

FIRST DRAFT

# Motorcoach Industry Impacts on Society and the Economy

An Industry that Binds the Nation Together



**NATHAN**  
ASSOCIATES INC.

[www.nathaninc.com](http://www.nathaninc.com)

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# Executive Summary

The motorcoach transportation service industry consists of nearly 4,000 mostly small businesses located in every U.S. state, the District of Columbia, and six of Canada's 13 provinces. Three-fourths of these businesses operate fewer than 10 vehicles and nearly half (41%) operate fewer than five. Operating a total fleet of more than 44,000 vehicles, the industry provides charter, tour, sightseeing, airport shuttle, commuter, and scheduled services.

*The industry binds the nation together.* It transports 863 million people each year, more than all other transportation service industries. Its transportation network includes more than three times the number of terminals and stations than the combined number of airports and intercity rail stations. The industry provides greater coverage of rural areas than does the air or rail system. For 14.4 million rural residents, motorcoaches are the only available mode of intercity transportation. And the motorcoach industry serves all people – the elderly, women, minorities, and those from low income households.

*The industry creates jobs and incomes throughout the economy.* Its \$4.7 billion of sales stimulates another \$2.6 billion of sales by other industries. Its investment in new motorcoaches generates \$819 million each year for motorcoach manufacturers and their suppliers. Its \$8.2 billion impact on output of the U.S. economy supports nearly 90,000 jobs. Including Canada, the industry supports 122,000 full-time jobs and 190,000 total jobs.

*The industry injects consumer spending into local economies, thereby stimulating business growth and economic opportunity.* In Boston alone, spending by visitors who traveled on motorcoaches supported over 1,400 full-time jobs and generated \$8.1 million in sales tax revenues. In New York City, spending by visitors who traveled on motorcoaches supported 7,200 full-time jobs and generated \$50 million in sales tax revenues. A single tour bus on a two-night tour injects as much as \$16,000 into a local economy.

*The transportation service provided by the motorcoach industry is the safest and most fuel and energy efficient service.* Fatality rates of all other modes are higher – 3.5 times higher for passenger cars, six times higher for U.S. air carriers, and 35 times higher for passenger trains. Fuel consumption per passenger miles is lowest and declining. Energy intensity is lowest. The

amount of energy used by motorcoaches per passenger mile is less than 44% of the amount used by other modes.

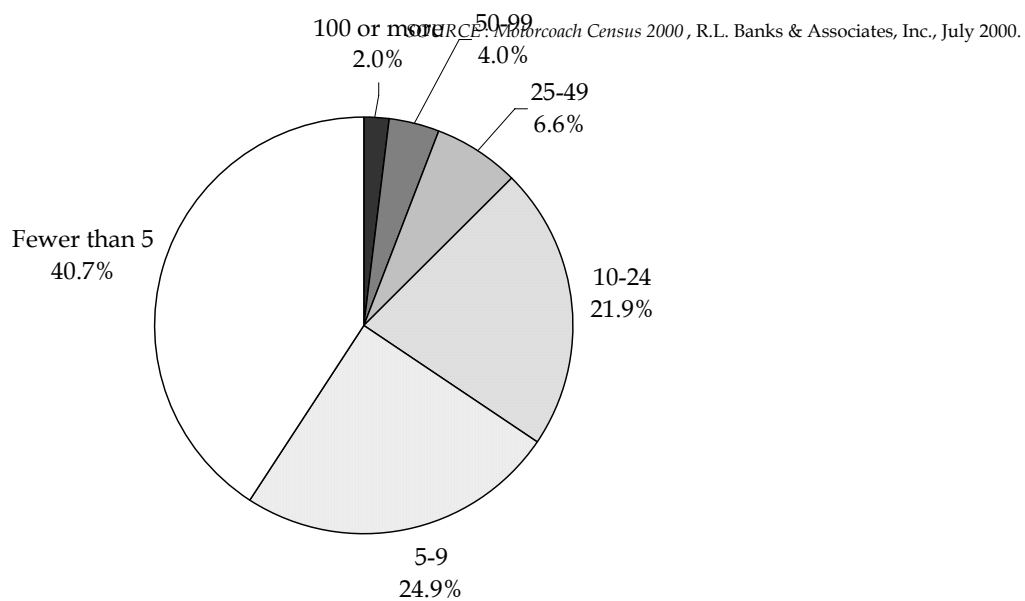
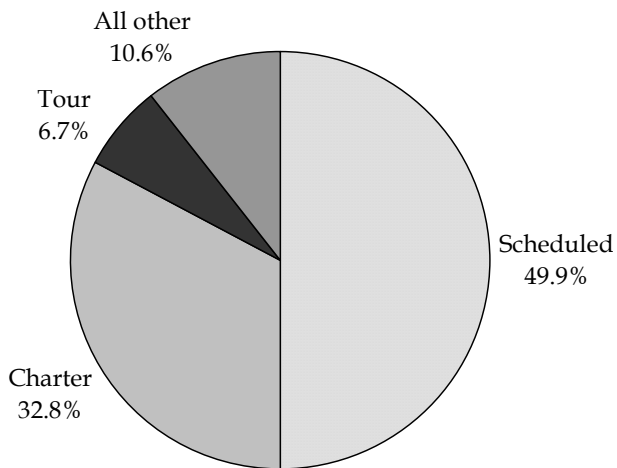
*In addition to being the most fuel and energy efficient provider of passenger transportation service, the motorcoach industry partners with public and private sector entities to increase the overall efficiency of the U.S. transportation system.* Pooling arrangements eliminate scheduling redundancies, reduce operating costs, and generate incremental sales. Inter-modal alliances provide seamless services. Nearly 2% of the industry reported miles are airport shuttle service mile.

