0.66	0.66	0.65	0.64	0.63	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.63	0.64	0.64	0.63	0.63	0.64	0.64	0.64	0.64	0.64	0.65
South Dakota	0.69	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.71	0.72	0.72	0.73	0.73	0.73	0.73	0.73	0.76	0.76	0.76	0.76	0.77	0.78	0.79	0.80	0.80	0.81
Subtotal	17.33	17.38	17.40	17.39	17.43	17.53	17.60	17.69	17.80	17.94	18.09	18.23	18.36	18.48	18.59	18.69	18.80	19.27	19.37	19.47	19.59	19.66	19.77	19.92	20.06	20.21	20.34
South Atlantic																											
Delaware	0.61	0.61	0.62	0.63	0.64	0.65	0.66	0.67	0.68	0.69	0.70	0.71	0.72	0.73	0.74	0.74	0.75	0.79	0.80	0.81	0.82	0.83	0.84	0.85	0.86	0.88	0.89
District of Columbia	0.63	0.63	0.63	0.64	0.64	0.63	0.62	0.60	0.59	0.58	0.58	0.56	0.55	0.54	0.53	0.52	0.52	0.57	0.57	0.56	0.56	0.58	0.58	0.58	0.59	0.59	0.60
Florida	10.75	11.04	11.35	11.67	12.0	12.31	12.64	13.02	13.29	13.50	13.71	13.96	14.19	14.43	14.68	14.91	15.11	16.05	16.35	16.68	17.0	17.38	17.78	18.09	18.28	18.42	18.54
Georgia	5.73	5.83	5.96	6.08	6.21	6.32	6.41	6.51	6.62	6.76	6.89	7.05	7.19	7.33	7.49	7.64	7.79	8.23	8.39	8.54	8.68	8.91	9.10	9.33	9.53	9.70	9.83
Maryland	4.31	4.37	4.41	4.49	4.57	4.66	4.73	4.80	4.86	4.90	4.94	4.99	5.02	5.06	5.09	5.13	5.17	5.31	5.38	5.44	5.51	5.54	5.58	5.61	5.63	5.66	5.70
North Carolina	6.08	6.16	6.25	6.32	6.40	6.48	6.57	6.66	6.75	6.83	6.95	7.06	7.19	7.31	7.43	7.55	7.65	8.08	8.20	8.31	8.42	8.53	8.67	8.87	9.06	9.25	9.38
South Carolina	3.23	3.27	3.30	3.34	3.38	3.41	3.46	3.50	3.56	3.60	3.63	3.67	3.70	3.74	3.79	3.84	3.89	4.02	4.06	4.11	4.15	4.20	4.26	4.34	4.42	4.50	4.56

Table F-20

Annual Population Estimates by State, 1983-2009 (millions)

Region	As of July 1983	As of July 1984	As of July 1985	As of July 1986	As of July 1987	As of July 1988	As of July 1989	As of July 1990	As of July 1991	As of July 1992	As of July 1993	As of July 1994	As of July 1995	As of July 1996	As of July 1997	As of July 1998	As of July 1999	As of July 2000	As of July 2001	As of July 2002	As of July 2003	As of July 2004	As of July 2005	As of July 2006	As of July 2007	As of July 2008	As of July 2009
Virginia	5.56	5.64	5.72	5.81	5.93	6.04	6.12	6.21	6.28	6.38	6.46	6.54	6.60	6.67	6.73	6.79	6.87	7.10	7.19	7.27	7.37	7.47	7.56	7.65	7.72	7.80	7.88
West Virginia	1.95	1.93	1.91	1.88	1.86	1.83	1.81	1.79	1.80	1.81	1.82	1.82	1.82	1.82	1.82	1.81	1.81	1.81	1.80	1.81	1.81	1.80	1.80	1.81	1.81	1.81	1.82
Subtotal	38.85	39.49	40.16	40.86	41.62	42.32	43.01	43.76	44.43	45.06	45.69	46.35	46.97	47.61	48.29	48.93	49.56	51.96	52.74	53.53	54.31	55.24	56.18	57.13	57.92	58.61	59.20
East South Central																											
Alabama	3.93	3.95	3.97	3.99	4.02	4.02	4.03	4.05	4.09	4.14	4.19	4.23	4.26	4.29	4.32	4.35	4.37	4.45	4.47	4.48	4.50	4.51	4.55	4.60	4.64	4.68	4.71
Kentucky	3.69	3.70	3.69	3.69	3.68	3.68	3.68	3.69	3.71	3.76	3.79	3.82	3.86	3.88	3.91	3.93	3.96	4.05	4.07	4.09	4.12	4.15	4.18	4.22	4.26	4.29	4.31
Mississippi	2.57	2.58	2.59	2.59	2.59	2.58	2.57	2.58	2.59	2.61	2.64	2.66	2.69	2.71	2.73	2.75	2.77	2.85	2.86	2.87	2.88	2.89	2.90	2.90	2.92	2.94	2.95
Tennessee	4.66	4.69	4.72	4.74	4.78	4.82	4.85	4.89	4.95	5.01	5.09	5.16	5.24	5.31	5.38	5.43	5.48	5.70	5.75	5.79	5.85	5.92	6.0	6.09	6.17	6.24	6.30
Subtotal	14.86	14.91	14.97	15.01	15.07	15.11	15.14	15.21	15.34	15.52	15.71	15.88	16.05	16.19	16.34	16.47	16.58	17.05	17.14	17.23	17.35	17.46	17.62	17.80	17.99	18.15	18.27
West South Central																											
Arkansas	2.31	2.32	2.33	2.33	2.34	2.34	2.35	2.35	2.37	2.39	2.42	2.45	2.48	2.50	2.52	2.54	2.55	2.68	2.69	2.71	2.73	2.75	2.78	2.82	2.84	2.87	2.89
Louisiana	4.40	4.40	4.41	4.41	4.34	4.29	4.25	4.22	4.24	4.27	4.28	4.31	4.33	4.34	4.35	4.36	4.37	4.47	4.47	4.48	4.49	4.49	4.50	4.24	4.38	4.45	4.49
Oklahoma	3.29	3.29	3.27	3.25	3.21	3.17	3.15	3.15	3.17	3.20	3.23	3.25	3.27	3.29	3.31	3.34	3.36	3.45	3.47	3.49	3.51	3.51	3.53	3.57	3.61	3.64	3.69
Texas	15.75	16.01	16.27	16.56	16.62	16.67	16.81	17.04	17.34	17.65	18.0	18.34	18.68	19.01	19.36	19.71	20.04	20.95	21.33	21.72	22.10	22.42	22.80	23.37	23.84	24.30	24.78
Subtotal	25.74	26.01	26.28	26.55	26.52	26.47	26.56	26.77	27.12	27.52	27.93	28.34	28.75	29.14	29.55	29.95	30.33	31.55	31.96	32.40	32.83	33.17	33.61	34.0	34.67	35.27	35.85
Mountain																											
Arizona	2.97	3.07	3.18	3.31	3.44	3.54	3.62	3.68	3.76	3.87	3.99	4.15	4.31	4.43	4.55	4.67	4.78	5.17	5.30	5.44	5.58	5.76	5.97	6.19	6.36	6.50	6.60
Colorado	3.13	3.17	3.21	3.24	3.26	3.26	3.28	3.30	3.37	3.46	3.56	3.65	3.74	3.81	3.89	3.97	4.06	4.33	4.43	4.50	4.55	4.60	4.66	4.75	4.84	4.94	5.02
Idaho	0.98	0.99	0.99	0.99	0.98	0.99	0.99	1.01	1.04	1.07	1.10	1.14	1.17	1.19	1.21	1.23	1.25	1.30	1.32	1.34	1.37	1.39	1.43	1.46	1.50	1.53	1.55
Montana	0.81	0.82	0.82	0.81	0.81	0.80	0.80	0.80	0.81	0.82	0.84	0.85	0.87	0.88	0.88	0.88	0.88	0.90	0.91	0.91	0.92	0.93	0.93	0.95	0.96	0.97	0.97
Nevada	0.90	0.92	0.95	0.98	1.02	1.08	1.14	1.22	1.29	1.33	1.38	1.46	1.53	1.60	1.68	1.74	1.81	2.02	2.10	2.17	2.24	2.33	2.41	2.49	2.57	2.62	2.64
New Mexico	1.39	1.42	1.44	1.46	1.48	1.49	1.50	1.52	1.55	1.58	1.61	1.65	1.68	1.71	1.72	1.73	1.74	1.82	1.83	1.86	1.88	1.89	1.92	1.94	1.97	1.99	2.01
Utah	1.59	1.62	1.64	1.66	1.68	1.69	1.71	1.73	1.77	1.82	1.88	1.93	1.98	2.02	2.07	2.10	2.13	2.24	2.28	2.32	2.35	2.44	2.50	2.58	2.66	2.73	2.78
Wyoming	0.51	0.50	0.50	0.50	0.48	0.47	0.46	0.45	0.46	0.46	0.47	0.48	0.48	0.48	0.48	0.48	0.47	0.49	0.49	0.50	0.50	0.50	0.51	0.51	0.52	0.53	0.54
Subtotal	12.30	12.52	12.74	12.95	13.14	13.30	13.50	13.72	14.04	14.41	14.84	15.31	15.74	16.11	16.48	16.80	17.12	18.27	18.65	19.03	19.39	19.84	20.33	20.89	21.38	21.79	22.12
Pacific																											
Alaska	0.49	0.51	0.53	0.54	0.54	0.54	0.55	0.55	0.57	0.59	0.60	0.60	0.60	0.60	0.61	0.62	0.62	0.63	0.63	0.64	0.65	0.66	0.67	0.68	0.68	0.69	0.70
California	25.36	25.84	26.44	27.10	27.78	28.46	29.22	29.95	30.41	30.88	31.15	31.32	31.49	31.78	32.22	32.68	33.15	34.0	34.53	34.99	35.46	35.56	35.80	35.98	36.23	36.58	36.96
Hawaii	1.01	1.03	1.04	1.05	1.07	1.08	1.09	1.11	1.13	1.15	1.16	1.17	1.18	1.18	1.19	1.19	1.19	1.21	1.22	1.23	1.25	1.25	1.27	1.28	1.28	1.29	1.30
Oregon	2.65	2.67	2.67	2.68	2.70	2.74	2.79	2.86	2.92	2.97	3.03	3.09	3.14	3.20	3.24	3.28	3.32	3.43	3.47	3.52	3.56	3.57	3.62	3.68	3.73	3.78	3.83
Washington	4.30	4.34	4.40	4.45	4.53	4.64	4.75	4.90	5.01	5.14	5.25	5.33	5.43	5.51	5.60	5.69	5.76	5.91	5.99	6.07	6.13	6.18	6.26	6.37	6.46	6.57	6.66
Subtotal	33.81	34.40	35.09	35.83	36.62	37.47	38.40	39.38	40.05	40.73	41.19	41.51	41.85	42.28	42.86	43.46	44.02	45.18	45.85	46.45	47.06	47.23	47.61	47.98	48.38	48.91	49.45
All regions	233.79	235.82	237.92	240.13	242.29	244.50	246.82	249.46	252.15	255.03	257.78	260.33	262.80	265.23	267.78	270.25	272.69	282.19	285.10	287.94	290.79	293.05	295.75	298.59	301.58	304.37	307.01

