Motorcoach Census

A Study of the Size and Activity of the Motorcoach Industry in the United States and Canada in 2015



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Executive Summary

Motorcoach Census is a study commissioned by the American Bus Association Foundation (ABAF) to measure the size and activity of the motorcoach transportation service industry in the United States and Canada in 2015. The study provides information on the scope and impact of the motorcoach industry that builds upon earlier census research.

In 2015, the motorcoach industry in the United States and Canada consisted of 3,264 companies that operated 38,720 motorcoaches. In the United States, 2,990 companies operated 34,885 motorcoaches, and in Canada 274 companies operated 3,835 motorcoaches.

Passenger Trips – The motorcoach industry provided 596.4 million passenger trips in 2015. About 59.8% of these trips were provided by large companies that operated 100 or more motorcoaches, 22.4% by mid-size companies operating 25 to 99 motorcoaches and 17.8% by small companies operating fewer than 25 motorcoaches. The industry moved individual passengers a total of 69.6 billion miles in 2015.

Services – Motorcoach companies offer a diverse variety of services. About 96.6% of motorcoach companies provided charter service in 2015, 55.7% provided tour service, 34.7% provided sightseeing, 43.4% provided airport shuttle, 31.3% provided scheduled service, 24.0% provided special operations, and 14.1% provided commuter services.

Companies – The majority (93.7%) of companies were small, and operated fewer than 25 motorcoaches. All told, these firms operated 15,596 motorcoaches, provided 105.9 million passenger trips, and accounted for 39.0% of motorcoach mileage. Mid-sized companies, those that operated 25 to 99 motorcoaches, ran 8,907 motorcoaches, provided 133.7 million passenger trips, and accounted for 44.4% of the industry's motorcoach mileage. Large companies that operated over 100 motorcoaches accounted for 36.7% of the industry's fleet, provided 59.8% of the industry's passenger trips, and 48.7% of the industry's motorcoach mileage.

Employment – The motorcoach industry provided jobs to 112,702 people in 2015. On average, a motorcoach company provided 35 jobs or 2.9 jobs per motorcoach. Small companies – those that operated fewer than 25 motorcoaches – provided for 36.7% of motorcoach industry jobs. Mid-sized companies – those that operated between 25 and 99 motorcoaches – provided for 24.1% of motorcoach industry jobs. Large companies – those that operated more than 100 motorcoaches – provided for 39.2% of motorcoach industry jobs. ¹

Fuel Efficiency – Considering the amount of passengers served per bus, motorcoaches move people with remarkable fuel efficiency. In 2015, the average fuel efficiency of a motorcoach was 4.0 miles per gallon of fuel. With this fuel efficiency, a motorcoach carrying the industry average of 46.9 passengers achieved 186.2 passenger miles per gallon of fuel in 2015.

Motorcoach Use – On average, a motorcoach provided 15,404 passenger trips in 2015, provided 1.8 million passenger miles, employed 2.9 people, used 9,661 gallons of fuel, and traveled 38,385 miles.

This figure may differ from that provided by the "The Economic Impact of the Motorcoach and Group Travel Industry" due to differences in the types of service modeled in the two analyses.

See: "The Economic Impact of the Motorcoach and Group Travel Industry," John Dunham & Associates, 2016. Available at: https://www.buses.org/aba-foundation/research-summary/economic-impact/motorcoach-economic-impact-study

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The study reveals the scope and impact of the motorcoach transportation industry in the United States and Canada. It shows an industry that serves a broad range of customers that moves people with great fuel efficiency. It shows an industry that provides charter, tour, and sightseeing services, which are of vital importance to the travel and leisure industries, and intercity and commuter services, which are essential components of the passenger transportation systems in both the United States and Canada.

