Motorcoach Census

A Study of the Size and Activity of the

Motorcoach Industry in the United States and Canada in 2022

Prepared for the American Bus Association Foundation
by John Dunham & Associates
December 22, 2023

Motorcoach Census

A Study of the Size and Activity of the Motorcoach Industry in the United States and Canada in 2022

December 22, 2023

Contents

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 2022. The study provides information on the scope and impact of the motorcoach industry that builds upon earlier census research.

In 2022, the motorcoach industry in the United States and Canada consisted of 1,566 companies that operated 27,630 motorcoaches. In the United States, 1,374 companies operated 24,792 motorcoaches, and in Canada 192 companies operated 2,838 motorcoaches.

Services – Motorcoach companies offer a diverse variety of services. About 96.0% of motorcoach companies provided charter service in 2022, 34.8% provided tour service, 20.3% provided sightseeing, 22.3% provided scheduled service, and 10.1% provided commuter services.

Companies – The majority (88.8%) of companies were small and operated fewer than 25 motorcoaches. All told, these firms operated 9,788 motorcoaches and accounted for 32.8% of motorcoach mileage. Mid-sized companies, those that operated 25 to 99 motorcoaches, ran 6,526 motorcoaches, and accounted for 27.3% of the industry's motorcoach mileage. Large companies that operated over 100 motorcoaches accounted for 41.0% of the industry's fleet and 40.0% of the industry's motorcoach mileage.

Employment – The motorcoach industry provided jobs to 52,366 people in 2022. On average, a motorcoach company provided 33 jobs or 1.9 jobs per motorcoach. Small companies – those that operated fewer than 25 motorcoaches – accounted for 44.3% of motorcoach industry jobs. Mid-sized companies – those that operated between 25 and 99 motorcoaches – provided for 24.2% of motorcoach industry jobs. Large companies – those that operated more than 100 motorcoaches – provided for 31.5% of motorcoach industry jobs.[1]

Motorcoach Use – On average, a motorcoach provided 1.1 million passenger miles, employed 1.9 people, and traveled 44,519 miles.

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] This figure may differ from that provided by *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, 2022, available at: https://www.buses.org/aba-foundation/research-summary/economic-impact/motorcoach-economic-impact-study

Selected Results of *Motorcoach Census*

1. Size of the Motorcoach Industry in the United States and Canada in 2022

United States:	
Motorcoach carriers	1,374
Motorcoaches	24,792
Canada:	
Motorcoach carriers	192
Motorcoaches	2,838
Total:	
Motorcoach carriers	1,566
Motorcoaches	27,630

2. Motorcoach Industry Activity in the United States and Canada in 2022

Passenger miles	30.8 billion
Miles traveled	1.2 billion
Employment	52,366

3. Motorcoach Operating Ratios for 2022

Passenger miles per motorcoach	1.1 million
Miles traveled per motorcoach	44,519
Employment per motorcoach	1.9

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 2022. Industry size is measured by the number of motorcoach carriers and the number of motorcoaches they operate. Activity is measured by the number of passenger miles driven, services provided, motorcoach miles traveled, 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, Data Axle, the U.S. Department of Transportation, and the United Motorcoach Association. Information about the potential motorcoach carriers, and the motorcoaches that they operated, was collected through a survey. The survey questionnaire was distributed to potential motorcoach carriers. A total of 272 usable survey responses from motorcoach carriers were returned to John Dunham & Associates.

John Dunham & Associates research efforts were supported by several industry groups, companies, and organizations, including the United Motorcoach Association, Motor Coach Canada, Trailways Transportation System, International Motorcoach Group, Ontario Motor Coach Association. We acknowledge and thank them for their support. We are particularly grateful to those 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 2022. Appendix A describes the study methodology and Appendix B describes the impact of COVID-19 on the industry.

.

Disclaimers

This analysis was prepared by John Dunham & Associates based on individual company responses to a survey. Our role was to aggregate the data 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 90% 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 2022 represents the first full year following the COVID-19 shutdowns. These shutdowns dramatically impacted the industry, and many carriers ceased operation or were merged into other firms. The dislocation from COVID-19 makes comparisons with prior years' data difficult.

