

REVISED DRAFT

The Economic Impacts and Social Benefits of the U.S. Motorcoach Industry

Binding the Nation Together by Providing Diverse and Affordable
Services to Everyone



NATHAN
ASSOCIATES INC.
www.nathaninc.com

Robert Damuth
Vice President
December 2008

Contents

Executive Summary	iii
1. Introduction	1
2. Binding the Nation Together	5
Serving More People	5
Serving More Locations	5
Serving Everyone	7
Providing Service in Local and National Emergencies	9
Improving the Quality of Life	9
3. Generating Sales and Supporting Jobs throughout the U.S. Economy	11
Impact of Visitor Spending Attributable to Motorcoach Industry	11
Impact of Industry Spending on New Motorcoaches	14
4. Stimulating Local Economies	17
5. Providing the Safest Service	19
6. Providing the Greenest Service	21
7. Partnering for Greater Efficiency	23
8. Adding Value with Virtually No Federal Subsidy	27

ILLUSTRATIONS

Figures

1-1. Nearly All Motorcoach Operators Provide Charter Service	2
1-2. Charter Service Accounts for Most Bus Miles	2
1-3. More Than Half of Industry Operators Provided Multiple Services in 2007	3
1-4. Most Motorcoach Industry Businesses Are Small	3

2-1. Motorcoaches Provide More Passenger Trips than Commercial Air Carriers, and Amtrak and Commuter Rail	6
2-2. Scheduled Intercity Bus Service Was Provided at Far More Locations than Air and Rail Services in 2006	6
2-3. The Motorcoach Industry Provides More Affordable Service	9
3-1. Direct Sales of Motorcoach Services to Visitors Have Increased Since 2004	13
5-1. Motorcoaches Are the Safest Mode	19
8-1. Motorcoach Share of Total Federal Subsidies Is Insignificant	29
8-2. Motorcoach Subsidy per Passenger Trip Is Insignificant Relative to Other Modes	29
8-3. Motorcoach Subsidy per Passenger Mile Is Insignificant Relative to Other Modes	30

Tables

3-1. Summary of the U.S. Economic Impact of Visitor Spending Attributable to the Motorcoach Industry and Industry Spending on New Motorcoaches, 2007	12
3-2. Direct and Indirect Effects of Visitor Spending Attributable to the Motorcoach Industry in 2007	12
4-1. Summary of Recent Regional and Local Economic Impact Studies	18
6-1. Motorcoaches Are the Most Energy Efficient and Greenest	21

Executive Summary

In 2007, the motorcoach transportation industry consisted of approximately 3,400 mostly small businesses, nearly four-fifths of which operated fewer than 10 coaches. Operating a total fleet of more than 33,400 coaches, the industry provided scheduled, charter, tour, sightseeing, airport shuttle, commuter, and special operation services. More than half of all industry operators provided more than one service.

The industry binds the nation together. It provided 751 million passenger-trips in 2007, 9% more than the number of U.S. certificated commercial air carrier enplanements and 20 times more than Amtrak and commuter rail combined. The national network of locations served by motorcoaches includes more than five times the number of airports and intercity rail stations. More important is the industry's greater coverage of rural America. Motorcoach service covers 89% of rural residents, while air service covers 70% and intercity rail covers only 42%. For 14.4 million rural residents, motorcoaches are the only available mode of intercity commercial transportation service. And the motorcoach industry serves everyone—in good times and in times of emergency. Working people use motorcoaches to commute to work; airline passengers use motorcoaches to shuttle to and from airports; ocean-going cruise line passengers use motorcoaches to shuttle to and from ports; students use motorcoaches for field trips, band trips, and sports outings; senior citizens use motorcoaches to travel to places of cultural and historical significance; everyone—business travelers, tourists, students, senior citizens, and minorities—uses scheduled service provided by the motorcoach industry; people stranded during times of local and national emergencies rely on motorcoaches to transport them to safety; and rural citizens rely on motorcoaches for transportation to medical facilities.

The industry generates sales and supports jobs throughout the economy. In 2007, tourists purchasing motorcoach services and industry spending on new motorcoaches generated \$55.0 billion of sales which supported 792,700 jobs in the U.S. economy. Tourists purchased \$5.6 billion of motorcoach industry services. The industry spent \$978 million on new motorcoaches.

Consumer spending of motorcoach passengers and industry spending stimulates local economies, thereby promoting economic growth and opportunity. Because of visitor and motorcoach industry spending in local economies, sales increase, additional jobs are supported, businesses thrive, and local and state governments collect additional tax revenues. In West Virginia, \$40.3 million of spending, 1,300 jobs, and \$4.0 million in state and local tax revenues were attributable to motorcoach charter and tour visitors in 2006. In southwestern Pennsylvania, \$39.2 million of spending, 1,030 jobs, and \$4.2 million in taxes were due to motorcoach charter and tour visitors in 2006. In Sevier County, Tennessee (the Pigeon Forge area), \$89.2 million of spending, 2,100 jobs, and \$8.9 million in taxes were due to motorcoach charter and tour services in 2005. These are just three of hundreds of regions throughout the country where local economies benefited from visitors who traveled by motorcoach.

Motorcoaches are the safest mode of transportation. On the basis of the industry safety and environmental records, motorcoaches are the most cost effective mode of transportation. Among all passenger transportation modes, the motorcoach fatality rate is lowest—0.5 fatality per 100 million vehicle miles. For passenger cars the fatality rate is more than twice as high. For U.S. air carriers, the fatality rate is nearly three times higher. For passenger trains, the fatality rate is nearly 16 times higher than the rate for motorcoaches.

Motorcoaches are the greenest mode of transportation. Motorcoach passenger miles per gallon of fuel are more than twice the fuel efficiency of commuter and intercity rail, and more than four times greater than domestic air carriers and transit buses. And motorcoach emission of CO₂ gases linked to global warming are lower than any other mode. Other modes produce three to four times more emissions.

The motorcoach industry promotes intermodalism, a seamless travel experience, and greater efficiency in the U.S. transportation system through private-public partnerships. The industry contracts with airlines and airports to shuttle passengers from regional facilities to hubs. The industry contracts with cruise lines to shuttle passengers between port facilities and airports. The industry partners with state governments to develop and operate intermodal facilities that link metropolitan and outlying areas. And motorcoach operators enter into pooling arrangements with each other to consolidate terminal facilities and eliminate redundant scheduled services. The industry has long recognized what most people implicitly understand: traveling is a multimodal experience.

Perhaps most important, these valuable contributions to the economy come at virtually no cost to taxpayers. Unlike other transportation industries, the motorcoach industry has received virtually no federal subsidy. Its user fee payments are adequate to reimburse the federal government for the cost motorcoaches impose on the U.S. transportation system. All other commercial modes are subsidized, and from 1996 through 2005, public transit and commercial air passenger transportation received nearly all the subsidy. However, Amtrak received the highest subsidy per passenger trip and passenger mile. From 1996 through 2005, the motorcoach industry received just \$0.06 of federal subsidy per passenger trip. In contrast,

public transit received nearly 13 times more, commercial air carriers received 72 times more, and Amtrak received nearly 800 times more subsidy than the motorcoach industry's meager \$0.06.

More than 25 years after deregulation, the motorcoach industry is a vibrant economy of mostly small businesses competing with each other and with heavily subsidized other modes of passenger transportation, as well as cooperating when possible with public entities and other private modes to provide seamless, affordable, safe, and green nation-wide service. The industry has succeeded by being responsive to the transportation needs and wants of every segment of the population. Truly, the motorcoach industry binds the nation together. And while doing so, the industry increases sales, jobs, and tax revenues nationally and in local economies.

1. Introduction

The first recorded scheduled bus service began in 1913.¹ Passengers were carried between the towns of Hibbing and Alice in northern Minnesota. By 1926 there were 4,040 businesses nationwide offering scheduled bus service for passengers traveling between cities.

