U.S. Department of Transportation

Office of the Secretary of Transportation
Bureau of Transportation Statistics


## Industry

 Snapshots: Uses of Transportation 2017Summary of GDP Contribution and Transportation Uses

| Sector | Contribution to GDP ${ }^{1}$ (2016 current dollars) | Use of Transportation ${ }^{2}$ (2016 current dollars) | Major mode used | Amount of transportation required to produce a dollar of output | Workforce - <br> Transportation and material moving occupations ${ }^{3}$ | Freight Moved by Sector ${ }^{4}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | Values | Tons | Ton-miles |
| Natural Resources and mining | $\$ 438.2$ billion ( $2.4 \%$ ) | \$32.2 billion ( $3.4 \%$ ) | Truck | 4.2¢ | $\begin{aligned} & 132,330 \\ & (12.4 \%) \\ & \hline \end{aligned}$ | \$99.9 bilion | 2.9 billion | 859.3 billion |
| Utilities | \$287.1 billion ( 1.5\%) | $\$ 18.9$ billion ( 2.0\%) | Pipeline | 4.9¢ | $\begin{gathered} 8,330 \\ (1.5 \%) \end{gathered}$ | N/A | N/A | N/A |
| Construction | $\$ 792.5$ billion (4.3\%) | $\$ 44.8$ billion (4.7\%) | Truck | 2.9¢ | $\begin{gathered} 218,650 \\ (3.3 \%) \end{gathered}$ | N/A | N/A | N/A |
| Manufacturing | \$2,183 billion ( 11.7\%) | \$201.1 billion ( 21.1\%) | Truck | 3.6¢ | $\begin{gathered} 969,070 \\ (7.9 \%) \\ \hline \end{gathered}$ | \$5.7 trillion | 4.2 billion | 1.3 trillion |
| Wholesale and retail trade | \$2,199.5 billion ( 11.8\%) | \$277.9 billion ( 29.2\%) | Truck | 9¢ | $\begin{gathered} \hline 2,216,750 \\ (10.2 \%) \\ \hline \end{gathered}$ | \$6.1 trillion | 3.8 billion | 723.2 billion |
| Information and services | $\$ 9,761.9$ billion ( 52.4\%) | \$246.5 billion ( 25.9\%) | Truck | 10.5¢ | $\begin{gathered} 2,529,770 \\ (3.1 \%) \\ \hline \end{gathered}$ | N/A | N/A | N/A |
| Government | \$2,399.8 billion ( 12.9\%) | \$129.5 billion ( 13.6\%) | Air, rail, and water | 3.8¢ | $\begin{gathered} 389,810 \\ (4.1 \%) \\ \hline \end{gathered}$ | N/A | N/A | N/A |
| NOTE: Table presents latest data available, as of March 2018. |  |  |  |  |  |  |  |  |
| SOURCE: Data for this table is draw ${ }^{1}$ Numbers in parantesis are a prece ${ }^{2}$ Numbers in parantesis are a prece ${ }^{3}$ Numbers in parantesis are a prece ${ }^{4}$ Shipments data from the U.S. Dep manufacturing, wholesale trade, | from figures and ta tage of total GDP. tage of total transpo tage of total sector artment of Transpor nd select retail and se | les presented throughout thi <br> ration use by non-transporta orkfocre. <br> ation, Bureau of Transportat rvices. | publication. <br> ion sectors. <br> n Statistics, Commodi | Flow Survey 2012 co | rs only business establis | ents in the fol | ing indust | mining, |
| $\mathrm{N} / \mathrm{A}=$ not applicable |  |  |  |  |  |  |  |  |

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## INDUSTRY SNAPSHOTS: USES OF TRANSPORTATION 2017

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## Chapter 1 Introduction

The Bureau of Transportation Statistics (BTS) estimates that transportation contributed \$1,066.9 billion to the economy in 2016. Of this $\$ 1,066.9$ billion, purchased transportation services (forhire transportation) contributed $\$ 562.4$ billion, transportation carried out by non-transportation industries for their own purposes (in-house transportation) contributed $\$ 172.3$ billion, and households contributed $\$ 332.2$ billion in operating their own automobiles. BTS measures this contribution to the gross domestic product in the Transportation Satellite Accounts (TSAs). The most current TSAs are for 2016. This report focuses on the for-hire and in-house transportation services used by nontransportation industries.

Figure 1-1 Contribution of For-Hire and Business-Related In-House Transportation Activity to U.S. Gross Domestic Product (GDP), 2016 (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: https://www.bts.gov/transportation satellite accounts

SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics, Transportation Satellite Accounts, available at www.bts.gov, as of March 2018.

## Measurement Method and Meaning

BTS produces the TSAs, which provide a comprehensive measure of transportation activity (e.g., a railroad hired by a business to move the business' freight to a customer, trucking carried out by

[^0]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 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. Forhire 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 non-transportation industries for their own purposes (known as business-related in-house transportation). For-hire and business-related inhouse transportation activity contributed $\$ 734.8$ billion to the economy in 2016 (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 inhouse 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.

1. make table: measures the value of transportation services that each transportation industry makes,
2. 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,
${ }^{2}$ For more information, see: https://www.bts.gov/transportation satellite accounts
3. direct requirements table: measures the amount of transportation required to produce one dollar of each product, and
4. total requirements table: measures the inputs required to produce one dollar of transportation.

This report uses information from the TSAs to highlight the role of for-hire and business-related in-house transportation in the production process for all of the non-transportation sectors listed in the U.S. I-O accounts:

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

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 2016,
- the sector's use of transportation by mode in 2016,
- the amount of transportation the sector requires to produce one dollar of output in 2016,
- the number of transportation (e.g., airline and commercial pilots, bus drivers, etc.) and material moving (e.g., cleaners of vehicles,

[^1]dredge operators, etc.) workers employed by the sector in 2016,

- the median annual wage for selected transportation occupations in the sector in 2016,
- the number of trucks and number of truck miles accumulated by the sector in 2002, and
- shipment characteristics (for selected sectors) in 2012.

TSAs data are revised for 2008 to 2015 with the latest BEA data. Due to changes in the source data, the numbers in this release are not comparable to those in our previous release.

## 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 <br> is available) |
| :--- | ---: | ---: |
| Contribution to GDP | $\$ 438.2$ billion | 2016 |
| Use of transportation | $\$ 32.2$ billion | 2016 |
| Amount of transportation required to produce a dollar of output | $4.2 ¢$ | 2016 |
|  |  |  |
| Number of transportation and material moving workers | 39,860 | 2016 |
| Agriculture, Forestry, Fishing and Hunting | 92,470 | 2016 |
| Mining, quarrying, and oil and gas extraction |  |  |
|  |  | $9.6 \%$ |
| Transportation and material moving workers as percent of sector's work force | $14.2 \%$ | 2016 |
| Agriculture, Forestry, Fishing and Hunting |  | 2016 |
| Mining, quarrying, and oil and gas extraction |  |  |


| Median annual wage of transportation and material moving workers |  |  |
| :--- | ---: | ---: |
| Agriculture, Forestry, Fishing and Hunting | $\$ 27,590$ | 2016 |
| Mining, quarrying, and oil and gas extraction | $\$ 43,230$ | 2016 |
| Number of trucks used | 2,418 thousand | 2002 |
| Truck miles accumulated | 27,532 million | 2002 |
| Shipments made by mining industry (excluding oil and gas) |  |  |
| Value |  |  |
| Tons | $\$ 99.9$ billion | 2012 |
| Ton-miles | 2.9 billion | 2012 |
| Average miles per shipment | 859.3 billion | 2012 |

NOTE: Table presents latest data available, as of March 2018
*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 Gross Domestic Product, 2016


NOTE: 2016 GDP $=\$ 18,624$ billion
SOURCE: U.S. Department of Commerce, Bureau of Economic Analysis, Value Added by Industry, available at http://bea.gov as of March 2018.

The natural resources and mining sector uses less transportation services than any of the other sectors except utilities in absolute dollars. But on the per dollar of output basis, 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 the largest number of transportation workers as heavy and tractor-trailer truck drivers (see table 2-1).

In 2016 the natural resources and mining sector contributed $\$ 438.2$ billion ( 2.4 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 ( $\$ 122.6$ billion) followed by California ( $\$ 44.3$ billion), Oklahoma ( $\$ 21.3$ billion), and Pennsylvania ( $\$ 19.4$ billion)— each of which accounted for 4 percent or more of national activity in the natural resources and mining sector in 2016 (figure 2-2, table 2-2). This is primarily driven by mining, quarrying, and oil and gas extraction in Texas, Oklahoma, and Pennsylvania; and agriculture in California.

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

Figure 2-2 State Contributions to Natural Resources and Mining Related GDP (percent of national GDP related to natural resources and mining), 2016


SOURCE: U.S. Department of Commerce, Bureau of Economic Analysis, Gross Domestic Product by State, available at http://bea.gov as of March 2018.

Table 2-2 States Contributing 4.0 Percent or More to National GDP Related to Natural Resources and Mining in 2016

| State | Natural resources and mining (Natural resources and mining related GDP = \$438.2 billion) |  |  | All products and services (Total national GDP = \$18.5 trillion) |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Natural resources and mining related GDP (billions) | Percent of national GDP related to natural resources and mining | Rank (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 | 122.6 | 28.0 | 1 | 1,599.3 | 2 |
| California | 44.3 | 10.1 | 2 | 2,622.7 | 1 |
| Oklahoma | 21.3 | 4.9 | 3 | 181.3 | 30 |
| Pennsylvania | 19.4 | 4.4 | 4 | 719.8 | 6 |

[^3]resources and mining products in 2016. However, natural resources and mining activity accounted for a smaller share of GSP in Texas ( 7.7 percent) than in Wyoming ( 21.6 percent), Alaska (16.2 percent), and North Dakota (14.6 percent) -the states where natural resources and mining activity accounted for the largest share of GSP. 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 14.0 percent ( $\$ 218.3$ billion) of GSP in Texas, while it accounted for only 6.5 percent of GSP in Wyoming ( $\$ 2.5$ billion), 3.1 percent of GSP in Alaska ( $\$ 1.6$ billion), and 7 percent of GSP in North Dakota (\$3.8 billion) in 2016. (see Appendix A)

The natural resources and mining sector was the second smallest user of transportation services in 2016 ( $\$ 32.2$ billion), using almost 2 times more transportation services than the utilities sector (the smallest user of transportation services) in 2016. Looking at air, rail, truck, and water transportation, the natural resources and mining sector used slightly more for-hire services (\$16.2 billion) than in-house (\$9.8 billion) operations (figure 2-3) ${ }^{2}$.

The natural resources and mining sector used \$32.2 billion of transportation services in 2016 (figure 2-4). In 2016, the sector used:

[^4]
## 2-3. Use of Transportation by the Natural Resources and Mining Sector, 2016 (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 2018.

- Primarily truck transportation services (e.g., in acquiring seed or moving agricultural output to silos or mining products to the railhead), which accounted for 57.3 percent ( $\$ 18,467$ million) of all transportation services used by the sector.
- Less in-house truck transportation operations ( $\$ 8,995$ million) than for-hire truck transportation services ( $\$ 9,472$ million), with for-hire truck transportation operations accounting for nearly third (29.4 percent) of all transportation services used ( $\$ 9,472$

Figure 2-4 Natural Resources and Mining Sector's Use of Transportation by Mode, 2016 (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 2018.
million out of \$32,204 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) summed to 23.5 percent ( $\$ 7,570$ million) of all the transportation services used by the sector, a majority of which is for-hire ( $\$ 6,763$ million).
- A significant amount of pipeline transportation, which accounted for 12.8 percent ( $\$ 4,136$ million) of the transportation services.
- A smaller amount of for-hire transit and ground passenger transportation (e.g., bus transportation purchased for farm laborers) ( 0.1 percent, or \$22.0 million) than any other transportation mode.

The natural resources and mining sector required more transportation services in producing output than the average sector in 2016, albeit substantially less transportation services than the sector depending the most on transportation services. In 2016, the natural resources and mining sector required $4.2 ¢$ worth of transportation services to produce one dollar of output, while the most dependent sector (wholesale and retail trade) required $9.0 ¢$ worth of transportation services to produce one dollar of output (figure 2-5).

The overall transportation requirement to produce one dollar of output in

Figure 2-5 Transportation Required Per Dollar of Output by the Natural Resources and Mining Sector, 2016


NOTE: In-house transportation consists of transportation services (air, rail, truck, and water) provided by non-transportation 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 2018.

2016 for the natural resources and mining sector (4.2¢) was relatively modest compared to other inputs. Transportation services were the fourth most important input. Natural resources and mining products, including support activities (e.g., geophysical surveying and mapping services used in mining), were the most important input, requiring 15.8 c 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 2016 the agriculture, forestry, fishing, and hunting
industry (the "agriculture industry") employed 39,860 transportation and material moving workers, accounting for 9.6 percent of its entire work force. The mining, quarrying, and oil and gas extraction industry (the "mining industry") employed 92,470 transportation and material moving workers, accounting for 14.2 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, 2016


NOTE: Transportation includes in-house and for-hire. The natural resources and mining sector requires 1.3 cents per dollar of output of in-house transportation and 2.9 cents per dollar of output of for-hire transportation. TSAs data are revised for 2008 to 2016 with latest BEA data. Due to changes in the source data, the numbers in this release are not comparable to those in our previous release.

SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics, Transportation Satellite Accounts, available at http://www.bts.gov as of March 2018.

Figure 2-7 Number of Workers Employed in Natural Resources and Mining Sector by Occupation, 2016


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 August 30, 2017.

Transportation and material moving workers in the agriculture industry earned a median wage of $\$ 27,590$ in 2016, while workers of all occupations in the agriculture industry earned a lower median wage of $\$ 23,630$. Transportation and material moving workers in mining industry earned a median wage of $\$ 43,230$ in 2016, while workers of all occupations in the mining industry earned a higher median wage of $\$ 52,270$ (figure 2-8).

The agriculture and mining industries employed the largest number of transportation workers as heavy and tractor-trailer truck drivers. Heavy and tractor-trailer truck drivers accounted for 32.9 percent of all transportation and material moving occupations in the agriculture industry and 36.3 percent of all transportation and material moving occupations in the mining industry. In the agriculture industry, heavy and tractor-trailer

Figure 2-8 Median Annual Wage and Employment for Most Common Transportation Occupations (Top 3) in Natural Resources and Mining Sector, 2016


Mining, Quarrying, and Oil and Gas Extraction
Median wage for all occupations: $\$ 52,270$
Total employment 649,130


[^5]truck drivers earned a median wage of $\$ 36,410$, while workers of all occupations in the agriculture industry earned a lower median wage of $\$ 23,630$. In the mining industry, heavy and tractor-trailer truck drivers earned a median wage of $\$ 41,500$, while workers of all occupations in the mining industry earned a higher median wage of \$52,270 (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) is the most recent survey of freight movement. It shows that the mining (excluding oil and gas) industry shipped 2.9 billion tons of raw materials and finished goods domestically, valued at \$99.9 billion, 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 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 2-9 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 Aug. 2012

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


NOTE: Value for modes may not sum to total due to data suppression and rounding.
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 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 heavy tractor-trailer truck drivers.

In 2016 the utilities sector contributed $\$ 287.1$ billion ( 1.5 percent) to the national economy, as measured by gross domestic product (GDP) (table 3-1 and 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 | $\$ 287.1$ billion | 2016 |
| Use of transportation | $\$ 18.9$ billion | 2016 |
| Amount of transportation required to produce a dollar of output | 4.9 C | 2016 |
| Number of transportation and material moving workers | 8,330 | 2016 |
| Transportation and material moving workers as percent of sector's work force | $1.5 \%$ | 2016 |
| Median annual wage of transportation and material moving workers | $\$ 53,220$ | 2016 |
| Number of trucks used | 679 thousand | 2002 |
| Truck miles accumulated | 10,245 million | 2002 |

NOTE: Table presents latest data available, as of March 2018.
*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.

[^6]Figure 3-1 Utilities Sector's Contribution to Gross Domestic Product, 2016


NOTE: 2016 GDP = \$18,624 billion
SOURCE: U.S. Department of Commerce, Bureau of Economic Analysis, Value Added by Industry, available at http://bea.gov as of March 2018.

The largest amount of activity in the utilities sector occurred in Texas ( $\$ 34.9$ billion), followed by California ( $\$ 28.8$ billion), New York ( $\$ 19$ billion), Florida (\$15.1 billion), Illinois (\$12.7 billion), Pennsylvania (\$11.5 billion), and Ohio (\$11.4)— each of which accounted for 4 percent or more of national activity in the utilities sector in 2016 (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 Illinois were the top five producers of utilities in 2016. Utilities, however, accounted for a small share (2.2 percent or less) of GSP in each of these States in 2016. Utilities accounted for the largest share of

GSP in Mississippi (2.8 percent or \$3.1 billion) (see Appendix A).

The utilities sector was the smallest user of transportation services and used $\$ 18.9$ billion of transportation services in 2016 (figure 3-3). The sector relies heavily on pipeline transportation (\$9.1 billion). Specifically, the sector used:

- Primarily pipeline transportation ( 48.4 percent, or \$9,144 million) (e.g., used to distribute natural gas and move waste through sewer systems) and transportationrelated support activities ( 28.9 percent, or $\$ 5,467$ million) (e.g., used to maintain and repair pipelines). Pipeline transportation and transportation-related support activities accounted for 77.3 percent ( $\$ 14,611$ million) of the total amount of transportation services used by the utilities sector.

Figure 3-2 State Contributions to Utilities Related GDP (percent of national GDP related to utilities), 2016


SOURCE: U.S. Department of Commerce, Bureau of Economic Analysis, Gross Domestic Product by State, available at http://bea.gov as of March 2018.

Table 3-2 States Contributing 4.0 Percent or More to National GDP Related to Utilities in 2016

| State | Utilities (Utilities related GDP = \$287.1 billion) |  |  | All products and services (Total National GDP = \$18.5 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 | 34.9 | 12.2 | 1 | 1,599.3 | 2 |
| California | 28.8 | 10.0 | 2 | 2,622.7 | 1 |
| New York | 19.0 | 6.6 | 3 | 1,500.1 | 3 |
| Florida | 15.1 | 5.3 | 4 | 926.0 | 4 |
| Illinois | 12.7 | 4.4 | 5 | 796.0 | 5 |
| Pennsylvania | 11.5 | 4.0 | 6 | 719.8 | 6 |
| Ohio | 11.4 | 4.0 | 7 | 626.6 | 7 |

NOTE: This table presents the latest available data which do not sum to latest available industry totals as shown in figures 1-1 and 3-1. Data shown in figures 1-1 and 3-1 are based on U.S. Department of Commerce, Bureau of Economic Analysis, Value Added by Industry table, available at http://bea.gov as of March 2018.
SOURCE: U.S. Department of Commerce, Bureau of Economic Analysis, Gross Domestic Product by State, available at http://bea.gov as of March 2018.

Figure 3-3 Use of Transportation by the Utilities Sector, 2016 (current dollars, billions)


Total transportation use $=\$ 951.0$ billion

Use of Transportation

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 measureable amount of in-house air, rail, or water transportation in 2016.
SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics, Transportation Satellite Accounts, available at http://www.bts.gov as of March 2018.

- For-hire truck, air, rail, and water transportation services (used, for instance, to move coal to electric generating plants operating on coal) summing to 17 percent ( $\$ 3,213$ million) of the total amount of transportation services.
- More for-hire truck transportation operations than in-house truck transportation services. For-hire truck transportation operations comprised 3.3 percent ( $\$ 629$ million) of the total amount of transportation services used by the sector, while in-house truck transportation accounted for 3.0 percent (\$558 million).
- A small amount of for-hire transit and ground passenger transportation e.g., to provide transportation to workers ( 0.5 percent, or $\$ 86$ million) (figure 3-4).