Any errors in the aggregation and presentation are our own.

2. Size and Activity of the Motorcoach Industry in 2022

Motorcoach Census reports estimates of the size and activity of the motorcoach transportation services industry in the United States and Canada in calendar year 2022. Industry size is measured by the number of motorcoach carriers and the number of motorcoaches they operate. Activity is measured by the number of passenger miles traveled, services provided, motorcoach miles traveled, and employment.

Size of the Motorcoach Industry

In 2022, the motorcoach industry in the United States and Canada consisted of 1,566 carriers and 27,630 motorcoaches (Table 2-1). In the United States, 1,374 carriers operated 24,792 motorcoaches and, in Canada, 192 carriers operated 2,838 motorcoaches. The average carrier operated 18 motorcoaches.[2]

Table 2-1
Total Carriers and Motorcoaches in 2022 by Fleet Size

Motorcoach Fleet Size	Carriers		Motorcoaches		Average Number of Motorcoaches
	Number	Percent	Number	Percent	
100 or more	27	1.7%	11,316	41.0%	419
50 to 99	42	2.7%	3,028	11.0%	72
25 to 49	106	6.8%	3,498	12.7%	33
10 to 24	321	20.5%	4,736	17.1%	15
1 to 9	1,070	68.3%	5,052	18.3%	5
Industry Total	**1,566**	**100.0%**	**27,630**	**100.0%**	**18**

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

Passenger Miles[3]

A passenger mile is defined as one person transported one mile. The motorcoach industry in the United States and Canada provided 30.8 billion passenger miles in 2022 (Table 2-2). On average, each carrier generated 19.6 million passenger miles and each motorcoach generated 1.1 million passenger miles.

Table 2-2
Motorcoach Passenger Miles in 2022 by Fleet Size

Motorcoach Fleet Size	Passengers Miles		Average Passenger Miles per:	
	Number	Percent	Motorcoach	Carrier
100 or more	12,286,052,700	40.0%	1,085,753	455,038,990
50 to 99	5,768,723,400	18.8%	1,905,001	137,350,558
25 to 49	2,622,704,500	8.5%	749,773	24,742,495
10 to 24	7,156,385,500	23.3%	1,511,109	22,294,036
1 to 9	2,917,859,900	9.5%	577,546	2,726,972
Industry Total	**30,751,726,000**	**100.0%**	**1,112,987**	**19,637,118**

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

[2] Note that this reflects the number of companies still operating at the end of 2022.

[3] Data on passenger trips was not surveyed as part of the 2022 questionnaire, so average coachload data is not internally available. Estimates of passenger miles are based off an assumed average coachload of 25 travelers. This compares to 37.7 in 2019 and 28.4 in 2020.

The largest carriers (100 or more motorcoaches) accounted for about 40.0% of industry passenger miles. On average, a large carrier accounted for 455 million passenger miles, or 1.1 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 (2.9 billion) of passenger miles per motorcoach. They averaged 2.7 million passenger miles per carrier for a total of 2.9 billion passenger miles, or 9.5% of industry passenger miles.

While data on passenger trips was not available in the 2022 census as the bulk of respondents were charter companies, a special question on whether trips were either day trips, or overnight excursions was included.

Table 2-3
Motorcoach Trip Types by Service and Fleet Size (Percent of Companies)

	Day Trips						Overnight Trips					
	Charter	Pkg Tour	Fixed Route	Sight-seeing	Comm	Other	Charter	Pkg Tour	Fixed Route	Sight-seeing	Comm	Other
100 or more	50%	0%	50%	0%	10%	20%	50%	10%	20%	0%	0%	0%
50 to 99	40%	5%	30%	0%	5%	10%	40%	5%	10%	0%	0%	0%
25 to 49	56%	16%	16%	9%	13%	19%	50%	16%	0%	3%	0%	3%
10 to 24	41%	12%	11%	11%	4%	12%	40%	12%	4%	8%	3%	8%
1 to 9	61%	20%	5%	8%	0%	18%	57%	21%	3%	6%	0%	12%
Industry Total	**52%**	**15%**	**13%**	**8%**	**4%**	**16%**	**49%**	**16%**	**4%**	**6%**	**1%**	**8%**

According to the survey, about 52.0% of respondents offered day charters, and virtually the same percentage (49.0%) sold overnight charters. Similarly, the split between single and multi-day package and sighting tours was roughly the same. In the case, of companies offering fixed route service, commuter service, and other (generally shuttle) services, the skew was much higher toward day trips.