The growing popularity of the automobile, which accompanied development of the interstate highway system in the 1950s, required bus operators to re-think their business models. They began diversifying by offering new services.

Today, the motorcoach industry provides charter, tour,² sightseeing, airport shuttle, commuter, and special operation³ services, as well as scheduled intercity service. Charter service is offered by nearly all operators (Figure 1-1). In terms of vehicle miles traveled,⁴ charter service ranks first followed by scheduled service (Figure 1-2). More than half of all industry operators provide more than one of the industry's seven service lines (Figure 1-3).

The modern bus—motorcoach—has an elevated passenger deck located above a baggage compartment.⁵ Motorcoaches are likely to be 35 feet or longer and provide seating for 30 to 57 passengers depending on the specific configuration of the coach. Comfort features include upholstered seats, as well as individual climate, audio, and video controls.

In 2007, the motorcoach industry consisted of approximately 3,400 businesses in the United States and Canada.⁶ The industry operated 33,500 coaches.⁷ Although some businesses, such as Greyhound Lines, Inc. and Coach USA, have brand value nationally, most are small and operate regionally (Figure 1-4). Nearly four-fifths operated fewer than 10 coaches in 2007.

¹ *Access to Over-the-Road Buses for Persons with Disabilities*, OTA-SET-547, Office of Technology Assessment, U.S. Congress, 1993.

² Tour service is the offering of a packaged or retail tour by the operator of the bus on which the tour will be taken. In contrast, charter service occurs when an operator charters his or her bus to pre-formed groups such as churches, schools, and tour operators.

³ Includes transportation to special events such as concerts, fairs, sporting contests, etc.

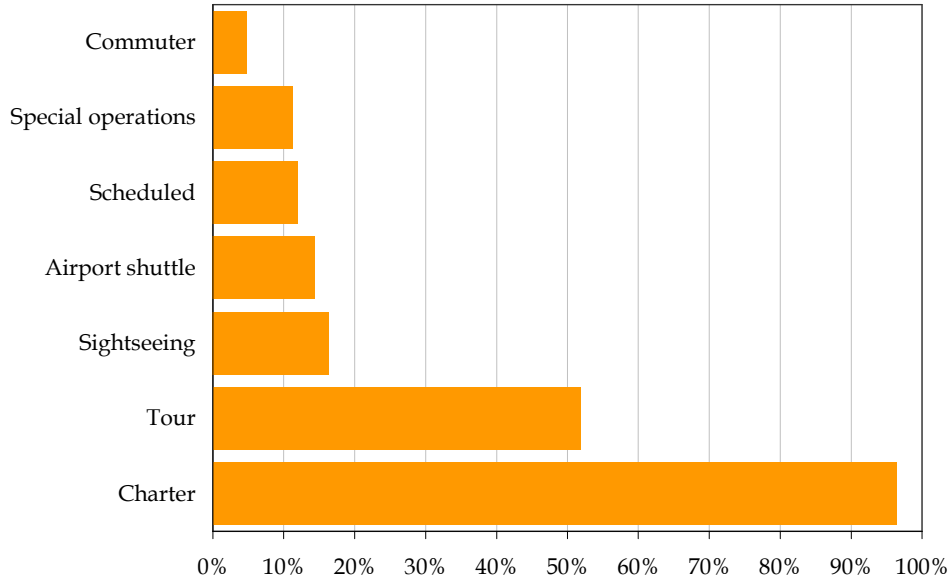
⁴ Vehicle miles of motorcoaches carrying passengers.

⁵ Transit buses, minibuses, and school buses are also used to provide regular route passenger transportation service.

⁶ Motorcoach industry businesses operate at least one motorcoach.

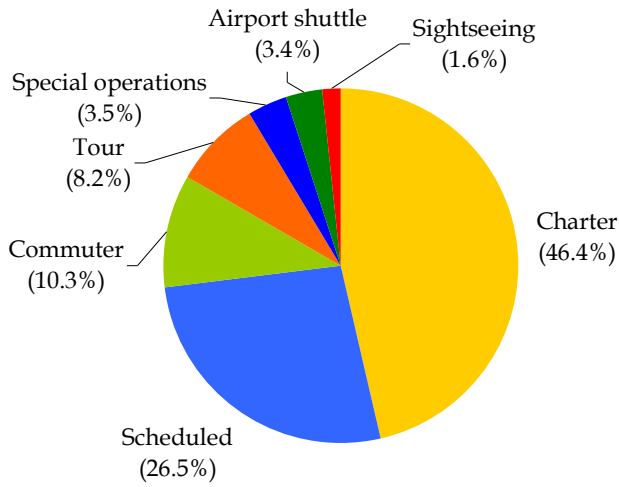
⁷ Nathan Associates Inc., *Motorcoach Census 2008*, American Bus Association, Washington, DC, October 2008.

Figure 1-1
Nearly All Motorcoach Operators Provide Charter Service



SOURCE: Nathan Associates Inc., *Motorcoach Census 2008*, American Bus Association, October 2008.

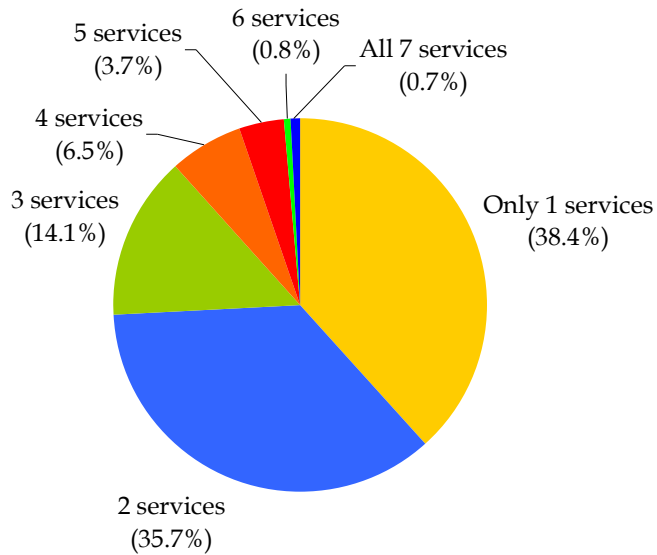
Figure 1-2
Charter Service Accounts for Most Bus Miles



SOURCE: Nathan Associates Inc., *Motorcoach Census 2008*, American Bus Association, Washington, DC, October 2008.

Figure 1-3

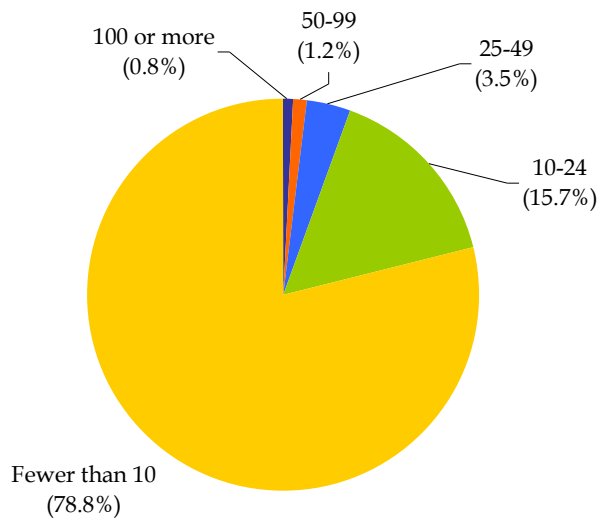
More Than Half of Industry Operators Provided Multiple Services in 2007



SOURCE: Nathan Associates Inc., *Motorcoach Census 2008*, American Bus Association, Washington, DC, October 2008.

Figure 1-4

Most Motorcoach Industry Businesses Are Small (businesses by number of motorcoaches operated)



SOURCE: Nathan Associates Inc., *Motorcoach Census 2008*, American Bus Association, Washington, DC, October 2008.