SOURCES: U.S. Bureau of the Census, Population Estimates Branch. Years 1980 - 1989 from Table: Intercensal Estimates of the Total Resident Population of States: 1980 to 1990, available online at http://www.census.gov/popest/archives/1980s/st8090ts.txt. Years 1990 - 1999 from ST-99-3 State Population Estimates: Annual Time Series, July 1, 1990 to July 1, 1999, available online at http://www.census.gov/popest/archives/1990s/ST-99-03.txt; years 2000 - 2004 from Table 1: Annual Estimates of the Population for the United States and States, and for Puerto Rico: April 1, 2000 to July 1, 2004, available online at http://www.census.gov/popest/states/tables/NST-EST2004-01.xls. ; years 2004-2009 from Table 1: Annual Estimates of the Population for the United States and States, and for Puerto Rico: April 1, 2000 to July 1, 2009, available online at http://www.census.gov/popest/states/tables/NST-EST2009-01.xls.

Table F-21
Oil Production by State, 1983-2009 (millions of barrels)

Region	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
New England																											
Connecticut	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Maine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Massachusetts	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
New Hampshire	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rhode Island	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vermont	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Middle Atlantic																											
New Jersey	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
New York	-	-	4.3	29.2	28.3	23.6	25.4	22.8	23.2	23.5	21.8	21.4	19.2	18.1	16.0	16.5	16.7	17.8	27.9	36.3	35.7	47.0	55.3	55.6	55.4	52.9	-
Pennsylvania	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	121.4	0.0	0.0	0.0	0.0	0.0	-
Subtotal	-	-	4.3	29.2	28.3	23.6	25.4	22.8	23.2	23.5	21.8	21.4	19.2	18.1	16.0	16.5	16.7	17.8	27.9	36.3	157.0	47.0	55.3	55.6	55.4	52.9	-
East North Central																											
Illinois	-	27.9	28.3	25.4	22.6	20.7	19.2	18.8	17.9	17.7	16.5	15.8	14.7	13.5	13.5	12.8	11.3	10.9	10.2	11.1	-	-	-	-	-	-	-
Indiana	-	5.0	4.9	4.2	3.8	3.4	3.1	3.1	3.0	3.0	2.8	2.6	2.6	2.5	2.4	2.2	2.0	2.0	2.1	2.0	-	-	-	-	-	-	-
Michigan	-	186.4	185.9	179.9	175.0	164.0	165.8	173.3	199.9	221.3	216.7	240.5	258.1	280.2	288.7	290.7	268.4	258.4	245.5	231.0	208.7	198.0	187.7	182.5	172.1	165.9	-
Ohio	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	87.8	86.5	79.6	81.9	74.7	86.6	-
Wisconsin	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal	-	219.3	219.1	209.5	201.4	188.1	188.2	195.2	220.8	242.0	236.0	259.0	275.4	296.3	304.6	305.6	281.6	271.4	257.8	244.1	296.4	284.6	267.3	264.4	246.8	252.5	-
West North Central																											
Iowa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Kansas	-	574.9	623.4	556.1	540.6	649.0	673.8	634.5	700.9	711.2	725.7	772.2	811.0	768.9	727.7	645.8	604.6	562.3	521.6	493.9	451.8	432.8	419.2	408.8	405.2	414.9	-
Minnesota	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Missouri	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.1	0.1	0.1	0.1	0.1	0.1	-
Nebraska	-	9.9	10.0	9.1	7.9	7.5	7.7	7.3	7.3	7.5	7.7	7.8	6.7	5.9	5.4	5.3	4.4	4.5	4.4	4.2	1.6	1.5	1.1	1.1	1.6	3.3	-
North Dakota	-	194.6	190.1	171.1	161.3	148.1	134.9	138.1	136.4	126.4	126.5	115.0	112.4	113.3	117.5	118.6	112.7	113.7	113.1	111.1	83.0	85.1	89.5	98.5	111.5	146.5	-
South Dakota	-	4.3	5.3	5.0	6.5	7.4	7.8	7.8	8.8	9.9	9.7	9.6	10.4	10.9	11.8	11.3	11.2	11.9	12.3	12.0	12.4	12.7	12.6	12.0	13.3	13.6	-
Subtotal	-	783.7	828.8	741.3	716.3	812.1	824.3	787.6	853.4	854.9	869.7	904.7	940.4	899.0	862.5	781.0	732.8	692.4	651.5	621.1	548.9	532.2	522.5	520.4	531.6	578.4	-
South Atlantic																											
Delaware	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
District of Columbia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Florida	-	45.0	34.2	28.6	27.5	24.6	25.0	20.5	16.1	20.5	21.1	22.9	19.4	19.2	20.1	18.9	18.0	19.1	16.5	11.1	6.7	6.2	5.5	5.3	4.1	4.7	-
Georgia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Maryland	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	0.0	0.1	0.0	0.0	0.0	-
North Carolina	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
South Carolina	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Virginia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	80.1	85.8	89.3	102.9	112.1	132.0	-
West Virginia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	202.0	209.8	219.9	223.6	236.4	240.3	-
Subtotal	-	45.0	34.2	28.6	27.5	24.6	25.0	20.5	16.1	20.5	21.1	22.9	19.4	19.2	20.1	18.9	18.0	19.1	16.5	11.1	288.8	301.8	314.7	331.8	352.6	377.0	-
East South Central																											
Alabama	-	185.6	193.4	194.0	198.5	223.7	218.8	227.0	262.5	370.0	391.5	492.2	474.9	462.6	457.7	450.5	434.5	414.0	398.9	386.4	381.8	346.1	325.0	313.5	296.7	283.9	-
Kentucky	-	4.7	5.6	4.7	3.8	3.6	3.4	3.2	3.0	2.8	2.1	1.8	1.7	1.7	1.6	1.4	1.4	1.5	1.5	1.4	87.6	89.0	81.9	87.7	0.0	0.0	-

Table F-21

Oil Production by State, 1983-2009 (millions of barrels)