Future Plans

The 2022 Census asked companies to indicate if they would be purchasing or retiring coaches in 2023. Respondents did not answer the question in a standard manner, so only percentages of the number of companies indicating what they would be doing are included in the results.

Table 2-4
Planned Motorcoach Purchases and Retirements by Fleet Size (Percent of Companies)

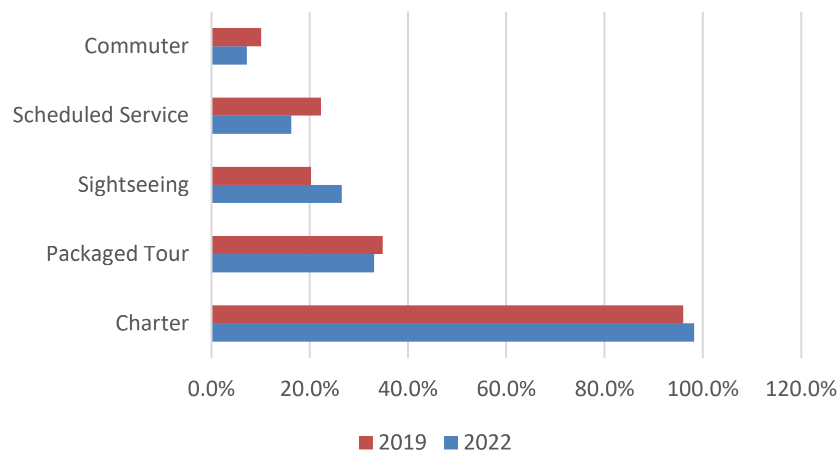
	Plans to purchase or eliminate	New Purchase	New Lease	Used Purchase	Used Lease	Sell Coach	Terminate Lease
100 or more	70%	60%	10%	10%	0%	30%	0%
50 to 99	65%	60%	5%	15%	5%	50%	0%
25 to 49	69%	59%	3%	13%	0%	34%	0%
10 to 24	63%	48%	3%	18%	0%	32%	0%
1 to 9	46%	18%	4%	23%	5%	21%	2%
Industry Total	**57%**	**38%**	**4%**	**19%**	**3%**	**29%**	**1%**

As Table 2-4 indicates, over half of the respondents indicated that they would be either purchasing or eliminating coaches in 2023, Larger companies indicated that they would be generally purchasing or leasing new motorcoaches, while smaller companies suggested that they would be more prone to acquiring used motorcoaches. Just under a third of respondents stated that they would be retiring at least some coaches from their fleets in 2023.

Services Provided

The services offered by the motorcoach industry are diverse. Many carriers offered multiple types of service. Nearly all carriers (98.2%) provided charter service in 2022, followed by tour (33.1%), sightseeing (26.5%), scheduled service (16.3%), and commuter service (7.2%).

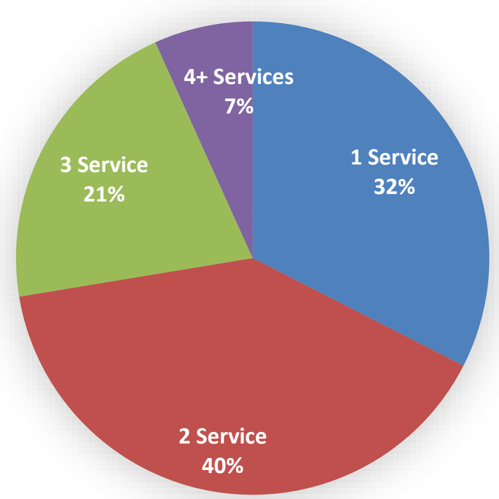
Figure 2-1
Percentage of Carriers Providing Types of Service in 2022



The data suggest that motorcoach use has shifted from general transportation to event and tourism related activities due to overall changes to the economy following COVID-19. Charter and sightseeing services are a more important part of the industry now than prior to COVID, while commuting has declined dramatically.

