

# The Moving and Storage Industry in the U.S. Economy

Overcoming the Challenges of the Great Recession



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This study was commissioned and funded by the Moving & Storage Institute (MSI), an industry foundation and the philanthropic arm of the American Moving & Storage Association. The MSI was founded to foster educational opportunities for individuals in the moving and storage industry, facilitate the development of industry education and certification programs, and to cultivate a broader understanding and appreciation of the transportation of household goods moving and warehousing.

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# Executive Summary

In 2011, the moving and storage industry began its recovery from the great recession. Industry activity was up 0.4 percent. Though it is a fragile recovery, the industry's increasing experience with the relatively new Defense Personal Property Program (DP3) for household goods of military moves, the industry's continuing willingness to develop innovative solutions to overcome the challenge of a driver shortage, and the industry's diligence rooting out rogue operators that deprive legitimate moving companies of business opportunities and tarnish the brand value of companies that have spent decades building brand all bode well for a prolonged industry recovery.

In 2011, the total economic impact of the industry included of \$25.71 billion of U.S. economic output, 252,850 jobs, \$7.43 billion of household earnings from labor, \$1.29 billion of tax revenues, and \$190 million contributed to the Federal Highway Trust Fund. Every state economy is stimulated by the demand for moving and storage industry services.

These impacts were generated by an industry that consisted of nearly 7,000 business firms and 13,900 locations of business establishments altogether generating \$12.6 billion of revenue and receipts and providing 93,800 industry jobs. The industry is present in every state.

The industry remains an incubator of small business development and growth, a driver of innovation and overall economic growth. Of the total industry business establishments, 92 percent earn less than \$10 million annually. Of these, 66 percent earn less than \$1 million annually.

Migration in search of better economic opportunity or a new lifestyle makes economic growth possible and the moving and storage industry enables migration.





# 1. Introduction

This report presents an analysis of the moving and storage industry<sup>1</sup> and the effects of the great recession on the activity, structure, operating practices, and economic impacts of the industry. It updates the original analysis of the industry presented in 2008.<sup>2</sup> The original analysis profiled the industry through 2005. Here, the profile is updated through 2011.

Because of the cyclical nature of the industry, its profile is likely to have changed significantly since the fourth quarter of 2007, which is when the deepest and longest lasting U.S. economic contraction since the Great Depression began. U.S. economic activity, as measured by real gross domestic product (GDP), finally recovered to its pre-recession level of activity three years after the recession began.

The original study of the moving and storage industry revealed important operating practices and profile characteristics. For example, the industry began relying more heavily on independent contractors following the recession of 2001. In addition, the industry is seasonal and it has diversified its lines of business to prosper during off-peak periods of demand. Regarding profile characteristics, the industry was found in every state, generated an economic impact greater than the industry itself, and comprised mostly small and micro-businesses.<sup>3</sup>

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<sup>1</sup> The moving and storage industry comprises specialized freight trucking, local used household and office goods moving without storage (NAICS 4842101); specialized freight trucking, local used household and office goods moving with storage (NAICS 4842103); specialized freight trucking, long-distance used household and office goods moving (NAICS 4842102); and household goods warehousing and storage (NAICS 4931901). Local trucking is defined by the Census Bureau as the carrying of goods within a single metro area and its adjacent nonurban areas. Long-distance trucking is the carrying of goods between metro areas. A metro area contains a core urban area of 50,000 or more population. Each metro area consists of one or more counties and includes the counties containing the core urban area, as well as any adjacent counties that have a high degree of social and economic integration (as measured by commuting to work) with the urban core. As in the original study of the moving and storage industry, the industry does not include businesses engaged primarily in leasing mini-warehouses and self storage units. Establishments of such businesses are classified by NAICS code 53113 and are assigned to the real estate and rental and leasing sector of the economy.

<sup>2</sup> See Robert Damuth, "The Moving and Storage Industry in the U.S. Economy: Facilitating Economic Growth by Making Residential Mobility Easier, Creating Opportunities for Small Businesses, and Stimulating Other Industries throughout the Economy," Nathan Associates Inc., October 2008.

<sup>3</sup> Small businesses defined as those with annual revenue less than \$10 million. Micro-businesses defined as those with annual revenue less than \$1 million.

The update presented here examines how trends identified in the original study have evolved since 2005 and, more important, identifies and examines new challenges facing the industry in its recovery from the great recession. Three challenges are of particular interest. The first challenge lies in the relatively recently implemented Defense Personal Property Program (DP3) for shipments of household goods of military moves. The second is more long lived. It is the challenge of providing services while hampered by a driver shortage. The final challenge is to overcome the rogue operator phenomenon that has increased with growing use of the Internet.

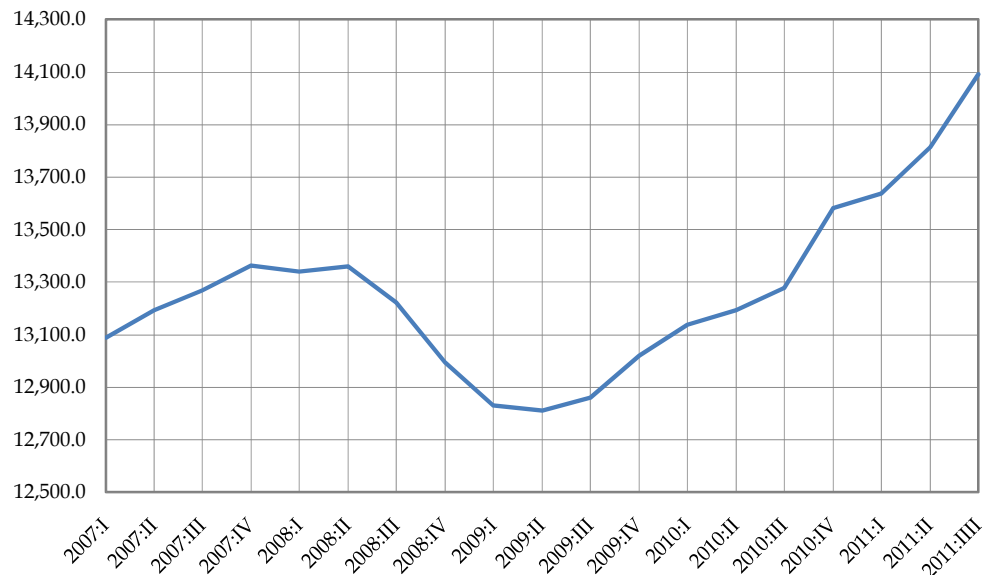
This report is organized into four sections. Immediately following this introductory section, Section 2 examines the effects of the great recession on industry activity, operating practices, characteristics, and contributions to the U.S. economy. Section 3 discusses the emerging challenges to industry recovery and describes how the industry is responding. Concluding thoughts are presented in Section 4. Appendices contain all industry data used in this analysis.

## 2. Effects of the Great Recession

The great recession began in the fourth quarter of 2007 and did not end until the third quarter of 2009 (Figure 1). From the fourth quarter of 2007 to the second quarter of 2009, real<sup>4</sup> GDP was down 4.14 percent. GDP did not recover to its pre-recession level until the fourth quarter of 2010 – three full years after onset of the great recession.

**Figure 1**

*The Great Recession Began in the Fourth Quarter of 2007 and Recovery Did Not Commence for Nearly Two Years (real GDP in chained 2005 \$billion)*



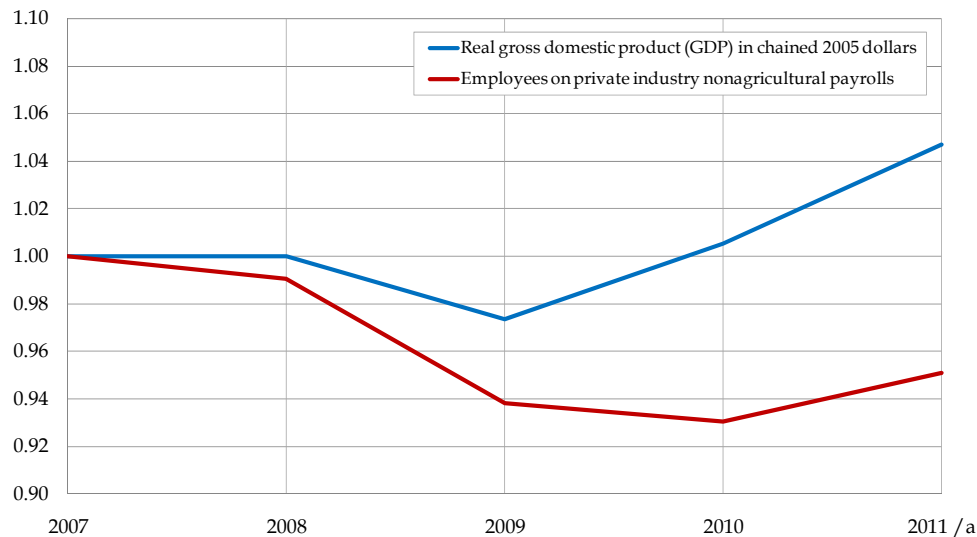
SOURCES: Quarterly GDP reported through the third quarter of 2010 in the Economic Report of the President, February 2011. Quarterly GDP for the fourth quarter of 2010 through the third quarter of 2011 calculated from reported quarterly percentage changes in GDP found in "GDP and the Economy, Second Estimates for the Third Quarter of 2011," December 2011, available at [http://www.bea.gov/scb/pdf/2011/12%20December/1211\\_gdpecon.pdf](http://www.bea.gov/scb/pdf/2011/12%20December/1211_gdpecon.pdf).

<sup>4</sup> Real GDP is measured in "chained" dollars to account for inflation and variation from year to year in the composition of goods and services produced in the economy. In the past, a "constant" dollar value was calculated and used to measure real GDP. However, in the constant dollar approach the composition of goods and services did not change from year to year.

Job losses persisted through 2010 (Figure 2). Jobs in nonagricultural private industries peaked in 2007 at 115,380,000. In 2010 there were more than 8,000,000 fewer people employed. Four years after the recession began, jobs finally began to recover. Yet in 2011, there were still 5,700,000 fewer jobs in the economy than in 2007. The civilian unemployment rate four years after the recession began was nearly twice as high as the rate in 2007.

**Figure 2**

*Recovery Has Been Slow and Job Growth Has Lagged  
(annual real GDP and jobs indexed to the year prior to the recession)*



a. Through 3rd quarter for GDP and November for employees on private industry nonagricultural payrolls.  
SOURCES: Bureau of Economic Analysis of the U.S. Department of Commerce for real GDP. Current Employment Statistics (CES) of the U.S. Bureau of Labor Statistics for private industry nonagricultural employees.

There is widespread consensus that the major precipitating factor of the recession was a boom and bust period in asset prices, especially housing prices.<sup>5</sup> The boom in housing prices was fueled by irresponsible lending practices, risky investment strategies, faulty credit ratings, and lax regulation.<sup>6</sup>

Nationally, housing prices began declining in 2007. Mortgage credit became harder to obtain and housing prices fell further.

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*"It was a breathtaking moment of free fall in the private sector. Capital markets collapsed. Credit to businesses froze. Banks failed. Foreclosures soared. National output fell at rates not seen in decades. And millions of people lost their jobs."*  
*Economic Report of the President, February 2011, p. 19.*

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<sup>5</sup> See the *Economic Report of the President*, February 2010, p. 39.

<sup>6</sup> *Ibid.*

Then, in September 2008, Lehman Brothers investment bank declared bankruptcy and other large financial firms faced financial distress causing them to seek government aid or merge with stronger institutions. Lending slowed further and credit markets tightened dramatically.

## 2.1 Demand for Moving and Storage Services Declined Sharply

As a result of these worsening economic conditions and, in particular, the collapse of the housing market—the single most important market for moving and storage industry services—the incidence and number of householder movers<sup>7</sup> declined. In 2006-2007, 14.8 million householders moved, 12.8 percent of all householders (Table 1). In 2010-2011, 13.2 million householders moved, 11.1 percent of all householders. Four years after the beginning of the recession, there were nearly two million fewer householder movers.

**Table 1**

*General Mobility of Householders Age 15 and Older, 2005-2006 through 2010-2011 (thousands)*

Year	Total	Nonmover	Mover	Intrastate Moves			Interstate Moves				Moves Abroad
				Same County	Different County, Same State	Total	Different State, Same Division	Different Division, Same Region	Different Region	Total	
2006-2007	116,041	101,235	14,806	9,700	2,908	12,608	530	369	953	1,852	346
2007-2008	116,819	103,219	13,600	8,910	2,512	11,422	458	368	978	1,804	375
2008-2009	117,205	103,340	13,865	9,352	2,496	11,848	517	311	873	1,701	315
2009-2010	117,572	103,564	14,008	9,762	2,351	12,113	451	345	816	1,612	281
2010-2011	118,702	105,522	13,180	8,794	2,228	11,022	502	378	956	1,836	322

*Note: A household consists of all the people who occupy a housing unit. A house, an apartment or other group of rooms, or a single room is regarded as a housing unit when it is occupied or intended for occupancy as separate living quarters, that is, when the occupants do not live and eat with any other persons in the structure and there is direct access from the outside or through a common hall. The householder refers to the person (or one of the people) in whose name the housing unit is owned or rented (maintained) or, if there is no such person, any adult member excluding roomers, boarders, or paid employees. The number of householders equals the number of households.*

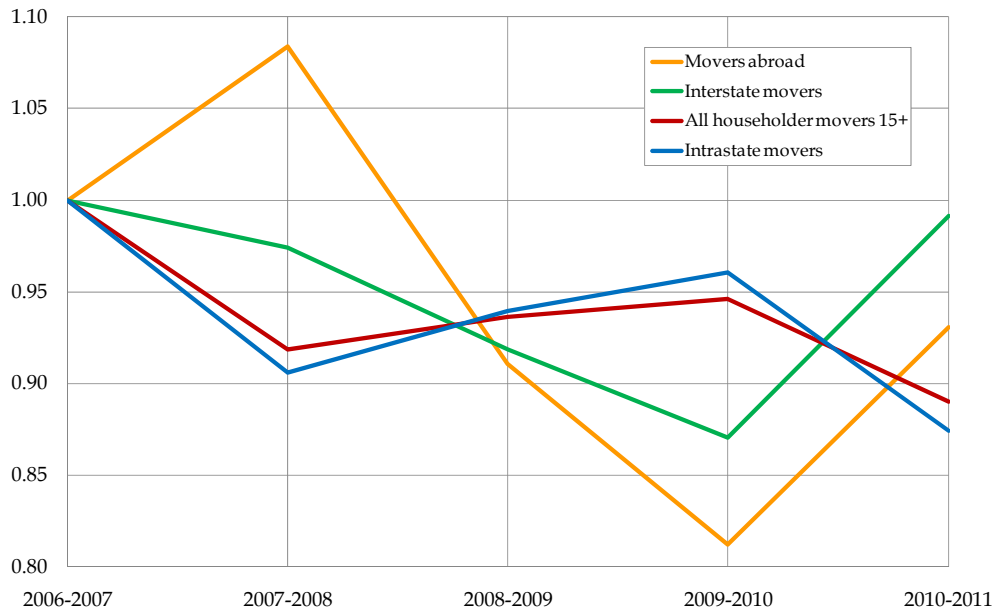
*SOURCE: U.S. Census Bureau, Current Population Survey, 2006, 2007, 2008, 2009, 2010, and 2011 Annual Social and Economic Supplements.*

The decline in householder demand for moving services occurred across all types of moves—intrastate, interstate, and moves abroad (Figure 3). By 2010-2011, the number of householder movers in each type remained fewer than before the recession began. Although interstate movers and movers abroad began to rebound in the fourth year following onset of the recession, intrastate householder movers—the largest number of movers—continued to decline. In 2010-2011, intrastate householder movers were 13 percent fewer than in 2006-2007.

<sup>7</sup> A household consists of all the people who occupy a housing unit. A house, an apartment or other group of rooms, or a single room is regarded as a housing unit when it is occupied or intended for occupancy as separate living quarters, that is, when the occupants do not live and eat with any other persons in the structure and there is direct access from the outside or through a common hall. The householder refers to the person (or one of the people) in whose name the housing unit is owned or rented (maintained) or, if there is no such person, any adult member excluding roomers, boarders, or paid employees. The number of householders equals the number of households.

**Figure 3**

*Demand for Moving and Storage Industry Services Declined During the Great Recession and Still Remains Lower than Pre-recession Demand (householder movers indexed to the year prior to the recession)*



SOURCE: U.S. Census Bureau, Current Population Survey, 2007, 2008, 2009, 2010, and 2011 Annual Social and Economic Supplements.

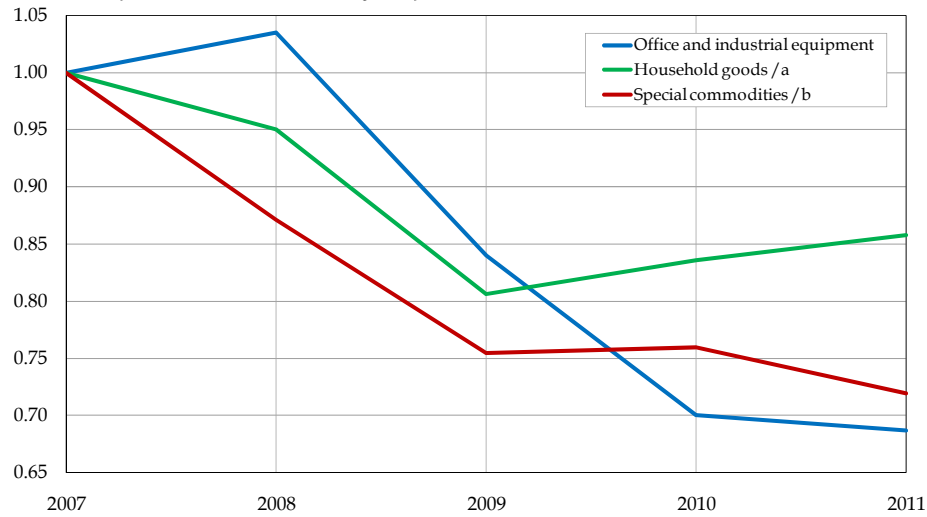
The impact of the recession and decline in number of householder movers can be seen in van line shipment data (Figure 4).<sup>8</sup> Although shipments of office and industrial equipment were up slightly in the first year following onset of the recession, they declined sharply in 2009 and 2010. Shipments of all other categories of goods declined through 2009 before beginning to recover in 2010. In 2011—four years after the recession began—annual van line shipments were fewer than before the recession began. The longest lasting effect was on shipments of office and industrial equipment, as well as special commodities, which include exhibits and goods requiring special handling, such as computers, medical equipment, copiers, HVAC equipment, etc.

A closer look at van line shipments of household goods, which is the largest business segment of van lines (Table 2), reveals how government demand helped sustain the industry during the deepest period of economic downturn (Figure 5). While shipments of household goods of corporate and private sector noncorporate moves were down after onset of the recession, shipments of household goods of military and government civilian increased. Shipments of household goods of military moves remained higher than 2007 shipments through 2011.

<sup>8</sup> Recall from the original study that van lines are national moving companies handling dispatching, shipment routing and monitoring, paperwork processing, and claims settlements primarily for interstate and international shipments. Van lines rely on local agents, many of whom use the van line's shipping authority to transport shipments across state lines.

