

Motorcoach Census Update 2010



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1. Introduction

Motorcoach Census Update 2010 is the second study commissioned by the American Bus Association (ABA) to update several key statistics in its comprehensive benchmarking study *Motorcoach Census 2008*. The benchmarking study measured the size and activity of the motorcoach passenger transportation industry in the United States and Canada during the year 2007. Industry size was measured by the number of motorcoach carriers and the number of motorcoaches they operated. Activity was measured by the number of passenger trips provided, passenger miles, services provided, motorcoach vehicle and service mileage, fuel consumed, and employment. The study also reported on the competition experienced by motorcoach carriers from transit agencies, the age of motorcoaches, how motorcoaches were acquired, how fuel was purchased, the age of carriers, and other revenue-generating vehicles.¹

Two follow-on studies, *Motorcoach Census Update 2009*² for data year 2008 and *Motorcoach Census Update 2010* for data year 2009, were sponsored by ABA to update four key statistics:

- the annual number of passenger trips provided by industry motorcoaches,
- the annual number of motorcoach passenger miles,
- annual motorcoach service miles, and
- the total number of motorcoaches operated by the industry.

The first two, passenger trips and passenger miles, are common measures of service consumption for passenger transportation. This study, *Motorcoach Census Update 2010*, also provides 2009 estimates for (1) motorcoach fuel consumption, (2) motorcoach mileage per gallon of fuel, and (3) the average manufacture year of motorcoaches.

The estimates in this report are based primarily on a survey of motorcoach carriers that was conducted during the late summer and early fall of 2010. Along with other information, the

¹ Go to <http://www.buses.org/files/Motorcoach%20Census%202008%2012-18-2008.pdf> to access the study report for *Motorcoach Census 2008*.

² Go to <http://www.buses.org/files/Motorcoach%20Census%20Update%202009.pdf> to access the study report for *Motorcoach Census Update 2009*.

survey collected data on the four key statistics for the years 2008 and 2009 so that year-over-year percentage changes in the key statistics could be calculated for each carrier participating in the survey. We are grateful to the carriers that took the time to provide us with information about their firms on a confidential basis; their assistance was crucial to the completion of this study.

Furthermore, we acknowledge and thank the following organizations that gave their support to the study: United Motorcoach Association, Motor Coach Canada, Trailways, International Motorcoach Group, Ontario Motor Coach Association, the Quebec Bus Owners Association, ABC Companies, Motor Coach Industries, Prevost Car, and Daimler Buses North America.

2. Study Results

Motorcoach Census Update 2010 estimated four key industry statistics for 2009. We found that in 2009

- motorcoach passenger trips were down 5.1% to 723 million,
- motorcoach passenger miles were down 9.9% to 58.652 billion,
- motorcoach service miles were down 5.5% to 1.726 billion, and
- the number of motorcoaches was down 0.5% to 35,026.

Furthermore, several motorcoach operating ratios were updated. We estimated that in 2009

- passenger trips per motorcoach were down 4.6% to 20,642,
- passenger miles per motorcoach were down 9.4% to 1.675 million,
- service miles traveled per motorcoach were down 5.0% to 49,278,
- passengers per service mile were down 4.6% to 34.0, and
- average passenger-trip length was down 5.0% to 81.1 miles.

These results of the study are summarized in Table 2-1.

In addition, we estimated that

- fuel consumption by motorcoaches totaled 320 million gallons in 2009,
- motorcoach fuel efficiency averaged 5.6 miles per gallon of fuel in 2009, and
- the average manufacture year of motorcoaches was 2001 as of late summer and early fall of 2010, when the survey of motorcoach carriers was conducted.

Table 2-1*Summary Statistics for the Motorcoach Industry in the United States and Canada, 2008-2009*

	2008	2009	Percent Change
Key Statistics			
Passenger trips	762,000,000	723,000,000	-5.1
Passenger miles	65,088,000,000	58,652,000,000	-9.9
Service miles	1,827,000,000	1,726,000,000	-5.5
Number of motorcoaches	35,217	35,026	-0.5
Selected Motorcoach Operating Ratios			
Passenger trips per motorcoach	21,637	20,642	-4.6
Passenger miles per motorcoach	1,848,000	1,675,000	-9.4
Service miles traveled per motorcoach	51,878	49,278	-5.0
Passengers per service mile	35.6	34.0	-4.6
Average length of a passenger trip in miles	85.4	81.1	-5.0

SOURCE: Nathan Associates Inc.