Region	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Mississippi	-	255.1	224.6	254.1	268.7	278.9	245.5	241.7	215.7	202.4	180.6	148.4	147.3	148.3	155.6	157.3	153.2	146.1	165.1	175.0	116.1	116.4	110.5	109.6	124.2	133.4	-
Tennessee	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.2	1.2	1.0	0.0	0.0	0.0	-
Subtotal	-	445.4	423.7	452.8	471.0	506.2	467.7	471.9	481.3	575.3	574.2	642.4	624.0	612.6	614.9	609.2	589.2	561.7	565.4	562.8	586.7	552.7	518.4	510.8	420.9	417.3	-
West South Central																											
Arkansas	-	184.4	197.1	171.8	179.9	204.7	210.5	212.6	203.8	220.2	217.9	202.7	202.2	217.4	214.9	191.3	174.0	174.7	174.3	169.9	177.0	191.9	195.3	206.0	276.0	453.1	-
Louisiana	-	2,457.2	2,226.2	2,186.9	2,104.8	2,092.0	2,020.3	1,999.0	1,933.2	1,913.3	1,872.3	1,788.7	1,783.2	1,878.5	1,849.4	1,811.4	1,676.7	1,677.2	1,713.9	1,560.2	1,468.8	1,470.7	1,394.0	1,461.6	1,467.5	1,468.1	-
Oklahoma	-	2,192.8	2,158.4	2,136.2	2,209.8	2,324.4	2,374.5	2,370.1	2,278.8	2,125.7	2,074.5	1,989.0	1,887.5	1,870.0	1,844.3	1,749.2	1,694.5	1,750.7	1,757.7	1,663.3	1,721.0	1,761.1	1,778.2	1,854.8	1,865.1	1,941.2	-
Texas	-	7,343.0	7,279.1	7,036.2	6,848.0	7,010.7	6,849.6	6,824.6	6,787.9	6,711.0	6,833.0	6,832.8	6,807.0	6,865.1	6,830.0	6,725.4	6,411.3	6,523.8	6,560.7	6,461.1	6,201.0	6,410.9	6,419.5	6,736.8	7,318.0	8,190.1	-
Subtotal	-	12,177.4	11,860.8	11,531.1	11,342.6	11,631.8	11,454.9	11,406.3	11,203.6	10,970.2	10,997.7	10,813.2	10,679.8	10,831.0	10,738.6	10,477.4	9,956.5	10,126.3	10,206.7	9,854.5	9,567.9	9,834.6	9,787.0	10,259.2	10,926.4	12,052.5	-
Mountain																											
Arizona	-	0.6	0.5	0.5	0.4	0.4	1.7	2.3	1.4	0.9	0.7	0.8	0.6	0.6	0.6	0.6	0.5	0.4	0.4	0.6	0.3	0.3	0.3	0.7	0.7	0.6	-
Colorado	-	319.5	435.3	498.5	502.1	545.1	571.7	597.6	628.7	701.3	759.9	881.1	907.0	960.9	1,021.3	1,112.5	1,063.0	1,123.5	1,162.2	1,265.4	1,058.2	1,121.0	1,179.3	1,281.1	1,348.7	1,455.0	-
Idaho	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Montana	-	97.8	97.4	86.3	83.0	85.8	82.3	79.4	80.9	80.4	80.5	74.8	73.6	74.3	78.6	83.1	83.8	94.1	104.4	111.5	106.1	122.8	141.9	150.5	155.7	151.3	-
Nevada	-	1.9	3.0	2.9	3.1	3.2	3.3	4.2	3.5	3.8	1.9	1.7	1.4	1.1	1.0	0.8	0.7	0.6	0.6	0.6	0.5	0.5	0.5	0.4	0.4	0.4	-
New Mexico	-	1,122.4	1,160.1	979.3	1,102.7	1,068.8	1,123.8	1,241.8	1,304.8	1,526.5	1,720.6	1,758.0	1,813.0	1,899.4	1,927.1	1,946.0	1,944.2	1,980.8	1,988.1	1,920.1	1,696.2	1,708.7	1,684.8	1,681.7	1,616.6	1,548.4	-
Utah	-	282.9	284.1	303.0	313.1	324.3	319.2	362.3	368.9	356.2	374.1	382.2	343.3	316.5	312.0	333.3	308.5	310.9	331.3	318.4	301.4	311.6	336.0	380.1	409.3	467.6	-
Wyoming	-	786.3	782.1	766.7	893.8	953.6	1,008.8	1,045.2	1,097.6	1,137.2	1,181.6	1,206.6	1,238.2	1,268.3	1,289.2	1,313.4	1,343.0	1,524.4	1,630.3	1,794.7	1,898.5	1,980.6	2,057.8	2,165.3	2,308.5	2,528.3	-
Subtotal	-	2,611.4	2,762.5	2,637.2	2,898.3	2,981.1	3,110.8	3,332.9	3,486.0	3,806.3	4,119.3	4,305.3	4,377.0	4,521.0	4,629.7	4,789.7	4,743.8	5,034.7	5,217.3	5,411.1	5,061.2	5,245.5	5,400.6	5,659.8	5,839.9	6,151.6	-
Pacific																											
Alaska	-	2,656.7	2,891.3	3,009.4	3,589.4	3,988.3	3,936.5	3,974.5	4,122.0	4,018.2	3,901.8	4,093.9	4,231.7	4,219.8	4,105.1	4,014.7	3,956.1	4,048.4	3,971.3	4,077.0	3,931.8	3,976.0	3,958.5	3,476.2	3,742.6	3,665.8	-
California	-	1,062.1	1,075.5	1,011.9	971.6	933.0	842.6	802.2	817.6	771.2	717.3	696.6	666.7	670.1	676.6	664.8	681.1	687.4	672.1	652.3	562.7	529.4	522.8	523.5	506.7	493.7	-
Hawaii	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oregon	-	2.8	4.1	4.6	3.8	4.0	2.6	2.8	2.7	2.6	4.0	4.4	2.5	1.7	1.4	1.3	1.6	1.6	1.1	0.8	0.7	0.5	0.5	0.6	0.4	0.8	-
Washington	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal	-	3,721.5	3,970.8	4,025.9	4,564.8	4,925.3	4,781.7	4,779.5	4,942.3	4,792.0	4,623.1	4,794.9	4,901.0	4,891.6	4,783.1	4,680.8	4,638.7	4,737.4	4,644.5	4,730.2	4,495.3	4,505.9	4,481.8	4,000.3	4,249.7	4,160.2	-
Total	-	20,003.8	20,104.2	19,655.6	20,250.3	21,092.9	20,877.9	21,016.9	21,226.7	21,284.6	21,462.8	21,763.9	21,836.1	22,088.8	21,969.6	21,679.1	20,977.3	21,460.8	21,587.6	21,471.1	21,002.2	21,304.4	21,347.5	21,602.3	22,623.3	24,042.4	-

SOURCE : U.S. Department of Energy, Energy Information Administration. Relevant statistics available online at: http://www.eia.doe.gov/pub/oil_gas/petrosystem/petrosysog.html.

Table F-22

Gross State Product for Construction by State, 1983-2009 ($ billions)