**Figure 4**

*All Major Categories of Van Line Shipments Declined During the Great Recession  
(annual shipments indexed to the year prior to the recession)*



*a. Includes corporate, private sector noncorporate, military, and government civilian moves.*

*b. Includes exhibits and goods requiring special handling such as computers, medical equipment, copiers, HVAC equipment, etc.*

*SOURCE: Monthly Market Study (MMS) of the American Moving and Storage Association (AMSA).*

**Table 2**

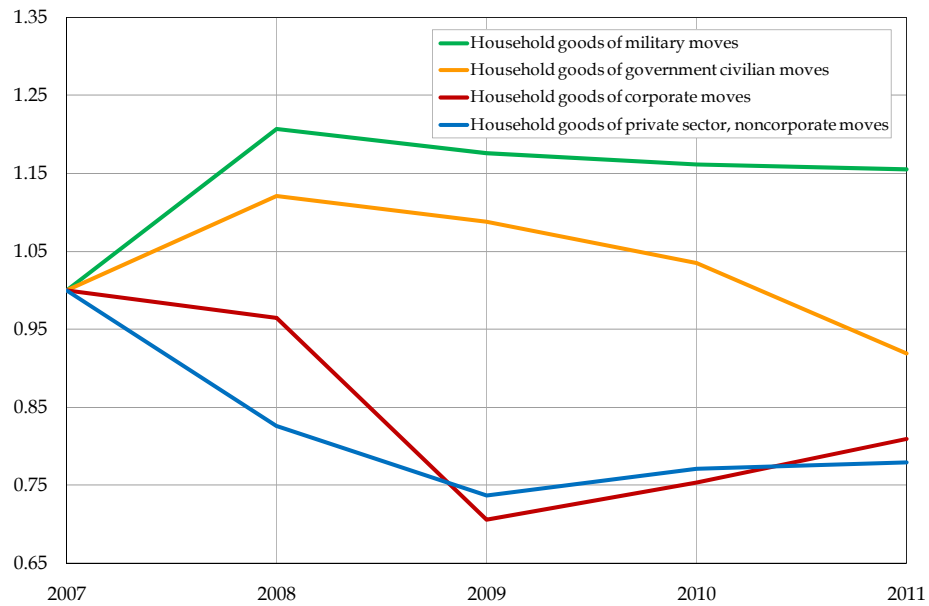
*Van Line Shipments by Type of Goods, 2007-2011*

Type of Goods	2007	2008	2009	2010	2011
Household goods of corporate moves	230,361	222,158	162,585	173,614	186,382
Household goods of private sector, noncorporate moves	250,334	206,737	184,449	192,875	195,122
Household goods of military moves	102,207	123,373	120,167	118,738	118,036
Household goods of government civilian moves	9,808	10,993	10,674	10,150	9,009
Household goods subtotal	592,710	563,261	477,875	495,377	508,549
Office and industrial equipment	2,719	2,815	2,285	1,904	1,868
Special commodities, exhibits	55,743	54,686	39,274	41,010	41,546
Special commodities, goods requiring special handling	273,264	231,889	208,970	208,990	195,180
Special commodities subtotal	329,007	286,575	248,244	250,000	236,726
Total	924,436	852,651	728,404	747,281	747,143

*SOURCE: Monthly Market Study (MMS) of the American Moving and Storage Association (AMSA).*

**Figure 5**

*Van Line Shipments of Household Goods of Military Moves Helped Sustain the Industry during the Great Recession (annual shipments indexed to the year prior to the recession)*



SOURCE: Monthly Market Study (MMS) of the American Moving and Storage Association (AMSA).

However, as the original study made clear, the moving and storage industry consists of more than van line companies. The industry is an efficient network of national moving companies, local agents, independent moving companies, and independent contractors who own or operate trucks, tractors, and trailers.

The remainder of this section updates the profile of the entire industry through 2011. Although all dimensions of the industry profile declined with the recession, the industry is now beginning to recover (Table 3).



**Table 3***Summary Characteristics of the Moving and Storage Industry, 1998-2011*

Year	Revenue and Receipts /a (\$million)	Firms	Employer and Non-employer Establishments	Employees and Independent Contractors /b	Payroll (\$million)
1998	12,890	8,478	15,801	138,245	3,469
1999	14,646	8,452	16,192	140,127	3,621
2000	15,930	8,432	16,156	142,215	3,833
2001	14,377	8,196	15,812	140,940	3,823
2002	13,753	7,979	17,685	128,133	3,475
2003/c	13,844	7,659	16,624	121,411	3,194
2004/c	14,823	7,818	16,680	120,692	3,450
2005/c	15,927	8,004	16,890	122,231	3,564
2006	16,102	7,968	16,626	119,929	3,533
2007	15,539	7,722	17,518	117,053	3,451
2008	15,137	7,352	16,830	108,219	3,180
2009	12,661	6,981	13,978	94,383	2,820
2010	12,537	6,913	13,842	93,459	2,793
2011	12,584	6,939	13,893	93,802	2,803

a. Revenue of firms with employer establishments and receipts of non-employer establishments.

b. Data on independent contractors are not available. In this study, the number of non-employer business establishments are used as a proxy for the number of independent contractors. A non-employer business is one that has no paid employees, has annual business receipts of \$1,000 or more, and is subject to federal income taxes. Most non-employers are self-employed individuals operating very small unincorporated businesses, which may or may not be the owner's principal source of income.

c. Revised since the 2008 Nathan Associates report.

SOURCES: Nathan Associates Inc. from Census Bureau data. See Appendix A for detailed characteristics and complete source citations.

## 2.2 Yet Numerous and Diverse Product and Service Lines Continued to Generate Industry Revenue

Specialized freight trucking of used household and office goods is unlike general freight trucking. It is consumer focused. Its employees and drivers interact directly with consumers, providing packing and packaging services, as well as truck loading and unloading services. In addition, industry services include rental of transportation equipment without operators, international freight forwarding and customs brokerage service, arrangement of domestic freight transportation, van line coordination services, and operations and supply chain management consulting services, among others (Table 4).

**Table 4***Business Establishments Offering Product or Service Line as a Share of All Establishments*

Product and Service Codes	Definition	Local Moving	Long-distance Moving	Household Goods Warehousing and Storage /a
44001	Moving of other goods requiring special handling	15.5%	17.7%	-
44002	Commercial moving services	57.3%	57.0%	-
44003	Residential moving services	96.1%	98.8%	-
44010	Transportation of documents and parcels	0.5%	0.3%	-
44020	Local trans and delivery of small purchased or serviced items	5.1%	3.6%	-
44050	Trans of dry bulks, except in intermodal tank containers, by road	-	0.3%	-
44060	Transportation of climate-controlled boxed and palletized goods, except in intermodal tank containers, by road	-	0.2%	-
44070	Transportation of boxed and palletized goods, not climate-controlled, except in intermodal tank containers, by road, truckload service	0.6%	2.0%	-
44080	Transportation of boxed and palletized goods, not climate-controlled, except in intermodal tank containers, by road, less-than-truckload service	1.1%	1.2%	-
44100	Transportation of other intermodal containers, nec, by road	0.1%	-	-
44110	Transportation of automobiles by road	0.8%	2.0%	-
44130	Transportation of waste by road	0.4%	-	-
44131	Transportation of non-hazardous waste by road	0.3%	-	-
44140	Transportation of other goods by road	1.9%	2.5%	-
44150	Repositioning services	0.4%	-	-
44160	Drayage	2.6%	8.1%	-
44191	Warehousing services - integrated third-party logistics services	1.3%	4.1%	4.0%
44192	Warehouse specialty services	4.3%	7.0%	11.9%
44193	Warehousing services - handling of goods	19.8%	39.8%	55.1%
44194	Warehousing services - storage of goods	36.9%	59.7%	96.0%
44230	Hauling services for truck trailers	0.1%	0.3%	-
48000	Domestic freight transportation arrangement service	0.6%	1.0%	-
48010	International freight forwarding and customs brokerage services	1.2%	4.2%	-
48040	Rental of goods transportation equipment, without operators	1.2%	3.9%	4.0%
48060	Van line coordination services	6.0%	7.4%	-
48070	Operations and supply chain management consulting services	0.2%	-	-
48130	Towing services	0.1%	-	-
49810	Other products	8.0%	10.7%	8.0%

a. Includes only warehousing and storage establishments that earn revenue. Some warehousing and storage establishments provide enterprise support, for example, a warehouse owned by a furniture retailer. Such establishments will have employees and payroll, but they do not earn revenue.

SOURCE: "Product Lines Statistics by Kind of Business for the United States: 2007," 2007 Economic Census, U.S. Census Bureau.

Across all business establishments in the local and long-distance moving segments of the industry, the top two revenue generating lines of business are residential moving services and the combination of commercial moving services and moving of other goods requiring special handling (Table 5). These results are not surprising given that van line shipments are mostly of household goods, followed by general freight and office and industrial equipment which include copiers, new store fixtures, HVAC equipment, new furniture, appliances, fitness equipment, motorcycles, sales kiosk, spas, hot tubs, and backyard garden pools, and other types. General freight requiring special handling includes computers and medical equipment, among other types.

**Table 5**  
*Product or Service Line Revenue as a Share of Industry Segment Revenue*

Product and Service Codes	Definition	Local Moving	Long-distance Moving	Household Goods Warehousing and Storage /a
44001	Moving of other goods requiring special handling	4.2%	7.1%	-
44002	Commercial moving services	15.6%	15.8%	-
44003	Residential moving services	62.9%	61.7%	-
44010	Transportation of documents and parcels	0.0%	0.0%	-
44020	Local trans and delivery of small purchased or serviced items	0.7%	0.2%	-
44050	Trans of dry bulks, except in intermodal tank containers, by road	-	0.1%	-
44060	Transportation of climate-controlled boxed and palletized goods, except in intermodal tank containers, by road	-	0.0%	-
44070	Transportation of boxed and palletized goods, not climate-controlled, except in intermodal tank containers, by road, truckload service	0.1%	0.4%	-
44080	Transportation of boxed and palletized goods, not climate-controlled, except in intermodal tank containers, by road, less-than-truckload service	0.2%	0.3%	-
44100	Transportation of other intermodal containers, nec, by road	0.1%	-	-
44110	Transportation of automobiles by road	0.0%	0.1%	-
44130	Transportation of waste by road	0.0%	-	-
44131	Transportation of non-hazardous waste by road	0.0%	-	-
44140	Transportation of other goods by road	0.5%	0.3%	-
44150	Repositioning services	0.0%	-	-
44160	Drayage	0.3%	0.8%	-
44191	Warehousing services - integrated third-party logistics services	0.1%	0.6%	1.0%
44192	Warehouse specialty services	0.4%	0.5%	4.4%
44193	Warehousing services - handling of goods	2.2%	1.3%	23.2%
44194	Warehousing services - storage of goods	9.0%	5.4%	69.1%
44230	Hauling services for truck trailers	0.0%	0.1%	-
48000	Domestic freight transportation arrangement service	0.1%	0.2%	-
48010	International freight forwarding and customs brokerage services	0.5%	1.8%	-
48040	Rental of goods transportation equipment, without operators	0.0%	0.2%	0.1%
48060	Van line coordination services	1.2%	0.8%	-
48070	Operations and supply chain management consulting services	0.0%	-	-
48130	Towing services	0.0%	-	-
49810	Other products	1.9%	2.4%	2.2%

a. Includes only warehousing and storage establishments that earn revenue. Some warehousing and storage establishments provide enterprise support, for example, a warehouse owned by a furniture retailer. Such establishments will have employees and payroll, but they do not earn revenue.

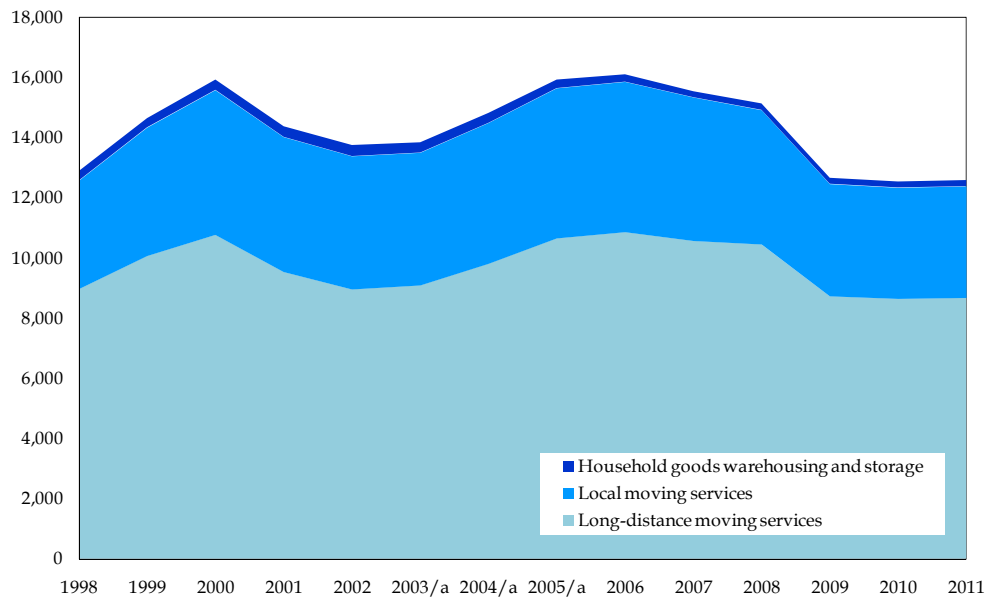
SOURCE: "Product Lines Statistics by Kind of Business for the United States: 2007," 2007 Economic Census, U.S. Census Bureau.

## 2.3 The Deep and Persistent Decline in Demand Reduced Total Industry Revenue and Recovery Is Only Now Beginning

Moving and storage industry total annual revenue of firms with employer establishments and receipts of non-employer business establishments has been pro-cyclical since 1998 (Figure 6). As the economy slips into recession, revenue declines. Once the economy begins to recover, so too does the industry. However, moving and storage industry revenue recovery lags economic recovery.

**Figure 6**

*Pro-cyclical Industry Revenue and Receipts (revenue of firms with employer establishments and receipts of non-employer establishments in current \$million)*



*a. Revised since the 2008 Nathan Associates report.*

*SOURCE: Nathan Associates Inc. See tables in Appendix A, Table A-2.*

The U.S. economy has experienced two recessions since 1998. The first began in the first quarter of 2001. It was shallow and brief. Quarterly real GDP had risen to pre-recession levels and remained rising consistently in the following year. Moving and storage industry revenue peaked at \$15.930 billion in 2000, before declining in 2001 and 2002. Industry revenue was up in 2003 and recovery was complete in 2005 when revenue reached \$15.927 billion. The peak-to-peak period of moving and storage industry revenue was five years.

The second recession—the great recession—was deeper and longer lasting. It began in the third quarter of 2007 and the economy did not even begin to recover until the third quarter of 2009. GDP did not recover to its pre-recession level until the fourth quarter of 2010—three full years after onset of the great recession.

Despite being an agile industry capable of overcoming seasonal declines in demand, the deep, broad, and long-lasting decline in demand during the great recession reduced industry revenue significantly, and five years after the industry's previous revenue peak, revenue is just beginning to recover. The industry's revenue reached a new peak of \$16.102 billion in 2006. From 2007 through 2010, revenue declined, bottoming out at \$12.537 billion in 2010 before increasing 0.4 percent to \$12.584 billion in 2011.

Local moving services revenue was hit hardest (see Appendix A, Tables A-2, A-2.1, and A-2.2 for details on revenue and receipts by industry segment). In 2011, revenue was 77.7 percent of

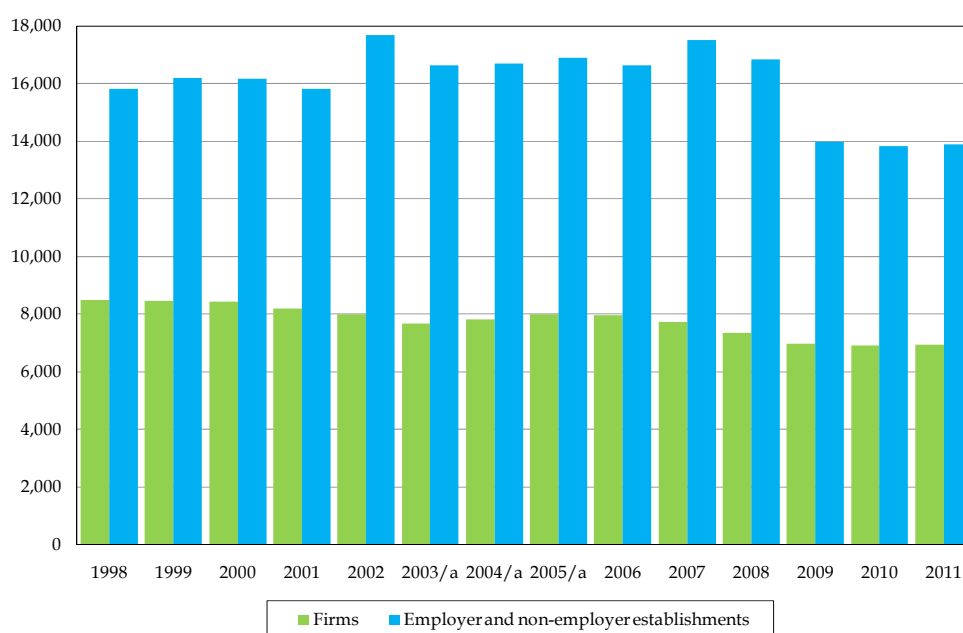
revenue in 2007. Revenue from long-distance moving services, which accounts for two-thirds of total industry revenue, was 82.1 percent of revenue in 2007.

## 24 As Revenue Declined, Business Firms and Establishments Left the Industry

As revenue declined, so too did the number of business firms and establishments.<sup>9</sup> The decline reached its deepest point in 2010 before a rebound in 2011 (Figure 7).

**Figure 7**

*Business Firms and Establishments of the Moving and Storage Industry, 1998-2011*



*a. Revised since the 2008 Nathan Associates report.*

*SOURCE: Nathan Associates Inc. See Appendix A, Table A-3 for firms and A-4 for establishments..*

The decline in number of business establishments was far greater than the decline in business firms. Firms in 2011 totaled just over 6,900, a 10.1 percent decline since 2007.<sup>10</sup> In 2011, establishments, including employers and non-employers, totaled nearly 13,900, a 20.7 percent decline since 2007.<sup>11</sup>

<sup>9</sup> A business establishment is a single physical location at which business is conducted. The industry classification of an establishment is based on the primary activity of the establishment. A business firm might consist of multiple business establishments.

<sup>10</sup> Recall that the original study estimated 8,056 business firms in 2005. This estimate has been revised to 8,004. Hence, between 2005 and 2011, the number of business firms declined 13.3 percent.

<sup>11</sup> Recall that the original study estimated 16,968 business establishments (employer and non-employer) in 2005. This estimate has been revised to 16,890. Hence, between 2005 and 2011, the number of business establishments declined 17.7 percent.

As a result, the number of business establishments per business firm dropped from 2.3 in 2007 to 2.0 in 2011. The geographic coverage of the industry narrowed.