This report documents the economic impacts and social benefits of the motorcoach industry. The industry binds the nation together (Section 2); generates sales and jobs throughout the U.S. economy (Section 3); brings consumer spending into local economies thereby stimulating local growth (Section 4); provides the safest and greenest transportation service (Section 5); partners with private sector businesses and public sector organizations to achieve greater transportation efficiencies (Section 6); and adds value to the economy without government subsidy (Section 7).

2. Binding the Nation Together

The motorcoach industry – unlike all other transportation industries – truly binds the nation together. It provides more types of service to more locations for more people of all backgrounds than any other mode. It provides an airport inter-modal connection for air travelers. It provides commuter service for businessmen and women traveling between homes and offices. 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 industry is the number one people mover. In 2007, the industry provided 751 million passenger trips.⁸ The industry provided nearly 9% more passenger trips than commercial airlines (excluding foreign-flag air carriers) and 67% more than Amtrak and commuter rail combined (Figure 2-1).

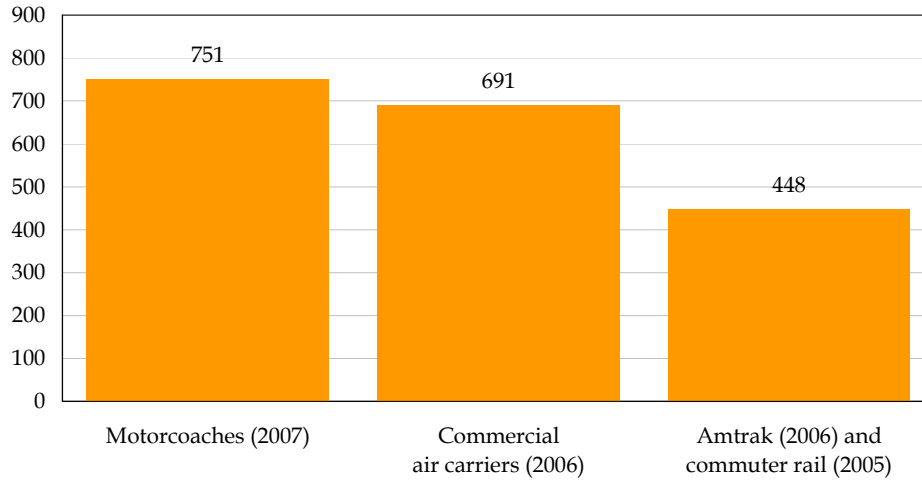
Serving More Locations

Locations with scheduled intercity service provided by the motorcoach industry are five times greater than the number of locations served by other commercial modes of intercity transportation (Figure 2-2). The scheduled intercity passenger transportation network of the U.S. economy consisted of approximately 4,200 nodes in 2006. The motorcoach industry provided scheduled intercity service at nearly 73% of these nodes.

⁸ *Motorcoach Census 2008.*

Figure 2-1

Motorcoaches Provide More Passenger Trips than Commercial Air Carriers, and Amtrak and Commuter Rail (millions)

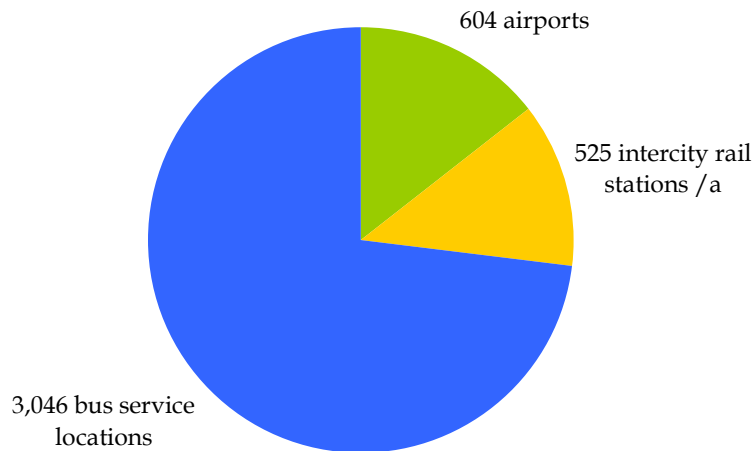


Note: Data are for the most recent year available.

SOURCES: *Motorcoach Census 2008*, Nathan Associates Inc. for motorcoaches. Bureau of Transportation Statistics, U.S. Department of Transportation, *National Transportation Statistics 2008*, Table 1-41 for commercial air carriers, Appendix D, Transit Profile, for commuter rail, and Appendix D, Rail Profile, for Amtrak.

Figure 2-2

Scheduled Intercity Bus Service Was Provided at Far More Locations than Air and Rail Services in 2006



a. Includes 505 Amtrak stations and 20 Alaska Railroad stations.

SOURCES: Certificated airports reported in Table 1-3 of *National Transportation Statistics 2008*, Bureau of Transportation Statistics (BTS), U.S. Department of Transportation. Amtrak stations reported in Table 1-7 of same. Alaska Railroad stations reported in *Scheduled Intercity Transportation: Rural Service Areas in the United States June 2005*, BTS, Table 3 on p. 4. Nathan Associates estimated bus service locations from bus share (72.96%) of total system nodes in 2005.

In much of rural America, bus stations are the only points of access to the U.S. intercity passenger transportation network.⁹ Nearly 73 million people living in rural areas have access to 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.¹⁰

In addition, the efficiency of airports and rail stations is enhanced by inter-modal connecting service provided by motorcoach operators. In 2007, 3.4% of the motorcoach industry's bus miles were airport shuttle service miles.¹¹

When one considers charter and tour services, the industry serves all communities—transporting people to special events, centers of culture and entertainment, and places of natural beauty.

Highway bus miles exceed vehicle miles of service provided by all other commercial modes of intercity transportation. Reported highway bus miles totaled 7.0 billion in 2006, 6% more than reported miles of large certificated domestic airlines (6.6 billion) and more than 20 times greater than Amtrak passenger-car miles (264 million).¹² While air carrier and Amtrak miles declined in 2006, highway bus miles increased 0.2%.

Serving Everyone

Unlike other commercial passenger transportation industries, the motorcoach industry serves all people. It provides commuter service for businessmen and women; airport shuttle service for airline and cruise travelers; charter, tour, and sightseeing services for students, senior citizens, and other groups visiting educational and cultural points of interest; and it provides regularly scheduled service for everyone, including business travelers, the elderly, women, and persons of color.

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.]

⁹ *Scheduled Intercity Transportation: Rural Service Areas in the United States*, June 2005, Bureau of Transportation Statistics, U.S. Department of Transportation, Table 2, p. 3.

¹⁰ Access is determined on the basis of a reasonable distance from airports and stations. BTS 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.

¹¹ *Motorcoach Census 2008*.

¹² Highway bus-miles, as well as air carrier, and Amtrak train-car miles are reported in *National Transportation Statistics 2008*, BTS, Table 1-32 at <http://www.bts.gov/cgi-bin/breadcrumbs/PrintVersion.cgi?date=16120431>.

U.S. government statistics on the demographic characteristics of travelers in the U.S. economy reveal a motorcoach industry providing service to a much broader cross-section of the population than any other commercial mode of passenger transportation.¹³

- 31.0% of all long-distance charter and tour bus passenger trips and 23.8% of all long-distance intercity trips are taken by people 65 years old or older.¹⁴ Only 8.3% of long-distance commercial airplane passenger trips are taken by the elderly.
- Most (55%) long-distance passenger trips by bus are taken by females.¹⁵ Males take most long-distance trips on all other modes of travel, including personal vehicles (58%), air carriers (57%), and the train (58%).
- 52.1% of all long-distance intercity bus person-trips are taken by non-white or Hispanic travelers.¹⁶ Only 13.8% of all long-distance commercial airplane and 32.0% of all long-distance train passenger trips are taken by minorities.
- 37.2% of all long-distance intercity bus passenger trips are taken by people 25 years old or older with less than a high school education.¹⁷ Only 2.1% of all long-distance commercial airplane and 6.6% of all long-distance train passenger trips are taken by this segment of the population.