*Perhaps most important, the valuable contributions to the economy come at virtually no cost to taxpayers.* Unlike the industries of its competing modes, the motorcoach industry has received virtually no federal subsidy after accounting for its federal costs responsibility and the user fee payments to the federal government by the industry and its passengers. From 1960 through 2001, the motorcoach industry received just 0.1¢ per passenger mile in net federal subsidy. The air transportation system received nearly 15 times more. Mass transit received more than 137 times more. And Amtrak received more than 200 times more in subsidy than did the motorcoach industry.

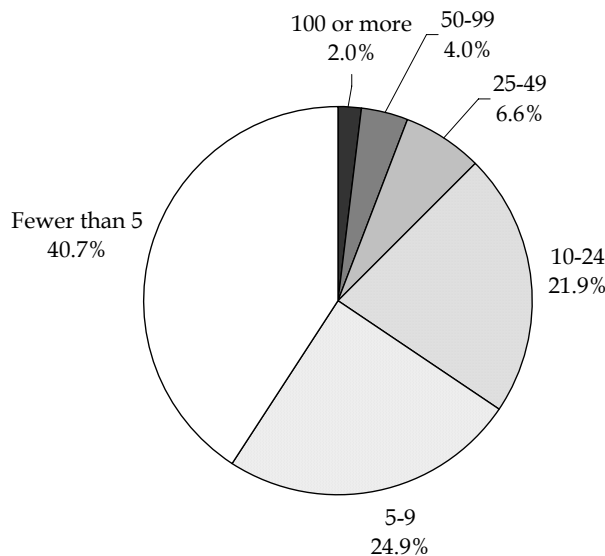
Despite competition with industries of other modes that receive federal subsidies, as well as competition within the industry itself, the motorcoach transportation service industry has continued to provide affordable, nation-wide, and safe service that truly binds the nation together.

seats, air conditioning, contact commuter, and private commuter. More than two-thirds of all industry businesses provide at least two motorcoach services, usually charter and tour.

Figure 1-3



SOURCE: Motorcoach Census 2000, R.L. Banks & Associates, Inc., July 2000



Note: Items do not sum to 100% because of rounding.  
 SOURCE: Motorcoach Census 2000, R.L. Banks & Associates, Inc., July 2000.



## 2. Binding the Nation Together

The motorcoach transportation service industry – unlike all other transportation industries – truly binds the nation together. It provides more types of service to more locations for more people from more backgrounds than any other mode. In many rural areas it is the only mode of commercial intercity passenger transportation. For many low-income travelers it is the only affordable transportation mode. For student and tour groups, it is the only choice for educational, recreational, and sightseeing trips to America’s urban, cultural, entertainment, and natural resource centers.

### Serving More People

The motorcoach transportation service industry is the number one people mover. In North America, the industry carried approximately 863,000,000 passengers in 1999, the most recent year for which data are available (R.L. Banks & Associates Inc. 2000). In the United States alone, the industry carried approximately 774,000,000 passengers, one-fourth more than the airline industry and twice more than Amtrak and commuter rail combined (Figure 2-1).

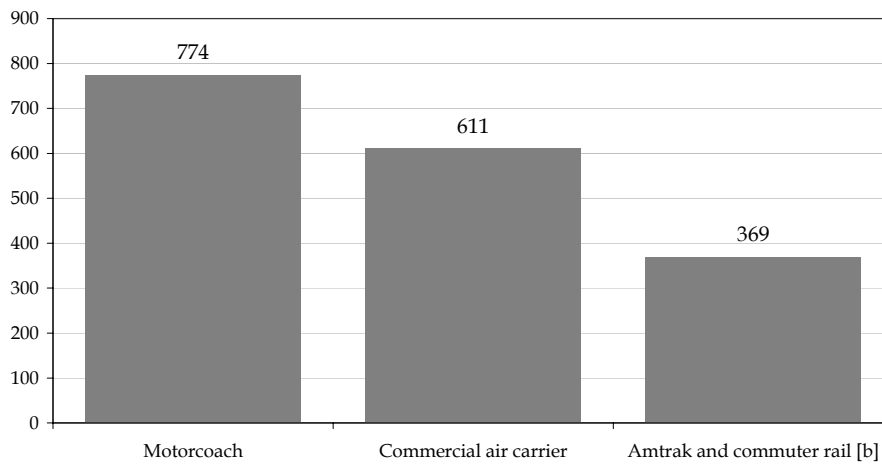
### Serving More Locations

As of August 18, 2004, the U.S. intercity passenger transportation network consisted of 4,378 bus terminals, airports, and rail stations (Bureau of Transportation Statistics 2004a). Intercity bus stations, which totaled 3,299, accounted for three-fourths of all these facilities (Figure 2-2). In addition, regularly scheduled intercity bus service is provided to locations where a bus station does not always exist. In contrast, there were only 543 airports<sup>3</sup> and 536 rail stations in the United States as of August 18, 2004.

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<sup>3</sup> Approximately 84% of passenger enplanements occur at the top 50 airports (Bureau of Transportation Statistics 2001a).

**Figure 2-1**  
*Passengers by Mode in 1999[a] (millions)*

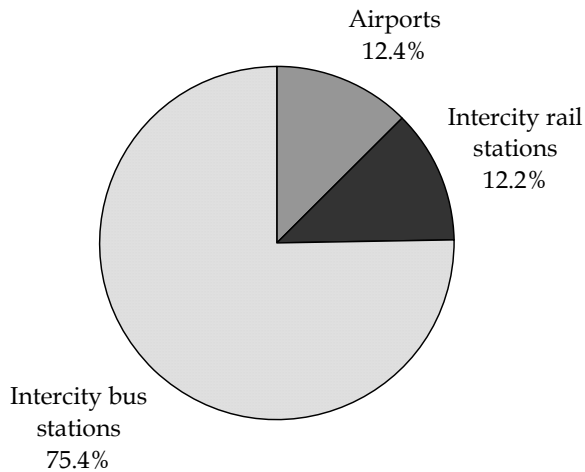


[a] 1999 is the most recent year for which data are available for the motorcoach industry.

[b] Amtrak total is 22 million. Commuter rail total is 347 million.

