

CHAPTER 6 WHOLESALE AND RETAIL TRADE



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

Wholesale trade consists of establishments who sell merchandise to other businesses. They arrange the purchase or sale of goods for resale (i.e., goods sold to other wholesalers or retailers), capital or durable nonconsumer goods, and raw and intermediate materials and supplies

used in production. Establishments performing these activities may be sales branches maintained by manufacturing, refining, or mining enterprises apart from their plants or mines for the purpose of selling their products. They also may be agents or brokers who arrange for the purchase or sale of goods owned by others, often on a commission basis.

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

Wholesale and retail trade	Value	Year (latest year data is available)
Contribution to GDP	\$2,130.1 billion	2015
Use of transportation	\$292.1 billion	2014
Amount of transportation required to produce a dollar of output	9.9	2014
Number of transportation and material moving workers		
Wholesale trade	1,167,230	2015
Retail trade	1,033,160	2015
Transportation and material moving workers as percent of sector's work force		
Wholesale trade	20.0	2015
Retail trade	6.6	2015
Median annual wage of transportation and material moving workers		
Wholesale trade	\$30,680	2015
Retail trade	\$ 22,750	2015
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 August 11, 2016.

*Data on number of trucks and truck miles accumulated was last collected in the Vehicle Inventory and Use Survey for 2002.

Shipment data not available for the retail trade industry.

SOURCE: Data for this table is drawn from figures and tables presented throughout this chapter.

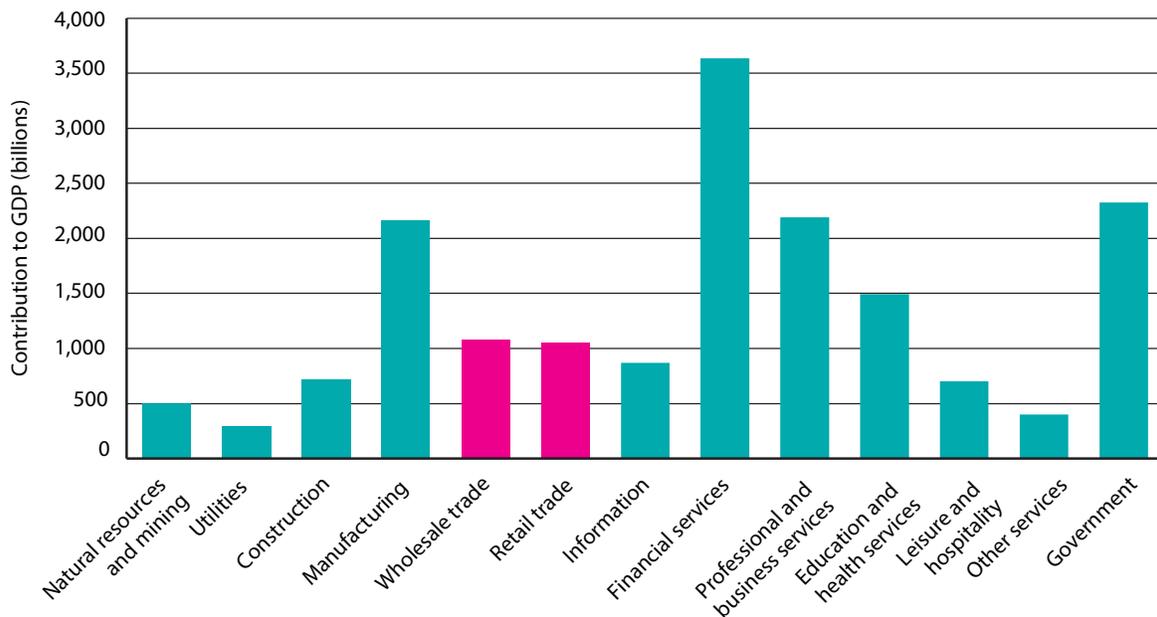
Establishments within the retail trade sector also sell merchandise, but unlike wholesalers, retailers sell merchandise (in small quantities) to the general public for personal or household consumption. In some cases retailers sell merchandise to businesses and institutions. Retailers may operate stores, 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 Sept. 1, 2015

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 2015 the wholesale and retail trade sector combined contributed \$2,130.1 billion (11.9 percent) to the national economy, as measured by gross domestic product (GDP). The wholesale trade sector contributed \$1,080.4 billion (6.0 percent), while the retail trade sector contributed \$1,049.7 billion (5.8 percent) (figure 6-1).