The industry serves a broader cross-section of the population at least in part because it provides affordable transportation service, ensuring that all people have the opportunity to travel (Figure 2-3). Over half (54.2%) of all long-distance intercity bus passenger trips and one-third (33.1%) of all long-distance charter or tour bus trips are taken by households with annual incomes less than \$25,000.¹⁸ In contrast, only 9.7% of commercial airplane trips are taken by households with annual incomes less than \$25,000. Nearly two-thirds (65.5%) are taken by households with annual incomes exceeding \$50,000.

¹³ Although the studies from which these statistics were collected are dated, there is no evidence suggesting that the statistics are no longer relevant. They are relative measurements, not absolute. So, while the number of, say, elderly people traveling by bus has changed since the studies were completed, there is no evidence suggesting that elderly bus passengers as a percentage of all bus passengers is significantly different today from what it was when the studies were completed.

¹⁴ 1995 American Travel Survey, BTS, BTS/ATS95-US.

¹⁵ National Household Travel Survey (NHTS) 2001 Highlights Report, BTS, BTS03-05.

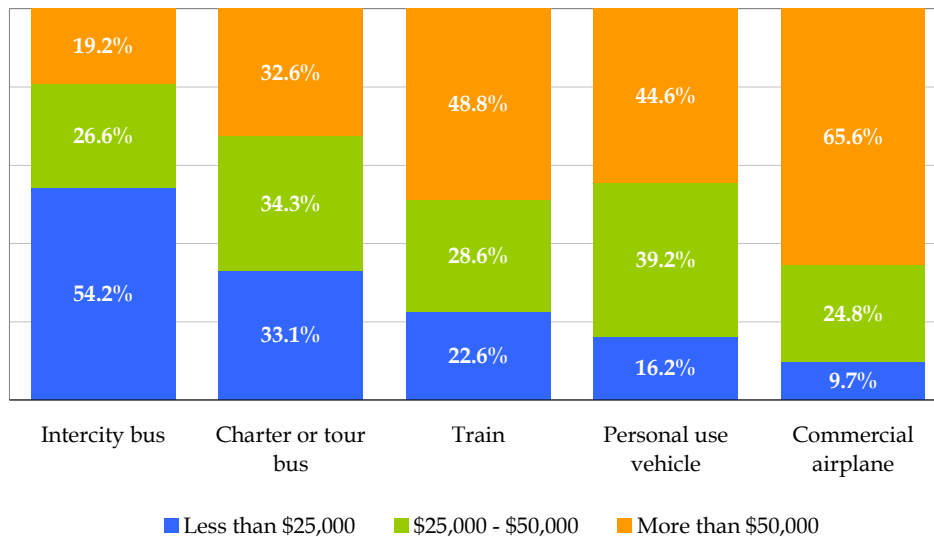
¹⁶ 1995 American Travel Survey.

¹⁷ 1995 American Travel Survey.

¹⁸ 1995 American Travel Survey.

Figure 2-3

The Motorcoach Industry Provides More Affordable Service (distribution of long-distance trips by mode and annual household income)



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

Providing Service in Local and National Emergencies

The motorcoach industry binds the nation together, especially during local and national emergencies. Following 9/11, the industry played a key role in helping people complete journeys that had been interrupted by closure of the air transportation system. In 2005, the industry played a key role in the relocation of people stranded by hurricanes Katrina and Rita. And leading up to and during the Iraq war and throughout the armed conflict and rebuilding effort, motorcoaches were used for troop movements supporting the U.S. military.

Improving the Quality of Life

Motorcoach services improve the quality of life for people in rural areas. For example, Jefferson Lines in Iowa provides access to medical facilities in Mason City as well as rural access to the senior center, March of Dimes clients, and other social services. As government, education, and medical services consolidate in larger communities, intercity connectors are more than ever part of the mobility foundation for rural and urban areas.

3. Generating Sales and Supporting Jobs throughout the U.S. Economy

The motorcoach industry generates sales and supports jobs directly and indirectly in travel and tourism industries as well as manufacturing. Travel and tourism industries—including the motorcoach industry—benefit from spending by visitors. Manufacturing industries benefit from the motorcoach industry’s purchases of new coaches. Altogether, the industry generated \$55.0 billion in sales which supported 793,000 jobs in 2007 (Table 3-1).

Impact of Visitor Spending Attributable to Motorcoach Industry

The Bureau of Economic Analysis (BEA) of the U.S. Department of Commerce measures the travel and tourism industry by the value of goods and services sold directly to visitors.¹⁹ Visitors are defined as people who travel outside their usual environments for less than a year or who stay overnight in a hotel or motel. They might be traveling for pleasure or business. They exclude travelers who expect to be compensated at the locations of their visits, such as migrant workers and persons traveling to new job assignments, as well as commuters. The distinction between sales to visitors versus residents is non-trivial in industries such as eating and drinking places, automotive repair services, retail gasoline sales, and urban transit, among others.

Altogether, motorcoach industry services purchased by visitors generated \$52.4 billion in sales and supported 774,000 jobs in 2007 (Table 3-2). Industry sales direct to visitors totaled \$5.6 billion and supported 61,000 industry jobs. Other industries’ direct sales to visitors that are attributable to the motorcoach industry totaled \$26.7 billion and supported 568,000 jobs. Indirect sales in the motorcoach industry’s supply chain totaled \$3.2 billion, which supported 27,000 jobs. Indirect sales in the supply chains of other industries with direct sales to visitors totaled \$16.7 billion, which supported 118,000 jobs.

¹⁹ Sarah R. Mattingly and Eric S. Griffith, “U.S. Travel and Tourism Satellite Accounts for 2004-2007,” *Survey of Current Business*, Bureau of Economic Analysis, U.S. Department of Commerce, June 2008.

Table 3-1

Summary of the U.S. Economic Impact of Visitor Spending Attributable to the Motorcoach Industry and Industry Spending on New Motorcoaches, 2007

Effect	Motorcoach Industry	Other Industries, Excluding Intercity Transportation /a	Total
Sales (\$billion)			
Visitor spending	8.8	43.6	52.4
Industry spending on new motorcoaches	2.6	na	2.6
Total	11.4	43.6	55.0
Jobs (thousand)			
Visitor spending	88.0	686.0	774.0
Industry spending on new motorcoaches	18.7	na	18.7
Total	106.7	686.0	792.7

a. Visitor spending impact attributable to the motorcoach industry.

SOURCE: Nathan Associates Inc.

Table 3-2

Direct and Indirect Effects of Visitor Spending Attributable to the Motorcoach Industry in 2007

Effect	Motorcoach Industry	Other Industries, Excluding Intercity Transportation /a	Total
Sales (\$billion)			
Direct	5.6	26.9	32.5
Indirect	3.2	16.7	19.9
Total	8.8	43.6	52.4
Jobs (thousand)			
Direct	61	568	629
Indirect	27	118	145
Total	88	686	774

a. Visitor spending impact attributable to the motorcoach industry.

SOURCE: Nathan Associates Inc. from travel and tourism data files 1998-2007, file tour2007.xls, Tables 9 and 10 at http://www/bea.gov/industry/tourism_data.htm.

