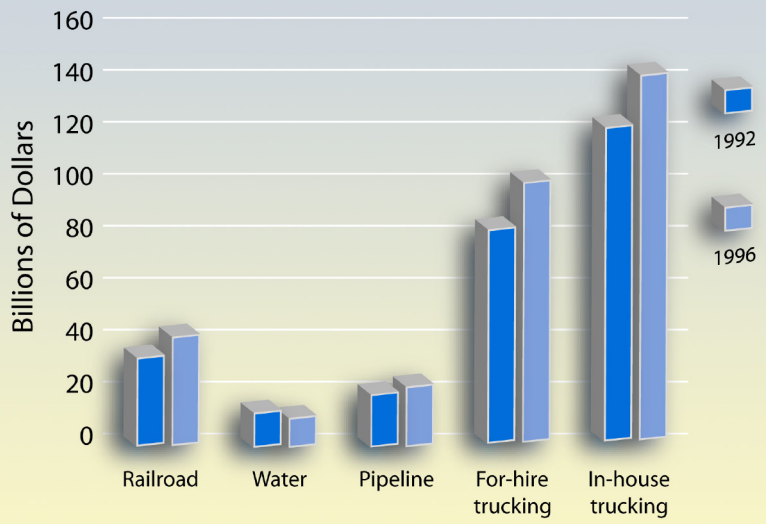
IV. THE FREIGHT TRANSPORTATION INDUSTRY

The private sector owns a significant share of assets in the transportation industry: $925 billion in equipment plus $515 billion in private structures, compared to $429 billion in transportation equipment plus $2.1 trillion in highways owned by public agencies.[1] Freight railroad facilities and services are almost entirely private, while trucks in the private sector operate over public highways, air-cargo services in the private sector operate in public airways and mostly public airports, and ships in the private sector serve public waterways and both public and private port facilities. Pipelines are mostly in the private sector, although significantly controlled by public regulation. In the public sector, virtually all truck routes are owned by state or local governments, airports and harbors are typically owned by public authorities (although terminals are usually owned or managed by private operators), air and water navigation is mostly federal, and safety is regulated by all levels of government.

FIGURE 4-1. VALUE ADDED BY FREIGHT TRANSPORTATION TO GDP BY TRANSPORTATION MODE: 1992 AND 1996



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 GDP. 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.

[1]Fixed assets are for 2005 and include both passenger and freight transportation. See Bureau of Economic Analysis at http://www.bea.gov/bea/dn/FA2004.

FIGURE 4-1. VALUE ADDED BY FREIGHT TRANSPORTATION TO GDP BY TRANSPORTATION MODE: 1992 AND 1996
Source: U.S. Department of Transportation, Bureau of Transportation Statistics, special tabulation, September 2000.

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 Establishments in Freight-Dominated Modes: 1997 and 2002

	Establishments		Revenue (Current $ thousands)		Payroll (Current $ thousands)		Paid Employees	
	1997	2002	1997	2002	1997	2002	1997	2002
Transportation and warehousing[1]	**178,025**	**(R) 199,618**	**318,245,044**	**(R) 382,152,040**	**82,346,182**	**(R) 115,988,733**	**2,920,777**	**(R) 3,650,859**
Rail transportation	NA	NA	NA	NA	NA	NA	NA	NA
Water transportation	1,921	(R) 1,890	24,019,168	(R) 23,331,333	2,834,114	(R) 3,194,391	72,857	(R) 66,153
Truck transportation[1]	103,798	(R) 112,642	141,225,398	(R) 164,218,769	38,471,272	(R) 47,750,111	1,293,790	(R) 1,435,210
Pipeline transportation	2,311	(R) 2,188	26,836,992	(R) 22,031,419	2,660,576	(R) 2,476,638	49,280	(R) 36,790
Support activities for transportation	30,675	(R) 33,942	39,758,245	(R) 57,414,131	12,592,441	(R) 16,202,043	411,640	(R) 465,616
Couriers and messengers	10,887	(R) 12,655	39,812,433	(R) 58,164,869	14,071,630	(R) 17,175,401	530,839	(R) 561,514
Warehousing and storage[1]	6,497	(R) 12,671	10,657,925	(R) 16,547,657	2,926,119	(R) 17,183,289	109,760	(R) 565,533

Key: NA = not available; R = revised.
[1]Enterprise 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.