The utilities sector used the least amount of transportation services in 2016 but ranked as the second most dependent sector on transportation, requiring more transportation services than the average amount needed to produce one dollar of output. In 2016, the utilities sector required 4.9¢ worth of transportation services to produce one dollar of output, while the most dependent sector (wholesale and retail trade) required 9.0¢ worth of transportation services to produce one dollar of output. The utilities sector relied heavily on for-hire transportation services in 2016, requiring 4.7¢ worth of for-hire transportation services (primarily pipeline and transportation-related support activities). The sector required a modest amount of in-house operations ( 0.1 ¢ $)^{2}$ to produce one dollar of output (figure 3-5).

[^7]Figure 3-4 Utilities Sector's Use of Transportation by Mode, 2016 (current dollars, millions)


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

Total use of transportation = \$18.9 billion
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 2016.

SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics, Transportation Satellite Accounts, available at http://www.bts.gov as of March 2018.

The overall transportation requirement for the utilities sector (4.9¢) is larger than most other inputs. In 2016 transportation services ranked as the second most important input. Natural resources and mining products (e.g., coal, petroleum, etc.) ranked as most important input. The utilities sector required 7.6 c worth of natural resources and mining products to produce one dollar of output (figure 3-6).

In 2016 the utilities sector employed nearly 9 thousand transportation and material moving workers, accounting for 1.5 percent of its entire work force. The sector employed more material moving workers $(5,570)$ than transportation
workers (2,760)3 (figure 3-7). 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 utilities sector earned a median wage of $\$ 53,220$ in 2016, while workers of all occupations in the utilities industry earned a higher median wage of \$72,290 (figure 3-8).

[^8]Figure 3-5 Transportation Required Per Dollar of Output by the Utilities Sector, 2016


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 2018.

The utilities sector employed the largest number of transportation workers as heavy and tractor-trailer truck drivers ( 1,460 ), followed first-line supervisors of transportation and material moving and vehicle operators (340), and by light truck or delivery services drivers (250). Heavy and tractor-trailer truck drivers earned a lower median wage $(\$ 45,690)$ than light truck or delivery services drivers $(\$ 60,700)$ and significantly less than first-line supervisors $(\$ 80,280)$. First-line supervisors earned a higher
median wage than all transportation and material moving workers and a slightly higher median wage than all utilities workers. Heavy and tractor-trailer truck 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 3-6 Top 5 Most Required Inputs by the Utilities Sector to Produce a Dollar of Output, 2016


NOTE: Transportation includes in-house and for-hire. The utilities sector requires 0.1 cents per dollar of output of in-house transportation and 4.7 cents per dollar of output of for-hire transportation. TSAs data are revised for 2008 to 2016 with latest BEA data. Due to changes in the source data, the numbers in this release are not comparable to those in our previous release.
SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics, Transportation Satellite Accounts, available at http://www.bts.gov as of March 2018.

Figure 3-7 Number of Workers Employed in the Utilities Sector by Occupation, 2016


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 August 30, 2017.

Figure 3-8 Median Annual Wage and Employment for Most Common Transportation Occupations (Top 3) in Utilities Sector, 2016


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. 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 August 30, 2017.

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

The sector uses less transportation services than all other sectors except the utilities and the natural resources and mining sectors in absolute dollars. Additionally, on the basis of transportation required per dollar of output, the construction sector requires slightly less 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 | $\$ 792.5$ billion | 2016 |
| Use of transportation | $\$ 44.8$ billion | 2016 |
| Amount of transportation required to produce a dollar of output | 2.9 C | 2016 |
| Number of transportation and material moving workers | 218,650 | 2016 |
| Transportation and material moving workers as percent of sector's work force | $3.3 \%$ | 2016 |
| Median annual wage of transportation and material moving workers | $\$ 38,560$ | 2016 |
| Number of trucks used | 4,542 thousand | 2002 |
| Truck miles accumulated | 75,906 million | 2002 |

NOTE: Table presents latest data available, as of March 2018.
*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 2016 the construction sector contributed $\$ 792.5$ billion (4.3 percent) to the national economy, as measured by gross domestic product (GDP) (table 4-1, figure 4-1). The construction sector contributed

[^9]Figure 4-1 Construction Sector's Contribution to Gross Domestic Product, 2016


NOTE: 2016 GDP = \$18,624 billion
SOURCE: U.S. Department of Commerce, Bureau of Economic Analysis, Value Added by Industry, available at http://bea.gov as of March 2018.
less to the economy than many sectors but builds the transportation infrastructure needed to move the goods produced by other sectors throughout the economy.

The largest amount of construction activity occurred in California ( $\$ 101.7$ billion), followed by Texas ( $\$ 91.3$ billion), New York ( $\$ 49.5$ billion), Florida ( $\$ 48.1$ billion), and Pennsylvania ( $\$ 31.7$ 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 gross state product (GSP), rather than as a share of GDP, also provides useful insights to U.S. production. Nationally, California, Texas, New York, Florida, and Pennsylvania led
in construction sector activity in 2016. However, construction was not the leading activity in these states and accounted for only a small share (less than 5.7 percent) of GSP. Construction accounted for the largest share of GSP in North Dakota (7.6 percent, or $\$ 4.1$ 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 2016 ( $\$ 44.8$ billion), using mostly for-hire ( $\$ 24.5$ billion) and in-house ( $\$ 19.6$ billion) air, rail, truck, and water transportation services (figure 4-3).

Of the $\$ 44.8$ billion of transportation services used in 2016 (figure 4-4), the construction sector specifically used:

Figure 4-2 State Contributions to Construction Related GDP (percent of national GDP related to construction), 2016


SOURCE: U.S. Department of Commerce, Bureau of Economic Analysis, Gross Domestic Product by State, available at http://bea.gov as of March 2018.

Table 4-2 States Contributing 4.0 Percent or More to National GDP Related to Construction in 2016

| State | Construction (Construction related GDP = $\$ 792.5$ billion) |  |  | All products and services (Total National GDP = \$18.5 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) |
| California | 101.7 | 12.8 | 1 | 2,622.7 | 1 |
| Texas | 91.3 | 11.5 | 2 | 1,599.3 | 2 |
| New York | 49.5 | 6.3 | 3 | 1,500.1 | 3 |
| Florida | 48.1 | 6.1 | 4 | 926.0 | 4 |
| Pennsylvania | 31.7 | 4.0 | 5 | 719.8 | 6 |

NOTE: This table presents the latest available data which do not sum to latest available industry totals as shown in figures 1-1 and 4-1. Data shown in figures 1-1 and 4-1 are based on U.S. Department of Commerce, Bureau of Economic Analysis, Value Added by Industry table, available at http://bea.gov as of March 2018.

SOURCE: U.S. Department of Commerce, Bureau of Economic Analysis, Gross Domestic Product by State, available at http://bea.gov as of March 2018.

Figure 4-3 Use of Transportation by the Construction Sector, 2016 (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, or in-house air, rail, and water transportation. SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics, Transportation Satellite Accounts, available at http://www.bts.gov as of March 2018.

- Almost exclusively truck transportation services (e.g., for hauling materials and equipment to a construction site), which accounted for 85.7 percent ( $\$ 38,383$ million total) of all transportation services used by the sector.
- Slightly more in-house truck transportation operations (\$19,578 million) than for-hire truck transportation services ( $\$ 18,805$ million), with in-house truck transportation operations accounting for almost half ( 43.7 percent) of all transportation services used.
- A modest amount of air, rail, and water transportation services, which collectively accounted for 12.8 percent ( $\$ 5,722$ million) of all the transportation services used. All of air, rail, and water transportation services used were for-hire.

The construction sector required slightly less transportation services in producing output than the average sector and substantially less transportation services than the sector depending the most on transportation services. In 2016 the construction sector required 2.9と worth of transportation services to produce one dollar of output, while the most dependent sector (wholesale and retail trade) required 9.0¢ worth of transportation services to produce one dollar of output (figure 4-5). The construction sector relied less upon in-house transportation operations than for-hire transportation services, requiring 1.3 C worth of in-house transportation services and $1.6 ¢$ worth of for-hire transportation operations to produce one dollar of output.

The overall transportation requirement for the construction sector (2.9¢) is relatively modest

Figure 4-4 Construction Sector's Use of Transportation by Mode, 2016 (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.
The construction sector did not use a measurable amount of for-hire warehousing, or in-house air, rail, and water transportation.

SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics, Transportation Satellite Accounts, available at http://www.bts.gov as of March 2018.

Figure 4-5 Transportation Required Per Dollar of Output by Construction Sector, 2016


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 2018.
compared to other inputs. In 2016 transportation services were the fourth most important input, while manufactured products (e.g. nails, sheet metal, etc.) were the most important input. The construction sector required 20.9¢ worth of manufactured products to produce one dollar of output (figure 4-6).

In 2016 the construction sector employed 218,650 transportation and material moving workers, accounting for 3.3 percent of its entire work force (figure 4-7). Transportation workers (125,780, or
1.9 percent) include motor vehicle operators, ship engineers, aircraft pilots and flight engineers, etc. Material moving workers ( 92,870 , or 1.4 percent) 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 $\$ 38,560$ in 2016, while workers of all occupations in the construction sector earned a higher median wage of $\$ 44,630$ (figure 4-8).

Figure 4-6 Top 5 Inputs Required by the Construction Sector to Produce a Dollar of Output, 2016


NOTE: Transportation includes in-house and for-hire. The construction sector requires 1.3 cents per dollar of output of in-house transportation and 1.6 cents per dollar of output of for-hire transportation. TSAs data are revised for 2008 to 2016 with latest BEA data. Due to changes in the source data, the numbers in this release are not comparable to those in our previous release.
SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics, Transportation Satellite Accounts, available at http://www.bts.gov as of March 2018.

Figure 4-7 Number of Workers Employed in the Construction Sector by Occupation, 2016
Construction occupations
Total work force $=6,687,380$


SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, Occupational Employment and Wages, available at http://www.bls.gov/oes as of August 30, 2017.

Figure 4-8 Median Annual Wage and Employment for Most Common Transportation Occupations (Top 3) in Construction Sector, 2016

Construction
Median wage for all occupations: $\$ 44,630$
Total employment 6,687,380


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. 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 August 30, 2017

The construction sector employed the largest number of workers as heavy and tractor-trailer truck drivers $(99,920)$, followed by light truck or delivery services drivers $(14,880)$. Workers in these two occupations collectively accounted for 52.5 percent of the sector's entire transportation and material moving workforce ( 114,800 of 218,650 ). Heavy and tractor-trailer truck drivers earned a slightly higher median wage $(\$ 39,270)$ than light truck or delivery services drivers $(\$ 33,920)$.

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 at 75.9 billion 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 continues to rely 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 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 | $\$ 2,183.0$ billion | 2016 |
| Use of transportation | $\$ 201.1$ billion | 2016 |
| Amount of transportation required to produce a dollar of output | 3.6 C | 2016 |
| Number of transportation and material moving workers | 969,070 | 2016 |
| Transportation and material moving workers as percent of sector's work force | $7.9 \%$ | 2016 |
| Median annual wage of transportation and material moving workers | $\$ 31,010$ | 2016 |
| Number of trucks used | 783 thousand | 2002 |
| Truck miles accumulated | 15,385 million | 2002 |
| Shipments made by manufacturing industry | $\$ 5.7$ trillion |  |
| Value | 4.2 billion | 2012 |
| Tons | 1.3 trillion | 2012 |
| Ton-miles | 713 | 2012 |
| Average miles per shipment | 2012 |  |

NOTE: Table presents latest data available, as of March 2018
*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.

[^10]In 2016 the manufacturing sector was the fourth largest contributor to the national economy next to the financial services sector (the largest contributor), the government sector (the second largest contributor), and the professional and business services sector (the third largest contributor). The manufacturing sector contributed $\$ 2,183$ billion ( 11.7 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. For example, the manufacturing sector 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 2016. The largest amount of manufacturing activity, however, occurred in California (\$291.6 billion), followed by Texas ( $\$ 218.3$ billion), Ohio (\$105.9 billion), North Carolina (\$103.4 billion), Illinois (\$99.9 billion), Indiana (\$99.8 billion), and Michigan ( $\$ 92.9$ 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 Ohio produced the most manufactured products in 2016. However, manufacturing activity accounted for only a modest share of economic activity ( 17.0 percent or less), as measured by GSP, within California,

Figure 5-1 Manufacturing Sector's Contribution to Gross Domestic Product, 2016


NOTE: 2016 GDP = \$18,624 billion
SOURCE: U.S. Department of Commerce, Bureau of Economic Analysis, Value Added by Industry, available at http://bea.gov as of March 2018.

Figure 5-2 State Contributions to Manufacturing Related GDP (percent of national GDP related to manufacturing), 2016


SOURCE: U.S. Department of Commerce, Bureau of Economic Analysis, Gross Domestic Product by State, available at http://bea.gov as of March 2018.

Table 5-2 States Contributing 4.0 Percent or More to National GDP Related to Manufacturing in 2016

| State | Manufacturing <br> (Manufacturing related GDP = \$2,183.0 billion) |  |  | All products and services (Total National GDP = \$18.5 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 | 291.6 | 13.4 | 1 | 2,622.7 | 1 |
| Texas | 218.3 | 10.0 | 2 | 1,599.3 | 2 |
| Ohio | 105.9 | 4.9 | 3 | 626.6 | 7 |
| North Carolina | 103.4 | 4.7 | 4 | 521.6 | 10 |
| Illinois | 99.9 | 4.6 | 5 | 796.0 | 5 |
| Indiana | 99.8 | 4.6 | 6 | 347.2 | 16 |
| Michigan | 92.9 | 4.3 | 7 | 490.2 | 13 |

NOTE: This table presents the latest available data which do not sum to latest available industry totals as shown in figures 1-1 and 5-1. Data shown in figures 1-1 and 5-1 are based on U.S. Department of Commerce, Bureau of Economic Analysis, Value Added by Industry table, available at http://bea.gov as of March 2018.

SOURCE: U.S. Department of Commerce, Bureau of Economic Analysis, Gross Domestic Product by State, available at http://bea.gov as of March 2018.

Texas, and Ohio. In contrast, manufacturing accounted for a relatively large share ( 20 percent or more) of GSP in Indiana ( 28.7 percent), Oregon (21.7 percent), and Louisiana (20.7 percent). (see Appendix A)

The manufacturing sector was the third largest user of transportation services in 2016 ( $\$ 201.1$ billion). The manufacturing sector relies heavily on for-hire transportation services - using more for-hire air, rail, truck, and water transportation services (\$128.5 billion) than in-house transportation operations ( $\$ 49.4$ billion) (figure 5-3).

Of the $\$ 201.1$ billion of transportation services (figure 5-4), the manufacturing sector used:

- Primarily for-hire ( $\$ 81,237$ million) and inhouse ( $\$ 48,772$ million) truck transportation services (e.g., used to haul raw materials like wood and cotton to manufacturing plants), which accounted for almost 60 percent ( $\$ 130,009$ million total) of all transportation services used by the sector.
- Air, rail, and water transportation services (e.g., for hauling coal to steel forgeries) summing to 23.8 percent ( $\$ 47,884$ million) of all the transportation services used by the sector. Nearly all air, rail, and water transportation services used were for-hire ( $\$ 47,257$ of $\$ 47,884$ million).
- Other transportation (pipeline transportation, passenger and ground transportation, and

Figure 5-3 Use of Transportation by the Manufacturing Sector, 2016 (current dollars, billions)


Use of Transportation by


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 2018.
transportation support activities such as freight loading) totaling 6.6 percent ( $\$ 13,171$ million) of all transportation services used by the sector.

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 2016 the manufacturing sector required 3.6 ¢ worth
of transportation services to produce one dollar of output, while the most dependent sector (wholesale and retail trade) required 9.0 ¢ 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 2.7 ¢ worth of for-hire transportation services to produce one dollar of output and 0.9 ¿ 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, 2016 (current dollars, millions)

Other<br>transportation and support $\begin{array}{ll}\text { Warehousing } & \begin{array}{l}\text { activities } \\ (\$ 13,171)\end{array}\end{array}$ (for-hire) $(\$ 9,986)$

Truck (in-house)

water
transportation
(for-hire) $(\$ 47,257)$

Truck (for-hire)
$(\$ 81,237)$
Air, rail, and water
transportation (in-house) (\$627)

Total use of transportation = \$201.1 billion
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 2018.

Figure 5-5 Transportation Required Per Dollar of Output by the Manufacturing Sector, 2016


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 2018.

The overall transportation requirement for the manufacturing sector (3.6¢) is relatively modest compared to other inputs. In 2016 transportation services were the fifth most important input, while manufactured products (e.g., nails, screws, etc.) were the most important input. The manufacturing sector required 33.1 C worth of manufactured products to produce one dollar of output (figure 5-6).

In 2016 the manufacturing sector employed nearly one million transportation and material moving workers, accounting for 7.9 percent
of its entire work force. The sector employed more material moving workers $(725,300)$ than transportation workers (about 243,770) ${ }^{2}$ (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.

Transportation and material moving workers in the manufacturing sector earned a median

[^11]Figure 5-6 Top 5 Most Required Inputs by Manufacturing Sector to Produce a Dollar of Output, 2016


NOTE: Transportation includes in-house and for-hire transportation. The manufacturing sector requires 0.9 cents per dollar of output of in-house transportation and 2.7 cents per dollar of output of 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 2018.

Figure 5-7 Number of Workers Employed in the Manufacturing Sector, 2016


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 August 30, 2017.
wage of $\$ 31,010$ in 2016, while workers of all occupations in the manufacturing sector earned a higher median wage of $\$ 39,530$ (figure 5-8).

The manufacturing sector employed the largest number of transportation workers as heavy and tractor-trailer truck drivers $(138,480)$, followed by light truck or delivery services drivers $(46,140)$, and driver/sales workers $(17,450)$. Heavy and tractortrailer truck drivers earned the highest median wage $(\$ 38,800)$ 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 $\$ 33,770$, while light truck or delivery services drivers earned a lower median wage of $\$ 30,030$ (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, 2016


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.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, Occupational Employment and Wages, available at http://www.bls. gov/oes as of August 30, 2017.

The 2012 Commodity Flow Survey shows that the manufacturing industry shipped 4.2 billion 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


Value of shipments (millions of dollars)
total value of shipments $=\$ 5.7$ trillion total tons shipped $=4.2$ billion


NOTE: Value for modes may not sum to total due to rounding and data suppression.
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 <br> (latest year where data available) |
| :---: | :---: | :---: |
| Contribution to GDP | \$2,199.5 billion | 2016 |
| Use of transportation | \$277.9 billion | 2016 |
| Amount of transportation required to produce a dollar of output | 9¢ | 2016 |
| Number of transportation and material moving workers |  |  |
| Wholesale trade | 1,164,310 | 2016 |
| Retail trade | 1,052,440 | 2016 |
| Transportation and material moving workers as percent of sector's work force |  |  |
| Wholesale trade | 19.9\% | 2016 |
| Retail trade | 6.6\% | 2016 |
| Median annual wage of transportation and material moving workers |  |  |
| Wholesale trade | \$31,590 | 2016 |
| Retail trade | \$23,650 | 2016 |
| Number of trucks used | 2,266 thousand | 2002 |
| Truck miles accumulated | 44,434 million | 2002 |
| Shipments made by wholesale industry |  |  |
| Value | \$6.1 trillion | 2012 |
| Tons | 3.8 billion | 2012 |
| Ton-miles | 723.2 billion | 2012 |
| Average miles per shipment | 413 | 2012 |

NOTE: Table presents latest data available, as of March 2018
*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.

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. ${ }^{1}$
${ }^{1}$ U.S. Department of Labor, Bureau of Labor Statistics, Industries at a Glance, www.bls.gov/iag/tgs/iag_index naics.htm, as of March 30, 2018

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 2016 the wholesale and retail trade sector combined contributed $\$ 2,199.5$ billion (11.8 percent) to the national economy, as measured by gross domestic product (GDP). The wholesale trade sector contributed $\$ 1,102.6$ billion (5.9 percent), while the retail trade sector contributed \$1,096.9 billion (5.9 percent) (figure 6-1).