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*In 2011, the industry consisted of 6,939 business firms and 13,893 business establishments (both employer and non-employer).*

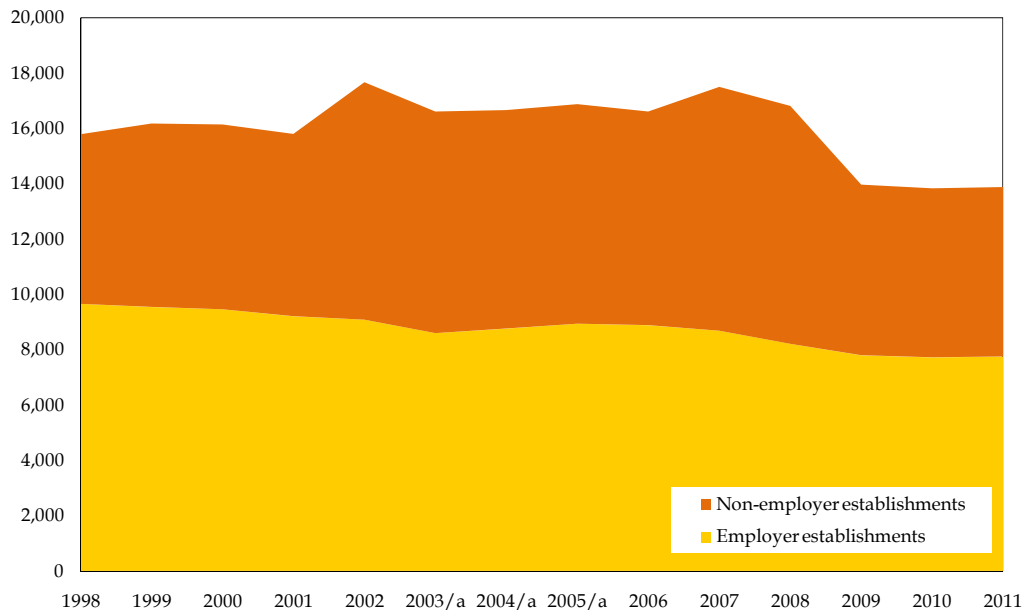
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A closer look at the historical trend in business establishments reveals an important industry dynamic—it relies on non-employer businesses.<sup>12</sup> As industry revenue declined through 2002, non-employer business establishments as a share of total industry establishments increased from 38.9 percent to 48.6 percent. As industry revenue began declining in 2007, non-employer business establishments as a share of total industry establishments increased to 51.2 percent in 2008.

However, the deep decline in demand for industry services in 2009 saw a mass exit of non-employer business establishments in absolute and relative numbers (Figure 8). In 2009, non-employer business establishments as a share of total industry establishments fell to 44.2 percent and remained at that level through 2011. Not since before the 2001 recession had non-employer business establishments been such a small part of the industry.

**Figure 8**

*Non-employer Establishments Were Hardest Hit by the Great Recession*



a. Revised since the 2008 Nathan Associates report.

SOURCE: Nathan Associates Inc. See Appendix A, Tables A-4.1 and A-4.2 for data and additional detail.

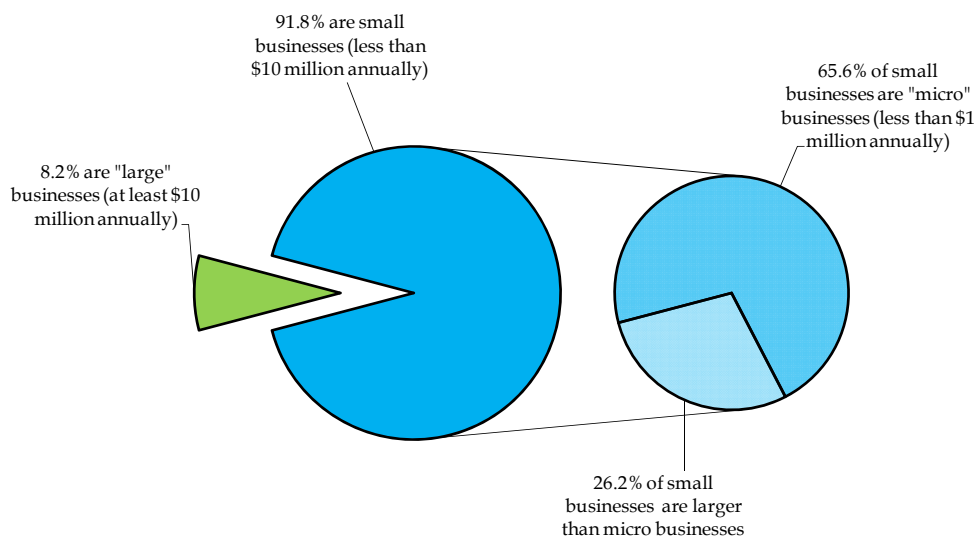
<sup>12</sup> A non-employer business is one that has no paid employees, has annual business receipts of \$1,000 or more (\$1 or more in the construction industries), and is subject to federal income taxes. Most non-employers are self-employed individuals operating very small unincorporated businesses, which may or may not be the owner's principal source of income.

Non-employer business establishments declined 30.5 percent from 2007 to 2011. In 2007, they totaled 8,830 and exceeded employer establishments (8,687). By 2011, the opposite was true. Employer establishments (7,752) outnumbered non-employer establishments (6,140).

While the industry still consists largely of small businesses earning less than \$10 million in annual revenue, the great recession caused relatively greater loss of small and micro business establishments. Previously, small businesses accounted for 95.6 percent of the industry. Now they account for 91.8 percent. Previously, micro businesses accounted for 84.2 percent of the industry's small businesses. Now they account for 65.6 percent (Figure 9).

**Figure 9**

*Small and Micro Business Establishments Now Account for Smaller Shares of Total Industry Businesses*



SOURCE: "Transportation and Warehousing: Subject Series - Establishment & Firm Size: Summary Statistics by Revenue Size of Firms for the United States," 2007 Economic Census, U.S. Census Bureau.

Industry employer establishments are also small businesses when measured by the number of their employees (Table 6). Considering local moving without storage, more than half of the establishments employ fewer than five people. When considering the local and long-distance segments of the industry combined, more than half of employer establishments employ fewer than 10 people.

When including non-employer establishments, which consist of one "employee," 72 percent of all establishments "employ" fewer than five people.

**Table 6**

*Considering Industry Employer Establishments Only, Most Employ Fewer than 10 People*

Employee Size Interval	Specialized Freight Trucking, Used Household and Office Goods Moving /a			
	Local without Storage	Local with Storage	Long Distance	Total
Firms operated entire year with fewer than 5 employees	51.9%	21.5%	31.1%	38.5%
Firms operated entire year with 5 to 9 employees	20.5%	20.8%	14.9%	18.4%
Firms operated entire year with 10 to 19 employees	14.0%	24.3%	17.1%	17.0%
Firms operated entire year with 20 to 49 employees	8.5%	17.9%	17.6%	13.7%
Firms operated entire year with 50 or more employees	5.0%	15.6%	19.4%	12.4%
All firms that operated the entire year	100.0%	100.0%	100.0%	100.0%

a. Data are not available for the household goods warehousing and storage segment of the moving and storage industry. Reported data on warehousing and storage includes revenue-earning and nonrevenue-earning (enterprise support) firms. Both can have payroll and employees. However, the moving and storage industry includes revenue-earning firms of the warehousing and storage segment, not enterprise support firms. Establishments of revenue earning firms with payroll cannot be disentangled from reported total establishments with payroll.

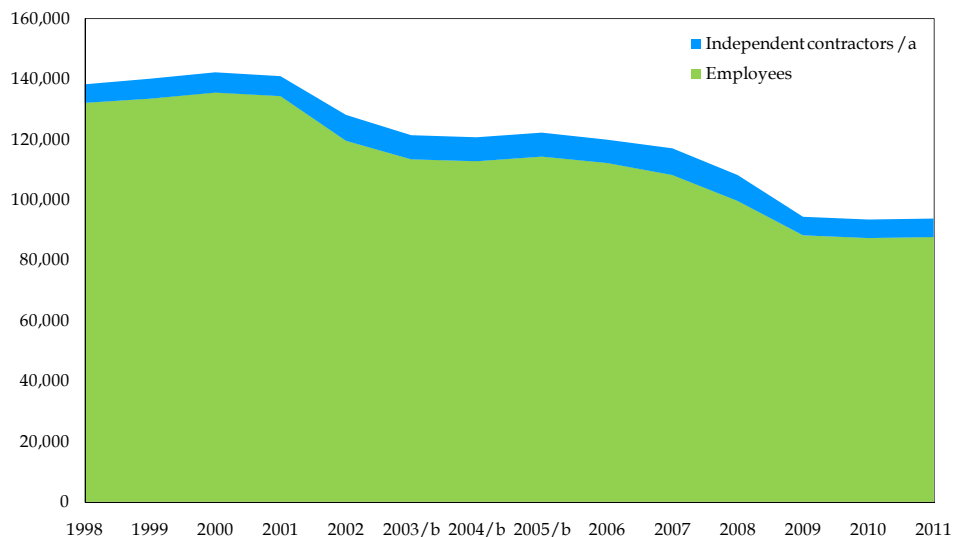
SOURCE: "Transportation and Warehousing: Subject Series - Establishment & Firm Size: Summary Statistics by Revenue Size of Firms for the United States: 2007," 2007 Economic Census, U.S. Census Bureau.

## 25 Jobs in the Moving and Storage Industry Declined Sharply with the Great Recession, but Job Losses Have Stabilized

Job recovery has been stubborn throughout the economy. In the moving and storage industry, there has been a steady decline in jobs since before the 2001 recession. Although industry jobs seemed to stabilize following the 2001 recession, the great recession brought another wave of job losses that have apparently stabilized during the past two years (Figure 10).

**Figure 10**

*Downward Trend in Industry Jobs Punctuated by Steep Declines Following Economic Recessions*



a. The number of non-employer establishments was used as a proxy for the number of independent contractors.

b. Revised since the 2008 Nathan Associates report.

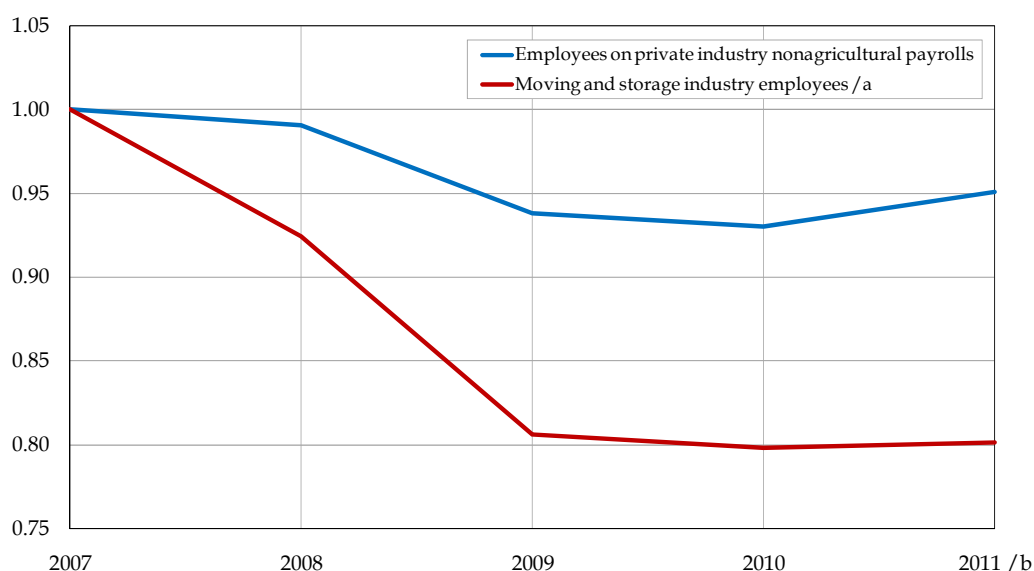
SOURCE: Nathan Associates Inc. See Appendix A, Tables A-5 for total jobs and A-5.1 and A-5.2 for employees and independent contractors, respectively.



The moving and storage industry's job loss rate from the great recession was deeper and more persistent than in nonagricultural private industries (Figure 11). At the trough of the recession (2009), moving and storage industry jobs were down 19.4 percent from 2007. Jobs continued declining in the following year. Four years after the onset of the recession, moving and storage industry jobs remained down even slightly more (19.9 percent), while nonagricultural private industry jobs began to rebound.

**Figure 11**

*Job Losses in the Moving and Storage Industry Were Deeper and More Persistent (jobs indexed to the year prior to the recession)*



a. Includes employer establishment employees and non-employer establishment "employees."

b. Through November for employees on private industry nonagricultural payrolls..

SOURCES: Nathan Associates Inc. for moving and storage industry employees. Current Employment Statistics (CES) of the U.S. Bureau of Labor Statistics for private industry nonagricultural employees.

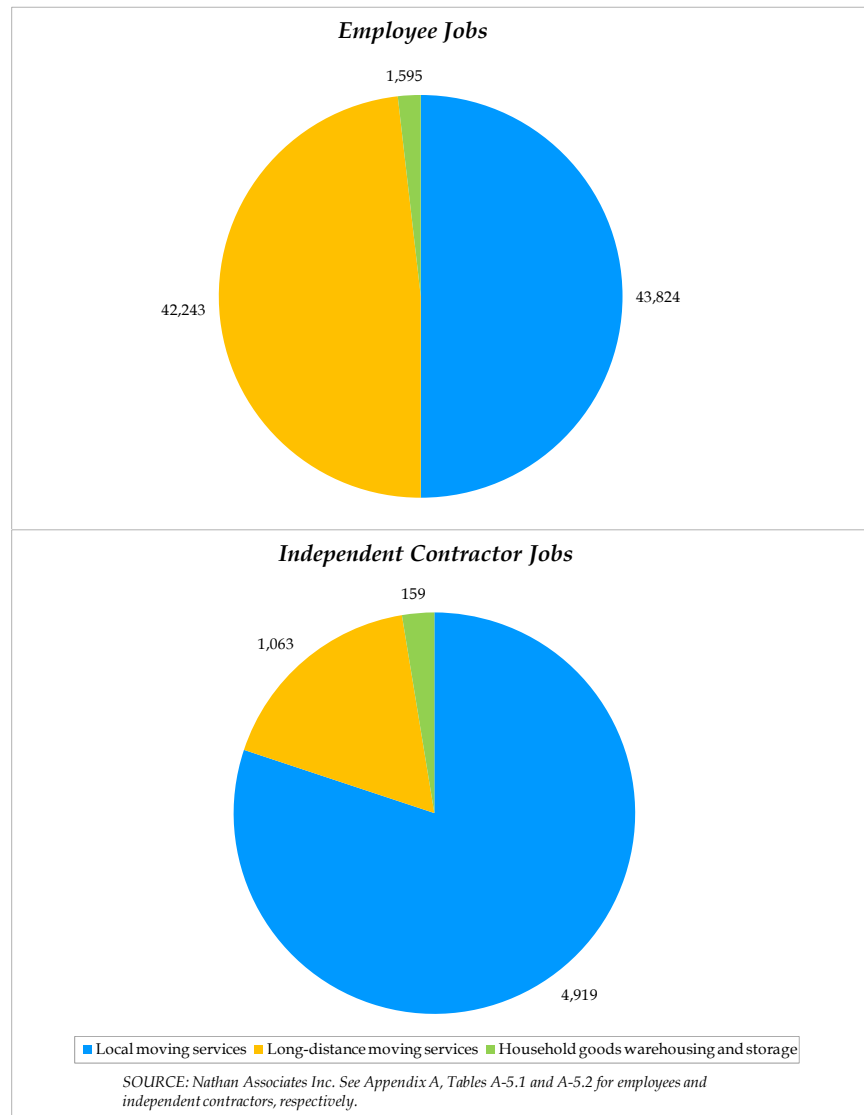
In 2011, there were just over 93,800 jobs in the industry, including 87,662 employees and 6,140 independent contractors.<sup>13</sup> Although employee and independent contractor jobs increased slightly in 2011 for the first time since the great recession, 2011 jobs remained significantly lower than in 2007. In 2007, there were 117,053 jobs in the industry. Four years after the recession began, the industry had 23,251 fewer jobs. Independent contractor jobs were down 30.5 percent. Employee jobs were down 19.0 percent.

<sup>13</sup> Independent contractor data are not available. We use the number of non-employer business establishments as a proxy for the number of independent contractors.

The distribution of 2011 employee and independent contractor jobs across industry segments is strikingly different (Figure 12).<sup>14</sup> Independent contractors are found mainly in the local moving services segment, whereas employees are evenly distributed across the local and long-distance moving services segments.

**Figure 12**

*Most Independent Contractor Jobs Are in the Local Moving Services Segment of the Industry*

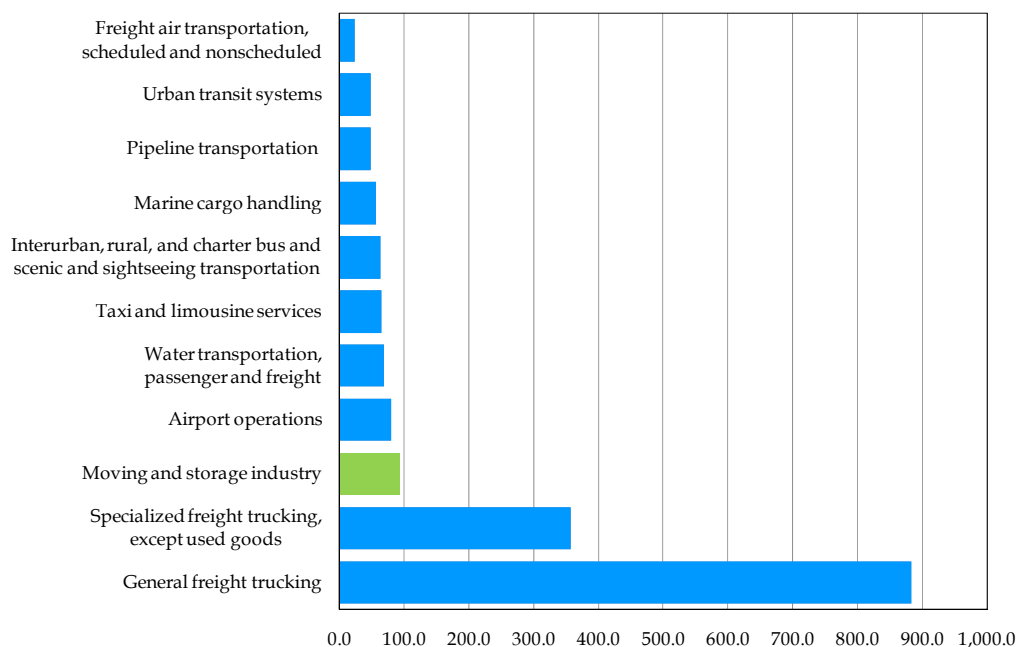


<sup>14</sup> Independent contractor jobs by industry segment were estimated using the industry segment shares of employer establishments. Alternatively, if segment shares of revenue of firms with employer establishments had been used, a greater share of independent contractors would be found in the long-distance moving segment of the industry.

Relative to other industries in the transportation and warehousing industry group, jobs in the moving and storage industry are far fewer than in general freight trucking and specialized freight trucking excluding used goods (Figure 13). However, moving and storage industry jobs outnumber jobs in airport operations; marine cargo handling; and interurban and rural bus, charter bus, and scenic and sightseeing transportation; among others.