Table 4-2. Economic Characteristics of Freight Railroads: 2000 and 2005

	Class I		Non-Class I		Total	
	2000	2005	2000	2005	2000	2005
Number of railroads	8	7	552	553	560	560
Freight revenue (billions $)	33.1	44.5	3.2	3.4	36.3	47.9
Operating revenue (billions $)	34.1	46.1	NA	NA	NA	NA
Employees	168,360	162,438	23,448	19,369	191,808	181,807

Key: NA = not available.

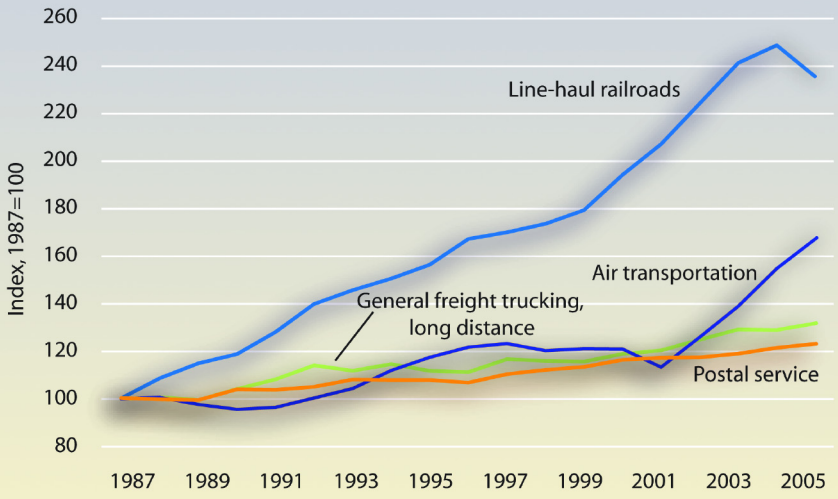
Revenue grew while employment declined in both the national (Class 1) railroads and the regional and local railroads during the first half of the decade. More recent indicators suggest that employment is now on the rise.

Table 4-1. Economic Characteristics of Transportation and Warehousing Establishments in Freight-Dominated Modes: 1997 and 2002
Sources: 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 July 2, 2007; 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 July 2, 2007.

Table 4-2. Economic Characteristics of Freight Railroads: 2000 and 2005
Sources: Association of American Railroads, *Railroad Facts* (Washington, DC: annual issues). Ibid, *U.S. Freight Railroad Statistics*, as of August 2, 2007.

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 2005, output-per-hour worked more than doubled in line-haul railroading but grew only 37 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.

FIGURE 4-2. PRODUCTIVITY IN SELECTED TRANSPORTATION INDUSTRIES: 1987-2005 (OUTPUT PER EMPLOYEE,[1] INDEX, 1987 = 100)



[1]Based 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.

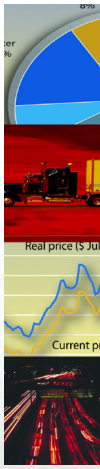


FIGURE 4-2. PRODUCTIVITY IN SELECTED TRANSPORTATION INDUSTRIES: 1987-2005 (OUTPUT PER EMPLOYEE,1 INDEX, 1987 = 100)
Source: U.S. Department of Labor, Bureau of Labor Statistics, *Industry Productivity*, available at http://www.bls.gov/ as of June 12, 2007.

Employment in many transportation industries has remained steady or has grown over the past two decades with the notable exception of railroads. While the long-term trend may have reversed in recent months, rail employment declined nearly 60 percent between 1980 and 2006. Consequently, in 2006 rail transportation employed only 5 percent of those working in the transportation and warehousing industry compared with 18 percent in 1980. Employment in trucking in 2006 accounted for about one-third of employment in transportation and warehousing.