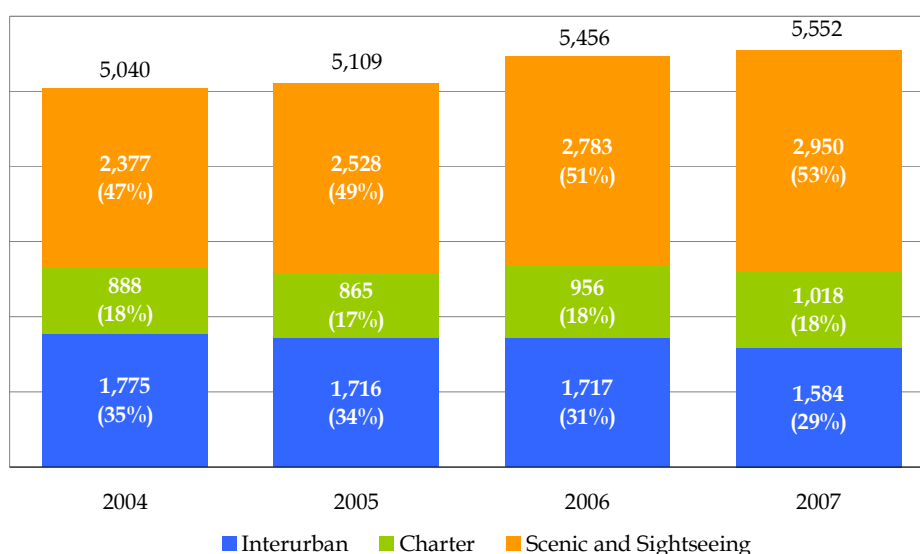
DIRECT SPENDING AND JOBS

Visitor Spending on Motorcoach Industry Services

Direct spending by visitors on services provided by the motorcoach industry total \$5.6 billion in 2007 and increased each year since 2004 (Figure 3-1).²⁰ Direct sales to visitors increased 10.2% and gains occurred in each segment but interurban. Visitor spending on sightseeing service increased most, up 24% since 2004.

Figure 3-1

Direct Sales of Motorcoach Services to Visitors Have Increased Since 2004 (\$million)



SOURCE: Travel and tourism data files 1998-2007, Bureau of Economic Analysis at http://www.bea.gov/industry/tourism_data.htm.

Motorcoach industry jobs in the United States supported by direct visitor spending on industry services totaled 61,000. Full- and part-time jobs are included, but additional jobs in the industry are supported by non-visitor spending on services provided by the industry such as commuter service. These additional jobs are not included here.²¹

Visitor Spending on Goods and Services of Other Tourism Related Industries

Visitors who purchased motorcoach industry services also purchased goods and services provided by other tourism-related industries, such as traveler accommodations, food and

²⁰ Calculated from the travel and tourism data files of the Bureau of Economic Analysis at http://www.bea.gov/industry/tourism_data.htm. See Table 9, Output by Commodity, 2007.

²¹ For comparison purposes, *Motorcoach Census 2008* reports 118,000 industry jobs in the United States and Canada combined.

drink, recreation and entertainment, travel arrangement and reservation services, and urban transit, among others. In 2007, \$26.9 billion of direct spending by visitors on tourism related goods and services other than intercity transportation can be attributed to visitor spending on motorcoach industry services.²² These direct sales supported 568,000 jobs.²³

INDIRECT SPENDING AND JOBS

An indirect spending effect occurs as goods and services are purchased to produce what was sold directly to visitors. For example, the motorcoach industry purchases diesel fuel to provide its transportation services.

- Direct spending by visitors on services provided by the motorcoach industry generated an indirect spending effect totaling \$3.2 billion as the motorcoach industry and others in its supply chain purchased the materials and services they required.²⁴ This indirect spending effect supported 27,000 jobs.²⁵
- Direct spending by visitors on goods and services provided by other tourism-related industries (excluding intercity transportation) generated an indirect spending effect totaling \$16.7 billion as these industries and others in their supply chains purchased the materials and services they required.²⁶ This indirect spending effect supported 118,000 jobs.²⁷

Impact of Industry Spending on New Motorcoaches

The demand for motorcoach transportation service stimulates investment in motorcoaches. In 2007, the industry purchased 2,173 new coaches, down 8.7% from 2006.²⁸ At an average purchase price of \$450,000,²⁹ the industry spent \$978 million on new motorcoaches in 2007.

²² Estimate is derived from motorcoach industry direct sales to visitors (\$5.6 billion) as a share of total motorcoach and intercity transportation industries' direct sales to visitors (\$128.6 billion) multiplied by total direct spending by visitors on other tourism related goods and services (\$617.9 billion). In other words, \$26.9 billion = $(\$5.6 \text{ billion} / \$128.6 \text{ billion}) \times \617.9 billion . See the travel and tourism data files of the Bureau of Economic Analysis, annual estimates 1998-2007, file tour2007.xls, Table 9, Output by Commodity at http://www.bea.gov/industry/tourism_data.htm for the underlying data.

²³ Direct jobs estimated from motorcoach industry jobs (61,000) supported by direct spending by visitors on industry services as a share of total jobs in the motorcoach and intercity transportation industries supported by direct visitor spending (569,000) multiplied by total jobs in other tourism related industries (5.3 million) supported by direct spending of visitors. In other words, $568,000 = (61,000 / 569,000) \times 5.3 \text{ million}$. See the travel and tourism data files, annual estimates 1998-2007, file tour2007.xls, Table 10, Employment by Industry for underlying data.

²⁴ Total output (sales) impact, which was estimated by the BEA, consists of direct and indirect spending effects. Hence, the indirect effect equals total impact minus the direct effect. See the travel and tourism data files, file tour2007.xls, Table 9 cited above for the BEA's estimate of total impact on output.

²⁵ Total employment (job) impact, which was estimated by the BEA, consists of direct and indirect employment effects. Hence, the indirect effect equals total impact minus the direct effect. See the travel and tourism data files, file tour2007.xls, Table 10 cited above for the BEA's estimate of total employment impact.

²⁶ See note 24 above.

²⁷ See note 25 above.

²⁸ *Bus&MotorcoachNEWS*, February 15, 2008.

²⁹ The American Bus Association and Motor Coach Industries, Inc.

Spending on new motorcoaches has a direct impact on coach manufacturers and an indirect impact on other industries, as coach manufacturers purchase the goods and services necessary to manufacture coaches. The \$978 million spent on new motorcoaches in 2007 generated an additional \$1,614 million of output in these other industries, for a total impact of \$2,592 million.³⁰

In 2007, approximately 18,700 jobs were generated from the industry's investment in new motorcoaches. Allocating the total job impact on the basis of new motorcoach sales as a share of total sales impact yields an estimate of 7,056 jobs in motorcoach manufacturing industries and 11,644 jobs in the manufacturers' supply chains.

The direct and indirect effects of visitor and motorcoach industry spending generated \$55.0 billion in sales which supported 793,000 jobs in 2007.

**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.

³⁰ Impact was calculated using final-demand multipliers for the motor vehicle and equipment manufacturing industry that were estimated by the Bureau of Economic Analysis using the Regional Input-Output Modeling System (RIMS). Approximately \$2.65 of total output is generated per \$1 change in output delivered to final demand by the motor vehicle and equipment manufacturing industry. Approximately 19.1 jobs are supported per \$1 million of output delivered to final demand by the industry.

4. Stimulating Local Economies

While BEA estimates the U.S. economic impact of visitor spending, others have examined and estimated regional and local impacts of visitors traveling on motorcoaches. All studies have demonstrated significant contributions of motorcoach transportation to local economies, spurring sales, supporting jobs, and generating tax revenues

Recent studies, the results of which are summarized in Table 4-1, examined regional economic impacts in 2005 and 2006.

