

## INDUSTRY SNAPSHOTS: USES OF TRANSPORTATION

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U.S. Department of Transportation

## INDUSTRY SNAPSHOTS: USES OF TRANSPORTATION

U.S. Department of Transportation Bureau of Transportation Statistics

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## Chapter 1 Introduction

The Bureau of Transportation Statistics (BTS) estimates that transportation directly created \$659.1 billion of economic activity by moving goods in 2012. BTS measures this contribution to the gross domestic product in the Transportation Satellite Accounts (TSAs). The most current TSAs are for 2012².

Figure 1-1 Contribution of For-Hire and Business-Related In-House Transportation Activity to U.S. Gross Domestic Product (GDP), 2012 (current dollars)


NOTES: (a) In-house transportation is business-related transportation. Business-related transportation includes privately owned and operated vehicles of all body types, used primarily on public rights of way, and the supportive services to store, maintain, and operate those vehicles. (b) For-hire transportation consists of the services provided by transportation firms to industries and the public on a fee-basis. (c) Other for-hire transportation includes: pipeline, transit and ground passenger transportation, including State and local government passenger transit; sightseeing transportation and transportation support; courier and messenger services; and warehousing and storage). (d) The TSAs also show the contribution of transportation carried out by households through the use of their private motor vehicles (known as household production of transportation services (HPTS). The contribution of HPTS is not shown in the figure. For more information, see: http://www.rita.dot.gov/bts/sites/rita.dot.gov.bts/files/publications/transportation_satellite_accounts/index.html
SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics, Transportation Satellite Accounts, available at www.bts.gov, as of Mar. 2016.

## Measurement Method and Meaning

BTS produces the TSAs, which provide a comprehensive measure of transportation activity (e.g., trucking carried out by grocers to move goods from distribution centers to stores and depreciation from households driving personal motor vehicles) in the United States. BTS builds on the Bureau

[^0]of Economic Analysis's (BEA's) input-output (I-O) accounts. The I-O accounts show the value of all for-hire transportation in the United States and the industries using for-hire transportation. For-hire transportation consists of the services provided by transportation firms to industries and the public on a fee-basis, such as air carriers, railroads, transit agencies, common carrier trucking companies, and pipelines. Part of the TSAs reorganizes the I-O accounts to show the dollar value of transportation activity carried out by nontransportation industries for their own purposes (known as business-related inhouse transportation). For-hire and business-related in-house transportation activity contributed \$659.1 billion to the economy in 2012 (figure 1-1).

The TSAs also show the value of transportation carried out by households through the use of their private motor vehicles (known as household production of transportation services (HPTS)) ${ }^{2}$. The I-O accounts do not show the dollar value of in-house transportation activity or HPTS.

The TSAs use the same structure as the U.S. I-O accounts and consist of four tables, quantifying transportation's role and impact.

- make table: measures the value of transportation services that each transportation industry makes,
- use table: measures the amount of transportation used by each industry and sector in the economy and the contribution of each industry and sector to the economy,
- direct requirements table: measures the amount of transportation required to produce one dollar of each product, and
- total requirements table: measures the inputs required to produce one dollar of transportation.

[^1]This report uses information from the TSAs to highlight the role of for-hire and business-related inhouse transportation in the production process for all of the nontransportation sectors listed in the U.S. I-O accounts:

- natural resources and mining,
- manufacturing,
- construction,
- utilities,
- wholesale and retail trade, and
- services.

For each sector, information is presented, using the latest available data ${ }^{3}$, on:

- the sector's contribution to gross domestic product (GDP) - nationally and by State in 2014,
- the sector's use of transportation by mode in 2012,
- the amount of transportation the sector requires to produce one dollar of output in 2012,
- the number of transportation (e.g., airline and commercial pilots, bus drivers, etc.) and material moving (e.g., cleaners of vehicles, dredge operators, etc.) workers employed by the sector in 2014,
- the median annual wage for selected transportation occupations in the sector in 2014,
- the number of trucks and number of truck miles accumulated by the sector in 2002, and
- shipment characteristics (for selected sectors) in 2012.
${ }^{3}$ Latest data as of Feb. 1, 2016.


## Chapter 2 Natural Resources and Mining Sector



This chapter provides an overview of the contribution of the natural resources and mining sector to the economy and the use of transportation services by the sector.

The natural resources and mining sector consists of two related subsectors: (1) the agriculture, forestry, fishing and hunting subsector, which engages in growing crops, raising animals, harvesting timber, and harvesting fish and other animals from a farm, ranch, or their natural habitats and (2) the mining, quarrying and oil and gas extraction subsector, which extracts naturally occurring mineral solids, such as coal and ores; liquid minerals, such as crude petroleum; and gases, such as natural gas. ${ }^{1}$

Table 2-1 Overview of the Natural Resources and Mining Sector's Contribution to Gross Domestic Product (GDP) and Use of Transportation

| Natural Resources and Mining Sector | Value | Year (latest year data is available) |
| :---: | :---: | :---: |
| Contribution to GDP | \$669.2 billion | 2014 |
| Use of transportation | \$44.9 billion | 2012 |
| Amount of transportation required to produce a dollar of output | 4.5¢ | 2012 |
| Number of transportation and material moving workers |  | 2014 |
| Agriculture, Forestry, Fishing and Hunting | 40,760 |  |
| Mining, quarrying, and oil and gas extraction | 113,280 |  |
| Transportation and material moving workers as percent of sector's work force |  |  |
| Agriculture, Forestry, Fishing and Hunting | 9.9 | 2014 |
| Mining, quarrying, and oil and gas extraction | 13.7 | 2014 |
| Median annual wage of transportation and material moving workers |  | 2014 |
| Agriculture, Forestry, Fishing and Hunting | \$25,170 | 2014 |
| Mining, quarrying, and oil and gas extraction | \$41,850 | 2014 |
| Number of trucks used | 2,418 thousand | 2002* |
| Truck miles accumulated | 27,532 million | 2002* |
| Shipments made by mining industry (excluding oil and gas) |  | 2012 |
| Value | \$99.8 million | 2012 |
| Tons | 2.9 billion | 2012 |
| Ton-miles | 859.3 billion | 2012 |
| Average miles per shipment | 47 | 2012 |

NOTE: Table presents latest data available, as of Feb. 1, 2016.
*Data on number of trucks and truck miles accumulated was last collected in the Vehicle Inventory and Use Survey for 2002.
SOURCE: Data for this table is drawn from figures and tables presented throughout this chapter.

[^2]Figure 2-1 Natural Resources and Mining Sector's Contribution to GDP v. Other Sectors, 2014


SOURCE: U.S. Department of Commerce, Bureau of Economic Analysis, Gross Domestic Product by State, available at http://bea.gov as of November 2015.

The natural resources and mining sector uses less transportation services than any of the other sectors except utilities in absolute dollars, but per dollar of output this sector requires more transportation services than most of the other sectors. The sector relies heavily on truck transportation services, shipping the most tons and largest value of product by truck, and employing more in motor vehicle occupations than any other transportation occupation (see table 2-1).

In 2014 the natural resources and mining sector contributed $\$ 669.2$ billion ( 3.9 percent) to the national economy, as measured by gross domestic product (GDP) (figure 2-1). The sector contributed less than other sectors to the economy but generates the raw materials other sectors need to produce finished products. The manufacturing sector, for example, purchases wheat from the natural resources and mining sector to produce bread.

The largest dollar value of natural resources and mining activity occurred in Texas (\$233.3 billion) followed by California ( $\$ 60.0$ billion), and Oklahoma ( $\$ 30.0$ billion)—each of which accounted for 4 percent or more of national activity in the natural resources and mining sector in 2014 (figure 2-2, table 2-2). This is primarily driven by oil extraction in Texas, agriculture in California, and a combination of these activities in Oklahoma.

Computing the percent of natural resources and mining sector activity as a percent of a gross state product (GSP), rather than as a share of GDP, also provides useful insights to U.S. production. Nationally, Texas produced the most natural resources and mining products in 2014. However, natural resources and mining activity accounted for a smaller share of GSP in Texas (14.2 percent) than in Wyoming ( 35.7 percent), Alaska (27.3 percent), and North Dakota (22.2 percent) -the

Figure 2-2 State Contributions to Natural Resources and Mining Related GDP (percent of national GDP related to natural resources and mining), 2014


NOTE: Data not available for Delaware, District of Columbia, or Rhode Island.
SOURCE: U.S. Department of Commerce, Bureau of Economic Analysis, Gross Domestic Product by State, available at http://bea.gov as of November 2015.

Table 2-2 States Contributing 4.0 Percent or More to National GDP Related to Natural Resources and Mining in 2014

| State | Natural resources and mining <br> (Natural resources and mining related $\text { GDP = } \$ 669.2 \text { billion) }$ |  |  | All products and services (Total national GDP = \$17.2 trillion) |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Natural resources and mining related GDP (billions) | Percent of national GDP related to natural resources and mining | Rank <br> (1=contributes most to national GDP related to natural resources and mining, 51=least) | Dollar contribution to national GDP (billions) | Rank (1=contributes most to national GDP, 51=least) |
| Texas | 233.3 | 34.8 | 1 | 1,641.0 | 2 |
| California | 60.1 | 9.0 | 2 | 2,305.9 | 1 |
| Oklahoma | 30.0 | 4.5 | 3 | 183.2 | 29 |

SOURCE: U.S. Department of Commerce, Bureau of Economic Analysis, Gross Domestic Product by State, available at http://bea.gov as of November 2015.
three states where natural resources and mining activity accounted for one-fifth or more of GSP in 2014. Natural resources and mining activity accounted for a smaller share of GSP in Texas than in Wyoming, Alaska, and North Dakota due to substantial manufacturing activity in Texas. Manufacturing activity accounted for 14.6 percent ( $\$ 239.1$ billion) of GSP in Texas, while it accounted for only 5.0 percent of GSP in Wyoming ( $\$ 2.2$ billion), 2.4 percent of GSP in Alaska ( $\$ 1.4$ billion), and 6.6 percent of GSP in North Dakota ( $\$ 3.7$ billion) in 2014. (see Appendix A)

The natural resources and mining sector was the second smallest user of transportation services in 2012 ( $\$ 44.9$ billion), using 3.0 times more transportation services than the utilities sector (the smallest user of transportation services) in
2012. The natural resources and mining sector used more in-house air, rail, truck, and water transportation operations ( $\$ 21.2$ billion) than forhire (\$17.6 billion) (figure 2-3).

The natural resources and mining sector used $\$ 44.9$ billion of transportation services in 2012 (figure 2-4). In 2012 the sector used:

- Primarily truck transportation services (e.g., in acquiring seed or moving agricultural output to silos or mining products to the railhead), which accounted for 59.8 percent ( $\$ 26,824$ million) of all transportation services used by the sector.
- More in-house truck transportation operations (\$18,276 million) than for-hire truck transportation services ( $\$ 8,548$ million), with

Figure 2-3 Use of Transportation by the Natural Resources and Mining Sector, 2012 (current dollars, billions)



[^3]in-house truck transportation operations accounting for nearly half ( 40.8 percent) of all transportation services used ( $\$ 18,276$ million out of $\$ 44,849$ million). In-house truck transportation consists of the trucking operations carried out by farms with their own trucks, for instance, in moving wheat to the mill.

- Air, rail, and water transportation services (used for instance, to move grain or coal on barges) summing to 26.7 percent $(\$ 11,958$

Figure 2-4 Natural Resources and Mining Sector's Use of Transportation by Mode, 2012 (current dollars, millions)


NOTE: In-house transportation consists of transportation services (air, rail, truck, and water) provided by nontransportation industries for their own use. For-hire transportation consists of the services provided by transportation firms to industries and the public on a fee-basis. Airlines, railroads, transit agencies, common carrier trucking companies, and pipelines are examples of for-hire transportation industries. Transit and passenger ground transportation excludes State and local government passenger transit. Other transportation includes sightseeing transportation.
SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics, Transportation Satellite Accounts, available at http://www.bts. gov as of March 2016.
million) of all the transportation services used by the sector, a majority of which is for-hire (20.2 percent, or $\$ 9,042$ million).

- A significant amount of pipeline transportation, which accounted for 9.6 percent ( $\$ 4,316$ million) of the transportation services used by the natural resources and mining sector.
- A smaller amount of for-hire transit and ground passenger transportation (e.g., bus transportation purchased for farm laborers) ( 0.1 percent, or $\$ 53.0$ million) than any other transportation mode.

The natural resources and mining sector required more transportation services in producing output than the average sector in 2012, albeit substantially less transportation services than the sector depending the most on transportation services. In 2012 the natural resources and mining sector required $4.5 ¢$ worth of transportation services to produce one dollar of output, while the most dependent sector (wholesale and retail trade) required $10.2 \xi$ worth of transportation services to produce one dollar of output (figure 2-5).

The overall transportation requirement to produce one dollar of output in 2012 for the natural resources and mining sector (4.5¢) was relatively modest compared to other inputs. Transportation services were the third most important input. Natural resources and mining products, including support activities (e.g., geophysical surveying and mapping

Figure 2-5 Transportation Required Per Dollar of Output by Natural Resources and Mining Sector, 2012


NOTE: In-house transportation consists of transportation services (air, rail, truck, and water) provided by nontransportation industries for their own use. For-hire transportation consists of the services provided by transportation firms to industries and the public on a fee-basis. Airlines, railroads, transit agencies, common carrier trucking companies, and pipelines are examples of for-hire transportation industries. "Other" for-hire transportation includes: transit and passenger ground transportation (excluding State and local government transit); pipeline; sightseeing transportation and transportation support; parcel delivery, courier, and messenger services (excluding U.S. Postal Service); warehousing and storage; and other transportation and support activities.
SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics, Transportation Satellite Accounts, available at http://www.bts.gov as of March 2016.
services used in mining), were the most important input, requiring $14.3 \xi$ worth of natural resources and mining products to produce one dollar of output (figure 2-6).

The natural resources and mining sector consists of both agricultural and mining activities. In 2014 the agriculture, forestry, fishing, and hunting industry (agriculture industry) employed 40,760 transportation and material moving workers, accounting for 9.9 percent of its entire work force.

The mining, quarrying, and oil and gas extraction industry (mining industry) employed 113,280 transportation and material moving workers, accounting for 13.7 percent of its entire work force (figure 2-7). Transportation workers include motor vehicle operators, ship engineers, aircraft pilots and flight engineers, etc. Material moving workers support transportation activities and include occupations such as cleaners of vehicles and ship loaders.

Figure 2-6 Top 5 Most Required Inputs by the Natural Resources and Mining Sector to Produce a Dollar of Output, 2012


NOTE: Transportation includes in-house and for-hire.
SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics, Transportation Satellite Accounts, available at http:// www.bts.gov as of March 2016.

Figure 2-7 Number of Workers Employed in the Natural Resources and Mining Sector by Occupation, 2014


NOTE: Total for transportation occupations includes supervisors of material moving workers, which could not be separated from supervisors of transportation workers.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, Occupational Employment and Wages, available at http://www.bls.gov/ oes as of Nov. 23, 2015.

Transportation and material moving workers in the agriculture, forestry, fishing and hunting industry (agriculture industry) earned a median wage of $\$ 25,170$ in 2014, while workers of all occupations in the agriculture industry earned a lower median wage ( $\$ 20,180$ ). Transportation and material moving workers in the mining, quarrying and oil and gas extraction industry (mining
industry) earned a median wage of $\$ 41,850$ in 2014, while workers of all occupations in the mining industry earned a higher median wage $(\$ 49,000)$ (figure 2-8).

The agriculture and mining industries employed the largest number of transportation workers as heavy and tractor-trailer truck drivers. Heavy

Figure 2-8 Median Annual Wage and Employment for Most Common Transportation Occupations (Top 3) in the Natural Resources and Mining Sector, 2014


NOTE: Top three transportation occupations are the transportation occupations employing the largest number of workers and are selected from detailed occupation group in Bureau of Labor Statistics Occupational Employment and Wages table. Material moving occupations not included in the selection of the top three transportation occupations. The top three transportation occupations in the natural resources sector are: heavy and tractor-trailer truck drivers; commercial pilots; and light truck or delivery services drivers. The top three transportation occupations in the mining sector are: heavy and tractor-trailer truck drivers; first-line supervisors of machine and vehicle operators; and light truck or delivery services drivers. First-line supervisors of machine and vehicle operators includes first-line supervisors of material moving occupations.
SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, Occupational Employment and Wages, available at http://www.bls.gov/ oes as of Nov. 23, 2015.
and tractor-trailer truck drivers accounted for 30.7 percent of all transportation and material moving occupations in the agriculture industry and 36.4 percent of all transportation and material moving occupations in the mining industry. In the agriculture industry, heavy and tractor-trailer truck drivers earned a median wage of \$34,560, while workers of all occupations in the agriculture industry earned a lower median wage $(\$ 20,180)$. In the mining industry, heavy and tractor-trailer truck drivers earned a median wage of $\$ 39,590$, while workers of all occupations in the mining industry earned a higher median wage $(\$ 49,000)$ (figure 2-8). The 2002 Vehicle Inventory and Use Survey (VIUS) is the most recent survey of vehicle ownership and use by industry. According to the 2002 VIUS, the natural resources and mining sector operated 2.4 million trucks -the second largest number
of trucks used by an industry. The other services industry and the wholesale and retail trade industry operated fewer trucks than the natural resources and mining industry but accumulated more miles (figure 2-9).

The 2012 Commodity Flow Survey (CFS) shows that the mining (excluding oil and gas) industry shipped 2.9 billion tons of raw materials and finished goods domestically, valued at \$99.8 million, and accounted for 859.3 billion tonmiles. Trucks carried 60.0 percent of the tonnage shipped by the mining industry and 44.6 percent of the value but accounted for only 8.3 percent of ton-miles. The mining industry, however, tended to use modes other than truck to ship goods long distances. Rail ton-miles exceeded the ton-miles of all other modes and accounted for 79.0 percent of all ton-miles. The average shipment distance

Figure 2-9 Trucks Used and Truck Miles Accumulated for Business by the Natural Resources and Mining Industry, 2002


NOTE: Totals for trucks in use only.
SOURCE: U.S. Census Bureau, 2002 Economic Census Vehicle Inventory and Use Survey, Table 2a, available at https://www.census.gov/ prod/ec02/ec02tv-us.pdf as of August 2012.
was shorter by truck ( 37 miles per shipment) than by all other modes and longest by air (2,732 miles per shipment) (figure 2-10).

The CFS does not provide shipment characteristics for the natural resources industry.

Figure 2-10 Characteristics for Shipments Made by the Mining (excluding oil and gas) Industry by Mode of Transportation, 2012


SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics, Commodity Flow Survey 2012, available at www.bts. gov as of October 2015

## Chapter 3 Utilities Sector



This chapter provides an overview of the contribution of the utilities sector to the economy and the use of transportation by the sector. The utilities sector consists of establishments providing electric power, natural gas, steam supply, water supply, and sewage removal. Electric power includes generation, transmission, and distribution; natural gas includes distribution; steam supply includes provision and/ or distribution; water supply includes treatment and distribution; and sewage removal includes collection, treatment, and disposal of waste through sewer systems and sewage treatment facilities. ${ }^{1}$

The utilities sector uses less transportation services than all other sectors in absolute dollars, but per dollar of output requires slightly more transportation services than most other sectors. The sector uses more dollars of pipeline transportation than any other mode. The utilities sector employs the largest number of workers as motor vehicle operators.

In 2014 the utilities sector contributed $\$ 280.8$ billion ( 1.6 percent) to the national economy, as measured by gross domestic product (GDP) (figure 3-1). The sector contributed the least to the economy but generates and distributes the energy other sectors need to produce goods and services.

Table 3-1 Overview of the Utilities Sector's Contribution to Gross Domestic Product (GDP) and Use of Transportation

| Utilities | Value | Year <br> (latest year data <br> is available) |
| :--- | ---: | ---: |
| Contribution to GDP | $\$ 280.8$ billion | 2014 |
| Use of transportation | $\$ 14.9$ billion | 2012 |
| Amount of transportation required to produce a dollar of output | 4.1 c | 2012 |
| Number of transportation and material moving workers | 9,990 | 2014 |
| Transportation and material moving workers as percent of sector's work force | 1.8 | 2014 |
| Median annual wage of transportation and material moving workers | $\$ 51,500$ | 2014 |
| Number of trucks used | 679 thousand | $2002^{*}$ |
| Truck miles accumulated | 10,245 million | $2002^{*}$ |

NOTE: Table presents latest data available, as of Feb. 1, 2016.
*Data on number of trucks and truck miles accumulated was last collected in the Vehicle Inventory and Use Survey for 2002.
SOURCE: Data for this table is drawn from figures and tables presented throughout this chapter.

[^4]Figure 3-1 Utilities Sector's Contribution to GDP v. Other Sectors, 2014


SOURCE: U.S. Department of Commerce, Bureau of Economic Analysis, Gross Domestic Product by State, available at http://bea.gov as of November 2015.

The largest amount of activity in the utilities sector occurred in Texas ( $\$ 36.7$ billion), followed by California ( $\$ 26.8$ billion), New York ( $\$ 19.2$ billion), Florida ( $\$ 14.4$ billion), and Ohio ( $\$ 12.6$ billion)—each of which accounted for 4 percent or more of national activity in the utilities sector in 2014 (figure 3-2, table 3-2). The States contributing the most to national activity in utilities are States with large gross state product (GSP) (table 3-2).

Computing the percent of utilities activity as a percent of a GSP, rather than as a share of GDP, also provides useful insights to U.S. production. Texas, California, New York, Florida, and Ohio lead in the production of utilities in 2014. Utilities, however, accounted for a small share ( 2.5 percent or less) of GSP in each of these States in 2014. Utilities accounted for the largest share of GSP in Oklahoma ( 2.9 percent or $\$ 5.4$ billion) (see Appendix A).

The utilities sector was the smallest user of transportation services in 2012 ( $\$ 14.9$ billion). The utilities sector relies heavily on for-hire transportation services-using more for-hire air, rail, truck, and water transportation services (\$2.9 billion) than in-house transportation operations (\$1.0 billion). The sector's use of for-hire air, rail, truck, and water transportation services, however, is smaller than the sector's use of pipeline transportation ( $\$ 6.2$ billion) and transportationrelated support activities ( $\$ 4.8$ billion) (figure 3-3).

The utilities sector used $\$ 14.9$ billion of transportation services in 2012 (figure 3-3). In 2012 the sector used:

- Primarily pipeline transportation (41.8 percent, or $\$ 6,224$ million) (e.g., used to distribute natural gas and move waste through sewer systems) and transportation-related support

Figure 3-2 State Contributions to Utilities Related Gross Domestic Product (GDP) (percent of national GDP related to utilities), 2014


SOURCE: U.S. Department of Commerce, Bureau of Economic Analysis, Gross Domestic Product by State, available at http://bea.gov as of November 2015.

Table 3-2 States Contributing 4.0 Percent or More to National GDP Related to Utilities in 2014

| State | Utilities <br> (Utilities related GDP = \$280.8 billion) |  |  | All products and services (Total National GDP = \$17.2 trillion) |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Utilities related GDP (billions) | Percent of national GDP related to utilities | Rank (1=contributes most to national GDP related to utilities, 51=least) | Dollar contribution to national GDP (billions) | Rank (1=contributes most to national GDP, 51=least) |
| Texas | 36.7 | 13.1 | 1 | 1,641.0 | 2 |
| California | 26.8 | 9.5 | 2 | 2,305.9 | 1 |
| New York | 19.2 | 6.8 | 3 | 1,395.5 | 3 |
| Florida | 14.4 | 5.1 | 4 | 838.9 | 4 |
| Ohio | 12.6 | 4.5 | 5 | 576.1 | 7 |

SOURCE: U.S. Department of Commerce, Bureau of Economic Analysis, Gross Domestic Product by State, available at http://bea.gov as of November 2015.

Figure 3-3 Use of Transportation by the Utilities Sector, 2012 (current dollars, billions)



NOTE: In-house transportation consists of transportation services (air, rail, truck, and water) provided by nontransportation industries for their own use. For-hire transportation consists of the services provided by transportation firms to industries and the public on a fee-basis. Airlines, railroads, transit agencies, common carrier trucking companies, and pipelines are examples of for-hire transportation industries. "Other" for-hire transportation includes: transit and passenger ground transportation (excluding State and local government passenger transit); sightseeing transportation and transportation support; parcel delivery, courier, and messenger services (excluding U.S. Postal Service); warehousing and storage; and other transportation and support activities. The utilities sector did not use a measurable amount of in-house air, rail, or water transportation in 2012.
SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics, Transportation Satellite Accounts, available at http://www.bts.gov as of March 2016. .
activities (29.1 percent, or \$4,327 million) (e.g., used to maintain and repair pipelines). Pipeline transportation and transportationrelated support activities accounted for 70.9 percent ( $\$ 10,551$ million) of the total amount of transportation services used by the utilities sector.