Figure 6-1 Wholesale and Retail Trade Sector's Contribution to Gross Domestic Product, 2016


NOTE: 2016 GDP = \$18,624 billion
SOURCE: U.S. Department of Commerce, Bureau of Economic Analysis, Value Added by Industry, available at http://bea.gov as of March 2018.

The largest amount of wholesale and retail trade activity combined occurred in California ( $\$ 289$ billion), followed by Texas (\$223.7 billion), New York ( $\$ 143.3$ billion), Florida ( $\$ 132.5$ billion), and Illinois ( $\$ 101.3$ billion) (figure 6-2). These five States produce more of all goods and services than other States and contributed the most to national GDP in 2016 (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 led in wholesale and retail trade. However,
wholesale and retail trade accounted for a smaller share of GSP in California (11 percent) than in South Dakota (14.9 percent)- the State where wholesale and retail trade accounted for the largest percent of GSP in 2016 (see Appendix A).

The wholesale and retail sector was the largest user of transportation services in 2016 (\$277.9 billion), and relies heavily on in-house transportation operations. Looking at the use of air, rail, truck, and water transportation services, the sector used significantly more in-house transportation operations ( $\$ 142.0$ billion) than forhire services (\$25.8 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), 2016


SOURCE: U.S. Department of Commerce, Bureau of Economic Analysis, Gross Domestic Product by State, available at http://bea.gov as of March 2018.

Table 6-2 States Contributing 4.0 Percent or More to National GDP Related to Wholesale and Retail Trade in 2016

Wholesale and retail trade
(Wholesale and retail trade
related GDP $=\$ 2,199.5$ billion) (Total National GDP $=\$ 18.5$ trillion)

| State | related GDP = \$2,199.5 billion) |  |  | National GDP = \$18.5 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 | 289.0 | 13.1 | 1 | 2,622.7 | 1 |
| Texas | 223.7 | 10.2 | 2 | 1,599.3 | 2 |
| New York | 143.3 | 6.5 | 3 | 1,500.1 | 3 |
| Florida | 132.5 | 6.0 | 4 | 926.0 | 4 |
| Illinois | 101.3 | 4.6 | 5 | 796.0 | 5 |

NOTE: This table presents the latest available data which do not sum to latest available industry totals as shown in figures 1-1 and 6-1. Data shown in figures 1-1 and 6-1 are based on U.S. Department of Commerce, Bureau of Economic Analysis, Value Added by Industry table, available at http://bea.gov as of March 2018.
SOURCE: U.S. Department of Commerce, Bureau of Economic Analysis, Gross Domestic Product by State, available at http://bea.gov as of March 2018.

Figure 6-3 Use of Transportation by the Wholesale and Retail Trade Sector, 2016 (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 2018.

Of the $\$ 277.9$ billion of transportation services used (figure 6-4), the wholesale and retail trade sector used:

- Primarily in-house ( $\$ 141,959$ million) and for-hire (\$18,732 million) truck transportation services (e.g., used to carry goods, such as clothing and food, to stores), which accounted for almost 60 percent (\$160,691 million total) of all transportation services used. In-house truck transportation operations accounted for about half (51.1 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 20.4 percent ( $\$ 56,565$ million) of the transportation services used by the wholesale and retail trade sector, and other transportation services accounted for 19 percent ( $\$ 52,773$ million).
- A small amount of for-hire air, rail, and water transportation services (\$7,067 million), which collectively accounted for 2.5 percent of the transportation services used.
- A smaller amount of for-hire pipeline transportation (\$49 million) and transit and ground passenger transportation services (\$641 million) (e.g., bus transportation purchased for workers) than any other transportation mode.

The wholesale and retail trade sector depended on transportation more than any other sector in 2016, requiring 9.0¢ worth of transportation
services to produce a dollar of output. The sector required more in-house transportation operations (4.6¢ to produce a dollar of output) than for-hire transportation services (4.4¢ to produce a dollar of output) $)^{2}$. The wholesale and retail trade sector also required the most in-house transportation operations per dollar of output in 2016 (figure 6-5).

Figure 6-4 Wholesale and Retail Trade Sector's Use of Transportation by Mode, 2016


Total use of transportation $=\$ 277.9$ billion
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 used $\$ 91$ million in-house air, rail, and water transportation in 2016.
SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics, Transportation Satellite Accounts, available at http://www.bts. gov as of March 2018.

Transportation services were the second most important input for the wholesale and retail trade sector to produce one dollar of output. The

[^12]wholesale and retail trade sector required slightly more professional and business services (11.2 $¢$ to produce one dollar of output), such as advertising services, payroll services, etc., than transportation services (9.0¢) to produce one dollar of output (figure 6-6).

In 2016 the wholesale trade industry employed nearly 1.2 million transportation and material moving workers, accounting for 19.9 percent of its entire work force. The retail trade industry employed slightly more than 1.0 million transportation and material moving workers,
accounting for 6.6 percent of its entire work force. Both industries employed more material moving workers (the wholesale trade industry employed 589,960 material moving workers and the retail trade industry employed 624,410 ) than transportation workers (the wholesale trade industry employed 574,350 transportation workers and the retail trade industry employed 428,030)3 (figure 6-7). Transportation workers
${ }^{3}$ Total for transportation occupations includes supervisors of material moving workers, which could not be separated from supervisors of transportation workers.

Figure 6-5 Transportation Required Per Dollar of Output by the Wholesale and Retail Trade Sector, 2016


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 2018.

Figure 6-6 Top 5 Most Required Inputs by Wholesale and Retail Trade Sector to Produce a Dollar of Output, 2016


SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics, Transportation Satellite Accounts, available at http://www.bts.gov as of March 2018.
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 $\$ 31,590$ in 2016, while workers of all occupations in the wholesale trade industry earned a higher median wage of $\$ 42,070$. Transportation and material moving workers in the retail trade industry earned a median wage of $\$ 23,650$ in 2016, while workers of all occupations in the retail trade industry earned a marginally higher median wage of $\$ 24,260$. (figure 6-8)

The wholesale trade industry employed the largest number of transportation workers as
heavy and tractor-trailer truck drivers $(206,790)$ followed by light truck or delivery drivers $(166,380)$ and driver/sales workers $(116,500)$. Heavy and tractor-trailer truck drivers earned a higher median wage of $\$ 40,330$ than light truck or delivery service drivers $(\$ 29,950)$ and driver/sales workers $(\$ 33,360)$ 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).

The retail trade industry employed the largest number of transportation workers as light truck/ delivery services drivers $(208,280)$ followed by driver/sales workers $(55,880)$ and automotive and watercraft service attendants $(55,300)$. The median wage for these three occupations is nearly the same. Light truck/delivery services

Figure 6-7 Number of Workers Employed in the Wholesale and Retail Trade Sector, 2016
Wholesale and retail trade occupations
Total wholesale work force $=5,840,730$
Total retail work force $=15,982,520$


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 August 30, 2017.
drivers employed in the retail trade industry earned a median wage of $\$ 24,170$, driver/sales workers earned a median wage of $\$ 25,760$, and automotive and watercraft service attendants earned a median wage of \$22,570 (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 billion 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 Wholesale and Retail Trade Sector, 2016

Wholesale Trade
Median wage for all occupations: $\$ 42,070$
Total employment 5,840,730


Retail Trade
Median wage for all occupations: $\$ 24,260$
Total employment 15,982,520

| All Transportation and Material Moving Occupations | 1,052,440 |  | \$23,650 |
| :---: | :---: | :---: | :---: |
| Top 3 transportation occupations |  |  |  |
| Light Truck or Delivery Services Drivers |  | 208,280 | \$24,170 |
| Driver/Sales Workers |  | 55,880 | \$25,760 |
| Automotive and Watercraft Service Attendants |  | 55,300 | \$22,570 |
|  |  | $\square$ Number employed ■ Annual | ian wage |

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.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, Occupational Employment and Wages, available at http://www.bls. gov/oes as of August 30, 2017.

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 $=3.8$ billion total value of shipments $=\$ 6.1$ trillion


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


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

NOTES: Value for pipeline data suppressed. Value for modes may not sum to total due to rounding and data suppression.
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 consist 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

[^13]
## Table 7-1 Overview of the Service Sectors' Contribution to Gross Domestic Product (GDP) and Use of Transportation

| Service Sectors | Value | Year (latest year where data available) |
| :---: | :---: | :---: |
| Contribution to GDP | \$9,761.9 billion | 2016 |
| Use of transportation | \$246.5 billion | 2016 |
| Amount of transportation required to produce a dollar of output |  |  |
| Information | 1.3¢ | 2016 |
| Financial services | 0.7¢ | 2016 |
| Professional/ business services | $2.4 ¢$ | 2016 |
| Education and health services | 1.4¢ | 2016 |
| Leisure and hospitality | 2.6¢ | 2016 |
| Other services | 2.2¢ | 2016 |
| Number of transportation and material moving workers |  |  |
| Information | 46,080 | 2016 |
| Financial services | 139,200 | 2016 |
| Professional/ business services | 1,228,500 | 2016 |
| Education and health services | 397,090 | 2016 |
| Leisure and hospitality | 321,210 | 2016 |
| Other services | 397,690 | 2016 |
| Transportation and material moving workers as percent of sector's work force |  |  |
| Information | 1.7\% | 2016 |
| Financial services | 1.8\% | 2016 |
| Professional/ business services | 6.1\% | 2016 |
| Education and health services | 1.2\% | 2016 |
| Leisure and hospitality | 2.1\% | 2016 |
| Other services | 9.8\% | 2016 |
| Median annual wage of transportation and material moving workers |  | 2016 |
| Information | \$27,310 | 2016 |
| Financial services |  |  |
| Finance and insurance | \$32,660 | 2016 |
| Real estate and rental and leasing | \$26,610 | 2016 |
| Professional/business services |  | 2016 |
| Professional, scientific, and technical services | \$29,890 | 2016 |
| Management of companies and enterprises | \$33,420 | 2016 |
| Administrative and support and waste management and remediation services | \$24,470 | 2016 |
| Education/health services |  | 2016 |
| Educational services | \$29,960 | 2016 |
| Health care and social assistance | \$24,870 | 2016 |
| Leisure/hospitality |  | 2016 |
| Arts, entertainment, and recreation | \$26,060 | 2016 |
| Accommodation and food services | \$19,630 | 2016 |
| Other services (except public administration) | \$22,500 | 2016 |
| Number of trucks used | 3,719 thousand | 2002 |
| Truck miles accumulated | 59,708 million | 2002 |
| NOTE: Table presents latest data available, as of March 2018. Data on number of trucks and truck miles accumulated was last collected in the Vehicle In SOURCE: Data for this table is drawn from figures and tables presented throughout this c | ntory and Use Surv ter. | y for 2002. |

Figure 7-1 Service Sectors' Contribution to Gross Domestic Product, 2016


NOTE: 2016 GDP $=\$ 18,624$ billion
SOURCE: U.S. Department of Commerce, Bureau of Economic Analysis, Value Added by Industry, available at http://bea.gov as of March 2018.
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.

The contribution of the service sectors to the national economy has grown. In 1997 the service sector contributed 46.2 percent, 49.5 percent in 2007, and 52.4 percent in 2016. In 2016 the service sectors collectively contributed $\$ 9,761.9$ billion ( 52.4 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 ( $\$ 1,483.5$ billion), followed
by New York (\$1,020.2 billion), Texas (\$674.8 billion), Florida ( $\$ 536.7$ billion), Illinois (\$437.3 billion), and Pennsylvania (\$400.6 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 2016, but New York contributed more in terms of service sector activity to the national economy due to significantly higher activity in almost all service sectors (Appendix A).

Figure 7-2 State Contributions to Service Related GDP (percent of national GDP related to service sector activity), 2016


SOURCE: U.S. Department of Commerce, Bureau of Economic Analysis, Gross Domestic Product by State, available at http://bea.gov as of March 2018.

Table 7-2 States Contributing 4.0 Percent or More to National GDP Related to Service Sectors in 2016

| State | All service sectors <br> (Service related GDP = \$9,761.9 billion) |  |  | All products and services <br> (Total national GDP = \$18.5 trillion) |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Service related GDP (billions) | Percent of national GDP related to services | Rank (1=contributes most to national GDP related to services, 51=least) | Dollar contribution to national GDP (billions) | Rank (1=contributes most to national GDP, 51=least) |
| California | 1,483.5 | 15.2 | 1 | 2,622.7 | 1 |
| New York | 1,020.2 | 10.5 | 2 | 1,500.1 | 3 |
| Texas | 674.8 | 6.9 | 3 | 1,599.3 | 2 |
| Florida | 536.7 | 5.5 | 4 | 926.0 | 4 |
| Illinois | 437.3 | 4.5 | 5 | 796.0 | 5 |
| Pennsylvania | 400.6 | 4.1 | 6 | 719.8 | 6 |

NOTE: This table presents the latest available data which do not sum to latest available industry totals as shown in figures 1-1 and 7-1. Data shown in figures 1-1 and 7-1 are based on U.S. Department of Commerce, Bureau of Economic Analysis, Value Added by Industry table, available at http://bea.gov as of March 2018.
SOURCE: U.S. Department of Commerce, Bureau of Economic Analysis, Gross Domestic Product by State, available at http://bea.gov as of March 2018.

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 leads in service sector activity in 2016. However, service sector activity accounted for a smaller share of GSP in California ( 56.6 percent) than in Delaware ( 70.0 percent, or $\$ 50$ billion) and New York (68 percent, or \$1,020.2 billion) — the two States where service sector activity accounted for more than two-thirds of GSP in 2016 (see Appendix A).

The service sectors combined were the second largest user of transportation services in 2016 ( $\$ 246.5$ billion). Looking at the use of air, rail, truck, and water transportation, the combined service sectors used more in-house services (\$90.3 billion) than for-hire ( $\$ 79$ billion) operations (figure 7-3) ${ }^{2}$.
${ }^{2}$ Data for previous years have been revised since last release. Due to changes in the source data, the numbers in this release is not comparable to those in our previous release.

Of the $\$ 246.5$ billion of transportation services (figure 7-4) used in 2016, the service sectors collectively used:

- Primarily truck transportation services (e.g., for transporting linens and other products to hotels), which accounted for 44.4 percent ( $\$ 109,527$ million) of all transportation services used by the sector.
- About 3.2 times more in-house truck operations ( $\$ 83,570$ million) than for-hire truck transportation ( $\$ 25,957$ million).
- In-house truck transportation operations accounted for slightly more than one-third (34 percent) of all transportation services used by the service sectors, while for-hire accounted for only 11 percent.
- A relatively large amount of other transportation and support activities

Figure 7-3 Use of Transportation by the Service Sectors, 2016 (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 2018.
(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 18.5 percent ( $\$ 45,577$ million) of the transportation services used by the service sectors.

- A modest amount of for-hire transit and ground passenger transportation (e.g., bus transportation purchased for workers)

Figure 7-4 Service Sectors' Use of Transportation by Mode, 2016


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 2018.
totaling 8.2 percent ( $\$ 20,157$ million) of the transportation services used by the service sectors.

- Warehousing (e.g., storage for medical records, etc.) summing to 4.5 percent ( $\$ 11,061$ million) 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 2016. The leisure and hospitality sector required the most transportation services to produce one dollar of output (requiring 2.6¢) among services sectors but much less than the wholesale and retail trade, which required the most transportation services (9.0¢) to produce one dollar of output.

Among service sectors, the professional and business services required the second largest amount of transportation services to produce one dollar of output (2.4¢) in 2016 followed by other services sector (e.g., grant-making, dry cleaning, machinery repair, etc.) (2.2¢), education and health services (1.4¢), information (1.3¢), and the financial services sector (0.7¢) (figure 7-5).

All of the service sectors relied less on transportation services than other commodities in producing output in 2016. Each service sector required 2.6 c worth of transportation services or less to produce one dollar of output (figure

Figure 7-5 Transportation Required Per Dollar of Output by the Service Sectors, 2016


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 2018.

7-5). The leisure and hospitality service sector required the most transportation services (2.6C) to produce one dollar of output among the service sectors but required substantially more of other commodities. For example, professional and business services were the most important input to the leisure and hospitality services sector, with the sector requiring 11.8 ¢ 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 ( 1.2 million), accounting for 6.1 percent of its work force in 2016. The other services sector employed the second largest in transportation and material moving occupations $(397,690)$ in 2016, followed by education and health services sector $(397,090)$, the leisure and hospitality sector $(321,210)$, the financial services sector $(139,200)$, and the information sector $(46,080)$ (figure 7-7). Transportation workers include motor vehicle operators, ship engineers, aircraft pilots and flight engineers, etc. Material moving workers support transportation activities

Figure 7-6 Top 5 Most Required Inputs by the Service Sectors to Produce a Dollar of Output, 2016



Production Inputs (Top 5 Most Required)



Production Inputs (Top 5 Most Required)


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 2018.

Figure 7-7 Number of Workers Employed in the Service Sectors, 2016


SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, Occupational Employment and Wages, available at http://www.bls. gov/oes as of August 30, 2017.
and include occupations such as cleaners of vehicles and ship loaders.

Transportation and material moving workers in all service sectors earned a lower median wage than workers of all other occupations in the same service sector except in the arts, entertainment, and recreation sector in 2016. In the arts, entertainment, and recreation sector, transportation and material moving workers earned a median wage of $\$ 26,060$, while workers of all other occupations in the arts, entertainment, and recreation industry earned a lower median wage of \$25,570 (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. 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 $(\$ 19,260)$. The arts, entertainment, and recreation industry as well as the other services industry employed the largest

Figure 7-8 Median Annual Wage and Employment for Most Common Transportation Occupations (Top 3) in Services Sectors, 2016

Information
Median wage for all occupations: $\$ 59,390$
Total employment 2,762,090


Finance and Insurance Median wage for all occupations: $\$ 50,780$

Total employment 5,775,240


Figure 7-8 continued
Real Estate and Rental and Leasing
Median wage for all occupations: $\$ 35,860$
Total employment 2,110,600



Figure 7-8 continued
Management of Companies and Enterprises Industry median wage for all occupations: \$65,380 Total employment 2,302,590

| Top 3 transportation occupations |  |  |
| :---: | :---: | :---: |
| Heavy and Tractor-Trailer Truck Drivers | 8,330 | \$42,320 |
| Light Truck or Delivery Services Drivers | 4,830 | \$29,760 |
| First-Line Supervisors of Transportation and Material-Moving Machine and Vehicle Operators | 2,490 | \$58,290 |
|  | $\square$ Number employed ■ A | median wage |

$\qquad$

Administrative and Support and Waste Management and
Remediation Services
Median wage for all occupations: \$28,870
Total employment 9,070,140


Figure 7-8 continued


Health Care and Social Assistance
Median wage for all occupations: $\$ 37,680$
Total employment 19,257,910


Figure 7-8 continued
Arts, Entertainment, and Recreation Median wage for all occupations: $\$ 25,570$ Total employment 2,322,400



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 August 30, 2017.
number of transportation workers as parking lot
second largest number of truck miles ( 59.7 billion). attendants, who earned a relatively low median wage of roughly $\$ 22,000$ (figure 7-8).

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 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

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, and also requires the fourth largest amount of transportation per dollar of output. 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

|  |  | Year <br> (latest year <br> where data <br> available) |
| :--- | ---: | :---: |
| Government | $\$ 2,399.8$ billion | 2016 |
| Contribution to GDP | $\$ 129.5$ billion | 2016 |
| Use of transportation | 3.8 C | 2016 |
| Amount of transportation required to produce a dollar of output | 389,810 | 2016 |
| Number of transportation and material moving workers | $4.1 \%$ | 2016 |
| Transportation and material moving workers as percent of sector's work force | $\$ 43,410$ | 2016 |
| Median annual wage of transportation and material moving workers |  |  |

NOTE: Table presents latest data available, as of March 2018. 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 2016 the government sector contributed $\$ 2,399.8$ billion ( 12.9 percent) to the national economy, as measured by gross domestic product (GDP) (figure 8-1).

