

IV. THE FREIGHT TRANSPORTATION INDUSTRY

The freight industry has many components, encompassing companies large and small. All told there were about 200,000 transportation and warehousing establishments in 2002, with more than half of those primarily engaged in trucking. Trucking revenue accounts for about 40 percent of the transportation and warehousing sector. Revenue generated by warehousing is a small percentage of the entire transportation and warehousing sector.

TABLE 4-1. ECONOMIC CHARACTERISTICS OF TRANSPORTATION AND WAREHOUSING IN FREIGHT DOMINATED MODES NORTH AMERICAN INDUSTRY CLASSIFICATION SYSTEM (NAICS) BASIS

	Establishments		Revenue (\$ thousands)		Payroll (\$ thousands)		Paid Employees	
	1997	2002	1997	2002	1997	2002	1997	2002
Transportation and warehousing¹	178,025	200,421	318,245,044	394,456,801	82,346,182	118,251,681	2,920,777	3,757,426
Rail transportation	NA	NA	NA	NA	NA	NA	NA	NA
Water transportation	1,921	1,924	24,019,168	23,124,300	2,834,114	3,031,880	72,857	65,326
Truck transportation ¹	103,798	112,698	141,225,398	165,561,328	38,471,272	47,833,733	1,293,790	1,437,259
Pipeline transportation	2,311	2,512	26,836,992	27,641,362	2,660,576	3,082,558	49,280	46,556
Support activities for transportation	30,675	34,223	39,758,245	62,315,569	12,592,441	16,558,036	411,640	478,166
Couriers and messengers	10,887	12,754	39,812,433	59,373,155	14,071,630	17,431,848	530,839	578,257
Warehousing and storage ¹	6,497	12,637	10,657,925	17,924,787	2,926,119	18,689,122	109,760	639,174

Key: NA = not available; R = revised.

¹Enterprise support establishments are included in 2002 but not 1997, thus the two years are not comparable.

Notes: Total includes air transportation, transit and ground passenger transportation, and scenic and sightseeing transportation. Data are for establishments in which transportation is the primary business. Data exclude transportation provided privately, such as trucking organized "in-house" by a grocery company. Data are not collected for rail transportation nor for governmental organizations even when their primary activity would be classified in industries covered by the census. For example, data are not collected for publicly-operated buses and subway systems. Data for 2002 are preliminary and subject to change.

TABLE 4-2. ECONOMIC CHARACTERISTICS OF FREIGHT RAILROADS

	Class I		Non-Class I		Total	
	1997	2002	1997	2002	1997	2002
Number of railroads	9	7	541	545	550	552
Freight revenue (billions \$)	32.3	34.1	3.0	2.8	35.3	36.9
Operating revenue (billions \$)	33.1	35.3	NA	NA	NA	NA
Employees	177,981	157,372	22,736	19,688	200,717	177,060

Key: NA = not available.

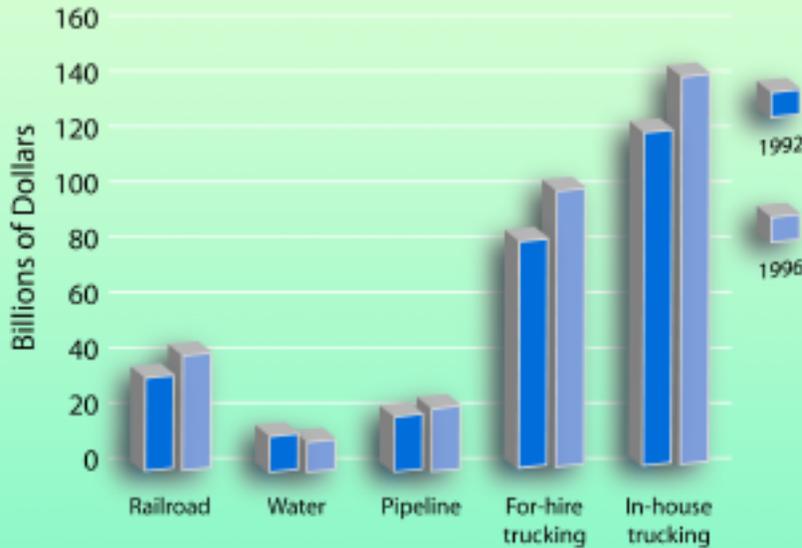
TABLE 4-1. ECONOMIC CHARACTERISTICS OF TRANSPORTATION AND WAREHOUSING IN FREIGHT DOMINATED MODES NORTH AMERICAN INDUSTRY CLASSIFICATION SYSTEM (NAICS) BASIS

Source: U.S. Department of Commerce, Census Bureau, *2002 Economic Census, Transportation and Warehousing, United States*, available at http://www.census.gov/econ/census02/data/us/US000_48.HTM as of September 14, 2005; U.S. Department of Commerce, Census Bureau, *1997 Economic Census, Transportation and Warehousing, United States*, available at http://www.census.gov/epcd/ec97/us/US000_48.HTM as of September 14, 2005.

