

**DEPARTMENT OF TRANSPORTATION**  
**INFORMATION COLLECTION SUPPORTING STATEMENT: PART B**  
**TITLE OF INFORMATION COLLECTION: Limousine Crashworthiness Safety Research**  
**OMB Control No. 2127-XXXX**

**I. ABSTRACT**

NHTSA seeks to perform a survey of limousine builders to identify the market penetration of various types of limousines. The survey supports NHTSA actions in fulfillment of Sections 23015 and 23023 of the Infrastructure Investment and Jobs Act of 2021 (IIJA). Survey participation is strictly voluntary. The survey will be focused on limousines as defined by Section 23015 (a)(1):

The term “limousine” means a motor vehicle—

- (A) that has a seating capacity of 9 or more persons (including the driver);
- (B) with a gross vehicle weight rating greater than 10,000 pounds but not greater than 26,000 pounds;
- (C) that has physical characteristics resembling—
  - (i) passenger car;
  - (ii) a multipurpose passenger vehicle; or
  - (iii) a truck with a gross vehicle weight rating of 10,000 pounds or less;
- and
- (D) that is not a taxi, nonemergency medical, or paratransit motor vehicle.

The limousine definition includes any vehicle meeting the criteria, regardless of the limousine fabricator type. Section 23015 mandates that NHTSA conduct research and actions related to limousine crashworthiness. Section 23023 mandates that NHTSA extend several federal safety regulations to limousines. The regulations include:

- FMVSS No. 207, Seating Systems
- FMVSS No. 208, Occupant Crash Protection
- FMVSS No. 209, Seat Belt Assemblies
- FMVSS No. 210, Seat Belt Anchorages

To fulfill the IIJA mandates, NHTSA has a need to understand the limousine market and their safety characteristics. However, the extent of limousine compliance with these FMVSSs, and limousine crashworthiness in general, is not well known.

The purpose of the survey is to collect information on limousine fabrication practices, including the installation of safety devices related to evacuation, crashworthiness, seating, and restraints.

The proposed NHTSA survey will consist of one-time voluntary interviews with various types of businesses that specialize in limousine fabrication. The differences of each business's approach to fabrication and vehicle safety will be investigated through targeted questions.

The interviews will consist of approximately ten questions about limousine fabrication and occupant safety. The responses will help NHTSA understand the limousine market and perform any necessary cost-benefit analyses that may be needed prior to potential rulemaking activities. All information will be assembled in the form of a report that will eventually be published in the National Transportation Library and made available to the public.

The information collection will be carried out solely through phone or text-based interviews. No further participation will be asked of the interviewees, and hence there is no involvement by any sort of institutional review board. The survey will be the first of its kind. It is not a revision of a prior survey. Thus, a change in burden does not apply.

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## II. JUSTIFICATION

### 1. DESCRIBE POTENTIAL RESPONDENT UNIVERSE AND ANY SAMPLING SELECTION METHOD TO BE USED.

The potential respondent universe is made up of three different groups of limousine fabricators: Original Equipment Manufacturers (OEMs), Second Stage Manufacturers (SSMs), and vehicle modifiers. Each is described below.

1. Vehicle OEMs that support limousine fabrication programs through SSMs. Presently, there are no known OEMs that manufacture limousines. However, there known to be several OEMs that support limousine fabrication through SSMs. The OEMs supply partially certified, incomplete vehicles to participating SSMs. The OEMs set rules and specifications for changes to the vehicle, and support fabricators through brand recognition and reputability. The OEM programs publish incomplete vehicle documents and body builder guides which include limits for GVWR and require compliance with Federal Motor Vehicle Safety Standards (FMVSS). Through these programs, the OEMs place responsibility for alterations to the vehicle and regulatory compliance on the program participant. Ford, General Motors, and Mercedes-Benz are known to have such programs. The total number of OEMs with limousine programs is not believed to exceed twenty.

2. High volume SSMs participating in OEM supported programs. There are about fifty SSMs who participate in OEM supported programs to build limousines. Many of these businesses build other forms of motorcoaches and motorhomes. In recent years, limousine fabrication has been limited to van conversions that do not involve changes to wheelbase or chassis length. Changes to these vehicles have focused on the interior including installation of non-OEM bench

and J-seats, walls separating the passenger area, and door reconfigurations. Entertainment centers and drink bars are also common features.

3. Vehicle modifiers not participating in OEM supported programs. The majority of limousine fabricators (estimated to be over 100) are modifiers who build limousines based on vehicles that are brought to them by the vehicle owner. These modifiers operate small businesses that do not have a direct relationship with the vehicle OEM and do not participate in OEM supported programs. Stretch limousines are typically available from modifiers only. In recent years, stretch limousines have been derived primarily from large SUVs only, such as the Lincoln Navigator and Cadillac Escalade models. While there is no indication that OEMs perform stretch limousine fabrication, non-participants are known to fabricate stretch limousines from many different vehicles, including exotic models such as the Rolls-Royce Phantom and Maserati Ghibli.