Region	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
New England																											
Connecticut	2.1	2.7	3.1	3.8	4.6	5.2	5.0	4.1	3.5	3.4	3.5	3.5	3.8	3.8	4.2	4.4	4.7	5.1	5.4	5.5	5.4	6.0	6.5	6.7	6.3	5.8	-
Maine	0.5	0.7	0.8	1.0	1.3	1.4	1.5	1.3	1.1	1.1	1.1	1.1	1.1	1.2	1.2	1.4	1.6	1.8	2.0	2.0	2.1	2.3	2.5	2.5	2.4	2.2	-
Massachusetts	3.1	4.0	4.8	5.9	7.0	7.6	7.0	5.8	4.9	4.9	5.4	6.1	6.6	7.3	8.3	9.4	10.3	11.2	12.7	12.9	12.5	13.2	14.2	14.7	13.7	13.3	-
New Hampshire	0.8	0.9	1.1	1.5	1.6	1.7	1.5	1.1	0.9	0.9	1.0	1.1	1.1	1.3	1.4	1.7	1.8	1.8	2.1	2.3	2.3	2.6	2.8	2.9	2.5	2.3	-
Rhode Island	0.4	0.5	0.6	0.7	0.8	1.0	1.0	1.0	0.8	0.8	0.8	0.9	1.0	1.1	1.3	1.4	1.6	1.6	1.7	1.7	1.9	2.0	2.2	2.3	2.2	2.0	-
Vermont	0.3	0.4	0.4	0.5	0.6	0.7	0.7	0.6	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.7	0.8	0.8	0.9	1.0	1.0	1.1	1.2	1.3	1.2	1.1	-
Subtotal	7.2	9.0	10.9	13.4	15.9	17.6	16.7	14.0	11.6	11.6	12.2	13.3	14.1	15.2	17.0	19.1	20.8	22.2	24.8	25.3	25.3	27.2	29.4	30.5	28.2	26.6	-
Middle Atlantic																											
New Jersey	4.5	5.9	7.0	8.2	9.4	10.6	10.7	9.8	8.4	8.3	8.6	9.1	9.3	9.7	10.6	11.4	11.9	12.8	14.7	15.3	15.4	16.8	18.3	19.2	18.0	17.3	-
New York	9.3	11.2	13.4	15.8	17.3	18.8	19.4	18.9	16.9	15.6	15.3	16.3	16.4	16.9	18.0	20.0	22.0	24.1	26.6	27.3	27.6	28.7	30.8	32.7	32.6	34.1	-
Pennsylvania	6.1	6.9	7.7	9.0	10.0	11.2	11.6	11.7	10.8	11.0	11.1	11.9	11.8	12.5	13.4	14.4	15.6	16.6	18.0	18.5	19.3	20.7	22.7	23.7	22.6	21.9	-
Subtotal	19.9	24.0	28.1	33.0	36.8	40.6	41.7	40.4	36.2	34.9	35.0	37.4	37.6	39.1	41.9	45.8	49.5	53.5	59.3	61.2	62.3	66.2	71.8	75.6	73.2	73.3	-
East North Central																											
Illinois	6.3	7.6	8.5	9.5	10.3	11.4	12.2	12.9	12.5	12.4	12.7	13.9	14.5	15.4	16.4	17.7	19.2	20.7	22.2	23.2	23.8	24.7	26.8	28.3	26.3	25.8	-
Indiana	2.5	2.8	3.2	3.7	4.0	4.5	4.9	5.1	5.3	5.4	5.7	6.5	6.8	7.3	7.9	8.5	8.6	8.6	8.9	9.0	9.3	9.9	10.7	10.7	10.5	10.3	-
Michigan	3.4	3.9	4.8	5.7	6.1	7.0	7.4	7.6	7.1	7.0	7.4	8.5	9.4	10.7	12.0	13.4	14.6	15.6	15.6	15.5	15.0	15.6	16.5	15.9	14.3	13.0	-
Ohio	4.6	5.6	6.1	6.8	7.6	8.4	8.8	9.3	8.8	8.8	9.6	10.7	11.1	12.0	13.2	14.2	15.1	15.6	15.8	16.0	16.0	17.0	18.0	18.3	17.2	16.3	-
Wisconsin	1.9	2.3	2.5	2.9	3.2	3.6	3.8	4.2	4.3	4.7	4.9	5.3	5.4	5.9	6.4	6.8	7.6	7.9	8.3	8.6	8.8	9.4	10.1	10.3	9.9	9.4	-
Subtotal	18.8	22.2	25.1	28.5	31.2	34.8	37.2	39.1	37.9	38.4	40.4	44.9	47.2	51.4	55.9	60.6	65.1	68.3	70.7	72.2	72.9	76.7	82.2	83.5	78.2	74.7	-
West North Central																											
Iowa	1.1	1.3	1.3	1.4	1.4	1.6	1.7	2.0	2.1	2.2	2.3	2.6	2.8	3.0	3.1	3.4	3.5	3.4	3.6	3.7	3.9	4.2	4.7	5.0	4.7	4.8	-
Kansas	1.4	1.6	1.6	1.8	1.8	1.8	1.8	1.8	1.8	2.0	2.2	2.4	2.5	2.9	3.0	3.2	3.4	3.6	3.7	3.6	3.6	3.8	4.2	4.4	4.3	4.4	-
Minnesota	2.2	2.8	3.1	3.6	4.0	4.1	4.3	4.5	4.4	4.8	4.9	5.3	5.5	6.0	6.6	7.4	8.2	8.9	9.5	9.8	10.1	10.8	11.3	11.2	10.4	9.8	-
Missouri	2.6	3.2	3.6	4.1	4.3	4.4	4.5	4.3	4.2	4.5	4.8	5.9	6.1	6.4	6.8	7.0	7.7	8.2	8.8	8.8	9.0	9.5	10.4	10.8	10.3	10.0	-
Nebraska	0.7	0.8	0.9	0.9	0.9	1.0	1.0	1.1	1.2	1.3	1.4	1.7	1.7	2.0	2.0	2.2	2.4	2.5	2.5	2.6	2.7	2.9	3.1	3.2	3.2	3.1	-
North Dakota	0.7	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.6	0.6	0.7	0.7	0.8	0.9	0.9	0.9	0.9	0.9	1.0	1.1	1.2	1.2	1.4	-
South Dakota	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.6	0.6	0.6	0.7	0.7	0.8	0.9	0.9	1.0	1.0	1.1	1.1	1.3	1.4	1.3	1.3	-
Subtotal	8.9	10.6	11.3	12.6	13.3	13.7	14.1	14.6	14.5	15.9	16.7	19.2	19.9	21.7	23.0	24.7	27.1	28.3	29.9	30.3	31.2	33.4	36.1	37.1	35.4	34.8	-
South Atlantic																											
Delaware	0.5	0.6	0.6	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.9	1.1	1.2	1.3	1.5	1.5	1.6	1.6	1.7	1.9	2.2	2.4	2.2	2.0	-
District of Columbia	0.4	0.4	0.4	0.5	0.5	0.6	0.6	0.6	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.6	0.7	0.8	1.0	1.0	1.0	1.1	1.2	1.1	1.2	-
Florida	7.8	9.7	10.9	12.1	12.5	13.7	14.0	14.0	12.5	12.5	13.8	14.7	15.9	17.5	18.5	21.5	23.4	26.1	29.6	32.2	35.9	41.9	51.0	56.5	49.7	41.9	-
Georgia	3.2	4.3	5.1	6.2	6.3	6.4	6.2	6.3	5.5	5.5	6.1	7.1	8.1	9.4	10.5	12.1	13.6	14.3	15.1	15.1	15.4	16.8	18.7	19.9	18.9	17.5	-
Maryland	3.0	3.8	4.7	5.7	6.7	7.5	7.7	7.6	6.5	6.0	5.9	6.5	6.7	7.1	7.7	8.4	9.2	9.9	11.0	11.6	12.3	13.7	15.3	16.0	15.4	14.7	-
North Carolina	2.6	3.5	4.2	4.9	5.2	5.7	5.9	6.0	5.6	5.9	6.6	7.3	8.1	9.1	10.4	11.7	12.8	13.4	14.2	13.8	13.8	14.9	16.9	18.7	18.1	16.6	-

Table F-22

Gross State Product for Construction by State, 1983-2009 ($ billions)

Region	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
South Carolina	1.2	1.7	2.0	2.6	2.9	3.2	3.3	3.9	3.4	3.1	3.4	3.7	4.1	4.8	5.2	5.9	6.2	6.3	6.6	6.7	6.9	7.3	8.2	9.1	8.6	7.7	-
Virginia	3.1	4.0	4.9	6.1	7.0	7.8	8.2	7.6	6.6	6.4	7.0	7.5	7.9	8.4	9.3	9.8	10.7	11.7	13.0	13.8	14.4	16.5	18.6	19.4	17.7	16.4	-
West Virginia	0.7	0.8	0.8	0.9	1.0	1.0	1.1	1.2	1.3	1.3	1.5	1.7	1.6	1.7	1.8	1.7	1.7	1.7	1.9	1.8	1.8	2.0	2.2	2.5	2.4	2.5	-
Subtotal	22.6	28.7	33.8	39.6	42.9	46.8	47.7	48.0	42.5	42.0	45.4	49.8	53.8	59.4	65.0	72.9	79.6	85.6	93.7	97.6	103.1	116.1	134.3	145.6	134.1	120.5	-
East South Central																											
Alabama	1.5	1.7	2.0	2.3	2.4	2.7	2.7	3.1	3.0	3.1	3.2	3.5	3.8	4.3	4.6	5.0	5.4	5.7	6.1	6.1	6.2	6.7	7.5	8.1	7.8	7.6	-
Kentucky	1.6	1.8	1.9	2.1	2.3	2.5	2.6	2.7	2.6	2.9	3.2	3.5	3.5	3.8	4.3	4.6	4.9	5.1	5.3	5.3	5.4	5.6	6.1	6.1	6.0	6.0	-
Mississippi	1.0	1.0	1.1	1.2	1.2	1.2	1.3	1.4	1.3	1.4	1.7	2.0	2.0	2.3	2.5	2.9	2.9	2.9	2.9	3.2	3.0	3.1	3.7	4.2	4.0	4.4	-
Tennessee	2.1	2.6	2.9	3.3	3.6	3.8	3.8	3.7	3.6	3.9	4.3	4.8	5.4	5.8	6.4	6.9	7.4	7.8	7.8	7.8	8.1	8.6	9.6	10.6	10.2	9.6	-
Subtotal	6.2	7.1	7.9	8.9	9.5	10.1	10.5	10.8	10.5	11.3	12.4	13.8	14.7	16.2	17.7	19.4	20.6	21.4	22.0	22.3	22.7	24.0	26.9	29.0	28.0	27.6	-
West South Central																											
Arkansas	0.9	1.1	1.2	1.3	1.2	1.3	1.3	1.4	1.4	1.6	1.8	1.9	2.2	2.4	2.5	2.7	2.8	3.0	3.1	3.3	3.2	3.5	3.9	4.2	4.0	4.0	-
Louisiana	3.9	4.0	3.8	3.3	2.9	3.2	3.2	3.6	3.8	4.0	4.0	4.4	4.5	5.0	5.3	6.2	6.2	6.2	6.4	6.4	6.6	6.8	7.5	9.1	9.1	9.7	-
Oklahoma	1.8	2.0	1.8	1.6	1.4	1.4	1.5	1.7	1.6	1.7	1.8	2.1	2.2	2.5	2.7	3.0	3.4	3.6	4.1	3.9	4.1	4.2	4.7	5.0	4.9	5.4	-
Texas	14.2	15.7	16.4	15.6	13.4	13.5	13.9	15.0	15.8	17.4	18.0	19.9	21.5	23.9	25.4	29.6	32.8	36.9	40.3	41.9	43.5	45.6	51.8	56.0	56.0	58.9	-
Subtotal	20.8	22.9	23.2	21.8	19.0	19.4	19.9	21.6	22.7	24.7	25.6	28.4	30.4	33.8	35.9	41.5	45.2	49.6	53.8	55.5	57.3	60.1	68.0	74.3	74.0	77.9	-
Mountain																											
Arizona	2.7	3.4	4.1	4.4	4.0	3.8	3.6	3.6	3.5	3.7	4.0	5.0	5.6	6.0	6.4	7.7	8.6	9.5	10.4	11.0	11.2	12.6	15.4	17.5	15.6	13.3	-
Colorado	3.2	3.4	3.4	3.2	3.0	2.9	2.9	3.1	3.4	4.0	4.6	5.3	5.4	6.1	6.8	8.0	9.0	10.4	11.2	11.5	10.9	11.5	12.8	13.3	12.5	12.1	-
Idaho	0.5	0.6	0.6	0.6	0.6	0.7	0.7	0.9	1.0	1.2	1.3	1.6	1.7	1.8	1.9	1.9	2.0	2.1	2.3	2.1	2.2	2.4	2.8	3.3	3.2	2.7	-
Montana	0.6	0.6	0.6	0.5	0.4	0.4	0.5	0.5	0.6	0.6	0.7	0.8	0.8	0.9	1.0	1.1	1.2	1.2	1.3	1.4	1.5	1.7	2.0	2.2	2.2	2.0	-
Nevada	0.8	0.9	1.0	1.2	1.3	1.7	2.1	2.3	2.1	2.2	2.7	3.4	3.9	5.3	6.0	6.6	6.6	6.3	6.4	6.6	7.3	8.7	10.7	11.7	11.2	10.7	-
New Mexico	0.9	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.3	1.5	1.8	1.9	1.8	1.8	1.9	2.0	2.2	2.4	2.4	2.5	2.8	3.2	3.5	3.3	3.5	-
Utah	1.0	1.2	1.3	1.3	1.1	1.1	1.1	1.3	1.4	1.6	1.8	2.3	2.6	3.0	3.4	3.6	3.8	3.8	3.8	3.9	3.8	4.2	5.0	5.9	6.0	5.3	-
Wyoming	0.5	0.5	0.7	0.6	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.6	0.6	0.7	0.7	0.8	0.9	1.0	1.1	1.2	1.2	1.2	1.4	1.7	1.9	2.2	-
Subtotal	10.2	11.7	12.8	13.0	11.9	12.0	12.5	13.1	13.6	14.9	17.1	20.7	22.7	25.7	28.0	31.6	34.0	36.5	39.0	40.0	40.6	45.0	53.1	59.1	55.9	51.7	-
Pacific																											
Alaska	1.7	1.6	1.4	1.1	0.8	0.7	0.7	0.8	0.8	0.8	0.9	1.0	1.0	1.0	1.1	1.1	1.1	1.2	1.3	1.5	1.6	1.7	1.9	1.9	1.8	1.8	-
California	16.9	21.3	24.5	28.3	30.9	33.8	36.0	35.8	31.3	28.4	26.6	29.0	30.2	31.7	35.6	41.7	46.6	51.7	57.2	58.6	61.2	69.4	79.2	84.2	76.5	67.8	-
Hawaii	0.8	0.8	0.9	1.0	1.2	1.4	1.8	2.1	2.3	2.2	2.3	2.0	1.9	1.7	1.6	1.7	1.7	1.9	2.0	2.2	2.4	2.6	3.3	3.6	3.7	3.6	-
Oregon	1.0	1.2	1.4	1.5	1.6	1.9	2.2	2.7	2.8	2.8	3.0	3.5	4.0	4.8	5.3	5.4	5.4	5.5	5.4	5.2	5.1	5.4	6.2	7.0	6.9	6.3	-
Washington	3.1	3.3	3.4	3.7	3.8	4.4	4.9	5.8	6.1	6.5	6.5	7.0	6.9	7.5	8.3	9.0	9.8	10.2	10.2	10.3	10.5	11.4	13.0	14.6	15.0	14.7	-
Subtotal	23.4	28.2	31.5	35.6	38.3	42.1	45.6	47.2	43.2	40.7	39.3	42.5	44.0	46.8	51.9	58.8	64.6	70.5	76.1	77.8	80.8	90.6	103.7	111.4	103.9	94.2	-
All regions	138.1	164.5	184.5	206.4	218.6	237.2	245.8	248.7	232.7	234.4	244.0	269.8	284.4	309.3	336.3	374.4	406.6	435.9	469.5	482.3	496.2	539.2	605.4	646.0	610.8	581.5	-