The largest amount of government activity occurred in California (\$319.4 billion), followed by Texas ( $\$ 175$ billion), New York ( $\$ 163.4$ billion), Florida (\$108.7 billion), and Virginia (\$92.7 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 2016. The government sector, however, accounted for a smaller share of GSP in California ( 12.2 percent), Texas ( 10.9 percent), New York (10.9 percent), Florida (11.7 percent), and Virginia ( 18.8 percent) than in the District of Columbia (DC). In 2016 government activity accounted for 33.9 percent of GSP in DC (\$42.9 billion) (see Appendix A).

The government sector was the fourth largest user of transportation services in 2016 ( $\$ 129.5$ billion). Looking at the use of air, rail, truck and water transportation services, the government sector used roughly two times more inhouse operations ( $\$ 66.6$ billion) than for-hire transportation services (\$36.9 billion) (figure 8-3).

Figure 8-1 Government Sector's Contribution to Gross Domestic Product, 2016


NOTE: 2016 GDP = \$18,624 billion
SOURCE: U.S. Department of Commerce, Bureau of Economic Analysis, Value Added by Industry, available at http://bea.gov as of March 2018.

Figure 8-2 State Contributions to Government Related GDP (percent of national GDP related to government), 2016


SOURCE: U.S. Department of Commerce, Bureau of Economic Analysis, Gross Domestic Product by State, available at http://bea.gov as of March 2018.

Table 8-2 States Contributed 4.0 Percent or More to National GDP Related to Government Activity in 2016

Government
$\qquad$
(Government related GDP = \$2,286.9)

All products and services (Total National GDP = \$18.5 trillion) Dollar contribution Rank (1=contributes

| State | GDP (billions) | activity | 51=least) | (billions) | GDP, 51=least) |
| :--- | :---: | :---: | :---: | :---: | :---: |
| California | 319.4 | 14.0 | 1 | $2,622.7$ | 1 |
| Texas | 175.0 | 7.7 | 2 | $1,599.3$ | 2 |
| New York | 163.4 | 7.1 | 3 | $1,500.1$ | 3 |
| Florida | 108.7 | 4.8 | 4 | 926.0 | 4 |
| Virginia | 92.7 | 4.1 | 5 | 492.9 | 12 |

NOTE: This table presents the latest available data which do not sum to latest available industry totals as shown in figures 1-1 and 8-1. Data shown in figures 1-1 and 8-1 are based on U.S. Department of Commerce, Bureau of Economic Analysis, Value Added by Industry table, available at http://bea.gov as of March 2018.
SOURCE: U.S. Department of Commerce, Bureau of Economic Analysis, Gross Domestic Product by State, available at http://bea.gov as of March 2018.

Figure 8-3 Use of Transportation by the Government Sector, 2016 (current dollars, billions)



Total transportation use= $\$ 951.0$ billion
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 2018.

Of the $\$ 129.5$ billion of transportation services (figure 8-4), the government sector used:

- Primarily air, rail, and water transportation services (e.g., passenger air travel, shipment of currency, etc.), which accounted for 62.8 percent ( $\$ 81,293$ million) of all transportation services used by the sector. In-house air, rail, and water transportation services accounted for nearly half (44 percent, or \$57,020 million) of all transportation services used by the sector.
- Less truck transportation services (17.2 percent, or \$22,264 million total) than air, rail, and water transportation services combined (\$81,293 million).
- A relatively large share ( 10.2 percent, or $\$ 13,151$ million) of transit and passenger ground transportation.

The government sector required less than 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 3.8 C worth of transportation services to produce one dollar of output in 2016, while the most dependent sector (wholesale and retail trade) required 9.0¢ worth of transportation services to produce one dollar of output (figure 8-5).

The overall transportation requirement for the government sector (3.8¢) is relatively modest

Figure 8-4 Government Sector's Use of Transportation by Mode, 2016 (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 2018.
compared to other inputs. In 2016, transportation services were the third most important input, while manufactured products (e.g., paper, furniture, etc.) were the most important input. The government sector required 8.4¢ worth of manufactured products to produce one dollar of output (figure 8-6).

In 2016 the government sector employed 389,810 transportation and material moving workers, accounting for 4.1 percent of its entire work
force. The sector employed more transportation workers $(293,630)^{1}$ than material moving workers $(96,180)$ (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.

[^14]Figure 8-5 Transportation Required Per Dollar of Output by the Government Sector, 2016


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 2018.

Figure 8-6 Top 5 Inputs Required by the Government Sector to Produce a Dollar of Output, 2016


SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics, Transportation Satellite Accounts, available at http://www.bts.gov as of March 2018.

Figure 8-7 Number of Workers Employed in the Government Sector, 2016

## Government occupations

Total work force $=9,589,350$


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 August 30, 2017.

Transportation and material moving workers in the government sector earned a median wage of $\$ 43,410$ in 2016, while workers of all occupations in the government sector earned a slightly higher median wage of $\$ 50,670$ (figure 8-8).

Bus drivers comprised the largest group of transportation workers in the government sector, accounting for 36.5 percent $(142,320)$ of the sector's transportation and material moving workforce. Bus drivers consist of transit and intercity bus drivers ( 86,460 , or 22.2 percent of
the sector's transportation and material moving workforce) and school/client bus drivers (55,860, or 14.3 percent of the sector's transportation and material moving workforce). Transit and intercity bus drivers earned a slightly higher median wage of $\$ 47,510$ than school/client bus drivers $(\$ 32,830)$. Heavy and tractor-trailer truck drivers accounted for the third largest number of transportation workers in the government sector $(21,690)$ and earned a median wage of $\$ 39,800$ (figure 8-8).

Figure 8-8 Median Annual Wage and Employment for Most Common Transportation Occupations (Top 3) in Government Sector, 2016

Government
Median wage for all occupations: $\$ 50,670$
Total employment 9,589,350

| All Transportation and Material Moving Occupations | 389,810 | \$43,410 |
| :---: | :---: | :---: |
| Top 3 transportation occupations |  |  |
| Bus Drivers, Transit and Intercity | 86,460 | \$47,510 |
| Bus Drivers, School or Special Client | 55,860 | \$32,830 |
| Heavy and Tractor-Trailer Truck Drivers | 21,690 | \$39,800 |
|  | $\square$ Number employed ■ Ann | ian wage |

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. 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 August 30, 2017.

## Appendix A

## Gross State Product for Selected Industries, 2016

| Identifier | State | Industry Id | Industry Classification | Description | Gross domestic product (GDP), 2016 (millions) | State contribution to GDP, 2016 (percent of national GDP for sector) | Contribution to State GDP, 2016 (percent of total State GDP) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | United States | 0 | 0 | All industry total | 18,511,499 | . | . |
| 6000 | California | 0 | 0 | All industry total | 2,622,731 | 14.2\% | . |
| 48000 | Texas | 0 | 0 | All industry total | 1,599,283 | 8.6\% | . |
| 36000 | New York | 0 | 0 | All industry total | 1,500,055 | 8.1\% | . |
| 12000 | Florida | 0 | 0 | All industry total | 926,049 | 5.0\% | . |
| 17000 | Illinois | 0 | 0 | All industry total | 796,012 | 4.3\% | . |
| 42000 | Pennsylvania | 0 | 0 | All industry total | 719,834 | 3.9\% | . |
| 39000 | Ohio | 0 | 0 | All industry total | 626,622 | 3.4\% | . |
| 34000 | New Jersey | 0 | 0 | All industry total | 575,331 | 3.1\% | . |
| 37000 | North Carolina | 0 | 0 | All industry total | 521,621 | 2.8\% | . |
| 13000 | Georgia | 0 | 0 | All industry total | 531,302 | 2.9\% | . |
| 51000 | Virginia | 0 | 0 | All industry total | 492,932 | 2.7\% | . |
| 25000 | Massachusetts | 0 | 0 | All industry total | 505,776 | 2.7\% | . |
| 26000 | Michigan | 0 | 0 | All industry total | 490,238 | 2.6\% | . |
| 53000 | Washington | 0 | 0 | All industry total | 476,770 | 2.6\% | . |
| 24000 | Maryland | 0 | 0 | All industry total | 382,437 | 2.1\% | . |
| 18000 | Indiana | 0 | 0 | All industry total | 347,249 | 1.9\% | . |
| 27000 | Minnesota | 0 | 0 | All industry total | 339,096 | 1.8\% | . |
| 8000 | Colorado | 0 | 0 | All industry total | 322,644 | 1.7\% | . |
| 47000 | Tennessee | 0 | 0 | All industry total | 331,868 | 1.8\% | . |
| 55000 | Wisconsin | 0 | 0 | All industry total | 313,088 | 1.7\% | . |
| 29000 | Missouri | 0 | 0 | All industry total | 299,113 | 1.6\% | . |
| 4000 | Arizona | 0 | 0 | All industry total | 305,849 | 1.7\% | . |
| 9000 | Connecticut | 0 | 0 | All industry total | 259,918 | 1.4\% | . |
| 22000 | Louisiana | 0 | 0 | All industry total | 236,999 | 1.3\% | . |
| 41000 | Oregon | 0 | 0 | All industry total | 228,886 | 1.2\% | . |
| 1000 | Alabama | 0 | 0 | All industry total | 205,625 | 1.1\% | . |
| 45000 | South Carolina | 0 | 0 | All industry total | 209,859 | 1.1\% | . |
| 21000 | Kentucky | 0 | 0 | All industry total | 196,681 | 1.1\% | . |
| 40000 | Oklahoma | 0 | 0 | All industry total | 181,278 | 1.0\% | . |
| 19000 | Iowa | 0 | 0 | All industry total | 185,183 | 1.0\% | . |
| 20000 | Kansas | 0 | 0 | All industry total | 150,576 | 0.8\% | . |
| 49000 | Utah | 0 | 0 | All industry total | 157,671 | 0.9\% | . |
| 32000 | Nevada | 0 | 0 | All industry total | 146,278 | 0.8\% | . |


| Identifier | State | Industry Id | Industry Classification | Description | Gross domestic product (GDP), 2016 (millions) | State contribution to GDP, 2016 (percent of national GDP for sector) | Contribution to State GDP, 2016 (percent of total State GDP) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 5000 | Arkansas | 0 | 0 | All industry total | 121,383 | 0.7\% | . |
| 11000 | District of Columbia | 0 | 0 | All industry total | 126,478 | 0.7\% | . |
| 31000 | Nebraska | 0 | 0 | All industry total | 117,446 | 0.6\% | . |
| 28000 | Mississippi | 0 | 0 | All industry total | 108,495 | 0.6\% | . |
| 35000 | New Mexico | 0 | 0 | All industry total | 93,594 | 0.5\% | . |
| 15000 | Hawaii | 0 | 0 | All industry total | 84,671 | 0.5\% | . |
| 54000 | West Virginia | 0 | 0 | All industry total | 72,861 | 0.4\% | . |
| 33000 | New Hampshire | 0 | 0 | All industry total | 77,208 | 0.4\% | . |
| 10000 | Delaware | 0 | 0 | All industry total | 71,453 | 0.4\% | . |
| 16000 | Idaho | 0 | 0 | All industry total | 68,377 | 0.4\% | . |
| 44000 | Rhode Island | 0 | 0 | All industry total | 57,529 | 0.3\% | . |
| 23000 | Maine | 0 | 0 | All industry total | 59,295 | 0.3\% | . |
| 38000 | North Dakota | 0 | 0 | All industry total | 53,453 | 0.3\% | . |
| 2000 | Alaska | 0 | 0 | All industry total | 50,404 | 0.3\% | . |
| 46000 | South Dakota | 0 | 0 | All industry total | 48,354 | 0.3\% | . |
| 30000 | Montana | 0 | 0 | All industry total | 46,227 | 0.3\% | . |
| 56000 | Wyoming | 0 | 0 | All industry total | 38,328 | 0.2\% | . |
| 50000 | Vermont | 0 | 0 | All industry total | 31,091 | 0.2\% | . |
| 0 | United States | 1 | 11,21 | Natural resources and mining | 438,172 | . | . |
| 11000 | District of Columbia | 1 | 11,21 | Natural resources and mining | (L) | . | . |
| 48000 | Texas | 1 | 11,21 | Natural resources and mining | 122,577 | 28.0\% | 7.7\% |
| 6000 | California | 1 | 11,21 | Natural resources and mining | 44,287 | 10.1\% | 1.7\% |
| 40000 | Oklahoma | 1 | 11,21 | Natural resources and mining | 21,294 | 4.9\% | 11.7\% |
| 42000 | Pennsylvania | 1 | 11,21 | Natural resources and mining | 19,393 | 4.4\% | 2.7\% |
| 8000 | Colorado | 1 | 11,21 | Natural resources and mining | 12,616 | 2.9\% | 3.9\% |
| 22000 | Louisiana | 1 | 11,21 | Natural resources and mining | 10,833 | 2.5\% | 4.6\% |
| 19000 | lowa | 1 | 11,21 | Natural resources and mining | 9,551 | 2.2\% | 5.2\% |
| 39000 | Ohio | 1 | 11,21 | Natural resources and mining | 12,943 | 3.0\% | 2.1\% |
| 54000 | West Virginia | 1 | 11,21 | Natural resources and mining | 8,701 | 2.0\% | 11.9\% |
| 2000 | Alaska | 1 | 11,21 | Natural resources and mining | 8,161 | 1.9\% | 16.2\% |


| Identifier | State | Industry Id | Industry Classification | Description | Gross domestic product (GDP), 2016 (millions) | State contribution to GDP, 2016 (percent of national GDP for sector) | Contribution to State GDP, 2016 (percent of total State GDP) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 35000 | New Mexico | 1 | 11, 21 | Natural resources and mining | 8,539 | 1.9\% | 9.1\% |
| 38000 | North Dakota | 1 | 11, 21 | Natural resources and mining | 7,811 | 1.8\% | 14.6\% |
| 27000 | Minnesota | 1 | 11, 21 | Natural resources and mining | 8,742 | 2.0\% | 2.6\% |
| 17000 | Illinois | 1 | 11, 21 | Natural resources and mining | 8,224 | 1.9\% | 1.0\% |
| 56000 | Wyoming | 1 | 11, 21 | Natural resources and mining | 8,289 | 1.9\% | 21.6\% |
| 4000 | Arizona | 1 | 11, 21 | Natural resources and mining | 6,225 | 1.4\% | 2.0\% |
| 31000 | Nebraska | 1 | 11,21 | Natural resources and mining | 7,417 | 1.7\% | 6.3\% |
| 53000 | Washington | 1 | 11, 21 | Natural resources and mining | 8,087 | 1.8\% | 1.7\% |
| 12000 | Florida | 1 | 11, 21 | Natural resources and mining | 7,660 | 1.7\% | 0.8\% |
| 18000 | Indiana | 1 | 11,21 | Natural resources and mining | 5,923 | 1.4\% | 1.7\% |
| 55000 | Wisconsin | 1 | 11, 21 | Natural resources and mining | 6,572 | 1.5\% | 2.1\% |
| 5000 | Arkansas | 1 | 11, 21 | Natural resources and mining | 4,731 | 1.1\% | 3.9\% |
| 20000 | Kansas | 1 | 11,21 | Natural resources and mining | 5,593 | 1.3\% | 3.7\% |
| 21000 | Kentucky | 1 | 11, 21 | Natural resources and mining | 5,435 | 1.2\% | 2.8\% |
| 37000 | North Carolina | 1 | 11, 21 | Natural resources and mining | 5,513 | 1.3\% | 1.1\% |
| 1000 | Alabama | 1 | 11, 21 | Natural resources and mining | 5,381 | 1.2\% | 2.6\% |
| 26000 | Michigan | 1 | 11,21 | Natural resources and mining | 5,460 | 1.2\% | 1.1\% |
| 13000 | Georgia | 1 | 11, 21 | Natural resources and mining | 5,135 | 1.2\% | 1.0\% |
| 29000 | Missouri | 1 | 11,21 | Natural resources and mining | 4,506 | 1.0\% | 1.5\% |
| 32000 | Nevada | 1 | 11, 21 | Natural resources and mining | 3,673 | 0.8\% | 2.5\% |
| 16000 | Idaho | 1 | 11,21 | Natural resources and mining | 3,994 | 0.9\% | 5.8\% |
| 41000 | Oregon | 1 | 11, 21 | Natural resources and mining | 4,427 | 1.0\% | 1.9\% |
| 30000 | Montana | 1 | 11,21 | Natural resources and mining | 3,263 | 0.7\% | 7.1\% |


| Identifier | State | Industry <br> Id | Industry Classification | Description | Gross domestic product (GDP), 2016 (millions) | State contribution to GDP, 2016 (percent of national GDP for sector) | Contribution to State GDP, 2016 (percent of total State GDP) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 28000 | Mississippi | 1 | 11,21 | Natural resources and mining | 3,180 | 0.7\% | 2.9\% |
| 49000 | Utah | 1 | 11,21 | Natural resources and mining | 2,956 | 0.7\% | 1.9\% |
| 36000 | New York | 1 | 11, 21 | Natural resources and mining | 3,306 | 0.8\% | 0.2\% |
| 46000 | South Dakota | 1 | 11, 21 | Natural resources and mining | 3,664 | 0.8\% | 7.6\% |
| 51000 | Virginia | 1 | 11,21 | Natural resources and mining | 3,432 | 0.8\% | 0.7\% |
| 47000 | Tennessee | 1 | 11, 21 | Natural resources and mining | 2,311 | 0.5\% | 0.7\% |
| 45000 | South Carolina | 1 | 11, 21 | Natural resources and mining | 1,383 | 0.3\% | 0.7\% |
| 24000 | Maryland | 1 | 11, 21 | Natural resources and mining | 1,133 | 0.3\% | 0.3\% |
| 34000 | New Jersey | 1 | 11,21 | Natural resources and mining | 1,157 | 0.3\% | 0.2\% |
| 25000 | Massachusetts | 1 | 11, 21 | Natural resources and mining | 1,150 | 0.3\% | 0.2\% |
| 23000 | Maine | 1 | 11, 21 | Natural resources and mining | 949 | 0.2\% | 1.6\% |
| 10000 | Delaware | 1 | 11, 21 | Natural resources and mining | 458 | 0.1\% | 0.6\% |
| 50000 | Vermont | 1 | 11, 21 | Natural resources and mining | 606 | 0.1\% | 1.9\% |
| 9000 | Connecticut | 1 | 11, 21 | Natural resources and mining | 616 | 0.1\% | 0.2\% |
| 15000 | Hawaii | 1 | 11,21 | Natural resources and mining | 480 | 0.1\% | 0.6\% |
| 33000 | New Hampshire | 1 | 11, 21 | Natural resources and mining | 268 | 0.1\% | 0.3\% |
| 44000 | Rhode Island | 1 | 11, 21 | Natural resources and mining | 167 | 0.0\% | 0.3\% |
| 0 | United States | 2 | 22 | Utilities | 287,088 | . | . |
| 48000 | Texas | 2 | 22 | Utilities | 34,891 | 12.2\% | 2.2\% |
| 6000 | California | 2 | 22 | Utilities | 28,751 | 10.0\% | 1.1\% |
| 36000 | New York | 2 | 22 | Utilities | 18,969 | 6.6\% | 1.3\% |
| 12000 | Florida | 2 | 22 | Utilities | 15,105 | 5.3\% | 1.6\% |
| 39000 | Ohio | 2 | 22 | Utilities | 11,441 | 4.0\% | 1.8\% |
| 17000 | Illinois | 2 | 22 | Utilities | 12,702 | 4.4\% | 1.6\% |
| 42000 | Pennsylvania | 2 | 22 | Utilities | 11,525 | 4.0\% | 1.6\% |
| 34000 | New Jersey | 2 | 22 | Utilities | 9,581 | 3.3\% | 1.7\% |
| 13000 | Georgia | 2 | 22 | Utilities | 9,319 | 3.2\% | 1.8\% |