TABLE 4-2. ECONOMIC CHARACTERISTICS OF FREIGHT RAILROADS

Source: Association of American Railroads, *Railroad Facts* (Washington, DC: Annual issues).

Figure 4-1: Value Added by Freight Transportation to GDP by Mode

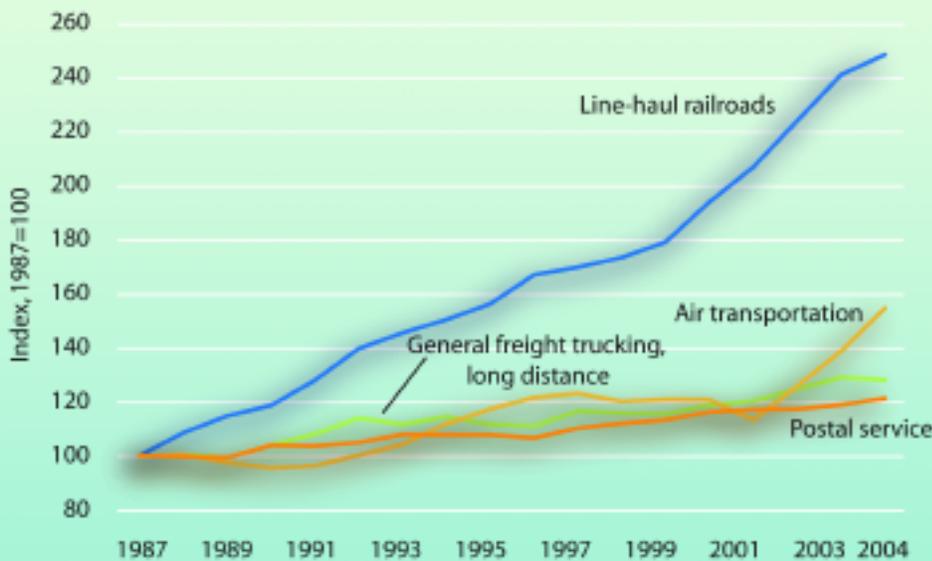


¹Based on the number of paid hours. Real gross domestic product in the business and nonfarm business sectors is the basis of the output components of the productivity measures. These output components are based on and are consistent with the National Income and Product Accounts (NIPA), including the gross domestic product (GDP) measure, prepared by the Bureau of Economic Analysis (BEA) of the U.S. Department of Commerce.

Freight transportation is a big part of the economy. The value generated by transportation services in moving goods and people on the transportation system is about 5 percent of gross domestic product. In the transportation services sector about 60 percent of the value is generated by for-hire transportation services and the rest is generated by “in-house” transportation (transportation provided by businesses for their own use).

In-house trucking accounted for \$142 billion of GDP in 1996 (the latest year for which data are available) and for-hire trucking accounted for \$101 billion.

Figure 4-2. Productivity in Selected Transportation Industries: 1987-2004 (OUTPUT PER EMPLOYEE,¹ INDEX, 1987 = 100)



¹Based on the number of paid hours. Real gross domestic product in the business and nonfarm business sectors is the basis of the output components of the productivity measures. These output components are based on and are consistent with the National Income and Product Accounts (NIPA), including the gross domestic product (GDP) measure, prepared by the Bureau of Economic Analysis (BEA) of the U.S. Department of Commerce.

In general, moving goods is cheaper now than in the past. Productivity has improved in both long-distance railroading and long-distance trucking over the past decade, but much more quickly in rail than road transportation. Between 1987 and 2004, output per hour worked more than doubled in line-haul railroading but

grew only 55 percent in long distance, general freight trucking. Line-haul railroads primarily engage in operating railroads for the transport of passengers and/or cargo over a long distance within a rail network. These establishments do not include switching and terminal operations or short distance (or local) railroads. Long distance, general freight trucking establishments are operations other than those primarily engaged in local trucking and specialized trucking. Specialized trucking establishments are engaged in the transportation of freight that, because of size, weight, shape, or other inherent characteristics, requires specialized equipment, such as flatbeds, tankers, or refrigerated trailers.

TABLE 4-3. EMPLOYMENT IN FOR-HIRE TRANSPORTATION PRIMARILY SERVING FREIGHT¹ (THOUSANDS)

	1980	1990	2000	2004	2005
Total U.S. labor force²	90,528	109,487	131,785	(R) 131,435	133,463
Transportation and warehousing	2,961	3,476	4,410	(R) 4,249	4,347
Rail transportation	518	272	232	(R) 226	228
Water transportation	NA	57	56	(R) 56	61
Truck transportation	NA	1,122	1,406	(R) 1,352	1,393
Pipeline transportation	NA	60	46	(R) 38	38
Support activities for transportation	NA	364	537	(R) 535	551
Couriers and messengers	NA	375	605	(R) 557	572
Warehousing and storage	NA	407	514	(R) 558	585

Key: NA = not available; R = revised.