Figure 6-1 Wholesale and Retail Trade Sector's Contribution to Gross Domestic Product, 2015



NOTE: GDP = \$17,947 billion

SOURCE: U.S. Department of Commerce, Bureau of Economic Analysis, Value Added by Industry, available at <http://bea.gov> as of August 11, 2016.

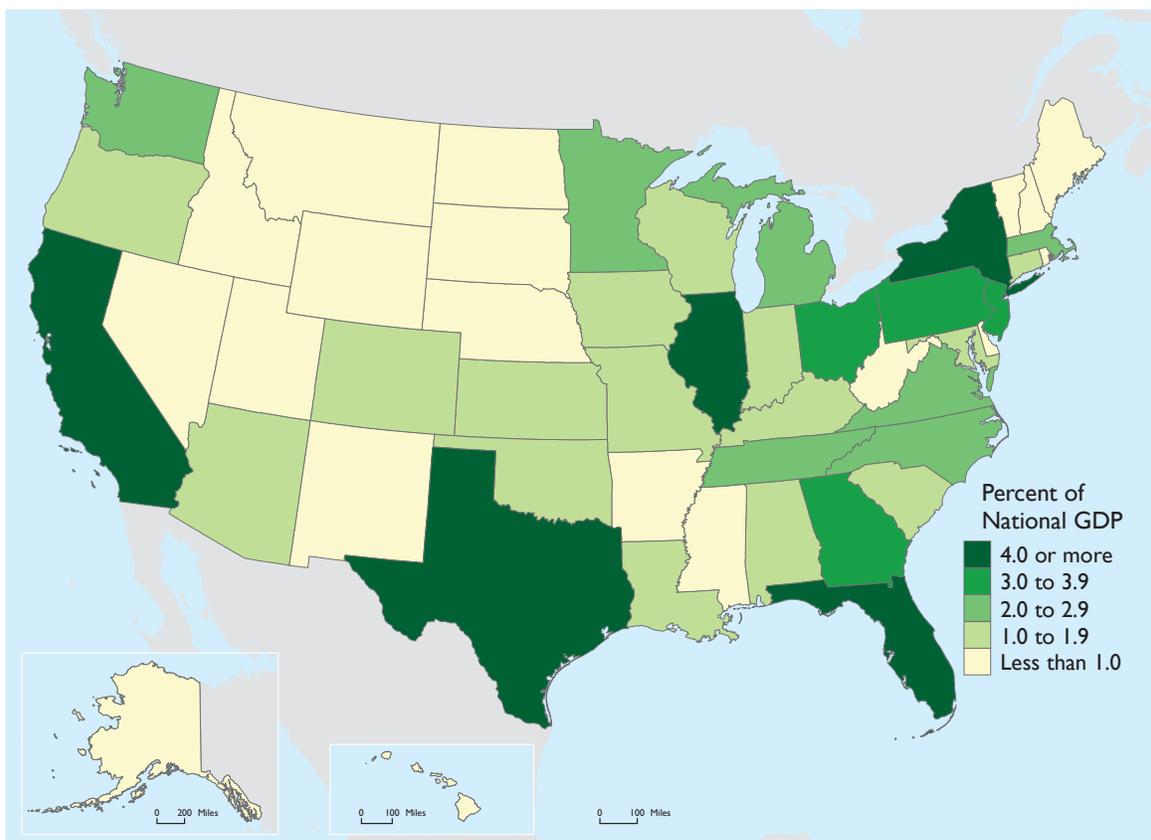
The largest amount of wholesale and retail trade activity combined occurred in California (\$276.0 billion), followed by Texas (\$222.7 billion), New York (\$136.6 billion), Florida (\$129.6 billion), and Illinois (\$98.3 billion) (figure 6-2). These five States produce more of all goods and services than other States (they contribute the most to national GDP) (figure 6-2, table 6-2).

Computing the percent of wholesale and retail trade as a percent of gross state product (GSP), rather than as a share of GDP, also provides useful insights to U.S. production. Nationally, California led in wholesale and retail trade. However,

wholesale and retail trade accounted for a smaller share of GSP in California (11.2 percent) than in Florida (14.7 percent)– the State where wholesale and retail trade accounted for the largest percent of GSP in 2015 (see Appendix A).