3. Study Methodology

Target Population

The target population of the study is the motorcoach passenger transportation industry in the United States and Canada in 2009.

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 on motorcoaches. The industry excludes, however, 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.** 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.** 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.** Service offered by motorcoach or tour companies to view points of interest within a specified area.

- **Airport Shuttle.** Private motorcoaches used to enhance public transportation system service to and from airports.
- **Commuter.** 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.** 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.

Data Collection and Processing

ABA mailed survey packages to 3,921 motorcoach carriers on July 30, 2010. A survey package included a questionnaire, cover letter, and business reply envelope. Along with other information, a questionnaire requested, for 2008 and 2009, data about a carrier’s motorcoach operations, including fleet size, annual mileage, average passenger loads per motorcoach, and annual number of passenger trips. Carriers were instructed to submit their completed questionnaires to Nathan Associates by August 20, 2010. Follow-up survey packages were mailed to non-respondents on August 30, 2010 with an extended response deadline of September 30, 2010. ABA also distributed numerous data solicitations via e-mail. Some of the e-mail solicitations focused on the larger non-responding motorcoach carriers. Survey responses were accepted until mid-November 2010.

Carriers submitted completed questionnaires to Nathan Associates by e-mail, fax, and mail. The submitted questionnaires were reviewed for completeness and validity. Additional contact was made selectively to resolve unclear responses and to prompt for response to questions left unanswered. We consolidated the questionnaires into an electronic database. The data were tabulated and evaluated for inconsistencies, irregularities and respondent-specific values that were significantly different from average reported values, and survey respondents were contacted to clarify anomalous answers. The final survey database contained usable responses from 170 motorcoach carriers that operated a total of 8,394

motorcoaches in 2009: 19 carriers operated 50 or more motorcoaches, 56 operated 11 to 49 motorcoaches, and 95 operated less than 10. Missing values for 2008 were filled in, when possible, using surveys submissions from the 2009 study. Other missing values were filled in using cell-average imputation and regression imputation.

Estimation

Industry estimates for 2009 were derived using 2008 industry totals from *Motorcoach Census Update 2009* and average 2009 percentage changes calculated from the survey returns.

The estimated number of industry motorcoaches in 2009, for example, was derived by first calculating, for three carrier fleet-size categories (50 or more motorcoaches, 10 to 49 motorcoaches, and less than 10 motorcoaches), the 2008 numbers of motorcoaches and the average 2009 percentage changes in fleet size. Second, these figures were multiplied together to calculate the 2009 numbers of motorcoaches by fleet-size category. Finally, the 2009 numbers of motorcoaches by fleet-size category were summed to calculate the number of industry motorcoaches in 2009.

Estimates for 2009 of passenger trips, passengers miles, and service miles were calculated in a similar manner, except six categories were used. The six categories were defined by the three fleet-size categories, as described above, and two service segments. The first service segment included charter, tour and sighting services, and the second service segment included fixed-route services (i.e., airport shuttle, commuter, scheduled, and special operations).

An industry estimate of the fuel consumed in 2009 was developed by first estimating total 2009 motorcoach miles by fleet-size category assuming the ratios of total miles to service miles were the same in 2009 as in 2007. The estimates of total 2009 motorcoach miles were multiplied by ratios of gallons-per-mile, which were calculated from the sample, to derive fuel consumed by fleet-size category. These figures were summed to calculate the industry estimate of fuel consumed in 2009. An industry estimate of miles per gallon was calculated by dividing total industry mileage by total industry fuel consumption.

An industry average of the manufacture year of motorcoaches was calculated by first estimating from the sample the 2009 averages by fleet-size category. The average for a fleet-size category was calculated by averaging the carrier averages of manufacture year, weighted by carrier fleet sizes. An industry average was calculated by averaging the fleet-size-category averages, weighted by the 2009 industry numbers of motorcoaches by fleet-size category.