| Identifier | State | Industry Id | Industry Classification | Description | Gross domestic product (GDP), 2016 (millions) | State contribution to GDP, 2016 (percent of national GDP for sector) | Contribution to State GDP, 2016 (percent of total State GDP) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 26000 | Michigan | 2 | 22 | Utilities | 8,592 | 3.0\% | 1.8\% |
| 37000 | North Carolina | 2 | 22 | Utilities | 8,073 | 2.8\% | 1.5\% |
| 24000 | Maryland | 2 | 22 | Utilities | 6,937 | 2.4\% | 1.8\% |
| 51000 | Virginia | 2 | 22 | Utilities | 6,089 | 2.1\% | 1.2\% |
| 1000 | Alabama | 2 | 22 | Utilities | 5,553 | 1.9\% | 2.7\% |
| 27000 | Minnesota | 2 | 22 | Utilities | 5,233 | 1.8\% | 1.5\% |
| 25000 | Massachusetts | 2 | 22 | Utilities | 5,625 | 2.0\% | 1.1\% |
| 18000 | Indiana | 2 | 22 | Utilities | 6,035 | 2.1\% | 1.7\% |
| 4000 | Arizona | 2 | 22 | Utilities | 5,883 | 2.0\% | 1.9\% |
| 29000 | Missouri | 2 | 22 | Utilities | 5,310 | 1.9\% | 1.8\% |
| 55000 | Wisconsin | 2 | 22 | Utilities | 4,883 | 1.7\% | 1.6\% |
| 40000 | Oklahoma | 2 | 22 | Utilities | 4,392 | 1.5\% | 2.4\% |
| 45000 | South Carolina | 2 | 22 | Utilities | 4,609 | 1.6\% | 2.2\% |
| 9000 | Connecticut | 2 | 22 | Utilities | 4,213 | 1.5\% | 1.6\% |
| 8000 | Colorado | 2 | 22 | Utilities | 4,088 | 1.4\% | 1.3\% |
| 22000 | Louisiana | 2 | 22 | Utilities | 3,849 | 1.3\% | 1.6\% |
| 53000 | Washington | 2 | 22 | Utilities | 3,618 | 1.3\% | 0.8\% |
| 41000 | Oregon | 2 | 22 | Utilities | 3,504 | 1.2\% | 1.5\% |
| 28000 | Mississippi | 2 | 22 | Utilities | 3,061 | 1.1\% | 2.8\% |
| 5000 | Arkansas | 2 | 22 | Utilities | 2,981 | 1.0\% | 2.5\% |
| 21000 | Kentucky | 2 | 22 | Utilities | 2,877 | 1.0\% | 1.5\% |
| 19000 | Iowa | 2 | 22 | Utilities | 2,997 | 1.0\% | 1.6\% |
| 20000 | Kansas | 2 | 22 | Utilities | 2,347 | 0.8\% | 1.6\% |
| 31000 | Nebraska | 2 | 22 | Utilities | 2,576 | 0.9\% | 2.2\% |
| 54000 | West Virginia | 2 | 22 | Utilities | 1,990 | 0.7\% | 2.7\% |
| 32000 | Nevada | 2 | 22 | Utilities | 1,982 | 0.7\% | 1.4\% |
| 47000 | Tennessee | 2 | 22 | Utilities | 1,848 | 0.6\% | 0.6\% |
| 15000 | Hawaii | 2 | 22 | Utilities | 1,443 | 0.5\% | 1.7\% |
| 49000 | Utah | 2 | 22 | Utilities | 1,670 | 0.6\% | 1.1\% |
| 38000 | North Dakota | 2 | 22 | Utilities | 1,440 | 0.5\% | 2.7\% |
| 35000 | New Mexico | 2 | 22 | Utilities | 1,383 | 0.5\% | 1.5\% |
| 11000 | District of Columbia | 2 | 22 | Utilities | 1,257 | 0.4\% | 1.0\% |
| 30000 | Montana | 2 | 22 | Utilities | 967 | 0.3\% | 2.1\% |
| 16000 | Idaho | 2 | 22 | Utilities | 966 | 0.3\% | 1.4\% |
| 33000 | New Hampshire | 2 | 22 | Utilities | 933 | 0.3\% | 1.2\% |
| 23000 | Maine | 2 | 22 | Utilities | 965 | 0.3\% | 1.6\% |
| 46000 | South Dakota | 2 | 22 | Utilities | 801 | 0.3\% | 1.7\% |
| 56000 | Wyoming | 2 | 22 | Utilities | 930 | 0.3\% | 2.4\% |
| 10000 | Delaware | 2 | 22 | Utilities | 938 | 0.3\% | 1.3\% |


| Identifier | State | Industry Id | Industry Classification | Description | Gross domestic product (GDP), 2016 (millions) | State contribution to GDP, 2016 (percent of national GDP for sector) | Contribution to State GDP, 2016 (percent of total State GDP) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2000 | Alaska | 2 | 22 | Utilities | 737 | 0.3\% | 1.5\% |
| 50000 | Vermont | 2 | 22 | Utilities | 579 | 0.2\% | 1.9\% |
| 44000 | Rhode Island | 2 | 22 | Utilities | 649 | 0.2\% | 1.1\% |
| 0 | United States | 3 | 23 | Construction | 792,509 | . | . |
| 6000 | California | 3 | 23 | Construction | 101,658 | 12.8\% | 3.9\% |
| 48000 | Texas | 3 | 23 | Construction | 91,279 | 11.5\% | 5.7\% |
| 36000 | New York | 3 | 23 | Construction | 49,534 | 6.3\% | 3.3\% |
| 12000 | Florida | 3 | 23 | Construction | 48,053 | 6.1\% | 5.2\% |
| 42000 | Pennsylvania | 3 | 23 | Construction | 31,668 | 4.0\% | 4.4\% |
| 17000 | Illinois | 3 | 23 | Construction | 30,691 | 3.9\% | 3.9\% |
| 34000 | New Jersey | 3 | 23 | Construction | 23,207 | 2.9\% | 4.0\% |
| 39000 | Ohio | 3 | 23 | Construction | 23,604 | 3.0\% | 3.8\% |
| 51000 | Virginia | 3 | 23 | Construction | 21,021 | 2.7\% | 4.3\% |
| 25000 | Massachusetts | 3 | 23 | Construction | 19,611 | 2.5\% | 3.9\% |
| 13000 | Georgia | 3 | 23 | Construction | 22,327 | 2.8\% | 4.2\% |
| 53000 | Washington | 3 | 23 | Construction | 20,666 | 2.6\% | 4.3\% |
| 37000 | North Carolina | 3 | 23 | Construction | 19,775 | 2.5\% | 3.8\% |
| 26000 | Michigan | 3 | 23 | Construction | 20,121 | 2.5\% | 4.1\% |
| 24000 | Maryland | 3 | 23 | Construction | 18,298 | 2.3\% | 4.8\% |
| 8000 | Colorado | 3 | 23 | Construction | 19,063 | 2.4\% | 5.9\% |
| 27000 | Minnesota | 3 | 23 | Construction | 14,319 | 1.8\% | 4.2\% |
| 22000 | Louisiana | 3 | 23 | Construction | 12,958 | 1.6\% | 5.5\% |
| 18000 | Indiana | 3 | 23 | Construction | 13,284 | 1.7\% | 3.8\% |
| 47000 | Tennessee | 3 | 23 | Construction | 12,874 | 1.6\% | 3.9\% |
| 55000 | Wisconsin | 3 | 23 | Construction | 13,016 | 1.6\% | 4.2\% |
| 4000 | Arizona | 3 | 23 | Construction | 13,500 | 1.7\% | 4.4\% |
| 29000 | Missouri | 3 | 23 | Construction | 11,226 | 1.4\% | 3.8\% |
| 45000 | South Carolina | 3 | 23 | Construction | 10,854 | 1.4\% | 5.2\% |
| 40000 | Oklahoma | 3 | 23 | Construction | 7,777 | 1.0\% | 4.3\% |
| 9000 | Connecticut | 3 | 23 | Construction | 8,301 | 1.0\% | 3.2\% |
| 49000 | Utah | 3 | 23 | Construction | 9,851 | 1.2\% | 6.2\% |
| 21000 | Kentucky | 3 | 23 | Construction | 8,585 | 1.1\% | 4.4\% |
| 1000 | Alabama | 3 | 23 | Construction | 7,733 | 1.0\% | 3.8\% |
| 19000 | lowa | 3 | 23 | Construction | 8,492 | 1.1\% | 4.6\% |
| 41000 | Oregon | 3 | 23 | Construction | 9,350 | 1.2\% | 4.1\% |
| 32000 | Nevada | 3 | 23 | Construction | 7,480 | 0.9\% | 5.1\% |
| 20000 | Kansas | 3 | 23 | Construction | 6,203 | 0.8\% | 4.1\% |
| 5000 | Arkansas | 3 | 23 | Construction | 4,749 | 0.6\% | 3.9\% |
| 15000 | Hawaii | 3 | 23 | Construction | 5,591 | 0.7\% | 6.6\% |


| Identifier | State | Industry Id | Industry Classification | Description | Gross domestic product (GDP), 2016 (millions) | State contribution to GDP, 2016 (percent of national GDP for sector) | Contribution to State GDP, 2016 (percent of total State GDP) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 28000 | Mississippi | 3 | 23 | Construction | 4,455 | 0.6\% | 4.1\% |
| 38000 | North Dakota | 3 | 23 | Construction | 4,077 | 0.5\% | 7.6\% |
| 31000 | Nebraska | 3 | 23 | Construction | 4,052 | 0.5\% | 3.5\% |
| 54000 | West Virginia | 3 | 23 | Construction | 3,793 | 0.5\% | 5.2\% |
| 35000 | New Mexico | 3 | 23 | Construction | 3,539 | 0.4\% | 3.8\% |
| 16000 | Idaho | 3 | 23 | Construction | 4,066 | 0.5\% | 5.9\% |
| 30000 | Montana | 3 | 23 | Construction | 2,847 | 0.4\% | 6.2\% |
| 33000 | New Hampshire | 3 | 23 | Construction | 2,556 | 0.3\% | 3.3\% |
| 2000 | Alaska | 3 | 23 | Construction | 2,139 | 0.3\% | 4.2\% |
| 56000 | Wyoming | 3 | 23 | Construction | 2,109 | 0.3\% | 5.5\% |
| 44000 | Rhode Island | 3 | 23 | Construction | 2,324 | 0.3\% | 4.0\% |
| 10000 | Delaware | 3 | 23 | Construction | 2,658 | 0.3\% | 3.7\% |
| 23000 | Maine | 3 | 23 | Construction | 2,334 | 0.3\% | 3.9\% |
| 46000 | South Dakota | 3 | 23 | Construction | 2,069 | 0.3\% | 4.3\% |
| 11000 | District of Columbia | 3 | 23 | Construction | 1,608 | 0.2\% | 1.3\% |
| 50000 | Vermont | 3 | 23 | Construction | 1,163 | 0.1\% | 3.7\% |
| 0 | United States | 4 | 31-33 | Manufacturing | 2,182,952 | . |  |
| 6000 | California | 4 | 31-33 | Manufacturing | 291,558 | 13.4\% | 11.1\% |
| 48000 | Texas | 4 | 31-33 | Manufacturing | 218,275 | 10.0\% | 13.6\% |
| 39000 | Ohio | 4 | 31-33 | Manufacturing | 105,880 | 4.9\% | 16.9\% |
| 17000 | Illinois | 4 | 31-33 | Manufacturing | 99,874 | 4.6\% | 12.5\% |
| 37000 | North Carolina | 4 | 31-33 | Manufacturing | 103,407 | 4.7\% | 19.8\% |
| 18000 | Indiana | 4 | 31-33 | Manufacturing | 99,825 | 4.6\% | 28.7\% |
| 26000 | Michigan | 4 | 31-33 | Manufacturing | 92,921 | 4.3\% | 19.0\% |
| 42000 | Pennsylvania | 4 | 31-33 | Manufacturing | 84,519 | 3.9\% | 11.7\% |
| 36000 | New York | 4 | 31-33 | Manufacturing | 72,149 | 3.3\% | 4.8\% |
| 53000 | Washington | 4 | 31-33 | Manufacturing | 59,935 | 2.7\% | 12.6\% |
| 55000 | Wisconsin | 4 | 31-33 | Manufacturing | 56,435 | 2.6\% | 18.0\% |
| 13000 | Georgia | 4 | 31-33 | Manufacturing | 57,296 | 2.6\% | 10.8\% |
| 22000 | Louisiana | 4 | 31-33 | Manufacturing | 49,115 | 2.3\% | 20.7\% |
| 47000 | Tennessee | 4 | 31-33 | Manufacturing | 54,078 | 2.5\% | 16.3\% |
| 41000 | Oregon | 4 | 31-33 | Manufacturing | 49,605 | 2.3\% | 21.7\% |
| 27000 | Minnesota | 4 | 31-33 | Manufacturing | 48,922 | 2.2\% | 14.4\% |
| 25000 | Massachusetts | 4 | 31-33 | Manufacturing | 48,336 | 2.2\% | 9.6\% |
| 12000 | Florida | 4 | 31-33 | Manufacturing | 47,437 | 2.2\% | 5.1\% |
| 34000 | New Jersey | 4 | 31-33 | Manufacturing | 45,902 | 2.1\% | 8.0\% |
| 51000 | Virginia | 4 | 31-33 | Manufacturing | 42,778 | 2.0\% | 8.7\% |
| 29000 | Missouri | 4 | 31-33 | Manufacturing | 40,530 | 1.9\% | 13.6\% |


| Identifier | State | Industry <br> Id | Industry Classification | Description | Gross domestic product (GDP), 2016 (millions) | State contribution to GDP, 2016 (percent of national GDP for sector) | Contribution to State GDP, 2016 (percent of total State GDP) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 21000 | Kentucky | 4 | 31-33 | Manufacturing | 37,301 | 1.7\% | 19.0\% |
| 1000 | Alabama | 4 | 31-33 | Manufacturing | 35,761 | 1.6\% | 17.4\% |
| 45000 | South Carolina | 4 | 31-33 | Manufacturing | 35,339 | 1.6\% | 16.8\% |
| 19000 | Iowa | 4 | 31-33 | Manufacturing | 34,024 | 1.6\% | 18.4\% |
| 9000 | Connecticut | 4 | 31-33 | Manufacturing | 28,273 | 1.3\% | 10.9\% |
| 4000 | Arizona | 4 | 31-33 | Manufacturing | 25,288 | 1.2\% | 8.3\% |
| 8000 | Colorado | 4 | 31-33 | Manufacturing | 22,628 | 1.0\% | 7.0\% |
| 20000 | Kansas | 4 | 31-33 | Manufacturing | 22,737 | 1.0\% | 15.1\% |
| 24000 | Maryland | 4 | 31-33 | Manufacturing | 21,150 | 1.0\% | 5.5\% |
| 5000 | Arkansas | 4 | 31-33 | Manufacturing | 17,800 | 0.8\% | 14.7\% |
| 40000 | Oklahoma | 4 | 31-33 | Manufacturing | 17,249 | 0.8\% | 9.5\% |
| 49000 | Utah | 4 | 31-33 | Manufacturing | 17,737 | 0.8\% | 11.2\% |
| 28000 | Mississippi | 4 | 31-33 | Manufacturing | 17,354 | 0.8\% | 16.0\% |
| 31000 | Nebraska | 4 | 31-33 | Manufacturing | 12,890 | 0.6\% | 11.0\% |
| 33000 | New Hampshire | 4 | 31-33 | Manufacturing | 8,362 | 0.4\% | 10.8\% |
| 54000 | West Virginia | 4 | 31-33 | Manufacturing | 7,500 | 0.3\% | 10.3\% |
| 16000 | Idaho | 4 | 31-33 | Manufacturing | 7,724 | 0.4\% | 11.3\% |
| 32000 | Nevada | 4 | 31-33 | Manufacturing | 6,157 | 0.3\% | 4.2\% |
| 23000 | Maine | 4 | 31-33 | Manufacturing | 5,371 | 0.2\% | 9.1\% |
| 10000 | Delaware | 4 | 31-33 | Manufacturing | 4,191 | 0.2\% | 5.9\% |
| 44000 | Rhode Island | 4 | 31-33 | Manufacturing | 4,641 | 0.2\% | 8.1\% |
| 46000 | South Dakota | 4 | 31-33 | Manufacturing | 4,455 | 0.2\% | 9.2\% |
| 35000 | New Mexico | 4 | 31-33 | Manufacturing | 3,985 | 0.2\% | 4.3\% |
| 38000 | North Dakota | 4 | 31-33 | Manufacturing | 3,765 | 0.2\% | 7.0\% |
| 30000 | Montana | 4 | 31-33 | Manufacturing | 3,525 | 0.2\% | 7.6\% |
| 50000 | Vermont | 4 | 31-33 | Manufacturing | 2,834 | 0.1\% | 9.1\% |
| 56000 | Wyoming | 4 | 31-33 | Manufacturing | 2,479 | 0.1\% | 6.5\% |
| 2000 | Alaska | 4 | 31-33 | Manufacturing | 1,574 | 0.1\% | 3.1\% |
| 15000 | Hawaii | 4 | 31-33 | Manufacturing | 1,817 | 0.1\% | 2.1\% |
| 11000 | District of Columbia | 4 | 31-33 | Manufacturing | 266 | 0.0\% | 0.2\% |
| 0 | United States | 5 | 42, 44-45 | Trade | 2,199,500 | . | . |
| 6000 | California | 5 | 42, 44-45 | Trade | 289,021 | 13.1\% | 11.0\% |
| 48000 | Texas | 5 | 42, 44-45 | Trade | 223,733 | 10.2\% | 14.0\% |
| 36000 | New York | 5 | 42, 44-45 | Trade | 143,278 | 6.5\% | 9.6\% |
| 12000 | Florida | 5 | 42, 44-45 | Trade | 132,522 | 6.0\% | 14.3\% |
| 17000 | Illinois | 5 | 42, 44-45 | Trade | 101,312 | 4.6\% | 12.7\% |
| 34000 | New Jersey | 5 | 42, 44-45 | Trade | 81,241 | 3.7\% | 14.1\% |
| 42000 | Pennsylvania | 5 | 42, 44-45 | Trade | 77,559 | 3.5\% | 10.8\% |
| 39000 | Ohio | 5 | 42, 44-45 | Trade | 76,228 | 3.5\% | 12.2\% |