The wholesale and retail sector was the largest user of transportation services in 2014 (\$292.1 billion). The wholesale and retail trade sector relies heavily on in-house transportation operations. Looking at the use of air, rail, truck, and water transportation services, the sector used more in-house transportation operations (\$156.5 billion) than for-hire services (\$26.9 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), 2015



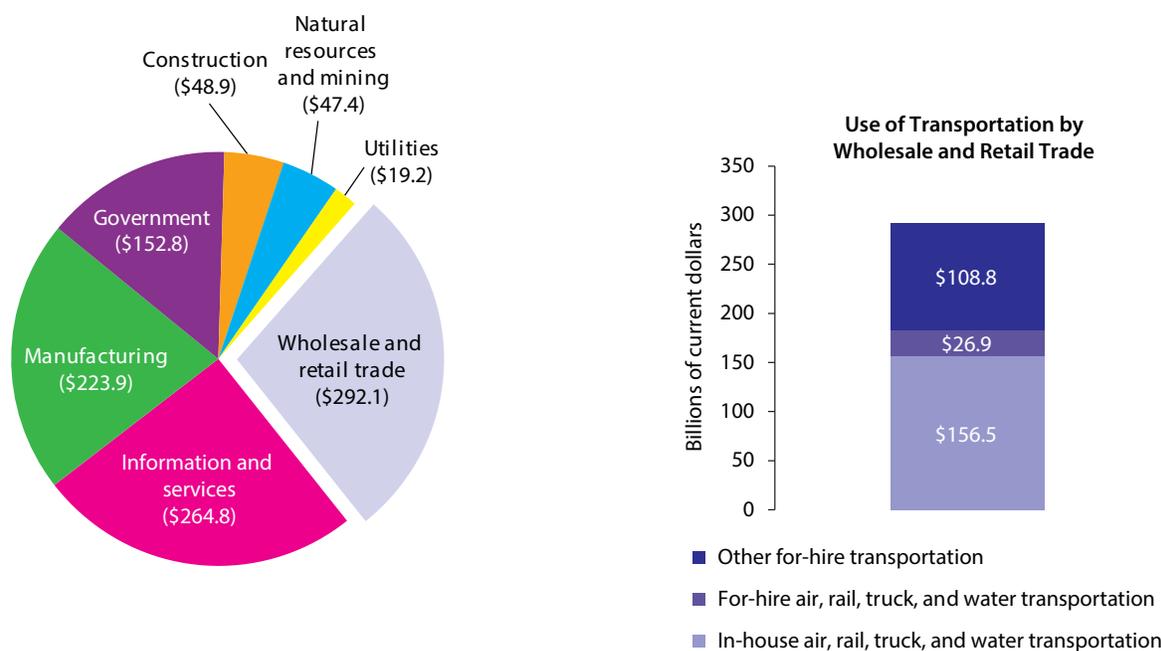
SOURCE: U.S. Department of Commerce, Bureau of Economic Analysis, Gross Domestic Product by State, available at <http://bea.gov> as of August 2016.

Table 6-2 States Contributing 4.0 Percent or More to National GDP Related to Wholesale and Retail Trade in 2015

State	Wholesale and retail trade (Wholesale and retail trade related GDP = \$2,130.1 billion)			All products and services (Total National GDP = \$17.8 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	276.0	13.0	1	2,458.5	1
Texas	222.7	10.5	2	1,586.5	2
New York	136.6	6.4	3	1,441.0	3
Florida	129.6	6.1	4	882.8	4
Illinois	98.3	4.6	5	775.0	5

NOTE: Latest available data do not sum to latest available industry totals (shown in figure 6-1) due to difference in source data vintage.
SOURCE: U.S. Department of Commerce, Bureau of Economic Analysis, Gross Domestic Product by State, available at <http://bea.gov> as of August 11, 2016.

**Figure 6-3 Use of Transportation by the Wholesale and Retail Trade Sector, 2014
(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 August 2016.