SOURCES: R.L. Banks & Associates, Inc., *Motorcoach Census 2000* for motorcoaches. Bureau of Transportation Statistics, U.S. Department of Transportation, *National Transportation Statistics 2000*, Tables 1-36 and 2-33 for commercial air carriers and commuter rail, and *National Transportation Statistics 2004*, Rail Profile for Amtrak.

**Figure 2-2**  
*Regularly Scheduled Intercity Passenger Transportation Facilities by Mode*



SOURCE: *Scheduled Intercity Transportation: Rural Service Areas in the United States*, Bureau of Transportation Statistics, U.S. Department of Transportation, September 2004.

Moreover, the effectiveness of airports and rail stations where regularly scheduled intercity service is available is enhanced by the inter-modal connecting service provided by motorcoach operators. Nearly 2% of the motorcoach transportation service industry's reported miles are airport shuttle service miles (R.L. Banks & Associates, Inc. 2000).

In addition to the 3,299 bus stations, charter and tour services are available virtually anywhere. The most popular destinations are major urban centers of entertainment, culture, and historical significance. According to the American Bus Association, the ten most popular cities to visit by motorcoach are Atlantic City, NJ; Branson, MO; Chicago, IL; Las Vegas, NV; Los Angeles, CA; New York, NY; Orlando, FL; Washington, DC; and Toronto, Canada.

The motorcoach transportation service industry serves many more rural locations than do the airline and intercity passenger rail industries.<sup>4</sup> Nearly 74 million people living in rural areas have access to regularly scheduled intercity bus service. Fewer than 58 million rural residents have access to airline service and fewer than 35 million rural residents have access to intercity rail service. For 14.4 million rural residents, motorcoaches are the only available mode of intercity transportation.

In terms of vehicle-miles, highway motorcoaches travel more miles than the fleet of large certificated domestic air carriers and Amtrak (Bureau of Transportation Statistics 2005). Over the 10 years ending in 2003, highway bus miles averaged 6.9 billion per year. Air carrier miles average 5.2 billion. Intercity train-car-miles averaged only 296.7 million.

## Serving Everyone

In addition to more extensively serving the rural population, the motorcoach industry is more likely than other transportation industries to serve elderly, female, minority, and less educated populations.

- In 1995 (the most recent year for which data are available), 31.0% of all long-distance charter and tour bus person-trips and 23.8% of all long-distance intercity bus person-trips were taken by people 65 years old or older (Bureau of Transportation Statistics 1997). Only 8.3% of long-distance commercial airplane person-trips were taken by the elderly (*Ibid.*).

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### Serving More of Rural America

*"Intercity bus has the greatest penetration into rural areas with 89% of the rural residents in the coverage area. Air service covers 70%, and intercity rail covers 42%."*

*["Scheduled Intercity Transportation: Rural Service Areas in the United States," Bureau of Transportation Statistics, U.S. Department of Transportation, September 2004, p. 2.]*

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*"[A]bout 30% of intercity bus trips were taken by persons who lived in a household with no personal use vehicle available."*

*["1995 American Travel Survey," Bureau of Transportation Statistics, U.S. Department of Transportation, October 1997, p. 8]*

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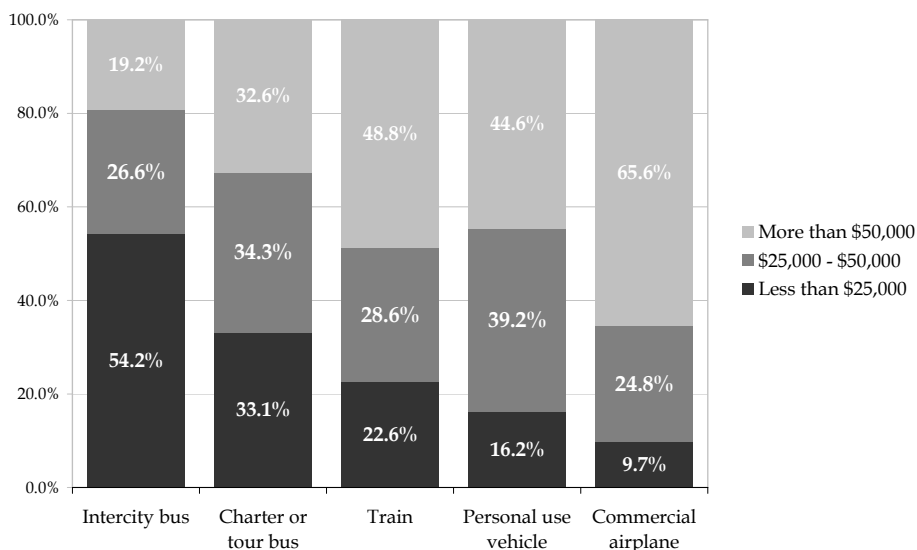
<sup>4</sup> The Bureau of Transportation Statistics (2004) defines reasonable coverage areas for bus stations, rail stations, and smaller airports to span a radius of 25 miles. For medium and large hub airports, the reasonable coverage area spans a radius of 75 miles.

- In 2001 (the most recent year for which data are available), most (55%) long-distance person-trips by bus were taken by females (Bureau of Transportation Statistics 2003). Males took most long-distance person-trips on all other modes of travel, including personal vehicle (58%), air (57%), and train (58%) (*Ibid.*).
- In 1995 (the most recent year for which data are available), 52.1% of all long-distance intercity bus person-trips were taken by non-white or Hispanic travelers (Bureau of Transportation Statistics 1997). Only 13.8% of all long-distance commercial airplane and 32.0% of all long-distance train passenger-trips were taken by minorities (*Ibid.*).
- In 1995 (the most recent year for which data are available), 37.2% of all long-distance intercity bus person-trips were taken by persons 25 years old or older with less than a high school education (*Ibid.*). Only 2.1% of all long-distance commercial airplane and 6.6% of all long-distance train passenger-trips were taken by this segment of the population (*Ibid.*).