SOURCE: U.S. Department of Commerce, Bureau of Economic Analysis, Regional Economic Accounts. Relevant statistics available online at: http://www.bea.gov/bea/regional/gsp/.

Table F-23

Distribution of Automobile, Bus, and Truck Registrations by Region, 1983-2009

Region	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009[a]
New England	5.3%	5.3%	5.3%	5.2%	5.3%	5.1%	5.1%	5.0%	4.9%	4.8%	4.9%	4.9%	5.2%	5.1%	5.4%	5.2%	5.2%	5.2%	5.0%	5.1%	5.2%	5.1%	5.0%	4.9%	4.9%	4.9%	4.9%
Middle Atlantic	12.3%	12.4%	12.5%	12.7%	12.7%	12.7%	12.6%	12.6%	12.4%	12.4%	12.4%	12.4%	12.2%	12.2%	12.3%	11.9%	12.0%	11.7%	11.5%	11.6%	11.8%	11.4%	11.6%	11.1%	11.2%	11.2%	11.2%
East North Central	17.5%	17.4%	17.1%	16.7%	16.7%	17.2%	17.4%	16.8%	17.1%	17.1%	17.1%	17.5%	17.6%	17.3%	17.4%	17.5%	17.4%	17.1%	16.9%	16.9%	16.7%	16.2%	15.8%	15.9%	15.7%	15.9%	15.9%
West North Central	8.4%	8.2%	8.4%	8.1%	8.0%	7.8%	7.7%	7.8%	7.7%	7.8%	7.9%	8.1%	7.9%	7.8%	7.8%	7.9%	7.7%	8.0%	7.6%	7.7%	7.7%	7.7%	7.6%	7.7%	7.6%	7.6%	7.6%
South Atlantic	17.4%	17.7%	17.8%	18.3%	18.4%	18.3%	18.4%	18.4%	18.1%	18.4%	18.0%	18.1%	18.1%	18.0%	18.0%	18.3%	18.1%	18.3%	18.8%	18.9%	19.1%	19.1%	19.3%	19.7%	19.6%	19.5%	19.5%
East South Central	6.6%	6.6%	6.7%	6.7%	6.7%	6.9%	6.8%	6.9%	6.8%	6.8%	6.7%	6.5%	6.8%	6.3%	6.4%	6.3%	6.2%	6.3%	6.5%	6.4%	6.3%	6.2%	6.2%	6.3%	6.3%	6.2%	6.2%
West South Central	11.5%	11.6%	11.5%	11.2%	10.7%	10.5%	10.4%	10.5%	10.6%	10.6%	10.6%	10.8%	10.6%	10.4%	10.0%	10.1%	10.3%	10.2%	10.0%	10.1%	10.2%	10.9%	11.2%	10.9%	11.0%	11.1%	11.1%
Mountain	6.2%	6.0%	5.8%	5.9%	6.1%	6.0%	6.1%	6.2%	6.2%	6.1%	6.3%	6.0%	6.1%	6.3%	6.5%	6.3%	6.7%	6.6%	6.9%	6.0%	5.7%	5.8%	5.8%	5.8%	5.8%	5.8%	5.8%
Pacific	14.8%	14.8%	14.9%	15.3%	15.3%	15.5%	15.6%	15.8%	16.2%	16.0%	16.0%	15.6%	15.4%	16.5%	16.3%	16.4%	16.4%	16.8%	16.7%	17.2%	17.4%	17.5%	17.7%	17.8%	18.0%	17.8%	17.8%
All regions	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

[a] Equals 2008 value.

SOURCE Table F-13.

Table F-24

Distribution of General Aviation and Air Taxi Total Population by Region of Based Aircraft, 1983-2009

Region	1983 [a]	1984 [a]	1985 [a]	1986 [a]	1987 [a]	1988 [a]	1989 [a]	1990 [a]	1991 [a]	1992 [a]	1993 [a]	1994 [a]	1995 [a]	1996	1997	1998	1999	2000	2001	2002	2003 [a]	2004	2005	2006	2007	2008	2009 [b]
New England	3.7%	3.7%	3.7%	3.7%	3.7%	3.7%	3.7%	3.7%	3.7%	3.7%	3.7%	3.7%	3.7%	3.7%	3.7%	3.7%	3.7%	3.5%	3.6%	3.6%	3.7%	3.8%	3.6%	3.7%	3.7%	3.6%	3.6%
Middle Atlantic	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%	7.8%	7.5%	7.1%	7.7%	7.4%	7.2%	7.5%	7.5%	7.1%	6.9%	7.1%	6.9%	7.6%	7.6%
East North Central	14.0%	14.0%	14.0%	14.0%	14.0%	14.0%	14.0%	14.0%	14.0%	14.0%	14.0%	14.0%	14.0%	14.4%	14.5%	13.9%	14.5%	13.7%	13.3%	13.4%	14.0%	13.4%	12.9%	12.8%	13.4%	12.6%	12.6%
West North Central	9.7%	9.7%	9.7%	9.7%	9.7%	9.7%	9.7%	9.7%	9.7%	9.7%	9.7%	9.7%	9.7%	9.8%	9.7%	9.9%	9.4%	9.6%	9.8%	9.5%	9.7%	9.2%	9.5%	9.6%	9.2%	9.5%	9.5%
South Atlantic	16.8%	16.8%	16.8%	16.8%	16.8%	16.8%	16.8%	16.8%	16.8%	16.8%	16.8%	16.8%	16.8%	15.9%	15.9%	17.4%	17.0%	17.0%	17.4%	17.2%	16.8%	17.4%	17.9%	17.1%	17.6%	17.6%	17.6%
East South Central	4.9%	4.9%	4.9%	4.9%	4.9%	4.9%	4.9%	4.9%	4.9%	4.9%	4.9%	4.9%	4.9%	4.8%	4.6%	4.9%	4.6%	5.3%	4.9%	5.1%	4.9%	5.1%	5.0%	5.4%	5.1%	4.7%	4.7%
West South Central	12.6%	12.6%	12.6%	12.6%	12.6%	12.6%	12.6%	12.6%	12.6%	12.6%	12.6%	12.6%	12.6%	12.4%	12.6%	12.2%	12.3%	13.8%	12.6%	12.6%	12.6%	12.4%	12.4%	12.3%	12.6%	13.0%	13.0%
Mountain	10.5%	10.5%	10.5%	10.5%	10.5%	10.5%	10.5%	10.5%	10.5%	10.5%	10.5%	10.5%	10.5%	10.3%	10.4%	10.5%	10.6%	9.9%	11.0%	11.2%	10.5%	11.8%	11.7%	12.5%	12.3%	12.4%	12.4%
Pacific	20.4%	20.4%	20.4%	20.4%	20.4%	20.4%	20.4%	20.4%	20.4%	20.4%	20.4%	20.4%	20.4%	21.0%	21.2%	20.4%	20.2%	19.9%	20.2%	19.9%	20.4%	19.7%	20.1%	19.6%	19.4%	19.1%	19.1%
All regions	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

[a] Equals the average of 1996-2002.