In 2022, 67.5% of carriers provided more than one service. Approximately 32.5% carriers had mileage in 2022 for just one service, 39.9% offered two services, 20.9% offered three services, and 6.7% offered four or more services.

Figure 2-2
Percentage of Carriers by Number of Services Provided in 2022



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

Vehicle Mileage

Industry motorcoaches traveled 1.2 billion miles in 2022, averaging 785,485 miles per carrier and 44,519 miles per motorcoach. The largest carriers with over 100 motorcoaches averaged 43,430 miles per motorcoach, while the smallest carriers – those with fewer than 10 motorcoaches – averaged 23,102 miles per motorcoach.

Table 2-5
Motorcoach Vehicle Mileage in 2022 by Fleet Size

Motorcoach Fleet Size	Vehicle Mileage		Average Vehicle Mileage per:	
	Number	Percent	Motorcoach	Carrier
100 or more	491,442,100	40.0%	43,430	18,201,560
50 to 99	230,748,900	18.8%	76,200	5,494,022
25 to 49	104,908,200	8.5%	29,991	989,700
10 to 24	286,255,400	23.3%	60,444	891,761
1 to 9	116,714,400	9.5%	23,102	109,079
Industry Total	**1,230,069,000**	**100.0%**	**44,519**	**785,485**

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

Employment

The motorcoach industry in the United States and Canada employed 52,366 people in 2022, averaging 33 employees per carrier and 1.9 employees per motorcoach (Table 2-6). The largest carriers with over 100 motorcoaches averaged 610 employees per carrier and 1.5 employees per motorcoach, while the smallest carriers with fewer than 10 motorcoaches averaged 12 employees per company and 2.5 employees per motorcoach.[4]

Table 2-6
Motorcoach Carrier Employment in 2022 by Fleet Size

Motorcoach Fleet Size	Employment		Average Employment per:	
	Total	Percent	Motorcoach	Carrier
100 or more	16,475	31.5%	1.5	610
50 to 99	6,134	11.7%	2.0	146
25 to 49	6,542	12.5%	1.9	62
10 to 24	10,584	20.2%	2.2	33
1 to 9	12,630	24.1%	2.5	12
Industry Total	**52,366**	**100.0%**	**1.9**	**33**

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

[4] This figure may differ from that provided by *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, 2022. Available at: https://www.buses.org/aba-foundation/research-summary/economic-impact/motorcoach-economic-impact-study

3. Motorcoach Industry Trends

A comparison of the Motorcoach Censuses conducted over the past two census years reveals an industry that is undergoing significant consolidation. In the United States and Canada, total companies declined from 1,873 to 1,566 due to mergers, companies going out of business, and companies discontinuing motorcoach service. The number of coaches decreased as well as companies downsized their fleets. Total motorcoaches dropped 10.47% between 2020 and 2022, from 30,860 to 27,630.

Numbers related to business activity show a rebound over COVID-19 era declines. Passenger mileage has increased from about 19.2 billion miles in 2020 to 30.8 billion in 2022. Miles traveled has grown more than 80%, up from 677.2 million in 2020 to 1.2 billion in 2022. Motorcoach employment appears to be a little slower to respond, but there are nearly 3,000 more jobs in 2022 than there were in 2020.

The effect of the consolidation is apparent when looking at the operating ratios. Rebounding industry activity with smaller fleet sizes reflects much greater increases in activity on a "per motorcoach" basis. Passenger miles per motorcoach is up from 623,696 to more than 1.1 million, an increase of nearly 80%, and miles traveled per coach has more than doubled from 21,945 to 44,519.