Low income households are more likely to be served by the motorcoach industry than by other transportation industries (Figure 2-3). In 1995 (the most recent year for which these data are available) over half (54.2%) of all long-distance intercity bus person-trips and one-third (33.1%) of all long-distance charter or tour bus person-trips were taken by households with annual incomes less than \$25,000 (Bureau of Transportation Statistics 1997). In contrast, only 9.7% of commercial airplane person-trips were taken by households with annual incomes less than \$25,000. Nearly two-thirds (65.5%) of long-distance commercial airplane person-trips were taken by households with annual incomes exceeding \$50,000.

**Figure 2-3**

*The Motorcoach Industry Provides Affordable Service to Low-Income Households (distribution of long-distance trips by annual household income)*



SOURCE: 1995 American Travel Survey, Bureau of Transportation Statistics, U.S. Department of Transportation, October 1997, Figure 8, p. 8.

### 3. Creating Jobs and Incomes throughout the Economy

Demand for travel generates sales (output) for transportation service industries of all modes of transport. In 2003, the total output of all intercity transportation services was \$100.4 billion, (Bureau of Economic Analysis 2004) most of which was air transportation service (see Figure 3-1).

Although the output of the motorcoach transportation service industry accounts for slightly less than 5% of total intercity transportation service output, the industry's sales totaled \$4.7 billion in 2003, consisting of (*Ibid.*):

- \$1.5 billion interurban bus transportation service,
- \$0.9 billion of interurban charter bus transportation service, and
- \$2.3 billion of scenic and sightseeing transportation services.

Regular route and scenic and sightseeing services have grown since 1998 (average annual rates of 5% per year for regular route service and 1.6% per year for scenic and sightseeing services), but charter bus service was especially hard hit by the 2001 recession. Charter bus service output has declined at an average annual rate of 10.8% since 1998, leaving total output of the motorcoach transportation service industry 3.7% lower in 2003 than its was in 1998 (*Ibid.*).

The \$4.7 billion of output of the motorcoach transportation service industry supported 65,200 full-time equivalent jobs in the industry in the United States (*Ibid.*). The average annual compensation of these employees was approximately \$32,000 (*Ibid.*).<sup>5</sup>

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*The motorcoach industry employed 190,000 people in the United States and Canada in 1999, 122,000 of whom were full-time employees.*

*[R.L. Banks & Associates, Inc. 2000]*

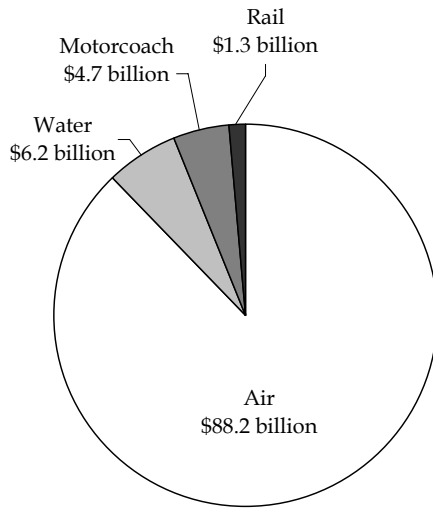
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<sup>5</sup> The average annual compensation of all employees in the United States was \$46,952 in 2002.

**Figure 3-1**

*Sales (Output) of Intercity Transportation Service Providers by Mode in 2003*



SOURCE: "U.S. Travel and Tourism Satellite Accounts for 1998-2003," *Survey of Current Business*, Bureau of Economic Analysis, U.S. Department of Commerce, September 2004, pp. 43-59.

To provide their services, the motorcoach transportation service industry purchased the output of other industries, for example, diesel fuel, insurance, and maintenance and repair services. Hence, the demand for transportation service provided by motorcoach operators had an indirect effect on sales of other industries

The total direct and indirect output of the motorcoach transportation service industry was \$7.4 billion in 2003 (*Ibid.*). In addition to the \$4.7 billion of transportation service output, businesses of motorcoach operators generated \$2.6 billion of output of other industries. In the U.S. economy, every \$1 spent on interurban bus and charter bus transportation services generated \$0.66 of additional industry output (*Ibid.*). Every \$1 spent on scenic and sightseeing transportation services generated \$0.49 of additional industry output (*Ibid.*).

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**Impact of Spending on Motorcoach Industry Transportation Services**

*Every \$1 spent on transportation services provided by the motorcoach industry generates an additional \$0.58 in spending throughout the economy.*

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In addition, the demand for motorcoach transportation service stimulates investment in new motorcoaches. From 1992 through 2003, the average annual number of new buses put into service by Greyhound alone was 214, approximately 8.8% of its beginning-of-the-year fleet size.<sup>6</sup> Using an industry new motorcoach annual investment rate equal to just 2% of the fleet – a rate less than one-fourth of Greyhound's rate – motorcoach operators invest in 884 new

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<sup>6</sup> Fleet size and new bus acquisitions were collected from Greyhound Lines, Inc. 10-K reports.

motorcoaches each year.<sup>7</sup> At an average purchase price of \$350,000,<sup>8</sup> total annual industry investment in new motorcoaches is \$309 million.

Investment spending on new motorcoaches has a direct impact on motorcoach manufacturers and an indirect impact on other industries as motorcoach manufacturers purchases the materials and services they use in their manufacturing processes. A \$309 million annual investment in new motorcoaches generates an additional \$510 million of output in these other industries.<sup>9</sup> The total impact of \$819 million (direct investment of \$309 million plus indirect output of \$510 million) supports nearly 15,650 jobs in the motorcoach manufacturing industry and its suppliers.

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**Impacts of Motorcoach Industry  
Investment Spending**

*Every \$1 of investment spending on new motorcoaches generates an additional \$1.65 of spending throughout the economy.*

*Every \$1 million of investment spending by the motorcoach industry supports 19.1 jobs throughout the economy.*

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Considering the demand for transportation service provided by the motorcoach industry and the industry's demand for new motorcoaches, the total economic impact of the industry is \$8.2 billion of output supporting nearly 90,000 jobs in the U.S. economy.