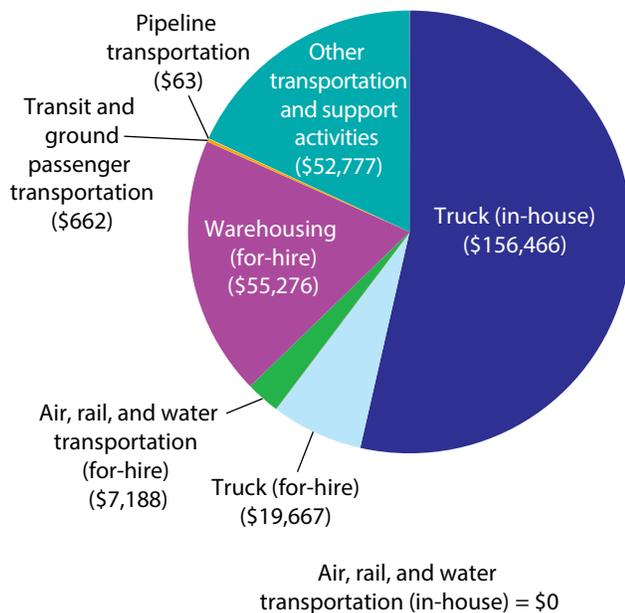
The wholesale and retail trade sector used \$292.1 billion of transportation services in 2014 (figure 6-3). In 2014, the wholesale and retail trade sector used:

- Primarily truck transportation services (e.g., used to carry goods, such as clothing and food, to stores), which accounted for 60.3 percent (\$176,133 million) of all transportation services used by the sector.
- More in-house truck transportation operations (\$156,466 million) than for-hire truck transportation services (\$19,667 million). In-house truck transportation operations accounted for nearly two-thirds (53.6 percent) of all transportation services used by the sector.
- A significant amount of warehousing and other transportation services (parcel delivery, courier, and messenger services excluding U.S. Postal Service, transportation support activities such as freight loading, etc.). Warehousing accounted for 18.9 percent (\$55,276 million) of the transportation services used by the wholesale and retail trade sector, and other services accounted for 18.1 percent (\$52,777 million).
- A small amount of for-hire air, rail, and water transportation services (\$7,188 million), which collectively accounted for 2.5 percent of the transportation services used by the sector.

- No measureable amount of in-house air, rail, or water transportation operations.
- A smaller amount of for-hire pipeline transportation (\$63 million) and transit and ground passenger transportation services (\$662 million) (e.g., bus transportation purchased for workers) than any other transportation mode (figure 6-4).

The wholesale and retail trade sector depended on transportation more than any other sector in 2014. The wholesale and retail trade sector

Figure 6-4 Wholesale and Retail Trade Sector's Use of Transportation by Mode, 2014



NOTE: In-house transportation consists of transportation services (air, rail, truck, and water) provided by nontransportation industries for their own use. For-hire transportation consists of the services provided by transportation firms to industries and the public on a fee-basis. Airlines, railroads, transit agencies, common carrier trucking companies, and pipelines are examples of for-hire transportation industries. Transit and passenger ground transportation excludes State and local government passenger transit. Other transportation includes sightseeing transportation. The wholesale and retail trade sector did not use an in-house air, rail, or water transportation in 2014.

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

required 9.9¢ worth of transportation services to produce a dollar of output in 2014. The sector required more in-house transportation operations (5.3¢ to produce a dollar of output) than for-hire transportation services (4.6¢ to produce a dollar of output)². The wholesale and retail trade sector required more in-house transportation operations than all other sectors in 2014 (figure 6-5).