[b] Equals 2008 value.

SOURCE: Table F-14.

Table F-25

Distribution of Total Rail Miles by Region, 1983-2009

Region	1983 [a]	1984 [a]	1985 [a]	1986 [a]	1987 [a]	1988 [a]	1989 [a]	1990 [a]	1991 [a]	1992 [a]	1993 [a]	1994 [a]	1995 [a]	1996 [a]
New England	2.7%	2.7%	2.7%	2.7%	2.7%	2.7%	2.7%	2.7%	2.7%	2.7%	2.7%	2.7%	2.7%	2.7%
Middle Atlantic	6.8%	6.8%	6.8%	6.8%	6.8%	6.8%	6.8%	6.8%	6.8%	6.8%	6.8%	6.8%	6.8%	6.8%
East North Central	16.9%	16.9%	16.9%	16.9%	16.9%	16.9%	16.9%	16.9%	16.9%	16.9%	16.9%	16.9%	16.9%	16.9%
West North Central	18.9%	18.9%	18.9%	18.9%	18.9%	18.9%	18.9%	18.9%	18.9%	18.9%	18.9%	18.9%	18.9%	18.9%
South Atlantic	13.8%	13.8%	13.8%	13.8%	13.8%	13.8%	13.8%	13.8%	13.8%	13.8%	13.8%	13.8%	13.8%	13.8%
East South Central	7.9%	7.9%	7.9%	7.9%	7.9%	7.9%	7.9%	7.9%	7.9%	7.9%	7.9%	7.9%	7.9%	7.9%
West South Central	13.4%	13.4%	13.4%	13.4%	13.4%	13.4%	13.4%	13.4%	13.4%	13.4%	13.4%	13.4%	13.4%	13.4%
Mountain	11.2%	11.2%	11.2%	11.2%	11.2%	11.2%	11.2%	11.2%	11.2%	11.2%	11.2%	11.2%	11.2%	11.2%
Pacific	8.4%	8.4%	8.4%	8.4%	8.4%	8.4%	8.4%	8.4%	8.4%	8.4%	8.4%	8.4%	8.4%	8.4%
All regions	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Region	1997 [a]	1998 [a]	1999 [a]	2000 [a]	2001 [a]	2002	2003 [a]	2004 [b]	2005 [b]	2006 [b]	2007 [b]	2008	2009 [b]
New England	2.7%	2.7%	2.7%	2.7%	2.7%	2.7%	2.7%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%
Middle Atlantic	6.8%	6.8%	6.8%	6.8%	6.8%	6.8%	6.8%	6.9%	6.9%	6.9%	6.9%	6.9%	6.9%
East North Central	16.9%	16.9%	16.9%	16.9%	16.9%	16.9%	16.9%	17.4%	17.4%	17.4%	17.4%	17.4%	17.4%
West North Central	18.9%	18.9%	18.9%	18.9%	18.9%	18.9%	18.9%	18.4%	18.4%	18.4%	18.4%	18.4%	18.4%
South Atlantic	13.8%	13.8%	13.8%	13.8%	13.8%	13.8%	13.8%	14.0%	14.0%	14.0%	14.0%	14.0%	14.0%
East South Central	7.9%	7.9%	7.9%	7.9%	7.9%	7.9%	7.9%	7.9%	7.9%	7.9%	7.9%	7.9%	7.9%
West South Central	13.4%	13.4%	13.4%	13.4%	13.4%	13.4%	13.4%	14.0%	14.0%	14.0%	14.0%	14.0%	14.0%
Mountain	11.2%	11.2%	11.2%	11.2%	11.2%	11.2%	11.2%	11.0%	11.0%	11.0%	11.0%	11.0%	11.0%
Pacific	8.4%	8.4%	8.4%	8.4%	8.4%	8.4%	8.4%	7.9%	7.9%	7.9%	7.9%	7.9%	7.9%
All regions	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

[a] Equals 2002 value.

[b] Equals 2008 value.

SOURCE: Table F-15.

Table F-26

Distribution of Gross State Product for Manufacturing by Region, 1983-2009

Region	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998 [a]	1999 [a]	2000 [a]	2001 [a]	2002 [a]	2003 [a]	2004	2005	2006	2007	2008	2009 [b]
New England	6.9%	7.0%	7.0%	7.0%	6.9%	6.5%	6.5%	6.3%	6.2%	5.9%	5.6%	5.4%	5.5%	5.6%	5.6%	5.6%	5.6%	5.6%	5.6%	5.6%	5.6%	5.0%	4.8%	5.0%	5.2%	5.1%	5.1%
Middle Atlantic	16.8%	16.4%	16.1%	15.6%	15.4%	15.6%	15.1%	15.1%	15.1%	14.7%	14.4%	13.9%	13.8%	13.6%	13.1%	13.1%	13.1%	13.1%	13.1%	13.1%	13.1%	11.6%	11.3%	11.4%	11.4%	11.5%	11.5%
East North Central	23.8%	24.4%	24.4%	24.4%	23.4%	23.1%	22.9%	22.6%	22.2%	23.1%	23.8%	24.6%	23.9%	23.6%	23.3%	23.3%	23.3%	23.3%	23.3%	23.3%	23.3%	23.1%	22.1%	21.1%	20.9%	20.6%	20.6%
West North Central	7.0%	7.2%	7.1%	7.1%	7.2%	7.2%	7.3%	7.3%	7.4%	7.5%	7.3%	7.4%	7.5%	7.5%	7.6%	7.6%	7.6%	7.6%	7.6%	7.6%	7.6%	7.8%	7.7%	7.6%	7.7%	7.9%	7.9%
South Atlantic	14.3%	14.3%	14.5%	15.1%	15.2%	14.8%	15.1%	15.1%	15.4%	15.6%	15.4%	15.2%	15.4%	15.2%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	15.2%	15.3%	15.1%	15.0%	14.8%	14.8%
East South Central	6.4%	6.3%	6.4%	6.4%	6.6%	6.6%	6.6%	6.6%	6.8%	7.1%	7.2%	7.2%	7.2%	7.0%	6.9%	6.9%	6.9%	6.9%	6.9%	6.9%	6.9%	7.1%	7.0%	7.0%	6.9%	6.9%	6.9%
West South Central	8.5%	8.3%	8.2%	8.0%	8.3%	9.1%	9.3%	9.6%	9.3%	8.9%	9.0%	9.3%	9.7%	9.5%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	12.3%	13.1%	13.7%	13.9%	14.2%	14.2%
Mountain	2.8%	2.8%	2.8%	2.9%	3.0%	2.9%	2.9%	2.9%	3.2%	3.5%	3.8%	4.1%	4.1%	4.3%	4.4%	4.4%	4.4%	4.4%	4.4%	4.4%	4.4%	4.1%	4.1%	4.0%	4.1%	4.1%	4.1%
Pacific	13.4%	13.3%	13.4%	13.5%	14.0%	14.1%	14.3%	14.5%	14.4%	13.7%	13.5%	12.8%	13.0%	13.7%	14.2%	14.2%	14.2%	14.2%	14.2%	14.2%	14.2%	13.8%	14.7%	14.9%	15.0%	15.0%	15.0%
All regions	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

[a] Equals 1997 value.

[b] Equals 2008 value.

SOURCE: Table F-16.