**Figure 13**

*Jobs by Industry for Selected Industries in the Transportation and Warehousing Industry Group, 2009 /a (thousands)*



*a. 2009 is the most current year for which jobs are reported for all industries by the U.S. Census Bureau.*

*SOURCES: Nathan Associates Inc. for moving and storage industry jobs and 2009 County Business Patterns of the U.S. Census Bureau for all other industries.*

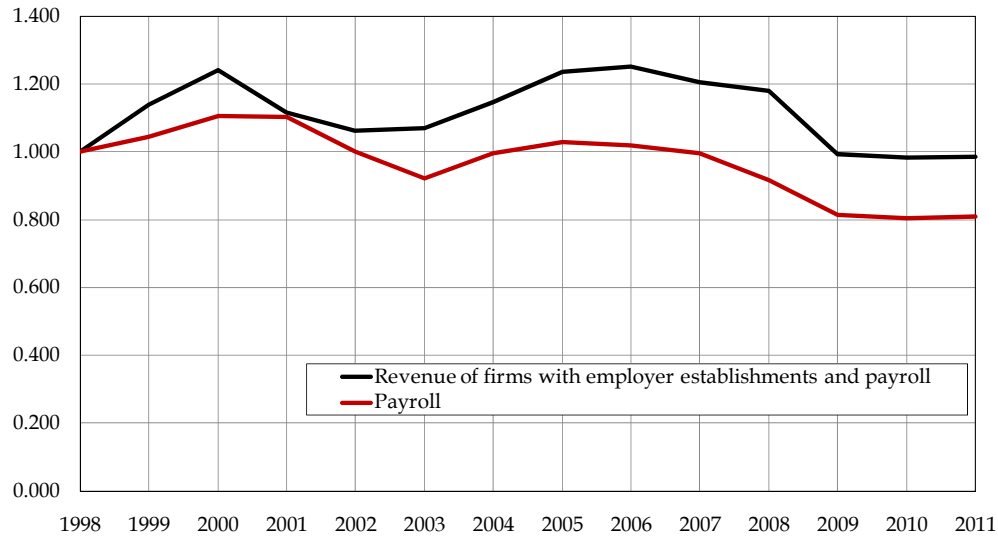
## 2.6 Payroll at Employer Establishments Moves with Industry Revenue

Payroll in the moving and storage industry has risen more slowly and fallen more steeply than revenue (Figure 14). Generally, employers are reluctant to take on new employees until increases in sales are deemed non-temporary. They sometimes reduce their workforce in anticipation of a downturn in business. In the moving and storage industry, there is the additional factor of being able to rely on independent contractors to smooth fluctuations in demand.

In 2011, industry payroll was \$2.8 billion, 18.8 percent lower than before the great recession began. However, it increased slightly from 2010, again a reflection of an industry on the brink of recovery.

**Figure 14**

*Payroll Rises Slower and Falls Faster than Revenue (values indexed to 1998)*

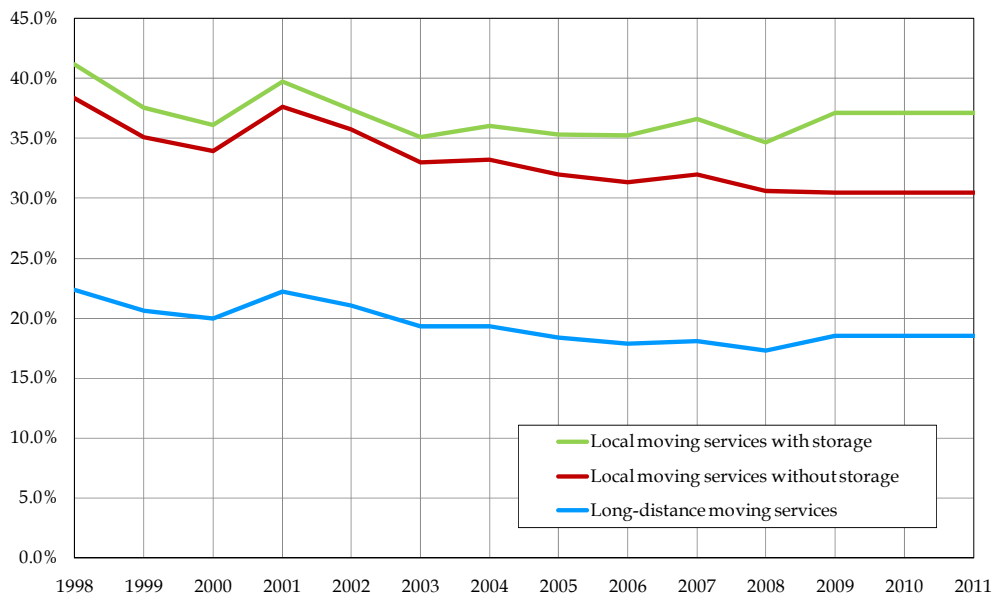


SOURCE: Nathan Associates Inc. See Appendix A, Tables A-2.1 for revenue and A-6 for payroll.

Payroll as a share of revenue and on a per employee basis differ across the three transportation segments of the industry. The payroll share of revenue has consistently been highest in the local moving services with storage segment and lowest in the long-distance moving segment (Figure 15). Payroll per employee has consistently been highest in the long-distance segment and lowest in the local without storage segment (Figure 16).

**Figure 15**

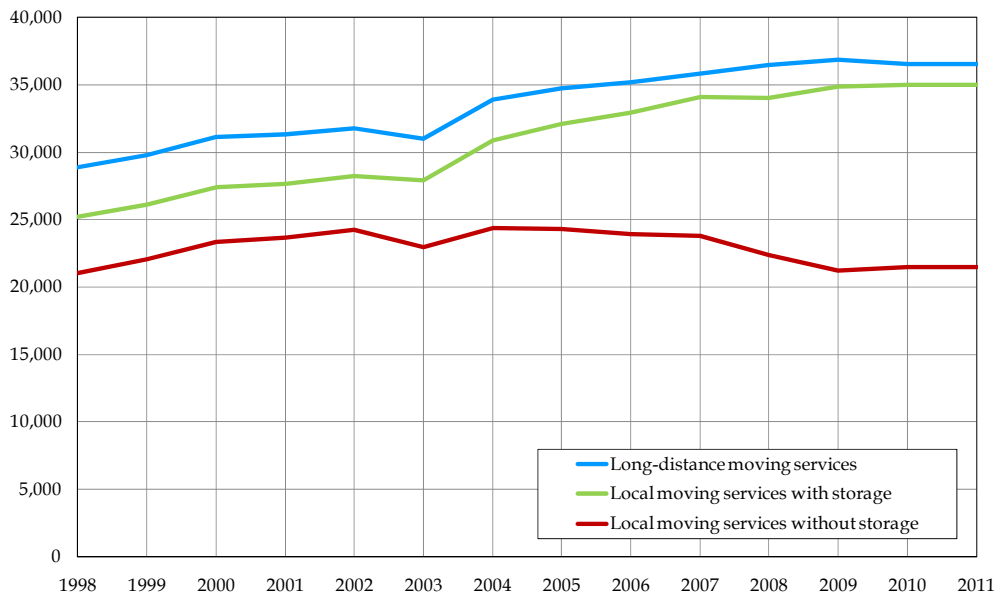
*Payroll as a Share of Revenue by Transportation Segment of the Moving and Storage Industry, 1998-2011*



SOURCE: Nathan Associates Inc. See Appendix A, Tables A-6.1.

**Figure 16**

*Payroll per Employee by Transportation Segment of the Moving and Storage Industry, 1998-2011 (current \$)*



SOURCE: Nathan Associates Inc. See Appendix A, Tables A-6.2.

## 27 The Industry Continues to Be Active in Every State

Despite the challenges of the great recession, the moving and storage industry is still active in every state. But typically, only a handful of states accounts for most industry activity. For example, six states (Missouri, Indiana, California, Illinois, Texas, and New York) accounted for 53.4 percent of total industry revenue and receipts in 2011 (Table 7). Eight states (California, New York, Florida, Texas, New Jersey, Illinois, Virginia, and Georgia) were home to 51.2 percent of all establishments (Table 8). Ten states (California, New York, Texas, Illinois, New Jersey, Virginia, Florida, Pennsylvania, North Carolina, and Ohio) accounted for 52.5 percent of all industry jobs (Table 9). And nine states (California, New York, Texas, Illinois, New Jersey, Virginia, Florida, Massachusetts, and Pennsylvania) accounted for 50.1 percent of industry payroll (Table 10).

A closer look at the distribution of industry activity across states reveals differences from one industry segment to another. For example, Maryland, which ranks eleventh in terms of total industry jobs, ranks fourth in jobs in the industry segment of local moving services with storage.

**Table 7***Industry Revenue and Receipts by State and Industry Segment,<sup>a</sup> 2011 (\$million)*

State	Local Moving Services without Storage	Local Moving Services with Storage	Total Local Moving Services	Long-distance Moving Services	Total Moving Services
Alabama	16.8	7.1	24.3	56.6	80.9
Alaska	17.5	18.9	36.4	10.2	47.9
Arizona	31.9	49.1	80.4	67.4	149.7
Arkansas	D	D	D	D	D
California	271.2	313.1	583.4	562.9	1,159.6
Colorado	29.0	49.6	77.8	90.8	170.1
Connecticut	21.4	55.3	75.4	116.2	192.5
Delaware	3.6 /b	0.0	3.7	41.5	44.7
District of Columbia	NR	NR	NR	NR	35.5
Florida	86.4	64.5	152.1	235.3	389.3
Georgia	51.4	27.7	80.2	154.8	235.6
Hawaii	19.6	41.5	60.3	20.8	83.0
Idaho	5.9	15.2	20.7	16.5	37.7
Illinois	152.7	110.9	265.7	811.1	1,073.6
Indiana	16.9	8.0	25.3	1,320.8	1,325.2
Iowa	7.3 /b	0.0	7.6	39.1	46.3
Kansas	D	D	14.4 /c	61.7	75.6
Kentucky	14.6	10.9	25.7	80.7	106.1
Louisiana	10.8	6.0	17.0	40.2	57.2
Maine	3.4	12.3	15.4	24.7	40.2
Maryland	D	D	137.1 /c	111.1	251.7
Massachusetts	71.9	83.2	154.9	118.8	277.8
Michigan	D	D	62.7 /c	152.4	215.0
Minnesota	23.5	18.4	42.1	104.3	146.3
Mississippi	6.8	3.6	10.5	32.9	43.3
Missouri	D	14.0	NR	D	1,782.8
Montana	0.0	6.0	5.7	36.6	42.7
Nebraska	5.4 /b	0.0	5.6	67.8	72.5
Nevada	20.8	28.2	48.8	20.1	70.5
New Hampshire	14.3	0.0	14.9	17.2	35.3
New Jersey	76.3	90.8	166.7	284.5	452.9
New Mexico	4.8	5.8	10.5	25.3	35.8
New York	198.0	122.9	324.5	254.1	586.9
North Carolina	46.0	32.0	78.7	169.9	248.8
North Dakota	3.7	0.0	3.9	11.5	17.3
Ohio	69.8	21.0	92.9	215.0	307.9
Oklahoma	D	D	D	D	D
Oregon	13.0	16.2	29.1	62.6	91.8
Pennsylvania	41.8	68.1	109.0	155.5	266.1
Rhode Island	4.8	0.0	5.0	89.9	95.1
South Carolina	9.4	18.9	28.0	64.2	92.3
South Dakota	1.4	0.0	1.4	10.9	12.2
Tennessee	19.3	10.5	30.2	107.0	136.6
Texas	111.8	109.3	221.6	464.5	687.0
Utah	5.5	23.3	28.1	32.7	61.3
Vermont	3.9	6.0	9.9	0.0	13.1
Virginia	98.6	166.6	262.7	186.3	456.2
Washington	16.9	75.2	89.8	150.2	241.0
West Virginia	2.5 /b	0.0	2.6	9.8	12.3
Wisconsin	19.2	19.9	39.0	110.9	149.6
Wyoming	4.7	0.0	4.9	15.0	22.2
Sum of reported state values	1,654	1,730	3,587	6,832	12,275
U.S. total	1,793.4	1,919.0	3,712.4	8,673.0	12,385.4

Notes: "D" indicate data withheld to avoid disclosing individual companies. "NR" indicates not reported. "0.0" means none.

a. The household goods warehousing and storage segment of the industry is not included here. Revenue is too small to avoid disclosing company data.

b. Calculated by subtracting reported state long distance from reported state total used household and office goods moving.

c. Calculated by subtracting reported state total for long-distance moving from reported state total for total moving services.

SOURCES: Nathan Associates Inc. from state data reported in Transportation and Warehousing: Geographic Area Series: Summary Statistics for the United States by State, U.S. Census Bureau.

**Table 8**  
*Industry Establishments by State and Industry Segment, 2011*

State	Local Moving Services without Storage	Local Moving Services with Storage	Long-distance Moving Services	Household Goods Warehousing and Storage /a	Total Industry
Alabama	77	17	64	6	165
Alaska	32	18	10	0	60
Arizona	160	47	56	6	269
Arkansas	55	9	27	6	97
California	1,068	354	453	41	1,916
Colorado	162	35	74	9	280
Connecticut	106	47	49	3	204
Delaware	23	3	14	0	40
District of Columbia	9	5	2	0	16
Florida	609	139	269	15	1,031
Georgia	236	42	130	9	417
Hawaii	21	12	13	0	46
Idaho	34	21	14	0	69
Illinois	345	98	130	12	585
Indiana	90	21	81	8	201
Iowa	62	5	48	0	114
Kansas	70	12	51	3	136
Kentucky	64	18	38	0	120
Louisiana	68	9	48	0	125
Maine	30	20	13	0	63
Maryland	179	70	79	6	334
Massachusetts	243	77	82	7	410
Michigan	170	24	111	8	313
Minnesota	119	18	66	6	209
Mississippi	24	11	30	4	69
Missouri	154	30	78	8	270
Montana	8	15	26	0	49
Nebraska	43	6	36	0	85
Nevada	62	20	17	5	104
New Hampshire	51	6	31	0	88
New Jersey	399	113	144	19	676
New Mexico	34	11	29	0	73
New York	697	142	249	14	1,102
North Carolina	175	60	124	10	369
North Dakota	30	6	13	0	49
Ohio	200	45	122	15	382
Oklahoma	68	15	47	5	135
Oregon	87	26	61	0	173
Pennsylvania	177	82	123	12	393
Rhode Island	38	6	18	0	62
South Carolina	89	36	55	5	184
South Dakota	15	0	23	0	38
Tennessee	107	24	62	10	204
Texas	458	156	302	26	941
Utah	40	14	26	3	83
Vermont	19	11	4	0	33
Virginia	247	76	111	10	443
Washington	128	104	100	11	344
West Virginia	17	2	14	0	33
Wisconsin	132	29	82	3	246
Wyoming	21	6	17	0	43
Total	7,549	2,172	3,867	305	13,893

a. For warehousing and storage, sum of reported state values did not equal reported U.S. value. Hence, the distribution is based on calculated sum of reported state values.

SOURCES: Nathan Associates Inc. from state data reported in *Transportation and Warehousing: Geographic Area Series: Summary Statistics for the United States by State*, U.S. Census Bureau.

**Table 9**  
*Industry Jobs by State and Industry Segment, 2011*

State	Local Moving Services without Storage	Local Moving Services with Storage	Long-distance Moving Services	Total Industry /a
Alabama	429	128	591	1,148
Alaska	193	224	94	511
Arizona	492	550	643	1,685
Arkansas	206	9	179	394
California	3,832	2,766	3,583	10,181
Colorado	856	637	953	2,446
Connecticut	342	388	706	1,436
Delaware	69	0	248	317
District of Columbia	98	54	37	189
Florida	1,288	664	1,793	3,746
Georgia	934	381	1,387	2,701
Hawaii	284	429	237	950
Idaho	156	177	121	455
Illinois	1,233	1,050	1,918	4,201
Indiana	366	131	1,902	2,399
Iowa	173	0	462	635
Kansas	191	59	634	884
Kentucky	281	143	505	930
Louisiana	222	100	429	751
Maine	55	133	258	445
Maryland	605	1,288	912	2,805
Massachusetts	1,054	917	753	2,724
Michigan	490	224	1,218	1,931
Minnesota	443	218	664	1,325
Mississippi	75	60	355	490
Missouri	860	183	1,344	2,387
Montana	7	70	301	379
Nebraska	91	2	521	614
Nevada	393	277	204	874
New Hampshire	174	35	220	429
New Jersey	1,136	1,053	1,892	4,080
New Mexico	81	70	221	371
New York	2,792	1,537	2,235	6,564
North Carolina	821	462	1,735	3,018
North Dakota	99	24	111	234
Ohio	1,153	293	1,441	2,887
Oklahoma	442	85	381	909
Oregon	243	301	567	1,110
Pennsylvania	759	780	1,744	3,283
Rhode Island	99	29	273	402
South Carolina	244	311	603	1,159
South Dakota	45	0	148	193
Tennessee	447	263	865	1,575
Texas	1,681	1,166	3,421	6,267
Utah	143	256	336	735
Vermont	48	79	34	161
Virginia	1,181	1,293	1,598	4,072
Washington	380	1,012	1,226	2,619
West Virginia	61	0	143	204
Wisconsin	360	226	1,018	1,604
Wyoming	62	36	139	237
Total	28,170	20,572	43,305	92,048 /a

a. Excludes household goods warehousing and storage. State distribution of its 1,754 jobs is not available.

SOURCES: Nathan Associates Inc. from state data reported in *Transportation and Warehousing: Geographic Area Series: Summary Statistics for the United States by State*, U.S. Census Bureau.



**Table 10**  
*Industry Payroll by State and Industry Segment, 2011 (\$million)*

State	Local Moving Services without Storage	Local Moving Services with Storage	Long-distance Moving Services	Total Industry /a
Alabama	6.4	2.5	17.4	26.2
Alaska	5.1	7.5	3.1	15.8
Arizona	7.7	18.9	21.0	47.7
Arkansas	3.5	0.2	4.1	7.9
California	70.0	92.9	132.8	295.7
Colorado	8.8	18.7	36.0	63.5
Connecticut	5.1	15.6	33.4	54.1
Delaware	1.3	0.0	10.9	12.2
District of Columbia	3.5	2.6	1.8	7.9
Florida	18.6	19.2	55.6	93.4
Georgia	14.3	12.2	43.1	69.6
Hawaii	7.0	16.1	7.3	30.4
Idaho	2.2	5.9	4.1	12.2
Illinois	26.6	37.5	97.9	162.0
Indiana	6.3	3.3	75.9	85.5
Iowa	2.4	0.0	10.7	13.1
Kansas	3.1	1.3	19.7	24.1
Kentucky	4.1	4.2	19.4	27.7
Louisiana	3.1	2.6	11.7	17.3
Maine	1.0	5.6	7.8	14.5
Maryland	12.0	34.9	33.8	80.7
Massachusetts	23.5	37.3	32.3	93.1
Michigan	13.4	8.3	47.4	69.1
Minnesota	7.4	7.7	29.0	44.1
Mississippi	1.3	1.8	9.2	12.4
Missouri	20.9	6.2	43.6	70.7
Montana	0.1	1.7	8.5	10.4
Nebraska	1.8	0.0	15.3	17.1
Nevada	6.3	10.3	6.6	23.1
New Hampshire	4.3	1.2	6.1	11.6
New Jersey	22.0	39.7	76.7	138.5
New Mexico	1.3	2.2	6.7	10.1
New York	57.9	50.0	78.0	185.9
North Carolina	13.6	12.2	56.3	82.1
North Dakota	1.2	1.0	3.0	5.2
Ohio	22.0	8.9	56.4	87.3
Oklahoma	10.6	2.8	12.2	25.6
Oregon	3.2	9.3	19.3	31.8
Pennsylvania	14.6	25.3	52.5	92.4
Rhode Island	1.2	0.6	11.0	12.9
South Carolina	3.2	7.5	19.9	30.6
South Dakota	0.4	0.0	3.7	4.1
Tennessee	7.6	4.0	32.2	43.8
Texas	31.2	34.9	117.2	183.3
Utah	2.0	9.5	10.3	21.7
Vermont	1.1	2.7	1.0	4.8
Virginia	24.1	55.9	53.0	133.1
Washington	5.8	32.6	41.4	79.8
West Virginia	0.7	0.0	4.1	4.8
Wisconsin	6.1	6.9	38.1	51.1
Wyoming	1.5	0.9	4.1	6.4
Total	522.4	683.2	1,542.5	2,748.1 /a

a. Excludes household goods warehousing and storage. State distribution of its \$55 million in payroll is not available.