- For-hire air, rail, truck, and water transportation services (used, for instance, to move coal to electric generating plants operating on coal) summing to 16.7 percent ( $\$ 2,484$ million) of the total amount of transportation services used by the sector.
- More in-house truck transportation operations than for-hire truck transportation services. In-house truck transportation
operations comprised 6.9 percent $(\$ 1,027$ million) of the total amount of transportation services used by the sector, while for-hire truck transportation accounted for 2.7 percent (\$361 million).
- No measureable amount of in-house air, rail, or water transportation operations.
- A smaller amount of for-hire transit and ground passenger transportation (e.g., bus transportation purchased for workers) (0.5 percent, or $\$ 72.0$ million) than any other transportation mode (figure 3-4).

The utilities sector used the least amount of transportation services in 2012 but ranked as the fourth most dependent sector on transportation,

Figure 3-4 Utilities Sector's Use of Transportation by Mode, 2012 (current dollars, millions)


Air, rail, and water
transportation
(in-house) = \$0


#### Abstract

NOTE: In-house transportation consists of transportation services (air, rail, truck, and water) provided by nontransportation industries for their own use. For-hire transportation consists of the services provided by transportation firms to industries and the public on a fee-basis. Airlines, railroads, transit agencies, common carrier trucking companies, and pipelines are examples of for-hire transportation industries. Transit and passenger ground transportation excludes State and local government passenger transit. Other transportation includes sightseeing transportation. The utilities sector did not use a measureable amount of in-house air, rail, or water transportation in 2012. SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics, Transportation Satellite Accounts, available at http://www.bts.gov as of March 2016.


requiring slightly more transportation services than the average amount needed to produce one dollar of output. In 2012 the utilities sector required 4.1¢ worth of transportation services to produce one dollar of output, while the most dependent sector (wholesale and retail trade) required 10.2¢ worth of transportation services to produce one dollar of output. The utilities sector relied heavily on for-hire transportation services in 2012, requiring 3.8 \& worth of for-hire transportation services (primarily pipeline and
transportation-related support activities). The sector required a modest amount of in-house operations (0.3द) to produce one dollar of output (figure 3-5).

The overall transportation requirement for the utilities sector (4.1c) is relatively modest compared to other inputs. In 2012 transportation services ranked as the fourth most important input. Natural resources and mining products (e.g., coal, petroleum, etc.) ranked as most important input. The utilities sector required 7.5\$ worth of natural

Figure 3-5 Transportation Required Per Dollar of Output by the Utilities Sector, 2012


NOTE: In-house transportation consists of transportation services (air, rail, truck, and water) provided by nontransportation industries for their own use. For-hire transportation consists of the services provided by transportation firms to industries and the public on a fee-basis. Airlines, railroads, transit agencies, common carrier trucking companies, and pipelines are examples of for-hire transportation industries. "Other" for-hire transportation includes: transit and passenger ground transportation (excluding State and local government); pipeline; sightseeing transportation and transportation support; parcel delivery, courier, and messenger services (excluding U.S. Postal Service); warehousing and storage; and other transportation and support activities. The utilities sector did not use any in-house air, rail, or water transportation in 2012.
SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics, Transportation Satellite Accounts, available at http://www.bts.gov as of March 2016.
resources and mining products to produce one dollar of output (figure 3-6).

In 2014 the utilities sector employed nearly 10 thousand transportation and material moving workers, accounting for 1.8 percent of its entire work force. The sector employed more material moving workers $(6,530)$ than transportation workers $(3,460)^{2}$ (figure 3-7). Transportation workers include motor vehicle operators, ship

[^5]engineers, aircraft pilots and flight engineers, etc. Material moving workers support transportation activities and include occupations such as cleaners of vehicles and ship loaders.

Transportation and material moving workers in the utilities sector earned a median wage of $\$ 51,500$ in 2014, while workers of all occupations in the utilities industry earned a higher median wage $(\$ 68,190)$ (figure 3-8).

The utilities sector employed the largest number of transportation workers as heavy and tractor-

Figure 3-6 Top 5 Most Required Inputs by the Utilities Sector to Produce a Dollar of Output, 2012


Production inputs (top 5 most required)
NOTE: Transportation includes in-house and for-hire.
SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics, Transportation Satellite Accounts, available at http://www.bts.gov as of March 2016.

Figure 3-7 Number of Workers Employed in the Utilities Sector by Occupation, 2014


NOTE: Total for transportation occupations includes supervisors of material moving workers, which could not be separated from supervisors of transportation workers.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, Occupational Employment and Wages, available at http://www.bls.gov/oes as of Nov. 23, 2015.

Figure 3-8 Median Annual Wage and Employment for Most Common Transportation Occupations (top 3) in the Utilities Sector, 2014


NOTE: Top three transportation occupations are the transportation occupations employing the largest number of workers and are selected from detailed occupation group in Bureau of Labor Statistics Occupational Employment and Wages table. Material moving occupations not included in the selection of the top three transportation occupations. The top three transportation occupations in the utilities sector are: heavy and tractor-trailer truck drivers; first-line supervisors of machine and vehicle operators; and light truck or delivery service drivers. First-line supervisors of machine and vehicle operators includes first-line supervisors of material moving occupations.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, Occupational Employment and Wages, available at http://www.bls. gov/oes as of Nov. 23, 2015.
trailer truck drivers ( 1,620 ), followed by firstline supervisors of transportation and material moving machine and vehicle operators (500) and light truck or delivery services drivers (490). Heavy and tractor-trailer truck drivers earned a higher median wage $(\$ 44,560)$ than light truck or delivery services drivers $(\$ 28,290)$ but significantly less than first-line supervisors ( $\$ 67,830$ ). First-line supervisors earned a higher median wage than all transportation and material moving workers but
a slightly smaller median wage than all utilities workers. Heavy and tractor-trailer truck drivers and light truck or delivery services drivers earned less than the sector median wage (figure 3-8).

The 2002 Vehicle Inventory and Use Survey (VIUS) is the most recent survey of vehicle ownership and use by industry. According to the 2002 VIUS, the utilities industry operated, at 0.7 million, fewer trucks than many other industries and accumulated fewer miles ( 10.2 billion) (figure 3-9).

Figure 3-9 Trucks Used and Truck Miles Accumulated for Business by the Utilities Industry, 2002


NOTE: Totals for trucks in use only.
SOURCE: U.S. Census Bureau, 2002 Economic Census Vehicle Inventory and Use Survey, Table 2a, available at https://www.census.gov/prod/ec02/ec02tv-us.pdf as of August 2012

## Chapter 4 Construction



This chapter provides an overview of the contribution of the construction sector to the economy and the use of transportation by the sector. The construction sector consists of establishments engaging in the construction of buildings or engineering projects (e.g., highways and utility systems), the preparation of sites for new construction, or subdivision of land for sale as building sites. ${ }^{1}$

The sector uses less transportation services than all other sectors except the utilities and the natural resources and mining sectors in absolute dollars. However, on the basis of transportation required per dollar of output, the construction sector requires slightly more transportation services than most other sectors. The sector relies heavily on truck transportation services, using more dollars of truck transportation services than all other modes combined, and employing more in motor vehicle occupations than any other transportation occupation.

Table 4-1 Overview of the Construction Sector's Contribution to Gross Domestic Product (GDP) and Use of Transportation

| Construction | Value | Year <br> (latest year data <br> is available) |
| :--- | ---: | :---: |
| Contribution to GDP | $\$ 664.0$ billion | 2014 |
| Use of transportation | $\$ 46.9$ billion | 2012 |
| Amount of transportation required to produce a dollar of output | 4.1 c | 2012 |
| Number of transportation and material moving workers | 199,420 | 2014 |
| Transportation and material moving workers as percent of sector's work force | 3.3 | 2014 |
| Median annual wage of transportation and material moving workers | $\$ 36,840$ | 2014 |
| Number of trucks used | 4,542 thousand | $2002^{*}$ |
| Truck miles accumulated | 75,906 million | $2002^{*}$ |

NOTE: Table presents latest data available, as of Feb. 1, 2016.
*Data on number of trucks and truck miles accumulated was last collected in the Vehicle Inventory and Use Survey for 2002.
SOURCE: Data for this table is drawn from figures and tables presented throughout this chapter.

In 2014 the construction sector contributed $\$ 664.0$ billion ( 3.8 percent) to the national economy, as measured by gross domestic product (GDP) (figure 4-1). The construction sector contributed less to the economy than many sectors but builds the transportation infrastructure needed to move the

[^6]Figure 4-1 Construction Sector's Contribution to GDP, 2014


SOURCE: U.S. Department of Commerce, Bureau of Economic Analysis, Gross Domestic Product by State, available at http://bea.gov as of November 2015.
goods produced by other sectors throughout the economy.

The largest amount of construction activity occurred in Texas ( $\$ 80.8$ billion), followed by California (\$76.6 billion), New York ( $\$ 43.7$ billion), Florida ( $\$ 37.3$ billion), and Illinois ( $\$ 26.4$ billion) - each of which accounted for 4 percent or more of national activity in the construction sector (figure 4-2, table 4-2).

Computing the percent of construction sector activity as a percent of a state gross product (GSP), rather than as a share of GDP, also provides useful insights to U.S. production. Nationally, Texas, California, New York, Florida, and Illinois lead in construction sector activity in 2014. However, construction was not the leading activity in these States and accounted for only a small share (less than 5.0 percent) of GSP. Construction accounted for the largest share of GSP in North Dakota (6.0
percent, or $\$ 3.3$ billion). North Dakota, however, contributed less than 4 percent to national GDP related to construction (see Appendix A).

The construction sector was the third smallest user of transportation services in 2012 ( $\$ 46.9$ billion). The sector relies heavily on air, rail, truck, and water transportation services. Looking at the use of these four transportation services, the construction sector used almost twice as much in-house operations ( $\$ 28.3$ billion) as for-hire services ( $\$ 18.2$ billion) (figure 4-3).

The construction sector used $\$ 46.9$ billion of transportation services in 2012. In 2012 the sector used:

- Almost exclusively truck transportation services (e.g., for hauling materials and equipment to a construction site), which accounted for 88.8 percent ( $\$ 41,632$ million) of

Figure 4-2 State Contributions to Construction Related GDP (percent of national GDP related to construction), 2014


SOURCE: U.S. Department of Commerce, Bureau of Economic Analysis, Gross Domestic Product by State, available at http://bea.gov as of November 2015.

Table 4-2 States Contributing 4.0 Percent or More to National GDP Related to Construction in 2014

| State | Construction (Construction related GDP = $\$ 664.0$ billion) |  |  | All products and services (Total National GDP = \$17.2 trillion) |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Construction related GDP (billions) | Percent of national GDP related to construction | Rank (1=contributes most to national GDP related to construction, 51=least) | Dollar contribution to national GDP (billions) | Rank (1=contributes most to national GDP, 51=least) |
| Texas | 80.8 | 12.2 | 1 | 1,641.0 | 2 |
| California | 76.6 | 11.5 | 2 | 2,305.9 | 1 |
| New York | 43.7 | 6.6 | 3 | 1,395.5 | 3 |
| Florida | 37.3 | 5.6 | 4 | 838.9 | 4 |
| Illinois | 26.4 | 4.0 | 5 | 736.3 | 5 |

SOURCE: U.S. Department of Commerce, Bureau of Economic Analysis, Gross Domestic Product by State, available at http://bea.gov as of November 2015.

Figure 4-3 Use of Transportation by the Construction Sector, 2012 (current dollars, billions)


NOTE: In-house transportation consists of transportation services (air, rail, truck, and water) provided by nontransportation industries for their own use. For-hire transportation consists of the services provided by transportation firms to industries and the public on a fee-basis. Airlines, railroads, transit agencies, common carrier trucking companies, and pipelines are examples of for-hire transportation industries. "Other" for-hire transportation includes: transit and passenger ground transportation (excluding State and local government passenger transit); pipeline; sightseeing transportation and transportation support; parcel delivery, courier, and messenger services (excluding U.S. Postal Service); warehousing and storage; and other transportation and support activities. The construction sector did not use a measurable amount of for-hire warehousing in 2012.

SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics, Transportation Satellite Accounts, available at http://www.bts.gov as of March 2016.
all transportation services used by the sector.

- More in-house truck transportation operations ( $\$ 27,936$ million) than for-hire truck transportation services ( $\$ 13,696$ million), with in-house truck transportation operations accounting for almost two-thirds (59.6 percent) of all transportation services used.
- A modest amount of air, rail, and water transportation services, which collectively accounted for 10.2 percent ( $\$ 4,797$ million) of all the transportation services used by the sector. Almost all of air, rail, and water transportation services used by the sector were for-hire (\$4,457 million). (figure 4-4)

The construction sector required slightly more transportation services in producing output than the average sector, albeit substantially less transportation services than the sector depending the most on transportation services in 2012. In 2012 the construction sector required 4.1¢ worth of transportation services to produce one dollar of output, while the most dependent sector (wholesale and retail trade) required $10.2 \zeta$ worth of transportation services to produce one dollar of output. The construction sector relied more on in-house transportation operations than for-hire transportation services, requiring 2.5 ¢ worth of for-hire transportation services and 1.6¢ worth of in-house transportation operations to produce one dollar of output (figure 4-5).

Figure 4-4 Construction Sector's Use of Transportation by Mode, 2012 (current dollars, millions)


NOTE: In-house transportation consists of transportation services (air, rail, truck, and water) provided by nontransportation industries for their own use. For-hire transportation consists of the services provided by transportation firms to industries and the public on a fee-basis. Airlines, railroads, transit agencies, common carrier trucking companies, and pipelines are examples of for-hire transportation industries. "Other" for-hire transportation includes: transit and passenger ground transportation (excluding State and local government passenger transit); pipeline; sightseeing transportation and transportation support; parcel delivery, courier, and messenger services (excluding U.S. Postal Service); and other transportation and support activities. The construction sector did not use a measurable amount of for-hire warehousing in 2012.

SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics, Transportation Satellite Accounts, available at http://www.bts.gov as of March 2016.

Figure 4-5 Transportation Required Per Dollar of Output by the Construction Sector, 2012


NOTE: In-house transportation consists of transportation services (air, rail, truck, and water) provided by nontransportation industries for their own use. For-hire transportation consists of the services provided by transportation firms to industries and the public on a fee-basis. Airlines, railroads, transit agencies, common carrier trucking companies, and pipelines are examples of for-hire transportation industries. "Other" for-hire transportation includes: Transit and passenger ground transportation (excluding State and local government transit); pipeline; sightseeing transportation and transportation support; parcel delivery, courier, and messenger services (excluding U.S. Postal Service); warehousing and storage; and other transportation and support activities.
SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics, Transportation Satellite Accounts, available at http://www.bts.gov as of March 2016.

The overall transportation requirement for the construction sector (4.1c) is relatively modest compared to other inputs. In 2012 transportation services were the third most important input, while manufactured products (e.g. nails, sheet metal, etc.) were the most important input. The construction sector required $22.2 ¢$ worth of manufactured products to produce one dollar of output. (figure 4-6)

In 2014 the construction sector employed 199,420 transportation and material moving workers, accounting for 3.3 percent of its entire work force
(figure 4-7). Transportation workers include motor vehicle operators, ship engineers, aircraft pilots and flight engineers, etc. Material moving workers support transportation activities and include occupations such as cleaners of vehicles and ship loaders.

Transportation and material moving workers in the construction sector earned a median wage of $\$ 36,840$ in 2014, while workers of all occupations in the construction sector earned a higher median wage ( $\$ 42,340$ ) (figure 4-8).

Figure 4-6 Top 5 Most Required Intermediate Inputs by the Construction Sector to Produce a Dollar of Output, 2012


NOTE: Transportation includes in-house and for-hire.
SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics, Transportation Satellite Accounts, available at http://www.bts.gov as of March 2016.

Figure 4-7 Number of Workers Employed in the Construction Sector by Occupation, 2014

Construction occupations


NOTE: Number of transportation and material moving workers only available as aggregate total.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, Occupational Employment and Wages, available at http://www.bls.gov/oes as of Nov. 23, 2015.

Figure 4-8 Median Annual Wage and Employment for Most Common Transportation Occupations (top 3) in the Construction Sector, 2014

Construction
Median wage for all occupations: $\$ 42,340$
Total employment 6,094,090



#### Abstract

NOTE: Top three transportation occupations are the transportation occupations employing the largest number of workers and are selected from detailed occupation group in Bureau of Labor Statistics Occupational Employment and Wages table. Material moving occupations not included in the selection of the top three transportation occupations. The top three transportation occupations in the construction sector are: heavy and tractor-trailer truck drivers; light truck or delivery services drivers; and first-line supervisors of machine and vehicle operators. First-line supervisors of machine and vehicle operators includes first-line supervisors of material moving occupations.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, Occupational Employment and Wages, available at http://www.bls. gov/oes as of November 23, 2015.


The construction sector employed the largest number of workers as heavy and tractor-trailer truck drivers $(93,060)$, followed by light truck or delivery services drivers $(14,810)$. Workers in these two occupations collectively accounted for 54.1 percent of the sector's entire transportation and material moving workforce. Heavy and tractortrailer truck drivers earned a slightly higher median wage $(\$ 37,330)$ than light truck or delivery services drivers $(\$ 32,300)$ (figure 4-8).

The 2002 Vehicle Inventory and Use Survey (VIUS) is the most recent survey of vehicle ownership and use by industry. According to the 2002 VIUS, the construction industry operated, at 4.5 million, the largest number of trucks and accumulated the most truck miles (figure 4-9).

Figure 4-9 Trucks Used and Truck Miles Accumulated for Business by the Construction Industry, 2002


NOTE: Totals for trucks in use only.
SOURCE: U.S. Census Bureau, 2002 Economic Census Vehicle Inventory and Use Survey, Table 2a, available at https://www.census.gov/prod/ec02/ec02tv-us.pdf as of August 2012.

## Chapter 5 Manufacturing



This chapter provides an overview of the contribution of the manufacturing sector to the economy and the use of transportation by the sector. The manufacturing sector consists of establishments engaging in the mechanical, physical, or chemical transformation of materials, substance, or components into new products. Establishments performing these activities typically are plants, factories, or mills. ${ }^{1}$

In absolute dollars, the sector uses the third largest amount of transportation services. Per dollar of output, the manufacturing sector requires slightly more transportation services than most other sectors. The sector relies heavily on truck transportation services, shipping the most tons and largest value of product by truck, and employing more in motor vehicle occupations than any other transportation occupation. The sector uses slightly more for-hire truck transportation services than in-house truck operations.

Table 5-1 Overview of the Manufacturing Sector's Contribution to Gross Domestic Product (GDP) and Use of Transportation

| Manufacturing | Value | Year <br> (latest year data <br> is available) |
| :--- | ---: | ---: |
| Contribution to GDP | $\$ 2,097.7$ billion | 2014 |
| Use of transportation | $\$ 212.5$ billion | 2012 |
| Amount of transportation required to produce a dollar of output | 3.7 c | 2012 |
| Number of transportation and material moving workers | 967,080 | 2014 |
| Median annual wage of transportation and material moving workers | 29,670 | 2014 |
| Transportation and material moving workers as percent of sector's work force | $8.0 \%$ | 2014 |
| Number of trucks used | 783 thousand | $2002^{*}$ |
| Truck miles accumulated | 15,385 million | $2002^{*}$ |
| Shipments made by manufacturing industry | $\$ 5.7$ trillion | 2012 |
| Value | 4.2 trillion | 2012 |
| Tons | 1.3 trillion | 2012 |
| Ton-miles | 713 | 2012 |
| Average miles per shipment |  | 2012 |

NOTE: Table presents latest data available, as of Feb. 1, 2016.
*Data on number of trucks and truck miles accumulated was last collected in the Vehicle Inventory and Use Survey for 2002. SOURCE: Data for this table is drawn from figures and tables presented throughout this chapter.

[^7]In 2014 the manufacturing sector was the third largest contributor to the national economy next to the financial services sector (the largest contributor) and the government second (the second largest contributor). The manufacturing sector contributed \$2,097.7 billion (12.1 percent) to the national economy, as measured by Gross Domestic Product (GDP) (figure 5-1). The manufacturing sector contributes to the economy by combining raw materials (many produced by other sectors) to make finished products. The manufacturing sector, for example, makes bread from the wheat that the natural resources and mining sector produces.

The upper mid-west (Illinois, Ohio, Indiana, and Michigan), known for manufacturing, contributed significantly to national manufacturing activity in 2014. The largest amount of manufacturing activity, however, occurred in California ( $\$ 255.6$ billion), followed by Texas (\$239.1 billion), Illinois
( $\$ 98.9$ billion), North Carolina ( $\$ 98.6$ billion), Ohio ( $\$ 98.3$ billion), Indiana ( $\$ 94.1$ billion), and Michigan ( $\$ 89.5$ billion) - each of which accounted for four percent or more of national activity in the manufacturing sector (figure 5-2, table 5-2).

Computing the percent of manufacturing sector activity as a percent of a Gross State Product (GSP), rather than as a share of GDP, also provides useful insights to U.S. production. Nationally, California, Texas, and Illinois produced the most manufactured products in 2014. However, manufacturing activity accounted for only a modest share of economic activity ( 15.0 percent or less), as measured by GSP, within California, Texas, and Illinois. In contrast, manufacturing accounted for a relatively large share of GSP in Indiana (29.6 percent), Oregon (26.3 percent), Louisiana (21.3 percent), North Carolina (20.5 percent), and Michigan ( 20.0 percent). (see Appendix A)

Figure 5-1 Manufacturing Sector's Contribution to Gross Domestic Product, 2014


SOURCE: U.S. Department of Commerce, Bureau of Economic Analysis, Gross Domestic Product by State, available at http://bea.gov as of November 2015.

Figure 5-2 State Contributions to Manufacturing Related GDP (percent of national GDP related to manufacturing), 2014


SOURCE: U.S. Department of Commerce, Bureau of Economic Analysis, Gross Domestic Product by State, available at http://bea.gov as of November 2015.

Table 5-2 States Contributing 4.0 Percent or More to National GDP Related to Manufacturing in 2014

| State | Manufacturing (Manufacturing related GDP = \$2,097.7 billion) |  |  | All products and services (Total National GDP = \$17.2 trillion) |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Manufacturing related GDP (billions) | Percent of national GDP related to manufacturing | Rank (1=contributes most to national GDP related to manufacturing, 51=least) | Dollar contribution to national GDP (billions) | Rank (1=contributes most to national GDP, 51=least) |
| California | 255.6 | 12.2 | 1 | 2,305.9 | 1 |
| Texas | 239.1 | 11.4 | 2 | 1,641.0 | 2 |
| Illinois | 98.9 | 4.7 | 3 | 736.3 | 5 |
| North |  |  |  |  |  |
| Carolina | 98.6 | 4.7 | 4 | 481.9 | 9 |
| Ohio | 98.3 | 4.7 | 5 | 576.1 | 7 |
| Indiana | 94.1 | 4.5 | 6 | 318.1 | 16 |
| Michigan | 89.5 | 4.3 | 7 | 448.2 | 13 |

SOURCE: U.S. Department of Commerce, Bureau of Economic Analysis, Gross Domestic Product by State, available at http://bea.gov as of November 2015.

The manufacturing sector was the third largest user of transportation services in 2012 ( $\$ 212.5$ billion). The manufacturing sector relies heavily on for-hire transportation services - using more forhire air, rail, truck, and water transportation services ( $\$ 122.5$ billion) than in-house transportation operations (\$69.7 billion) (figure 5-3).

The manufacturing sector used $\$ 212.5$ billion of transportation services in 2012 (figure 5-3). In 2012 the sector used:

- primarily truck transportation services (e.g., used to haul raw materials like wood and cotton to manufacturing plants), which
accounted for 65.5 percent ( $\$ 139,114$ million) of all transportation services used by the sector.
- slightly more for-hire truck transportation services ( $\$ 73,085$ million) than in-house truck transportation operations ( $\$ 66,029$ million).
- air, rail, and water transportation services (e.g., for hauling coal to steel forgeries) summing to 25.0 percent ( $\$ 53,074$ million) of all the transportation services used by the sector. Nearly all air, rail, and water transportation services used were for-hire ( 23.3 percent, or \$49,427 million).

Figure 5-3 Use of Transportation by the Manufacturing Sector, 2012 (current dollars, billions)



NOTE: In-house transportation consists of transportation services (air, rail, truck, and water) provided by nontransportation industries for their own use. For-hire transportation consists of the services provided by transportation firms to industries and the public on a fee-basis. Airlines, railroads, transit agencies, common carrier trucking companies, and pipelines are examples of for-hire transportation industries. "Other" for-hire transportation includes: transit and passenger ground transportation (excluding State and local government passenger transit); pipeline; sightseeing transportation and transportation support; parcel delivery, courier, and messenger services (excluding U.S. Postal Service); warehousing and storage; and other transportation and support activities.
SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics, Transportation Satellite Accounts, available at http://www.bts.gov as of March 2016.

- other transportation (pipeline transportation, passenger and ground transportation, and transportation support activities such as freight loading) totaling 5.5 percent $(\$ 11,672)$ of all transportation services used by the sector (figure 5-4).

The manufacturing sector required marginally more transportation services in producing output than the average sector, albeit substantially less transportation services than the sector depending the most on transportation in 2012.

In 2012 the manufacturing sector required 3.7¢ worth of transportation services to produce one dollar of output, while the most dependent sector (wholesale and retail trade) required 10.2¢ worth of transportation services to produce one dollar of output. The manufacturing sector relied more on for-hire transportation services than in-house transportation operations, requiring 2.5\$ worth of for-hire transportation services to produce one dollar of output and 1.2¢ worth of in-house transportation operations to produce one dollar of output (figure 5-5).