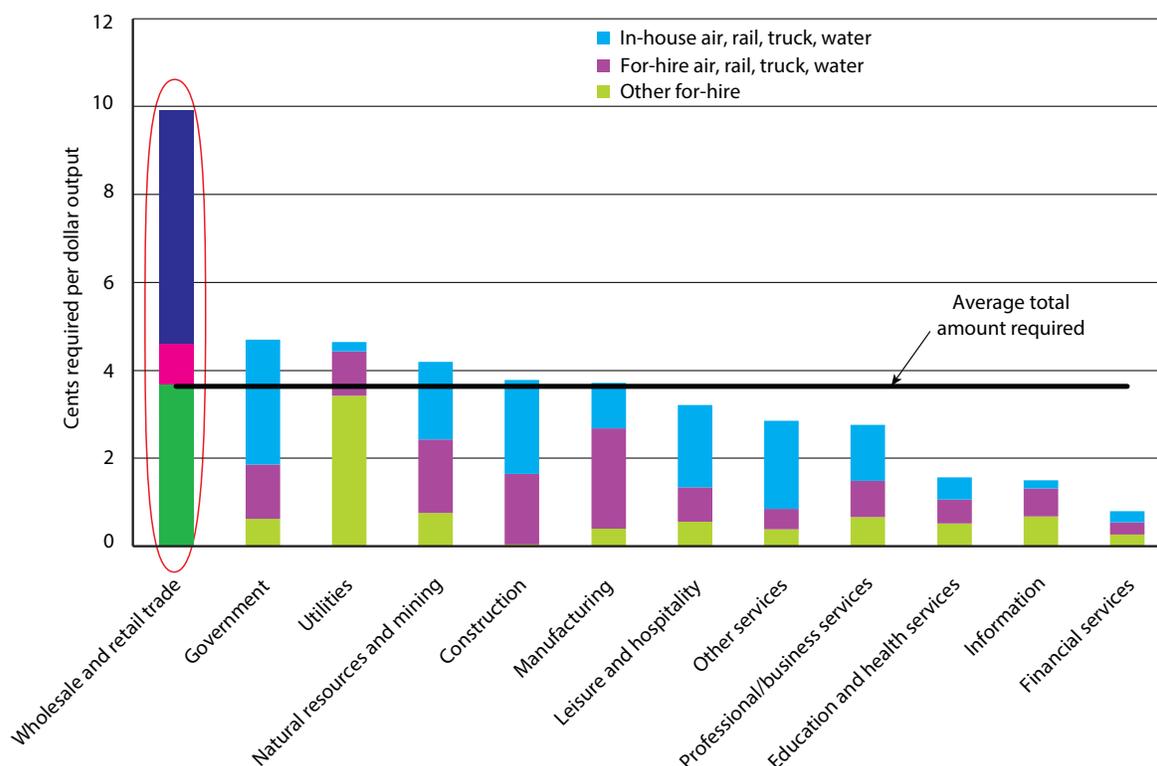
Transportation services were the second most important input for the wholesale and retail trade sector to produce one dollar of output. The

² In-house and for-hire transportation requirements add to more than total transportation requirement due to rounding.

wholesale and retail trade sector required slightly more professional and business services (11.7¢ to produce one dollar of output), such as advertising services, payroll services, etc., than transportation services to produce one dollar of output (figure 6-6).

In 2015 the wholesale trade industry employed nearly 1.2 million transportation and material moving workers, accounting for 20.0 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

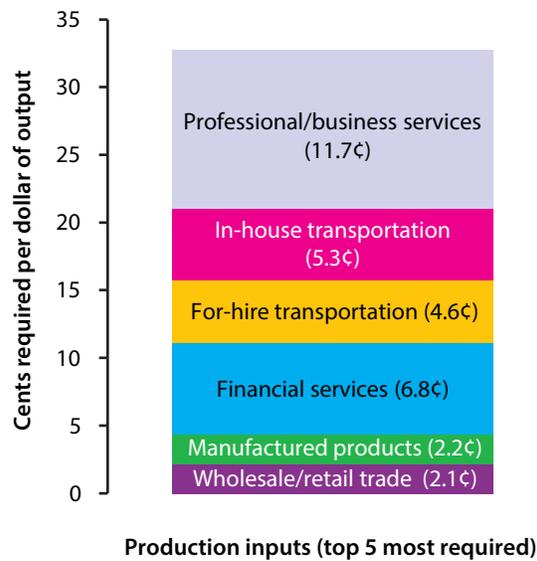
Figure 6-5 Transportation Required Per Dollar of Output by the Wholesale and Retail Trade Sector, 2014



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 August 2016.

Figure 6-6 Top 5 Most Required Inputs by Wholesale and Retail Trade Sector to Produce a Dollar of Output, 2014



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

force. Both industries employed more material moving workers (the wholesale trade industry employed 593,670 material moving workers and the retail trade industry employed 618,500) than transportation workers (the wholesale trade industry employed 593,670 transportation workers and the retail trade industry employed 414,660)³ (figure 6-7). Transportation workers include motor vehicle operators, ship engineers, aircraft pilots and flight engineers, etc. Material moving workers support transportation activities and include occupations such as cleaners of vehicles and ship loaders.