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<sup>7</sup> Calculated by multiplying industry fleet size (44,200 motorcoaches) by 2%.

<sup>8</sup> According to the American Bus Association (see [http://www.buses.org/Press\\_Room/Industry\\_Facts](http://www.buses.org/Press_Room/Industry_Facts)), \$350,000 is the average cost of a new 45-foot motorcoach.

<sup>9</sup> Calculated using final-demand multipliers for the motor vehicle and equipment manufacturing industry. There is approximately \$2.65 of total output generated per \$1 change in output delivered to final demand by the motor vehicle and equipment manufacturing industry. There are approximately 19.1 jobs created per \$1 million of output delivered to final demand by the industry.



## 4. Injecting Consumer Spending into Local Economies

Total travel-related expenditures in the United States in 2003, including expenditures on all transportation services, as well as tourism and travel-related goods and services, by residents and non-residents, was \$914.8 billion (Bureau of Economic Analysis 2004). Of this, \$518.4 billion was direct expenditure on output of goods and services of the travel and tourism sector, a sector that accounted for 2.5% of the gross domestic product (GDP) of the U.S. economy (*Ibid.*). The remaining \$396.4 billion was indirect expenditure required to support the production of travel and tourism goods and services, for example purchases by restaurants, maintenance and repair costs paid by hotels, and insurance paid by transportation service providers. More than five million (5.4 million) people were employed providing travel and tourism-related goods and services – 4.2% of total employment in the U.S. economy (*Ibid.*).

In the U.S. economy in 2003, goods and services sold to tourists and travelers, excluding intercity transportation service, totaled \$418 billion, four times the amount spent on purchased intercity transportation service. Industries that benefit most from traveler and tourist spending include providers of food and drink, traveler accommodations, retail trade (shopping), and recreation and entertainment (Table 4-1).

Several studies have quantified the amount of consumer spending injected into local economies by motorcoach industry passengers and the economic impact of their spending. For example,

- ***In Boston, Massachusetts*** in 2000, visitors to the city who had traveled on motorcoaches operated by Greyhound Lines, Inc., Peter Pan Lines, Inc., or Vermont Transit Company Inc. injected \$140 million of direct and indirect consumer spending into the economy (Nathan Associates Inc. 2001). The spending supported 1,403 full-time –equivalent jobs, generated \$21.6 million in household earnings, and added \$8.1 million in sales tax revenues (Table 4-2).

**Table 4-1***Travel-Related Expenditures in the United States by Residents and Non-Residents*

<b>Tourism Goods and Services</b>	<b>2003 (\$million)</b>	<b>Share</b>
Food and drink	91,719.7	21.9%
Traveler accommodations	82,749.2	19.8%
Shopping	81,354.6	19.5%
Recreation and entertainment	68,518.3	16.4%
Travel arrangement and reservations	32,389.6	7.7%
Automobile and other vehicle rental and leasing	19,747.0	4.7%
Gasoline	19,563.9	4.7%
Automotive repair	12,894.0	3.1%
Taxi	3,867.2	0.9%
Urban transit	2,959.7	0.7%
Parking lots and garages	1,568.6	0.4%
Highway tolls	669.9	0.2%
Subtotal	418,001.7	100.0%
Air, rail, water, and motorcoach industry transportation	100,385.0	na
Total	518,386.7	na

Note: na means not applicable.

SOURCE: "U.S. Travel and Tourism Satellite Accounts for 1998-2003," *Survey of Current Business*, Bureau of Economic Analysis, U.S. Department of Commerce, September 2004.

**Table 4-2***Economic Impacts of Boston Visitors Traveling by Greyhound, Peter Pan, and Vermont Transit Company, 2000*

<b>Item (\$million, except as noted)</b>	<b>2000</b>
Visitors traveling by Greyhound, Peter Pan, or Vermont Transit Company (million)	459.5
Direct spending	
Lodging	39.6
Restaurant	36.9
Shopping	31.0
Entertainment	15.3
Transportation, intra-city	9.0
Total	131.8
Indirect spending	18.0
Total spending	149.8
Full-time-equivalent jobs	1,403
Household earnings	21.6
Sales tax revenue	8.1

SOURCE: "Economic Impacts of Greyhound, Peter Pan, and Vermont Transit Passengers Visiting Boston," Nathan Associates Inc., Arlington, VA, 2001.

- *In New York City*, more than 1 million visitors who had traveled on Greyhound motorcoaches injected nearly \$800 million of direct and indirect consumer spending into the economy (Nathan Associates Inc. 2004). The spending supported 7,200 full-time-equivalent jobs, generated household earnings of \$193 million, and added \$50 million in sales tax revenues to the local economy (Table 4-3).

**Table 4-3**

*Economic Impacts of New York City Visitors Traveling by Greyhound, 2003*

Item (\$million, except as noted)	2003
Visitors traveling by Greyhound (million)	1.0
Direct spending	
Shopping	188.5
Lodging	145.7
Restaurant	144.6
Entertainment	88.0
Transportation, intra-city	39.7
Total	606.5
Indirect spending	192.2
Total spending	798.7
Full-time-equivalent jobs	7,199
Household earnings	192.9
Sales tax revenue	49.6

SOURCE: "Economic Impacts of Greyhound Bus Passengers Visiting New York City," Nathan Associates Inc., Arlington, VA, 2004.

- Neirotti (2002) has analyzed and estimated the economic impacts of bus tours on the economies of New York City, Washington, D.C., and Lancaster, Pennsylvania. In 2001, the average amount spent per bus on accommodations, meals, attractions, fuel, and additional fees was \$7,107 in New York City, \$4,780 in Washington, and \$4,302 in Lancaster. Spending per bus varied from \$2,536 to \$16,080 depending on tour destination and length (Table 4-4). At these destinations, bus tour groups generated 18% to 40% of the business of local restaurants, retail establishments, hotels, and attractions (*Ibid.*).