Figure 5-4 Manufacturing Sector's Use of Transportation by Mode, 2012 (current dollars, millions)


NOTE: In-house transportation consists of transportation services (air, rail, truck, and water) provided by nontransportation industries for their own use. For-hire transportation consists of the services provided by transportation firms to industries and the public on a fee-basis. Airlines, railroads, transit agencies, common carrier trucking companies, and pipelines are examples of for-hire transportation industries. "Other" for-hire transportation includes: transit and passenger ground transportation (excluding State and local government transit); pipeline; sightseeing transportation and transportation support; parcel delivery, courier, and messenger services (excluding U.S. Postal Service); and other transportation and support activities.

SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics, Transportation Satellite Accounts, available at http://www.bts.gov as of March 2016.

Figure 5-5 Transportation Required Per Dollar of Output by the Manufacturing Sector, 2012


NOTE: In-house transportation consists of transportation services (air, rail, truck, and water) provided by nontransportation industries for their own use. For-hire transportation consists of the services provided by transportation firms to industries and the public on a fee-basis. Airlines, railroads, transit agencies, common carrier trucking companies, and pipelines are examples of for-hire transportation industries. "Other" for-hire transportation includes: transit and passenger ground transportation (excluding State and local government transit); pipeline; sightseeing transportation and transportation support; parcel delivery, courier, and messenger services (excluding U.S. Postal Service); warehousing and storage; and other transportation and support activities.

SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics, Transportation Satellite Accounts, available at http://www.bts.gov as of March 2016.

The overall transportation requirement for the manufacturing sector (3.7C) is relatively modest compared to other inputs. In 2012, transportation services were the fifth most important input, while manufactured products (e.g., nails, screws, etc.) were the most important input. The manufacturing sector requiring 33.7¢ worth of manufactured products to produce one dollar of output (figure 5-6).

In 2014 the manufacturing sector employed nearly one million transportation and material
moving workers, accounting for 8.0 percent of its entire work force. The sector employed more material moving workers $(730,530)$ than transportation workers (about 236,550$)^{2}$ (figure 5-7). Transportation workers include motor vehicle operators, ship engineers, aircraft pilots and flight engineers, etc. Material moving workers support transportation activities and include occupations such as cleaners of vehicles and ship loaders.

[^8]Figure 5-6 Top 5 Most Required Inputs by the Manufacturing Sector to Produce a Dollar of Output, 2012


NOTE: Transportation includes in-house and for-hire transportation.
SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics, Transportation Satellite Accounts, available at http://www.bts.gov as of March 2016.

Figure 5-7 Number of Workers Employed in the Manufacturing Sector by Occupation, 2014

## Manufacturing occupations

Total work force $=12,100,740$


NOTE: Total for transportation occupations includes supervisors of material moving workers, which could not be separated from supervisors of transportation workers.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, Occupational Employment and Wages, available at http://www.bls.gov/oes as of Nov. 23, 2015.

Transportation and material moving workers in the manufacturing sector earned a median wage of $\$ 29,670$ in 2014, while workers of all occupations in the manufacturing sector earned a higher median wage $(\$ 38,150)$ (figure 5-8).

The manufacturing sector employed the largest number of transportation workers as heavy and tractor-trailer truck drivers $(126,240)$, followed by light truck or delivery services drivers $(48,340)$ and driver/sales workers $(19,810)$. Heavy and tractortrailer truck drivers earned the highest median wage $(\$ 37,520)$ among these three types of motor
vehicle operators but earned slightly less than the sector median wage. Driver/sales workers earned a median wage of $\$ 32,720$, while light truck or delivery services drivers earned a lower median wage ( $\$ 29,140$ ) (figure 5-8).

The 2002 Vehicle Inventory and Use Survey (VIUS) is the most recent survey of vehicle ownership and use by industry. According to the 2002 VIUS, the manufacturing industry operated, at 0.8 million, fewer trucks than most other industries and accumulated fewer miles (15.4 billion) (figure 5-9).

Figure 5-8 Median Annual Wage and Employment for Most Common Transportation Occupations (top 3) in Manufacturing Sector, 2014

Manufacturing<br>Median wage for all occupations: $\$ 38,150$

Total employment 12,100,740
\(\left.$$
\begin{array}{c}\begin{array}{c}\text { All Transportation and Material } \\
\text { Moving Occupations }\end{array}
$$ <br>
\hline Top 3 transportation occupations <br>
Heavy and Tractor-Trailer Truck Drivers <br>
Light Truck or Delivery Services Drivers <br>

Driver/Sales Workers\end{array}\right] \quad 967,080\)|  |
| :--- | :--- |

NOTE: Top three transportation occupations are the transportation occupations employing the largest number of workers and are selected from detailed occupation group in Bureau of Labor Statistics Occupational Employment and Wages table. The top three transportation occupations in the manufacturing sector are: heavy and tractor-trailer truck drivers; light truck or delivery services drivers; and driver/sales workers.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, Occupational Employment and Wages, available at http://www.bls. gov/oes as of Nov. 23, 2015.

The 2012 Commodity Flow Survey shows that the manufacturing industry shipped 4.2 trillion tons of raw materials and finished goods domestically, valued at \$5.7 trillion, and accounting for 1.3 trillion ton-miles. Trucking was the dominant mode. Trucks carried 67.5 percent of the tonnage shipped by the manufacturing industry, 66.9
percent of the value, and accounted for 54.2 percent of ton-miles. The manufacturing industry, however, tended to use modes other than truck to ship goods long distances. The average shipment distance was shorter by truck ( 399 miles per shipment) than by all other modes, and longest by air (1,276 miles per shipment) (figure 5-10).

Figure 5-9 Trucks Used and Truck Miles Accumulated for Business by the Manufacturing Industry, 2002


NOTE: Totals for trucks in use only.
SOURCE: U.S. Census Bureau, 2002 Economic Census Vehicle Inventory and Use Survey, Table 2a, available at https://www.census.gov/prod/ec02/ec02tv-us.pdf as of August 2012.

Figure 5-10 Characteristics for Shipments Made by the Manufacturing Sector by Mode of Transportation, 2012

| $\square$ Truck | $\square$ Pipeline |
| :--- | :--- |
| $\square$ Rail | Multiple modes |
| $\square$ Water | $\square$ |



Value of shipments (millions of dollars) total value of shipments $=\$ 5.7$ trillion


Ton-miles (millions)
total ton-miles $=1.3$ trillion


Tons (thousands)
total tons shipped $=4.2$ trillion


Average miles per shipment average miles per shipment $=713$

SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics, Commodity Flow Survey 2012, available at www. bts.gov as of October 2015

## Chapter 6 Wholesale and Retail Trade



This chapter provides an overview of the contribution of the wholesale and retail trade sector to the economy and the use of transportation services by the sector.

Wholesale trade consists of establishments who sell merchandise to other businesses. They arrange the purchase or sale of goods for resale (i.e., goods sold to other wholesalers or retailers), capital or durable nonconsumer goods, and raw and intermediate materials and supplies used in production. Establishments performing these activities may be sales branches maintained by manufacturing, refining, or mining enterprises apart from their plants or mines for the purpose of selling their products. They also may be agents or brokers who arrange for the purchase or sale of goods owned by others, often on a commission basis.

Table 6-1 Overview of the Wholesale and Retail Trade Sector's Contribution to Gross Domestic Product (GDP) and Use of Transportation

| Wholesale and retail trade | Value | Year (latest year data is available) |
| :---: | :---: | :---: |
| Contribution to GDP | \$2,042.3 billion | 2014 |
| Use of transportation | \$279.3 billion | 2012 |
| Amount of transportation required to produce a dollar of output | 10.2¢ | 2012 |
| Number of transportation and material moving workers |  |  |
| Wholesale trade | 1,162,780 | 2014 |
| Retail trade | 1,030,690 | 2014 |
| Transportation and material moving workers as percent of sector's work force |  |  |
| Wholesale trade | 20.0 | 2014 |
| Retail trade | 6.7 | 2014 |
| Median annual wage of transportation and material moving workers |  |  |
| Wholesale trade | \$29,900 | 2014 |
| Retail trade | \$22,040 | 2014 |
| Number of trucks used | 2,266 thousand | 2002* |
| Truck miles accumulated | 44,434 million | 2002* |
| Shipments made by wholesale industry |  | 2012 |
| Value | \$6.1 trillion | 2012 |
| Tons | 3.8 trillion | 2012 |
| Ton-miles | 723.2 billion | 2012 |
| Average miles per shipment | 413 | 2012 |

[^9]Establishments within the retail trade sector also sell merchandise, but unlike wholesalers, retailers sell merchandise (in small quantities) to the general public for personal or household consumption. In some cases retailers sell merchandise to businesses and institutions. Retailers may operate stores, designed to attract a large number of walk-in customers. This includes establishments like office supply stores, grocery stores, automotive dealers, and gasoline stations. Other retailers, like home heating oil dealers and home newspaper delivery dealers, sell directly to the public but do not sell their merchandise from a storefront. ${ }^{1}$

[^10]The wholesale and retail trade sector uses more dollars of transportation services and requires more transportation services per dollar of output than any other sector. The sector relies heavily on truck transportation services, with the wholesale trade industry shipping the most tons and largest value of product by truck, and employs a large number of heavy and tractor-trailer truck drivers and light truck/delivery service drivers.

In 2014 the wholesale and retail trade sector combined contributed $\$ 2,042.3$ billion (11.8 percent) to the national economy, as measured by gross domestic product (GDP). The wholesale trade sector contributed $\$ 1,044.5$ billion ( 6.0 percent), while the retail trade sector contributed \$997.8 billion (5.8 percent) (figure 6-1).

Figure 6-1 Wholesale and Retail Trade Sector's Contribution to GDP, 2014


SOURCE: U.S. Department of Commerce, Bureau of Economic Analysis, Gross Domestic Product by State, available at http://bea.gov as of November 2015.

The largest amount of wholesale and retail trade activity combined occurred in California (\$268.0 billion), followed by Texas (\$207.4 billion), New York (\$136.5 billion), Florida (\$123.2 billion), and Illinois (\$92.7 billion) (figure 6-2). These five States produce more of all goods and services than other States (they contribute the most to national GDP) (figure 6-2, table 6-2).

Computing the percent of wholesale and retail trade as a percent of gross state product (GSP), rather than as a share of GDP, also provides useful insights to U.S. production. Nationally, California lead in wholesale and retail trade. However, wholesale and retail trade accounted for a smaller
share of GSP in California (11.6 percent) than in Florida (14.7 percent) and New Jersey (14.3 percent) - the only two States where wholesale and retail trade accounted for more than 14.0 percent of GSP in 2014 (see Appendix A).

The wholesale and retail sector was the largest user of transportation services in 2012 ( $\$ 279.3$ billion). The wholesale and retail trade sector relies heavily on in-house transportation operations. Looking at the use of air, rail, truck, and water transportation services, the sector used more in-house transportation operations (\$157.4 billion) than for-hire services (\$122.0 billion) (figure 6-3).

Figure 6-2 State Contributions to Wholesale and Retail Trade Related GDP (percent of national GDP related to wholesale and retail trade), 2014


SOURCE: U.S. Department of Commerce, Bureau of Economic Analysis, Gross Domestic Product by State, available at http://bea.gov as of November 2015.

Table 6-2 States Contributing 4.0 Percent or More to National GDP Related to Wholesale and Retail Trade in 2014

| State | Wholesale and retail trade (Wholesale and retail trade related GDP = \$2,042.2 billion) |  |  | All products and services <br> (Total National GDP = \$17.2 trillion) |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Wholesale and retail trade related GDP (billions) | Percent of national GDP related to wholesale and retail trade | Rank (1=contributes most to national GDP related to wholesale and retail trade, 51=least) | Dollar contribution to national GDP (billions) | Rank (1=contributes most to national GDP, 51=least) |
| California | 268.0 | 13.1 | 1 | 2,305.9 | 1 |
| Texas | 207.4 | 10.2 | 2 | 1,641.0 | 2 |
| New York | 136.5 | 6.7 | 3 | 1,395.5 | 3 |
| Florida | 123.2 | 6.0 | 4 | 838.9 | 4 |
| Illinois | 92.7 | 4.5 | 5 | 736.3 | 5 |

SOURCE: U.S. Department of Commerce, Bureau of Economic Analysis, Gross Domestic Product by State, available at http://bea.gov as of November 2015.

Figure 6-3 Use of Transportation by the Wholesale and Retail Trade Sector, 2012 (current dollars, billions)


NOTE: In-house transportation consists of transportation services (air, rail, truck, and water) provided by nontransportation industries for their own use. For-hire transportation consists of the services provided by transportation firms to industries and the public on a fee-basis. Airlines, railroads, transit agencies, common carrier trucking companies, and pipelines are examples of for-hire transportation industries. "Other" for-hire transportation includes: tansit and passenger ground transportation (excluding State and local government); pipeline; sightseeing transportation and transportation support; parcel delivery, courier, and messenger services (excluding U.S. Postal Service); warehousing and storage; and other transportation and support activities. The wholesale and retail trade sector did not use a measureable amount of in-house air, rail, or water transportation in 2012.

SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics, Transportation Satellite Accounts, available at http://www.bts.gov as of March 2016.

The wholesale and retail trade sector used \$279.3 • No measureable amount of in-house air, rail, billion of transportation services in 2012 (figure 6-3). In 2012 the wholesale and retail trade sector used:

- Primarily truck transportation services (e.g, used to carry goods, such as clothing and food, to stores), which accounted for 62.6 percent ( $\$ 174,882$ million) of all transportation services used by the sector.
- More in-house truck transportation operations ( $\$ 157,369$ million) than for-hire or water transportation operations.
- A smaller amount of for-hire pipeline transportation (\$56 million) and transit and ground passenger transportation services (\$592 million) (e.g., bus transportation purchased for workers) than any other transportation mode (figure 6-4).

The wholesale and retail trade sector depended on transportation more than any other sector in 2012. The wholesale and retail trade sector truck transportation services (\$17,513 million). In-house truck transportation operations accounted for nearly twothirds ( 56.3 percent) of all transportation services used by the sector.

- A significant amount of warehousing and other transportation services (parcel delivery, courier, and messenger services excluding U.S. Postal Service, transportation support activities such as freight loading, etc.). Warehousing accounted for 18.5 percent ( $\$ 51,697$ million) of the transportation services used by the wholesale and retail trade sector, and other services accounted for 16.4 percent ( $\$ 45,748$ million).
- A small amount of for-hire air, rail, and water transportation services ( $\$ 6,363$ million), which collectively accounted for 2.3 percent of the transportation services used by the sector.

Figure 6-4 Wholesale and Retail Trade Sector's Use of Transportation by Mode, 2012 (current dollars, millions)


> Air, rail, and water transportation (in-house) $=\$ 0$

NOTE: In-house transportation consists of transportation services (air, rail, truck, and water) provided by nontransportation industries for their own use. For-hire transportation consists of the services provided by transportation firms to industries and the public on a fee-basis. Airlines, railroads, transit agencies, common carrier trucking companies, and pipelines are examples of for-hire transportation industries. Transit and passenger ground transportation excludes State and local government passenger transit. Other transportation includes sightseeing transportation. The wholesale and retail trade sector did not use a measureable amount of in-house air, rail, or water transportation in 2012.
SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics, Transportation Satellite Accounts, available at http://www.bts. gov as of March 2016.
required $10.2 \Varangle$ worth of transportation services to produce a dollar of output in 2012. The sector required more on in-house transportation operations (5.8¢ to produce a dollar of output) than for-hire transportation services (4.5c to produce a dollar of output) ${ }^{2}$. The wholesale and retail trade sector required more in-house transportation operations than all other sectors in 2012 (figure 6-5).

Transportation services were the second most important input for the wholesale and retail
${ }^{2}$ In-house and for-hire transportation requirements add to more than total transportation requirement due to rounding.
trade sector to produce one dollar of output. The wholesale and retail trade sector required slightly more professional and business services ( $11.4 \zeta$ to produce one dollar of output), such as advertising services, payroll services, etc., than transportation services to produce one dollar of output (figure 6-6).

In 2014 the wholesale trade industry employed nearly 1.2 million transportation and material moving workers, accounting for 20.1 percent of its entire work force. The retail trade industry employed slightly more than 1.0 million transportation and material moving workers, accounting for 6.7 percent of its entire work

Figure 6-5 Transportation Required Per Dollar of Output by the Wholesale and Retail Trade Sector, 2012


NOTE: In-house transportation consists of transportation services (air, rail, truck, and water) provided by nontransportation industries for their own use. For-hire transportation consists of the services provided by transportation firms to industries and the public on a fee-basis. Airlines, railroads, transit agencies, common carrier trucking companies, and pipelines are examples of for-hire transportation industries. "Other" for-hire transportation includes: transit and passenger ground transportation (excluding State and local government passenger transit); pipeline; sightseeing transportation and transportation support; parcel delivery, courier, and messenger services (excluding U.S. Postal Service); warehousing and storage; and Other transportation and support activities. The wholesale and retail trade sector did not use an in-house air, rail, or water transportation in 2012.

SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics, Transportation Satellite Accounts, available at http://www.bts.gov as of March 2016.

Figure 6-6 Top 5 Most Required Inputs by the Wholesale and Retail Trade Sector to Produce a Dollar of Output, 2012


SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics, Transportation Satellite Accounts, available at http://www.bts.gov as of March 2016.
force. Both industries employed more material moving workers (the wholesale trade industry employed 594,520 material moving workers and the retail trade industry employed 632,400) than transportation workers (the wholesale trade industry employed 568,260 transportation workers and the retail trade industry employed 398,290) ${ }^{3}$ (figure 6-7). Transportation workers include motor vehicle operators, ship engineers, aircraft pilots and flight engineers, etc. Material moving workers support transportation activities and include occupations such as cleaners of vehicles and ship loaders.

Transportation and material moving workers in the wholesale trade industry earned a median wage of $\$ 29,900$ in 2014, while workers of all occupations in the wholesale trade industry

[^11]earned a higher median wage ( $\$ 40,120$ ). Transportation and material moving workers in the retail trade industry earned a median wage of $\$ 22,040$ in 2014, while workers of all occupations in the retail trade industry earned a marginally higher median wage ( $\$ 23,270$ ). (figure 6-8)

The wholesale trade industry employed the largest number of transportation workers as heavy and tractor-trailer truck drivers $(203,860)$ followed by light truck or delivery drivers and driver/sales workers. Heavy and tractor-trailer truck drivers earned a higher median wage $(\$ 38,950)$ than light truck or delivery service drivers $(\$ 28,550)$ and driver/sales workers $(\$ 29,590)$ employed in the wholesale industry. Heavy tractor-trailer truck drivers, drivers/sales workers, and light truck or delivery service operators all earned less than the industry median wage (figure 6-8).

Figure 6-7 Number of Workers Employed in the Wholesale and Retail Trade Sector by Occupation, 2014


NOTE: Total for transportation occupations includes supervisors of material moving workers, which could not be separated from supervisors of transportation workers.
SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, Occupational Employment and Wages, available at http://www.bls. gov/oes as of Nov. 23, 2015.

The retail trade industry employed the largest number of transportation workers as light truck/ delivery services drivers $(176,880)$ followed by driver/sales workers $(58,460)$ and automotive and watercraft service attendants $(54,260)$. The median wage for these three occupations is nearly the same. Light truck/delivery services drivers employed in the retail trade industry earned a median wage of $\$ 23,420$, driver/sales workers earned a median wage of $\$ 25,340$, and automotive and watercraft service attendants earned a median wage of \$20,640 (figure 6-8).

The 2002 Vehicle Inventory and Use Survey (VIUS) is the most recent survey of vehicle ownership and use by industry. According to the 2002 VIUS, the wholesale and retail trade industry operated the third largest number of trucks ( 2.3 million) and accumulated the second largest number of
miles (44.4 billion) (figure 6-9).
The 2012 Commodity Flow Survey shows that the wholesale trade industry shipped 3.8 trillion tons of raw materials and finished goods domestically, valued at $\$ 6.1$ trillion, and accounting for 723.2 billion ton-miles. Trucking was the dominant mode. Trucks carried 81.8 percent of the tonnage shipped by the wholesale industry, 78.2 percent of the value, and accounted for 55.4 percent of ton-miles. The wholesale trade industry, however, tended to use modes other than truck to ship goods long distances. The average shipment distance was shorter by truck ( 176 miles per shipment) than by all other modes and longest by air ( 1,163 miles per shipment) (figure 6-10).

Commodity flow data are not available for the retail trade industry.

Figure 6-8 Median Annual Wage and Employment for Most Common Transportation Occupations (top 3) in the Wholesale and Retail Trade Sector, 2014



NOTE: Top three transportation occupations are the transportation occupations employing the largest number of workers and are selected from detailed occupation group in Bureau of Labor Statistics Occupational Employment and Wages table. Material moving occupations not included in the selection of the top three transportation occupations. The top three transportation occupations in the wholesale trade sector are: heavy and tractor-trailer truck drivers; light truck or delivery services drivers; and driver/ sales workers. The top three transportation occupations in the retail trade sector are light truck or delivery services drivers; driver/ sales workers; and automotive and watercraft service attendants.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, Occupational Employment and Wages, available at http://www.bls. gov/oes as of Nov. 23, 2015.

Figure 6-9 Trucks Used and Truck Miles Accumulated for Business by the Wholesale and Retail Trade Industry, 2002


NOTE: Totals for trucks in use only.
SOURCE: U.S. Census Bureau, 2002 Economic Census Vehicle Inventory and Use Survey, Table 2a, available at https://www.census.gov/prod/ec02/ec02tv-us.pdf as of August 2012

Figure 6-10 Characteristics for Shipments Made by the Wholesale Industry by Mode of Transportation, 2012


Tons (thousands) total tons shipped $=3.8$ trillion


Ton-miles (millions)
total ton-miles $=723.2$ billion


Average miles per shipment average miles per shipment $=413$

NOTE: Pipeline data not available
SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics, Commodity Flow Survey 2012, available at www. bts.gov as of October 2015.

## Chapter 7 Service Sectors



The following provides an overview of the contribution of the service sectors to the economy and the use of transportation by the sectors.

There are six service sectors: (1) information; (2) financial services; (3) professional and business services; (4) education and health services; (5) leisure and hospitality; and (6) other services.

The information sector consists of establishments engaging in the production and distribution of information and cultural products and the processing of data.

The financial services sector consists of services related to finance and insurance activities as well as real estate, rental, and leasing. With regards to finance and insurance, the sector includes establishments engaging in financial transactions (transactions involving the creation, liquidation, or change in ownership of financial assets) and/or facilitating financial transactions. With regards to real estate, rental, and leasing, the sector includes establishments engaging in the rental or leasing of tangible (e.g., real estate, equipment, etc.) or intangible (e.g., patents) assets and establishments providing related services.

The professional and business services sector consists of professional, scientific, and technical services; management of companies and enterprises; and administrative and support and waste management and remediation services. It includes logistics consulting services used in moving goods from point of origin to point of consumption.

The education and health services sector consists of establishments that provide instruction and training (e.g., schools, universities, training centers, etc.) and establishments that provide health care and social assistance for individuals.

The leisure and hospitality sector consists of establishments providing art, entertainment, and recreation services as well as establishments providing accommodation and food services.

Other services consists of establishments providing services not captured elsewhere, such as equipment and machinery repair, religious activities, grant making, advocacy, personal care services, etc. ${ }^{1}$

The service sectors collectively use the second largest dollar amount of transportation services. However, per dollar of output, each service sector requires less transportation than most other sectors. The service sectors collectively rely heavily on truck transportation, primarily in-house truck transportation, and employ a large number in a variety of transportation occupations such as bus drivers, light truck/delivery services drivers, commercial pilots, parking lot attendants, etc.

[^12]Table 7-1 Overview of the Service Sectors' Contribution to Gross Domestic Product (GDP) and Use of Transportation
$\left.\begin{array}{lrc} & & \begin{array}{c}\text { Year } \\ \text { (latest year } \\ \text { data is }\end{array} \\ \text { available) }\end{array}\right]$

NOTE: Table presents latest data available, as of Feb. 1, 2016.
*Data on number of trucks and truck miles accumulated was last collected in the Vehicle Inventory and Use Survey for 2002.
SOURCE: Data for this table is drawn from figures and tables presented throughout this chapter.

Figure 7-1 Service Sectors' Contribution to Gross Domestic Product, 2014


SOURCE: U.S. Department of Commerce, Bureau of Economic Analysis, Gross Domestic Product by State, available at http://bea.gov as of November 2015.

The contribution of the service sectors to the national economy has grown. In 1997 the service sector contributed 46.3 percent, 49.8 percent in 2007, and 50.8 percent in 2014. In 2014 the service sectors collectively contributed $\$ 8,813.8$ billion ( 50.8 percent) to the national economy, as measured by Gross Domestic Product (GDP). The financial services sector contributed more than all other service sectors.

The largest amount of service sector activity occurred in California ( $\$ 1,278.1$ billion), followed by New York ( $\$ 935.7$ billion), Texas ( $\$ 626.6$ billion), Florida (\$482.6 billion), Illinois (\$394.7 billion), and Pennsylvania ( $\$ 360.2$ billion) - each of which accounted for 4 percent or more of national activity in the services sectors (figure 7-2, table 7-2).