Table F-27

Distribution of Gross State Product for Mining, Except Oil and Gas Extraction by Region, 1983-2009

Region	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998 [a]	1999 [a]	2000 [a]	2001 [a]	2002 [a]	2003 [a]	2004	2005	2006	2007	2008 [b]	2009 [b]
New England	0.5%	0.6%	0.7%	0.7%	1.0%	0.9%	0.6%	0.8%	0.7%	0.9%	0.9%	0.7%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%	1.4%	1.4%	1.4%	1.7%	1.7%	1.7%
Middle Atlantic	8.8%	8.9%	8.6%	8.5%	8.0%	7.4%	7.0%	6.8%	6.6%	7.3%	7.0%	6.8%	6.8%	7.2%	7.9%	7.9%	7.9%	7.9%	7.9%	7.9%	7.9%	7.5%	6.9%	6.5%	6.7%	6.7%	6.7%
East North Central	13.2%	14.6%	14.8%	15.5%	15.2%	13.6%	13.0%	12.2%	12.8%	13.4%	12.5%	12.5%	11.0%	11.3%	10.8%	10.8%	10.8%	10.8%	10.8%	10.8%	10.8%	11.2%	10.2%	9.8%	9.4%	9.4%	9.4%
West North Central	6.6%	6.8%	6.4%	5.5%	5.6%	5.7%	5.8%	6.0%	6.0%	2.5%	6.2%	6.1%	6.1%	6.2%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	6.8%	7.7%	7.8%	7.5%	7.5%	7.5%
South Atlantic	23.8%	22.7%	23.3%	23.0%	22.3%	22.2%	22.0%	22.2%	21.9%	22.3%	20.1%	20.6%	20.1%	20.9%	21.0%	21.0%	21.0%	21.0%	21.0%	21.0%	21.0%	21.3%	19.8%	18.9%	18.6%	18.6%	18.6%
East South Central	17.0%	17.4%	17.2%	16.1%	15.5%	13.9%	13.9%	14.1%	13.9%	14.7%	15.0%	14.0%	13.3%	13.2%	13.4%	13.4%	13.4%	13.4%	13.4%	13.4%	13.4%	12.5%	11.7%	11.1%	10.9%	10.9%	10.9%
West South Central	3.8%	4.4%	4.6%	5.5%	5.0%	4.4%	3.9%	3.5%	3.6%	3.6%	3.6%	3.6%	3.9%	4.1%	4.2%	4.2%	4.2%	4.2%	4.2%	4.2%	4.2%	5.9%	5.4%	4.7%	4.8%	4.8%	4.8%
Mountain	23.0%	20.8%	20.2%	20.1%	22.0%	26.2%	28.0%	27.8%	28.0%	29.3%	28.7%	29.0%	31.3%	29.0%	28.2%	28.2%	28.2%	28.2%	28.2%	28.2%	28.2%	25.8%	30.1%	32.0%	32.9%	32.9%	32.9%
Pacific	3.3%	3.7%	4.2%	4.9%	5.4%	5.6%	5.8%	6.5%	6.4%	6.0%	6.1%	6.7%	6.8%	7.3%	8.1%	8.1%	8.1%	8.1%	8.1%	8.1%	8.1%	7.5%	6.9%	7.7%	7.6%	7.6%	7.6%
All regions	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

[a] Equals 1997 value.

[b] Equals 2007 value.

SOURCE: Table F-17.

Table F-28

Distribution of Net Value-Added in the Agricultural Sector by Region, 1983-2009

Region	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009 [a]
New England	1.4%	1.2%	1.2%	1.3%	1.3%	1.3%	1.1%	1.2%	1.2%	1.4%	1.3%	1.2%	1.2%	1.1%	1.0%	1.0%	1.1%	1.2%	1.0%	1.1%	0.9%	1.0%	1.0%	1.1%	1.1%	1.0%	1.0%
Middle Atlantic	3.9%	3.5%	3.7%	4.0%	3.8%	3.4%	3.6%	3.5%	3.3%	3.5%	3.6%	3.2%	3.1%	3.2%	2.5%	3.1%	3.2%	3.6%	3.6%	3.4%	3.4%	3.5%	3.7%	3.8%	4.1%	3.5%	3.5%
East North Central	10.6%	16.0%	16.8%	15.5%	14.5%	12.7%	16.3%	14.3%	11.9%	13.4%	13.1%	13.0%	12.2%	13.8%	14.2%	13.7%	12.6%	12.7%	12.9%	11.7%	12.8%	14.2%	12.0%	14.1%	14.9%	16.9%	16.9%
West North Central	22.9%	25.7%	26.9%	27.1%	26.1%	23.2%	22.6%	24.2%	22.4%	23.1%	18.3%	23.1%	21.3%	26.7%	23.2%	23.0%	21.2%	22.0%	20.8%	18.7%	21.6%	23.6%	23.4%	22.5%	24.3%	30.4%	30.4%
South Atlantic	13.1%	12.4%	11.8%	12.0%	12.0%	14.3%	14.0%	13.3%	15.9%	14.6%	14.8%	15.3%	16.1%	14.0%	14.7%	15.1%	14.4%	15.9%	16.5%	14.1%	12.9%	11.6%	13.6%	13.4%	10.9%	10.2%	10.2%
East South Central	6.5%	7.2%	6.2%	5.1%	5.7%	6.6%	6.4%	5.9%	6.9%	6.8%	6.6%	6.8%	6.5%	6.1%	6.4%	6.5%	6.3%	6.8%	7.1%	5.2%	6.1%	6.5%	7.3%	6.3%	4.8%	5.1%	5.1%
West South Central	14.3%	11.5%	11.5%	10.7%	11.8%	12.9%	11.4%	12.1%	12.4%	12.6%	13.7%	12.9%	12.4%	10.7%	12.2%	11.3%	14.1%	12.0%	12.6%	14.3%	14.3%	13.2%	12.5%	11.4%	11.2%	9.6%	9.6%
Mountain	8.2%	6.6%	6.0%	6.8%	7.0%	7.4%	7.7%	7.9%	8.6%	7.5%	9.1%	6.6%	8.0%	6.7%	7.0%	7.9%	8.5%	7.3%	8.7%	9.8%	8.6%	7.6%	8.2%	7.4%	8.3%	7.5%	7.5%
Pacific	19.0%	15.9%	15.9%	17.6%	17.9%	18.2%	16.9%	17.6%	17.5%	16.9%	19.5%	17.9%	19.2%	17.6%	18.8%	18.4%	18.6%	18.5%	16.8%	21.8%	19.4%	18.8%	18.3%	19.9%	20.3%	15.8%	15.8%
All regions	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

[a] Equals 2008 value.

SOURCE: Table F-18.

Table F-29

Distribution of Disposable Personal Income by Region, 1983-2009

Region	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
New England	5.9%	6.0%	5.9%	6.0%	6.2%	6.3%	6.3%	6.1%	6.0%	5.9%	5.9%	5.8%	5.8%	5.7%	5.7%	5.7%	5.7%	5.7%	5.8%	5.8%	5.8%	5.7%	5.6%	5.6%	5.6%	5.6%	5.6%
Middle Atlantic	17.4%	17.3%	16.9%	17.0%	17.1%	17.3%	17.3%	17.2%	17.1%	16.9%	16.7%	16.4%	16.4%	16.3%	16.2%	16.0%	15.8%	15.8%	15.4%	15.4%	15.3%	15.0%	14.9%	14.9%	15.0%	15.0%	15.1%
East North Central	17.4%	17.4%	17.2%	17.1%	16.9%	16.7%	16.6%	16.5%	16.4%	16.5%	16.5%	16.6%	16.5%	16.4%	16.3%	16.2%	16.1%	15.9%	15.7%	15.6%	15.6%	15.2%	14.9%	14.6%	14.4%	14.3%	14.3%
West North Central	7.1%	7.1%	7.1%	7.0%	6.9%	6.7%	6.7%	6.6%	6.6%	6.7%	6.6%	6.7%	6.6%	6.7%	6.7%	6.7%	6.6%	6.6%	6.5%	6.5%	6.5%	6.6%	6.5%	6.4%	6.4%	6.5%	6.5%
South Atlantic	15.8%	15.9%	16.2%	16.5%	16.7%	16.9%	17.1%	17.2%	17.3%	17.3%	17.5%	17.5%	17.6%	17.7%	17.7%	17.7%	17.8%	17.9%	18.1%	18.2%	18.2%	18.6%	18.8%	18.9%	18.8%	18.8%	18.9%
East South Central	4.9%	4.9%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.1%	5.2%	5.2%	5.2%	5.2%	5.2%	5.2%	5.2%	5.1%	5.1%	5.1%	5.2%	5.1%	5.1%	5.1%	5.1%	5.1%	5.1%
West South Central	10.3%	10.2%	10.2%	9.9%	9.5%	9.3%	9.3%	9.4%	9.5%	9.6%	9.7%	9.8%	9.8%	9.9%	10.1%	10.1%	10.2%	10.3%	10.5%	10.3%	10.3%	10.3%	10.6%	10.6%	10.8%	10.9%	10.9%
Mountain	5.0%	4.9%	5.0%	5.0%	5.0%	4.9%	4.9%	4.9%	5.0%	5.1%	5.3%	5.4%	5.5%	5.6%	5.7%	5.8%	5.9%	6.0%	6.1%	6.1%	6.2%	6.3%	6.5%	6.6%	6.7%	6.7%	6.6%
Pacific	16.3%	16.3%	16.4%	16.6%	16.7%	16.8%	16.8%	17.1%	17.1%	17.0%	16.8%	16.6%	16.5%	16.5%	16.4%	16.6%	16.6%	16.7%	16.7%	16.9%	16.9%	17.2%	17.1%	17.2%	17.2%	17.1%	17.1%
All regions	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

SOURCE: Table F-19.