Transportation and material moving workers in the wholesale trade industry earned a median wage of \$30,680 in 2015, while workers of all

³Total for transportation occupations includes supervisors of material moving workers, which could not be separated from supervisors of transportation workers.

occupations in the wholesale trade industry earned a higher median wage (\$40,980). Transportation and material moving workers in the retail trade industry earned a median wage of \$22,750 in 2015, while workers of all occupations in the retail trade industry earned a marginally higher median wage (\$23,670). (figure 6-8)

The wholesale trade industry employed the largest number of transportation workers as heavy and tractor-trailer truck drivers (208,450) followed by light truck or delivery drivers (161,290) and driver/sales workers (117,920). Heavy and tractor-trailer truck drivers earned a higher median wage (\$39,500) than light truck or delivery service drivers (\$29,120) and driver/sales workers (\$31,130) employed in the wholesale industry. Heavy tractor-trailer truck drivers, drivers/sales workers, and light truck or delivery service operators all earned less than the industry median wage (figure 6-8).

Figure 6-7 Number of Workers Employed in the Wholesale and Retail Trade Sector, 2015

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 11, 2016.

The retail trade industry employed the largest number of transportation workers as light truck/delivery services drivers (191,280) followed by driver/sales workers (60,880) and automotive and watercraft service attendants (55,310). The median wage for these three occupations is nearly the same. Light truck/delivery services drivers employed in the retail trade industry earned a median wage of \$23,740, driver/sales workers earned a median wage of \$25,330, and automotive and watercraft service attendants earned a median wage of \$21,530 (figure 6-8).

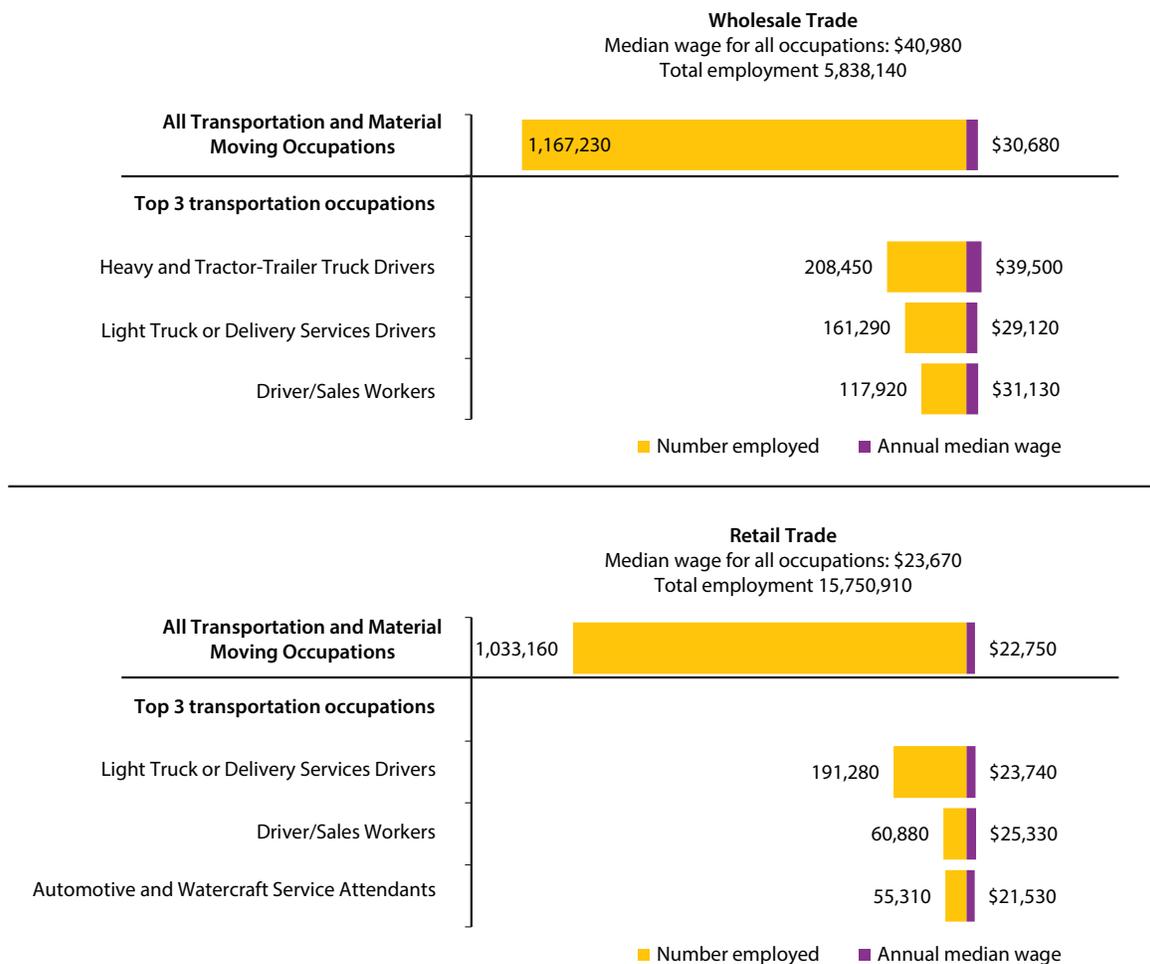
The 2002 Vehicle Inventory and Use Survey (VIUS) is the most recent survey of vehicle ownership and use by industry. According to the 2002 VIUS, the wholesale and retail trade industry operated the third largest number of trucks (2.3 million) and accumulated the second largest number of