California, New York, Texas, Florida, Illinois, and Pennsylvania contributed the most to national economy related to services and the most to
national activity overall (they also have the largest gross state product (GSP)). Texas contributed more to the national economy than New York in 2014, but New York contributed more in terms of service sector activity to the national economy due to significantly higher activity in information, financial services, and education and health services (Appendix A).

Computing the percent of service sector activity as a percent of GSP, rather than as a share of GDP, also provides useful insights to U.S. production. Nationally, California lead in service sector activity in 2014. However, service sector activity accounted for a smaller share of GSP in California ( 55.4 percent) than in Delaware ( 68.1 percent, or $\$ 43.2$ billion) and New York ( 67.1 percent, or $\$ 935.7$ billion) - the two States where service sector activity accounted for more than twothirds of GSP in 2014 (see Appendix A).

Figure 7-2 State Contributions to Service Related GDP (percent of national GDP related to service sector activity), 2014


SOURCE: U.S. Department of Commerce, Bureau of Economic Analysis, Gross Domestic Product by State, available at http://bea.gov as of November 2015.

Table 7-2 States Contributing 4.0 Percent or More to National GDP Related to Services in 2014

| State | All service sectors <br> (Service related GDP = \$8,813.8 billion) |  |  | All products and services (Total national GDP = \$17.2 trillion) |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Service related GDP (billions) | Percent of national GDP related to services | Rank (1=contributes most to national GPD related to services, 51=least) | Dollar contribution to national GDP (billions) | Rank (1=contributes most to national GDP, 51=least) |
| California | 1,278.1 | 14.5 | 1 | 2,305.9 | 1 |
| New York | 935.7 | 10.6 | 2 | 1,395.5 | 3 |
| Texas | 626.6 | 7.1 | 3 | 1,641.0 | 2 |
| Florida | 482.6 | 5.5 | 4 | 838.9 | 4 |
| Illinois | 394.7 | 4.5 | 5 | 736.3 | 5 |
| Pennsylvania | 360.2 | 4.1 | 6 | 658.3 | 6 |

SOURCE: U.S. Department of Commerce, Bureau of Economic Analysis, Gross Domestic Product by State, available at http://bea.gov as of November 2015.

The service sectors combined were the second largest user of transportation services in 2012 ( $\$ 237.9$ billion). Looking at the use of air, rail, truck, and water transportation services, the combined service sectors used more in-house operations (\$106.4 billion) than for-hire air, rail, truck, and water services (\$65.8 billion) (figure 7-3).

The service sectors collectively used $\$ 237.9$ billion of transportation services in 2012 (figure 7-3). In 2012 the service sectors collectively used:

- Primarily truck transportation services (e.g., for transporting linens and other products to hotels), which accounted for 51.7 percent of all transportation services used by the sector.
- Roughly four times more in-house truck operations ( $\$ 99,844$ million) than for-hire
truck transportation services (\$23,093 million). In-house truck transportation operations accounted for nearly half (42.0 percent) of all transportation services used by the service sectors.
- A relatively large amount of other transportation and support activities (sightseeing, parcel delivery, courier, and messenger services excluding U.S. Postal Service, transportation support activities such as freight loading, etc.). Other transportation and support services (e.g., sightseeing by bus or boat and vehicle cleaning services) accounted for 16.3 percent ( $\$ 38,885$ million) of the transportation services used by the service sectors.

Figure 7-3 Use of Transportation by the Service Sectors, 2012 (current dollars, billions)
Use of Transportation by All Service Sectors



NOTE: In-house transportation consists of transportation services (air, rail, truck, and water) provided by nontransportation industries for their own use. For-hire transportation consists of the services provided by transportation firms to industries and the public on a fee-basis. Airlines, railroads, transit agencies, common carrier trucking companies, and pipelines are examples of for-hire transportation industries. "Other" for-hire transportation includes: transit and passenger ground transportation (excluding State and local government passenger transit); pipeline; sightseeing transportation and transportation support; parcel delivery, courier, and messenger services (excluding U.S. Postal Service); warehousing and storage; and other transportation and support activities.

SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics, Transportation Satellite Accounts, available at http://www.bts.gov as of March 2016.

- A modest amount of for-hire transit and ground passenger transportation (e.g., bus transportation purchased for workers) totaling 7.0 percent ( $\$ 16,696$ million) of the transportation services used by the service sectors.
- Warehousing (e.g., storage for medical records, etc.) summing to 4.1 percent $(\$ 9,851)$ of all transportation services used by the service sectors (figure 7-4).

While the service sectors collectively were the second largest user of transportation services,
they individually did not depend as heavily on transportation as other sectors in 2014. The professional and business service sector and the leisure and hospitality sector required the most transportation services to produce one dollar of output (each requiring 2.8 C ) among services sectors but much less than the wholesale and retail trade, which required the most transportation services (10.2¢) to produce one dollar of output.

Among service sectors, the other services sector (e.g., grant-making, dry cleaning, machinery repair, etc.) required the second largest amount of transportation services to produce one dollar of output (2.7¢) in 2012 followed by information (1.7¢), education and health services (1.5¢), and the financial services sector (0.8¢) (figure 7-5).

All of the service sectors relied less on transportation services than other commodities in producing output in 2014. Each service sector required 2.8 C worth of transportation services or less to produce one dollar of output (figure $7-5$ ). The professional and business service sector and the leisure and hospitality service sector required the most transportation services (2.8¢) to produce one dollar of output among the service sectors but required substantially more of other commodities. For example, professional and business services (e.g., payroll services for those working in the sector) were the most important input to the professional and business services

Figure 7-5 Transportation Required Per Dollar of Output by the Service Sectors, 2012


NOTE: In-house transportation consists of transportation services (air, rail, truck, and water) provided by nontransportation industries for their own use. For-hire transportation consists of the services provided by transportation firms to industries and the public on a fee-basis. Airlines, railroads, transit agencies, common carrier trucking companies, and pipelines are examples of for-hire transportation industries. "Other" for-hire transportation includes: transit and passenger ground transportation (excluding State and local government passenger transit); pipeline; sightseeing transportation and transportation support; parcel delivery, courier, and messenger services (excluding U.S. Postal Service); warehousing and storage; and other transportation and support activities.
SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics, Transportation Satellite Accounts, available at http://www.bts.gov as of March 2016.
sector, with the sector requiring 15.9 worth to produce one dollar of output (figure 7-6).

Among the service sectors, the professional and business services sector employed the largest number in transportation and material moving occupations (nearly 1.2 million), accounting for 6.1 percent of its work force in 2014. The education and health services sector employed the second largest in transportation and material moving occupations $(389,990)$ in 2014 , followed by the other services sector $(370,270)$, the leisure and hospitality sector ( 277,310 ), the financial services sector $(131,400)$, and the information sector
$(44,970)$ (figure 7-7). Transportation workers include motor vehicle operators, ship engineers, aircraft pilots and flight engineers, etc. Material moving workers support transportation activities and include occupations such as cleaners of vehicles and ship loaders.

Transportation and material moving workers in the all service sectors earned a lower median than workers of all occupations in the same service sector except in the arts, entertainment, and recreation sector in 2014. In the arts, entertainment, and recreation sector, transportation and material moving workers

Figure 7-6 Top 5 Most Required Inputs by Service Sectors, 2012




NOTE: Transportation includes in-house and for-hire.
SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics, Transportation Satellite Accounts, available at http:// www.bts.gov as of March 2016.

Figure 7-7 Number of Workers Employed in the Service Sectors by Occupation, 2014 Natural resources and mining sector occupations


SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, Occupational Employment and Wages, available at http://www.bls. gov/oes as of Nov. 23, 2015.
earned a median wage of $\$ 24,960$, while workers of all occupations in the arts, entertainment, and recreation industry earned a lower median wage $(\$ 24,300)$ (figure 7-8).

Each service sector contains several industries.
Each industry employed different types of transportation workers. Most industries employed the largest number of transportation workers as motor vehicle operators, ranging from heavy and tractor-trailer truck drivers to taxi drivers and chauffeurs. In contrast, the finance and insurance industry employed the
largest number of transportation workers as commercial pilots, who earned a significantly higher median wage $(\$ 91,140)$ than motor vehicle operators. Of the motor vehicle workers, driver/ sales workers earned the lowest median wage. Across industries, driver/sales workers earned the lowest median wage in the accommodation and food services industry ( $\$ 18,610$ ). The arts, entertainment, and recreation industry as well as the other services industry employed the largest number of transportation workers as parking lot attendants, who earned a relatively low median wage (roughly $\$ 19,000$ ) (figure 7-8).

Figure 7-8 Median Annual Wage and Employment for Most Common Transportation Occupations (top 3) in Services Sectors, 2014

Information
Median wage for all occupations: $\$ 55,770$
Total employment 2,735,590


Finance and Insurance
Median wage for all occupations: $\$ 47,550$
Total employment 5,618,720

| All Transportation and Material Moving Occupations | 2,260 | \$33,340 |
| :---: | :---: | :---: |
| Top 3 transportation occupations |  |  |
| Commercial Pilots | 260 | \$91,140 |
| Light Truck or Delivery Services Drivers | 190 | \$29,440 |
| Heavy and Tractor-Trailer Truck Drivers | 110 | \$39,480 |
|  | $\square$ Number employed ■ A | I median wage |

Figure 7-8 continued

| All Transportation and Material Moving Occupations | Real Estate and Rental and Leasing Median wage for all occupations: $\mathbf{\$ 3 3 , 8 7 0}$ Total employment 2,017,970 |  |  |
| :---: | :---: | :---: | :---: |
|  | 129,140 |  | \$25,960 |
| Top 3 transportation occupations |  |  |  |
| Light Truck or Delivery Services Drivers |  | 25,290 | \$27,170 |
| Heavy and Tractor-Trailer Truck Drivers |  | 16,490 | \$39,490 |
| Taxi Drivers and Chauffeurs |  | 9,310 | \$20,890 |

Professional, Scientific, and Technical Services
Median wage for all occupations: $\$ 61,250$
Total employment 8,231,540

| All Transportation and Material <br> Moving Occupations |  |
| :---: | :---: |
| Top 3 transportation occupations |  |
| Light Truck or Delivery Services Drivers |  |
| Heavy and Tractor-Trailer Truck Drivers |  |
| Commercial Pilots |  |
|  | 62,800 |

Figure 7-8 continued
Management of Companies and Enterprises
Industry median wage for all occupations: $\mathbf{\$ 6 2 , 2 1 0}$
Total employment 2,206,620

| All Transportation and Material <br> Moving Occupations |  |
| :---: | :---: |
| Top 3 transportation occupations |  |
| Heavy and Tractor-Trailer Truck Drivers |  |
| $\left.\begin{array}{l}\text { Light Truck or Delivery Services Drivers } \\ \text { First-Line Supervisors of Machine } \\ \text { and Vehicle Operators }\end{array}\right]$ | 52,370 |



Figure 7-8 continued

| All Transportation and Material Moving Occupations | Educational Services <br> Median wage for all occupations: $\$ 44,740$ Total employment 12,758,610 |  |  |
| :---: | :---: | :---: | :---: |
|  | 259,980 |  | \$27,850 |
| Top 3 transportation occupations | 219,530 |  |  |
| Bus Drivers, School or Special Client |  | 5,550 | \$27,350 |
| First-Line Supervisors of Machine and Vehicle Operators |  |  | \$50,050 |
| Commercial Pilots |  | 4,890 | \$66,760 |
|  | $\square$ Number employed |  | l median wage |

Health Care and Social Assistance Median wage for all occupations: $\$ 36,160$

Total employment 18,341,690


Figure 7-8 continued

| All Transportation and Material Moving Occupations | Arts, Entertainment, and Recreation Median wage for all occupations: $\$ 24,300$ Total employment 2,198,590 |  |
| :---: | :---: | :---: |
|  | 52,050 | \$24,960 |
| Top 3 transportation occupations |  |  |
| Parking Lot Attendants | 10,410 | \$19,380 |
| Bus Drivers, Transit and Intercity | 2,490 | \$26,810 |
| Automotive and Watercraft Service Attendants | 1,730 | \$19,690 |
|  | $\square$ Number employed ■ A | l median wage |


| All Transportation and Material Moving Occupations | Accommodation and Food Services Median wage for all occupations: \$19,330 Total employment 12,548,660 |  |  |
| :---: | :---: | :---: | :---: |
|  | 225,260 |  | \$18,940 |
| Top 3 transportation occupations |  |  |  |
| Driver/Sales Workers | 158,390 | 31,640 | \$18,610 |
| Light Truck or Delivery Services Drivers |  |  | \$19,680 |
| Parking Lot Attendants |  | 10,360 | \$19,790 |



NOTE: Median wage is for all occupations within each industry (transportation and non-transportation occupations). Top three transportation occupations are the transportation occupations employing the largest number of workers and are selected from detailed occupation group in Bureau of Labor Statistics Occupational Employment and Wages table.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, Occupational Employment and Wages, available at http://www.bls. gov/oes as of Nov. 23, 2015.

The 2002 Vehicle Inventory and Use Survey (VIUS) is the most recent survey of vehicle ownership and use by industry. According to the 2002 VIUS, the service industries collectively operated, at
3.7 million, the second largest number of trucks next to the construction industry. The service industries also collectively accumulated the second largest number of truck miles ( 59.7 billion).

Figure 7-9 Trucks Used and Truck Miles Accumulated for Business by the Service Industries, 2002


NOTE: Totals for trucks in use only.
SOURCE: U.S. Census Bureau, 2002 Economic Census Vehicle Inventory and Use Survey, Table 2a, available at https://www.census.gov/prod/ec02/ec02tv-us.pdf as of August 2012

## Chapter 8 Government



This chapter provides an overview of the contribution of the government sector to the economy and the use of transportation by the sector.

The government sector includes goods and services provided by all Federal, State, and local government agencies. The government sector includes Federal Government services provided by agencies such as the Departments of Transportation and Defense and State and local government services, such as welfare services. The government sector also includes Federal, State, and local government enterprises. Government enterprises are government agencies that cover a substantial portion of their operating costs by selling goods and services to the public. The Federal Housing Administration and the Southeastern Power Administration are examples of Federal enterprises. The Alaska Railroad is an example of a State and local government enterprise.

In absolute dollars, the government sector uses the fourth largest amount of transportation services, but per dollar of output requires the second largest amount of transportation. The sector relies heavily on air, rail, and water transportation services but employed the largest number of transportation workers as bus drivers (see table 8-1).

Table 8-1 Overview of the Government Sector's Contribution to Gross Domestic Product (GDP) and Use of Transportation

| Government | Value | Year <br> (latest year data <br> is available) |
| :--- | ---: | :---: |
| Contribution to GDP | $\$ 2,274.6$ billion | 2014 |
| Use of transportation | $\$ 145.9$ billion | 2012 |
| Amount of transportation required to produce a dollar of output | $4.5 ¢$ | 2012 |
| Number of transportation and material moving workers | 373,280 | 2014 |
| Transportation and material moving workers as percent of sector's work force | 3.9 | 2014 |
| Median annual wage of transportation and material moving workers | $\$ 41,960$ | 2014 |

NOTE: Table presents latest data available, as of Feb. 1, 2016.
SOURCE: Data for this table is drawn from figures and tables presented throughout this chapter.

In 2014 the government sector contributed $\$ 2,274.6$ billion (13.1 percent) to the national economy, as measured by gross domestic product (GDP) (figure 8-1).

The largest amount of government activity occurred in California (\$287.5 billion), followed by Texas ( $\$ 161.5$ billion), New York ( $\$ 160.8$ billion), Florida ( $\$ 105.4$ billion), and Virginia ( $\$ 87.0$ billion) — each of which accounted for 4 percent or more of national activity in the government sector (figure 8-2, table 8-2). With the exception of Virginia, the States contributing the most to national activity in government are States with the largest gross state product (GSP) (table 8-2).

Computing the percent of government sector activity as a percent of GSP, rather than as a share of GDP, also provides useful insights to U.S.
production. Nationally, California, Texas, New York, Florida, and Virginia lead in government sector activity in 2014. The government sector, however, accounted for a smaller share of GSP in California ( 12.5 percent), Texas ( 9.8 percent), New York (11.5 percent), Florida (12.6 percent), and Virginia ( 18.8 percent) than in the District of Columbia (DC). In 2014 government activity accounted for 35.0 percent of GSP in Washington, DC ( $\$ 40.8$ million) (see Appendix A).

The government sector was the fourth largest user of transportation services in 2012 ( $\$ 145.9$ billion). Looking at the use of air, rail, truck and water transportation services, the government sector used roughly two times more inhouse operations ( $\$ 85.5$ billion) than for-hire transportation services (\$40.0 billion) (figure 8-3).

Figure 8-1 Government Sector's Contribution to Gross Domestic Product, 2014


SOURCE: U.S. Department of Commerce, Bureau of Economic Analysis, Gross Domestic Product by State, available at http://bea.gov as of November 2015.

Figure 8-2 State Contributions to Government Related GDP (percent of national GDP related to government), 2014


NOTE: Data not available for Delaware, District of Columbia, or Rhode Island.
SOURCE: U.S. Department of Commerce, Bureau of Economic Analysis, Gross Domestic Product by State, available at http://bea.gov as of November 2015.

Table 8-2 States Contributed 4.0 Percent or More to National GDP Related to Government Activity in 2014

Government All products and services

| Government <br> (Government related GDP = \$2,159.2) |  |  | All products and services (Total National GDP = \$17.2 trillion) |  |
| :---: | :---: | :---: | :---: | :---: |
| Dollar contribution of government related GDP (billions) | Percent of national GDP related to government activity | Rank (1=contributes most to national GDP related to government activity, 51=least) | Dollar contribution to national GDP (billions) | Rank (1=contributes most to national GDP, 51=least) |
| 287.5 | 13.3 | 1 | 2,305.9 | 1 |
| 161.5 | 7.5 | 2 | 1,641.0 | 2 |
| 160.8 | 7.4 | 3 | 1,395.5 | 3 |
| 105.4 | 4.9 | 4 | 838.9 | 4 |
| 87.0 | 4.0 | 5 | 462,861 | 11 |

SOURCE: U.S. Department of Commerce, Bureau of Economic Analysis, Gross Domestic Product by State, available at http://bea.gov as of November 2015.

Figure 8-3 Use of Transportation by the Government Sector, 2012 (current dollars, billions)


NOTE: In-house transportation consists of transportation services (air, rail, truck, and water) provided by nontransportation industries for their own use. For-hire transportation consists of the services provided by transportation firms to industries and the public on a fee-basis. Airlines, railroads, transit agencies, common carrier trucking companies, and pipelines are examples of for-hire transportation industries. "Other" for-hire transportation includes: transit and passenger ground transportation (excluding State and local government passenger transit); pipeline; sightseeing transportation and transportation support; parcel delivery, courier, and messenger services (excluding U.S. Postal Service); warehousing and storage; and other transportation and support activities.

SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics, Transportation Satellite Accounts, available at http://www.bts.gov as of March 2016.

The government sector used $\$ 145.9$ billion of transportation services in 2012 (figure 8-3). In 2012 the government sector used:

- Primarily air, rail, and water transportation services (e.g., passenger air travel, shipment of currency, etc.), which accounted for 66.2 percent ( $\$ 96,678$ million) of all transportation services used by the sector.
- More in-house than for-hire air, rail, and water transportation services, with in-house accounting for nearly half ( 47.6 percent, or $\$ 69,465$ ) of all transportation services used by the sector.
- Less truck transportation services ( 19.7 percent, or $\$ 28,816$ ) than air, rail, and water transportation services combined.
- A relatively large share (7.1 percent, or $\$ 10,425$ million) of transit and passenger ground transportation (figure 8-4).

The government sector was the second most dependent sector on transportation services in 2012, although it required half as much transportation services to produce one dollar of output compared to the most dependent sector (wholesale and retail trade). The government sector required 4.5¢ worth of transportation

Figure 8-4 Government Sector's Use of Transportation by Mode, 2012 (current dollars, millions)


NOTE: In-house transportation consists of transportation services (air, rail, truck, and water) provided by nontransportation industries for their own use. For-hire transportation consists of the services provided by transportation firms to industries and the public on a fee-basis. Airlines, railroads, transit agencies, common carrier trucking companies, and pipelines are examples of for-hire transportation industries. Transit and passenger ground transportation excludes State and local government passenger transit. Other transportation includes sightseeing transportation.

SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics, Transportation Satellite Accounts, available at http://www.bts.gov as of March 2016.
services to produce one dollar of output in 2012, while the most dependent sector (wholesale and retail trade) required $10.2 ¢$ worth of transportation services to produce one dollar of output (figure 8-5).

The overall transportation requirement for the government sector (4.5c) is relatively modest compared to other inputs (the overall transportation requirement does not equal the sum of the in-house and the for-hire transportation requirement due to rounding). In 2012 transportation services were the third most important input, while manufactured products (e.g., paper, furniture, etc.) were the most important input. The government sector
requiring 10.3 ¢ worth of manufactured products to produce one dollar of output (figure 8-6).

In 2014 the government sector employed 373,280 transportation and material moving workers, accounting for 3.9 percent of its entire work force. The sector employed more transportation workers $(278,420)^{1}$ than material moving workers $(94,860)$ (figure 8-7). Transportation workers include motor vehicle operators, ship engineers, aircraft pilots and flight engineers, etc. Material moving workers support transportation activities and include occupations such as cleaners of vehicles and ship loaders.

[^13]Figure 8-5 Transportation Required Per Dollar of Output by the Government Sector, 2012


NOTE: In-house transportation consists of transportation services (air, rail, truck, and water) provided by nontransportation industries for their own use. For-hire transportation consists of the services provided by transportation firms to industries and the public on a fee-basis. Airlines, railroads, transit agencies, common carrier trucking companies, and pipelines are examples of for-hire transportation industries. "Other" for-hire transportation includes: transit and passenger ground transportation (excluding State and local government transit); pipeline; sightseeing transportation and transportation support; parcel delivery, courier, and messenger services (excluding U.S. Postal Service); warehousing and storage; and other transportation and support activities.
SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics, Transportation Satellite Accounts, available at http://www.bts.gov as of March 2016.

Figure 8-6 Top 5 Most Required Inputs by the Government Sector to Produce a Dollar of Output, 2012


SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics, Transportation Satellite Accounts, available at http://www.bts.gov as of March 2016.

Figure 8-7 Number of Workers Employed in the Government Sector by Occupation, 2014

## Government occupations

Total work force $=9,472,980$


NOTE: Total for transportation occupations includes supervisors of material moving workers, which could not be separated from supervisors of transportation workers. SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, Occupational Employment and Wages, available at http://www.bls.gov/oes as of Nov. 23, 2015.

Transportation and material moving workers in the government sector earned a median wage of \$41,960 in 2014, while workers of all occupations in the government sector earned a slightly higher median wage ( $\$ 48,850$ ) (figure 8-8).

Bus drivers comprised the largest group of transportation workers in the government sector, accounting for 35.6 percent $(132,820)$ of the sector's transportation and material
moving workforce. Bus drivers consist of transit and intercity bus drivers and school/client bus drivers. Transit and intercity bus drivers earned a slightly higher median wage $(\$ 46,590)$ than school/client bus drivers $(\$ 33,120)$. Heavy and tractor-trailer truck drivers accounted for the third largest number of transportation workers in the government sector $(23,530)$ and earned a median wage of $\$ 38,130$ (figure 8-8).

Figure 8-8 Median Annual Wage and Employment for Most Common Transportation Occupations (top 3) in the Government Sector, 2014


NOTE: Top three transportation occupations are the transportation occupations employing the largest number of workers and are selected from detailed occupation group in Bureau of Labor Statistics Occupational Employment and Wages table. Material moving occupations not included in the selection of the top three transportation occupations. Material moving occupations not included in the selection of the top three transportation occupations. The top three transportation occupations in the government sector are: transit and intercity bus drivers; school or special client bus drivers; and heavy and tractor-trailer truck drivers. First-line supervisors of machine and vehicle operators includes first-line supervisors of material moving occupations.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, Occupational Employment and Wages, available at http://www.bls. gov/oes as of Sept. 23, 2015.