1.	Size of the Motorcoach Industry in the United States and Canada in 2015
	United States:
	Motorcoach carriers
	Motorcoaches
	Canada:
	Motorcoach carriers
	Motorcoaches
	Total:
	Motorcoach carriers
	Motorcoaches
	Passenger trips
2.	Motorcoach Industry Activity in the United States and Canada in 2015
	Passenger miles
	Miles traveled
	Fuel consumed (gallons)
	Employment
	r - J
3.	Motorcoach Operating Ratios for 2015
3.	
3.	Motorcoach Operating Ratios for 2015
3.	Motorcoach Operating Ratios for 2015 Passenger trips per motorcoach
3.	Motorcoach Operating Ratios for 2015 Passenger trips per motorcoach
3.	Motorcoach Operating Ratios for 2015 Passenger trips per motorcoach

Disclaimers

This analysis was prepared by John Dunham & Associates based on individual company responses to a survey. Our role was to aggregate the data in order to present an overview of the motorcoach industry in the United States and Canada while maintaining the confidentiality of the individual respondent's information. All estimates are based solely on those provided to us by the companies.

Overall, the analysis is based on data that are statistically significant to the 95 percent level; however, individual size and service breaks are not statistically significant, and have never been so. This should be considered when

analyzing changes from year to year, as they are likely quite variable. In addition, data for 2015 contain responses from significantly fewer mid-sized companies which can also skew the results. The overall margin of error for the 2015 Motorcoach Census is \pm -4.6 percent; however, the significance is much lower for the larger sized companies. The margin of error for medium sized company results is \pm -2.2 percent and for the largest of companies it is \pm -2.2 percent due to the fact that few of these firms responded to the survey.

Any errors in the aggregation and presentation are our own.

1. Introduction

Motorcoach Census is a study commissioned by the American Bus Association Foundation to measure the size and activity of the motorcoach transportation service industry in the United States and Canada in calendar year 2015. Industry size is measured by the number of motorcoach carriers and the number of motorcoaches they operated. Activity is measured by the number of passenger trips provided, passenger miles, services provided, motorcoach miles traveled, fuel consumed, and employment.

Definition of the Motorcoach Industry

The industry consists of private-sector organizations that lease/own and operate motorcoaches and offer motorcoach transportation services to the public, including to private and public sector organizations on a contract basis. The industry includes motorcoach transportation companies that are hired on a contract basis by state or city transit authorities to transport commuters. The industry excludes governments, transit agencies or other public-sector organizations that lease/own and operate motorcoaches and offer transportation services to the public. The industry also excludes private- and public-sector organizations that lease/own and operate motorcoaches for their own use, such as businesses that operate motorcoaches to shuttle their employees.

Definition of a Motorcoach

For this study, a motorcoach, or over-the-road bus (OTRB), is defined as a vehicle designed for long-distance transportation of passengers, characterized by integral construction with an elevated passenger deck located over a baggage compartment. It is at least 35 feet in length with a capacity of more than 30 passengers. This definition closely matches the definition of an OTRB written into U.S. law, namely "a bus characterized by an elevated passenger deck located over a baggage compartment" (Section 3038 of Public Law 105-178, 49 USC 5310 note). This definition of a motorcoach excludes the typical city transit bus and city sightseeing buses, such as double-decker buses and trolleys.

Data Sources

Several sources of information were used to construct the estimates of industry size and activity in this study. Names of potential motorcoach carriers were assembled using information from prior censuses, the American Bus Association Foundation, Infogroup LLC, the U.S. Department of Transportation, and the United Motorcoach Association. Information about the potential motorcoach carriers and the motorcoaches they operated was collected through a survey. The survey questionnaire was distributed to the potential motorcoach carriers. A total of 343 usable survey responses from motorcoach carriers were returned to John Dunham & Associates.

John Dunham & Associates research efforts were supported by a number of industry groups, companies, and organizations, including the United Motorcoach Association, Motor Coach Canada, Trailways Transportation System, International Motorcoach Group, Ontario Motor Coach Association, the Quebec Bus Owners Association, ABC Companies, Motor Coach Industries, and Prevost Car. We acknowledge and thank them for their support. We are particularly grateful to the 343 motorcoach carriers that took the time to provide information about their firms on a confidential basis; their assistance was crucial to the completion of this study.