SOURCES: Nathan Associates Inc. from state data reported in *Transportation and Warehousing: Geographic Area Series: Summary Statistics for the United States by State*, U.S. Census Bureau.

## 2.8 Total Impact of the Industry Exceeds Its Size

When consumers demand moving and storage industry services, the industry itself demands output of other industries. In addition, industry employees and independent contractors purchase goods and services for personal consumption. Inter-industry and consumer spending create a ripple effect. Once it subsides, total output,<sup>15</sup> jobs, and household earnings of labor in the U.S. economy are greater than in the moving and storage industry itself.

- *Total impact on U.S. economic output was \$25.71 billion in 2011, \$13.1 billion more than industry revenue and receipts. Every \$1 of moving and storage industry output (revenue and receipts), increases total economic output \$2.04. The effect varies by industry segment. According to the National Income Accounts of the Bureau of Economic Analysis, every \$1 of trucking transportation output generates \$2.0519073 of total economic output; every \$1 of warehousing and storage output generates \$1.4919082 of total economic output (see Appendix B, Table B for output multipliers). The industry's \$25.71 billion impact on U.S. economic output stimulates output of all industries (Table 11).*
- *Total impact on U.S. jobs in 2011 was 252,850, including 93,800 jobs in the moving and storage industry and 159,050 indirect and induced jobs generated from inter-industry spending and spending of household earnings, respectively. Throughout the U.S. economy there are 2.7 total jobs for every moving and storage industry job (see Appendix C, Table C-1 for job impacts by state).*
- *Total impact on 2011 household earnings of \$7.43 billion, including \$2.84 billion in household earnings of moving and storage industry employees and independent contractors as well as \$4.60 billion of indirect and induced household earnings. Household earnings include wages, salaries, and other compensation available to workers for spending on goods and services. They do not include legally required benefits such as costs for social security, Medicare, federal and state unemployment insurance, workers' compensation, and retirement and savings, all of which are included in payroll and must be paid from the receipts of independent contractors. Hence, to determine the impact of the moving and storage industry on household earnings, payroll and receipts are adjusted downward. Household earnings in the moving and storage industry are estimated to equal 85.3 percent of payroll and receipts (see Appendix C, Table C-2 for impacts by state).*
- *Total impact on 2011 individual federal, individual state, and federal business income tax revenue of \$1.29 billion, including \$467.2 million in federal individual income taxes, \$114.7 million in state individual income taxes, and \$708.2 million in federal business income taxes. Individual income taxes were collected on the total household earnings effect of the moving and storage industry. Federal business income taxes were collected on the total output effect of the industry (see Appendix C, Tables C-3, C-4, and C4 for tax effects by type and state).*

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<sup>15</sup> Output is the value of intermediate-use goods and services (those used by industries to produce other goods and services), as well as end-use goods and services (those used by final consumers).

**Table 11***Total Output Effect of the Moving and Storage Industry by Industry Affected (\$million)*

Industry Description	Local Moving Services without Storage	Local Moving Services with Storage	Long-distance Moving Services	Household Goods Warehousing & Storage	Total
Farms, forestry, fishing, and related activities	\$3.16	\$3.38	\$15.26	\$0.22	\$22.01
Oil and gas extraction	\$242.59	\$259.58	\$1,173.17	\$3.65	\$1,678.99
Mining, except oil and gas	\$5.29	\$5.66	\$25.59	\$0.33	\$36.88
Support activities for mining	\$4.29	\$4.59	\$20.76	\$0.07	\$29.72
Utilities	\$14.44	\$15.46	\$69.85	\$2.66	\$102.41
Construction	\$22.87	\$24.48	\$110.62	\$1.68	\$159.65
Wood products	\$3.86	\$4.13	\$18.69	\$0.32	\$27.01
Nonmetallic mineral products	\$4.77	\$5.11	\$23.07	\$0.34	\$33.29
Primary metals	\$26.53	\$28.39	\$128.30	\$1.35	\$184.57
Fabricated metal products	\$35.38	\$37.86	\$171.11	\$1.72	\$246.08
Machinery	\$11.22	\$12.01	\$54.26	\$1.72	\$79.21
Computer and electronic products	\$14.94	\$15.99	\$72.26	\$0.99	\$104.18
Electrical equipment, appliances, and components	\$7.93	\$8.49	\$38.36	\$1.05	\$55.84
Motor vehicles, bodies and trailers, and parts	\$53.49	\$57.23	\$258.65	\$1.99	\$371.36
Other transportation equipment	\$2.76	\$2.95	\$13.33	\$0.11	\$19.15
Furniture and related products	\$0.61	\$0.66	\$2.97	\$0.06	\$4.29
Miscellaneous manufacturing	\$2.09	\$2.24	\$10.10	\$0.35	\$14.78
Food and beverage and tobacco products	\$3.98	\$4.26	\$19.26	\$0.27	\$27.78
Textile mills and textile product mills	\$2.00	\$2.14	\$9.66	\$0.11	\$13.91
Apparel and leather and allied products	\$0.73	\$0.79	\$3.55	\$0.04	\$5.11
Paper products	\$9.89	\$10.58	\$47.82	\$1.01	\$69.29
Printing and related support activities	\$5.15	\$5.51	\$24.92	\$0.32	\$35.91
Petroleum and coal products	\$339.59	\$363.38	\$1,642.27	\$4.37	\$2,349.61
Chemical products	\$33.60	\$35.96	\$162.51	\$1.67	\$233.74
Plastics and rubber products	\$23.11	\$24.73	\$111.75	\$1.02	\$160.60
Wholesale trade	\$65.00	\$69.55	\$314.33	\$2.76	\$451.63
Retail trade	\$27.57	\$29.50	\$133.32	\$0.32	\$190.70
Air transportation	\$9.85	\$10.54	\$47.65	\$0.44	\$68.48
Rail transportation	\$29.38	\$31.43	\$142.06	\$0.22	\$203.09
Water transportation	\$0.92	\$0.99	\$4.46	\$0.02	\$6.40
Truck transportation	\$1,890.69	\$2,023.14	\$9,143.43	\$1.02	\$13,058.28
Transit and ground passenger transportation	\$0.61	\$0.65	\$2.94	\$0.04	\$4.24
Pipeline transportation	\$7.74	\$8.28	\$37.44	\$0.17	\$53.63
Other transportation and support activities	\$99.48	\$106.45	\$481.08	\$3.63	\$690.63
Warehousing and storage	\$21.15	\$22.63	\$102.29	\$206.28	\$352.36
Publishing industries (includes software)	\$6.55	\$7.01	\$31.67	\$0.56	\$45.79
Motion picture and sound recording industries	\$2.22	\$2.38	\$10.76	\$0.17	\$15.53
Broadcasting and telecommunications	\$30.47	\$32.61	\$147.37	\$2.26	\$212.72
Information and data processing services	\$3.85	\$4.12	\$18.61	\$0.34	\$26.92
Federal Reserve banks, credit intermediation, and related activities	\$46.66	\$49.93	\$225.64	\$4.29	\$326.51
Securities, commodity contracts, and investments	\$21.71	\$23.23	\$104.98	\$1.49	\$151.41
Insurance carriers and related activities	\$102.98	\$110.19	\$498.01	\$3.71	\$714.90
Funds, trusts, and other financial vehicles	\$0.87	\$0.93	\$4.22	\$0.04	\$6.07
Real estate	\$37.84	\$40.49	\$183.00	\$10.72	\$272.05
Rental and leasing services and lessors of intangible assets	\$21.49	\$23.00	\$103.94	\$1.53	\$149.97
Legal services	\$13.84	\$14.81	\$66.92	\$1.19	\$96.76
Computer systems design and related services	\$17.80	\$19.05	\$86.08	\$1.21	\$124.14
Miscellaneous professional, scientific, and technical services	\$65.34	\$69.92	\$316.00	\$5.33	\$456.59
Management of companies and enterprises	\$42.81	\$45.81	\$207.05	\$3.59	\$299.27
Administrative and support services	\$121.01	\$129.48	\$585.20	\$8.19	\$843.88
Waste management and remediation services	\$5.41	\$5.79	\$26.17	\$0.76	\$38.12
Educational services	\$0.35	\$0.38	\$1.70	\$0.02	\$2.45
Ambulatory health care services	\$0.06	\$0.06	\$0.29	\$0.00	\$0.42
Hospitals and nursing and residential care facilities	\$0.03	\$0.03	\$0.13	\$0.00	\$0.19
Social assistance	\$0.01	\$0.01	\$0.06	\$0.00	\$0.08
Performing arts, spectator sports, museums, and related activities	\$3.49	\$3.73	\$16.87	\$0.70	\$24.79
Amusements, gambling, and recreation industries	\$0.34	\$0.36	\$1.64	\$0.03	\$2.37
Accommodation	\$3.17	\$3.40	\$15.35	\$0.49	\$22.42
Food services and drinking places	\$8.36	\$8.95	\$40.44	\$0.72	\$58.48
Other services, except government	\$25.13	\$26.89	\$121.51	\$2.28	\$175.80
Federal government, general and enterprises	\$54.39	\$58.20	\$263.04	\$2.46	\$378.09
State and local government, general and enterprises	\$17.03	\$18.23	\$82.37	\$1.61	\$119.24
<b>Total industry output effect</b>	<b>\$3,679.91</b>	<b>\$3,937.68</b>	<b>\$17,796.11</b>	<b>\$296.05</b>	<b>\$25,709.76</b>

SOURCE: Nathan Associates Inc. See Appendix B, Table B for output multipliers by industry.

- *The industry contributes approximately \$190 million to the Federal Highway Trust Fund annually. Sources of contribution include excise and use taxes, specifically the federal diesel fuel tax; federal excise taxes on truck purchases, the heavy vehicle use tax, and tire taxes all of which apply to combination trucks; and tire taxes that apply to straight trucks.*<sup>16</sup>

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<sup>16</sup> See Robert Damuth, "The Moving and Storage Industry in the U.S. Economy," October 2008, p. 26.

## 3. Threats to a Speedy Industry Recovery

The industry began its recovery in 2011. However, the increase in all dimensions of the industry's profile was less than 0.4 percent. This fragile recovery is imperiled by three changes in the market that have occurred since the great recession began: a new process by which contracts for household goods of military moves are awarded, a driver shortage, and emergence of a greater presence of rogue operators.

### 3.1 The Defense Personal Property Program (DP3) Injected New Uncertainty into the Market

As Figure 5 presented earlier revealed, household goods of military moves were the only category of van line shipments that were higher in each year following onset of the great recession. Military demand for household goods moving services helped sustain the industry during the recession.

However, in late 2010, in an effort to make moving easier for military members and their families, the United States Transportation Command (USTRANSCOM) and the Military Surface Deployment and Distribution Command (SDDC) of the U.S. Department of Defense began implementation of the Defense Personal Property Program, or DP3.<sup>17</sup> The new program injected new uncertainty into the market of household goods of military moves. The uncertainty has made it more difficult for moving companies to plan for future demand.

Generally, in the new DP3 program, moving businesses (van lines, agents, other movers, and freight forwarders) must qualify to become program participants. The qualification criteria are not especially onerous. Basically, businesses must submit financial ratios and other operational and financial data demonstrating good standing.

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<sup>17</sup> See MOVE.MIL, the official DPS portal at <http://www.move.mil/home.htm>.

Once qualified, the business must then file rates that will be applicable for an *entire year*. Rates can be submitted for continental U.S. moves, international moves, or both. The business is then put on a list of program participants and assigned a minimum score.

Once a contract has been awarded to a listed business, its customers are surveyed to determine their satisfaction and a new score is calculated. The new score is a weighted average of the business's rate score (30 percent) and its consumer satisfaction score (70 percent).

The list of participating businesses is then resorted based on the weighted average scores, and contracts are awarded, beginning with the company achieving the best overall score. The weighted average score is re-calculated quarterly using additional survey results and the original rates that remain in effect for the entire year.

Uncertainty arises at several points in the process. Firstly, the annual rates that are submitted are based on shipment weight, but not distance. There is no way a qualified business knows the distribution of shipment orders by rate category before submitting rates. Secondly, shipment orders can come in daily without any notice. A business has no way of knowing what its demand will be from day-to-day, which makes capacity planning nearly impossible. And thirdly, when weighted average scores are re-calculated quarterly and the list of qualified businesses is resorted, a business perched near the top of the list in one quarter might drop a few places in the following quarter. The drop in position could result in not receiving a contract award.

Moreover, in the new DP3 program, the industry is burdened with new additional costs. Businesses must now arrange and manage the move, tasks that were previously handled by the military at the base level.

The program has pushed rates lower, raised overhead costs of participants, and made uncertainty higher. Because of these outcomes, movers are less likely to have the capacity or incentive to provide military household goods moving services during peak summer months when there is heavy demand for the more profitable shipments of household goods of corporate moves and private-sector noncorporate moves. Providing service to the military during peak season is more difficult because of capacity shortages and opportunity cost.

The uncertainty, lower rates, and depressed margins are disincentives for drivers and independent contractors to commit to participating in the business, which has contributed to a driver shortage in the industry

### 3.2 A Driver Shortage Limits the Industry's Ability to Meet Increasing Demand as the Economy Recovers

Because of the seasonal nature of moving and storage industry demand, the industry has a long history of working its way through shortages of equipment and drivers during peak periods of demand.

Regarding past solutions to equipment shortages, two innovative approaches have been implemented in the past, both of which were eventually abandoned on the basis of costs and benefits. During the 1970s and 1980s, some industry members experimented with road railers or trailers on railroad flat cars. However, damage to trailers occurred and apparently could not be avoided. At one point, the industry experimented with new plastic containers, but they too did not hold up and eventually the solution was abandoned.

Regarding drivers, the specialized freight transportation industry group,<sup>18</sup> which includes more than the moving and storage industry, has been and will continue to be reliant on heavy and tractor-trailer drivers. In 2008, drivers in the industry group accounted for 50.9 percent of industry group employment.<sup>19</sup> By 2018, they are expected to account for 54.6 percent of industry group employment.

In the past, driver shortages in the moving and storage industry occurred mainly during peak periods of demand. Beginning in the 1980s, the industry was able to overcome the challenge of temporary driver shortages by relying on drivers brought in from Canada, Scotland, the Caribbean, and elsewhere on temporary work visas. The industry provided driver training and used foreign drivers on interstate shipments during peak summer months. However, this solution had to be abandoned following 9/11, when obtaining temporary work visas for foreign drivers became nearly impossible. Even today, it is difficult to find and use Canadian cross-border drivers.

More recently—and especially now—the industry has faced and is facing driver shortages during peak and off-peak periods of demand. Jobs for heavy and tractor-trailer drivers declined steadily from 2007 through 2010 (Figure 18). In 2010, specialized freight trucking industry group jobs for drivers were down 11 percent from 2007. Jobs for drivers in the moving and storage industry were down 23 percent. In 2007, there were 43,291 moving and storage industry heavy and tractor-trailer drivers. By 2010, the number of drivers had declined to 33,168.

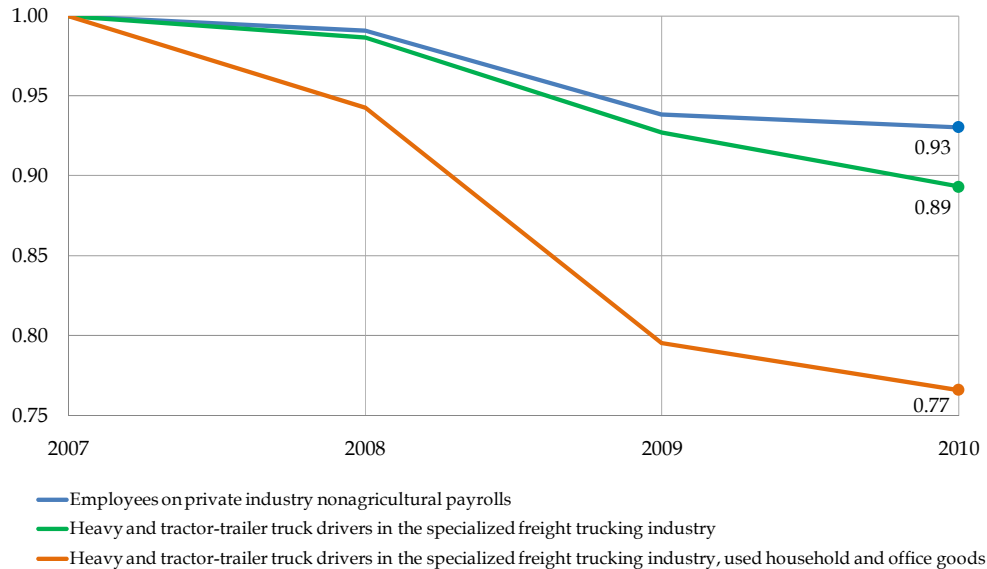
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<sup>18</sup> Includes used household and offices goods and freight other than used goods, such as hazardous materials (except waste) and agricultural products, among others.

<sup>19</sup> "Employment by Industry, occupation, and percent distribution, 2008 and projected 2018," Bureau of Labor Statistics,

**Figure 18**

*Job Losses Were Greatest among Moving and Storage Industry Heavy and Tractor-trailer Truck Drivers (jobs indexed to jobs in year prior to the recession)*



SOURCES: Nathan Associates Inc. for moving and storage industry employees and heavy and tractor-trailer truck drivers in the specialized freight trucking industry, used household and office goods. Current Employment Statistics (CES), U.S. Bureau of Labor Statistics (BLS) for private industry nonagricultural employees. Occupational Employment Statistics (OES) Survey, BLS for heavy and tractor-trailer truck drivers in the specialized freight trucking industry.

Now that the U.S. economy is beginning to recover from the great recession, demand for moving and storage industry services is beginning to increase, but the industry is having difficulty re-hiring drivers who lost jobs during the recession. The demands on truck drivers, especially in the moving and storage industry, can be onerous. Industry drivers must load and unload shipments. They must interact with the customer. They spend days on the road away from home and family. And truck driving generally has a high incidence of injuries and illnesses, two factors that are associated with occupations earning below average wages.<sup>20</sup>

To overcome the current challenge of a driver shortage, the industry has been experimenting with a new business model. In the long-lived industry business model, drivers loaded, hauled, and unloaded the entire shipment. In the new model, a local crew loads a container at its origin, a third-party less-than-truckload (LTL) carrier transports the container to its destination, and a local crew at the destination unloads the container. For the moving company, in the new business model labor costs are mostly confined to the origin and destination of the shipment.

Several national companies provide drive-away service. They provide a qualified driver who can pull the trailer to its destination and they are not liable for damage to goods on the trip. LTL companies include Yellow, UPS, and FedEx, among others.