## Appendix A

Gross State Product for Selected Industries, 2014

| FIPS | Geographic Name | Industry Id | Industry Classification | Description | Gross domestic product (GDP), 2014 (millions) | State contribution to GDP, 2014 (percent of national GDP for sector) | Contribution to State GSP, 2014 (percent of total State GSP) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | United States | 0 | 0 | All industries | 17,232,618 | . | . |
| 6000 | California | 0 | 0 | All industries | 2,305,921 | 13.4\% | . |
| 48000 | Texas | 0 | 0 | All industries | 1,641,044 | 9.5\% | . |
| 36000 | New York | 0 | 0 | All industries | 1,395,488 | 8.1\% | . |
| 12000 | Florida | 0 | 0 | All industries | 838,939 | 4.9\% |  |
| 17000 | Illinois | 0 | 0 | All industries | 736,285 | 4.3\% |  |
| 42000 | Pennsylvania | 0 | 0 | All industries | 658,290 | 3.8\% | . |
| 39000 | Ohio | 0 | 0 | All industries | 576,056 | 3.3\% | . |
| 34000 | New Jersey | 0 | 0 | All industries | 551,828 | 3.2\% | . |
| 37000 | North Carolina | 0 | 0 | All industries | 481,876 | 2.8\% | . |
| 13000 | Georgia | 0 | 0 | All industries | 474,696 | 2.8\% | . |
| 51000 | Virginia | 0 | 0 | All industries | 462,861 | 2.7\% | . |
| 25000 | Massachusetts | 0 | 0 | All industries | 455,732 | 2.6\% | . |
| 26000 | Michigan | 0 | 0 | All industries | 448,243 | 2.6\% | . |
| 53000 | Washington | 0 | 0 | All industries | 422,877 | 2.5\% | . |
| 24000 | Maryland | 0 | 0 | All industries | 346,857 | 2.0\% | . |
| 18000 | Indiana | 0 | 0 | All industries | 318,085 | 1.8\% | . |
| 27000 | Minnesota | 0 | 0 | All industries | 317,237 | 1.8\% | . |
| 8000 | Colorado | 0 | 0 | All industries | 305,871 | 1.8\% | . |
| 47000 | Tennessee | 0 | 0 | All industries | 297,159 | 1.7\% | . |
| 55000 | Wisconsin | 0 | 0 | All industries | 289,616 | 1.7\% | . |
| 4000 | Arizona | 0 | 0 | All industries | 286,554 | 1.7\% | . |
| 29000 | Missouri | 0 | 0 | All industries | 279,835 | 1.6\% | . |
| 22000 | Louisiana | 0 | 0 | All industries | 251,672 | 1.5\% | . |
| 9000 | Connecticut | 0 | 0 | All industries | 250,569 | 1.5\% | . |
| 41000 | Oregon | 0 | 0 | All industries | 212,807 | 1.2\% | . |
| 1000 | Alabama | 0 | 0 | All industries | 200,414 | 1.2\% | . |
| 45000 | South Carolina | 0 | 0 | All industries | 189,278 | 1.1\% | . |
| 21000 | Kentucky | 0 | 0 | All industries | 187,788 | 1.1\% | . |
| 40000 | Oklahoma | 0 | 0 | All industries | 183,174 | 1.1\% | . |
| 19000 | lowa | 0 | 0 | All industries | 169,707 | 1.0\% | . |
| 20000 | Kansas | 0 | 0 | All industries | 144,407 | 0.8\% | . |
| 49000 | Utah | 0 | 0 | All industries | 140,031 | 0.8\% | . |
| 32000 | Nevada | 0 | 0 | All industries | 135,038 | 0.8\% | . |


| FIPS | Geographic Name | Industry <br> Id | Industry Classification | Description | Gross domestic product (GDP), 2014 (millions) | State contribution to GDP, 2014 (percent of national GDP for sector) | Contribution to State GSP, 2014 (percent of total State GSP) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 5000 | Arkansas | 0 | 0 | All industries | 120,035 | 0.7\% | . |
| 11000 | District of Columbia | 0 | 0 | All industries | 116,378 | 0.7\% | . |
| 31000 | Nebraska | 0 | 0 | All industries | 111,007 | 0.6\% | . |
| 28000 | Mississippi | 0 | 0 | All industries | 104,753 | 0.6\% | . |
| 35000 | New Mexico | 0 | 0 | All industries | 91,885 | 0.5\% | . |
| 15000 | Hawaii | 0 | 0 | All industries | 76,171 | 0.4\% | . |
| 54000 | West Virginia | 0 | 0 | All industries | 74,296 | 0.4\% | . |
| 33000 | New Hampshire | 0 | 0 | All industries | 70,358 | 0.4\% | . |
| 10000 | Delaware | 0 | 0 | All industries | 63,404 | 0.4\% | . |
| 16000 | Idaho | 0 | 0 | All industries | 63,235 | 0.4\% | . |
| 2000 | Alaska | 0 | 0 | All industries | 56,647 | 0.3\% | . |
| 38000 | North Dakota | 0 | 0 | All industries | 55,978 | 0.3\% | . |
| 44000 | Rhode Island | 0 | 0 | All industries | 54,492 | 0.3\% | . |
| 23000 | Maine | 0 | 0 | All industries | 54,324 | 0.3\% | . |
| 46000 | South Dakota | 0 | 0 | All industries | 46,169 | 0.3\% | . |
| 30000 | Montana | 0 | 0 | All industries | 44,135 | 0.3\% | . |
| 56000 | Wyoming | 0 | 0 | All industries | 43,800 | 0.3\% | . |
| 50000 | Vermont | 0 | 0 | All industries | 29,312 | 0.2\% | . |
| 11000 | District of Columbia | 1 | 11, 21 | Natural resources and mining | (L) | . | . |
| 0 | United States | 1 | 11, 21 | Natural resources and mining | 669,172 | . | . |
| 48000 | Texas | 1 | 11,21 | Natural resources and mining | 233,262 | 34.9\% | 14.2\% |
| 6000 | California | 1 | 11, 21 | Natural resources and mining | 60,064 | 9.0\% | 2.6\% |
| 40000 | Oklahoma | 1 | 11, 21 | Natural resources and mining | 30,018 | 4.5\% | 16.4\% |
| 22000 | Louisiana | 1 | 11, 21 | Natural resources and mining | 24,792 | 3.7\% | 9.9\% |
| 8000 | Colorado | 1 | 11, 21 | Natural resources and mining | 21,529 | 3.2\% | 7.0\% |
| 42000 | Pennsylvania | 1 | 11, 21 | Natural resources and mining | 19,725 | 2.9\% | 3.0\% |
| 56000 | Wyoming | 1 | 11, 21 | Natural resources and mining | 15,616 | 2.3\% | 35.7\% |
| 2000 | Alaska | 1 | 11, 21 | Natural resources and mining | 15,481 | 2.3\% | 27.3\% |
| 54000 | West Virginia | 1 | 11, 21 | Natural resources and mining | 13,332 | 2.0\% | 17.9\% |
| 19000 | lowa | 1 | 11, 21 | Natural resources and mining | 12,500 | 1.9\% | 7.4\% |
| 38000 | North Dakota | 1 | 11, 21 | Natural resources and mining | 12,400 | 1.9\% | 22.2\% |
| 17000 | Illinois | 1 | 11, 21 | Natural resources and mining | 12,008 | 1.8\% | 1.6\% |
| 27000 | Minnesota | 1 | 11, 21 | Natural resources and mining | 10,876 | 1.6\% | 3.4\% |
| 35000 | New Mexico | 1 | 11, 21 | Natural resources and mining | 10,650 | 1.6\% | 11.6\% |
| 31000 | Nebraska | 1 | 11, 21 | Natural resources and mining | 10,116 | 1.5\% | 9.1\% |
| 20000 | Kansas | 1 | 11, 21 | Natural resources and mining | 9,952 | 1.5\% | 6.9\% |
| 39000 | Ohio | 1 | 11, 21 | Natural resources and mining | 9,772 | 1.5\% | 1.7\% |
| 4000 | Arizona | 1 | 11, 21 | Natural resources and mining | 8,756 | 1.3\% | 3.1\% |
| 53000 | Washington | 1 | 11, 21 | Natural resources and mining | 8,668 | 1.3\% | 2.0\% |


| FIPS | Geographic Name | Industry Id | Industry Classification | Description | Gross domestic product (GDP), 2014 (millions) | State contribution to GDP, 2014 (percent of national GDP for sector) | Contribution to State GSP, 2014 (percent of total State GSP) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 21000 | Kentucky | 1 | 11, 21 | Natural resources and mining | 8,371 | 1.3\% | 4.5\% |
| 12000 | Florida | 1 | 11, 21 | Natural resources and mining | 8,070 | 1.2\% | 1.0\% |
| 55000 | Wisconsin | 1 | 11, 21 | Natural resources and mining | 7,783 | 1.2\% | 2.7\% |
| 37000 | North Carolina | 1 | 11, 21 | Natural resources and mining | 7,496 | 1.1\% | 1.6\% |
| 5000 | Arkansas | 1 | 11, 21 | Natural resources and mining | 7,478 | 1.1\% | 6.2\% |
| 18000 | Indiana | 1 | 11, 21 | Natural resources and mining | 7,459 | 1.1\% | 2.3\% |
| 32000 | Nevada | 1 | 11,21 | Natural resources and mining | 6,885 | 1.0\% | 5.1\% |
| 13000 | Georgia | 1 | 11, 21 | Natural resources and mining | 6,278 | 0.9\% | 1.3\% |
| 1000 | Alabama | 1 | 11, 21 | Natural resources and mining | 6,259 | 0.9\% | 3.1\% |
| 29000 | Missouri | 1 | 11, 21 | Natural resources and mining | 5,827 | 0.9\% | 2.1\% |
| 26000 | Michigan | 1 | 11,21 | Natural resources and mining | 5,647 | 0.8\% | 1.3\% |
| 49000 | Utah | 1 | 11, 21 | Natural resources and mining | 5,323 | 0.8\% | 3.8\% |
| 46000 | South Dakota | 1 | 11, 21 | Natural resources and mining | 5,285 | 0.8\% | 11.4\% |
| 28000 | Mississippi | 1 | 11, 21 | Natural resources and mining | 5,261 | 0.8\% | 5.0\% |
| 16000 | Idaho | 1 | 11, 21 | Natural resources and mining | 5,204 | 0.8\% | 8.2\% |
| 30000 | Montana | 1 | 11, 21 | Natural resources and mining | 4,574 | 0.7\% | 10.4\% |
| 51000 | Virginia | 1 | 11, 21 | Natural resources and mining | 4,481 | 0.7\% | 1.0\% |
| 36000 | New York | 1 | 11, 21 | Natural resources and mining | 4,442 | 0.7\% | 0.3\% |
| 41000 | Oregon | 1 | 11, 21 | Natural resources and mining | 4,386 | 0.7\% | 2.1\% |
| 47000 | Tennessee | 1 | 11, 21 | Natural resources and mining | 3,920 | 0.6\% | 1.3\% |
| 45000 | South Carolina | 1 | 11,21 | Natural resources and mining | 1,968 | 0.3\% | 1.0\% |
| 24000 | Maryland | 1 | 11, 21 | Natural resources and mining | 1,472 | 0.2\% | 0.4\% |
| 34000 | New Jersey | 1 | 11, 21 | Natural resources and mining | 1,025 | 0.2\% | 0.2\% |
| 25000 | Massachusetts | 1 | 11, 21 | Natural resources and mining | 954 | 0.1\% | 0.2\% |
| 23000 | Maine | 1 | 11, 21 | Natural resources and mining | 829 | 0.1\% | 1.5\% |
| 50000 | Vermont | 1 | 11, 21 | Natural resources and mining | 750 | 0.1\% | 2.6\% |
| 10000 | Delaware | 1 | 11, 21 | Natural resources and mining | 601 | 0.1\% | 0.9\% |
| 9000 | Connecticut | 1 | 11, 21 | Natural resources and mining | 596 | 0.1\% | 0.2\% |
| 15000 | Hawaii | 1 | 11, 21 | Natural resources and mining | 504 | 0.1\% | 0.7\% |
| 33000 | New Hampshire | 1 | 11, 21 | Natural resources and mining | 374 | 0.1\% | 0.5\% |
| 44000 | Rhode Island | 1 | 11, 21 | Natural resources and mining | 151 | 0.0\% | 0.3\% |
| 0 | United States | 2 | 22 | Utilities | 280,809 | . | . |
| 48000 | Texas | 2 | 22 | Utilities | 36,687 | 13.1\% | 2.2\% |
| 6000 | California | 2 | 22 | Utilities | 26,806 | 9.5\% | 1.2\% |
| 36000 | New York | 2 | 22 | Utilities | 19,205 | 6.8\% | 1.4\% |
| 12000 | Florida | 2 | 22 | Utilities | 14,444 | 5.1\% | 1.7\% |
| 39000 | Ohio | 2 | 22 | Utilities | 12,643 | 4.5\% | 2.2\% |
| 42000 | Pennsylvania | 2 | 22 | Utilities | 10,743 | 3.8\% | 1.6\% |
| 34000 | New Jersey | 2 | 22 | Utilities | 10,015 | 3.6\% | 1.8\% |

Appendix A

| FIPS | Geographic Name | Industry <br> Id | Industry Classification | Description | Gross domestic product (GDP), 2014 (millions) | State contribution to GDP, 2014 (percent of national GDP for sector) | Contribution to State GSP, 2014 (percent of total State GSP) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 17000 | Illinois | 2 | 22 | Utilities | 9,815 | 3.5\% | 1.3\% |
| 26000 | Michigan | 2 | 22 | Utilities | 8,811 | 3.1\% | 2.0\% |
| 13000 | Georgia | 2 | 22 | Utilities | 8,133 | 2.9\% | 1.7\% |
| 37000 | North Carolina | 2 | 22 | Utilities | 7,808 | 2.8\% | 1.6\% |
| 24000 | Maryland | 2 | 22 | Utilities | 6,431 | 2.3\% | 1.9\% |
| 51000 | Virginia | 2 | 22 | Utilities | 6,359 | 2.3\% | 1.4\% |
| 4000 | Arizona | 2 | 22 | Utilities | 5,559 | 2.0\% | 1.9\% |
| 25000 | Massachusetts | 2 | 22 | Utilities | 5,519 | 2.0\% | 1.2\% |
| 18000 | Indiana | 2 | 22 | Utilities | 5,440 | 1.9\% | 1.7\% |
| 1000 | Alabama | 2 | 22 | Utilities | 5,399 | 1.9\% | 2.7\% |
| 40000 | Oklahoma | 2 | 22 | Utilities | 5,353 | 1.9\% | 2.9\% |
| 27000 | Minnesota | 2 | 22 | Utilities | 5,347 | 1.9\% | 1.7\% |
| 29000 | Missouri | 2 | 22 | Utilities | 5,213 | 1.9\% | 1.9\% |
| 55000 | Wisconsin | 2 | 22 | Utilities | 4,758 | 1.7\% | 1.6\% |
| 45000 | South Carolina | 2 | 22 | Utilities | 4,507 | 1.6\% | 2.4\% |
| 9000 | Connecticut | 2 | 22 | Utilities | 4,363 | 1.6\% | 1.7\% |
| 8000 | Colorado | 2 | 22 | Utilities | 4,188 | 1.5\% | 1.4\% |
| 22000 | Louisiana | 2 | 22 | Utilities | 3,962 | 1.4\% | 1.6\% |
| 41000 | Oregon | 2 | 22 | Utilities | 3,684 | 1.3\% | 1.7\% |
| 53000 | Washington | 2 | 22 | Utilities | 3,630 | 1.3\% | 0.9\% |
| 21000 | Kentucky | 2 | 22 | Utilities | 2,886 | 1.0\% | 1.5\% |
| 28000 | Mississippi | 2 | 22 | Utilities | 2,875 | 1.0\% | 2.7\% |
| 5000 | Arkansas | 2 | 22 | Utilities | 2,829 | 1.0\% | 2.4\% |
| 19000 | lowa | 2 | 22 | Utilities | 2,816 | 1.0\% | 1.7\% |
| 20000 | Kansas | 2 | 22 | Utilities | 2,728 | 1.0\% | 1.9\% |
| 31000 | Nebraska | 2 | 22 | Utilities | 2,438 | 0.9\% | 2.2\% |
| 32000 | Nevada | 2 | 22 | Utilities | 1,828 | 0.7\% | 1.4\% |
| 15000 | Hawaii | 2 | 22 | Utilities | 1,709 | 0.6\% | 2.2\% |
| 47000 | Tennessee | 2 | 22 | Utilities | 1,513 | 0.5\% | 0.5\% |
| 38000 | North Dakota | 2 | 22 | Utilities | 1,403 | 0.5\% | 2.5\% |
| 35000 | New Mexico | 2 | 22 | Utilities | 1,325 | 0.5\% | 1.4\% |
| 49000 | Utah | 2 | 22 | Utilities | 1,219 | 0.4\% | 0.9\% |
| 54000 | West Virginia | 2 | 22 | Utilities | 1,169 | 0.4\% | 1.6\% |
| 11000 | District of Columbia | 2 | 22 | Utilities | 1,137 | 0.4\% | 1.0\% |
| 33000 | New Hampshire | 2 | 22 | Utilities | 1,017 | 0.4\% | 1.4\% |
| 30000 | Montana | 2 | 22 | Utilities | 1,011 | 0.4\% | 2.3\% |
| 16000 | Idaho | 2 | 22 | Utilities | 944 | 0.3\% | 1.5\% |
| 23000 | Maine | 2 | 22 | Utilities | 910 | 0.3\% | 1.7\% |
| 10000 | Delaware | 2 | 22 | Utilities | 835 | 0.3\% | 1.3\% |


| FIPS | Geographic Name | Industry Id | Industry Classification | Description | Gross domestic product (GDP), 2014 (millions) | State contribution to GDP, 2014 (percent of national GDP for sector) | Contribution to State GSP, 2014 (percent of total State GSP) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 46000 | South Dakota | 2 | 22 | Utilities | 717 | 0.3\% | 1.6\% |
| 2000 | Alaska | 2 | 22 | Utilities | 708 | 0.3\% | 1.2\% |
| 50000 | Vermont | 2 | 22 | Utilities | 701 | 0.2\% | 2.4\% |
| 56000 | Wyoming | 2 | 22 | Utilities | 651 | 0.2\% | 1.5\% |
| 44000 | Rhode Island | 2 | 22 | Utilities | 618 | 0.2\% | 1.1\% |
| 0 | United States | 3 | 23 | Construction | 664,001 | . | . |
| 48000 | Texas | 3 | 23 | Construction | 80,801 | 12.2\% | 4.9\% |
| 6000 | California | 3 | 23 | Construction | 76,561 | 11.5\% | 3.3\% |
| 36000 | New York | 3 | 23 | Construction | 43,723 | 6.6\% | 3.1\% |
| 12000 | Florida | 3 | 23 | Construction | 37,256 | 5.6\% | 4.4\% |
| 17000 | Illinois | 3 | 23 | Construction | 26,365 | 4.0\% | 3.6\% |
| 42000 | Pennsylvania | 3 | 23 | Construction | 23,405 | 3.5\% | 3.6\% |
| 34000 | New Jersey | 3 | 23 | Construction | 19,942 | 3.0\% | 3.6\% |
| 39000 | Ohio | 3 | 23 | Construction | 19,341 | 2.9\% | 3.4\% |
| 51000 | Virginia | 3 | 23 | Construction | 17,465 | 2.6\% | 3.8\% |
| 37000 | North Carolina | 3 | 23 | Construction | 17,399 | 2.6\% | 3.6\% |
| 13000 | Georgia | 3 | 23 | Construction | 17,228 | 2.6\% | 3.6\% |
| 53000 | Washington | 3 | 23 | Construction | 16,161 | 2.4\% | 3.8\% |
| 25000 | Massachusetts | 3 | 23 | Construction | 15,786 | 2.4\% | 3.5\% |
| 24000 | Maryland | 3 | 23 | Construction | 15,653 | 2.4\% | 4.5\% |
| 26000 | Michigan | 3 | 23 | Construction | 15,016 | 2.3\% | 3.3\% |
| 22000 | Louisiana | 3 | 23 | Construction | 14,040 | 2.1\% | 5.6\% |
| 27000 | Minnesota | 3 | 23 | Construction | 13,784 | 2.1\% | 4.3\% |
| 8000 | Colorado | 3 | 23 | Construction | 13,721 | 2.1\% | 4.5\% |
| 4000 | Arizona | 3 | 23 | Construction | 13,409 | 2.0\% | 4.7\% |
| 18000 | Indiana | 3 | 23 | Construction | 11,792 | 1.8\% | 3.7\% |
| 47000 | Tennessee | 3 | 23 | Construction | 10,471 | 1.6\% | 3.5\% |
| 29000 | Missouri | 3 | 23 | Construction | 10,318 | 1.6\% | 3.7\% |
| 55000 | Wisconsin | 3 | 23 | Construction | 10,076 | 1.5\% | 3.5\% |
| 45000 | South Carolina | 3 | 23 | Construction | 8,378 | 1.3\% | 4.4\% |
| 1000 | Alabama | 3 | 23 | Construction | 8,252 | 1.2\% | 4.1\% |
| 9000 | Connecticut | 3 | 23 | Construction | 7,715 | 1.2\% | 3.1\% |
| 41000 | Oregon | 3 | 23 | Construction | 7,506 | 1.1\% | 3.5\% |
| 40000 | Oklahoma | 3 | 23 | Construction | 7,448 | 1.1\% | 4.1\% |
| 49000 | Utah | 3 | 23 | Construction | 7,368 | 1.1\% | 5.3\% |
| 21000 | Kentucky | 3 | 23 | Construction | 7,316 | 1.1\% | 3.9\% |
| 19000 | lowa | 3 | 23 | Construction | 7,058 | 1.1\% | 4.2\% |
| 32000 | Nevada | 3 | 23 | Construction | 6,154 | 0.9\% | 4.6\% |
| 28000 | Mississippi | 3 | 23 | Construction | 5,331 | 0.8\% | 5.1\% |

Appendix A

| FIPS | Geographic Name | Industry Id | Industry Classification | Description | Gross domestic product (GDP), 2014 (millions) | State contribution to GDP, 2014 (percent of national GDP for sector) | Contribution to State GSP, 2014 (percent of total State GSP) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 20000 | Kansas | 3 | 23 | Construction | 5,284 | 0.8\% | 3.7\% |
| 31000 | Nebraska | 3 | 23 | Construction | 4,608 | 0.7\% | 4.2\% |
| 5000 | Arkansas | 3 | 23 | Construction | 4,429 | 0.7\% | 3.7\% |
| 15000 | Hawaii | 3 | 23 | Construction | 4,321 | 0.7\% | 5.7\% |
| 35000 | New Mexico | 3 | 23 | Construction | 3,655 | 0.6\% | 4.0\% |
| 38000 | North Dakota | 3 | 23 | Construction | 3,344 | 0.5\% | 6.0\% |
| 54000 | West Virginia | 3 | 23 | Construction | 3,130 | 0.5\% | 4.2\% |
| 16000 | Idaho | 3 | 23 | Construction | 2,745 | 0.4\% | 4.3\% |
| 33000 | New Hampshire | 3 | 23 | Construction | 2,493 | 0.4\% | 3.5\% |
| 30000 | Montana | 3 | 23 | Construction | 2,425 | 0.4\% | 5.5\% |
| 2000 | Alaska | 3 | 23 | Construction | 2,396 | 0.4\% | 4.2\% |
| 44000 | Rhode Island | 3 | 23 | Construction | 2,317 | 0.3\% | 4.3\% |
| 23000 | Maine | 3 | 23 | Construction | 2,269 | 0.3\% | 4.2\% |
| 56000 | Wyoming | 3 | 23 | Construction | 2,067 | 0.3\% | 4.7\% |
| 10000 | Delaware | 3 | 23 | Construction | 1,889 | 0.3\% | 3.0\% |
| 46000 | South Dakota | 3 | 23 | Construction | 1,759 | 0.3\% | 3.8\% |
| 11000 | District of Columbia | 3 | 23 | Construction | 1,432 | 0.2\% | 1.2\% |
| 50000 | Vermont | 3 | 23 | Construction | 1,200 | 0.2\% | 4.1\% |
| 0 | United States | 4 | 31-33 | Manufacturing | 2,097,716 | . | . |
| 6000 | California | 4 | 31-33 | Manufacturing | 255,634 | 12.2\% | 11.1\% |
| 48000 | Texas | 4 | 31-33 | Manufacturing | 239,105 | 11.4\% | 14.6\% |
| 17000 | Illinois | 4 | 31-33 | Manufacturing | 98,949 | 4.7\% | 13.4\% |
| 37000 | North Carolina | 4 | 31-33 | Manufacturing | 98,621 | 4.7\% | 20.5\% |
| 39000 | Ohio | 4 | 31-33 | Manufacturing | 98,251 | 4.7\% | 17.1\% |
| 18000 | Indiana | 4 | 31-33 | Manufacturing | 94,079 | 4.5\% | 29.6\% |
| 26000 | Michigan | 4 | 31-33 | Manufacturing | 89,506 | 4.3\% | 20.0\% |
| 42000 | Pennsylvania | 4 | 31-33 | Manufacturing | 79,520 | 3.8\% | 12.1\% |
| 36000 | New York | 4 | 31-33 | Manufacturing | 69,262 | 3.3\% | 5.0\% |
| 53000 | Washington | 4 | 31-33 | Manufacturing | 57,047 | 2.7\% | 13.5\% |
| 41000 | Oregon | 4 | 31-33 | Manufacturing | 55,961 | 2.7\% | 26.3\% |
| 55000 | Wisconsin | 4 | 31-33 | Manufacturing | 55,493 | 2.6\% | 19.2\% |
| 22000 | Louisiana | 4 | 31-33 | Manufacturing | 53,690 | 2.6\% | 21.3\% |
| 13000 | Georgia | 4 | 31-33 | Manufacturing | 52,757 | 2.5\% | 11.1\% |
| 47000 | Tennessee | 4 | 31-33 | Manufacturing | 48,159 | 2.3\% | 16.2\% |
| 25000 | Massachusetts | 4 | 31-33 | Manufacturing | 45,976 | 2.2\% | 10.1\% |
| 34000 | New Jersey | 4 | 31-33 | Manufacturing | 45,339 | 2.2\% | 8.2\% |
| 27000 | Minnesota | 4 | 31-33 | Manufacturing | 44,183 | 2.1\% | 13.9\% |
| 51000 | Virginia | 4 | 31-33 | Manufacturing | 43,101 | 2.1\% | 9.3\% |
| 12000 | Florida | 4 | 31-33 | Manufacturing | 41,707 | 2.0\% | 5.0\% |