This report presents industry estimates of size and activity in Chapter 2 and other statistics on motorcoach carrier characteristics in Chapter 3 for the motorcoach transportation services industry in the United States and Canada in 2015. Appendix A describes the study methodology.

2. Size and Activity of the Motorcoach Industry in 2015

Motorcoach Census reports estimates of the size and activity of the motorcoach transportation services industry in the United States and Canada in calendar year 2015. Industry size is measured by the number of motorcoach carriers and the number of motorcoaches they operated. Activity is measured by the number of passenger trips provided, passenger miles, services provided, motorcoach miles traveled, fuel consumed, and employment.

Size of the Motorcoach Industry

In 2015, the motorcoach industry in the United States and Canada consisted of 3,264 carriers and 38,720 motorcoaches (Table 2-1). In the United States, 2,990 carriers operated 34,885 motorcoaches and, in Canada, 274 carriers operated 3,835 motorcoaches. The average carrier operated 12 motorcoaches.

Table 2-1 *Total Carriers and Motorcoaches in 2015 by Fleet Size*

Motorcoach Fleet Size	Carriers		Motorcoaches		Average Number of	Motorcoaches by Capacity (Passengers)	
Fleet Size	Number	Percent	Number	Percent	Motorcoaches	30 to 45	Over 46
100 or more	22	0.7%	14,217	36.7%	639	2,654	11,563
50 to 99	69	2.1%	4,844	12.5%	70	345	4,499
25 to 49	113	3.5%	4,063	10.5%	36	216	3,847
10 to 24	395	12.1%	6,107	15.8%	15	635	5,472
1 to 9	2,665	81.6%	9,489	24.5%	4	1,881	7,607
Industry Total	3,264	100.0%	38,720	100.0%	12	5,731	32,989

Note: Percentages may not sum to 100% because of rounding.

Over the past 5 years since JDA began conducting the Census, the number of companies has fallen considerably. This year, we estimate that total US companies have fallen by 340 and Canadian companies by 24.² At the same time, the number of coaches in the overall market has been fairly consistent. There were a total of 39,607 motorcoaches operating in 2012, and 38,720 operating in 2015, a change of just 2 percent over the course of 4 years.

Passenger Trips

The motorcoach industry in the United States and Canada provided 596.4 million passenger trips in 2015 (Table 2-2). The average carrier provided 182,711 passenger trips and an average motorcoach provided 15,404 passenger trips.

Note that the change in Canadian data are in line with overall changes in motorcoach numbers as reported by Statistics Canada.

Table 2-2 *Motorcoach Passenger Trips in 2015 by Fleet Size*

Motorcoach	Passenger Trips		Average Passen	nger Trips per:		
Fleet Size	Total	Percent	Motorcoach	Carrier		
100 or more	356,862,700	59.8%	25,101	16,027,941		
50 to 99	81,572,700	13.7%	16,839	1,181,802		
25 to 49	52,126,100	8.7%	12,830	461,146		
10 to 24	62,421,900	10.5%	10,221	158,078		
1 to 9	43,460,900	7.3%	4,580	16,307		
Industry Total	596,444,300	100.0%	15,404	182,711		

Note: Percentages may not sum to 100% because of rounding.

The largest carriers (100 or more motorcoaches) provided 356.9 million passenger trips and accounted for 59.8% of passenger trips in 2015, which, on average, amounts to 16,027,941 million passenger trips per carrier. Motorcoaches operated by large carriers provided an average of 25,101 passenger trips per motorcoach in 2015.

The smallest carriers with fewer than 10 motorcoaches provided 7.3% of industry passenger trips, which is, on average, 16,307 passenger trips per carrier and 4,580 passenger trips per motorcoach.

Passenger Miles

A passenger mile is defined as one person transported one mile. The motorcoach industry in the United States and Canada provided 69.6 billion passenger miles in 2015 (Table 2-3). On average, each carrier generated 21.3 million passenger miles and each motorcoach generated 1.8 million passenger miles.