<sup>20</sup> See Occupation Focus, Occupational Employment and Wages 2007, Bureau of Labor Statistics, p. 14.



The new business model of third-party LTL and drive-away shipments provides greater flexibility to the moving and storage industry. Unlike owner-operator trailers that the owner needs to empty as quickly as possible to move on to the next job. In the new business model, delivery of the shipment to its destination can occur on any day. And the trailer does not need to be immediately unloaded.

The new business model also allows more efficient and effective use of drivers. A moving company can schedule smaller shipments more quickly with third-party shippers and assign larger jobs to its drivers. The drivers are better able to manage two or three large shipments instead of four or five smaller shipments because of the need to load and unload all shipments at the origin and destination.

In addition to experimenting with this new business model, the industry is also working on developing a program that will provide driver-training and job placement guarantees for those who complete the training.

Although the moving and storage industry has a long history of driver shortages during peak periods of demand, more recently shortages exist during peak and off-peak periods. Difficulties in re-hiring drivers who lost jobs during the recession jeopardize the industry's fragile recovery. As a result, the industry is developing new business models and working hard to develop innovative solutions to attract and retain heavy and tractor-trailer drivers.

### **3.3 An Increasing Presence of Rogue Operators Deprives Legitimate Movers of Business Opportunities and Imposes New Costs on the Industry**

Many businesses across all industries that sell to consumers occasionally receive complaints from consumers. The moving and storage industry is no exception. During the process of negotiating a contract, agreeing on services to be provided, and scheduling delivery there is room for misunderstandings. Moreover, during the packing and packaging of goods and loading and unloading of trucks, items can be broken, damaged or even occasionally misplaced.

However, rogue operators are unique, and they have benefitted from emergence of the Internet. Rogues prey on consumers who seek the lowest cost service. They often fail to register as required with the U.S. Department of Transportation and state departments of transportation. Their practices include using a name and mark similar to those of a reputable company, offering low-price services only to hold the consumer's goods captive until consumers pay a higher price, and changing the name of their business once consumer complaints result in a lowering of the company's rating with the Better Business Bureau.

One particularly egregious example of rogue behavior came to light earlier this year.<sup>21</sup> Movers USA in Denver, Colorado was indicted on 55 counts, including conspiracy, fraud, extortion, falsely making a bill of lading, and theft from interstate shipment.<sup>22</sup> According to the indictment, the company, which had formerly done business as A Golden Hand Moving and Storage Company, offered “extremely low moving estimates.” Once the company had taken possession of the customers’ goods, it fraudulently inflated the price and withheld delivery of the goods until the customers paid the inflated price.

Although 10 victims were identified in the indictment, one was not—Movers USA in Baltimore, Maryland. Movers USA-Baltimore is a fully licensed and insured Maryland moving company that has been doing business for 20 years and is a member of the American Moving and Storage Association. Not only did the alleged rogue company use the name of a reputable mover located 2,000 miles away, it also engaged in trademark infringement by using a mark on its trailers similar to the mark found on the trailers of Movers USA-Baltimore (Figure 17).

**Figure 17**

*Similar Marks on Trailers of a Legitimate Moving Company and an Alleged Rogue Operator*

**Trailer of the Legitimate Moving Company**



**Trailer of the Alleged Rogue Operator**



Regulatory actions and advocacy have helped protect customers, but they impose new costs on legitimate moving companies. One industry member estimates spending \$100,000 in legal

<sup>21</sup> See <http://denver.cbslocal.com/2012/01/13/moving-company-faces-charges-for-hijacking-customers-property/>.

<sup>22</sup> The indictment is available at <http://cbsdenver.files.wordpress.com/2012/01/moversusaindictment.pdf>.

and internal labor costs over nine months of rooting out and trying to shut down a rogue operator infringing on its business, name, and reputation.

The confusion between legitimate movers and rogues can be overwhelming, so much so that, in one instance, law enforcement agents arrived on the premises of a legitimate mover to shut down its operations thinking it was the rogue operator.

Infringement of trademarks and brand values by rogue operators has escalated with the ubiquitous nature of the Internet. Legitimate movers expend large amounts on investment in digital marketing, but rogues can easily piggy-back on such investments by naming their operations and marking their trailers in ways that serve to confuse consumers.

Brand value of legitimate moving companies, often value built on decades of service, can be easily eroded by rogue operators, and legitimate movers now find themselves in the position of having to expend resources to protect their brands and reputations.

Rogue operators take business away from legitimate moving companies and create confusion among consumers. As a result, new and non-trivial costs are imposed on legitimate moving and storage companies.



## 4. Conclusions

This study provides a fuller picture of the moving and storage industry than was provided in the original study of the industry. The original study had only eight years of data to examine. This study spans 14 years. More important, during these 14 years the economy experienced two recessions, the second of which was the greatest economic contraction since the Great Depression. In this study, there is additional insight into industry activity, structure, and operating practices and how the industry has adapted to change.

The major conclusions from this study include the following:

- The moving and storage industry is indeed pro-cyclical with the U.S. economy. When U.S. economic activity declines, so too does activity in the moving and storage industry.
- Recovery of the moving and storage industry lags other industries. Considering the 2001 recession, peak-to-peak moving and storage industry activity spanned 2000 to 2006. In the total private industry transportation and warehousing industry group, peak-to-peak activity spanned 2000 to 2004, a period lasting two years fewer than in the moving and storage industry.
- The industry came to rely more and more on independent contractors to smooth the effects of seasonal and cyclical fluctuations in demand. Not surprisingly, the great recession hit independent contractors hardest. Four years after the beginning of the great recession, independent contractor jobs were 30.5 percent fewer.
- Job recovery from the great recession has been stubborn throughout the U.S. economy, but especially so in the moving and storage industry. Although jobs increased slightly in 2011, they remained 20 percent fewer than in 2007. Private industry nonagricultural jobs remained five percent fewer than in 2007.
- A partial explanation of the stubborn job recovery in the moving and storage industry can be found in the industry's experimentation with new business models, specifically the model of third-party LTL and drive-away shipments which provides greater flexibility, as well as more efficient and effective use of the moving and storage industry's drivers. Drivers of LTL and drive away shipments are employees or independent contractors of the

general freight trucking industry, not the specialized freight trucking industry of moving and storage services.

Conclusions of this study that were also found in the original study include the following:

- The moving and storage industry consists mostly of small and micro-businesses, the major sources of growth and innovation in the U.S. economy.
- Though its profile is lower than before the great recession, the industry still consists of nearly 7,000 business firms and 13,900 locations of business establishments altogether generating \$12.6 billion of revenue and receipts and providing 93,800 industry jobs.

In 2011 the industry began its recovery. Activity was up 0.4 percent. The total 2011 economic impact of the industry included of \$25.71 billion of U.S. economic output, 252,850 jobs, \$7.43 billion of household earnings from labor, \$1.29 billion of tax revenues, and \$190 million contributed to the Federal Highway Trust Fund.

The fragile recovery of the industry is imperiled by three changes in the market: the new DP3 program, a driver shortage, and an increasing presence of rogue operators. However, with continuing U.S. economic recovery, additional experience with the DP3 program, a willingness to work creatively to solve the driver shortage issue, and focus on educating consumers and rooting out rogue operators, the moving and storage industry will continue along its recovery path.

# Appendix A

Industry Profile, 1998-2011





**Table A-1***Summary Characteristics of the Moving and Storage Industry, 1998-2011*

Year	Revenue or Receipts <sup>a</sup> (\$million)	Firms <sup>b</sup>	Establishments <sup>c</sup>	Employees and Independent Contractors <sup>d</sup>	Payroll <sup>e</sup> (\$million)
1998	12,890	8,478	15,801	138,245	3,469
1999	14,646	8,452	16,192	140,127	3,621
2000	15,930	8,432	16,156	142,215	3,833
2001	14,377	8,196	15,812	140,940	3,823
2002	13,753	7,979	17,685	128,133	3,475
2003 <sup>f</sup>	13,844	7,659	16,624	121,411	3,194
2004 <sup>f</sup>	14,823	7,818	16,680	120,692	3,450
2005 <sup>f</sup>	15,927	8,004	16,890	122,231	3,564
2006	16,102	7,968	16,626	119,929	3,533
2007	15,539	7,722	17,518	117,053	3,451
2008	15,137	7,352	16,830	108,219	3,180
2009	12,661	6,981	13,978	94,383	2,820
2010	12,537	6,913	13,842	93,459	2,793
2011	12,584	6,939	13,893	93,802	2,803

*Note: The moving and storage industry is defined to include NAICS 48421 (specialized freight trucking of used household and office goods) and NAICS 4931901 (Other warehousing and storage, household goods).*

*a. Includes revenue of employer firms and receipts of nonemployer establishments (independent contractors). Receipts are defined as the revenue for goods produced, distributed, or services provided, including revenue earned from premiums, commissions and fees, rents, interest, dividends, and royalties. Receipts excludes all revenue collected for local, state, and federal taxes.*

*b. Firms with employer establishments, that is, firms with revenue and payroll.*

*c. Includes employer and nonemployer (independent contractor) establishments. An establishment is a single physical location where business is conducted or where services or industrial operations are performed.*

*d. For employees, includes paid employees for pay period including March 12. Paid employees include full and part time employees; salaried officers and executives of corporations; and employees on paid sick leave, paid holidays, and paid vacations. Not included are proprietors and partners of unincorporated businesses, full and part time leased employees, and temporary staffing obtained from a service. Independent contractors are nonemployer establishments.*

*e. For employer firms only. Nonemployer establishments have no employees and therefore no payroll. Payroll includes all forms of compensation such as salaries, wages, commissions, dismissal pay, bonuses, vacation allowances, sick leave pay, and employee contributions to a qualified pension plan paid during the year to all employees and reported on IRS form 941 as taxable Medicare wages and tips (even if not subject to income or FICA tax). For corporations, payroll includes amounts paid to officers and executives. For unincorporated businesses, it does not include profit or other compensation of proprietors or partners. Payroll is reported before deductions for social security, income tax, insurance, and union dues.*

*f. Revised since the 2008 Nathan Associates report.*

*SOURCE: Nathan Associates Inc. from data reported by the U.S. Census Bureau. See Tables A-2 through A-6 for additional industry detail and complete source citations.*



**Table A-2**

*Revenue of Firms with Employer Establishments and Receipts of Nonemployer Establishments in the Moving and Storage Industry by Industry Segment, 1998-2011 (\$million)*

Year	Specialized Freight Trucking, Used Household and Office Goods					Household Goods Warehousing and Storage	Grand Total, Moving and Storage Industry
	Local without Storage	Local with Storage	Subtotal, Local	Long Distance	Total		
1998	1,360	2,248	3,608	8,965	12,573	316	12,890
1999	1,736	2,537	4,273	10,068	14,340	305	14,646
2000	2,087	2,728	4,816	10,770	15,585	344	15,930
2001	2,059	2,429	4,488	9,536	14,024	353	14,377
2002	2,137	2,293	4,431	8,954	13,385	368	13,753
2003 <sup>a</sup>	2,149	2,269	4,417	9,086	13,503	341	13,844
2004 <sup>a</sup>	2,298	2,386	4,684	9,809	14,493	329	14,823
2005 <sup>a</sup>	2,472	2,524	4,996	10,651	15,647	279	15,927
2006	2,497	2,505	5,001	10,859	15,861	242	16,102
2007	2,407	2,371	4,778	10,567	15,345	194	15,539
2008	2,161	2,312	4,473	10,449	14,922	214	15,137
2009	1,804	1,931	3,735	8,726	12,461	200	12,661
2010	1,787	1,912	3,699	8,641	12,339	198	12,537
2011	1,793	1,919	3,712	8,673	12,385	198	12,584

*a. Revised since the 2008 Nathan Associates report.*

*SOURCES: Nathan Associates Inc. from data published in the 1997, 2002, and 2007 Economic Census, the 2005 Service Annual Survey, the 2009 Service Annual Survey, and the 1998 through 2009 Nonemployer Statistics of the U.S. Census Bureau. See Table A-2.1 for revenue of firms with employer establishments and Table A-2.2 for receipts of nonemployer establishments.*



**Table A-2.1**

*Revenue of Firms with Employer Establishments in the Moving and Storage Industry by Industry Segment, 1998-2011 (\$million)*

Year	Specialized Freight Trucking, Used Household and Office Goods					Household Goods Warehousing and Storage	Grand Total, Moving and Storage Industry
	Local without Storage	Local with Storage	Subtotal, Local	Long Distance	Total		
1998	1,289	2,131	3,420	8,499	11,919	307	12,226
1999	1,649	2,410	4,059	9,564	13,623	296	13,919
2000	1,988	2,599	4,588	10,260	14,848	335	15,183
2001	1,953	2,304	4,256	9,045	13,301	344	13,645
2002	2,018	2,165	4,183	8,455	12,638	360	12,998
2003 <sup>a</sup>	2,028	2,141	4,169	8,578	12,747	331	13,078
2004 <sup>a</sup>	2,173	2,256	4,430	9,277	13,707	318	14,025
2005 <sup>a</sup>	2,344	2,392	4,736	10,100	14,836	267	15,103
2006	2,374	2,381	4,754	10,325	15,079	229	15,308
2007	2,282	2,248	4,530	10,019	14,549	181	14,730
2008	2,055	2,205	4,260	9,966	14,226	199	14,425
2009	1,725	1,852	3,577	8,370	11,947	188	12,135
2010	1,709	1,834	3,542	8,288	11,830	187	12,017
2011	1,715	1,841	3,556	8,319	11,874	187	12,062

*a. Revised since the 2008 Nathan Associates report.*

*SOURCES: Nathan Associates Inc. from data published in 1997, 2002, and 2007 Economic Censuses; the 2005 Service Annual Survey (SAS); and the 2009 SAS of the U.S. Census Bureau.*



**Table A-2.2***Receipts of Nonemployer Establishments of the Moving and Storage Industry by Industry Segment, 1998-2011 (\$million)*

Year	Specialized Freight Trucking, Used Household and Office Goods					Household Goods Warehousing and Storage	Grand Total, Moving and Storage Industry
	Local without Storage	Local with Storage	Subtotal, Local	Long Distance	Total		
1998	71	117	188	467	654	9	663
1999	87	127	214	504	717	9	727
2000	99	129	228	510	737	9	747
2001	106	125	231	492	723	9	732
2002	119	128	247	500	747	8	755
2003 <sup>a</sup>	120	127	248	508	756	9	766
2004 <sup>a</sup>	125	130	255	532	786	11	797
2005 <sup>a</sup>	128	131	260	551	811	13	824
2006	123	124	247	535	782	13	794
2007	125	123	248	548	796	14	810
2008	107	107	214	483	696	15	712
2009	79	79	158	357	514	11	526
2010	78	78	156	353	509	11	520
2011	78	78	157	354	511	11	522

*a. Revised since the 2008 Nathan Associates report.**SOURCES: Nathan Associates Inc. from data published in the 1997, 2002, and 2007 Economic Census and the 1998 through 2009 Nonemployer Statistics of the U.S. Census Bureau.*





**Table A-3***Firms with Employer Establishments in the Moving and Storage Industry by Industry Segment, 1998-2011*

Year	Specialized Freight Trucking, Used Household and Office Goods					Household Goods Warehousing and Storage	Grand Total, Moving and Storage Industry
	Local without Storage	Local with Storage	Subtotal, Local	Long Distance	Total		
1998	3,004	2,020	5,024	3,236	8,260	218	8,478
1999	3,040	1,958	4,998	3,234	8,232	220	8,452
2000	3,084	1,902	4,986	3,240	8,226	206	8,432
2001	3,039	1,793	4,832	3,155	7,987	209	8,196
2002	2,999	1,692	4,691	3,077	7,768	211	7,979
2003 <sup>a</sup>	3,004	1,551	4,555	2,933	7,488	171	7,659
2004 <sup>a</sup>	3,187	1,505	4,692	2,967	7,659	159	7,818
2005 <sup>a</sup>	3,388	1,460	4,848	3,010	7,858	146	8,004
2006	3,497	1,372	4,869	2,967	7,836	132	7,968
2007	3,504	1,249	4,753	2,843	7,596	126	7,722
2008	3,514	1,055	4,569	2,668	7,237	115	7,352
2009	3,337	1,002	4,339	2,533	6,872	109	6,981
2010	3,304	992	4,296	2,509	6,805	108	6,913
2011	3,317	996	4,313	2,518	6,831	108	6,939

*a. Revised since the 2008 Nathan Associates report.**SOURCES: Nathan Associates Inc. from data published in 1997, 2002, and 2007 Economic Censuses and 1998-2008 Statistics of U.S. Businesses.*



**Table A-4**

*Employer and Nonemployer (Independent Contractor) Establishments in the Moving and Storage Industry by Industry Segment, 1998-2011*

Year	Specialized Freight Trucking, Used Household and Office Goods					Household Goods Warehousing and Storage	Grand Total, Moving and Storage Industry
	Local without Storage	Local with Storage	Subtotal, Local	Long Distance	Total		
1998	5,540	3,722	9,262	5,966	15,228	574	15,801
1999	5,785	3,722	9,508	6,152	15,660	532	16,192
2000	5,867	3,614	9,481	6,163	15,644	512	16,156
2001	5,831	3,438	9,268	6,052	15,320	492	15,812
2002	6,625	3,738	10,363	6,796	17,159	526	17,685
2003 <sup>a</sup>	6,486	3,349	9,835	6,334	16,169	455	16,624
2004 <sup>a</sup>	6,748	3,185	9,933	6,281	16,214	466	16,680
2005 <sup>a</sup>	7,098	3,057	10,155	6,304	16,459	431	16,890
2006	7,248	2,843	10,091	6,149	16,240	386	16,626
2007	7,923	2,823	10,746	6,429	17,175	343	17,518
2008	8,144	2,341	10,484	6,026	16,511	319	16,830
2009	7,596	2,185	9,780	3,890	13,671	308	13,978
2010	7,521	2,164	9,685	3,852	13,537	305	13,842
2011	7,549	2,172	9,721	3,867	13,587	305	13,893

*a. Revised since the 2008 Nathan Associates report.*

*SOURCES: Nathan Associates Inc. from data published in the 1997, 2002, and 2007 Economic Census, the 1998 through 2008 Statistics of U.S. Business, and the 1998 through 2009 Nonemployer Statistics of the U.S. Census Bureau. See Table A-4.1 for employer establishments and Table A-4.2 for nonemployer (independent contractor) establishments.*



**Table A-4.1***Employer Establishments by Industry Segment, 1998-2011*

Year	Specialized Freight Trucking, Used Household and Office Goods					Household Goods Warehousing and Storage	Grand Total, Moving and Storage Industry
	Local without Storage	Local with Storage	Subtotal, Local	Long Distance	Total		
1998	3,375	2,269	5,643	3,635	9,278	383	9,661
1999	3,405	2,193	5,598	3,621	9,219	329	9,548
2000	3,429	2,115	5,544	3,603	9,147	317	9,464
2001	3,391	2,001	5,392	3,521	8,913	300	9,213
2002	3,390	1,913	5,303	3,478	8,781	306	9,087
2003 <sup>a</sup>	3,353	1,731	5,084	3,274	8,358	243	8,601
2004 <sup>a</sup>	3,544	1,673	5,217	3,299	8,516	252	8,768
2005 <sup>a</sup>	3,756	1,618	5,375	3,336	8,711	232	8,943
2006	3,875	1,520	5,395	3,288	8,683	206	8,889
2007	3,922	1,398	5,320	3,182	8,502	185	8,687
2008	3,913	1,175	5,088	2,971	8,059	155	8,214
2009	3,716	1,116	4,832	2,821	7,653	147	7,800
2010	3,679	1,105	4,784	2,794	7,578	145	7,723
2011	3,693	1,109	4,802	2,804	7,606	146	7,752