miles (44.4 billion) (figure 6-9).

The 2012 Commodity Flow Survey shows that the wholesale trade industry shipped 3.8 trillion tons of raw materials and finished goods domestically, valued at \$6.1 trillion, and accounting for 723.2 billion ton-miles. Trucking was the dominant mode. Trucks carried 81.8 percent of the tonnage shipped by the wholesale industry, 78.2 percent of the value, and accounted for 55.4 percent of ton-miles. The wholesale trade industry, however, tended to use modes other than truck to ship goods long distances. The average shipment distance was shorter by truck (176 miles per shipment) than by all other modes and longest by air (1,163 miles per shipment) (figure 6-10).

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

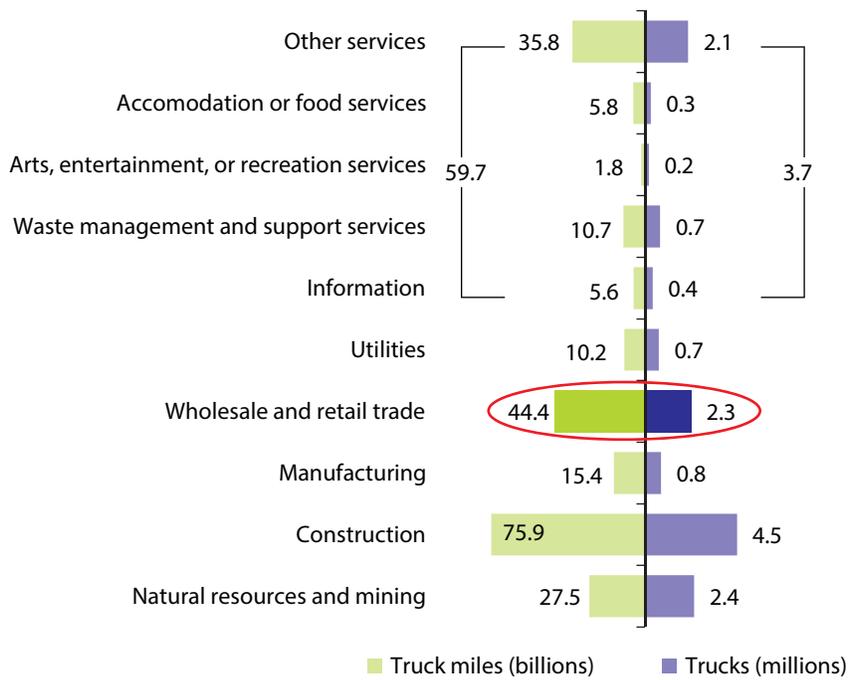
Figure 6-8 Median Annual Wage and Employment for Most Common Transportation Occupations (Top 3) in Wholesale and Retail Trade Sector, 2015



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 11, 2016.