| FIPS | Geographic Name | Industry Id | Industry Classification | Description | Gross domestic product (GDP), 2014 (millions) | State contribution to GDP, 2014 (percent of national GDP for sector) | Contribution to State GSP, 2014 (percent of total State GSP) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 21000 | Kentucky | 4 | 31-33 | Manufacturing | 36,225 | 1.7\% | 19.3\% |
| 29000 | Missouri | 4 | 31-33 | Manufacturing | 35,904 | 1.7\% | 12.8\% |
| 1000 | Alabama | 4 | 31-33 | Manufacturing | 35,333 | 1.7\% | 17.6\% |
| 19000 | Iowa | 4 | 31-33 | Manufacturing | 31,987 | 1.5\% | 18.8\% |
| 45000 | South Carolina | 4 | 31-33 | Manufacturing | 31,015 | 1.5\% | 16.4\% |
| 9000 | Connecticut | 4 | 31-33 | Manufacturing | 27,356 | 1.3\% | 10.9\% |
| 4000 | Arizona | 4 | 31-33 | Manufacturing | 23,945 | 1.1\% | 8.4\% |
| 8000 | Colorado | 4 | 31-33 | Manufacturing | 21,633 | 1.0\% | 7.1\% |
| 24000 | Maryland | 4 | 31-33 | Manufacturing | 19,210 | 0.9\% | 5.5\% |
| 20000 | Kansas | 4 | 31-33 | Manufacturing | 19,180 | 0.9\% | 13.3\% |
| 40000 | Oklahoma | 4 | 31-33 | Manufacturing | 17,753 | 0.8\% | 9.7\% |
| 49000 | Utah | 4 | 31-33 | Manufacturing | 17,081 | 0.8\% | 12.2\% |
| 5000 | Arkansas | 4 | 31-33 | Manufacturing | 16,885 | 0.8\% | 14.1\% |
| 28000 | Mississippi | 4 | 31-33 | Manufacturing | 15,864 | 0.8\% | 15.1\% |
| 31000 | Nebraska | 4 | 31-33 | Manufacturing | 14,033 | 0.7\% | 12.6\% |
| 16000 | Idaho | 4 | 31-33 | Manufacturing | 8,112 | 0.4\% | 12.8\% |
| 33000 | New Hampshire | 4 | 31-33 | Manufacturing | 7,925 | 0.4\% | 11.3\% |
| 54000 | West Virginia | 4 | 31-33 | Manufacturing | 7,324 | 0.3\% | 9.9\% |
| 32000 | Nevada | 4 | 31-33 | Manufacturing | 6,323 | 0.3\% | 4.7\% |
| 35000 | New Mexico | 4 | 31-33 | Manufacturing | 5,531 | 0.3\% | 6.0\% |
| 23000 | Maine | 4 | 31-33 | Manufacturing | 5,167 | 0.2\% | 9.5\% |
| 44000 | Rhode Island | 4 | 31-33 | Manufacturing | 4,396 | 0.2\% | 8.1\% |
| 46000 | South Dakota | 4 | 31-33 | Manufacturing | 4,150 | 0.2\% | 9.0\% |
| 10000 | Delaware | 4 | 31-33 | Manufacturing | 3,930 | 0.2\% | 6.2\% |
| 38000 | North Dakota | 4 | 31-33 | Manufacturing | 3,716 | 0.2\% | 6.6\% |
| 30000 | Montana | 4 | 31-33 | Manufacturing | 3,250 | 0.2\% | 7.4\% |
| 50000 | Vermont | 4 | 31-33 | Manufacturing | 2,866 | 0.1\% | 9.8\% |
| 56000 | Wyoming | 4 | 31-33 | Manufacturing | 2,179 | 0.1\% | 5.0\% |
| 15000 | Hawaii | 4 | 31-33 | Manufacturing | 1,519 | 0.1\% | 2.0\% |
| 2000 | Alaska | 4 | 31-33 | Manufacturing | 1,350 | 0.1\% | 2.4\% |
| 11000 | District of Columbia | 4 | 31-33 | Manufacturing | 234 | 0.0\% | 0.2\% |
| 0 | United States | 5 | 42, 44-45 | Trade | 2,042,235 | . | . |
| 6000 | California | 5 | 42, 44-45 | Trade | 268,011 | 13.1\% | 11.6\% |
| 48000 | Texas | 5 | 42, 44-45 | Trade | 207,444 | 10.2\% | 12.6\% |
| 36000 | New York | 5 | 42, 44-45 | Trade | 136,519 | 6.7\% | 9.8\% |
| 12000 | Florida | 5 | 42, 44-45 | Trade | 123,207 | 6.0\% | 14.7\% |
| 17000 | Illinois | 5 | 42, 44-45 | Trade | 92,723 | 4.5\% | 12.6\% |
| 34000 | New Jersey | 5 | 42, 44-45 | Trade | 78,992 | 3.9\% | 14.3\% |
| 42000 | Pennsylvania | 5 | 42, 44-45 | Trade | 75,661 | 3.7\% | 11.5\% |

Appendix A

| FIPS | Geographic Name | Industry <br> Id | Industry Classification | Description | Gross domestic product (GDP), 2014 (millions) | State contribution to GDP, 2014 (percent of national GDP for sector) | Contribution to State GSP, 2014 (percent of total State GSP) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 39000 | Ohio | 5 | 42, 44-45 | Trade | 71,013 | 3.5\% | 12.3\% |
| 13000 | Georgia | 5 | 42, 44-45 | Trade | 66,340 | 3.2\% | 14.0\% |
| 26000 | Michigan | 5 | 42, 44-45 | Trade | 60,090 | 2.9\% | 13.4\% |
| 37000 | North Carolina | 5 | 42, 44-45 | Trade | 53,172 | 2.6\% | 11.0\% |
| 53000 | Washington | 5 | 42, 44-45 | Trade | 52,743 | 2.6\% | 12.5\% |
| 51000 | Virginia | 5 | 42, 44-45 | Trade | 43,407 | 2.1\% | 9.4\% |
| 25000 | Massachusetts | 5 | 42, 44-45 | Trade | 42,244 | 2.1\% | 9.3\% |
| 47000 | Tennessee | 5 | 42, 44-45 | Trade | 40,914 | 2.0\% | 13.8\% |
| 27000 | Minnesota | 5 | 42, 44-45 | Trade | 39,937 | 2.0\% | 12.6\% |
| 4000 | Arizona | 5 | 42, 44-45 | Trade | 37,957 | 1.9\% | 13.2\% |
| 18000 | Indiana | 5 | 42, 44-45 | Trade | 35,880 | 1.8\% | 11.3\% |
| 29000 | Missouri | 5 | 42, 44-45 | Trade | 35,521 | 1.7\% | 12.7\% |
| 55000 | Wisconsin | 5 | 42, 44-45 | Trade | 34,449 | 1.7\% | 11.9\% |
| 24000 | Maryland | 5 | 42, 44-45 | Trade | 33,859 | 1.7\% | 9.8\% |
| 8000 | Colorado | 5 | 42, 44-45 | Trade | 33,291 | 1.6\% | 10.9\% |
| 9000 | Connecticut | 5 | 42, 44-45 | Trade | 27,992 | 1.4\% | 11.2\% |
| 22000 | Louisiana | 5 | 42, 44-45 | Trade | 26,598 | 1.3\% | 10.6\% |
| 1000 | Alabama | 5 | 42, 44-45 | Trade | 26,217 | 1.3\% | 13.1\% |
| 45000 | South Carolina | 5 | 42, 44-45 | Trade | 25,340 | 1.2\% | 13.4\% |
| 21000 | Kentucky | 5 | 42, 44-45 | Trade | 23,402 | 1.1\% | 12.5\% |
| 40000 | Oklahoma | 5 | 42, 44-45 | Trade | 21,251 | 1.0\% | 11.6\% |
| 41000 | Oregon | 5 | 42, 44-45 | Trade | 21,075 | 1.0\% | 9.9\% |
| 19000 | lowa | 5 | 42, 44-45 | Trade | 19,438 | 1.0\% | 11.5\% |
| 20000 | Kansas | 5 | 42, 44-45 | Trade | 19,085 | 0.9\% | 13.2\% |
| 5000 | Arkansas | 5 | 42, 44-45 | Trade | 16,792 | 0.8\% | 14.0\% |
| 49000 | Utah | 5 | 42, 44-45 | Trade | 16,707 | 0.8\% | 11.9\% |
| 32000 | Nevada | 5 | 42, 44-45 | Trade | 15,842 | 0.8\% | 11.7\% |
| 28000 | Mississippi | 5 | 42, 44-45 | Trade | 13,520 | 0.7\% | 12.9\% |
| 31000 | Nebraska | 5 | 42, 44-45 | Trade | 12,343 | 0.6\% | 11.1\% |
| 33000 | New Hampshire | 5 | 42, 44-45 | Trade | 9,702 | 0.5\% | 13.8\% |
| 16000 | Idaho | 5 | 42, 44-45 | Trade | 8,684 | 0.4\% | 13.7\% |
| 35000 | New Mexico | 5 | 42, 44-45 | Trade | 8,430 | 0.4\% | 9.2\% |
| 54000 | West Virginia | 5 | 42, 44-45 | Trade | 8,118 | 0.4\% | 10.9\% |
| 38000 | North Dakota | 5 | 42, 44-45 | Trade | 7,685 | 0.4\% | 13.7\% |
| 15000 | Hawaii | 5 | 42, 44-45 | Trade | 7,629 | 0.4\% | 10.0\% |
| 23000 | Maine | 5 | 42, 44-45 | Trade | 7,614 | 0.4\% | 14.0\% |
| 46000 | South Dakota | 5 | 42, 44-45 | Trade | 6,218 | 0.3\% | 13.5\% |
| 44000 | Rhode Island | 5 | 42, 44-45 | Trade | 5,688 | 0.3\% | 10.4\% |
| 30000 | Montana | 5 | 42, 44-45 | Trade | 5,270 | 0.3\% | 11.9\% |


| FIPS | Geographic Name | Industry Id | Industry Classification | Description | Gross domestic product (GDP), 2014 (millions) | State contribution to GDP, 2014 (percent of national GDP for sector) | Contribution to State GSP, 2014 (percent of total State GSP) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 10000 | Delaware | 5 | 42, 44-45 | Trade | 5,251 | 0.3\% | 8.3\% |
| 50000 | Vermont | 5 | 42, 44-45 | Trade | 3,552 | 0.2\% | 12.1\% |
| 56000 | Wyoming | 5 | 42, 44-45 | Trade | 3,547 | 0.2\% | 8.1\% |
| 2000 | Alaska | 5 | 42, 44-45 | Trade | 3,389 | 0.2\% | 6.0\% |
| 11000 | District of Columbia | 5 | 42, 44-45 | Trade | 2,482 | 0.1\% | 2.1\% |
| 0 | United States | 6 | $\begin{gathered} 51-56,61-62, \\ 71-72,81 \end{gathered}$ | All services | 8,813,847 | . |  |
| 6000 | California | 6 | $\begin{gathered} 51-56,61-62, \\ 71-72,81 \end{gathered}$ | All services | 1,278,140 | 14.5\% | 55.4\% |
| 36000 | New York | 6 | $\begin{gathered} 51-56,61-62, \\ 71-72,81 \end{gathered}$ | All services | 935,690 | 10.6\% | 67.1\% |
| 48000 | Texas | 6 | $\begin{gathered} 51-56,61-62, \\ 71-72,81 \end{gathered}$ | All services | 626,551 | 7.1\% | 38.2\% |
| 12000 | Florida | 6 | $\begin{gathered} 51-56,61-62, \\ 71-72,81 \end{gathered}$ | All services | 482,592 | 5.5\% | 57.5\% |
| 17000 | Illinois | 6 | $\begin{gathered} 51-56,61-62, \\ 71-72,81 \end{gathered}$ | All services | 394,721 | 4.5\% | 53.6\% |
| 42000 | Pennsylvania | 6 | $\begin{gathered} 51-56,61-62, \\ 71-72,81 \end{gathered}$ | All services | 360,178 | 4.1\% | 54.7\% |
| 34000 | New Jersey | 6 | $\begin{gathered} \text { 51-56, 61-62, } \\ 71-72,81 \end{gathered}$ | All services | 319,549 | 3.6\% | 57.9\% |
| 25000 | Massachusetts | 6 | $\begin{gathered} 51-56,61-62, \\ 71-72,81 \end{gathered}$ | All services | 286,932 | 3.3\% | 63.0\% |
| 39000 | Ohio | 6 | $\begin{gathered} 51-56,61-62, \\ 71-72,81 \end{gathered}$ | All services | 282,351 | 3.2\% | 49.0\% |
| 51000 | Virginia | 6 | $\begin{gathered} 51-56,61-62, \\ 71-72,81 \end{gathered}$ | All services | 249,648 | 2.8\% | 53.9\% |
| 13000 | Georgia | 6 | $\begin{gathered} 51-56,61-62, \\ 71-72,81 \end{gathered}$ | All services | 242,035 | 2.7\% | 51.0\% |
| 37000 | North Carolina | 6 | $\begin{gathered} 51-56,61-62, \\ 71-72,81 \end{gathered}$ | All services | 222,516 | 2.5\% | 46.2\% |
| 53000 | Washington | 6 | $\begin{gathered} 51-56,61-62, \\ 71-72,81 \end{gathered}$ | All services | 213,361 | 2.4\% | 50.5\% |
| 26000 | Michigan | 6 | $\begin{gathered} 51-56,61-62, \\ 71-72,81 \end{gathered}$ | All services | 207,073 | 2.3\% | 46.2\% |
| 24000 | Maryland | 6 | $\begin{gathered} 51-56,61-62, \\ 71-72,81 \end{gathered}$ | All services | 189,565 | 2.2\% | 54.7\% |
| 8000 | Colorado | 6 | $\begin{gathered} 51-56,61-62, \\ 71-72,81 \end{gathered}$ | All services | 165,399 | 1.9\% | 54.1\% |
| 27000 | Minnesota | 6 | $\begin{gathered} 51-56,61-62, \\ 71-72,81 \end{gathered}$ | All services | 161,851 | 1.8\% | 51.0\% |
| 9000 | Connecticut | 6 | $\begin{gathered} 51-56,61-62, \\ 71-72,81 \end{gathered}$ | All services | 151,860 | 1.7\% | 60.6\% |
| 4000 | Arizona | 6 | $\begin{gathered} \text { 51-56, 61-62, } \\ 71-72,81 \end{gathered}$ | All services | 148,851 | 1.7\% | 51.9\% |

Appendix A

| FIPS | Geographic Name | Industry Id Id | Industry Classification | Description | Gross domestic product (GDP), 2014 (millions) | State contribution to GDP, 2014 (percent of national GDP for sector) | Contribution to State GSP, 2014 (percent of total State GSP) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 29000 | Missouri | 6 | $\begin{gathered} \text { 51-56, 61-62, } \\ 71-72,81 \end{gathered}$ | All services | 143,027 | 1.6\% | 51.1\% |
| 47000 | Tennessee | 6 | $\begin{gathered} \text { 51-56, 61-62, } \\ 71-72,81 \end{gathered}$ | All services | 142,490 | 1.6\% | 48.0\% |
| 55000 | Wisconsin | 6 | $\begin{gathered} 51-56,61-62, \\ 71-72,81 \end{gathered}$ | All services | 135,266 | 1.5\% | 46.7\% |
| 18000 | Indiana | 6 | $\begin{gathered} \text { 51-56, 61-62, } \\ 71-72,81 \end{gathered}$ | All services | 123,880 | 1.4\% | 38.9\% |
| 22000 | Louisiana | 6 | $\begin{gathered} \text { 51-56, 61-62, } \\ 71-72,81 \end{gathered}$ | All services | 91,279 | 1.0\% | 36.3\% |
| 41000 | Oregon | 6 | $\begin{gathered} \text { 51-56, 61-62, } \\ 71-72,81 \end{gathered}$ | All services | 90,028 | 1.0\% | 42.3\% |
| 45000 | South Carolina | 6 | $\begin{gathered} 51-56,61-62, \\ 71-72,81 \end{gathered}$ | All services | 83,456 | 0.9\% | 44.1\% |
| 1000 | Alabama | 6 | $\begin{gathered} \text { 51-56, 61-62, } \\ 71-72,81 \end{gathered}$ | All services | 80,448 | 0.9\% | 40.1\% |
| 32000 | Nevada | 6 | $\begin{gathered} \text { 51-56, 61-62, } \\ 71-72,81 \end{gathered}$ | All services | 76,715 | 0.9\% | 56.8\% |
| 21000 | Kentucky | 6 | $\begin{gathered} \text { 51-56, 61-62, } \\ 71-72,81 \end{gathered}$ | All services | 73,504 | 0.8\% | 39.1\% |
| 19000 | lowa | 6 | $\begin{gathered} 51-56,61-62, \\ 71-72,81 \end{gathered}$ | All services | 71,169 | 0.8\% | 41.9\% |
| 11000 | District of Columbia | 6 | $\begin{gathered} \text { 51-56, 61-62, } \\ 71-72,81 \end{gathered}$ | All services | 69,951 | 0.8\% | 60.1\% |
| 49000 | Utah | 6 | $\begin{gathered} \text { 51-56, 61-62, } \\ 71-72,81 \end{gathered}$ | All services | 69,286 | 0.8\% | 49.5\% |
| 40000 | Oklahoma | 6 | $\begin{gathered} \text { 51-56, 61-62, } \\ 71-72,81 \end{gathered}$ | All services | 65,945 | 0.7\% | 36.0\% |
| 20000 | Kansas | 6 | $\begin{gathered} 51-56,61-62, \\ 71-72,81 \end{gathered}$ | All services | 62,520 | 0.7\% | 43.3\% |
| 5000 | Arkansas | 6 | $\begin{gathered} 51-56,61-62, \\ 71-72,81 \end{gathered}$ | All services | 51,265 | 0.6\% | 42.7\% |
| 31000 | Nebraska | 6 | $\begin{gathered} \text { 51-56, 61-62, } \\ 71-72,81 \end{gathered}$ | All services | 45,516 | 0.5\% | 41.0\% |
| 10000 | Delaware | 6 | $\begin{gathered} \text { 51-56, 61-62, } \\ 71-72,81 \end{gathered}$ | All services | 43,207 | 0.5\% | 68.1\% |
| 28000 | Mississippi | 6 | $\begin{gathered} 51-56,61-62, \\ 71-72,81 \end{gathered}$ | All services | 40,223 | 0.5\% | 38.4\% |
| 15000 | Hawaii | 6 | $\begin{gathered} 51-56,61-62, \\ 71-72,81 \end{gathered}$ | All services | 40,096 | 0.5\% | 52.6\% |
| 33000 | New Hampshire | 6 | $\begin{gathered} \text { 51-56, 61-62, } \\ 71-72,81 \end{gathered}$ | All services | 39,408 | 0.4\% | 56.0\% |
| 35000 | New Mexico | 6 | $\begin{gathered} 51-56,61-62, \\ 71-72,81 \end{gathered}$ | All services | 37,884 | 0.4\% | 41.2\% |
| 44000 | Rhode Island | 6 | $\begin{gathered} 51-56,61-62, \\ 71-72,81 \end{gathered}$ | All services | 32,858 | 0.4\% | 60.3\% |


| FIPS | Geographic Name | Industry Id | Industry Classification | Description | Gross domestic product (GDP), 2014 (millions) | State contribution to GDP, 2014 (percent of national GDP for sector) | Contribution to State GSP, 2014 (percent of total State GSP) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 23000 | Maine | 6 | $\begin{gathered} \text { 51-56, 61-62, } \\ 71-72,81 \end{gathered}$ | All services | 28,544 | 0.3\% | 52.5\% |
| 54000 | West Virginia | 6 | $\begin{gathered} 51-56,61-62, \\ 71-72,81 \end{gathered}$ | All services | 27,190 | 0.3\% | 36.6\% |
| 16000 | Idaho | 6 | $\begin{gathered} 51-56,61-62, \\ 71-72,81 \end{gathered}$ | All services | 26,982 | 0.3\% | 42.7\% |
| 46000 | South Dakota | 6 | $\begin{gathered} \text { 51-56, 61-62, } \\ 71-72,81 \end{gathered}$ | All services | 21,854 | 0.2\% | 47.3\% |
| 30000 | Montana | 6 | $\begin{gathered} 51-56,61-62, \\ 71-72,81 \end{gathered}$ | All services | 18,900 | 0.2\% | 42.8\% |
| 38000 | North Dakota | 6 | $\begin{gathered} 51-56,61-62, \\ 71-72,81 \end{gathered}$ | All services | 18,733 | 0.2\% | 33.5\% |
| 2000 | Alaska | 6 | $\begin{gathered} \text { 51-56, 61-62, } \\ 71-72,81 \end{gathered}$ | All services | 17,047 | 0.2\% | 30.1\% |
| 50000 | Vermont | 6 | $\begin{gathered} \text { 51-56, 61-62, } \\ 71-72,81 \end{gathered}$ | All services | 15,242 | 0.2\% | 52.0\% |
| 56000 | Wyoming | 6 | $\begin{gathered} 51-56,61-62, \\ 71-72,81 \end{gathered}$ | All services | 11,077 | 0.1\% | 25.3\% |
| 0 | United States | 7 | 51 | Information | 824,743 | . | . |
| 6000 | California | 7 | 51 | Information | 187,311 | 22.7\% | 8.1\% |
| 36000 | New York | 7 | 51 | Information | 108,329 | 13.1\% | 7.8\% |
| 48000 | Texas | 7 | 51 | Information | 56,090 | 6.8\% | 3.4\% |
| 53000 | Washington | 7 | 51 | Information | 45,388 | 5.5\% | 10.7\% |
| 12000 | Florida | 7 | 51 | Information | 34,097 | 4.1\% | 4.1\% |
| 42000 | Pennsylvania | 7 | 51 | Information | 30,953 | 3.8\% | 4.7\% |
| 13000 | Georgia | 7 | 51 | Information | 30,344 | 3.7\% | 6.4\% |
| 17000 | Illinois | 7 | 51 | Information | 25,098 | 3.0\% | 3.4\% |
| 34000 | New Jersey | 7 | 51 | Information | 24,742 | 3.0\% | 4.5\% |
| 8000 | Colorado | 7 | 51 | Information | 23,213 | 2.8\% | 7.6\% |
| 25000 | Massachusetts | 7 | 51 | Information | 23,010 | 2.8\% | 5.0\% |
| 51000 | Virginia | 7 | 51 | Information | 18,393 | 2.2\% | 4.0\% |
| 37000 | North Carolina | 7 | 51 | Information | 15,245 | 1.8\% | 3.2\% |
| 39000 | Ohio | 7 | 51 | Information | 15,073 | 1.8\% | 2.6\% |
| 24000 | Maryland | 7 | 51 | Information | 14,593 | 1.8\% | 4.2\% |
| 9000 | Connecticut | 7 | 51 | Information | 12,974 | 1.6\% | 5.2\% |
| 29000 | Missouri | 7 | 51 | Information | 12,388 | 1.5\% | 4.4\% |
| 26000 | Michigan | 7 | 51 | Information | 12,336 | 1.5\% | 2.8\% |
| 27000 | Minnesota | 7 | 51 | Information | 12,175 | 1.5\% | 3.8\% |
| 55000 | Wisconsin | 7 | 51 | Information | 10,015 | 1.2\% | 3.5\% |
| 47000 | Tennessee | 7 | 51 | Information | 8,736 | 1.1\% | 2.9\% |
| 4000 | Arizona | 7 | 51 | Information | 8,174 | 1.0\% | 2.9\% |
| 5000 | Arkansas | 7 | 51 | Information | 6,998 | 0.8\% | 5.8\% |