*a. Revised since the 2008 Nathan Associates report.**SOURCES: Nathan Associates Inc. from data published in 1997, 2002, and 2007 Economic Censuses; 1998-2008 Statistics of U.S. Businesses; and 2009 County Business Patterns of the U.S. Census Bureau.*



**Table A-4.2***Nonemployer (Independent Contractors) Establishments by Industry Segment, 1998-2011*

Year	Specialized Freight Trucking, Used Household and Office Goods					Household Goods Warehousing and Storage	Grand Total, Moving and Storage Industry
	Local without Storage	Local with Storage	Subtotal, Local	Long Distance	Total		
1998	2,165	1,453	3,619	2,331	5,950	191	6,141
1999	2,381	1,529	3,910	2,530	6,441	203	6,644
2000	2,438	1,499	3,937	2,560	6,497	195	6,692
2001	2,439	1,437	3,876	2,531	6,407	192	6,599
2002	3,235	1,825	5,060	3,318	8,378	220	8,598
2003 <sup>a</sup>	3,134	1,618	4,751	3,060	7,811	212	8,023
2004 <sup>a</sup>	3,204	1,512	4,716	2,982	7,698	214	7,912
2005 <sup>a</sup>	3,342	1,439	4,781	2,967	7,748	199	7,947
2006	3,373	1,323	4,696	2,861	7,557	179	7,736
2007	4,001	1,426	5,427	3,246	8,673	157	8,830
2008	4,231	1,166	5,396	3,055	8,452	165	8,616
2009	3,880	1,069	4,949	1,069	6,018	161	6,179
2010	3,842	1,059	4,900	1,059	5,959	159	6,118
2011	3,856	1,063	4,919	1,063	5,981	159	6,140

*a. Revised since the 2008 Nathan Associates report.**SOURCES: Nathan Associates Inc. from data published in the 1997, 2002, and 2007 Economic Census and the 1998 through 2009 Nonemployer Statistics of the U.S. Census Bureau.*





**Table A-5**

*Employees<sup>a</sup> and Independent Contractors<sup>b</sup> in the Moving and Storage Industry by Industry Segment, 1998-2011*

Year	Specialized Freight Trucking, Used Household and Office Goods					Household Goods Warehousing and Storage <sup>c</sup>	Grand Total, Moving and Storage Industry
	Local without Storage	Local with Storage	Subtotal, Local	Long Distance	Total		
1998	25,639	36,211	61,849	68,156	130,005	8,240	138,245
1999	28,640	36,158	64,798	68,602	133,401	6,726	140,127
2000	31,370	35,702	67,072	68,330	135,402	6,813	142,215
2001	33,477	34,506	67,983	66,646	134,629	6,311	140,940
2002	32,983	30,520	63,502	59,434	122,936	5,197	128,133
2003 <sup>d</sup>	32,231	28,549	60,780	56,423	117,203	4,208	121,411
2004 <sup>d</sup>	32,804	27,807	60,611	55,788	116,399	4,293	120,692
2005 <sup>d</sup>	34,183	27,743	61,926	56,520	118,446	3,785	122,231
2006	34,446	26,770	61,215	55,400	116,615	3,313	119,929
2007	34,691	25,563	60,254	53,800	114,054	2,999	117,053
2008	32,309	23,613	55,922	50,314	106,236	1,983	108,219
2009	28,631	20,797	49,428	43,184	92,612	1,771	94,383
2010	28,065	20,496	48,561	43,144	91,705	1,754	93,459
2011	28,170	20,572	48,742	43,305	92,048	1,754	93,802

*a. Includes paid employees for pay period including March 12. Paid employees include full and part time employees; salaried officers and executives of corporations; and employees on paid sick leave, paid holidays, and paid vacations. Not included are proprietors and partners of unincorporated businesses, full and part time leased employees, and temporary staffing obtained from a service.*

*b. Independent contractors are the number of nonemployer establishments.*

*c. SUSB data for 2002 and earlier reported statistics for industry 95-Auxiliaries, exc corp, subsidiary, & regional managing offices. Beginning in 2003, SUSB no longer reported industry 95 separately, which would have included enterprise support activities. Instead industry 95 activities were classified by the industry benefitting from the activities. Hence, there is an inconsistency in the time series of 1998-2002 and 2003-2008 SUSB data, and the inconsistency has significant effect on the warehousing and storage industry, which includes many establishments that provide enterprise support. Such establishments have employees and payroll, but usually no revenue. A warehouse owned by a furniture retailer is an example. To mitigate the effect of this inconsistency in the other warehousing and storage industry (NAICS 49319), which includes the household goods warehousing and storage industry (NAICS 4931901), we adjust reported industry activity in 2003-2008 downward to exclude enterprise support activity reported in the 2002 and 2007 Economic Censuses.*

*d. Revised since the 2008 Nathan Associates report.*

*SOURCES: Nathan Associates Inc. from data published in 1997, 2002, and 2007 Economic Censuses; 1998-2008 Statistics of U.S. Businesses; 2009 County Business Patterns; and 1998-2009 Nonemployer Statistics of the U.S. Census Bureau. See Table A-5.1 for employees and Table A-5.2 for independent contractors.*



**Table A-5.1***Employees<sup>a</sup> in the Moving and Storage Industry by Industry Segment, 1998-2011*

Year	Specialized Freight Trucking, Used Household and Office Goods					Household Goods Warehousing and Storage <sup>b</sup>	Grand Total, Moving and Storage Industry
	Local without Storage	Local with Storage	Subtotal, Local	Long Distance	Total		
1998	23,473	34,757	58,231	65,824	124,055	8,049	132,104
1999	26,259	34,629	60,888	66,072	126,960	6,523	133,483
2000	28,932	34,202	63,134	65,771	128,905	6,619	135,524
2001	31,038	33,069	64,107	64,115	128,222	6,120	134,342
2002	29,748	28,695	58,443	56,115	114,558	4,977	119,535
2003 <sup>c</sup>	29,097	26,932	56,029	53,363	109,392	3,996	113,388
2004 <sup>c</sup>	29,599	26,295	55,895	52,806	108,701	4,079	112,780
2005 <sup>c</sup>	30,842	26,304	57,146	53,552	110,698	3,586	114,284
2006	31,073	25,447	56,520	52,538	109,058	3,134	112,192
2007	30,690	24,137	54,827	50,554	105,381	2,842	108,223
2008	28,078	22,447	50,525	47,259	97,784	1,819	99,603
2009	24,751	19,728	44,479	42,115	86,594	1,611	88,205
2010	24,224	19,437	43,661	42,086	85,746	1,595	87,341
2011	24,314	19,510	43,824	42,243	86,067	1,595	87,662

*a. Includes paid employees for pay period including March 12. Paid employees include full and part time employees; salaried officers and executives of corporations; and employees on paid sick leave, paid holidays, and paid vacations. Not included are proprietors and partners of unincorporated businesses, full and part time leased employees, and temporary staffing obtained from a service.*

*b. SUSB data for 2002 and earlier reported statistics for industry 95-Auxiliaries, exc corp, subsidiary, & regional managing offices. Beginning in 2003, SUSB no longer reported industry 95 separately, which would have included enterprise support activities. Instead industry 95 activities were classified by the industry benefitting from the activities. Hence, there is an inconsistency in the time series of 1998-2002 and 2003-2008 SUSB data, and the inconsistency has significant effect on the warehousing and storage industry, which includes many establishments that provide enterprise support. Such establishments have employees and payroll, but usually no revenue. A warehouse owned by a furniture retailer is an example. To mitigate the effect of this inconsistency in the other warehousing and storage industry (NAICS 49319) , which includes the household goods warehousing and storage industry (NAICS 4931901), we adjust reported industry activity in 2003-2008 downward to exclude enterprise support activity reported in the 2002 and 2007 Economic Censuses.*

*c. Revised since the 2008 Nathan Associates report.*

*SOURCES: Nathan Associates Inc. from data published in 1997, 2002, and 2007 Economic Censuses; 1998-2008 Statistics of U.S. Businesses; 2009 County Business Patterns; and 1998-2009 Nonemployer Statistics of the U.S. Census Bureau.*



**Table A-5.2***Independent Contractors in the Moving and Storage Industry by Industry Segment, 1998-2011*

Year	Specialized Freight Trucking, Used Household and Office Goods					Household Goods Warehousing and Storage	Grand Total, Moving and Storage Industry
	Local without Storage	Local with Storage	Subtotal, Local	Long Distance	Total		
1998	2,165	1,453	3,619	2,331	5,950	191	6,141
1999	2,381	1,529	3,910	2,530	6,441	203	6,644
2000	2,438	1,499	3,937	2,560	6,497	195	6,692
2001	2,439	1,437	3,876	2,531	6,407	192	6,599
2002	3,235	1,825	5,060	3,318	8,378	220	8,598
2003 <sup>a</sup>	3,134	1,618	4,751	3,060	7,811	212	8,023
2004 <sup>a</sup>	3,204	1,512	4,716	2,982	7,698	214	7,912
2005 <sup>a</sup>	3,342	1,439	4,781	2,967	7,748	199	7,947
2006	3,373	1,323	4,696	2,861	7,557	179	7,736
2007	4,001	1,426	5,427	3,246	8,673	157	8,830
2008	4,231	1,166	5,396	3,055	8,452	165	8,616
2009	3,880	1,069	4,949	1,069	6,018	161	6,179
2010	3,842	1,059	4,900	1,059	5,959	159	6,118
2011	3,856	1,063	4,919	1,063	5,981	159	6,140

*a. Revised since the 2008 Nathan Associates report.**SOURCES: Nathan Associates Inc. from data published in the 1997, 2002, and 2007 Economic Census and the 1998 through 2009 Nonemployer Statistics of the U.S. Census Bureau.*



**Table A-6***Payroll<sup>a</sup> of Firms with Employer Establishments in the Moving and Storage Industry by Industry Segment, 1998-2011 (\$million)*

Year	Specialized Freight Trucking, Used Household and Office Goods					Household Goods Warehousing and Storage <sup>b</sup>	Grand Total, Moving and Storage Industry
	Local without Storage	Local with Storage	Subtotal, Local	Long Distance	Total		
1998	494	878	1,372	1,902	3,273	195	3,469
1999	579	906	1,484	1,969	3,454	167	3,621
2000	675	938	1,613	2,048	3,661	171	3,833
2001	735	916	1,651	2,007	3,658	165	3,823
2002	721	810	1,531	1,783	3,314	160	3,475
2003 <sup>c</sup>	669	752	1,421	1,656	3,077	117	3,194
2004 <sup>c</sup>	722	813	1,535	1,790	3,325	125	3,450
2005 <sup>c</sup>	750	844	1,594	1,859	3,453	111	3,564
2006	744	839	1,583	1,847	3,431	102	3,533
2007	730	823	1,552	1,813	3,365	86	3,451
2008	629	765	1,393	1,724	3,117	62	3,180
2009	526	687	1,213	1,552	2,765	55	2,820
2010	520	681	1,201	1,537	2,738	55	2,793
2011	522	683	1,206	1,543	2,748	55	2,803

a. Payroll includes all forms of compensation such as salaries, wages, commissions, dismissal pay, bonuses, vacation allowances, sick leave pay, and employee contributions to a qualified pension plan paid during the year to all employees and reported on IRS form 941 as taxable Medicare wages and tips (even if not subject to income or FICA tax). For corporations, payroll includes amounts paid to officers and executives. For unincorporated businesses, it does not include profit or other compensation of proprietors or partners. Payroll is reported before deductions for social security, income tax, insurance, and union dues.

b. SUSB data for 2002 and earlier reported statistics for industry 95-Auxiliaries, exc corp, subsidiary, & regional managing offices. Beginning in 2003, SUSB no longer reported industry 95 separately, which would have included enterprise support activities. Instead industry 95 activities were classified by the industry benefiting from the activities. Hence, there is an inconsistency in the time series of 1998-2002 and 2003-2008 SUSB data, and the inconsistency has significant effect on the warehousing and storage industry, which includes many establishments that provide enterprise support. Such establishments have employees and payroll, but usually no revenue. A warehouse owned by a furniture retailer is an example. To mitigate the effect of this inconsistency in the other warehousing and storage industry (NAICS 49319) , which includes the household goods warehousing and storage industry (NAICS 4931901), we adjust reported industry activity in 2003-2008 downward to exclude enterprise support activity reported in the 2002 and 2007 Economic Censuses.

c. Revised since the 2008 Nathan Associates report.

SOURCES: Nathan Associates Inc. from data published in 1997, 2002, and 2007 Economic Censuses; 1998-2008 Statistics of U.S. Businesses, and 2009 County Business Patterns of the U.S. Census Bureau.





**Table A-6.1**

*Payroll<sup>a</sup> Share of Revenue at Firms with Employer Establishments in the Moving and Storage Industry by Industry Segment, 1998-2011 (%)*

Year	Specialized Freight Trucking, Used Household and Office Goods					Household Goods Warehousing and Storage <sup>b</sup>	Grand Total, Moving and Storage Industry
	Local without Storage	Local with Storage	Subtotal, Local	Long Distance	Total		
1998	38.3%	41.2%	40.1%	22.4%	27.5%	63.6%	28.4%
1999	35.1%	37.6%	36.6%	20.6%	25.4%	56.4%	26.0%
2000	33.9%	36.1%	35.2%	20.0%	24.7%	51.1%	25.2%
2001	37.6%	39.8%	38.8%	22.2%	27.5%	48.1%	28.0%
2002	35.7%	37.4%	36.6%	21.1%	26.2%	44.6%	26.7%
2003 <sup>c</sup>	33.0%	35.1%	34.1%	19.3%	24.1%	35.4%	24.4%
2004 <sup>c</sup>	33.2%	36.0%	34.7%	19.3%	24.3%	39.4%	24.6%
2005 <sup>c</sup>	32.0%	35.3%	33.7%	18.4%	23.3%	41.7%	23.6%
2006	31.4%	35.2%	33.3%	17.9%	22.8%	44.6%	23.1%
2007	32.0%	36.6%	34.3%	18.1%	23.1%	47.5%	23.4%
2008	30.6%	34.7%	32.7%	17.3%	21.9%	31.3%	22.0%
2009	30.5%	37.1%	33.9%	18.5%	23.1%	29.4%	23.2%
2010	30.5%	37.1%	33.9%	18.5%	23.1%	29.4%	23.2%
2011	30.5%	37.1%	33.9%	18.5%	23.1%	29.4%	23.2%

a. Payroll includes all forms of compensation such as salaries, wages, commissions, dismissal pay, bonuses, vacation allowances, sick leave pay, and employee contributions to a qualified pension plan paid during the year to all employees and reported on IRS form 941 as taxable Medicare wages and tips (even if not subject to income or FICA tax). For corporations, payroll includes amounts paid to officers and executives. For unincorporated businesses, it does not include profit or other compensation of proprietors or partners. Payroll is reported before deductions for social security, income tax, insurance, and union dues.

b. SUSB data for 2002 and earlier reported statistics for industry 95-Auxiliaries, exc corp, subsidiary, & regional managing offices. Beginning in 2003, SUSB no longer reported industry 95 separately, which would have included enterprise support activities. Instead industry 95 activities were classified by the industry benefitting from the activities. Hence, there is an inconsistency in the time series of 1998-2002 and 2003-2008 SUSB data, and the inconsistency has significant effect on the warehousing and storage industry, which includes many establishments that provide enterprise support. Such establishments have employees and payroll, but usually no revenue. A warehouse owned by a furniture retailer is an example. To mitigate the effect of this inconsistency in the other warehousing and storage industry (NAICS 49319), which includes the household goods warehousing and storage industry (NAICS 4931901), we adjust reported industry activity in 2003-2008 downward to exclude enterprise support activity reported in the 2002 and 2007 Economic Censuses.

c. Revised since the 2008 Nathan Associates report.

SOURCES: Nathan Associates Inc. Appendix A, Tables A-2.1 for revenue and A-6 for payroll.



**Table A-6.2***Payroll<sup>a</sup> Per Employee in the Moving and Storage Industry by Industry Segment, 1998-2011 (\$)*

Year	Specialized Freight Trucking, Used Household and Office Goods					Household Goods Warehousing and Storage <sup>b</sup>	Grand Total, Moving and Storage Industry
	Local without Storage	Local with Storage	Subtotal, Local	Long Distance	Total		
1998	21,053	25,249	23,557	28,889	26,386	24,282	26,258
1999	22,047	26,149	24,380	29,804	27,203	25,618	27,126
2000	23,322	27,434	25,550	31,143	28,404	25,868	28,280
2001	23,683	27,694	25,752	31,304	28,528	27,039	28,460
2002	24,244	28,233	26,202	31,770	28,929	32,242	29,067
2003 <sup>c</sup>	22,996	27,931	25,368	31,027	28,128	29,333	28,171
2004 <sup>c</sup>	24,409	30,914	27,469	33,891	30,589	30,754	30,595
2005 <sup>c</sup>	24,308	32,095	27,893	34,714	31,193	31,027	31,187
2006	23,952	32,963	28,009	35,164	31,456	32,586	31,488
2007	23,770	34,090	28,313	35,857	31,932	30,208	31,887
2008	22,392	34,064	27,577	36,475	31,878	34,328	31,922
2009	21,236	34,843	27,271	36,851	31,930	34,385	31,975
2010	21,486	35,017	27,510	36,516	31,930	34,385	31,975
2011	21,486	35,017	27,510	36,516	31,930	34,507	31,977

a. Payroll includes all forms of compensation such as salaries, wages, commissions, dismissal pay, bonuses, vacation allowances, sick leave pay, and employee contributions to a qualified pension plan paid during the year to all employees and reported on IRS form 941 as taxable Medicare wages and tips (even if not subject to income or FICA tax). For corporations, payroll includes amounts paid to officers and executives. For unincorporated businesses, it does not include profit or other compensation of proprietors or partners. Payroll is reported before deductions for social security, income tax, insurance, and union dues.

b. SUSB data for 2002 and earlier reported statistics for industry 95-Auxiliaries, exc corp, subsidiary, & regional managing offices. Beginning in 2003, SUSB no longer reported industry 95 separately, which would have included enterprise support activities. Instead industry 95 activities were classified by the industry benefitting from the activities. Hence, there is an inconsistency in the time series of 1998-2002 and 2003-2008 SUSB data, and the inconsistency has significant effect on the warehousing and storage industry, which includes many establishments that provide enterprise support. Such establishments have employees and payroll, but usually no revenue. A warehouse owned by a furniture retailer is an example. To mitigate the effect of this inconsistency in the other warehousing and storage industry (NAICS 49319), which includes the household goods warehousing and storage industry (NAICS 4931901), we adjust reported industry activity in 2003-2008 downward to exclude enterprise support activity reported in the 2002 and 2007 Economic Censuses.

c. Revised since the 2008 Nathan Associates report.

SOURCES: Nathan Associates Inc. See Appendix A, Tables A-6 for payroll and A-5.1 for employees.



