

**Department of Transportation
Office of the Chief Information Officer**

**SUPPORTING STATEMENT
Motorcoach Passenger Survey: Motorcoach Safety and Pre-Trip Safety Awareness
Information**

This is to request the Office of Management and Budget’s (OMB) review and approval for a new information collection titled, “Motorcoach Passenger Survey: Motorcoach Safety and Pre-Trip Safety Awareness and Emergency Preparedness Information.” The Federal Motor Carrier Safety Administration (FMCSA) is currently working several initiatives to improve motorcoach safety in the United States, given several recent fatal motorcoach crashes. The goals and objectives of this survey are to assess the current levels of voluntary compliance by motorcoach operators and to obtain passenger opinions of the implementation of pre-trip safety awareness and emergency preparedness information. The results of this survey will not serve as a national estimate, but will provide the Agency a general sense of voluntary compliance and suggestions for improvement. FMCSA will use the information to determine whether further evaluation is needed to support future program, policy, and regulatory initiatives. As appropriate, the information will be presented to NTSB and Congress, while also contributing to the general literature regarding practices for improving motorcoach safety in the United States.

Part B. Collections of Information Employing Statistical Methods

1. Describe potential respondent universe and any sample selection method to be used.

Motor coaches will be selected from those arriving in the following five locations within four Standard Federal Regions chosen because of the abundance of motorcoach trips to these areas (nonrandom sites):

- Region II: Atlantic City, New Jersey
New York City, New York
- Region III: Washington, District of Columbia
- Region V: Chicago, Illinois
- Region IX: San Diego, California

Information on the number of motorcoaches arriving at each of these locations per year is provided later in Section 2 (see Table 1), based on data from the Chambers of Commerce, local city Departments of Transportation, Port Authorities, as well as some national-level sources of motorcoach activity data for each location.

Motorcoaches for the proposed survey will be identified by visiting multiple locations within each of these cities where motorcoach operators regularly conduct drop-offs. The passengers identified to participate in the survey will be selected by approaching them as they disembark the motorcoach, using FMCSA-designated personnel trained for this work.

FMCSA is aware that the data collected from the above five survey locations will not necessarily yield nationally representative results. However, the survey results are expected to reflect the behavior of motorcoaches destinating at these five locations and, due to the high volume of motorcoach traffic in these cities, may also serve as a barometer for potential national trends. Estimates generated from the survey, however, will only officially refer to those five cities.

2. Describe procedures for collecting information, including statistical methodology for stratification and sample selection, estimation procedures, degree of accuracy needed, and less than annual periodic data cycles.

The sampling universe for this survey consists of all motorcoach daytrips to each of the five survey locations.

Motorcoaches will be selected by a systematic sampling technique as they arrive at their destination. A variety of motorcoaches will be arriving at a particular stop (e.g., parking lot, bus terminal, etc.) throughout the day and motorcoaches will be selected systematically based on the time of arrival (e.g., selecting every 4th motorcoach arriving at a particular stop). After a motorcoach is selected, one passenger from the motorcoach will then be chosen at random and asked whether or not he or she received the pre-trip safety briefing. Because of the possibility that the person questioned may have been distracted or otherwise did not note the safety briefing being given, if the response is in the negative, one additional passenger will be interviewed very briefly to confirm that a pre-trip briefing did not occur for the trip. If the additional passenger responds in the positive that a pre-trip briefing did occur, then the response of the second passenger will be recorded. The total sample will consist of passenger responses from motorcoaches operated by multiple motor carriers/companies arriving at various drop-off sites within the five primary locations (one response per motorcoach).

A complete day count of all motorcoaches arriving at each of the collection sites used within each of the five survey locations will be estimated during the survey, and survey weights will be used to weight the data used for producing survey estimates, based on the volume of vehicles arriving at each stop where data are collected. The final survey weight assigned to each sampled motorcoach will equal the total number of motorcoaches arriving at the site on that particular day, divided by the number of vehicles inspected at that site for that day.

The primary statistic of interest to be generated from the survey is the percentage of all motorcoaches whose drivers provide pre-trip safety information to passengers. This statistic will be estimated based on a weighted average of the binary responses from the survey (1=yes, information provided; 2=no information provided):

$$P = \sum Wgt_i * y_i / \sum Wgt_i ,$$

Where Wgt_i = the sampling weight for the i^{th} motorcoach sampled, based on the total motorcoaches destinating at the location for that day, divided by the total number of motorcoaches sampled at that location for that day ; and

y_i =the binary response (0,1) for the i^{th} motorcoach sampled.

FMCSA expects to obtain data from at least 1,280 motorcoaches in this survey effort. This sample size will allow the Agency to measure the percentage of motorcoaches whose drivers provide pre-trip safety briefings to their passengers for those motorcoaches destinating at locations listed in Table 1 with a level of accuracy of plus or minus 2.7 percentage points, at a 95% level of confidence ($1.96 * \text{square root}(.5 \times .5 / 1280) = .027$). The sample will be stratified by the five locations listed in Table 1, below. As shown in the table, the total number of motorcoaches projected to be sampled in each location is in direct proportion to the number of motorcoaches destinating at each location annually. Allocating the sample proportionally across the sampling strata in this manner will minimize the sampling error.