- ***In West Virginia in 2006***, 7,400 motorcoaches of 356 companies transported 44,300 overnight visitors and 243,000 day-trippers who spent \$37.1 million in the West Virginia economy, including \$10.2 million of food and beverages, \$10.2 million on admission fees to attractions, \$7.2 million on retail purchases, \$6.1 million on accommodations, and \$3.4 on gaming.³¹ In addition, the motorcoach operators spent \$3.2 million on operational expenses like fuel, parking, and repairs. Altogether, the spending supported 1,300 jobs and generated \$4.0 million in state and local tax revenues.
- ***In Southwestern Pennsylvania in 2006***, 4,100 motorcoaches of 270 companies transported 43,000 overnight guests and 108,000 day-trippers who spent \$37.5 million in the region, including \$12.1 million on retail purchases, \$11.5 million of food and beverages, \$7.1 million on admission fees to attractions, and \$6.5 million on accommodations.³² Motorcoach operators spend \$1.7 million in the region. Altogether, the spending supported 1,030 jobs and generated \$4.2 million in state and local tax revenues.

³¹ GuerrillaEconomics, LLC, *The Economic Impact of Motorcoach Tourism in West Virginia*, The American Bus Association Foundation and West Virginia Division of Tourism, February 12, 2007.

³² GuerrillaEconomics, LLC, *The Economic Impact of Motorcoach Tourism in Southwestern Pennsylvania*, The American Bus Association Foundation, February 2, 2007.

Table 4-1*Summary of Recent Regional and Local Economic Impact Studies*

Region and Year	Coach Operators	Operator Spending (\$ million)	Visitors	Visitor Spending (\$ million)	Jobs	Tax Revenue (\$ million)
West Virginia in 2006	356	3.2	287,300	37.1	1,300	4.0
Southwestern Pennsylvania in 2006	270	1.7	151,000	37.5	1,030	4.2
Greater Cleveland area in 2005	100	4.3	233,075	24.7	630	2.4
Sevier County, Tennessee in 2005	880	2.5	207,100	86.7	2,100	8.9

SOURCE: GuerrillaEconomics, LLC.

- In the Greater Cleveland Area in 2005***, 4,625 motorcoaches of 100 companies transported 34,275 overnight visitors and 198,800 day-trippers who spent \$24.7 million in the region, including \$8.9 million on food and beverages, \$7.1 million on retail purchases, \$4.7 million on admission fees to attractions, \$1.3 million on lodging, \$1.3 million on arts and entertainment, and \$1.4 million on transportation, sports and events, personal services, and other.³³ Motorcoach operators spent \$4.3 million. Altogether, the spending supported 630 jobs and generated \$2.4 million in state and local tax revenues.
- In the Pigeon Forge area of Sevier County, Tennessee in 2005***, 5,070 motorcoaches of 880 companies transported 200,700 overnight visitors and 6,400 day-trippers who spent \$86.7 million in the region, including \$21.9 million on food and beverages, \$18.0 million on retail purchases, \$16.3 million on admission fees to attractions, and \$30.5 on accommodations.³⁴ Operators spent \$2.5 million. Altogether, the spending supported 2,100 jobs and generated \$8.9 million in state and local tax revenues

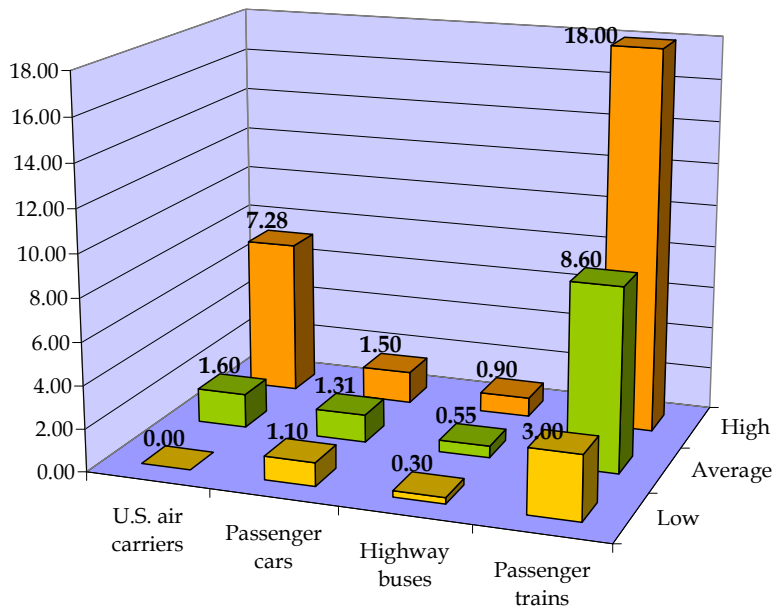
³³ GuerrillaEconomics, LLC, *The Economic Impact of Motorcoach Tourism in Greater Cleveland Ohio*, The American Bus Association Foundation and Greater Cleveland Convention and Visitors Bureau, August 29, 2006.

³⁴ GuerrillaEconomics, LLC, *The Economic Impact of Motorcoach Tourism in Greater Cleveland Ohio*, The American Bus Association Foundation and Greater Cleveland Convention and Visitors Bureau, August 29, 2006.

5. Providing the Safest Service

Over the most recent 10-year period for which data are available for each mode, traveling by motorcoach has been safest (Figure 5-1). From 1996 through 2005, the fatality rate of highway buses averaged only 0.55 per 100 million highway bus miles. The average passenger car fatality rate was more than twice as high—1.31 fatalities per 100 million passenger car miles. U.S. air carrier and passenger train fatality rates were even higher.

Figure 5-1
Motorcoaches Are the Safest Mode
(annual fatality rates per 100 million vehicle miles, 1996-2005)



SOURCE: Bureau of Transportation Statistics, Table 2-9: U.S. Air Carrier Safety Data; Table 2-21: Passenger Car Occupant Safety Data; Table 2-24: Bus Occupant Safety Data; and Table 2-38: Railroad Passenger Safety Data.

6. Providing the Greenest Service

In addition to its safety record, motorcoach energy efficiency is highest and carbon dioxide emissions are lowest (Table 6-1). Average passenger miles per diesel equivalent gallon (DEG) of fuel were 206.6 for motorcoaches—more than twice the fuel efficiency of commuter and intercity rail and more than four times greater than the fuel efficiency of domestic air carriers and transit buses. Motorcoach emissions of CO₂, a greenhouse gas linked to global warming, are lower than any other mode of passenger transportation. Motorcoaches produce only 50 grams of CO₂ per passenger mile. In contrast, commuter, intercity, and light rail produce more than three times that amount. Domestic air carriers and transit buses produce more than four times the amount of CO₂ emissions produced by motorcoaches.

Table 6-1

Motorcoaches Are the Most Energy Efficient and Greenest

Mode	Energy Efficiency		Carbon Dioxide Emissions (grams per passenger mile)
	Passenger Miles per Gallon [a]	BTU per Passenger Mile [b]	
Motorcoach	206.6	668	50
Commuter rail	92.4	1,493	164
Intercity rail (AMTRAK)	67.0	2,061	186
Light rail	120.6	1,144	201
Automobile (average trip)	42.9	3,215	239
Domestic air travel	44.0	3,138	234
Transit bus	31.4	4,391	308

[a] Diesel equivalent gallon (DEG) which is defined on the basis of energy content or British Thermal Unit (BTU). 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. The energy content or BTUs of different fuels varies. Here, one DEG is defined to be 138,000 BTU, the energy content of a gallon of typical highway diesel fuel. One gallon of typical highway gasoline contains 114,000 BTU. One kilowatt hour (KWH) of electricity is equal to 3,412 BTU, so there are 40.45 KWH of electricity in one DEG.

[b] See note [a] for definition of BTU.

SOURCE: M.J. Bradley & Associates, "Updated Comparison of Energy Use & Emissions from Different Transportation Modes," American Bus Association, October 2008, Table 1.1, p. 4.