TABLE 4-3. EMPLOYMENT IN FOR-HIRE TRANSPORTATION ESTABLISHMENTS PRIMARILY SERVING FREIGHT: 1980-2006[1] (THOUSANDS)

	1980	1990	2000	2005	2006
Total U.S. labor force[2]	**90,528**	**109,487**	**131,785**	**(R) 133,703**	**136,174**
Transportation and warehousing	**2,961**	**3,476**	**4,410**	**(R) 4,361**	**4,466**
Rail transportation	518	272	232	228	225
Water transportation	NA	57	56	61	64
Truck transportation	NA	1,122	1,406	(R) 1,398	1,437
Pipeline transportation	NA	60	46	38	39
Support activities for transportation[3]	NA	364	537	(R) 552	571
Couriers and messengers	NA	375	605	572	585
Warehousing and storage	NA	407	514	(R) 595	636

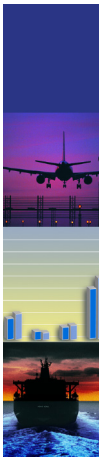
Key: NA = not available; R = revised.
[1]Annual averages.
[2]Excludes farm employment.
[3]Industries in the Support Activities for Transportation subsector provide services which support transportation. These services may be provided to transportation carrier establishments or to the general public. This subsector includes a wide array of establishments, including air traffic control services, marine cargo handling, and motor vehicle towing.
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.

TABLE 4-3. EMPLOYMENT IN FOR-HIRE TRANSPORTATION ESTABLISHMENTS PRIMARILY SERVING FREIGHT: 1980-20061 (THOUSANDS)
Source: U.S. Department of Labor, Bureau of Labor Statistics, Current Employment Statistics survey, available at www.bls.gov as of June 3, 2007.

Table 4-4. Employment in Selected Freight Transportation and Freight Transportation-Related Occupations: 2000-2006

Occupation (SOC code)	2000	2004	2005	2006
Vehicle operators, pipeline operators, and primary support				
Driver/sales worker (53-3031)	373,660	406,910	400,530	396,680
Truck drivers, heavy and tractor-trailer (53-3032)	1,577,070	1,553,370	1,624,740	1,673,950
Truck drivers, light or delivery services (53-3033)	1,033,220	938,730	938,280	941,590
Locomotive engineers (53-4011)	29,390	31,180	37,390	36,870
Rail yard engineers, dinkey operators, and hostlers (53-4013)	4,020	6,170	6,970	5,820
Railroad brake, signal, and switch operators (53-4021)	16,830	16,410	20,700	22,810
Railroad conductors and yardmasters (53-4031)	40,380	35,720	38,330	37,110
Sailors and marine oilers (53-5011)	30,090	27,570	31,090	31,690
Captains, mates, and pilots of water vessels (53-5021)	21,080	25,200	28,570	29,170
Ship engineers (53-5031)	7,370	10,330	13,240	14,190
Bridge and lock tenders (53-6011)	4,790	3,500	3,620	3,700
Gas compressor and gas pumping station operators (53-7071)	6,510	4,680	3,950	3,900
Pump operators, except wellhead pumpers (53-7072)	13,730	9,810	9,970	10,030
Transportation equipment manufacturing and maintenance occupations				
Bus and truck mechanics and diesel engine specialists (49-3031)	258,800	251,430	248,280	254,850
Rail car repairers (49-3043)	10,620	18,140	24,270	23,810
Transportation Infrastructure construction and maintenance occupations				
Rail-track laying and maintenance equipment operators (47-4061)	9,940	10,430	13,510	13,680
Signal and track switch repairers (49-9097)	5,540	7,780	6,100	5,980
Dredge operators (53-7031)	3,100	1,730	1,720	1,780
Secondary support service occupations				
Dispatchers, except police, fire, and ambulance (43-5032)	167,180	165,910	172,550	185,410
Postal service mail carriers (43-5052)	354,980	344,050	347,180	346,990
Shipping, receiving, and traffic clerks (43-5071)	864,530	747,270	759,910	763,350
Transportation inspectors (53-6051)	26,520	24,140	25,570	23,790
Tank car, truck, and ship loaders (53-7121)	17,480	16,530	15,950	15,360

Key: SOC = Standard Occupational Classification.



Freight transportation jobs are not limited to for-hire carriers. Truck driving is by far the largest freight transportation occupation in the United States, and many drivers work for retailers and other establishments with shipper-owned trucks. There were more than 3.6 million truck drivers in 2006; about 56 percent of these professionals drive heavy/tractor trailer trucks, 31 percent drive light/delivery service trucks, and about 13 percent are driver/sales workers. Many industry analysts believe the number of truck drivers is below demand and that driver shortages will worsen in the future.

Table 4-4. Employment in Selected Freight Transportation and Freight Transportation-Related Occupations: 2000-2006
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 June 3, 2007.