Table 2-3 *Motorcoach Passenger Miles in 2015 by Fleet Size*

Motorcoach	Passengers I	Miles	Average Passenger Miles per:		
Fleet Size	Number	Percent	Motorcoach	Carrier	
100 or more	25,652,980,200	36.8%	1,804,392	1,152,164,356	
50 to 99	12,381,493,100	17.8%	2,555,924	179,379,389	
25 to 49	11,032,562,400	15.8%	2,715,426	97,602,128	
10 to 24	8,625,551,400	12.4%	1,412,372	21,843,514	
1 to 9	11,944,933,300	17.2%	1,258,846	4,481,808	
Industry Total	69,637,520,400	100.0%	1,798,487	21,332,355	

Note: Percentages may not sum to 100% because of rounding.

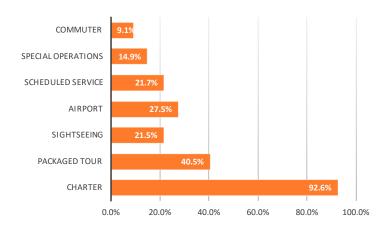
The largest carriers (100 or more motorcoaches) accounted for about 36.8% of industry passenger miles. On average, a large carrier accounted for 1.2 billion passenger miles, or 1.8 million passenger miles per motorcoach; the largest of any fleet-size category.

The smallest carriers, those with a fleet size of fewer than 10 motorcoaches, operated the smallest average number (11.9 billion) of passenger miles per motorcoach. They averaged 4.5 million passenger miles per carrier for a total of 11.9 billion passenger miles, or 17.2% of industry passenger miles.

Services Provided

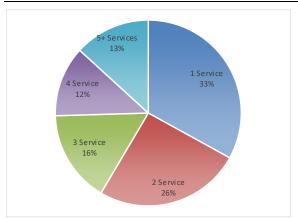
The services offered by the motorcoach industry are diverse. Many carriers offered multiple types of service. Nearly all carriers (96.6%) provided charter service in 2015, followed by tour (55.7%), airport shuttle (43.4%), scheduled service (31.3%), sightseeing (34.7%), special operations (24.0%), and commuter service (14.1%).

Figure 2-1Percentage of Carriers Providing Types of Service in 2015



In 2015, 67.0% of carriers provided more than one service. Approximately (33.0%) carriers had mileage in 2015 for just one service, 25.5% offered two services, 16.0% offered three services, 12.3% offered four services, and 13.2% offered five or more services.

Figure 2-2 *Percentage of Carriers by Number of Services Provided in 2015*



Note: Percentages may not sum to 100% because of rounding.

Vehicle Mileage

Industry motorcoaches traveled 1.5 billion miles in 2015, averaging 455,300 miles per carrier and 38,385 miles per motorcoach. The largest carriers with over 100 motorcoaches averaged 50,885 miles per motorcoach, while the smallest carriers – those with fewer than 10 motorcoaches – averaged 35,500 miles per motorcoach.

Table 2-4 *Motorcoach Vehicle Mileage in 2015 by Fleet Size*

Motorcoach	Vehicle Mil	leage	Average Vehic	cle Mileage per:
Fleet Size	Number	Percent	Motorcoach	Carrier
100 or more	723,427,200	48.7%	50,885	32,491,624
50 to 99	349,164,400	23.5%	72,078	5,058,591
25 to 49	311,123,900	20.9%	76,576	2,752,430
10 to 24	243,245,000	16.4%	39,830	615,998
1 to 9	336,853,200	22.7%	35,500	126,389
Industry Total	1,963,813,700	100.0%	38,385	455,300

Note: Percentages may not sum to 100% because of rounding.

Fuel Consumption

Industry motorcoaches consumed 374.1 million gallons of fuel in 2015. Each carrier, on average, consumed 114,592 gallons of fuel, or 9,661 gallons per motorcoach. Motorcoach fuel efficiency averaged 4.0 miles per gallon. With this fuel efficiency, a motorcoach carrying the industry average of 46.9 passengers achieved 186.2 passenger miles per gallon in 2015.