7. Partnering for Greater Efficiency

The key to greater efficiency in the U.S. transportation system is intermodalism. In 2002, Craig Lentzsch, past President and Chief Executive Officer of Greyhound Lines, Inc. gave an example of how the transportation system could be improved with better intermodal connections:

“A perfect example exists right here in Washington, D.C. Washington’s bus terminal is located three long blocks from Union Station, where Amtrak and Metro rail service are located. This is a formidable barrier to someone with luggage wanting to connect their Capital Trailways, Peter Pan, or Greyhound bus trip with Amtrak or Metro service. Despite this barrier, roughly 55% of Greyhound’s current customers use Metro. Just think how much more attractive Washington’s public transportation would be if intercity bus, intercity rail, and transit services were located in the same building.” [Craig Lentzsch, past President and Chief Executive Officer of Greyhound Lines, Inc. in testimony given before the Highways and Transit Subcommittee of the House Transportation and Infrastructure Committee of the U.S. House of Representatives on June 18, 2002]

Since industry deregulation in 1981, motorcoach operators have worked to improve intermodal connections in the U.S. transportation system through creatively partnering with providers of other modes of commercial transportation services and public entities, including rural transit providers.

- When American and United Airlines cut service to Rockford, Illinois, Van Galder Bus and Rockford Peoria Lines were contracted to transport passengers between Rockford and O’Hare International Airports. Van Galder Bus has transported passengers onto the tarmac of O’Hare International where American Eagle flights await. Rockford Peoria Lines has made dozens of daily runs linking Rockford and O’Hare International Airports. Dozens of other motorcoach operators provide connecting services to airports, including the C & J Trailways service between New Hampshire and Boston’s Logan International airport and the CoachUSA service between Bakersfield and Los Angeles International Airport.
- Escot Bus Lines has run more than 30 buses weekly to and from Miami’s airport and cruise ship ports. The intermodal service provided by motorcoaches helps cruise ship passengers make reliable, orderly, and affordable connections between ship and plane.

- Motorcoach operators have promoted the creation of public-private partnerships for the development and operation of intermodal facilities linking private automobiles and express motorcoaches to improve transportation service between metropolitan and outlying areas. Two very successful projects are found in New Hampshire. The State Department of Transportation funded development of two intermodal facilities, one in Concord and the other in Portsmouth. The State invested only \$11 million in the facilities and commuter motorcoaches. The motorcoach industry operates the facilities with no subsidy from federal or state governments. Operations are fully funded from ticket fares. This year, more than 800,000 people traveled by scheduled bus service through these facilities. Other intermodal facilities that include local and intercity rail and bus services are found in Oceanside, Oxnard, and San Francisco, California and elsewhere throughout America.
- Motorcoach operators are partnering with public sector rural transit providers to serve remote locations with seamless through ticketing arrangements. In Ft. Dodge, Iowa, Jefferson Lines is partnering with the city. The city acts as a Jefferson agent and an interline feeder service by providing a small bus that meets the Jefferson schedule on Interstate 35. The rural communities surrounding Ft. Dodge now have direct connected access to the entire North American intercity bus network. The city of Minneapolis used federal grants and parking revenues to build an attractive central transportation hub – the Hawthorne facility – for transit, charter and tour operators, as well as Greyhound and Jefferson Lines. The facility provides a skyway connection to downtown theater, shopping, and sports complexes for people throughout a five state region including Minnesota, Iowa, South Dakota, North Dakota, and Wisconsin.

Motorcoach operators also enter into partnerships with each other to improve the efficiency of the industry. Regular scheduled service providers 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.

Good transfer facilities and information shared between modes and carriers insure access and increase opportunities for improving the customer experience. In the state of Washington, intercity operators are interlined and co-branded. By expanding the reach of the transportation network, service has increased. Northwest Stagelines has provide an additional 10,000 trips in the past year. Approximately one third of these trips were interlined with other carriers. Interlining – not just between intercity carriers, but between intercity carriers and local feeders – helps the industry reach and serve more people.

In the past three years, the Federal Transit Administration has supported a pilot program to integrate public and private investments in the intercity bus network. Through this program, states can identify gaps in service and then work with existing carriers to interline, expand connections, and increase rural access to services and opportunities available only in larger urban areas. The program provides a 50% match of the fully allocated cost of private service

investment. The state of Washington has benefited from the private match program. Oregon, Minnesota, Colorado, and Utah are also looking at the benefits of working with the private match program. Fundamentally, the program makes every private service provider a potential partner in the national intercity bus network

Motorcoach operators who also provide freight transportation service 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.

The motorcoach industry has long recognized what most people implicitly understand: traveling from one location to another is a multimodal experience. We envision a seamless and continuous trip when planning to travel. Too often, however, transportation system planners have overlooked the multimodal dimension of travel. As a result, facilities are not conveniently connected and a trip that could be seamless and continuous is not. An important element of the success of the motorcoach industry since its deregulation has been its continuing focus on helping to make the travel experience seamless and continuous.

8. Adding Value with Virtually No Federal Subsidy

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 1989, Nathan Associates has periodically estimated federal subsidies to passenger transportation, including commercial air carriers, automobiles, intercity buses, intercity rail (Amtrak), and mass transit. Federal subsidies were defined as the difference between outlays made by the federal government in support of passenger transportation systems and federal funds collected directly from passengers via taxes and fees. The most recent Nathan report estimated subsidies through 2005.³⁵

**Federal Subsidies per
Passenger Mile, 1996-2005
(2005 dollars)**

<i>Bus</i>	0.1¢
<i>Mass transit</i>	15.4¢
<i>Commercial air carrier</i>	0.5¢
<i>Amtrak</i>	19.2¢

In addition, in 2006, the Bureau of Transportation Statistics (BTS) released its own analysis of federal subsidies to passenger transportation.³⁶ The BTS study estimated subsidies from 1990 through 2002.

³⁵ Nathan Associates Inc., *Federal Subsidies for Passenger Transportation 1960-2005, Focus on 1996-2005*, September 20, 2007.

All past subsidy studies have reached a common conclusion: Private sector intercity bus transportation service has been disadvantaged by inequities in the distribution of federal subsidies. Regardless of how the subsidy is expressed – total amount, amount per passenger trip, or amount per passenger mile – the federal subsidy received by intercity bus operators has been a small fraction of the subsidy received by each of the other passenger transportation modes. In absolute terms and relative to other commercial modes of passenger transportation, intercity bus operators pay their fair share of the cost of the federal highway system.

The BTS acknowledged the subsidy disparity. Although the cumulative net federal subsidy to highway passenger transportation was negative (indicating excess user charge payments) from 1990 through 2002, not all users of the highway passenger transportation system paid their fair share. While autos, motorcycles, pickups and vans, *and intercity buses* did, transit buses did not. On average, BTS found that passenger rail service received the largest subsidy during the period, followed by transit and air transportation.

The Nathan study released in 2007 focused on 1996 through 2005, the most recent 10-year period for which data were available. During the latter part of the period, the newly created Department of Homeland Security (DHS) had provided additional federal funds for transportation infrastructure safety and security. However, the amounts of money awarded by DHS varied across systems and modes.