Table 3-1

Overview of the Motorcoach Industry, 2020-2022

	2020	2022	*% change*
Overview			
US Carriers	*1,717*	*1,374*	*-19.98%*
US Motorcoaches	*27,753*	*24,792*	*-10.67%*
Canada Carriers	*156*	*192*	*23.08%*
Canada Motorcoaches	*3,107*	*2,838*	*-8.66%*
Total Carriers	*1,873*	*1,566*	*-16.39%*
Total Motorcoaches	*30,860*	*27,630*	*-10.47%*
Industry Activity			
Passenger Miles	*19,247,481,100*	*30,751,726,081*	*59.77%*
Miles Traveled	*677,221,600*	*1,230,069,043*	*81.63%*
Employment	*49,430*	*52,366*	*5.94%*
Operating Ratios			
passenger miles per motorcoach	*623,696*	*1,112,987*	*78.45%*
miles traveled per motorcoach	*21,945*	*44,519*	*102.87%*
employment per motorcoach	*1.6*	*1.9*	*18.75%*

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 2022. 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 2022. 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 used in this study are defined below:

- **Charter** – A preformed group (organization, association, tour company, shuttle service, church, school, etc.) that 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 carrying passengers to points of interest within a specified area.
- **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.
- **Airport Shuttle** – A private motorcoach service usually operating on a fixed route to transport passengers to and from airports.
- **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 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
- Data Axle
- U.S. Department of Transportation
- The Canadian Public Transit Discussion Board

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 motorcoaches 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 eleven years, JDA has had direct contact with more than 5,000 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 that a number of companies had gone out of business, merged with other companies, or been acquired by larger companies. JDA estimates that, in 2022, there were 1,374 companies operating in the United States and 192 operating in Canada, for a total of 1,566 companies. This is 36.2% fewer companies than in 2021.

Table A-1
The Motorcoach Industry by Size of Fleet – U.S. and Canada – 2020-2022

	Total Carriers		
Fleet Size	**2020**	**2021**	**2022**
1 to 9	3,115	2,961	1,070
10 to 24	462	439	321
25 to 49	155	155	106
50 to 99	50	50	42
100 or more	19	23	27
Total	**3,801**	**3,628**	**1,566**

The motorcoach industry experienced a decline in the number of companies due to mergers and acquisitions, companies going out of business, and companies discontinuing motorcoach service. From 2021 to 2022, the industry decreased in size by 36.2% companies. It is estimated that about 275 companies ceased operations in the United States in 2020, and 88 ceased operations in Canada during the year primarily due to the loss of business resulting from the COVID-19 pandemic. In addition, numerous corrections have been made over the years, as companies that operated motorcoaches for specific populations (churches, senior living facilities, hotels, etc.) have been identified and removed.

Survey Data Collection and Processing

Online survey questionnaires with cover letters from the ABA 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 272 motorcoach carriers.

Estimating the Size of the Motorcoach Industry in 2022

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 1,566 motorcoach companies operating in the United States and Canada (not including subsidiaries of larger entities).

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 number of motorcoaches operated by the company. As a result, JDA verified the number of motorcoaches operated by all of the companies, either through Data Axle data, FMCSA data, CTPDB data, survey responses, phone calls, or company websites.

Estimating Motorcoach Industry Activity in 2022

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, and employment). Then, JDA 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 weighing the sample totals by fleet size, the population totals for each fleet size were summed to calculate an industry total.

One of the major issues with business surveys is developing a data panel that is statistically significant. This means that the probability of the sample mean of the data not matching the population mean is below a specified level (generally set to 10 percent in this type of analysis). In any analysis that involves drawing a sample from a population, there is always the possibility that an observed effect would have occurred due to sampling error alone. If the sampling statistic is lower than the significance level, it is possible to conclude that the survey reflects the characteristics of the entire population.

In the Motorcoach Census, the sample is significant to the 90% level for the population; however, the level of significance is not high for many of the sampling size categories. Table A-2 below outlines the level of significance for each of the category levels.