| Identifier | State | Industry Id | Industry Classification | Description | Gross domestic product (GDP), 2016 (millions) | State contribution to GDP, 2016 (percent of national GDP for sector) | Contribution to State GDP, 2016 (percent of total State GDP) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 13000 | Georgia | 5 | 42, 44-45 | Trade | 72,112 | 3.3\% | 13.6\% |
| 26000 | Michigan | 5 | 42, 44-45 | Trade | 63,428 | 2.9\% | 12.9\% |
| 53000 | Washington | 5 | 42, 44-45 | Trade | 63,831 | 2.9\% | 13.4\% |
| 37000 | North Carolina | 5 | 42, 44-45 | Trade | 57,697 | 2.6\% | 11.1\% |
| 51000 | Virginia | 5 | 42, 44-45 | Trade | 46,419 | 2.1\% | 9.4\% |
| 25000 | Massachusetts | 5 | 42, 44-45 | Trade | 46,957 | 2.1\% | 9.3\% |
| 47000 | Tennessee | 5 | 42, 44-45 | Trade | 46,553 | 2.1\% | 14.0\% |
| 27000 | Minnesota | 5 | 42, 44-45 | Trade | 41,937 | 1.9\% | 12.4\% |
| 4000 | Arizona | 5 | 42, 44-45 | Trade | 41,298 | 1.9\% | 13.5\% |
| 18000 | Indiana | 5 | 42, 44-45 | Trade | 39,708 | 1.8\% | 11.4\% |
| 29000 | Missouri | 5 | 42, 44-45 | Trade | 37,897 | 1.7\% | 12.7\% |
| 55000 | Wisconsin | 5 | 42, 44-45 | Trade | 36,878 | 1.7\% | 11.8\% |
| 8000 | Colorado | 5 | 42, 44-45 | Trade | 37,154 | 1.7\% | 11.5\% |
| 24000 | Maryland | 5 | 42, 44-45 | Trade | 36,064 | 1.6\% | 9.4\% |
| 9000 | Connecticut | 5 | 42, 44-45 | Trade | 31,111 | 1.4\% | 12.0\% |
| 22000 | Louisiana | 5 | 42, 44-45 | Trade | 27,890 | 1.3\% | 11.8\% |
| 45000 | South Carolina | 5 | 42, 44-45 | Trade | 26,978 | 1.2\% | 12.9\% |
| 1000 | Alabama | 5 | 42, 44-45 | Trade | 26,122 | 1.2\% | 12.7\% |
| 21000 | Kentucky | 5 | 42, 44-45 | Trade | 25,210 | 1.1\% | 12.8\% |
| 40000 | Oklahoma | 5 | 42, 44-45 | Trade | 21,751 | 1.0\% | 12.0\% |
| 41000 | Oregon | 5 | 42, 44-45 | Trade | 23,043 | 1.0\% | 10.1\% |
| 19000 | lowa | 5 | 42, 44-45 | Trade | 20,167 | 0.9\% | 10.9\% |
| 20000 | Kansas | 5 | 42, 44-45 | Trade | 20,308 | 0.9\% | 13.5\% |
| 49000 | Utah | 5 | 42, 44-45 | Trade | 19,539 | 0.9\% | 12.4\% |
| 5000 | Arkansas | 5 | 42, 44-45 | Trade | 17,915 | 0.8\% | 14.8\% |
| 32000 | Nevada | 5 | 42, 44-45 | Trade | 16,419 | 0.7\% | 11.2\% |
| 28000 | Mississippi | 5 | 42, 44-45 | Trade | 14,852 | 0.7\% | 13.7\% |
| 31000 | Nebraska | 5 | 42, 44-45 | Trade | 14,137 | 0.6\% | 12.0\% |
| 33000 | New Hampshire | 5 | 42, 44-45 | Trade | 10,576 | 0.5\% | 13.7\% |
| 16000 | Idaho | 5 | 42, 44-45 | Trade | 9,903 | 0.5\% | 14.5\% |
| 35000 | New Mexico | 5 | 42, 44-45 | Trade | 8,876 | 0.4\% | 9.5\% |
| 54000 | West Virginia | 5 | 42, 44-45 | Trade | 8,440 | 0.4\% | 11.6\% |
| 23000 | Maine | 5 | 42, 44-45 | Trade | 8,394 | 0.4\% | 14.2\% |
| 38000 | North Dakota | 5 | 42, 44-45 | Trade | 7,707 | 0.4\% | 14.4\% |
| 15000 | Hawaii | 5 | 42, 44-45 | Trade | 8,327 | 0.4\% | 9.8\% |
| 46000 | South Dakota | 5 | 42, 44-45 | Trade | 7,220 | 0.3\% | 14.9\% |
| 44000 | Rhode Island | 5 | 42, 44-45 | Trade | 6,586 | 0.3\% | 11.4\% |
| 30000 | Montana | 5 | 42, 44-45 | Trade | 5,742 | 0.3\% | 12.4\% |
| 10000 | Delaware | 5 | 42, 44-45 | Trade | 5,187 | 0.2\% | 7.3\% |
| 50000 | Vermont | 5 | 42, 44-45 | Trade | 4,077 | 0.2\% | 13.1\% |


| Identifier | State | Industry Id | Industry Classification | Description | Gross domestic product (GDP), 2016 (millions) | State contribution to GDP, 2016 (percent of national GDP for sector) | Contribution to State GDP, 2016 (percent of total State GDP) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 56000 | Wyoming | 5 | 42, 44-45 | Trade | 3,802 | 0.2\% | 9.9\% |
| 2000 | Alaska | 5 | 42, 44-45 | Trade | 3,616 | 0.2\% | 7.2\% |
| 11000 | District of Columbia | 5 | 42, 44-45 | Trade | 2,779 | 0.1\% | 2.2\% |
| 0 | United States | 6 | $\begin{gathered} \text { 51-56, 61-62, } \\ 71-72,81 \end{gathered}$ | Services | 9,761,896 | . | . |
| 6000 | California | 6 | $\begin{gathered} \text { 51-56, 61-62, } \\ 71-72,81 \end{gathered}$ | Services | 1,483,489 | 15.2\% | 56.6\% |
| 36000 | New York | 6 | $\begin{gathered} \text { 51-56, 61-62, } \\ 71-72,81 \end{gathered}$ | Services | 1,020,172 | 10.5\% | 68.0\% |
| 48000 | Texas | 6 | $\begin{gathered} 51-56,61-62, \\ 71-72,81 \end{gathered}$ | Services | 674,834 | 6.9\% | 42.2\% |
| 12000 | Florida | 6 | $\begin{gathered} 51-56,61-62, \\ 71-72,81 \end{gathered}$ | Services | 536,658 | 5.5\% | 58.0\% |
| 17000 | Illinois | 6 | $\begin{gathered} \text { 51-56, 61-62, } \\ 71-72,81 \end{gathered}$ | Services | 437,296 | 4.5\% | 54.9\% |
| 42000 | Pennsylvania | 6 | $\begin{gathered} 51-56,61-62, \\ 71-72,81 \end{gathered}$ | Services | 400,609 | 4.1\% | 55.7\% |
| 34000 | New Jersey | 6 | $\begin{gathered} \text { 51-56, 61-62, } \\ 71-72,81 \end{gathered}$ | Services | 331,691 | 3.4\% | 57.7\% |
| 25000 | Massachusetts | 6 | $\begin{gathered} 51-56,61-62, \\ 71-72,81 \end{gathered}$ | Services | 321,260 | 3.3\% | 63.5\% |
| 39000 | Ohio | 6 | $\begin{gathered} \text { 51-56, 61-62, } \\ 71-72,81 \end{gathered}$ | Services | 307,404 | 3.1\% | 49.1\% |
| 51000 | Virginia | 6 | $\begin{gathered} 51-56,61-62, \\ 71-72,81 \end{gathered}$ | Services | 267,873 | 2.7\% | 54.3\% |
| 13000 | Georgia | 6 | $\begin{gathered} 51-56,61-62, \\ 71-72,81 \end{gathered}$ | Services | 278,488 | 2.9\% | 52.4\% |
| 37000 | North Carolina | 6 | $\begin{gathered} 51-56,61-62, \\ 71-72,81 \end{gathered}$ | Services | 246,133 | 2.5\% | 47.2\% |
| 53000 | Washington | 6 | $\begin{gathered} \text { 51-56, 61-62, } \\ 71-72,81 \end{gathered}$ | Services | 242,717 | 2.5\% | 50.9\% |
| 26000 | Michigan | 6 | $\begin{gathered} 51-56,61-62, \\ 71-72,81 \end{gathered}$ | Services | 234,382 | 2.4\% | 47.8\% |
| 24000 | Maryland | 6 | $\begin{gathered} 51-56,61-62, \\ 71-72,81 \end{gathered}$ | Services | 211,586 | 2.2\% | 55.3\% |
| 8000 | Colorado | 6 | $\begin{gathered} 51-56,61-62, \\ 71-72,81 \end{gathered}$ | Services | 176,379 | 1.8\% | 54.7\% |
| 27000 | Minnesota | 6 | $\begin{gathered} 51-56,61-62, \\ 71-72,81 \end{gathered}$ | Services | 175,584 | 1.8\% | 51.8\% |
| 9000 | Connecticut | 6 | $\begin{gathered} \hline 51-56,61-62, \\ 71-72,81 \end{gathered}$ | Services | 155,759 | 1.6\% | 59.9\% |
| 4000 | Arizona | 6 | $\begin{gathered} 51-56,61-62, \\ 71-72,81 \end{gathered}$ | Services | 163,652 | 1.7\% | 53.5\% |
| 47000 | Tennessee | 6 | $\begin{gathered} 51-56,61-62, \\ 71-72,81 \end{gathered}$ | Services | 160,943 | 1.6\% | 48.5\% |


| Identifier | State | Industry Id | Industry Classification | Description | Gross domestic product (GDP), 2016 (millions) | State contribution to GDP, 2016 (percent of national GDP for sector) | Contribution to State GDP, 2016 (percent of total State GDP) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 29000 | Missouri | 6 | $\begin{gathered} \text { 51-56, 61-62, } \\ 71-72,81 \end{gathered}$ | Services | 153,417 | 1.6\% | 51.3\% |
| 55000 | Wisconsin | 6 | $\begin{gathered} 51-56,61-62, \\ 71-72,81 \end{gathered}$ | Services | 152,037 | 1.6\% | 48.6\% |
| 18000 | Indiana | 6 | $\begin{gathered} \text { 51-56, 61-62, } \\ 71-72,81 \end{gathered}$ | Services | 139,401 | 1.4\% | 40.1\% |
| 41000 | Oregon | 6 | $\begin{gathered} \text { 51-56, 61-62, } \\ 71-72,81 \end{gathered}$ | Services | 106,528 | 1.1\% | 46.5\% |
| 22000 | Louisiana | 6 | $\begin{gathered} \text { 51-56, 61-62, } \\ 71-72,81 \end{gathered}$ | Services | 95,433 | 1.0\% | 40.3\% |
| 45000 | South Carolina | 6 | $\begin{gathered} \text { 51-56, 61-62, } \\ 71-72,81 \end{gathered}$ | Services | 92,824 | 1.0\% | 44.2\% |
| 1000 | Alabama | 6 | $\begin{gathered} \text { 51-56, 61-62, } \\ 71-72,81 \end{gathered}$ | Services | 84,997 | 0.9\% | 41.3\% |
| 32000 | Nevada | 6 | $\begin{gathered} 51-56,61-62, \\ 71-72,81 \end{gathered}$ | Services | 87,476 | 0.9\% | 59.8\% |
| 21000 | Kentucky | 6 | $\begin{gathered} \text { 51-56, 61-62, } \\ 71-72,81 \end{gathered}$ | Services | 80,183 | 0.8\% | 40.8\% |
| 19000 | lowa | 6 | $\begin{gathered} \text { 51-56, 61-62, } \\ 71-72,81 \end{gathered}$ | Services | 83,156 | 0.9\% | 44.9\% |
| 11000 | District of Columbia | 6 | $\begin{gathered} \hline 51-56,61-62, \\ 71-72,81 \\ \hline \end{gathered}$ | Services | 77,154 | 0.8\% | 61.0\% |
| 49000 | Utah | 6 | $\begin{gathered} \text { 51-56, 61-62, } \\ 71-72,81 \end{gathered}$ | Services | 80,223 | 0.8\% | 50.9\% |
| 40000 | Oklahoma | 6 | $\begin{gathered} \text { 51-56, 61-62, } \\ 71-72,81 \end{gathered}$ | Services | 69,860 | 0.7\% | 38.5\% |
| 20000 | Kansas | 6 | $\begin{gathered} \text { 51-56, 61-62, } \\ 71-72,81 \end{gathered}$ | Services | 66,779 | 0.7\% | 44.3\% |
| 5000 | Arkansas | 6 | $\begin{gathered} 51-56,61-62, \\ 71-72,81 \end{gathered}$ | Services | 52,401 | 0.5\% | 43.2\% |
| 31000 | Nebraska | 6 | $\begin{gathered} 51-56,61-62, \\ 71-72,81 \end{gathered}$ | Services | 52,788 | 0.5\% | 44.9\% |
| 10000 | Delaware | 6 | $\begin{gathered} \text { 51-56, 61-62, } \\ 71-72,81 \end{gathered}$ | Services | 50,022 | 0.5\% | 70.0\% |
| 15000 | Hawaii | 6 | $\begin{gathered} \text { 51-56, 61-62, } \\ 71-72,81 \end{gathered}$ | Services | 45,360 | 0.5\% | 53.6\% |
| 28000 | Mississippi | 6 | $\begin{gathered} 51-56,61-62, \\ 71-72,81 \end{gathered}$ | Services | 42,806 | 0.4\% | 39.5\% |
| 33000 | New Hampshire | 6 | $\begin{gathered} \text { 51-56, 61-62, } \\ 71-72,81 \end{gathered}$ | Services | 44,528 | 0.5\% | 57.7\% |
| 35000 | New Mexico | 6 | $\begin{gathered} \text { 51-56, 61-62, } \\ 71-72,81 \end{gathered}$ | Services | 42,489 | 0.4\% | 45.4\% |
| 44000 | Rhode Island | 6 | $\begin{gathered} 51-56,61-62, \\ 71-72,81 \end{gathered}$ | Services | 34,351 | 0.4\% | 59.7\% |
| 23000 | Maine | 6 | $\begin{gathered} 51-56,61-62, \\ 71-72,81 \end{gathered}$ | Services | 31,601 | 0.3\% | 53.3\% |


| Identifier | State | Industry Id | Industry Classification | Description | Gross domestic product (GDP), 2016 (millions) | State contribution to GDP, 2016 (percent of national GDP for sector) | Contribution to State GDP, 2016 (percent of total State GDP) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 16000 | Idaho | 6 | $\begin{gathered} 51-56,61-62, \\ 71-72,81 \end{gathered}$ | Services | 30,337 | 0.3\% | 44.4\% |
| 54000 | West Virginia | 6 | $\begin{gathered} 51-56,61-62, \\ 71-72,81 \end{gathered}$ | Services | 28,478 | 0.3\% | 39.1\% |
| 46000 | South Dakota | 6 | $\begin{gathered} 51-56,61-62, \\ 71-72,81 \end{gathered}$ | Services | 23,414 | 0.2\% | 48.4\% |
| 30000 | Montana | 6 | $\begin{gathered} \text { 51-56, 61-62, } \\ 71-72,81 \end{gathered}$ | Services | 20,914 | 0.2\% | 45.2\% |
| 38000 | North Dakota | 6 | $\begin{gathered} \hline 51-56,61-62, \\ 71-72,81 \end{gathered}$ | Services | 19,946 | 0.2\% | 37.3\% |
| 2000 | Alaska | 6 | $\begin{gathered} \text { 51-56, 61-62, } \\ 71-72,81 \end{gathered}$ | Services | 17,698 | 0.2\% | 35.1\% |
| 50000 | Vermont | 6 | $\begin{gathered} \text { 51-56, 61-62, } \\ 71-72,81 \end{gathered}$ | Services | 16,645 | 0.2\% | 53.5\% |
| 56000 | Wyoming | 6 | $\begin{gathered} \text { 51-56, 61-62, } \\ 71-72,81 \end{gathered}$ | Services | 11,735 | 0.1\% | 30.6\% |
| 0 | United States | 7 | 51 | Information | 903,994 | . | . |
| 6000 | California | 7 | 51 | Information | 222,726 | 24.6\% | 8.5\% |
| 36000 | New York | 7 | 51 | Information | 121,479 | 13.4\% | 8.1\% |
| 48000 | Texas | 7 | 51 | Information | 55,259 | 6.1\% | 3.5\% |
| 53000 | Washington | 7 | 51 | Information | 50,525 | 5.6\% | 10.6\% |
| 12000 | Florida | 7 | 51 | Information | 36,531 | 4.0\% | 3.9\% |
| 42000 | Pennsylvania | 7 | 51 | Information | 47,430 | 5.2\% | 6.6\% |
| 13000 | Georgia | 7 | 51 | Information | 40,893 | 4.5\% | 7.7\% |
| 17000 | Illinois | 7 | 51 | Information | 26,332 | 2.9\% | 3.3\% |
| 25000 | Massachusetts | 7 | 51 | Information | 26,988 | 3.0\% | 5.3\% |
| 34000 | New Jersey | 7 | 51 | Information | 22,412 | 2.5\% | 3.9\% |
| 8000 | Colorado | 7 | 51 | Information | 17,269 | 1.9\% | 5.4\% |
| 51000 | Virginia | 7 | 51 | Information | 15,346 | 1.7\% | 3.1\% |
| 37000 | North Carolina | 7 | 51 | Information | 17,523 | 1.9\% | 3.4\% |
| 39000 | Ohio | 7 | 51 | Information | 16,549 | 1.8\% | 2.6\% |
| 24000 | Maryland | 7 | 51 | Information | 16,655 | 1.8\% | 4.4\% |
| 27000 | Minnesota | 7 | 51 | Information | 11,633 | 1.3\% | 3.4\% |
| 29000 | Missouri | 7 | 51 | Information | 10,637 | 1.2\% | 3.6\% |
| 9000 | Connecticut | 7 | 51 | Information | 13,126 | 1.5\% | 5.1\% |
| 26000 | Michigan | 7 | 51 | Information | 12,300 | 1.4\% | 2.5\% |
| 55000 | Wisconsin | 7 | 51 | Information | 10,367 | 1.1\% | 3.3\% |
| 47000 | Tennessee | 7 | 51 | Information | 9,497 | 1.1\% | 2.9\% |
| 4000 | Arizona | 7 | 51 | Information | 9,531 | 1.1\% | 3.1\% |
| 41000 | Oregon | 7 | 51 | Information | 7,071 | 0.8\% | 3.1\% |
| 18000 | Indiana | 7 | 51 | Information | 6,178 | 0.7\% | 1.8\% |


| Identifier | State | Industry Id | Industry Classification | Description | Gross domestic product (GDP), 2016 (millions) | State contribution to GDP, 2016 (percent of national GDP for sector) | Contribution to State GDP, 2016 (percent of total State GDP) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 11000 | District of Columbia | 7 | 51 | Information | 6,167 | 0.7\% | 4.9\% |
| 49000 | Utah | 7 | 51 | Information | 7,139 | 0.8\% | 4.5\% |
| 5000 | Arkansas | 7 | 51 | Information | 3,999 | 0.4\% | 3.3\% |
| 20000 | Kansas | 7 | 51 | Information | 4,008 | 0.4\% | 2.7\% |
| 22000 | Louisiana | 7 | 51 | Information | 5,635 | 0.6\% | 2.4\% |
| 45000 | South Carolina | 7 | 51 | Information | 5,118 | 0.6\% | 2.4\% |
| 21000 | Kentucky | 7 | 51 | Information | 4,240 | 0.5\% | 2.2\% |
| 1000 | Alabama | 7 | 51 | Information | 4,393 | 0.5\% | 2.1\% |
| 19000 | lowa | 7 | 51 | Information | 3,948 | 0.4\% | 2.1\% |
| 40000 | Oklahoma | 7 | 51 | Information | 4,554 | 0.5\% | 2.5\% |
| 35000 | New Mexico | 7 | 51 | Information | 3,545 | 0.4\% | 3.8\% |
| 32000 | Nevada | 7 | 51 | Information | 3,724 | 0.4\% | 2.5\% |
| 44000 | Rhode Island | 7 | 51 | Information | 1,615 | 0.2\% | 2.8\% |
| 31000 | Nebraska | 7 | 51 | Information | 3,110 | 0.3\% | 2.6\% |
| 33000 | New Hampshire | 7 | 51 | Information | 3,074 | 0.3\% | 4.0\% |
| 28000 | Mississippi | 7 | 51 | Information | 2,146 | 0.2\% | 2.0\% |
| 10000 | Delaware | 7 | 51 | Information | 1,077 | 0.1\% | 1.5\% |
| 15000 | Hawaii | 7 | 51 | Information | 1,889 | 0.2\% | 2.2\% |
| 54000 | West Virginia | 7 | 51 | Information | 1,566 | 0.2\% | 2.1\% |
| 2000 | Alaska | 7 | 51 | Information | 1,405 | 0.2\% | 2.8\% |
| 16000 | Idaho | 7 | 51 | Information | 1,363 | 0.2\% | 2.0\% |
| 46000 | South Dakota | 7 | 51 | Information | 1,133 | 0.1\% | 2.3\% |
| 38000 | North Dakota | 7 | 51 | Information | 1,289 | 0.1\% | 2.4\% |
| 23000 | Maine | 7 | 51 | Information | 1,150 | 0.1\% | 1.9\% |
| 30000 | Montana | 7 | 51 | Information | 1,008 | 0.1\% | 2.2\% |
| 50000 | Vermont | 7 | 51 | Information | 841 | 0.1\% | 2.7\% |
| 56000 | Wyoming | 7 | 51 | Information | 598 | 0.1\% | 1.6\% |
| 0 | United States | 8 | 52,53 | Finance, insurance, real estate, rental, and leasing | 3,883,755 | . | . |
| 6000 | California | 8 | 52,53 | Finance, insurance, real estate, rental, and leasing | 571,712 | 14.7\% | 21.8\% |
| 36000 | New York | 8 | 52,53 | Finance, insurance, real estate, rental, and leasing | 481,839 | 12.4\% | 32.1\% |
| 48000 | Texas | 8 | 52,53 | Finance, insurance, real estate, rental, and leasing | 243,355 | 6.3\% | 15.2\% |
| 12000 | Florida | 8 | 52,53 | Finance, insurance, real estate, rental, and leasing | 210,522 | 5.4\% | 22.7\% |