Table F-30

Distribution of Population Estimates by Region, 1983-2009

Region	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
New England	5.4%	5.4%	5.4%	5.3%	5.3%	5.4%	5.3%	5.3%	5.2%	5.2%	5.1%	5.1%	5.1%	5.0%	5.0%	5.0%	4.9%	4.9%	4.9%	4.9%	4.9%	4.9%	4.8%	4.8%	4.7%	4.7%	4.7%
Middle Atlantic	15.8%	15.7%	15.6%	15.5%	15.4%	15.3%	15.2%	15.1%	15.0%	14.9%	14.8%	14.6%	14.5%	14.4%	14.3%	14.2%	14.1%	14.1%	14.0%	13.9%	13.8%	13.8%	13.7%	13.5%	13.5%	13.4%	13.3%
East North Central	17.7%	17.6%	17.4%	17.3%	17.2%	17.1%	17.0%	16.9%	16.8%	16.8%	16.7%	16.6%	16.6%	16.5%	16.5%	16.4%	16.3%	16.0%	15.9%	15.8%	15.8%	15.7%	15.6%	15.5%	15.4%	15.2%	15.1%
West North Central	7.4%	7.4%	7.3%	7.2%	7.2%	7.2%	7.1%	7.1%	7.1%	7.0%	7.0%	7.0%	7.0%	7.0%	6.9%	6.9%	6.9%	6.8%	6.8%	6.8%	6.7%	6.7%	6.7%	6.7%	6.7%	6.6%	6.6%
South Atlantic	16.6%	16.7%	16.9%	17.0%	17.2%	17.3%	17.4%	17.5%	17.6%	17.7%	17.7%	17.8%	17.9%	18.0%	18.0%	18.1%	18.2%	18.4%	18.5%	18.6%	18.7%	18.9%	19.0%	19.1%	19.2%	19.3%	19.3%
East South Central	6.4%	6.3%	6.3%	6.3%	6.2%	6.2%	6.1%	6.1%	6.1%	6.1%	6.1%	6.1%	6.1%	6.1%	6.1%	6.1%	6.1%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%
West South Central	11.0%	11.0%	11.0%	11.1%	10.9%	10.8%	10.8%	10.7%	10.8%	10.8%	10.8%	10.9%	10.9%	11.0%	11.0%	11.1%	11.1%	11.2%	11.2%	11.3%	11.3%	11.3%	11.4%	11.4%	11.5%	11.6%	11.7%
Mountain	5.3%	5.3%	5.4%	5.4%	5.4%	5.4%	5.5%	5.5%	5.6%	5.7%	5.8%	5.9%	6.0%	6.1%	6.2%	6.2%	6.3%	6.5%	6.5%	6.6%	6.7%	6.8%	6.9%	7.0%	7.1%	7.2%	7.2%
Pacific	14.5%	14.6%	14.7%	14.9%	15.1%	15.3%	15.6%	15.8%	15.9%	16.0%	16.0%	15.9%	15.9%	15.9%	16.0%	16.1%	16.1%	16.0%	16.1%	16.1%	16.2%	16.1%	16.1%	16.1%	16.0%	16.1%	16.1%
All regions	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

SOURCE: Table F-20.

Table F-31

Distribution of Oil Production by Region, 1983-2009

Region	1983 [a]	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003 [b]	2004	2005	2006	2007	2008	2009 [c]
New England	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Middle Atlantic	0.0%	0.0%	0.0%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.2%	0.2%	0.2%	0.3%	0.3%	0.2%	0.2%	0.2%
East North Central	1.1%	1.1%	1.1%	1.1%	1.0%	0.9%	0.9%	0.9%	1.0%	1.1%	1.1%	1.2%	1.3%	1.3%	1.4%	1.4%	1.3%	1.3%	1.2%	1.1%	1.1%	1.3%	1.3%	1.2%	1.1%	1.1%	1.1%
West North Central	3.9%	3.9%	4.1%	3.8%	3.5%	3.9%	3.9%	3.7%	4.0%	4.0%	4.1%	4.2%	4.3%	4.1%	3.9%	3.6%	3.5%	3.2%	3.0%	2.9%	2.9%	2.5%	2.4%	2.4%	2.3%	2.4%	2.4%
South Atlantic	0.2%	0.2%	0.2%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	1.4%	1.5%	1.5%	1.6%	1.6%	1.6%
East South Central	2.2%	2.2%	2.1%	2.3%	2.3%	2.4%	2.2%	2.2%	2.3%	2.7%	2.7%	3.0%	2.9%	2.8%	2.8%	2.8%	2.8%	2.6%	2.6%	2.6%	2.6%	2.6%	2.4%	2.4%	1.9%	1.7%	1.7%
West South Central	60.9%	60.9%	59.0%	58.7%	56.0%	55.1%	54.9%	54.3%	52.8%	51.5%	51.2%	49.7%	48.9%	49.0%	48.9%	48.3%	47.5%	47.2%	47.3%	45.9%	45.9%	46.2%	45.8%	47.5%	48.3%	50.1%	50.1%
Mountain	13.1%	13.1%	13.7%	13.4%	14.3%	14.1%	14.9%	15.9%	16.4%	17.9%	19.2%	19.8%	20.0%	20.5%	21.1%	22.1%	22.6%	23.5%	24.2%	25.2%	25.2%	24.6%	25.3%	26.2%	25.8%	25.6%	25.6%
Pacific	18.6%	18.6%	19.8%	20.5%	22.5%	23.4%	22.9%	22.7%	23.3%	22.5%	21.5%	22.0%	22.4%	22.1%	21.8%	21.6%	22.1%	22.1%	21.5%	22.0%	22.0%	21.2%	21.0%	18.5%	18.8%	17.3%	17.3%
All regions	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

[a] Equals 1984 value.

[b] Equals 2002 value.

[c] Equals 2008 value.

SOURCE: Table F-21.

Table F-32

Distribution of Gross State Product for Construction by Region, 1983-2009

Region	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998 [a]	1999 [a]	2000 [a]	2001 [a]	2002 [a]	2003 [a]	2004	2005	2006	2007	2008	2009 [b]
New England	5.2%	5.5%	5.9%	6.5%	7.3%	7.4%	6.8%	5.6%	5.0%	5.0%	5.0%	4.9%	5.0%	4.9%	5.1%	5.1%	5.1%	5.1%	5.1%	5.1%	5.1%	5.0%	4.9%	4.7%	4.6%	4.6%	4.6%
Middle Atlantic	14.4%	14.6%	15.2%	16.0%	16.8%	17.1%	17.0%	16.2%	15.5%	14.9%	14.3%	13.8%	13.2%	12.6%	12.5%	12.5%	12.5%	12.5%	12.5%	12.5%	12.5%	12.3%	11.9%	11.7%	12.0%	12.6%	12.6%
East North Central	13.6%	13.5%	13.6%	13.8%	14.3%	14.7%	15.1%	15.7%	16.3%	16.4%	16.5%	16.6%	16.6%	16.6%	16.6%	16.6%	16.6%	16.6%	16.6%	16.6%	16.6%	14.2%	13.6%	12.9%	12.8%	12.9%	12.9%
West North Central	6.5%	6.4%	6.1%	6.1%	6.1%	5.8%	5.8%	5.9%	6.2%	6.8%	6.8%	7.1%	7.0%	7.0%	6.8%	6.8%	6.8%	6.8%	6.8%	6.8%	6.8%	6.2%	6.0%	5.7%	5.8%	6.0%	6.0%
South Atlantic	16.4%	17.5%	18.3%	19.2%	19.6%	19.7%	19.4%	19.3%	18.3%	17.9%	18.6%	18.5%	18.9%	19.2%	19.3%	19.3%	19.3%	19.3%	19.3%	19.3%	19.3%	21.5%	22.2%	22.5%	22.0%	20.7%	20.7%
East South Central	4.5%	4.3%	4.3%	4.3%	4.3%	4.3%	4.3%	4.3%	4.5%	4.8%	5.1%	5.1%	5.2%	5.2%	5.3%	5.3%	5.3%	5.3%	5.3%	5.3%	5.3%	4.4%	4.4%	4.5%	4.6%	4.8%	4.8%
West South Central	15.1%	13.9%	12.6%	10.6%	8.7%	8.2%	8.1%	8.7%	9.7%	10.6%	10.5%	10.5%	10.7%	10.9%	10.7%	10.7%	10.7%	10.7%	10.7%	10.7%	10.7%	11.1%	11.2%	11.5%	12.1%	13.4%	13.4%
Mountain	7.4%	7.1%	6.9%	6.3%	5.4%	5.1%	5.1%	5.3%	5.8%	6.4%	7.0%	7.7%	8.0%	8.3%	8.3%	8.3%	8.3%	8.3%	8.3%	8.3%	8.3%	8.3%	8.8%	9.1%	9.2%	8.9%	8.9%
Pacific	17.0%	17.1%	17.0%	17.2%	17.5%	17.8%	18.6%	19.0%	18.6%	17.4%	16.1%	15.7%	15.5%	15.1%	15.4%	15.4%	15.4%	15.4%	15.4%	15.4%	15.4%	16.8%	17.1%	17.2%	17.0%	16.2%	16.2%
All regions	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

[a] Equals 1997 value.
[b] Equals 2008 value.
SOURCE : Table F-22.

Table F-33

Receipts of Scrap and New Supply Available for Consumption by Region, 2007 (thousands of net tons)

Region	Receipts of Scrap [a]		New Supply Available for Consumption	
	Actual Value	Share of Total	Actual Value	Share of Total
New England	30	0.1%	44	0.1%
Middle Atlantic	6,140	10.7%	9,017	12.4%
East North Central	18,915	33.0%	25,243	34.8%
West North Central	1,912	3.3%	2,320	3.2%
South Atlantic	7,463	13.0%	9,061	12.5%
East South Central	8,444	14.7%	9,182	12.7%
West South Central	9,325	16.3%	11,254	15.5%
Mountain	2,877	5.0%	4,034	5.6%
Pacific	2,216	3.9%	2,403	3.3%
All regions	57,322	100.0%	72,559	100.0%

[a] Equals receipt of scrap from brokers, dealers, and other outside sources. All figures rounded by the U.S. Geological Survey and may not add to totals shown.

SOURCE : U.S. Geological Survey, *Mineral Yearbook, 2007* , Table 5.