¹Annual averages.

²Excludes farm employment

Note: These data include workers employed in transportation industries but not necessarily in a transportation occupation, such as a lawyer working for a trucking company. Moreover, these data exclude workers in transportation occupations employed by non-transportation industries, such as a truck driver employed by a retail company.

Employment in many transportation industries has remained steady or has grown over the past two decades, but it has plummeted in rail transportation as productivity has soared. Between 1980 and 2005, rail employment declined nearly 60 percent. Consequently, in 2005 rail transportation employed only 5 percent of those working in the transportation and warehousing industry compared with 18 percent in 1980. By comparison, employment in trucking in 2005 accounted for about one-third of employment in transportation and warehousing.

FIGURE 4-1: VALUE ADDED BY FREIGHT TRANSPORTATION TO GDP BY MODE

Source: U.S. Department of Transportation, Research and Innovative Technology Administration, Bureau of Transportation Statistics, Special Tabulation, September 2000.

FIGURE 4-2. PRODUCTIVITY IN SELECTED TRANSPORTATION INDUSTRIES: 1987-2003

Source: U.S. Department of Labor, Bureau of Labor Statistics, Industry Productivity, available at <http://www.bls.gov/> as of September 12, 2006.

TABLE 4-3. EMPLOYMENT IN FOR-HIRE TRANSPORTATION PRIMARILY SERVING FREIGHT

Source: U.S. Department of Labor, Bureau of Labor Statistics, Current Employment Statistics survey, available at www.bls.gov as of May 3, 2006.



Freight transportation is a major employer, with truck driving by far the largest freight transportation occupation in the United States. There were nearly three million truck drivers in 2005; about 54 percent of these professionals drive heavy/tractor trailer trucks, 32 percent drive light/delivery service trucks, and about 14 percent are driver/sales workers.

TABLE 4-4. EMPLOYMENT IN SELECTED FREIGHT TRANSPORTATION AND FREIGHT TRANSPORTATION-RELATED OCCUPATIONS

Occupation (SOC code)	1999	2000	2004	2005
Vehicle operators, pipeline operators, and primary support				
Driver/sales worker (53-3031)	385,210	373,660	406,910	400,530
Truck drivers, heavy and tractor-trailer (53-3032)	1,558,400	1,577,070	1,553,370	1,624,740
Truck drivers, light or delivery services (53-3033)	1,085,050	1,033,220	938,730	938,280
Locomotive engineers (53-4011)	19,940	29,390	31,180	37,390
Rail yard engineers, dinkey operators, and hostlers (53-4013)	5,070	4,020	6,170	6,970
Railroad brake, signal, and switch operators (53-4021)	14,500	16,830	16,410	20,700
Railroad conductors and yardmasters (53-4031)	36,680	40,380	35,720	38,330
Sailors and marine oilers (53-5011)	27,200	30,090	27,570	31,090
Captains, mates, and pilots of water vessels (53-5021)	20,660	21,080	25,200	28,570
Ship engineers (53-5031)	6,800	7,370	10,330	13,240
Bridge and lock tenders (53-6011)	6,970	4,790	3,500	3,620
Gas compressor and gas pumping station operators (53-7071)	6,940	6,510	4,680	3,950
Pump operators, except wellhead pumpers (53-7072)	13,480	13,730	9,810	9,970
Transportation equipment manufacturing and maintenance occupations				
Bus and truck mechanics and diesel engine specialists (49-3031)	273,320	258,800	251,430	248,280
Rail car repairers (49-3043)	7,230	10,620	18,140	24,270
Transportation infrastructure construction and maintenance occupations				
Rail-track laying and maintenance equipment operators (47-4061)	8,620	9,940	10,430	13,510
Signal and track switch repairers (49-9097)	3,720	5,540	7,780	6,100
Dredge operators (53-7031)	1,910	3,100	1,730	1,720
Secondary support service occupations				
Dispatchers, except police, fire, and ambulance (43-5032)	171,560	167,180	165,910	172,550
Postal service mail carriers (43-5052)	352,550	354,980	344,050	347,180
Shipping, receiving, and traffic clerks (43-5071)	886,230	864,530	747,270	759,910
Transportation inspectors (53-6051)	22,440	26,520	24,140	25,570
Tank car, truck, and ship loaders (53-7121)	20,830	17,480	16,530	15,950

Key: SOC = Standard Occupational Classification.

TABLE 4-4. EMPLOYMENT IN SELECTED FREIGHT TRANSPORTATION AND FREIGHT TRANSPORTATION-RELATED OCCUPATIONS

Source: U.S. Department of Labor, Bureau of Labor Statistics, Occupational Employment and Wages, 2005 (Washington, DC: May 2005), available at <http://www.bls.gov/oes> as of May 24, 2006.