Modifiers represent a small portion of the limousine industry, focused on meeting the requests of individual or fleet owners. Many install safety devices, including seat belts, fifth doors (for evacuation), and anti-intrusion beams. However, modifiers do not recertify the GVWR of the limousines they build. FMVSS compliance of these vehicles is generally viewed as the responsibility of the vehicle owner with enforcement handled by state inspectors. Thus, the safety integrity of their products is not known.

Participant selection process. Survey participants will be selected from a convenience sample of limousine businesses. Therefore, no statistical methods will be used for stratification and sample selection. A full database of respondents has been identified by S&P Global Mobility from their extensive canvassing of the automotive industry<sup>1</sup>. The respondents in each category will be selected at random and given the opportunity to accept or decline the interview before moving on to the subsequent outreach effort.

## **2. DESCRIBE PROCEDURES FOR COLLECTING INFORMATION**

Participants will be guided through a series of roughly ten topics. Three versions of the interview will be used depending on whether the interviewee is an OEM, an SSM, or a modifier. Questions are both closed-ended (i.e., have a fixed set of response options) and open-ended.

We expect the survey to take no longer than one hour to complete. A partial list of specific topics covered by all interviewees is shown below:

- Self-identification: OEM, SSM, vehicle alterer (prior to first sale), or aftermarket modifier.

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<sup>1</sup> S&P Global Mobility (also known as IHS Markit and R.L. Polk & Co) used a multi-phased approach consisting of vehicle and fleet registrations analysis, literature review, and industry participant interviews to identify limousine market size, and market penetration of various limousine fabrication methods and limousine characteristics related to evacuation, crashworthiness, seating, and restraints. Market research included vehicles defined as limousines in IIJA § 23015, and similar vehicles serving the limousine market. This work was carried out under DOT contract No. 693JJ922D000005 / 693JJ922F00191N.

- Describe your certification or re-certification process.
- Source of seats and seat belts: OEM, third-party supplied, or in-house manufactured.
- Describe the seat belt attachment points or attachment method.
- Describe how to determine the need to install egress windows or roof hatches.

Responses from the survey will then be captured and summarized in a Microsoft Excel worksheet. Once condensed and coalesced, all survey responses will be assembled in a public report to be published in the National Transportation Library.

### **3. DESCRIBE METHODS TO MAXIMIZE RESPONSE RATE**

Respondents in some of the groups may be more difficult for interview completion than others and thus a target maximum respondent outreach of 160 contacts will be followed. For OEMs, a maximum of 20 interview attempts will be made with about 7 responses expected; a maximum of 40 OEM program participants will be contacted with about 13 responses expected; a maximum of 100 modifiers (i.e., OEM program nonparticipants) will be contacted with about 30 responses expected (these will be the smaller businesses and response rate is expected to be low).

To maximize response rates, NHTSA has developed an interview guide that is concise and focused. Experience has proven interviewees have limited patience for interviews that fail to get directly to the point. Thus, NHTSA will limit the inquiry to about ten open-ended questions to avoid disengagement by the interviewee.

The interview protocol primarily targets in-person or phone interviews and avoids the use of web-based responses that typically yield limited responses. This approach has proven very successful in the past, often revealing issues not considered at project launch. Additionally, a delicate approach is required when discussing “legal” or “compliance” issues with companies that may be on the fringe of the Final-Stage Manufacturers (FSM) build process or near the transition between a limo “modifier” and a limo “alterer.” These organizations are the types of organizations that a possible limousine regulatory action may target. Thus, their perspectives are critical to NHTSA.

### **4. DESCRIBE TESTS OF PROCEDURES OR METHODS TO BE UNDERTAKEN.**

The interviews will be one-time responses of limousine fabricators. While each interview guide varies slightly, the time to complete the interview is not expected to vary greatly with an average of 60 minutes per interview. Given that the extent of the survey consists of interviews, no further tests of procedures or methods will be undertaken.

Interview responses will be presented in an orderly report. Categorical responses will be displayed using basic descriptive statistics, such as frequency graphs and box and whisker plots. Other information will be presented as summaries within the report or in direct database formats to be shared as part of a scientific manuscript or other academic scholarship.

**5. PROVIDE NAME AND CONTACT INFORMATION OF INDIVIDUALS WHO WERE CONSULTED ON STATISTICAL ASPECTS OF THE INFORMATION COLLECTION.**

Individuals consulted on statistical aspects of the design:

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