Table 2-5 *Motorcoach Fuel Consumption in 2015 by Fleet Size*

Motorcoach	Gallons of Fuel	Consumed	Average Gall Consume		Miles Per
Fleet Size	Gallons	Percent	Motorcoach	Carrier	Gallon
100 or more	138,085,400	36.9%	9,713	6,201,894	5.2
50-99	70,621,200	18.9%	14,578	1,023,139	4.9
25 to 49	32,192,200	8.6%	7,923	284,796	9.7
10 to 24	50,068,600	13.4%	8,198	126,795	4.9
1 to 9	83,108,400	22.2%	8,759	31,183	4.1
Industry Total	374,075,800	100.0%	9,661	114,592	4.0

Note: Percentages may not sum to 100% because of rounding.

Employment

The motorcoach industry in the United States and Canada employed 112,600 people in 2015, averaging 35 employees per carrier and 2.9 employees per motorcoach (Table 2-6). The largest carriers with over 100 motorcoaches averaged 1,986 employees per carrier and 3.1 employees per motorcoach, while the smallest carriers with fewer than 10 motorcoaches averaged 7 employees per company and 2.0 employees per motorcoach.³

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This figure may differ from that provided by the "The Economic Impact of the Motorcoach and Group Travel Industry" due to differences in the types of service modeled in the two analyses.

See: "The Economic Impact of the Motorcoach and Group Travel Industry," John Dunham & Associates, 2016. Available at: https://www.buses.org/aba-foundation/research-summary/economic-impact/motorcoach-economic-impact-study

Table 2-6 *Motorcoach Carrier Employment in 2015 by Fleet Size*

Motorcoach	Employment		Average Empl	oloyment per:		
Fleet Size	Total	Percent	Motorcoach	Carrier		
100 or more	44,200	39.2%	3.1	1,986		
50 to 99	12,600	11.2%	2.6	183		
25 to 49	14,500	12.9%	3.6	129		
10 to 24	22,400	19.9%	3.7	57		
1 to 9	18,900	16.8%	2.0	7		
Industry Total	112,600	100.0%	2.9	35		

Note: Percentages may not sum to 100% because of rounding.

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3. Motorcoach Industry Trends

A comparison of the Motorcoach Censuses conducted over the past three years reveals an industry that experienced some decline in total companies, passenger trips, and employment.

In the United States and Canada, total companies declined from 3,628 to 3,264, due to mergers, companies going out of business, and companies discontinuing motorcoach service. From 2014 to 2015, passenger trips declined by 1.2%, fuel consumed increased by 20.6%, and miles traveled increased by 4.0%.

Table 3-1Overview of the Motorcoach Industry, 2013-2015

	2013	2014	% change	2015	% change
Overview					
US Carriers	3,471	3,330	-4.1%	2,990	-10.2%
US Motorcoaches	32,811	32,825	0.0%	34,885	6.3%
Canada Carriers	330	298	-9.7%	274	-7.9%
Canada Motorcoaches	4,092	3,695	-9.7%	3,835	3.8%
Total Carriers	3,801	3,628	-4.6%	3,264	-10.0%
Total Motorcoaches	36,903	36,520	-1.0%	38,720	6.0%
Industry Activity					
Passenger Trips	605,084,000	603,918,000	-0.2%	596,444,300	-1.2%
Passenger Miles	63,092,552,000	61,828,818,000	-2.0%	69,637,520,400	12.6%
Miles Traveled	1,860,710,000	1,888,178,000	1.5%	1,963,813,700	4.0%
Fuel Consumed (gallons)	303,629,000	310,079,600	2.1%	374,075,800	20.6%
Employment	133,200	128,300	-3.7%	112,702	-12.2%
Operating Ratios					
Passenger Trips per Motorcoach	16,400	16,500	0.6%	15,404	-6.6%
Passenger Miles per Motorcoach	1,710,000	1,693,000	-1.0%	1,798,487	6.2%
Miles Traveled per Motorcoach	50,400	51,700	2.6%	38,385	-25.8%
Miles per Gallon of Fuel	6.1	6.1	0.0%	4.0	-34.9%
Passenger Miles per Gallon of Fuel	207.8	199.4	-4.0%	186.2	-6.6%
Employment per Motorcoach	3.6	3.5	-2.8%	2.9	-16.8%
Average Passenger Loads					
Charter Average Passengers	40.9	38.7	-5.4%	37.5	-3.1%
Packaged Tour Average Passengers	37	35.4	-4.3%	38.6	9.0%
Sightseeing Average Passengers	37.2	34.6	-7.0%	33.7	-7.0%
Fixed-Route Average Passengers	35.2	32.6	-7.4%	35.5	9.0%