**Table 4-4***Economic Impact of Bus Tours by Destination Type and Tour Length in 2001*

Destination Type	Impact per Bus (\$)		
	Day Tours	One-Night Tours	Two-Night Tours
Historical or cultural such as Washington, D.C.	2,536	7,685	12,199
Rural ethnic such as Lancaster, Pennsylvania	2,415	5,094	9,021
Major cosmopolitan such as New York City	4,563	11,264	16,080

*SOURCE:* "Bus Tours and Bus Passengers: Impact on Local Economies," Lisa Delpy Neirotti, Ph.D., School of Business and Public Administration, The George Washington University, Washington, February 2002.

Consumer spending injected into local economies by the motorcoach transportation service industry is a significant stimulus to local economic activity, business development, and growth.

## 5. Providing the Safest and Most Fuel and Energy Efficient Service

Travelers and tourists on motorcoaches are traveling on the safest and most fuel and energy efficient mode of passenger transportation

### Safe

Over the most recent 10-year period for which data are available, traveling by motorcoach has been the safest mode of intercity travel (see Figure 5-1). From 1992 through 2001, the fatality rate of highway buses was only 0.4 per 100 million highway bus miles. The passenger car fatality rate was more than three times higher – 1.4 fatalities per 100 million passenger car miles. U.S. air carrier and passenger train fatality rates were even higher.

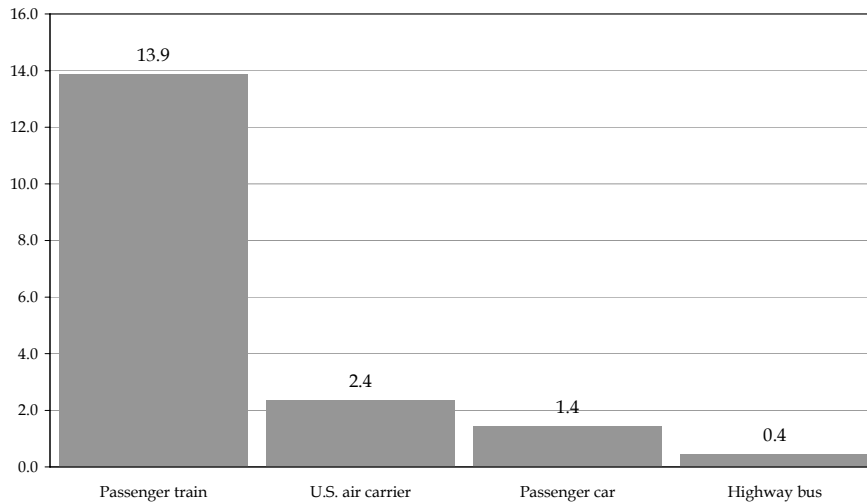
Among all types of buses, motorcoaches are safest. From 1995 through 1999, 297 buses (schools buses, transit buses, and motorcoach buses) were involved in fatal accidents each year (Campbell and Putchá 2001). Of this total, only 11% or 33 motorcoaches were involved.

Of the 340 people killed in all bus accidents each year from 1995 through 1999, only 13.4% were the result of motorcoach accidents (*Ibid.*). Fatalities from transit bus and school bus accidents were almost three times as high. Moreover, of the average annual motorcoach fatalities (46), less than one-fourth (11) were fatalities of passengers who were on the bus at the time of the accident.

### Fuel and Energy Efficient

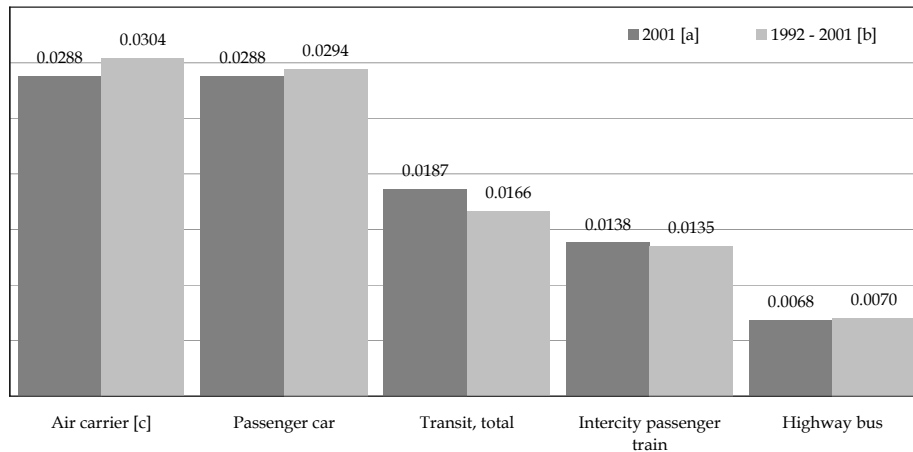
The motorcoach industry provides the most fuel efficient passenger transportation service (see Figure 5-2). In 2001, the industry consumed only 0.0068 gallons of fuel per passenger mile of service. The next most fuel efficient mode (the intercity train) consumed twice as much fuel (distillate and diesel fuels only) per passenger mile.

**Table 5-1**  
*Fatality Rates per 100 Million Vehicle Miles by Mode, 1992-2001*



SOURCE: Nathan Associates Inc. from data provided by the Bureau of Transportation Statistics (BTS) at <http://www.transtats.bts.gov>. See BTS Table 1-32 for highway bus miles in 1992 through 1999, the bus profile for bus miles in 2000 and 2001, Table 2-1 for highway bus occupant fatalities, Table 2-9 for U.S. air carrier fatalities, Table 2-21 for passenger car occupant fatalities, and Table 2-38 for passenger train passenger fatalities.

**Figure 5-2**  
*Fuel Consumption of Passenger Transportation Modes (gallons per passenger mile)*



[a] 2000 for transit and train.

[b] 1992 - 2000 for transit and train.