|  |  |  |  |  |  | State <br> contribution <br> to GDP, 2016 <br> (percent of <br> national GDP <br> for sector) | Contribution <br> to State GDP, <br> 2016 (percent <br> of total State <br> GDP) |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Identifier | State | Industry <br> Id | Industry <br> Classification | Gross domestic <br> product (GDP), <br> Description |  |  |  |
| 17000 | Illinois (millions) |  |  |  |  |  |  |


|  |  |  |  |  |  | State <br> contribution <br> to GDP, 2016 <br> (percent of <br> national GDP <br> for sector) | Contribution <br> to State GDP, <br> 2016 (percent <br> of total State <br> GDP) |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Identifier | State | Industry <br> Id | Industry <br> Classification | Gross domestic <br> product (GDP), <br> Description |  |  |  |
| 2016 (millions) |  |  |  |  |  |  |  |


| Identifier | State | Industry Id | Industry Classification | Description | Gross domestic product (GDP), 2016 (millions) | State contribution to GDP, 2016 (percent of national GDP for sector) | Contribution to State GDP, 2016 (percent of total State GDP) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 5000 | Arkansas | 8 | 52,53 | Finance, insurance, real estate, rental, and leasing | 18,611 | 0.5\% | 15.3\% |
| 33000 | New Hampshire | 8 | 52,53 | Finance, insurance, real estate, rental, and leasing | 18,714 | 0.5\% | 24.2\% |
| 11000 | District of Columbia | 8 | 52, 53 | Finance, insurance, real estate, rental, and leasing | 17,374 | 0.4\% | 13.7\% |
| 28000 | Mississippi | 8 | 52, 53 | Finance, insurance, real estate, rental, and leasing | 16,321 | 0.4\% | 15.0\% |
| 35000 | New Mexico | 8 | 52,53 | Finance, insurance, real estate, rental, and leasing | 15,932 | 0.4\% | 17.0\% |
| 44000 | Rhode Island | 8 | 52,53 | Finance, insurance, real estate, rental, and leasing | 14,339 | 0.4\% | 24.9\% |
| 16000 | Idaho | 8 | 52,53 | Finance, insurance, real estate, rental, and leasing | 12,405 | 0.3\% | 18.1\% |
| 46000 | South Dakota | 8 | 52,53 | Finance, insurance, real estate, rental, and leasing | 11,882 | 0.3\% | 24.6\% |
| 23000 | Maine | 8 | 52, 53 | Finance, insurance, real estate, rental, and leasing | 12,360 | 0.3\% | 20.8\% |
| 54000 | West Virginia | 8 | 52, 53 | Finance, insurance, real estate, rental, and leasing | 9,843 | 0.3\% | 13.5\% |
| 30000 | Montana | 8 | 52,53 | Finance, insurance, real estate, rental, and leasing | 8,486 | 0.2\% | 18.4\% |
| 38000 | North Dakota | 8 | 52, 53 | Finance, insurance, real estate, rental, and leasing | 9,072 | 0.2\% | 17.0\% |
| 2000 | Alaska | 8 | 52,53 | Finance, insurance, real estate, rental, and leasing | 6,459 | 0.2\% | 12.8\% |
| 50000 | Vermont | 8 | 52,53 | Finance, insurance, real estate, rental, and leasing | 6,132 | 0.2\% | 19.7\% |
| 56000 | Wyoming | 8 | 52,53 | Finance, insurance, real estate, rental, and leasing | 5,614 | 0.1\% | 14.6\% |
| 0 | United States | 9 | 54, 55, 56 | Professional and business services | 2,251,679 | , | . |
| 6000 | California | 9 | 54, 55, 56 | Professional and business services | 333,821 | 14.8\% | 12.7\% |


| Identifier | State | Industry Id | Industry Classification | Description | Gross domestic product (GDP), 2016 (millions) | State contribution to GDP, 2016 (percent of national GDP for sector) | Contribution to State GDP, 2016 (percent of total State GDP) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 36000 | New York | 9 | 54, 55, 56 | Professional and business services | 191,971 | 8.5\% | 12.8\% |
| 48000 | Texas | 9 | 54, 55, 56 | Professional and business services | 179,358 | 8.0\% | 11.2\% |
| 12000 | Florida | 9 | 54, 55, 56 | Professional and business services | 118,526 | 5.3\% | 12.8\% |
| 17000 | Illinois | 9 | 54, 55, 56 | Professional and business services | 106,845 | 4.7\% | 13.4\% |
| 42000 | Pennsylvania | 9 | 54, 55, 56 | Professional and business services | 92,499 | 4.1\% | 12.9\% |
| 34000 | New Jersey | 9 | 54, 55, 56 | Professional and business services | 90,384 | 4.0\% | 15.7\% |
| 51000 | Virginia | 9 | 54, 55, 56 | Professional and business services | 90,656 | 4.0\% | 18.4\% |
| 25000 | Massachusetts | 9 | 54, 55, 56 | Professional and business services | 83,831 | 3.7\% | 16.6\% |
| 39000 | Ohio | 9 | 54, 55, 56 | Professional and business services | 71,527 | 3.2\% | 11.4\% |
| 13000 | Georgia | 9 | 54, 55, 56 | Professional and business services | 64,463 | 2.9\% | 12.1\% |
| 26000 | Michigan | 9 | 54, 55, 56 | Professional and business services | 63,490 | 2.8\% | 13.0\% |
| 37000 | North Carolina | 9 | 54, 55, 56 | Professional and business services | 58,651 | 2.6\% | 11.2\% |
| 24000 | Maryland | 9 | 54, 55, 56 | Professional and business services | 51,969 | 2.3\% | 13.6\% |
| 53000 | Washington | 9 | 54, 55, 56 | Professional and business services | 49,893 | 2.2\% | 10.5\% |
| 8000 | Colorado | 9 | 54, 55, 56 | Professional and business services | 46,041 | 2.0\% | 14.3\% |
| 27000 | Minnesota | 9 | 54, 55, 56 | Professional and business services | 43,892 | 1.9\% | 12.9\% |
| 47000 | Tennessee | 9 | 54, 55, 56 | Professional and business services | 37,011 | 1.6\% | 11.2\% |
| 29000 | Missouri | 9 | 54, 55, 56 | Professional and business services | 37,179 | 1.7\% | 12.4\% |
| 4000 | Arizona | 9 | 54, 55, 56 | Professional and business services | 34,798 | 1.5\% | 11.4\% |
| 9000 | Connecticut | 9 | 54, 55, 56 | Professional and business services | 31,387 | 1.4\% | 12.1\% |
| 11000 | District of Columbia | 9 | 54, 55, 56 | Professional and business services | 30,656 | 1.4\% | 24.2\% |
| 55000 | Wisconsin | 9 | 54, 55, 56 | Professional and business services | 29,880 | 1.3\% | 9.5\% |
| 18000 | Indiana | 9 | 54, 55, 56 | Professional and business services | 28,283 | 1.3\% | 8.1\% |


| Identifier | State | Industry Id | Industry Classification | Description | Gross domestic product (GDP), 2016 (millions) | State contribution to GDP, 2016 (percent of national GDP for sector) | Contribution to State GDP, 2016 (percent of total State GDP) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 41000 | Oregon | 9 | 54, 55, 56 | Professional and business services | 24,577 | 1.1\% | 10.7\% |
| 45000 | South Carolina | 9 | 54, 55, 56 | Professional and business services | 21,428 | 1.0\% | 10.2\% |
| 22000 | Louisiana | 9 | 54, 55, 56 | Professional and business services | 20,131 | 0.9\% | 8.5\% |
| 1000 | Alabama | 9 | 54, 55, 56 | Professional and business services | 19,202 | 0.9\% | 9.3\% |
| 49000 | Utah | 9 | 54, 55, 56 | Professional and business services | 17,197 | 0.8\% | 10.9\% |
| 21000 | Kentucky | 9 | 54, 55, 56 | Professional and business services | 16,410 | 0.7\% | 8.3\% |
| 40000 | Oklahoma | 9 | 54, 55, 56 | Professional and business services | 15,290 | 0.7\% | 8.4\% |
| 32000 | Nevada | 9 | 54, 55, 56 | Professional and business services | 15,674 | 0.7\% | 10.7\% |
| 20000 | Kansas | 9 | 54, 55, 56 | Professional and business services | 16,562 | 0.7\% | 11.0\% |
| 5000 | Arkansas | 9 | 54, 55, 56 | Professional and business services | 12,427 | 0.6\% | 10.2\% |
| 19000 | lowa | 9 | 54, 55, 56 | Professional and business services | 11,531 | 0.5\% | 6.2\% |
| 31000 | Nebraska | 9 | 54, 55, 56 | Professional and business services | 10,573 | 0.5\% | 9.0\% |
| 35000 | New Mexico | 9 | 54, 55, 56 | Professional and business services | 9,646 | 0.4\% | 10.3\% |
| 33000 | New Hampshire | 9 | 54, 55, 56 | Professional and business services | 9,197 | 0.4\% | 11.9\% |
| 28000 | Mississippi | 9 | 54, 55, 56 | Professional and business services | 7,752 | 0.3\% | 7.1\% |
| 10000 | Delaware | 9 | 54, 55, 56 | Professional and business services | 7,727 | 0.3\% | 10.8\% |
| 15000 | Hawaii | 9 | 54, 55, 56 | Professional and business services | 7,364 | 0.3\% | 8.7\% |
| 44000 | Rhode Island | 9 | 54, 55, 56 | Professional and business services | 6,934 | 0.3\% | 12.1\% |
| 16000 | Idaho | 9 | 54, 55, 56 | Professional and business services | 6,623 | 0.3\% | 9.7\% |
| 23000 | Maine | 9 | 54, 55, 56 | Professional and business services | 6,007 | 0.3\% | 10.1\% |
| 54000 | West Virginia | 9 | 54, 55, 56 | Professional and business services | 5,183 | 0.2\% | 7.1\% |
| 2000 | Alaska | 9 | 54, 55, 56 | Professional and business services | 3,309 | 0.1\% | 6.6\% |
| 30000 | Montana | 9 | 54, 55, 56 | Professional and business services | 3,371 | 0.2\% | 7.3\% |

$\begin{array}{|l|l|c|c|c|c|c|c|}\hline & & & & & & \begin{array}{c}\text { State } \\ \text { contribution } \\ \text { to GDP, 2016 } \\ \text { (percent of }\end{array} \\ \text { Identifier }\end{array}$ State $\left.\begin{array}{c}\text { Industry } \\ \text { Id }\end{array} \begin{array}{c}\text { Contribution } \\ \text { to State GDP, } \\ \text { 2016 (percent } \\ \text { of total State } \\ \text { GDP) }\end{array}\right\}$

| Identifier | State | Industry Id | Industry Classification | Description | Gross domestic product (GDP), 2016 (millions) | State contribution to GDP, 2016 (percent of national GDP for sector) | Contribution to State GDP, 2016 (percent of total State GDP) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 26000 | Michigan | 10 | 61,62 | Educational services, health care, and social assistance | 43,413 | 2.8\% | 8.9\% |
| 37000 | North Carolina | 10 | 61,62 | Educational services, health care, and social assistance | 39,833 | 2.6\% | 7.6\% |
| 13000 | Georgia | 10 | 61,62 | Educational services, health care, and social assistance | 38,746 | 2.5\% | 7.3\% |
| 27000 | Minnesota | 10 | 61,62 | Educational services, health care, and social assistance | 34,893 | 2.2\% | 10.3\% |
| 51000 | Virginia | 10 | 61,62 | Educational services, health care, and social assistance | 34,956 | 2.2\% | 7.1\% |
| 47000 | Tennessee | 10 | 61,62 | Educational services, health care, and social assistance | 34,920 | 2.2\% | 10.5\% |
| 24000 | Maryland | 10 | 61,62 | Educational services, health care, and social assistance | 33,144 | 2.1\% | 8.7\% |
| 53000 | Washington | 10 | 61,62 | Educational services, health care, and social assistance | 32,333 | 2.1\% | 6.8\% |
| 55000 | Wisconsin | 10 | 61,62 | Educational services, health care, and social assistance | 29,743 | 1.9\% | 9.5\% |
| 18000 | Indiana | 10 | 61,62 | Educational services, health care, and social assistance | 30,526 | 2.0\% | 8.8\% |
| 29000 | Missouri | 10 | 61,62 | Educational services, health care, and social assistance | 28,883 | 1.9\% | 9.7\% |
| 4000 | Arizona | 10 | 61,62 | Educational services, health care, and social assistance | 28,643 | 1.8\% | 9.4\% |


| Identifier | State | Industry Id | Industry Classification | Description | Gross domestic product (GDP), 2016 (millions) | State contribution to GDP, 2016 (percent of national GDP for sector) | Contribution to State GDP, 2016 (percent of total State GDP) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 9000 | Connecticut | 10 | 61,62 | Educational services, health care, and social assistance | 26,232 | 1.7\% | 10.1\% |
| 8000 | Colorado | 10 | 61,62 | Educational services, health care, and social assistance | 23,081 | 1.5\% | 7.2\% |
| 22000 | Louisiana | 10 | 61,62 | Educational services, health care, and social assistance | 19,464 | 1.3\% | 8.2\% |
| 41000 | Oregon | 10 | 61,62 | Educational services, health care, and social assistance | 19,624 | 1.3\% | 8.6\% |
| 21000 | Kentucky | 10 | 61,62 | Educational services, health care, and social assistance | 17,212 | 1.1\% | 8.8\% |
| 1000 | Alabama | 10 | 61,62 | Educational services, health care, and social assistance | 16,171 | 1.0\% | 7.9\% |
| 45000 | South Carolina | 10 | 61,62 | Educational services, health care, and social assistance | 15,140 | 1.0\% | 7.2\% |
| 40000 | Oklahoma | 10 | 61,62 | Educational services, health care, and social assistance | 14,161 | 0.9\% | 7.8\% |
| 19000 | lowa | 10 | 61,62 | Educational services, health care, and social assistance | 13,883 | 0.9\% | 7.5\% |
| 20000 | Kansas | 10 | 61,62 | Educational services, health care, and social assistance | 12,331 | 0.8\% | 8.2\% |
| 5000 | Arkansas | 10 | 61,62 | Educational services, health care, and social assistance | 10,704 | 0.7\% | 8.8\% |
| 49000 | Utah | 10 | 61,62 | Educational services, health care, and social assistance | 11,029 | 0.7\% | 7.0\% |


| Identifier | State | Industry Id | Industry Classification | Description | Gross domestic product (GDP), 2016 (millions) | State contribution to GDP, 2016 (percent of national GDP for sector) | Contribution to State GDP, 2016 (percent of total State GDP) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 11000 | District of Columbia | 10 | 61,62 | Educational services, health care, and social assistance | 9,763 | 0.6\% | 7.7\% |
| 31000 | Nebraska | 10 | 61,62 | Educational services, health care, and social assistance | 9,293 | 0.6\% | 7.9\% |
| 32000 | Nevada | 10 | 61,62 | Educational services, health care, and social assistance | 9,070 | 0.6\% | 6.2\% |
| 28000 | Mississippi | 10 | 61,62 | Educational services, health care, and social assistance | 8,900 | 0.6\% | 8.2\% |
| 33000 | New Hampshire | 10 | 61,62 | Educational services, health care, and social assistance | 8,373 | 0.5\% | 10.8\% |
| 23000 | Maine | 10 | 61,62 | Educational services, health care, and social assistance | 7,680 | 0.5\% | 13.0\% |
| 54000 | West Virginia | 10 | 61,62 | Educational services, health care, and social assistance | 7,525 | 0.5\% | 10.3\% |
| 44000 | Rhode Island | 10 | 61,62 | Educational services, health care, and social assistance | 7,429 | 0.5\% | 12.9\% |
| 35000 | New Mexico | 10 | 61,62 | Educational services, health care, and social assistance | 7,602 | 0.5\% | 8.1\% |
| 15000 | Hawaii | 10 | 61,62 | Educational services, health care, and social assistance | 6,257 | 0.4\% | 7.4\% |
| 16000 | Idaho | 10 | 61,62 | Educational services, health care, and social assistance | 6,054 | 0.4\% | 8.9\% |
| 10000 | Delaware | 10 | 61,62 | Educational services, health care, and social assistance | 5,370 | 0.3\% | 7.5\% |


| Identifier | State | Industry Id | Industry Classification | Description | Gross domestic product (GDP), 2016 (millions) | State contribution to GDP, 2016 (percent of national GDP for sector) | Contribution to State GDP, 2016 (percent of total State GDP) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 46000 | South Dakota | 10 | 61,62 | Educational services, health care, and social assistance | 4,722 | 0.3\% | 9.8\% |
| 30000 | Montana | 10 | 61,62 | Educational services, health care, and social assistance | 4,553 | 0.3\% | 9.8\% |
| 50000 | Vermont | 10 | 61,62 | Educational services, health care, and social assistance | 4,033 | 0.3\% | 13.0\% |
| 38000 | North Dakota | 10 | 61,62 | Educational services, health care, and social assistance | 4,079 | 0.3\% | 7.6\% |
| 2000 | Alaska | 10 | 61,62 | Educational services, health care, and social assistance | 3,801 | 0.2\% | 7.5\% |
| 56000 | Wyoming | 10 | 61,62 | Educational services, health care, and social assistance | 1,674 | 0.1\% | 4.4\% |
| 0 | United States | 11 | 71,72 | Arts, entertainment, recreation, accommodation, and food services | 751,148 | . | . |
| 6000 | California | 11 | 71,72 | Arts, entertainment, recreation, accommodation, and food services | 112,207 | 14.9\% | 4.3\% |
| 36000 | New York | 11 | 71,72 | Arts, entertainment, recreation, accommodation, and food services | 60,838 | 8.1\% | 4.1\% |
| 12000 | Florida | 11 | 71,72 | Arts, entertainment, recreation, accommodation, and food services | 58,110 | 7.7\% | 6.3\% |
| 48000 | Texas | 11 | 71,72 | Arts, entertainment, recreation, accommodation, and food services | 57,903 | 7.7\% | 3.6\% |
| 17000 | Illinois | 11 | 71,72 | Arts, entertainment, recreation, accommodation, and food services | 31,053 | 4.1\% | 3.9\% |