Appendix A

| FIPS | Geographic Name | Industry Id | Industry Classification | Description | Gross domestic product (GDP), 2014 (millions) | State contribution to GDP, 2014 (percent of national GDP for sector) | Contribution to State GSP, 2014 (percent of total State GSP) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 18000 | Indiana | 7 | 51 | Information | 6,753 | 0.8\% | 2.1\% |
| 41000 | Oregon | 7 | 51 | Information | 6,561 | 0.8\% | 3.1\% |
| 20000 | Kansas | 7 | 51 | Information | 6,209 | 0.8\% | 4.3\% |
| 11000 | District of Columbia | 7 | 51 | Information | 6,044 | 0.7\% | 5.2\% |
| 49000 | Utah | 7 | 51 | Information | 5,670 | 0.7\% | 4.0\% |
| 21000 | Kentucky | 7 | 51 | Information | 5,015 | 0.6\% | 2.7\% |
| 45000 | South Carolina | 7 | 51 | Information | 4,932 | 0.6\% | 2.6\% |
| 1000 | Alabama | 7 | 51 | Information | 4,798 | 0.6\% | 2.4\% |
| 22000 | Louisiana | 7 | 51 | Information | 4,790 | 0.6\% | 1.9\% |
| 19000 | Iowa | 7 | 51 | Information | 4,357 | 0.5\% | 2.6\% |
| 40000 | Oklahoma | 7 | 51 | Information | 4,164 | 0.5\% | 2.3\% |
| 33000 | New Hampshire | 7 | 51 | Information | 2,994 | 0.4\% | 4.3\% |
| 32000 | Nevada | 7 | 51 | Information | 2,891 | 0.4\% | 2.1\% |
| 44000 | Rhode Island | 7 | 51 | Information | 2,787 | 0.3\% | 5.1\% |
| 31000 | Nebraska | 7 | 51 | Information | 2,707 | 0.3\% | 2.4\% |
| 35000 | New Mexico | 7 | 51 | Information | 2,513 | 0.3\% | 2.7\% |
| 28000 | Mississippi | 7 | 51 | Information | 2,257 | 0.3\% | 2.2\% |
| 10000 | Delaware | 7 | 51 | Information | 2,046 | 0.2\% | 3.2\% |
| 15000 | Hawaii | 7 | 51 | Information | 1,705 | 0.2\% | 2.2\% |
| 54000 | West Virginia | 7 | 51 | Information | 1,599 | 0.2\% | 2.2\% |
| 2000 | Alaska | 7 | 51 | Information | 1,292 | 0.2\% | 2.3\% |
| 38000 | North Dakota | 7 | 51 | Information | 1,261 | 0.2\% | 2.3\% |
| 16000 | Idaho | 7 | 51 | Information | 1,221 | 0.1\% | 1.9\% |
| 46000 | South Dakota | 7 | 51 | Information | 1,102 | 0.1\% | 2.4\% |
| 23000 | Maine | 7 | 51 | Information | 1,074 | 0.1\% | 2.0\% |
| 30000 | Montana | 7 | 51 | Information | 951 | 0.1\% | 2.2\% |
| 50000 | Vermont | 7 | 51 | Information | 791 | 0.1\% | 2.7\% |
| 56000 | Wyoming | 7 | 51 | Information | 585 | 0.1\% | 1.3\% |
| 0 | United States | 8 | 52,53 | Finance, insurance, real estate, rental, and leasing | 3,470,572 | . | . |
| 6000 | California | 8 | 52,53 | Finance, insurance, real estate, rental, and leasing | 483,461 | 13.9\% | 21.0\% |
| 36000 | New York | 8 | 52,53 | Finance, insurance, real estate, rental, and leasing | 449,705 | 13.0\% | 32.2\% |
| 48000 | Texas | 8 | 52,53 | Finance, insurance, real estate, rental, and leasing | 223,795 | 6.4\% | 13.6\% |
| 12000 | Florida | 8 | 52,53 | Finance, insurance, real estate, rental, and leasing | 189,534 | 5.5\% | 22.6\% |
| 17000 | Illinois | 8 | 52,53 | Finance, insurance, real estate, rental, and leasing | 163,825 | 4.7\% | 22.3\% |


| FIPS | Geographic Name | Industry Id | Industry Classification | Description | Gross domestic product (GDP), 2014 (millions) | State contribution to GDP, 2014 (percent of national GDP for sector) | Contribution to State GSP, 2014 (percent of total State GSP) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 34000 | New Jersey | 8 | 52,53 | Finance, insurance, real estate, rental, and leasing | 134,810 | 3.9\% | 24.4\% |
| 42000 | Pennsylvania | 8 | 52,53 | Finance, insurance, real estate, rental, and leasing | 127,581 | 3.7\% | 19.4\% |
| 39000 | Ohio | 8 | 52,53 | Finance, insurance, real estate, rental, and leasing | 112,556 | 3.2\% | 19.5\% |
| 25000 | Massachusetts | 8 | 52,53 | Finance, insurance, real estate, rental, and leasing | 108,088 | 3.1\% | 23.7\% |
| 37000 | North Carolina | 8 | 52,53 | Finance, insurance, real estate, rental, and leasing | 92,760 | 2.7\% | 19.2\% |
| 13000 | Georgia | 8 | 52,53 | Finance, insurance, real estate, rental, and leasing | 90,964 | 2.6\% | 19.2\% |
| 51000 | Virginia | 8 | 52,53 | Finance, insurance, real estate, rental, and leasing | 90,025 | 2.6\% | 19.4\% |
| 24000 | Maryland | 8 | 52,53 | Finance, insurance, real estate, rental, and leasing | 74,952 | 2.2\% | 21.6\% |
| 26000 | Michigan | 8 | 52,53 | Finance, insurance, real estate, rental, and leasing | 72,405 | 2.1\% | 16.2\% |
| 53000 | Washington | 8 | 52,53 | Finance, insurance, real estate, rental, and leasing | 71,646 | 2.1\% | 16.9\% |
| 9000 | Connecticut | 8 | 52,53 | Finance, insurance, real estate, rental, and leasing | 70,835 | 2.0\% | 28.3\% |
| 4000 | Arizona | 8 | 52,53 | Finance, insurance, real estate, rental, and leasing | 63,707 | 1.8\% | 22.2\% |
| 27000 | Minnesota | 8 | 52,53 | Finance, insurance, real estate, rental, and leasing | 62,066 | 1.8\% | 19.6\% |
| 8000 | Colorado | 8 | 52,53 | Finance, insurance, real estate, rental, and leasing | 58,400 | 1.7\% | 19.1\% |
| 55000 | Wisconsin | 8 | 52,53 | Finance, insurance, real estate, rental, and leasing | 55,423 | 1.6\% | 19.1\% |
| 29000 | Missouri | 8 | 52,53 | Finance, insurance, real estate, rental, and leasing | 51,836 | 1.5\% | 18.5\% |
| 47000 | Tennessee | 8 | 52,53 | Finance, insurance, real estate, rental, and leasing | 48,437 | 1.4\% | 16.3\% |
| 18000 | Indiana | 8 | 52,53 | Finance, insurance, real estate, rental, and leasing | 46,182 | 1.3\% | 14.5\% |
| 19000 | lowa | 8 | 52,53 | Finance, insurance, real estate, rental, and leasing | 35,195 | 1.0\% | 20.7\% |
| 41000 | Oregon | 8 | 52,53 | Finance, insurance, real estate, rental, and leasing | 34,919 | 1.0\% | 16.4\% |
| 22000 | Louisiana | 8 | 52,53 | Finance, insurance, real estate, rental, and leasing | 34,192 | 1.0\% | 13.6\% |
| 45000 | South Carolina | 8 | 52, 53 | Finance, insurance, real estate, rental, and leasing | 31,990 | 0.9\% | 16.9\% |


| FIPS | Geographic Name | Industry Id Id | Industry Classification | Description | Gross domestic product (GDP), 2014 (millions) | State contribution to GDP, 2014 (percent of national GDP for sector) | Contribution to State GSP, 2014 (percent of total State GSP) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1000 | Alabama | 8 | 52,53 | Finance, insurance, real estate, rental, and leasing | 31,459 | 0.9\% | 15.7\% |
| 49000 | Utah | 8 | 52,53 | Finance, insurance, real estate, rental, and leasing | 30,169 | 0.9\% | 21.5\% |
| 21000 | Kentucky | 8 | 52,53 | Finance, insurance, real estate, rental, and leasing | 27,534 | 0.8\% | 14.7\% |
| 10000 | Delaware | 8 | 52,53 | Finance, insurance, real estate, rental, and leasing | 26,024 | 0.7\% | 41.0\% |
| 32000 | Nevada | 8 | 52,53 | Finance, insurance, real estate, rental, and leasing | 25,461 | 0.7\% | 18.9\% |
| 40000 | Oklahoma | 8 | 52,53 | Finance, insurance, real estate, rental, and leasing | 24,304 | 0.7\% | 13.3\% |
| 20000 | Kansas | 8 | 52,53 | Finance, insurance, real estate, rental, and leasing | 22,783 | 0.7\% | 15.8\% |
| 31000 | Nebraska | 8 | 52,53 | Finance, insurance, real estate, rental, and leasing | 19,305 | 0.6\% | 17.4\% |
| 5000 | Arkansas | 8 | 52,53 | Finance, insurance, real estate, rental, and leasing | 17,132 | 0.5\% | 14.3\% |
| 15000 | Hawaii | 8 | 52,53 | Finance, insurance, real estate, rental, and leasing | 16,961 | 0.5\% | 22.3\% |
| 33000 | New Hampshire | 8 | 52,53 | Finance, insurance, real estate, rental, and leasing | 15,982 | 0.5\% | 22.7\% |
| 28000 | Mississippi | 8 | 52,53 | Finance, insurance, real estate, rental, and leasing | 15,157 | 0.4\% | 14.5\% |
| 11000 | District of Columbia | 8 | 52,53 | Finance, insurance, real estate, rental, and leasing | 15,067 | 0.4\% | 12.9\% |
| 35000 | New Mexico | 8 | 52,53 | Finance, insurance, real estate, rental, and leasing | 14,513 | 0.4\% | 15.8\% |
| 44000 | Rhode Island | 8 | 52,53 | Finance, insurance, real estate, rental, and leasing | 12,964 | 0.4\% | 23.8\% |
| 46000 | South Dakota | 8 | 52,53 | Finance, insurance, real estate, rental, and leasing | 11,709 | 0.3\% | 25.4\% |
| 16000 | Idaho | 8 | 52,53 | Finance, insurance, real estate, rental, and leasing | 11,450 | 0.3\% | 18.1\% |
| 23000 | Maine | 8 | 52,53 | Finance, insurance, real estate, rental, and leasing | 11,147 | 0.3\% | 20.5\% |
| 54000 | West Virginia | 8 | 52,53 | Finance, insurance, real estate, rental, and leasing | 9,166 | 0.3\% | 12.3\% |
| 38000 | North Dakota | 8 | 52,53 | Finance, insurance, real estate, rental, and leasing | 8,364 | 0.2\% | 14.9\% |
| 30000 | Montana | 8 | 52,53 | Finance, insurance, real estate, rental, and leasing | 7,785 | 0.2\% | 17.6\% |
| 2000 | Alaska | 8 | 52,53 | Finance, insurance, real estate, rental, and leasing | 6,108 | 0.2\% | 10.8\% |
| 50000 | Vermont | 8 | 52,53 | Finance, insurance, real estate, rental, and leasing | 5,627 | 0.2\% | 19.2\% |


| FIPS | Geographic Name | Industry Id | Industry Classification | Description | Gross domestic product (GDP), 2014 (millions) | State contribution to GDP, 2014 (percent of national GDP for sector) | Contribution to State GSP, 2014 (percent of total State GSP) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 56000 | Wyoming | 8 | 52,53 | Finance, insurance, real estate, rental, and leasing | 5,114 | 0.1\% | 11.7\% |
| 0 | United States | 9 | 54, 55, 56 | Professional and business services | 2,056,958 | . | . |
| 6000 | California | 9 | 54, 55, 56 | Professional and business services | 301,343 | 14.6\% | 13.1\% |
| 36000 | New York | 9 | 54, 55, 56 | Professional and business services | 174,678 | 8.5\% | 12.5\% |
| 48000 | Texas | 9 | 54, 55, 56 | Professional and business services | 167,568 | 8.1\% | 10.2\% |
| 12000 | Florida | 9 | 54, 55, 56 | Professional and business services | 103,150 | 5.0\% | 12.3\% |
| 17000 | Illinois | 9 | 54, 55, 56 | Professional and business services | 101,122 | 4.9\% | 13.7\% |
| 42000 | Pennsylvania | 9 | 54, 55, 56 | Professional and business services | 85,936 | 4.2\% | 13.1\% |
| 51000 | Virginia | 9 | 54, 55, 56 | Professional and business services | 83,446 | 4.1\% | 18.0\% |
| 34000 | New Jersey | 9 | 54, 55, 56 | Professional and business services | 83,441 | 4.1\% | 15.1\% |
| 25000 | Massachusetts | 9 | 54, 55, 56 | Professional and business services | 74,729 | 3.6\% | 16.4\% |
| 39000 | Ohio | 9 | 54, 55, 56 | Professional and business services | 69,446 | 3.4\% | 12.1\% |
| 13000 | Georgia | 9 | 54, 55, 56 | Professional and business services | 59,025 | 2.9\% | 12.4\% |
| 26000 | Michigan | 9 | 54, 55, 56 | Professional and business services | 56,261 | 2.7\% | 12.6\% |
| 37000 | North Carolina | 9 | 54, 55, 56 | Professional and business services | 51,813 | 2.5\% | 10.8\% |
| 24000 | Maryland | 9 | 54, 55, 56 | Professional and business services | 48,767 | 2.4\% | 14.1\% |
| 53000 | Washington | 9 | 54, 55, 56 | Professional and business services | 44,613 | 2.2\% | 10.5\% |
| 8000 | Colorado | 9 | 54, 55, 56 | Professional and business services | 42,526 | 2.1\% | 13.9\% |
| 27000 | Minnesota | 9 | 54, 55, 56 | Professional and business services | 38,890 | 1.9\% | 12.3\% |
| 29000 | Missouri | 9 | 54, 55, 56 | Professional and business services | 34,049 | 1.7\% | 12.2\% |
| 47000 | Tennessee | 9 | 54, 55, 56 | Professional and business services | 33,298 | 1.6\% | 11.2\% |
| 4000 | Arizona | 9 | 54, 55, 56 | Professional and business services | 31,880 | 1.5\% | 11.1\% |
| 9000 | Connecticut | 9 | 54, 55, 56 | Professional and business services | 30,018 | 1.5\% | 12.0\% |

Appendix A

| FIPS | Geographic Name | Industry Id | Industry Classification | Description | Gross domestic product (GDP), 2014 (millions) | State contribution to GDP, 2014 (percent of national GDP for sector) | Contribution to State GSP, 2014 (percent of total State GSP) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 11000 | District of Columbia | 9 | 54, 55, 56 | Professional and business services | 27,625 | 1.3\% | 23.7\% |
| 55000 | Wisconsin | 9 | 54, 55, 56 | Professional and business services | 26,637 | 1.3\% | 9.2\% |
| 18000 | Indiana | 9 | 54, 55, 56 | Professional and business services | 25,384 | 1.2\% | 8.0\% |
| 41000 | Oregon | 9 | 54, 55, 56 | Professional and business services | 20,821 | 1.0\% | 9.8\% |
| 22000 | Louisiana | 9 | 54, 55, 56 | Professional and business services | 19,692 | 1.0\% | 7.8\% |
| 45000 | South Carolina | 9 | 54, 55, 56 | Professional and business services | 19,478 | 0.9\% | 10.3\% |
| 1000 | Alabama | 9 | 54, 55, 56 | Professional and business services | 17,906 | 0.9\% | 8.9\% |
| 40000 | Oklahoma | 9 | 54, 55, 56 | Professional and business services | 15,008 | 0.7\% | 8.2\% |
| 21000 | Kentucky | 9 | 54, 55, 56 | Professional and business services | 14,979 | 0.7\% | 8.0\% |
| 49000 | Utah | 9 | 54, 55, 56 | Professional and business services | 14,979 | 0.7\% | 10.7\% |
| 20000 | Kansas | 9 | 54, 55, 56 | Professional and business services | 14,405 | 0.7\% | 10.0\% |
| 32000 | Nevada | 9 | 54, 55, 56 | Professional and business services | 14,056 | 0.7\% | 10.4\% |
| 5000 | Arkansas | 9 | 54, 55, 56 | Professional and business services | 11,389 | 0.6\% | 9.5\% |
| 19000 | lowa | 9 | 54, 55, 56 | Professional and business services | 10,620 | 0.5\% | 6.3\% |
| 31000 | Nebraska | 9 | 54, 55, 56 | Professional and business services | 9,904 | 0.5\% | 8.9\% |
| 35000 | New Mexico | 9 | 54, 55, 56 | Professional and business services | 8,881 | 0.4\% | 9.7\% |
| 33000 | New Hampshire | 9 | 54, 55, 56 | Professional and business services | 8,209 | 0.4\% | 11.7\% |
| 10000 | Delaware | 9 | 54, 55, 56 | Professional and business services | 7,459 | 0.4\% | 11.8\% |
| 28000 | Mississippi | 9 | 54, 55, 56 | Professional and business services | 7,221 | 0.4\% | 6.9\% |
| 15000 | Hawaii | 9 | 54, 55, 56 | Professional and business services | 6,803 | 0.3\% | 8.9\% |
| 44000 | Rhode Island | 9 | 54, 55, 56 | Professional and business services | 6,458 | 0.3\% | 11.9\% |
| 16000 | Idaho | 9 | 54, 55, 56 | Professional and business services | 5,778 | 0.3\% | 9.1\% |


| FIPS | Geographic Name | Industry Id | Industry Classification | Description | Gross domestic product (GDP), 2014 (millions) | State contribution to GDP, 2014 (percent of national GDP for sector) | Contribution to <br> State GSP, 2014 <br> (percent of total <br> State GSP) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 23000 | Maine | 9 | 54, 55, 56 | Professional and business services | 5,375 | 0.3\% | 9.9\% |
| 54000 | West Virginia | 9 | 54, 55, 56 | Professional and business services | 5,161 | 0.3\% | 6.9\% |
| 2000 | Alaska | 9 | 54, 55, 56 | Professional and business services | 3,690 | 0.2\% | 6.5\% |
| 38000 | North Dakota | 9 | 54, 55, 56 | Professional and business services | 3,137 | 0.2\% | 5.6\% |
| 30000 | Montana | 9 | 54, 55, 56 | Professional and business services | 3,034 | 0.1\% | 6.9\% |
| 50000 | Vermont | 9 | 54, 55, 56 | Professional and business services | 2,774 | 0.1\% | 9.5\% |
| 46000 | South Dakota | 9 | 54, 55, 56 | Professional and business services | 2,461 | 0.1\% | 5.3\% |
| 56000 | Wyoming | 9 | 54, 55, 56 | Professional and business services | 1,637 | 0.1\% | 3.7\% |
| 0 | United States | 10 | 61,62 | Educational services, health care, and social assistance | 1,419,639 | . |  |
| 6000 | California | 10 | 61,62 | Educational services, health care, and social assistance | 164,882 | 11.6\% | 7.2\% |
| 36000 | New York | 10 | 61,62 | Educational services, health care, and social assistance | 121,485 | 8.6\% | 8.7\% |
| 48000 | Texas | 10 | 61,62 | Educational services, health care, and social assistance | 93,599 | 6.6\% | 5.7\% |
| 12000 | Florida | 10 | 61,62 | Educational services, health care, and social assistance | 79,408 | 5.6\% | 9.5\% |
| 42000 | Pennsylvania | 10 | 61,62 | Educational services, health care, and social assistance | 77,995 | 5.5\% | 11.8\% |
| 17000 | Illinois | 10 | 61,62 | Educational services, health care, and social assistance | 61,548 | 4.3\% | 8.4\% |
| 25000 | Massachusetts | 10 | 61,62 | Educational services, health care, and social assistance | 55,588 | 3.9\% | 12.2\% |
| 39000 | Ohio | 10 | 61,62 | Educational services, health care, and social assistance | 54,311 | 3.8\% | 9.4\% |
| 34000 | New Jersey | 10 | 61,62 | Educational services, health care, and social assistance | 47,603 | 3.4\% | 8.6\% |
| 26000 | Michigan | 10 | 61,62 | Educational services, health care, and social assistance | 39,945 | 2.8\% | 8.9\% |
| 37000 | North Carolina | 10 | 61,62 | Educational services, health care, and social assistance | 37,146 | 2.6\% | 7.7\% |
| 13000 | Georgia | 10 | 61,62 | Educational services, health care, and social assistance | 35,072 | 2.5\% | 7.4\% |
| 51000 | Virginia | 10 | 61,62 | Educational services, health care, and social assistance | 31,822 | 2.2\% | 6.9\% |

Appendix A

| FIPS | Geographic Name | Industry Id | Industry Classification | Description | Gross domestic product (GDP), 2014 (millions) | State contribution to GDP, 2014 (percent of national GDP for sector) | Contribution to <br> State GSP, 2014 <br> (percent of total <br> State GSP) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 47000 | Tennessee | 10 | 61,62 | Educational services, health care, and social assistance | 31,642 | 2.2\% | 10.6\% |
| 27000 | Minnesota | 10 | 61,62 | Educational services, health care, and social assistance | 31,373 | 2.2\% | 9.9\% |
| 24000 | Maryland | 10 | 61,62 | Educational services, health care, and social assistance | 30,672 | 2.2\% | 8.8\% |
| 53000 | Washington | 10 | 61,62 | Educational services, health care, and social assistance | 28,742 | 2.0\% | 6.8\% |
| 55000 | Wisconsin | 10 | 61,62 | Educational services, health care, and social assistance | 27,746 | 2.0\% | 9.6\% |
| 18000 | Indiana | 10 | 61,62 | Educational services, health care, and social assistance | 27,552 | 1.9\% | 8.7\% |
| 29000 | Missouri | 10 | 61,62 | Educational services, health care, and social assistance | 26,797 | 1.9\% | 9.6\% |
| 4000 | Arizona | 10 | 61,62 | Educational services, health care, and social assistance | 26,184 | 1.8\% | 9.1\% |
| 9000 | Connecticut | 10 | 61,62 | Educational services, health care, and social assistance | 25,588 | 1.8\% | 10.2\% |
| 8000 | Colorado | 10 | 61,62 | Educational services, health care, and social assistance | 20,453 | 1.4\% | 6.7\% |
| 22000 | Louisiana | 10 | 61,62 | Educational services, health care, and social assistance | 17,696 | 1.2\% | 7.0\% |
| 41000 | Oregon | 10 | 61,62 | Educational services, health care, and social assistance | 17,007 | 1.2\% | 8.0\% |
| 21000 | Kentucky | 10 | 61,62 | Educational services, health care, and social assistance | 15,965 | 1.1\% | 8.5\% |
| 1000 | Alabama | 10 | 61,62 | Educational services, health care, and social assistance | 14,747 | 1.0\% | 7.4\% |
| 45000 | South Carolina | 10 | 61,62 | Educational services, health care, and social assistance | 13,934 | 1.0\% | 7.4\% |
| 40000 | Oklahoma | 10 | 61,62 | Educational services, health care, and social assistance | 13,067 | 0.9\% | 7.1\% |
| 19000 | Iowa | 10 | 61,62 | Educational services, health care, and social assistance | 12,707 | 0.9\% | 7.5\% |
| 20000 | Kansas | 10 | 61,62 | Educational services, health care, and social assistance | 11,543 | 0.8\% | 8.0\% |
| 5000 | Arkansas | 10 | 61,62 | Educational services, health care, and social assistance | 9,789 | 0.7\% | 8.2\% |
| 49000 | Utah | 10 | 61,62 | Educational services, health care, and social assistance | 9,692 | 0.7\% | 6.9\% |
| 11000 | District of Columbia | 10 | 61,62 | Educational services, health care, and social assistance | 9,048 | 0.6\% | 7.8\% |
| 31000 | Nebraska | 10 | 61,62 | Educational services, health care, and social assistance | 8,482 | 0.6\% | 7.6\% |
| 28000 | Mississippi | 10 | 61,62 | Educational services, health care, and social assistance | 8,421 | 0.6\% | 8.0\% |


| FIPS | Geographic Name | Industry Id | Industry Classification | Description | Gross domestic product (GDP), 2014 (millions) | State contribution to GDP, 2014 (percent of national GDP for sector) | Contribution to State GSP, 2014 (percent of total State GSP) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 32000 | Nevada | 10 | 61,62 | Educational services, health care, and social assistance | 8,116 | 0.6\% | 6.0\% |
| 33000 | New Hampshire | 10 | 61,62 | Educational services, health care, and social assistance | 7,747 | 0.5\% | 11.0\% |
| 23000 | Maine | 10 | 61,62 | Educational services, health care, and social assistance | 7,202 | 0.5\% | 13.3\% |
| 44000 | Rhode Island | 10 | 61,62 | Educational services, health care, and social assistance | 7,154 | 0.5\% | 13.1\% |
| 54000 | West Virginia | 10 | 61,62 | Educational services, health care, and social assistance | 7,053 | 0.5\% | 9.5\% |
| 35000 | New Mexico | 10 | 61,62 | Educational services, health care, and social assistance | 6,797 | 0.5\% | 7.4\% |
| 15000 | Hawaii | 10 | 61,62 | Educational services, health care, and social assistance | 5,702 | 0.4\% | 7.5\% |
| 16000 | Idaho | 10 | 61,62 | Educational services, health care, and social assistance | 5,169 | 0.4\% | 8.2\% |
| 10000 | Delaware | 10 | 61,62 | Educational services, health care, and social assistance | 4,896 | 0.3\% | 7.7\% |
| 46000 | South Dakota | 10 | 61,62 | Educational services, health care, and social assistance | 4,155 | 0.3\% | 9.0\% |
| 30000 | Montana | 10 | 61,62 | Educational services, health care, and social assistance | 4,068 | 0.3\% | 9.2\% |
| 50000 | Vermont | 10 | 61,62 | Educational services, health care, and social assistance | 3,656 | 0.3\% | 12.5\% |
| 38000 | North Dakota | 10 | 61,62 | Educational services, health care, and social assistance | 3,592 | 0.3\% | 6.4\% |
| 2000 | Alaska | 10 | 61,62 | Educational services, health care, and social assistance | 3,463 | 0.2\% | 6.1\% |
| 56000 | Wyoming | 10 | 61,62 | Educational services, health care, and social assistance | 1,622 | 0.1\% | 3.7\% |
| 0 | United States | 11 | 71,72 | Arts, entertainment, recreation, accommodation, and food services | 660,338 | . |  |
| 6000 | California | 11 | 71,72 | Arts, entertainment, recreation, accommodation, and food services | 91,642 | 13.9\% | 4.0\% |
| 36000 | New York | 11 | 71,72 | Arts, entertainment, recreation, accommodation, and food services | 54,055 | 8.2\% | 3.9\% |
| 12000 | Florida | 11 | 71,72 | Arts, entertainment, recreation, accommodation, and food services | 53,423 | 8.1\% | 6.4\% |
| 48000 | Texas | 11 | 71,72 | Arts, entertainment, recreation, accommodation, and food services | 52,513 | 8.0\% | 3.2\% |
| 17000 | Illinois | 11 | 71,72 | Arts, entertainment, recreation, accommodation, and food services | 25,456 | 3.9\% | 3.5\% |