[c] Air carriers, certificated, domestic, all services.

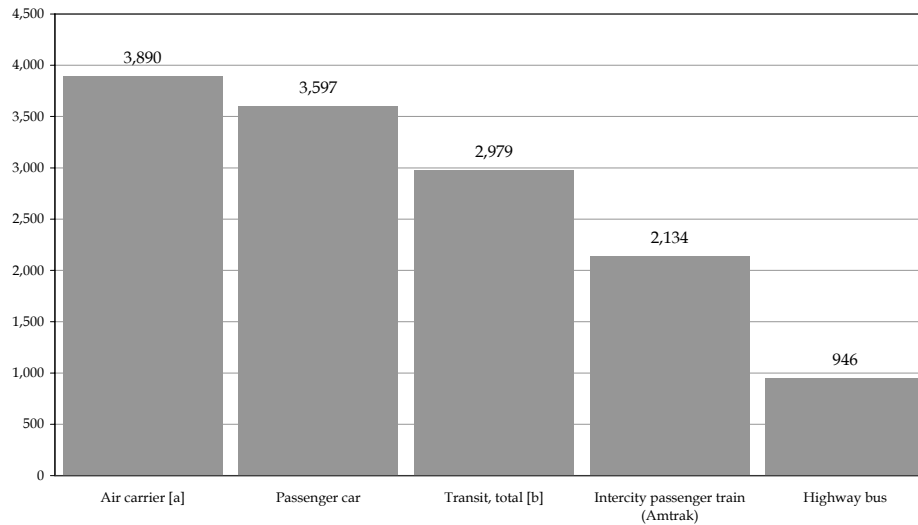
SOURCE: Nathan Associates Inc. from data reported by the Bureau of Transportation Statistics (BTS) at <http://www.transtats.bts.gov>. See the BTS air carrier profile for air carrier passenger miles, Table 4-5 for air carrier fuel consumption, the automobile profile and Table 1-34 for passenger car passenger miles, Table 4-11 for passenger car fuel consumption, Table 1-34 for transit passenger miles, Table 4-5 for transit motor fuel consumption, Table 1-34 for intercity/Amtrak passenger miles, Table 4-5 for distillate/diesel fuel consumption, the bus profile and Table 1-34 for bus passenger miles, and Table 4-5 for highway bus fuel consumption.

The motorcoach industry is also becoming more fuel efficient (see Figure 5-2 above). In 2001, the industry's consumption of fuel per passenger mile was 2.9% lower than the 10-year average from 1992 through 2001. Only air carriers achieved a better reduction (5.3%) in fuel consumed per passenger miles. Yet the air carrier industry consumed more than four times as much fuel per passenger mile as did the motorcoach industry in 2001.

In addition, the energy intensity of motor coach industry passenger transportation service is lowest among all modes of passenger transportation. In 2001, the motorcoach industry consumed only 946 Btu per passenger mile (see Figure 5-3).<sup>10</sup> The energy intensity of all other passenger transportation industries was higher than 2,100 Btu per passenger mile.

**Figure 5-3**

*Energy Intensity of Passenger Transportation Industries in 2001 (Btu per passenger mile)*



[a] Air carriers, certificated, domestic, all services.

[b] 2000.

SOURCE: Nathan Associates Inc. from data reported by the Bureau of Transportation Statistics (BTS) at <http://www.transtats.bts.gov>. See BTS Table 4-20 for energy intensity of air carriers, passenger cars, and Amtrak; BTS Table 4-6 for energy consumption of highway buses and transit

<sup>10</sup> A Btu is the quantity of heat required to raise the temperature of one pound of water from 60°F to 61°F at a constant pressure of one atmosphere. Btu varies by energy source. The BTS uses the following conversion rates: 135,000 Btu per gallon of jet fuel; 125,000 Btu per gallon of automotive gasoline; 138,700 Btu per gallon of diesel motor fuel, 3,412 Btu per kilowatt hour of electricity, excluding electrical system losses, and 1,031 Btu per cubic foot of natural gas.



## 6. Partnering for Greater Efficiency

In addition to being the most fuel and energy efficient provider of passenger transportation service, the motorcoach industry partners with public and private sector entities to increase the overall efficiency of the U.S. transportation system.

### **Private Sector Partnerships**

Operators of regularly scheduled intercity transportation service often enter into pooling or interline arrangements. Pooling reduces expenses through consolidation of terminal facilities and elimination of redundant scheduled services. Pooling also generates incremental revenue from bus scheduling improvements.

Motorcoach operators also enter into alliances with cruise ships, airlines, and Amtrak. For example, Greyhound provides motorcoaches and insurance coverage to Hotard and purchases charter services from Hotard for the transport of cruise ship passengers (Greyhound 2003). [NEED MORE EXAMPLES, ESPECIALLY FOR AIRLINES AND AMTRAK ALLIANCES]

Motorcoach operators who provide freight transportation service on their motorcoaches ally themselves with package pickup and delivery carriers. Greyhound, for example, relies on such alliances to provide same-day intercity package express service at distances of up to 400 miles at substantially lower prices than those charged by other delivery services (Greyhound 2002).

### **Public Sector Partnerships**

[NEED INFORMATION]



# 7. Adding Value with Virtually No Federal Subsidy

The motorcoach industry has survived and, indeed, grown and prospered, in a highly competitive market with relatively little support from the federal government. Unlike its competitors, the motorcoach industry has received virtually no federal subsidy after accounting for its federal cost responsibility and the user fee payments to the federal government by the industry and its passengers.