Table A-2
Statistical Significance of the Survey

	population	sample	level of significance
1-9 buses	1,070	137	5.27
10-24 buses	321	73	6.80
25-49 buses	106	32	9.79
50-99 buses	42	20	10.81
100+ buses	27	10	16.88
Total	1,566	272	4.55

Appendix B. Impact of COVID-19 on 2022 Operations

In early 2020, the coronavirus pandemic brought large sections of the economy to a screeching halt. Local and national governments across the world grappled with various types of shutdowns and quarantine procedures, which affected all corners of the economy. While some industries and jobs were able to easily adapt to limited travel and work-from-home transitions, it struck at the absolute core of industries that rely on group travel and transportation. The motorcoach industry would be one of the most heavily battered industries navigating the pandemic.

According to responses from the 2020 Survey, motorcoach businesses saw an overall 76.7% decline in passengers from 535.8 million in 2019 to just 124.6 million in 2020. Every sector of the industry felt this change, from Charter to Scheduled, however Sightseeing Trips were hit the hardest.

The most recent Census (2022) shows that much of the lost ground has been made up, particularly in the charger and other (airport shuttles, etc.) service areas, however, some portions of the industry have yet to recover. Commuter services have continued to decline even after businesses began to reopen.

The table below summarizes changes in industry passengers by service.

Table B-1
Change in Business due to COVID-19

2022 Survey Results

	Passengers						
Coaches	Charter	Package/Tour	Sightseeing	Commuter	Scheduled	Other	Total
1-9 buses	83,494,145	1,282,916	605,040	-	791,259	861,234	87,034,594
10-24 buses	11,245,454	673,275	1,801,644	815,707	1,022,794	945,762	16,504,636
25-49 buses	12,561,234	307,996	998,410	1,766,289	2,713,895	4,750,844	23,098,667
50-99 buses	14,459,189	556,000	138,000	95,261	18,830,022	6,210,026	40,288,498
100+ buses	9,566,924	1,152,245	-	7,006,990	24,447,228	2,460,590	44,633,977
Total	131,326,945	3,972,432	3,543,094	9,684,247	47,805,199	15,228,456	211,560,372

2020 Survey Results

	Passengers						
Coaches	Charter	Package/Tour	Sightseeing	Commuter	Scheduled	Other	Total
1-9 buses	11,459,850	407,204	224,826	46,055	284,775	183,441	12,606,152
10-24 buses	26,892,093	451,028	6,612	359,711	3,012,984	2,461,350	33,183,779
25-49 buses	7,391,274	43,507	10,437	315,514	3,166,873	7,263	10,934,869
50-99 buses	10,752,463	77,261	-	1,581,890	6,276,615	461,709	19,149,938
100+ buses	6,474,023	20,321	24,082	12,850,703	20,864,851	8,468,625	48,702,605
Total	62,969,704	999,320	265,958	15,153,874	33,606,099	11,582,388	124,577,343

2019 Survey Results

	Passengers						
Coaches	Charter	Package/Tour	Sightseeing	Commuter	Scheduled	Other	Total
1-9 buses	70,831,339	7,516,317	4,349,121	3,561,582	2,869,778	911,757	90,039,894
10-24 buses	85,544,230	8,837,172	10,602,240	2,385,902	4,174,635	5,727,186	117,271,367
25-49 buses	54,042,683	9,380,744	5,601,294	6,744,805	10,662,147	746,152	87,177,825
50-99 buses	37,899,102	5,738,837	5,538,045	22,514,960	9,067,637	561,381	81,319,962
100+ buses	23,087,254	2,582,257	1,590,364	42,338,581	68,660,324	21,703,756	159,962,537
Total	271,404,609	34,055,327	27,681,065	77,545,829	95,434,521	29,650,232	535,771,584

Difference (2020-2022)	68,357,240	2,973,112	3,277,136	(5,469,627)	14,199,100	3,646,068	86,983,029
Percent Gain	25.2%	8.7%	11.8%	-7.1%	14.9%	12.3%	16.2%