| FIPS | Geographic Name | Industry Id | Industry Classification | Description | Gross domestic product (GDP), 2014 (millions) | State contribution to GDP, 2014 (percent of national GDP for sector) | Contribution to State GSP, 2014 (percent of total State GSP) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 32000 | Nevada | 11 | 71,72 | Arts, entertainment, recreation, accommodation, and food services | 23,537 | 3.6\% | 17.4\% |
| 42000 | Pennsylvania | 11 | 71,72 | Arts, entertainment, recreation, accommodation, and food services | 22,654 | 3.4\% | 3.4\% |
| 39000 | Ohio | 11 | 71,72 | Arts, entertainment, recreation, accommodation, and food services | 18,828 | 2.9\% | 3.3\% |
| 34000 | New Jersey | 11 | 71,72 | Arts, entertainment, recreation, accommodation, and food services | 17,450 | 2.6\% | 3.2\% |
| 13000 | Georgia | 11 | 71,72 | Arts, entertainment, recreation, accommodation, and food services | 16,828 | 2.5\% | 3.5\% |
| 25000 | Massachusetts | 11 | 71,72 | Arts, entertainment, recreation, accommodation, and food services | 16,750 | 2.5\% | 3.7\% |
| 37000 | North Carolina | 11 | 71,72 | Arts, entertainment, recreation, accommodation, and food services | 15,909 | 2.4\% | 3.3\% |
| 26000 | Michigan | 11 | 71,72 | Arts, entertainment, recreation, accommodation, and food services | 15,540 | 2.4\% | 3.5\% |
| 53000 | Washington | 11 | 71,72 | Arts, entertainment, recreation, accommodation, and food services | 14,479 | 2.2\% | 3.4\% |
| 51000 | Virginia | 11 | 71,72 | Arts, entertainment, recreation, accommodation, and food services | 14,087 | 2.1\% | 3.0\% |
| 8000 | Colorado | 11 | 71,72 | Arts, entertainment, recreation, accommodation, and food services | 13,946 | 2.1\% | 4.6\% |
| 4000 | Arizona | 11 | 71,72 | Arts, entertainment, recreation, accommodation, and food services | 12,755 | 1.9\% | 4.5\% |
| 47000 | Tennessee | 11 | 71,72 | Arts, entertainment, recreation, accommodation, and food services | 12,698 | 1.9\% | 4.3\% |
| 24000 | Maryland | 11 | 71,72 | Arts, entertainment, recreation, accommodation, and food services | 12,236 | 1.9\% | 3.5\% |
| 29000 | Missouri | 11 | 71,72 | Arts, entertainment, recreation, accommodation, and food services | 11,346 | 1.7\% | 4.1\% |
| 18000 | Indiana | 11 | 71,72 | Arts, entertainment, recreation, accommodation, and food services | 10,915 | 1.7\% | 3.4\% |


| FIPS | Geographic Name | Industry Id | Industry Classification | Description | Gross domestic product (GDP), 2014 (millions) | State contribution to GDP, 2014 (percent of national GDP for sector) | Contribution to State GSP, 2014 (percent of total State GSP) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 27000 | Minnesota | 11 | 71,72 | Arts, entertainment, recreation, accommodation, and food services | 10,701 | 1.6\% | 3.4\% |
| 22000 | Louisiana | 11 | 71,72 | Arts, entertainment, recreation, accommodation, and food services | 9,743 | 1.5\% | 3.9\% |
| 55000 | Wisconsin | 11 | 71,72 | Arts, entertainment, recreation, accommodation, and food services | 9,037 | 1.4\% | 3.1\% |
| 45000 | South Carolina | 11 | 71,72 | Arts, entertainment, recreation, accommodation, and food services | 8,343 | 1.3\% | 4.4\% |
| 9000 | Connecticut | 11 | 71,72 | Arts, entertainment, recreation, accommodation, and food services | 7,313 | 1.1\% | 2.9\% |
| 15000 | Hawaii | 11 | 71,72 | Arts, entertainment, recreation, accommodation, and food services | 7,177 | 1.1\% | 9.4\% |
| 41000 | Oregon | 11 | 71,72 | Arts, entertainment, recreation, accommodation, and food services | 6,589 | 1.0\% | 3.1\% |
| 1000 | Alabama | 11 | 71,72 | Arts, entertainment, recreation, accommodation, and food services | 6,177 | 0.9\% | 3.1\% |
| 21000 | Kentucky | 11 | 71,72 | Arts, entertainment, recreation, accommodation, and food services | 6,057 | 0.9\% | 3.2\% |
| 40000 | Oklahoma | 11 | 71,72 | Arts, entertainment, recreation, accommodation, and food services | 5,588 | 0.8\% | 3.1\% |
| 19000 | lowa | 11 | 71,72 | Arts, entertainment, recreation, accommodation, and food services | 4,802 | 0.7\% | 2.8\% |
| 11000 | District of Columbia | 11 | 71,72 | Arts, entertainment, recreation, accommodation, and food services | 4,696 | 0.7\% | 4.0\% |
| 49000 | Utah | 11 | 71,72 | Arts, entertainment, recreation, accommodation, and food services | 4,676 | 0.7\% | 3.3\% |
| 28000 | Mississippi | 11 | 71,72 | Arts, entertainment, recreation, accommodation, and food services | 4,657 | 0.7\% | 4.4\% |
| 20000 | Kansas | 11 | 71,72 | Arts, entertainment, recreation, accommodation, and food services | 4,273 | 0.6\% | 3.0\% |
| 5000 | Arkansas | 11 | 71,72 | Arts, entertainment, recreation, accommodation, and food services | 3,357 | 0.5\% | 2.8\% |


| FIPS | Geographic Name | Industry Id | Industry Classification | Description | Gross domestic product (GDP), 2014 (millions) | State contribution to GDP, 2014 (percent of national GDP for sector) | Contribution to State GSP, 2014 (percent of total State GSP) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 35000 | New Mexico | 11 | 71,72 | Arts, entertainment, recreation, accommodation, and food services | 3,204 | 0.5\% | 3.5\% |
| 31000 | Nebraska | 11 | 71,72 | Arts, entertainment, recreation, accommodation, and food services | 2,802 | 0.4\% | 2.5\% |
| 33000 | New Hampshire | 11 | 71,72 | Arts, entertainment, recreation, accommodation, and food services | 2,783 | 0.4\% | 4.0\% |
| 54000 | West Virginia | 11 | 71,72 | Arts, entertainment, recreation, accommodation, and food services | 2,697 | 0.4\% | 3.6\% |
| 23000 | Maine | 11 | 71,72 | Arts, entertainment, recreation, accommodation, and food services | 2,499 | 0.4\% | 4.6\% |
| 44000 | Rhode Island | 11 | 71,72 | Arts, entertainment, recreation, accommodation, and food services | 2,340 | 0.4\% | 4.3\% |
| 16000 | Idaho | 11 | 71,72 | Arts, entertainment, recreation, accommodation, and food services | 2,094 | 0.3\% | 3.3\% |
| 30000 | Montana | 11 | 71,72 | Arts, entertainment, recreation, accommodation, and food services | 2,094 | 0.3\% | 4.7\% |
| 10000 | Delaware | 11 | 71,72 | Arts, entertainment, recreation, accommodation, and food services | 1,844 | 0.3\% | 2.9\% |
| 50000 | Vermont | 11 | 71,72 | Arts, entertainment, recreation, accommodation, and food services | 1,693 | 0.3\% | 5.8\% |
| 2000 | Alaska | 11 | 71,72 | Arts, entertainment, recreation, accommodation, and food services | 1,629 | 0.2\% | 2.9\% |
| 46000 | South Dakota | 11 | 71,72 | Arts, entertainment, recreation, accommodation, and food services | 1,510 | 0.2\% | 3.3\% |
| 56000 | Wyoming | 11 | 71,72 | Arts, entertainment, recreation, accommodation, and food services | 1,458 | 0.2\% | 3.3\% |
| 38000 | North Dakota | 11 | 71,72 | Arts, entertainment, recreation, accommodation, and food services | 1,455 | 0.2\% | 2.6\% |
| 0 | United States | 12 | 81 | Other services, except government | 381,597 | . | . |
| 6000 | California | 12 | 81 | Other services, except government | 49,501 | 13.0\% | 2.1\% |
| 48000 | Texas | 12 | 81 | Other services, except government | 32,986 | 8.6\% | 2.0\% |


| FIPS | Geographic Name | Industry Id Id | Industry Classification | Description | Gross domestic product (GDP), 2014 (millions) | State contribution to GDP, 2014 (percent of national GDP for sector) | Contribution to State GSP, 2014 (percent of total State GSP) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 36000 | New York | 12 | 81 | Other services, except government | 27,438 | 7.2\% | 2.0\% |
| 12000 | Florida | 12 | 81 | Other services, except government | 22,980 | 6.0\% | 2.7\% |
| 17000 | Illinois | 12 | 81 | Other services, except government | 17,672 | 4.6\% | 2.4\% |
| 42000 | Pennsylvania | 12 | 81 | Other services, except government | 15,059 | 3.9\% | 2.3\% |
| 39000 | Ohio | 12 | 81 | Other services, except government | 12,137 | 3.2\% | 2.1\% |
| 51000 | Virginia | 12 | 81 | Other services, except government | 11,875 | 3.1\% | 2.6\% |
| 34000 | New Jersey | 12 | 81 | Other services, except government | 11,503 | 3.0\% | 2.1\% |
| 26000 | Michigan | 12 | 81 | Other services, except government | 10,586 | 2.8\% | 2.4\% |
| 13000 | Georgia | 12 | 81 | Other services, except government | 9,802 | 2.6\% | 2.1\% |
| 37000 | North Carolina | 12 | 81 | Other services, except government | 9,643 | 2.5\% | 2.0\% |
| 25000 | Massachusetts | 12 | 81 | Other services, except government | 8,767 | 2.3\% | 1.9\% |
| 53000 | Washington | 12 | 81 | Other services, except government | 8,493 | 2.2\% | 2.0\% |
| 24000 | Maryland | 12 | 81 | Other services, except government | 8,345 | 2.2\% | 2.4\% |
| 47000 | Tennessee | 12 | 81 | Other services, except government | 7,679 | 2.0\% | 2.6\% |
| 11000 | District of Columbia | 12 | 81 | Other services, except government | 7,471 | 2.0\% | 6.4\% |
| 18000 | Indiana | 12 | 81 | Other services, except government | 7,094 | 1.9\% | 2.2\% |
| 8000 | Colorado | 12 | 81 | Other services, except government | 6,861 | 1.8\% | 2.2\% |
| 27000 | Minnesota | 12 | 81 | Other services, except government | 6,646 | 1.7\% | 2.1\% |
| 29000 | Missouri | 12 | 81 | Other services, except government | 6,611 | 1.7\% | 2.4\% |
| 55000 | Wisconsin | 12 | 81 | Other services, except government | 6,408 | 1.7\% | 2.2\% |
| 4000 | Arizona | 12 | 81 | Other services, except government | 6,151 | 1.6\% | 2.1\% |
| 1000 | Alabama | 12 | 81 | Other services, except government | 5,361 | 1.4\% | 2.7\% |
| 22000 | Louisiana | 12 | 81 | Other services, except government | 5,166 | 1.4\% | 2.1\% |

Appendix A

| FIPS | Geographic Name | Industry Id Id | Industry Classification | Description | Gross domestic product (GDP), 2014 (millions) | State contribution to GDP, 2014 (percent of national GDP for sector) | Contribution to State GSP, 2014 (percent of total State GSP) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 9000 | Connecticut | 12 | 81 | Other services, except government | 5,132 | 1.3\% | 2.0\% |
| 45000 | South Carolina | 12 | 81 | Other services, except government | 4,779 | 1.3\% | 2.5\% |
| 41000 | Oregon | 12 | 81 | Other services, except government | 4,131 | 1.1\% | 1.9\% |
| 49000 | Utah | 12 | 81 | Other services, except government | 4,100 | 1.1\% | 2.9\% |
| 21000 | Kentucky | 12 | 81 | Other services, except government | 3,954 | 1.0\% | 2.1\% |
| 40000 | Oklahoma | 12 | 81 | Other services, except government | 3,814 | 1.0\% | 2.1\% |
| 19000 | lowa | 12 | 81 | Other services, except government | 3,488 | 0.9\% | 2.1\% |
| 20000 | Kansas | 12 | 81 | Other services, except government | 3,307 | 0.9\% | 2.3\% |
| 32000 | Nevada | 12 | 81 | Other services, except government | 2,654 | 0.7\% | 2.0\% |
| 5000 | Arkansas | 12 | 81 | Other services, except government | 2,600 | 0.7\% | 2.2\% |
| 28000 | Mississippi | 12 | 81 | Other services, except government | 2,510 | 0.7\% | 2.4\% |
| 31000 | Nebraska | 12 | 81 | Other services, except government | 2,316 | 0.6\% | 2.1\% |
| 35000 | New Mexico | 12 | 81 | Other services, except government | 1,976 | 0.5\% | 2.2\% |
| 15000 | Hawaii | 12 | 81 | Other services, except government | 1,748 | 0.5\% | 2.3\% |
| 33000 | New Hampshire | 12 | 81 | Other services, except government | 1,693 | 0.4\% | 2.4\% |
| 54000 | West Virginia | 12 | 81 | Other services, except government | 1,514 | 0.4\% | 2.0\% |
| 16000 | Idaho | 12 | 81 | Other services, except government | 1,270 | 0.3\% | 2.0\% |
| 23000 | Maine | 12 | 81 | Other services, except government | 1,247 | 0.3\% | 2.3\% |
| 44000 | Rhode Island | 12 | 81 | Other services, except government | 1,155 | 0.3\% | 2.1\% |
| 30000 | Montana | 12 | 81 | Other services, except government | 968 | 0.3\% | 2.2\% |
| 10000 | Delaware | 12 | 81 | Other services, except government | 938 | 0.2\% | 1.5\% |
| 38000 | North Dakota | 12 | 81 | Other services, except government | 924 | 0.2\% | 1.7\% |
| 46000 | South Dakota | 12 | 81 | Other services, except government | 917 | 0.2\% | 2.0\% |


| FIPS | Geographic Name | Industry Id | Industry Classification | Description | Gross domestic product (GDP), 2014 (millions) | State contribution to GDP, 2014 (percent of national GDP for sector) | Contribution to State GSP, 2014 (percent of total State GSP) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2000 | Alaska | 12 | 81 | Other services, except government | 865 | 0.2\% | 1.5\% |
| 50000 | Vermont | 12 | 81 | Other services, except government | 701 | 0.2\% | 2.4\% |
| 56000 | Wyoming | 12 | 81 | Other services, except government | 661 | 0.2\% | 1.5\% |
| 0 | United States | 13 | 92 | Government | 2,159,153 | . | . |
| 6000 | California | 13 | 92 | Government | 287,464 | 13.3\% | 12.5\% |
| 48000 | Texas | 13 | 92 | Government | 161,456 | 7.5\% | 9.8\% |
| 36000 | New York | 13 | 92 | Government | 160,801 | 7.4\% | 11.5\% |
| 12000 | Florida | 13 | 92 | Government | 105,410 | 4.9\% | 12.6\% |
| 51000 | Virginia | 13 | 92 | Government | 87,001 | 4.0\% | 18.8\% |
| 17000 | Illinois | 13 | 92 | Government | 75,034 | 3.5\% | 10.2\% |
| 24000 | Maryland | 13 | 92 | Government | 73,671 | 3.4\% | 21.2\% |
| 42000 | Pennsylvania | 13 | 92 | Government | 69,625 | 3.2\% | 10.6\% |
| 39000 | Ohio | 13 | 92 | Government | 66,033 | 3.1\% | 11.5\% |
| 37000 | North Carolina | 13 | 92 | Government | 64,391 | 3.0\% | 13.4\% |
| 13000 | Georgia | 13 | 92 | Government | 62,001 | 2.9\% | 13.1\% |
| 34000 | New Jersey | 13 | 92 | Government | 60,294 | 2.8\% | 10.9\% |
| 53000 | Washington | 13 | 92 | Government | 59,549 | 2.8\% | 14.1\% |
| 25000 | Massachusetts | 13 | 92 | Government | 50,944 | 2.4\% | 11.2\% |
| 26000 | Michigan | 13 | 92 | Government | 50,644 | 2.3\% | 11.3\% |
| 11000 | District of Columbia | 13 | 92 | Government | 40,758 | 1.9\% | 35.0\% |
| 4000 | Arizona | 13 | 92 | Government | 39,579 | 1.8\% | 13.8\% |
| 8000 | Colorado | 13 | 92 | Government | 37,003 | 1.7\% | 12.1\% |
| 47000 | Tennessee | 13 | 92 | Government | 36,079 | 1.7\% | 12.1\% |
| 29000 | Missouri | 13 | 92 | Government | 34,286 | 1.6\% | 12.3\% |
| 55000 | Wisconsin | 13 | 92 | Government | 33,336 | 1.5\% | 11.5\% |
| 1000 | Alabama | 13 | 92 | Government | 32,727 | 1.5\% | 16.3\% |
| 27000 | Minnesota | 13 | 92 | Government | 32,139 | 1.5\% | 10.1\% |
| 45000 | South Carolina | 13 | 92 | Government | 30,233 | 1.4\% | 16.0\% |
| 18000 | Indiana | 13 | 92 | Government | 28,854 | 1.3\% | 9.1\% |
| 40000 | Oklahoma | 13 | 92 | Government | 28,098 | 1.3\% | 15.3\% |
| 21000 | Kentucky | 13 | 92 | Government | 27,615 | 1.3\% | 14.7\% |
| 22000 | Louisiana | 13 | 92 | Government | 26,161 | 1.2\% | 10.4\% |
| 9000 | Connecticut | 13 | 92 | Government | 26,120 | 1.2\% | 10.4\% |
| 41000 | Oregon | 13 | 92 | Government | 24,920 | 1.2\% | 11.7\% |
| 35000 | New Mexico | 13 | 92 | Government | 21,822 | 1.0\% | 23.7\% |
| 20000 | Kansas | 13 | 92 | Government | 20,099 | 0.9\% | 13.9\% |
| 19000 | lowa | 13 | 92 | Government | 19,213 | 0.9\% | 11.3\% |
| 49000 | Utah | 13 | 92 | Government | 18,350 | 0.8\% | 13.1\% |


| FIPS | Geographic Name | Industry Id | Industry Classification | Description | Gross domestic product (GDP), 2014 (millions) | State contribution to GDP, 2014 (percent of national GDP for sector) | Contribution to State GSP, 2014 (percent of total State GSP) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 28000 | Mississippi | 13 | 92 | Government | 17,936 | 0.8\% | 17.1\% |
| 15000 | Hawaii | 13 | 92 | Government | 16,963 | 0.8\% | 22.3\% |
| 32000 | Nevada | 13 | 92 | Government | 15,552 | 0.7\% | 11.5\% |
| 5000 | Arkansas | 13 | 92 | Government | 15,287 | 0.7\% | 12.7\% |
| 31000 | Nebraska | 13 | 92 | Government | 13,547 | 0.6\% | 12.2\% |
| 54000 | West Virginia | 13 | 92 | Government | 11,816 | 0.5\% | 15.9\% |
| 2000 | Alaska | 13 | 92 | Government | 10,077 | 0.5\% | 17.8\% |
| 16000 | Idaho | 13 | 92 | Government | 8,708 | 0.4\% | 13.8\% |
| 33000 | New Hampshire | 13 | 92 | Government | 8,239 | 0.4\% | 11.7\% |
| 23000 | Maine | 13 | 92 | Government | 7,709 | 0.4\% | 14.2\% |
| 44000 | Rhode Island | 13 | 92 | Government | 7,629 | 0.4\% | 14.0\% |
| 10000 | Delaware | 13 | 92 | Government | 6,677 | 0.3\% | 10.5\% |
| 30000 | Montana | 13 | 92 | Government | 6,508 | 0.3\% | 14.7\% |
| 56000 | Wyoming | 13 | 92 | Government | 5,945 | 0.3\% | 13.6\% |
| 38000 | North Dakota | 13 | 92 | Government | 5,282 | 0.2\% | 9.4\% |
| 46000 | South Dakota | 13 | 92 | Government | 5,097 | 0.2\% | 11.0\% |
| 50000 | Vermont | 13 | 92 | Government | 4,472 | 0.2\% | 15.3\% |
| NOTE: (L) = Less than \$500,000 in nominal GDP |  |  |  |  |  |  |  |


[^0]:    ${ }^{1}$ The TSAs are based on the Bureau of Economic Analysis' (BEA) Input-Output (I-O) Accounts. BEA produces detailed (benchmark) I-O data for every fifth year. BEA releases less detailed (annual) data for the years between the benchmarks. At the time of this publication, the 2007 benchmark data are the most recent detailed data available to the Bureau of Transportation Statistics (BTS) for creating the TSAs. BTS produced TSAs through 2012 (using BEA's annual data in combination with the 2007 benchmark data) and will revise the 2012 TSAs and produce TSAs for the years 2013 through 2017 when BEA releases detailed data for the year 2012.

[^1]:    ${ }^{2}$ For more information, see: http://www.rita.dot.gov/bts/sites/ rita.dot.gov.bts/files/publications/transportation satellite accounts/index.html

[^2]:    ${ }^{1}$ U.S. Department of Labor, Bureau of Labor Statistics, Industries at a Glance, www.bls.gov/iag/tgs/iag_index_naics.htm, as of Sept. 1, 2015

[^3]:    NOTE: In-house transportation consists of transportation services (air, rail, truck, and water) provided by nontransportation industries for their own use. For-hire transportation consists of the services provided by transportation firms to industries and the public on a fee-basis. Airlines, railroads, transit agencies, common carrier trucking companies, and pipelines are examples of for-hire transportation industries. "Other" for-hire transportation includes: transit and passenger ground transportation (excluding State and local government passenger transit); pipeline; Sightseeing transportation and transportation support; parcel delivery, courier, and messenger services (excluding U.S. Postal Service); warehousing and storage; and other transportation and support activities.

    SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics, Transportation Satellite Accounts, available at http:// www.bts.gov as of March 2016.

[^4]:    ${ }^{1}$ U.S. Department of Labor, Bureau of Labor Statistics, Industries at a Glance, www.bls.gov/iag/tgs/iag_index naics.htm, as of September 1, 2015.

[^5]:    ${ }^{2}$ Total for transportation occupations includes supervisors of material moving workers, which could not be separated from supervisors of transportation workers.

[^6]:    ${ }^{1}$ U.S. Department of Labor, Bureau of Labor Statistics, Industries at a Glance, www.bls.gov/iag/tgs/iag_index_naics.htm, as of Sept. 1, 2015

[^7]:    ${ }^{1}$ U.S. Department of Labor, Bureau of Labor Statistics, Industries at a Glance, www.bls.gov/iag/tgs/iag_index naics.htm, as of Sept. 1, 2015

[^8]:    ${ }^{2}$ Total for transportation occupations includes supervisors of material moving workers, which could not be separated from supervisors of transportation workers.

[^9]:    NOTE: Table presents latest data available, as of Feb. 1, 2016.
    *Data on number of trucks and truck miles accumulated was last collected in the Vehicle Inventory and Use Survey for 2002. Shipment data not available for the retail trade industry.
    SOURCE: Data for this table is drawn from figures and tables presented throughout this chapter.

[^10]:    ${ }^{1}$ U.S. Department of Labor, Bureau of Labor Statistics, Industries at a Glance, www.bls.gov/iag/tgs/iag index naics.htm, as of Sept. 1, 2015

[^11]:    ${ }^{3}$ Total for transportation occupations includes supervisors of material moving workers, which could not be separated from supervisors of transportation workers.

[^12]:    ${ }^{1}$ U.S. Department of Labor, Bureau of Labor Statistics, Industries at a Glance, www.bls.gov/iag/tgs/iag_index naics.htm, as of Sept. 1, 2015

[^13]:    ${ }^{1}$ Total for transportation occupations includes supervisors of material moving workers, which could not be separated from supervisors of transportation workers.