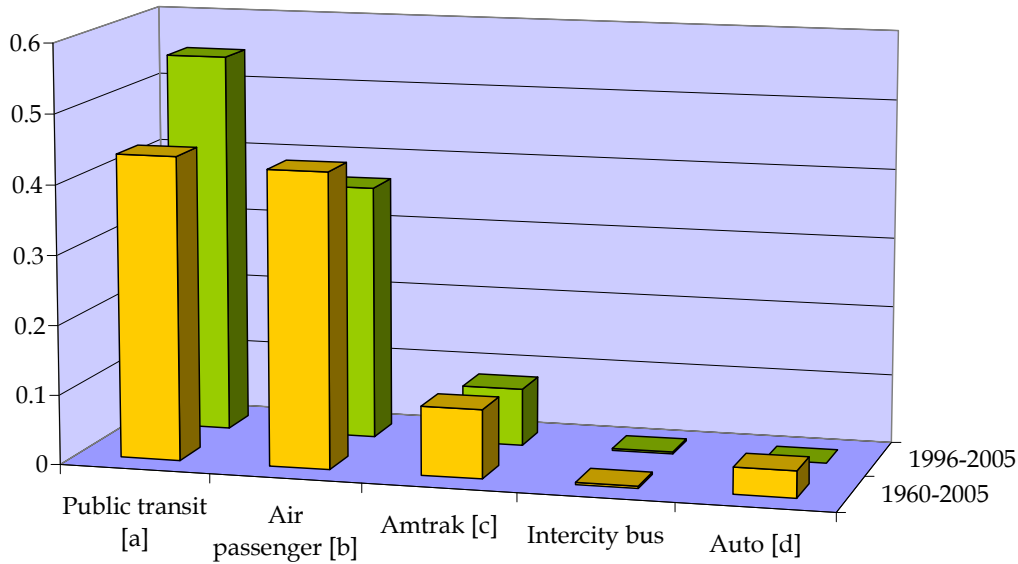
During this period, the disparity between federal subsidies for intercity bus operators and each of the other modes widened, especially the disparity between bus and mass transit subsidies. While mass transit and air passenger transportation (commercial airlines and general aviation) have historically captured equal shares (about 43%) of the total federal subsidy, between 1996 and 2005, mass transit captured 55% of the total, while air passenger transportation captured 37% (Figure 7-1). Meanwhile, the bus subsidy share remained unchanged at 0.3%.

From 1996 through 2005, the subsidy for intercity bus service fell from \$0.08 per passenger trip to \$0.06 (Figure 7-2). In the meantime, the subsidy for transit service increased from \$0.60 per passenger trip to \$0.77.

Per passenger mile, the bus subsidy has remained at 0.1¢ during the past 10 years (Figure 7-3). Per passenger mile subsidies received by other commercial modes of transportation far exceeded the subsidy received by the intercity bus industry.

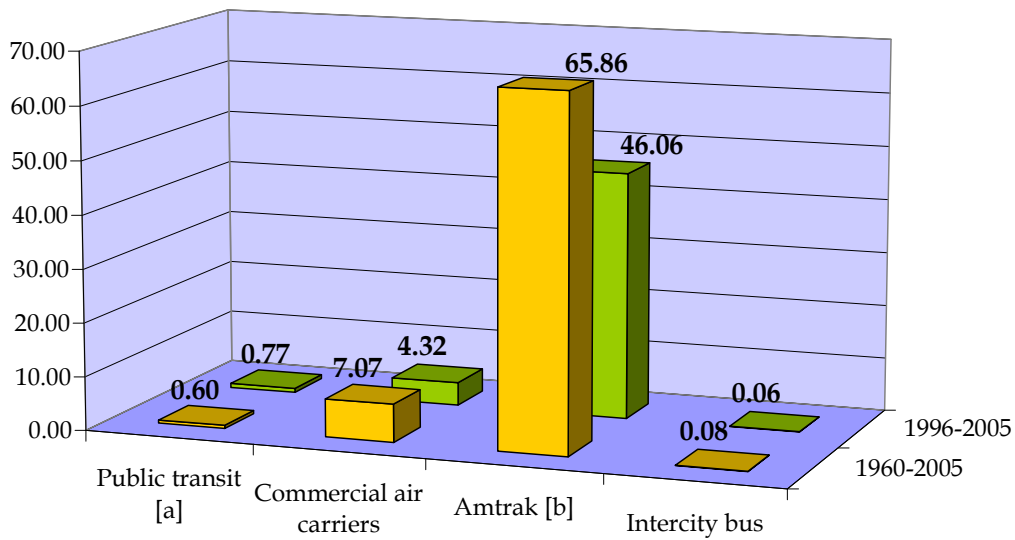
³⁶ *Federal Subsidies to Passenger Transportation*, Bureau of Transportation Statistics, U.S. Department of Transportation, 2005.

Figure 8-1
Motorcoach Share of Total Federal Subsidies Is Insignificant



[a] All modes.
 [b] Includes commercial air carriers and general aviation.
 [c] Period spans 1971-2005.
 [d] Auto passengers contributed in excess of their cost responsibility over the 1996-2005 period.
 SOURCE: Nathan Associates Inc.

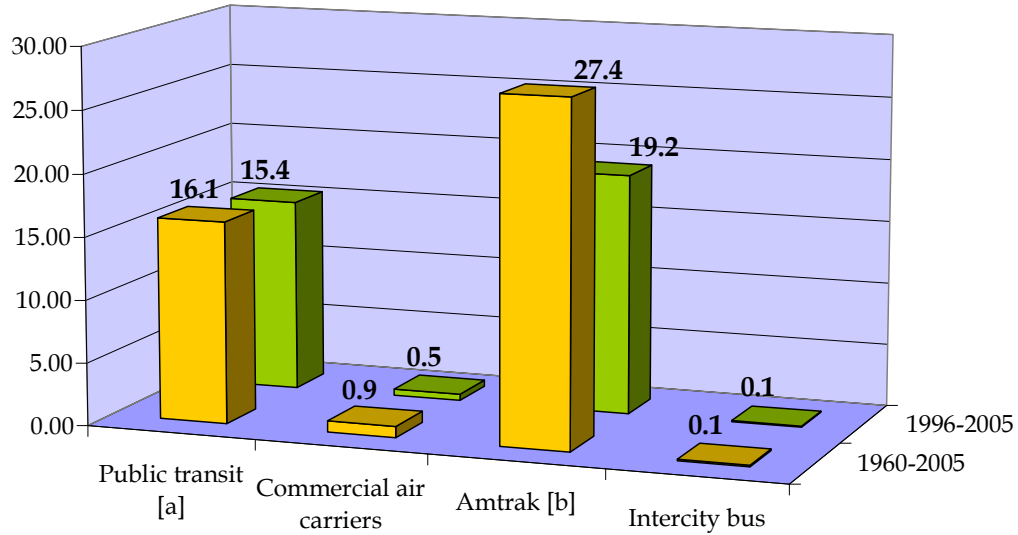
Figure 8-2
Motorcoach Subsidy per Passenger Trip Is Insignificant Relative to Other Modes (2005 \$)



[a] All modes.
 [b] Period spans 1971-2005.
 SOURCE: Nathan Associates Inc.

Figure 8-3

Motorcoach Subsidy per Passenger Mile Is Insignificant Relative to Other Modes (2005 ¢)



[a] All modes.

[b] Period spans 1971-2005.

SOURCE: Nathan Associates Inc.

In 2005, the intercity bus subsidy was \$0.08 per passenger trip. In contrast, the mass transit subsidy of \$0.88 per passenger trip was more than 10 times greater; the commercial air carrier subsidy of \$6.04 per passenger trip was more than 75 times greater, and the Amtrak subsidy of \$51.9 per passenger trip was nearly 649 times greater than the bus subsidy.

Although Congress has recently taken several modest steps to offer additional support for intercity bus service, the support is part of larger subsidy initiatives, the result of which will be a widening in the federal subsidy disparity between intercity buses and other modes. Under SAFETEA-LU, funding for rural intercity bus service is planned to increase in a 5-year period from \$37.5 million to \$70 million, but this is a small part of rural transit funding, which will rise from \$250 million to \$465 million during the period, and an even smaller part of overall federal transit funding, which is scheduled to rise from \$7.6 billion to \$10.3 billion during the period. Similarly, Congress recently authorized \$87 million over four years for intercity bus security, but the authorization was part of a broader bill that authorized over \$4 billion for rail, transit, and bus security.³⁷

From a taxpayer's perspective, the motorcoach industry's numerous contributions to the economy are extremely cost effective. Unlike other transportation industries, motorcoaches pay their fair share of transportation system costs and, while doing so, stimulate the economy through tourism-related sales, jobs, and tax revenues.

³⁷ Public Law 110-53, Implementing Recommendations of the 9/11 Commission Act of 2007.