| Identifier | State | Industry Id | Industry Classification | Description | Gross domestic product (GDP), 2016 (millions) | State contribution to GDP, 2016 (percent of national GDP for sector) | Contribution to State GDP, 2016 (percent of total State GDP) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 32000 | Nevada | 11 | 71,72 | Arts, entertainment, recreation, accommodation, and food services | 25,548 | 3.4\% | 17.5\% |
| 42000 | Pennsylvania | 11 | 71,72 | Arts, entertainment, recreation, accommodation, and food services | 24,579 | 3.3\% | 3.4\% |
| 39000 | Ohio | 11 | 71,72 | Arts, entertainment, recreation, accommodation, and food services | 21,234 | 2.8\% | 3.4\% |
| 25000 | Massachusetts | 11 | 71,72 | Arts, entertainment, recreation, accommodation, and food services | 19,704 | 2.6\% | 3.9\% |
| 34000 | New Jersey | 11 | 71,72 | Arts, entertainment, recreation, accommodation, and food services | 18,731 | 2.5\% | 3.3\% |
| 13000 | Georgia | 11 | 71,72 | Arts, entertainment, recreation, accommodation, and food services | 17,556 | 2.3\% | 3.3\% |
| 37000 | North Carolina | 11 | 71,72 | Arts, entertainment, recreation, accommodation, and food services | 18,803 | 2.5\% | 3.6\% |
| 26000 | Michigan | 11 | 71,72 | Arts, entertainment, recreation, accommodation, and food services | 16,945 | 2.3\% | 3.5\% |
| 53000 | Washington | 11 | 71,72 | Arts, entertainment, recreation, accommodation, and food services | 16,951 | 2.3\% | 3.6\% |
| 8000 | Colorado | 11 | 71,72 | Arts, entertainment, recreation, accommodation, and food services | 16,362 | 2.2\% | 5.1\% |
| 51000 | Virginia | 11 | 71,72 | Arts, entertainment, recreation, accommodation, and food services | 15,935 | 2.1\% | 3.2\% |
| 47000 | Tennessee | 11 | 71,72 | Arts, entertainment, recreation, accommodation, and food services | 16,609 | 2.2\% | 5.0\% |


| Identifier | State | Industry Id | Industry Classification | Description | Gross domestic product (GDP), 2016 (millions) | State contribution to GDP, 2016 (percent of national GDP for sector) | Contribution to State GDP, 2016 (percent of total State GDP) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 4000 | Arizona | 11 | 71,72 | Arts, entertainment, recreation, accommodation, and food services | 14,050 | 1.9\% | 4.6\% |
| 24000 | Maryland | 11 | 71,72 | Arts, entertainment, recreation, accommodation, and food services | 13,927 | 1.9\% | 3.6\% |
| 29000 | Missouri | 11 | 71,72 | Arts, entertainment, recreation, accommodation, and food services | 11,960 | 1.6\% | 4.0\% |
| 18000 | Indiana | 11 | 71,72 | Arts, entertainment, recreation, accommodation, and food services | 11,952 | 1.6\% | 3.4\% |
| 27000 | Minnesota | 11 | 71,72 | Arts, entertainment, recreation, accommodation, and food services | 11,426 | 1.5\% | 3.4\% |
| 22000 | Louisiana | 11 | 71,72 | Arts, entertainment, recreation, accommodation, and food services | 10,916 | 1.5\% | 4.6\% |
| 55000 | Wisconsin | 11 | 71,72 | Arts, entertainment, recreation, accommodation, and food services | 9,562 | 1.3\% | 3.1\% |
| 45000 | South Carolina | 11 | 71,72 | Arts, entertainment, recreation, accommodation, and food services | 9,980 | 1.3\% | 4.8\% |
| 9000 | Connecticut | 11 | 71,72 | Arts, entertainment, recreation, accommodation, and food services | 8,261 | 1.1\% | 3.2\% |
| 15000 | Hawaii | 11 | 71,72 | Arts, entertainment, recreation, accommodation, and food services | 8,231 | 1.1\% | 9.7\% |
| 41000 | Oregon | 11 | 71,72 | Arts, entertainment, recreation, accommodation, and food services | 8,519 | 1.1\% | 3.7\% |
| 21000 | Kentucky | 11 | 71,72 | Arts, entertainment, recreation, accommodation, and food services | 7,197 | 1.0\% | 3.7\% |


| Identifier | State | Industry Id | Industry Classification | Description | Gross domestic product (GDP), 2016 (millions) | State contribution to GDP, 2016 (percent of national GDP for sector) | Contribution to State GDP, 2016 (percent of total State GDP) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1000 | Alabama | 11 | 71,72 | Arts, entertainment, recreation, accommodation, and food services | 6,361 | 0.8\% | 3.1\% |
| 40000 | Oklahoma | 11 | 71,72 | Arts, entertainment, recreation, accommodation, and food services | 6,358 | 0.8\% | 3.5\% |
| 49000 | Utah | 11 | 71,72 | Arts, entertainment, recreation, accommodation, and food services | 5,329 | 0.7\% | 3.4\% |
| 19000 | Iowa | 11 | 71,72 | Arts, entertainment, recreation, accommodation, and food services | 5,283 | 0.7\% | 2.9\% |
| 11000 | District of Columbia | 11 | 71,72 | Arts, entertainment, recreation, accommodation, and food services | 4,837 | 0.6\% | 3.8\% |
| 28000 | Mississippi | 11 | 71,72 | Arts, entertainment, recreation, accommodation, and food services | 5,061 | 0.7\% | 4.7\% |
| 20000 | Kansas | 11 | 71,72 | Arts, entertainment, recreation, accommodation, and food services | 4,765 | 0.6\% | 3.2\% |
| 5000 | Arkansas | 11 | 71,72 | Arts, entertainment, recreation, accommodation, and food services | 3,843 | 0.5\% | 3.2\% |
| 35000 | New Mexico | 11 | 71,72 | Arts, entertainment, recreation, accommodation, and food services | 3,722 | 0.5\% | 4.0\% |
| 31000 | Nebraska | 11 | 71,72 | Arts, entertainment, recreation, accommodation, and food services | 3,166 | 0.4\% | 2.7\% |
| 33000 | New Hampshire | 11 | 71,72 | Arts, entertainment, recreation, accommodation, and food services | 3,308 | 0.4\% | 4.3\% |
| 54000 | West Virginia | 11 | 71,72 | Arts, entertainment, recreation, accommodation, and food services | 2,853 | 0.4\% | 3.9\% |


|  |  |  |  |  |  | State <br> contribution <br> to GDP, 2016 <br> (percent of <br> national GDP <br> for sector) | Contribution <br> to State GDP, <br> 2016 (percent <br> of total State <br> GDP) |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Identifier | State | Industry <br> Id | Industry <br> Classification | Gross domestic <br> product (GDP), <br> Description |  |  |  |
| 2016 (millions) |  |  |  |  |  |  |  |


| Identifier | State | Industry Id | Industry Classification | Description | Gross domestic product (GDP), 2016 (millions) | State contribution to GDP, 2016 (percent of national GDP for sector) | Contribution to State GDP, 2016 (percent of total State GDP) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 36000 | New York | 12 | 81 | Other services (except public administration) | 30,647 | 7.4\% | 2.0\% |
| 12000 | Florida | 12 | 81 | Other services (except public administration) | 26,058 | 6.3\% | 2.8\% |
| 17000 | Illinois | 12 | 81 | Other services (except public administration) | 18,705 | 4.5\% | 2.3\% |
| 42000 | Pennsylvania | 12 | 81 | Other services (except public administration) | 16,726 | 4.0\% | 2.3\% |
| 39000 | Ohio | 12 | 81 | Other services (except public administration) | 13,319 | 3.2\% | 2.1\% |
| 51000 | Virginia | 12 | 81 | Other services (except public administration) | 12,962 | 3.1\% | 2.6\% |
| 34000 | New Jersey | 12 | 81 | Other services (except public administration) | 11,995 | 2.9\% | 2.1\% |
| 26000 | Michigan | 12 | 81 | Other services (except public administration) | 11,500 | 2.8\% | 2.3\% |
| 13000 | Georgia | 12 | 81 | Other services (except public administration) | 10,380 | 2.5\% | 2.0\% |
| 37000 | North Carolina | 12 | 81 | Other services (except public administration) | 10,636 | 2.6\% | 2.0\% |
| 53000 | Washington | 12 | 81 | Other services (except public administration) | 9,547 | 2.3\% | 2.0\% |
| 25000 | Massachusetts | 12 | 81 | Other services (except public administration) | 9,883 | 2.4\% | 2.0\% |
| 24000 | Maryland | 12 | 81 | Other services (except public administration) | 8,882 | 2.1\% | 2.3\% |
| 47000 | Tennessee | 12 | 81 | Other services (except public administration) | 8,214 | 2.0\% | 2.5\% |
| 11000 | District of Columbia | 12 | 81 | Other services (except public administration) | 8,357 | 2.0\% | 6.6\% |
| 18000 | Indiana | 12 | 81 | Other services (except public administration) | 7,852 | 1.9\% | 2.3\% |
|  |  |  |  |  |  |  |  |

$\left.\left.\begin{array}{|l|l|c|c|c|c|c|c|}\hline & & & & & & \begin{array}{c}\text { State } \\ \text { contribution } \\ \text { to GDP, 2016 } \\ \text { (percent of }\end{array} & \begin{array}{c}\text { Contribution } \\ \text { to State GDP, } \\ \text { 2016 (percent } \\ \text { national GDP }\end{array} \\ \text { Idental State } \\ \text { GDP) }\end{array}\right] \begin{array}{c}\text { for sector) }\end{array}\right\}$

| Identifier | State | Industry Id | Industry Classification | Description | Gross domestic product (GDP), 2016 (millions) | State contribution to GDP, 2016 (percent of national GDP for sector) | Contribution to State GDP, 2016 (percent of total State GDP) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 5000 | Arkansas | 12 | 81 | Other services (except public administration) | 2,817 | 0.7\% | 2.3\% |
| 28000 | Mississippi | 12 | 81 | Other services (except public administration) | 2,626 | 0.6\% | 2.4\% |
| 31000 | Nebraska | 12 | 81 | Other services (except public administration) | 2,406 | 0.6\% | 2.0\% |
| 35000 | New Mexico | 12 | 81 | Other services (except public administration) | 2,042 | 0.5\% | 2.2\% |
| 15000 | Hawaii | 12 | 81 | Other services (except public administration) | 1,981 | 0.5\% | 2.3\% |
| 33000 | New Hampshire | 12 | 81 | Other services (except public administration) | 1,862 | 0.4\% | 2.4\% |
| 54000 | West Virginia | 12 | 81 | Other services (except public administration) | 1,508 | 0.4\% | 2.1\% |
| 16000 | Idaho | 12 | 81 | Other services (except public administration) | 1,402 | 0.3\% | 2.1\% |
| 23000 | Maine | 12 | 81 | Other services (except public administration) | 1,382 | 0.3\% | 2.3\% |
| 44000 | Rhode Island | 12 | 81 | Other services (except public administration) | 1,271 | 0.3\% | 2.2\% |
| 30000 | Montana | 12 | 81 | Other services (except public administration) | 1,064 | 0.3\% | 2.3\% |
| 10000 | Delaware | 12 | 81 | Other services (except public administration) | 1,043 | 0.3\% | 1.5\% |
| 46000 | South Dakota | 12 | 81 | Other services (except public administration) | 1,076 | 0.3\% | 2.2\% |
| 38000 | North Dakota | 12 | 81 | Other services (except public administration) | 997 | 0.2\% | 1.9\% |
| 2000 | Alaska | 12 | 81 | Other services (except public administration) | 902 | 0.2\% | 1.8\% |
| 50000 | Vermont | 12 | 81 | Other services (except public administration) | 742 | 0.2\% | 2.4\% |


| Identifier | State | Industry Id | Industry Classification | Description | Gross domestic product (GDP), 2016 (millions) | State contribution to GDP, 2016 (percent of national GDP for sector) | Contribution to State GDP, 2016 (percent of total State GDP) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 56000 | Wyoming | 12 | 81 | Other services (except public administration) | 626 | 0.2\% | 1.6\% |
| 0 | United States | 13 | 92 | Government | 2,286,853 | . | . |
| 6000 | California | 13 | 92 | Government | 319,429 | 14.0\% | 12.2\% |
| 48000 | Texas | 13 | 92 | Government | 174,981 | 7.7\% | 10.9\% |
| 36000 | New York | 13 | 92 | Government | 163,405 | 7.1\% | 10.9\% |
| 12000 | Florida | 13 | 92 | Government | 108,741 | 4.8\% | 11.7\% |
| 51000 | Virginia | 13 | 92 | Government | 92,732 | 4.1\% | 18.8\% |
| 24000 | Maryland | 13 | 92 | Government | 79,218 | 3.5\% | 20.7\% |
| 17000 | Illinois | 13 | 92 | Government | 76,009 | 3.3\% | 9.5\% |
| 42000 | Pennsylvania | 13 | 92 | Government | 71,607 | 3.1\% | 9.9\% |
| 39000 | Ohio | 13 | 92 | Government | 69,649 | 3.0\% | 11.1\% |
| 37000 | North Carolina | 13 | 92 | Government | 69,520 | 3.0\% | 13.3\% |
| 13000 | Georgia | 13 | 92 | Government | 64,104 | 2.8\% | 12.1\% |
| 53000 | Washington | 13 | 92 | Government | 64,246 | 2.8\% | 13.5\% |
| 34000 | New Jersey | 13 | 92 | Government | 62,793 | 2.7\% | 10.9\% |
| 25000 | Massachusetts | 13 | 92 | Government | 54,356 | 2.4\% | 10.7\% |
| 26000 | Michigan | 13 | 92 | Government | 53,162 | 2.3\% | 10.8\% |
| 11000 | District of Columbia | 13 | 92 | Government | 42,882 | 1.9\% | 33.9\% |
| 4000 | Arizona | 13 | 92 | Government | 40,509 | 1.8\% | 13.2\% |
| 8000 | Colorado | 13 | 92 | Government | 40,323 | 1.8\% | 12.5\% |
| 47000 | Tennessee | 13 | 92 | Government | 37,627 | 1.6\% | 11.3\% |
| 29000 | Missouri | 13 | 92 | Government | 35,823 | 1.6\% | 12.0\% |
| 55000 | Wisconsin | 13 | 92 | Government | 34,009 | 1.5\% | 10.9\% |
| 1000 | Alabama | 13 | 92 | Government | 34,732 | 1.5\% | 16.9\% |
| 27000 | Minnesota | 13 | 92 | Government | 33,858 | 1.5\% | 10.0\% |
| 45000 | South Carolina | 13 | 92 | Government | 32,907 | 1.4\% | 15.7\% |
| 18000 | Indiana | 13 | 92 | Government | 31,460 | 1.4\% | 9.1\% |
| 40000 | Oklahoma | 13 | 92 | Government | 29,429 | 1.3\% | 16.2\% |
| 21000 | Kentucky | 13 | 92 | Government | 27,568 | 1.2\% | 14.0\% |
| 9000 | Connecticut | 13 | 92 | Government | 27,327 | 1.2\% | 10.5\% |
| 22000 | Louisiana | 13 | 92 | Government | 27,161 | 1.2\% | 11.5\% |
| 41000 | Oregon | 13 | 92 | Government | 26,432 | 1.2\% | 11.5\% |
| 35000 | New Mexico | 13 | 92 | Government | 22,345 | 1.0\% | 23.9\% |
| 20000 | Kansas | 13 | 92 | Government | 20,640 | 0.9\% | 13.7\% |
| 19000 | lowa | 13 | 92 | Government | 20,821 | 0.9\% | 11.2\% |
| 49000 | Utah | 13 | 92 | Government | 20,141 | 0.9\% | 12.8\% |
| 28000 | Mississippi | 13 | 92 | Government | 19,018 | 0.8\% | 17.5\% |


| Identifier | State | Industry Id | Industry Classification | Description | Gross domestic product (GDP), 2016 (millions) | State contribution to GDP, 2016 (percent of national GDP for sector) | Contribution to State GDP, 2016 (percent of total State GDP) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 15000 | Hawaii | 13 | 92 | Government | 17,535 | 0.8\% | 20.7\% |
| 32000 | Nevada | 13 | 92 | Government | 16,886 | 0.7\% | 11.5\% |
| 5000 | Arkansas | 13 | 92 | Government | 15,736 | 0.7\% | 13.0\% |
| 31000 | Nebraska | 13 | 92 | Government | 14,782 | 0.6\% | 12.6\% |
| 54000 | West Virginia | 13 | 92 | Government | 11,815 | 0.5\% | 16.2\% |
| 2000 | Alaska | 13 | 92 | Government | 10,499 | 0.5\% | 20.8\% |
| 16000 | Idaho | 13 | 92 | Government | 9,392 | 0.4\% | 13.7\% |
| 33000 | New Hampshire | 13 | 92 | Government | 8,711 | 0.4\% | 11.3\% |
| 23000 | Maine | 13 | 92 | Government | 8,333 | 0.4\% | 14.1\% |
| 44000 | Rhode Island | 13 | 92 | Government | 7,896 | 0.3\% | 13.7\% |
| 30000 | Montana | 13 | 92 | Government | 6,934 | 0.3\% | 15.0\% |
| 10000 | Delaware | 13 | 92 | Government | 6,860 | 0.3\% | 9.6\% |
| 56000 | Wyoming | 13 | 92 | Government | 6,252 | 0.3\% | 16.3\% |
| 38000 | North Dakota | 13 | 92 | Government | 6,022 | 0.3\% | 11.3\% |
| 46000 | South Dakota | 13 | 92 | Government | 5,577 | 0.2\% | 11.5\% |
| 50000 | Vermont | 13 | 92 | Government | 4,659 | 0.2\% | 15.0\% |

NOTE: This table presents the latest available data which do not sum to latest available industry totals as shown in figures 1-1, 2-1, 3-1, 4-1, 5-1, 6-1, 7-1, and 8-1.

Data shown in figures 1-1 to 8-1 are based on U.S. Department of Commerce, Bureau of Economic Analysis, Value Added by Industry table, available at http://bea.gov as of March 2018.
SOURCE: U.S. Department of Commerce, Bureau of Economic Analysis, Gross Domestic Product by State, available at http://bea.gov as of March 2018.


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[^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 2016 (using BEA's latest data in combination with the 2007 benchmark data) and will revise the 2012-2016 TSAs when BEA releases detailed data for the year 2012.

[^1]:    ${ }^{3}$ Latest data as of March 30, 2018.

[^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 March 30, 2018.

[^3]:    NOTE: This table presents the latest available data which do not sum to latest available industry totals as shown in figures 1-1 and 2-1. Data shown in figures 1-1 and 2-1 are based on U.S. Department of Commerce, Bureau of Economic Analysis, Value Added by Industry table, available at http://bea.gov as of March 2018.
    SOURCE: U.S. Department of Commerce, Bureau of Economic Analysis, Gross Domestic Product by State, available at http://bea.gov as of March 2018.

[^4]:    ${ }^{2}$ Data for previous years have been revised since last release. Due to changes in the source data, the numbers in this release is not comparable to those in our previous release.

[^5]:    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. 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 August 30, 2017.

[^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 March 30, 2018.

[^7]:    ${ }^{2}$ In-house and for-hire requirements sum less than overall transportation requirement due to rounding.

[^8]:    ${ }^{3}$ Total for transportation occupations includes supervisors of material moving workers, which could not be separated from supervisors of transportation workers.

[^9]:    ${ }^{1}$ U.S. Department of Labor, Bureau of Labor Statistics, Industries at a Glance, www.bls.gov/iag/tgs/iag index naics.htm, as of March 30, 2018

[^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 March 30, 2018

[^11]:    ${ }^{2}$ Total for transportation occupations includes supervisors of material moving workers, which could not be separated from supervisors of transportation workers.

[^12]:    ${ }^{2}$ In-house and for-hire transportation requirements add to more than total transportation requirement due to rounding.

[^13]:    ${ }^{1}$ U.S. Department of Labor, Bureau of Labor Statistics, Industries at a Glance, www.bls.gov/iag/tgs/iag index naics.htm, as of March 30, 2018

[^14]:    ${ }^{1}$ Total for transportation occupations includes supervisors of material moving workers, which could not be separated from supervisors of transportation workers.