Appendix A. Study Methodology

The American Bus Association Foundation commissioned the *Motorcoach Census* to measure the size and activity of the motorcoach transportation service industry in the United States and Canada. The study estimates and reports total industry size and activity for the year 2015. This appendix describes the data sources and methodologies used in the study. The appendix describes the target population, the survey frame, the survey data collection and processing, the estimation of industry size, and the estimation of industry activity.

Target Population

The target population of the study is the motorcoach transportation service industry in the United States and Canada in 2015.

The industry consists of private-sector organizations that lease/own and operate motorcoaches and offer motorcoach transportation services to the public, including to private and public sector organizations on a contract basis. The industry includes, for example, motorcoach transportation companies that are hired on a contract basis by state or city transit authorities to transport commuters. The industry excludes governments, transit agencies or other public-sector organizations that lease/own and operate motorcoaches and offer motorcoach transportation services to the public. The industry also excludes private and public-sector organizations that lease/own and operate motorcoaches just for their own use, such as businesses that operate motorcoaches to shuttle their employees.

Motorcoach transportation services include motorcoach charter services, tour and sightseeing services using motorcoaches, and motorcoach passenger transportation over regular routes and on regular schedules, such as airport shuttle services, commuter transportation services, and scheduled intercity and rural transportation services. The seven types of motorcoach transportation service that were used in this study are defined below:

- **Charter** A preformed group (organization, association, tour company, shuttle service, church, school, etc.) who hires a motorcoach for exclusive use under a fixed contract.
- Packaged/Retail Tour A planned or prearranged trip offered for sale by a motorcoach transportation company (including a tour company that leases/owns and operates motorcoaches) at a fixed price to leisure travelers. Price usually includes lodging, meals, sightseeing, and transportation.
- **Sightseeing** A service offered by motorcoach or tour companies to view points of interest within a specified area.
- **Airport Shuttle** A private motorcoach service usually operating on a fixed-route to transport passengers to and from airports.
- **Commuter** A fixed-route bus service, characterized by service predominantly in one direction during peak periods, limited stops, use of multi-ride tickets, and routes of extended length, usually between the central business district and outlying suburbs.
- **Scheduled** A specified, ticketed, predetermined regular-route service between cities or terminals.
- **Special Operations** Published, regular-route service to special events, such as fairs, sporting events, or service for employees to work sites.

A motorcoach, or over-the-road bus (OTRB), is defined for this study as a vehicle designed for long-distance transportation of passengers, characterized by integral construction with an elevated passenger deck located over a baggage compartment. It is at least 35 feet in length with a capacity of more than 30 passengers. This definition closely matches the definition of an OTRB written into U.S. law, namely "a bus characterized by an elevated passenger deck located over a baggage compartment" (Section 3038 of Public Law 105-178, 49 USC 5310 note).

This definition of a motorcoach excludes the typical city transit bus, which is designed for urban and suburban routes, and city sightseeing buses, such as double-decker buses and trolleys.

Survey Frame

John Dunham & Associates assembled a list (i.e., survey frame) of carriers in the United States and Canada that potentially offer motorcoach transportation services to the public. The list was developed using information from the following sources:

- Prior motorcoach census research
- American Bus Association Foundation
- Infogroup LLC
- U.S. Department of Transportation

Potential carriers were identified by name, trade name, mailing address, contact name, phone number, e-mail address, and fax number.