# Appendix B

## Output Multipliers



**Table B***Output Multipliers for Truck Transportation and Warehousing & Storage*

Industry Code	Description	Truck Transportation	Warehousing & Storage
111CA and 113FF	Farms, forestry, fishing, and related activities	0.0017596	0.0011062
211	Oil and gas extraction	0.1352672	0.0184174
212	Mining, except oil and gas	0.0029508	0.0016781
213	Support activities for mining	0.0023935	0.0003579
22	Utilities	0.0080537	0.0134179
23	Construction	0.0127549	0.0084448
321	Wood products	0.0021546	0.0016158
327	Nonmetallic mineral products	0.0026605	0.0017136
331	Primary metals	0.0147927	0.0068168
332	Fabricated metal products	0.0197293	0.0086663
333	Machinery	0.0062568	0.0086630
334	Computer and electronic products	0.0083319	0.0049898
335	Electrical equipment, appliances, and components	0.0044230	0.0053158
3361MV	Motor vehicles, bodies and trailers, and parts	0.0298231	0.0100332
3364OT	Other transportation equipment	0.0015368	0.0005714
337	Furniture and related products	0.0003419	0.0002855
339	Miscellaneous manufacturing	0.0011651	0.0017634
311FT	Food and beverage and tobacco products	0.0022212	0.0013356
313TT	Textile mills and textile product mills	0.0011142	0.0005717
315AL	Apparel and leather and allied products	0.0004093	0.0001966
322	Paper products	0.0055132	0.0050939
323	Printing and related support activities	0.0028731	0.0016262
324	Petroleum and coal products	0.1893550	0.0220275
325	Chemical products	0.0187377	0.0084155
326	Plastics and rubber products	0.0128846	0.0051453
42	Wholesale trade	0.0362422	0.0138894
44RT	Retail trade	0.0153718	0.0016014
481	Air transportation	0.0054937	0.0022176
482	Rail transportation	0.0163802	0.0010910
483	Water transportation	0.0005146	0.0001134
484	Truck transportation	1.0542454	0.0051279
485	Transit and ground passenger transportation	0.0003389	0.0002035
486	Pipeline transportation	0.0043163	0.0008572
487OS	Other transportation and support activities	0.0554692	0.0182684
493	Warehousing and storage	0.0117939	1.0395257
511	Publishing industries (includes software)	0.0036513	0.0028388
512	Motion picture and sound recording industries	0.0012403	0.0008589
513	Broadcasting and telecommunications	0.0169923	0.0113906
514	Information and data processing services	0.0021462	0.0017184
521CI	Federal Reserve banks, credit intermediation, and related activities	0.0260161	0.0215940
523	Securities, commodity contracts, and investments	0.0121040	0.0075300
524	Insurance carriers and related activities	0.0574211	0.0187034
525	Funds, trusts, and other financial vehicles	0.0004867	0.0002244
531	Real estate	0.0211001	0.0540275
532RL	Rental and leasing services and lessors of intangible assets	0.0119846	0.0077328
5411	Legal services	0.0077157	0.0060189
5415	Computer systems design and related services	0.0099250	0.0061199
5412OP	Miscellaneous professional, scientific, and technical services	0.0364352	0.0268528
55	Management of companies and enterprises	0.0238728	0.0181031
561	Administrative and support services	0.0674736	0.0412951
562	Waste management and remediation services	0.0030170	0.0038110
61	Educational services	0.0001961	0.0001072
621	Ambulatory health care services	0.0000337	0.0000245
622HO	Hospitals and nursing and residential care facilities	0.0000155	0.0000086
624	Social assistance	0.0000067	0.0000038
711AS	Performing arts, spectator sports, museums, and related activities	0.0019451	0.0035080
713	Amusements, gambling, and recreation industries	0.0001890	0.0001284
721	Accommodation	0.0017701	0.0024893
722	Food services and drinking places	0.0046633	0.0036479
81	Other services, except government	0.0140098	0.0115083
GFG	Federal general government	0.0042864	0.0023725
GFE	Federal government enterprises	0.0260418	0.0100233
GFG and GFE	Federal government, general and enterprises	0.0303282	0.0123958
GSLG	State and local general government	0.0019993	0.0011207
GSLE	State and local government enterprises	0.0074986	0.0069814
GSLG and GSLE	State and local government, general and enterprises	0.0094979	0.0081021
<b>Total industry output requirement</b>		<b>2.0519073</b>	<b>1.4919082</b>

Note: Values indicate total output required from each row industry for each \$1 of output produced by the column industry.

SOURCE: Industry-by-industry total requirements table, 2010, Bureau of Economic Analysis, U.S. Department of Commerce at [http://www.bea.gov/industry/io\\_annual.htm](http://www.bea.gov/industry/io_annual.htm).





# Appendix C

## Total Economic Impact of the Moving and Storage Industry



**Table C-1**

*Total Moving and Storage Industry Impact on Jobs, including Direct, Indirect, and Induced Effects, by State, 2011*

State	Direct	Indirect and Induced	Total Jobs
Alabama	1,148	1,950	3,099
Alaska	511	691	1,203
Arizona	1,685	2,847	4,533
Arkansas	394	616	1,010
California	10,181	17,199	27,380
Colorado	2,446	4,595	7,041
Connecticut	1,436	2,089	3,525
Delaware	317	521	838
District of Columbia	189	138	327
Florida	3,746	6,112	9,858
Georgia	2,701	4,757	7,459
Hawaii	950	1,361	2,311
Idaho	455	621	1,076
Illinois	4,201	8,136	12,337
Indiana	2,399	4,640	7,039
Iowa	635	813	1,448
Kansas	884	1,518	2,403
Kentucky	930	1,756	2,686
Louisiana	751	1,231	1,982
Maine	445	737	1,182
Maryland	2,805	4,571	7,376
Massachusetts	2,724	4,253	6,977
Michigan	1,931	3,327	5,259
Minnesota	1,325	2,369	3,695
Mississippi	490	767	1,258
Missouri	2,387	4,265	6,652
Montana	379	667	1,045
Nebraska	614	797	1,411
Nevada	874	1,155	2,029
New Hampshire	429	723	1,152
New Jersey	4,080	7,841	11,921
New Mexico	371	620	991
New York	6,564	8,232	14,795
North Carolina	3,018	4,957	7,975
North Dakota	234	331	566
Ohio	2,887	5,914	8,801
Oklahoma	909	1,677	2,586
Oregon	1,110	1,915	3,025
Pennsylvania	3,283	6,811	10,094
Rhode Island	402	618	1,019
South Carolina	1,159	2,062	3,221
South Dakota	193	228	421
Tennessee	1,575	2,939	4,514
Texas	6,267	11,713	17,981
Utah	735	1,656	2,392
Vermont	161	267	427
Virginia	4,072	6,421	10,493
Washington	2,619	4,276	6,895
West Virginia	204	322	525
Wisconsin	1,604	3,017	4,621
Wyoming	237	334	571
U.S. total /a	93,802	159,047	252,849

a. State-specific jobs exclude the household goods warehousing and storage segment for which a state distribution is unavailable. The U.S. total does include direct, indirect, and total job effects of the segment.

SOURCES: Nathan Associates Inc. from Bureau of Economic Analysis direct effect multipliers for each state and for an aggregate region defined as the contiguous 48 states plus the District of Columbia.



**Table C-2**

*Total Moving and Storage Industry Impact on Household Earnings from Labor, including Direct, Indirect, and Induced Effects, by State, 2011 (\$million)*

State	Direct	Indirect and Induced	Total Household Earnings
Alabama	26.6	40.4	67.0
Alaska	16.0	21.0	37.0
Arizona	48.2	74.9	123.1
Arkansas	8.1	11.4	19.4
California	299.7	549.6	849.4
Colorado	64.1	114.6	178.7
Connecticut	54.5	74.8	129.3
Delaware	12.3	17.6	29.9
District of Columbia	8.1	6.4	14.5
Florida	94.5	147.3	241.9
Georgia	70.4	122.4	192.9
Hawaii	30.8	43.7	74.5
Idaho	12.3	14.4	26.7
Illinois	163.7	307.8	471.5
Indiana	86.1	144.1	230.2
Iowa	13.2	15.5	28.7
Kansas	24.3	38.1	62.4
Kentucky	27.9	43.8	71.7
Louisiana	17.5	29.1	46.6
Maine	14.6	20.4	35.0
Maryland	81.5	123.1	204.6
Massachusetts	94.5	138.4	232.9
Michigan	69.8	110.5	180.3
Minnesota	44.5	71.3	115.9
Mississippi	12.5	17.7	30.2
Missouri	71.7	112.4	184.1
Montana	10.4	14.4	24.8
Nebraska	17.2	20.9	38.2
Nevada	23.4	29.8	53.2
New Hampshire	11.8	17.0	28.8
New Jersey	139.9	252.9	392.8
New Mexico	10.2	15.1	25.3
New York	189.0	240.4	429.4
North Carolina	82.9	123.1	206.0
North Dakota	5.3	6.2	11.5
Ohio	88.5	158.3	246.8
Oklahoma	26.2	44.0	70.2
Oregon	32.0	48.9	81.0
Pennsylvania	93.4	164.5	257.8
Rhode Island	13.0	17.5	30.5
South Carolina	30.9	48.2	79.1
South Dakota	4.1	4.1	8.2
Tennessee	44.3	77.1	121.3
Texas	185.2	372.6	557.8
Utah	21.9	42.3	64.2
Vermont	4.9	6.3	11.2
Virginia	134.7	200.7	335.4
Washington	80.4	129.9	210.2
West Virginia	4.8	6.6	11.4
Wisconsin	51.5	78.0	129.5
Wyoming	6.5	7.6	14.1
U.S. total /a	2,836.7	4,591.8	7,428.5

a. State-specific household earnings exclude the household goods warehousing and storage segment for which a state distribution is unavailable. The U.S. total does include direct, indirect, and total household earnings effects of the segment. SOURCES: Nathan Associates Inc. from Bureau of Economic Analysis direct effect multipliers for each state and for an aggregate region defined as the contiguous 48 states plus the District of Columbia.



**Table C-3**

*Total Moving and Storage Industry Impact on Federal Individual Income Tax Revenue by State, 2011 (\$million)*

State	Total Household Earnings Effect of the Moving and Storage Industry	Estimated Adjusted Gross Income from Earnings	Estimated Taxable Income	Average Tax Rate	Total Tax Liability
Alabama	67.02	81.15	29.89	11.73%	3.51
Alaska	36.99	45.72	21.71	12.40%	2.69
Arizona	123.11	148.65	56.87	12.02%	6.83
Arkansas	19.44	23.81	8.92	11.95%	1.07
California	849.38	1,035.02	394.25	13.30%	52.44
Colorado	178.72	214.57	91.56	12.65%	11.59
Connecticut	129.31	166.40	75.17	12.86%	9.66
Delaware	29.94	37.99	16.44	11.65%	1.92
District of Columbia	14.47	17.15	8.42	12.66%	1.07
Florida	241.89	299.55	118.48	12.37%	14.66
Georgia	192.87	226.46	81.43	12.19%	9.92
Hawaii	74.55	90.37	40.70	12.39%	5.04
Idaho	26.72	32.76	12.04	11.96%	1.44
Illinois	471.51	591.40	239.94	12.31%	29.54
Indiana	230.18	294.27	118.46	11.70%	13.87
Iowa	28.75	36.27	15.82	11.97%	1.89
Kansas	62.36	76.98	32.08	11.91%	3.82
Kentucky	71.72	89.89	35.41	11.91%	4.22
Louisiana	46.62	54.79	21.40	12.20%	2.61
Maine	34.99	44.69	19.40	12.73%	2.47
Maryland	204.64	246.49	105.05	12.13%	12.74
Massachusetts	232.87	294.48	138.92	12.79%	17.77
Michigan	180.32	253.37	99.96	12.10%	12.09
Minnesota	115.87	144.38	63.65	12.33%	7.85
Mississippi	30.19	35.56	12.53	11.82%	1.48
Missouri	184.15	229.08	94.24	12.08%	11.38
Montana	24.76	31.34	12.88	12.59%	1.62
Nebraska	38.17	45.40	19.64	11.99%	2.35
Nevada	53.20	62.88	25.47	11.92%	3.04
New Hampshire	28.80	36.10	16.75	13.01%	2.18
New Jersey	392.85	501.96	214.20	12.42%	26.61
New Mexico	25.27	30.84	12.02	11.81%	1.42
New York	429.40	535.90	229.35	12.87%	29.53
North Carolina	206.00	252.91	95.18	11.96%	11.39
North Dakota	11.47	14.02	6.60	12.51%	0.83
Ohio	246.84	318.54	139.30	12.01%	16.73
Oklahoma	70.20	85.35	33.70	12.05%	4.06
Oregon	80.96	104.53	41.83	12.70%	5.31
Pennsylvania	257.82	337.13	148.03	12.06%	17.85
Rhode Island	30.51	38.58	17.08	12.44%	2.12
South Carolina	79.11	96.95	36.46	11.73%	4.28
South Dakota	8.21	9.92	4.40	12.32%	0.54
Tennessee	121.30	148.09	57.02	12.47%	7.11
Texas	557.80	652.26	249.85	12.51%	31.25
Utah	64.18	74.93	27.36	11.35%	3.11
Vermont	11.17	14.10	6.43	13.07%	0.84
Virginia	335.37	401.26	169.81	12.11%	20.56
Washington	210.24	262.74	113.16	12.47%	14.11
West Virginia	11.40	14.75	5.92	11.78%	0.70
Wisconsin	129.53	163.48	70.21	11.88%	8.34
Wyoming	14.09	16.83	7.52	12.25%	0.92
Sum of state totals	7,317.23	na	na	na	460.34
U.S. warehousing & storage /a	111.23	136.82	55.47	12.41%	6.88
U.S. total	7,428.46	na	na	na	467.22

Note: "na" means not applicable.

a. State distribution is unavailable.

SOURCES: Nathan Associates Inc. from data presented in "Table 2. Individual Income and Tax Data, by State

and Size of Adjusted Gross Income, Tax Year 2009," SOI Tax Stats available at <http://www.irs.gov/taxstats/article/0,,id=171535,00.html>.





**Table C-4**

*Total Moving and Storage Industry Impact on State Individual Income Tax Revenue by State, 2011 (\$million)*

State	State Individual Income Tax Collections, 2009 (1)	Federal Individual Income Tax Liabilities (all returns), 2009 (2)	State as a Share of Federal (3)=(2)/(3)	Federal Individual Income Tax Liability (4)	State Individual Income Tax Revenue from Moving and Storage Industry (5)=(3)x(4)
Alabama	2,662.8	10,386.7	25.6%	3.51	0.90
Alaska	0	na	na	2.69	na
Arizona	2,575.8	14,943.4	17.2%	6.83	1.18
Arkansas	2,239.0	5,694.9	39.3%	1.07	0.42
California	44,356.0	127,986.6	34.7%	52.44	18.17
Colorado	4,403.4	16,951.9	26.0%	11.59	3.01
Connecticut	5,609.3	21,452.9	26.1%	9.66	2.53
Delaware	910.7	2,693.3	33.8%	1.92	0.65
District of Columbia /a	1,296.4	3,164.5	41.0%	1.07	0.44
Florida	0	na	na	14.66	na
Georgia	7,801.2	23,730.8	32.9%	9.92	3.26
Hawaii	1,338.7	3,703.8	36.1%	5.04	1.82
Idaho	1,175.6	2,948.8	39.9%	1.44	0.57
Illinois	9,222.6	45,585.7	20.2%	29.54	5.98
Indiana	4,313.8	14,847.0	29.1%	13.87	4.03
Iowa	2,703.2	7,478.1	36.1%	1.89	0.68
Kansas	2,731.6	7,870.9	34.7%	3.82	1.33
Kentucky	3,315.4	8,745.7	37.9%	4.22	1.60
Louisiana	2,940.6	11,525.3	25.5%	2.61	0.67
Maine	1,370.7	3,064.3	44.7%	2.47	1.10
Maryland	6,478.2	23,147.6	28.0%	12.74	3.57
Massachusetts	10,599.1	31,095.2	34.1%	17.77	6.06
Michigan	5,856.8	23,987.5	24.4%	12.09	2.95
Minnesota	6,948.1	17,253.3	40.3%	7.85	3.16
Mississippi	1,485.6	5,100.8	29.1%	1.48	0.43
Missouri	4,771.6	15,136.3	31.5%	11.38	3.59
Montana	827.2	2,305.9	35.9%	1.62	0.58
Nebraska	1,602.1	4,728.4	33.9%	2.35	0.80
Nevada	0	na	na	3.04	na
New Hampshire	98.2	4,808.5	2.0%	2.18	0.04
New Jersey	958.5	42,607.3	2.2%	26.61	0.60
New Mexico	958.5	4,831.3	19.8%	1.42	0.28
New York	36,840.0	88,034.1	41.8%	29.53	12.36
North Carolina	9,560.4	21,674.4	44.1%	11.39	5.02
North Dakota	370.2	2,037.7	18.2%	0.83	0.15
Ohio	8,323.4	28,371.6	29.3%	16.73	4.91
Oklahoma	2,544.6	8,813.3	28.9%	4.06	1.17
Oregon	5,162.4	9,205.5	56.1%	5.31	2.98
Pennsylvania	9,550.2	39,714.1	24.0%	17.85	4.29
Rhode Island	960.9	3,231.5	29.7%	2.12	0.63
South Carolina	2,812.3	9,280.9	30.3%	4.28	1.30
South Dakota	0	na	na	0.54	na
Tennessee	221.7	15,179.2	1.5%	7.11	0.10
Texas	0	na	na	31.25	na
Utah	2,319.6	5,800.0	40.0%	3.11	1.24
Vermont	532.9	1,710.8	31.1%	0.84	0.26
Virginia	9,194.4	29,751.5	30.9%	20.56	6.35
Washington	0	23,143.4	0.0%	14.11	na
West Virginia	1,557.4	3,676.5	42.4%	0.70	0.30
Wisconsin	5,971.2	15,559.9	38.4%	8.34	3.20
Wyoming	0.0	na	na	0.92	na
Total /b	na	na	na	460.34	114.66

Note: "na" means not applicable because the state has no income tax.

a. Data are from the 2008 Nathan report, that is, they are for 2005.

b. Excludes state individual income tax revenue collected from household earnings in the warehousing and storage segment of the industry. A state distribution of earnings is not available.

SOURCE: Nathan Associates Inc. from "State Government Tax Collections, 2009" of the U.S. Census Bureau available at <http://www.census.gov/govs/statetax/SOI> data of the Internal Rev.



**Table C-5**

*Total Moving and Storage Industry Impact on Federal Business Income Tax Revenue, 2011 (\$million)*

Industry	Output (Revenue and Receipts) (1)	Business Income Taxes Paid as a Share of Business Receipts in 2003 /b (2)	Businesses Tax Revenue Effect in 2011 (3) = (1) x (2)
Moving and storage industry, firms with employer establishments /a	12,061.5	3.53%	425.4
Moving and storage industry's indirect effect on U.S. economic output of all U.S. industries	13,125.9	2.15%	282.8
U.S. total	25,187.4 /c	na	708.2

*a. Business taxes on revenue of firms with employer establishments only. Taxes paid on receipts of nonemployer establishments or independent contractors were considered individual income taxes.*

*b. 2003 is the most recent year for which data are available. Share of moving and storage industry is share for transportation and warehousing industry group. Share for indirect effect of the moving and storage industry is for all industries.*

*c. Excludes \$522.3 million of nonemployer (independent contractor) receipts.*

*SOURCE: Nathan Associates Inc. from Table 2: Selected financial data on businesses; SOI Tax Stats - Integrated Business Data, IRS, available at <http://www.irs.gov/taxstats/bustaxstats/article/0,,id=152029,00.html>.*