Respondents’ Universe and Sample:

According to the objective of this survey effort, the FMCSA survey team will collect information on the proportion of motorcoaches providing pre-trip safety information for passengers onboard for trips to the selected five locations.

FMCSA expects that, given the nature of this survey and its brevity, it will be able to determine whether the driver provided pre-trip safety information for nearly all motor coaches sampled. Based on the limited pilot conducted where 7 of 9 passengers provided responses to the test survey instrument, it is reasonable to expect a response rate of approximately 80 percent. Therefore, the survey team will initially sample 1,600 passengers from 1,600 destinating motorcoaches, with expected positive responses for 1,280 motorcoaches. In cases where the selected passenger indicates that the motorcoach driver did not provide passengers with pre-trip safety information, one additional person will be interviewed very briefly to confirm the veracity of the initial negative responses. The final database resulting from the survey, however, will be at the motorcoach level (i.e., one record for each motorcoach sampled).

The target number of motorcoaches to be sampled in each of five survey locations is provided below in Table-1.

Table-1: The Sample Motorcoach Trips by Survey Location.

Survey Location	Estimated Motorcoaches Destinating Per Year	Sample Motorcoach Trips	Team-Days Required at 45 interviews per team per day
Atlantic City, NJ	112,600	134	3
New York City, NY	671,150	802	18
Washington, DC	197,100	235	6
Chicago, IL	268,500	321	8
San Diego, CA	90,000	108	3
Total Survey	1,339,350	1,600	38

The survey questionnaire will be completed by the FMCSA survey teams as motorcoach passengers are sampled at each geographic location. FMCSA selected these locations based upon the primary motorcoach travel corridors on the East Coast, West Coast, and Central United States. There will be three teams working to conduct the survey. Each team consists of two interviewers who will work eight to ten hours per day. Each team of survey interviewers will be responsible for obtaining approximately a total of 45 passenger interviews per day. To obtain at least 1,280 total completed interviews out of the total 1,600 selected motorcoach trips from the 5 cities, will require a total of 38 team-days. The teams will travel to the cities and conduct interviews for the requisite number of days to meet the number of team days as shown in Table 1. The responses to questions included in the survey questionnaire will be recorded by interviewers (i.e. team members) in face-to-face interviews.

3. Describe methods to maximize response rate.

The survey will take the following steps to maximize response rates:

- Employ a respondent-friendly design – The questionnaire design was reviewed and modified to be respondent-friendly with clear, unambiguous wording of questions. The final design incorporates prominent question numbers, bright labels, and clear instructions for guiding survey takers through the questionnaire as quickly and efficiently as possible.
- Emphasize voluntary nature – The questionnaire includes a prominent statement that the survey is voluntary.
- Utilize a concise questionnaire – The questionnaire length was kept to a maximum of 10 minutes, with an average of 5 minutes for most respondents.

In addition, a brief introduction on motorcoach safety will be given to the passengers about the importance of the information collection and the benefits of survey results to motorcoach passenger safety, as well as to assure respondents of the confidentiality of their responses.

Based on the purpose of the FMCSA pre-trip safety information survey and on the simplicity of the questionnaire as designed, FMCSA expects to achieve a response rate of at least 80 percent during the face-to-face interview of the proposed survey. The FMCSA will determine the differences in proportion of responses to safety-related questions by survey location. The FMCSA survey will also capture information on the motorcoach (carrier name, US DOT Number, vehicle number) and the trip (survey location, date/time of arrival, trip origin) to evaluate potential differences in responses and to determine the differences in proportion of responses by survey location.

4. Describe tests of procedures or methods.

The information collection burden was estimated through a pilot test of the survey process and the survey instrument on June 26, 2013, at Union Station in Washington, DC. The test team attempted to collect information from nine respondents over the course of the day, with 3 in the morning, 3 at midday, and 3 in the afternoon. Non-response was about 20 percent (2 out of 9). About 20 percent who provided a response failed to complete all of the survey questions, but all of them responded to the key question about receiving pre-trip safety information. On average,

the respondents completed the survey in 5 minutes. The respondents arrived on trips from 6 different points of origin, and were transported by 6 different motorcoach companies. The survey team tracked overall arrival of motorcoaches; at this location on this weekday on average there were 6 arrivals per hour throughout the day.

Based on the results of this limited test, the survey team was able to effectively execute the process, achieve an acceptable response rate of nearly 80 percent, and determine some minor changes to the survey instrument to improve the ease and accuracy of information collection – these changes have been incorporated. The team also determined that respondents could easily complete the survey within the expected 10 minutes, with most completing the questions in half that time.

5. Provide the name and telephone number of individuals who were consulted on statistical aspects of the information collection and who will actually collect and/or analyze the information.

The FMCSA is sponsoring this information collection request. The FMCSA contacts are:

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The statistical survey and technical representative of FMCSA for this information collection request is:

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