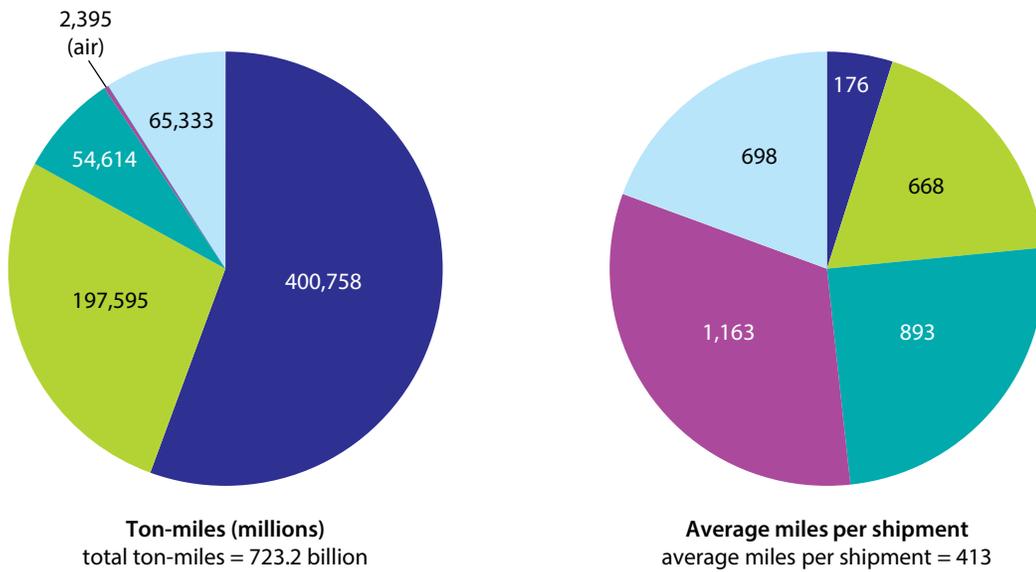
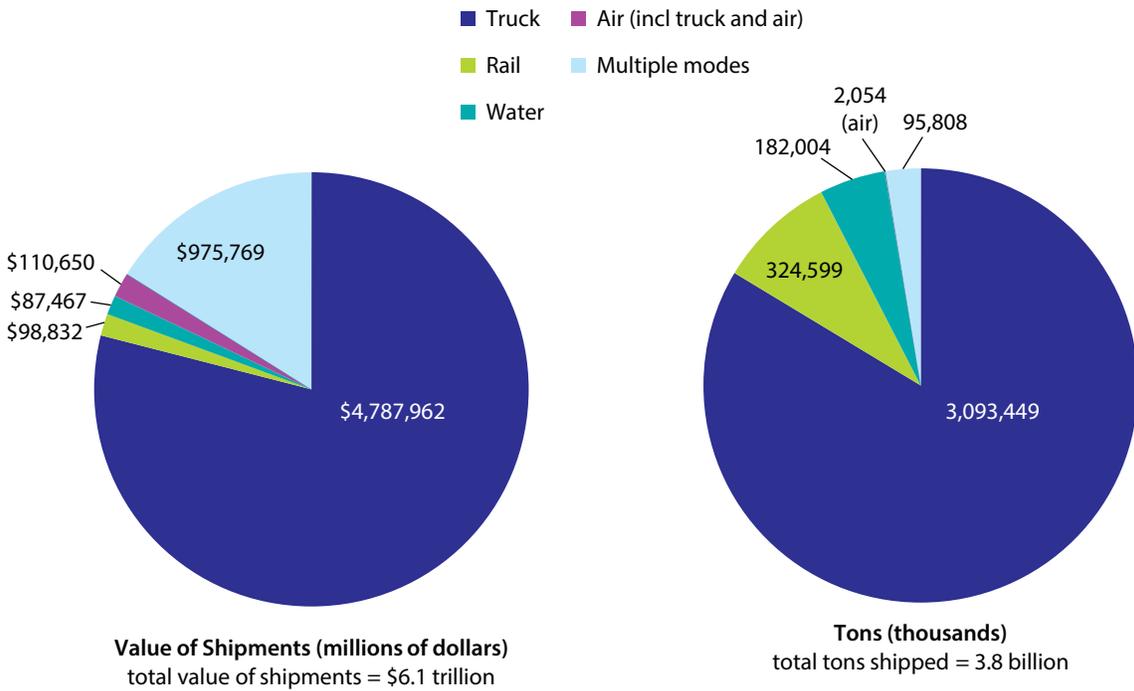
Figure 6-9 Trucks Used and Truck Miles Accumulated for Business by the Wholesale and Retail Trade Industry, 2002



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



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.