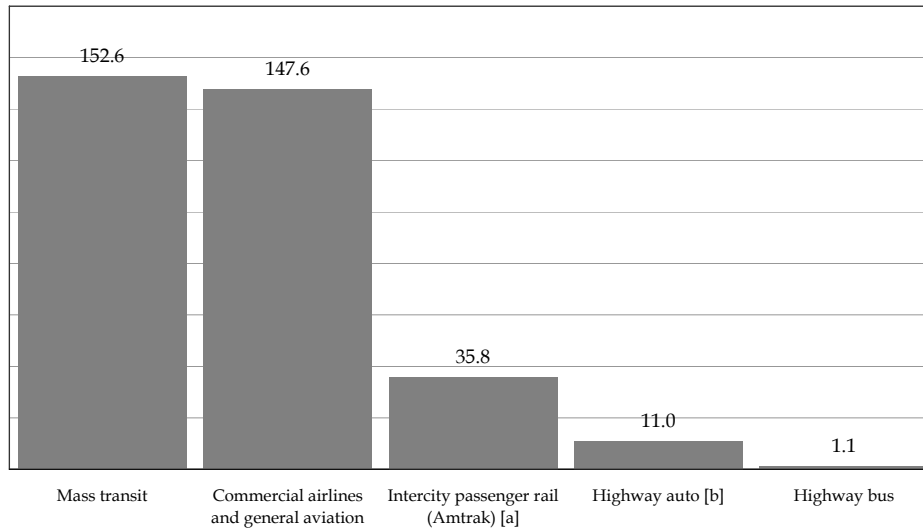
## A Brief History

Development of the current U.S. transportation system effectively began in the late 1950s following passage of the Federal-Aid Highway Act of 1956 and the Federal Aviation Act of 1958. It continued during the 1960s and 1970s with passage of the Urban Mass Transportation Act of 1964 and the creation of the National Railroad Passenger Corporation (Amtrak) in 1971.

Although user fees such as the motor fuels tax and the airline passenger ticket tax have paid for a significant portion of the transportation system, its development has been due largely to Federal subsidies – financial assistance from the federal government that has not been reimbursed by user fees. Early examples of subsidy include Federal land grants which facilitated the development of the transcontinental railway system and U.S. Postal Service airmail contracts which facilitated the development of commercial airlines.

Since 1960 all systems of passenger transportation have received some subsidy (Nathan Associates 1989). However, federal subsidies have not been distributed evenly among systems and modes (see Figure 7-1).

**Figure 7-1**  
Federal Subsidy from 1960 through 2001 (2001\$ billion)



[a] Amtrak was created in 1970.

[b] Includes motorcycles, pickups, and vans beginning in 1977; SUVs beginning in 2000.

SOURCE: "Net Federal Subsidies to Passenger Transportation Systems and Modes," 1960-2001, Nathan Associates Inc., Washington, April 2003.

When accounting for mode-specific cost responsibilities to allocate federal outlays to passenger systems and modes, and for user fees collected by the federal government from each mode and its users, the motorcoach industry's federal subsidy from 1960 through 2001 has been virtually zero. On a per passenger mile basis, the motorcoach industry subsidy over 42 years was 0.1¢ (see Figure 7-2). Other modes received at least 14 times more in subsidy per passenger mile.

## Growing Recognition of Subsidy Disparities

Recently the Bureau of Transportation Statistics released its own analysis of federal subsidies to passenger transportation (Bureau of Transportation Statistics 2004b). The BTS analyzed subsidies from 1990 through 2002 and found that:

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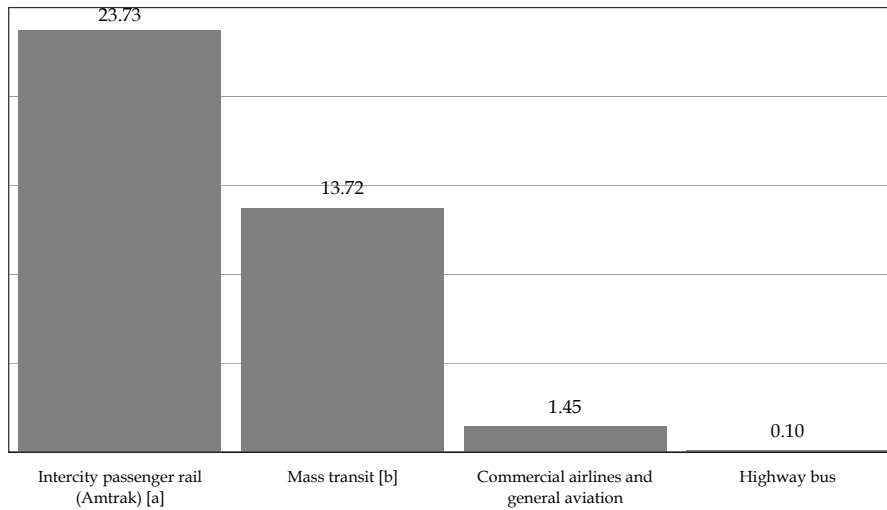
*"...intercity buses paid more than their allocated cost to the federal government." [BTS 2004]*

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- Although the cumulative net federal subsidy to highway passenger transportation was negative (indicating excess user charge payments) during the period, not all users of the highway passenger transportation system benefited. Autos, motorcycles, pickups and vans, *and intercity buses* paid more than their cost responsibility to the federal government. Only school and transit buses benefited from federal subsidy.
- On average, passenger rail service received the largest subsidy during the period, followed by transit and air transportation.

**Figure 7-2**

*Federal Subsidy per Passenger Mile from 1960 through 2001 (2001¢)*



[a] 1971-2001.

[b] 1978-2000.

SOURCE: "Net Federal Subsidies to Passenger Transportation Systems and Modes," 1960-2001, Nathan Associates Inc., Washington, April 2003.

From a taxpayer's perspective, the motorcoach industry's numerous impacts on the economy and society are high-value, low-cost contributions. Unlike other transportation industries, only those who use the service pay for its cost.

In summary, the motorcoach transportation service industry:

- Binds the nation together,
- Creates jobs and incomes throughout the economy,
- Injects consumer spending into local economies, thereby stimulating business growth and development,
- Provides the safest and most fuel and energy efficient service,
- Partners with private and public sector entities to increase the overall efficiency of the transportation system, and
- Contributes without federal subsidy.



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