Outside of the *Motorcoach Census* no comprehensive source of company information on motorcoach operators is publicly available. Data sources often contradict each other, and most listings are either out of date or inaccurate. Companies that operate motor coaches are often combined with transit service providers, companies that operate school buses or firms that use smaller passenger vans. In conducting surveys for the *Motorcoach Census* over the past four years, JDA has had direct contact with more than 4,800 potential carriers. Throughout the survey process, JDA identified companies that were no longer in business, did not operate motorcoaches as defined for the purposes of this study, or had disconnected phone numbers or outdated addresses. JDA will continue to refine the numbers for future Motorcoach Censuses.

While there have been adjustments to JDA's earlier estimates, the total number of motorcoach operators has also decreased, and by directly contacting companies JDA was able to determine a number of companies had gone out of business, merged with other companies, or been acquired by larger companies. JDA estimates that, in 2015, there were 2,990 companies operating in the United States and 274 operating in Canada, for a total of 3,264 companies. This is 364 fewer companies than in 2014.

Table A-1 *The Motorcoach Industry by Size of Fleet – U.S. and Canada – 2013-2015*

	Total Carriers				
Fleet Size	2013	2014	2015		
1 to 9	3,115	2,961	2,665		
10 to 24	462	439	395		
25 to 49	155	155	113		
50 to 99	50	50	69		
100 or more	19	23	22		
Total	3,801	3,628	3,264		

The motorcoach industry experienced a decline in the size of companies due to mergers and acquisitions, companies going out of business, and companies discontinuing motorcoach service. From 2014 to 2015, the industry decreased in size by 364 companies.

Survey Data Collection and Processing

Online survey questionnaires with cover letters from the ABAF were sent electronically to potential carriers. The potential carriers were given the option of completing the survey online, by e-mail, or over the phone. JDA and the

American Bus Association Foundation (ABAF) made follow-up solicitations to potential carriers by both e-mail and phone. The ABAF sent notices several times to its members by e-mail encouraging them to participate in the survey.

Submitted electronic and paper questionnaires were reviewed for completeness and validity. Additional contact was made selectively to resolve unclear responses and to prompt response to questions left unanswered. JDA consolidated the information from all surveys collected into one database. The data were tabulated and evaluated for inconsistencies, irregularities, and respondent-specific values that were significantly different from average reported values. Survey respondents were contacted to clarify anomalous answers. The final survey database contained usable responses from 343 motorcoach carriers. Table A-3 presents the sample sizes realized from the returns to the *Motorcoach Census* survey of motorcoach carriers.

Estimating the Size of the Motorcoach Industry in 2015

Throughout the survey process, JDA identified companies that were no longer in business, did not operate motorcoaches, or had disconnected phone numbers and bad addresses. JDA assumed that the companies with bad addresses and/or disconnected phone numbers were out of business and did not count them as motorcoach operators. In all, JDA identified a total of 3,189 motorcoach companies operating in the United States and Canada (not including subsidiaries of larger entities). These companies operated throughout a total of 4,650 separate facilities.

In order to determine the size of the motorcoach industry by fleet size, JDA relied upon survey collection efforts. Even in the case of a motorcoach operator that did not wish to complete the survey, JDA attempted to verify the total motorcoaches operated by the company. As a result, JDA verified the number of motorcoaches operated by all but 31 of the companies, either through Infogroup data, FMCSA data, survey response, phone calls, or company websites.

Estimating Motorcoach Industry Activity in 2015

To estimate a population total for the activity of the motorcoach industry, John Dunham & Associates calculated sample totals for the types of activity measured (passenger trips, mileage, fuel consumed, and employment). Then, John Dunham estimated the total motorcoaches in each fleet size category using the mean motorcoaches operated in each fleet size category of the sample population. Third, the sample totals were multiplied by weights to calculate population totals for each fleet size category. Each fleet size category was weighted by the estimated population total of motorcoaches in the category divided by the sample total of motorcoaches in the category. After weighting all of the sample totals by fleet size, the population totals for each fleet size were summed to calculate an industry total.