Supporting Statement

Focus Groups as used by the Exploratory Advanced Research Program on the Topic of Dynamic Ridesharing

Part A. Justification

1. Circumstances that make collection of information necessary:

The Federal Highway Administration's Exploratory Advanced Research (EAR) Program is requesting approval for the information collection requirements through the use of focus groups. The EAR Program was established to conduct longer term, higher risk research that will result in potentially dramatic breakthrough for improving the durability, efficiency, environmental impact, productivity, and safety of highway and intermodal transportation systems. To facilitate identification and assessment of higher-risk, breakthrough research topics, the EAR Program conducts literature reviews, event scanning, and targeted convening. As part of an assessment of potential high-risk, breakthrough research on dynamic ridesharing, the EAR Program is funding collection of behavioral preferences using focus groups.

Focus groups provide an important role in gathering information because they allow for more indepth understanding of the attitudes, beliefs, and motivations of the public than do quantitative studies. The information from these focus groups will be used to improve understanding of human behavior and develop more effective protocols for research that could lead to increased mobility and conservation of energy and natural resources.

As a response to the opening of High Occupancy Vehicle (HOV) lanes in the Washington, DC metro area in the mid-1970s, a unique commuting phenomenon developed: slugging. This type of dynamic carpooling evolved from drivers and passengers coming together to fulfill each party's needs. Academic and entrepreneurial types alike are looking at ways to facilitate dynamic ridesharing ("slugging") through technological means. Some suggestions for enhancing dynamic ridesharing include website forums that connect drivers with slugs and Smartphone applications that would allow drivers and slugs to register and connect with each other. Dynamic carpooling has no formal leadership or management; rather the practice has evolved to fulfill a need for carpools created by the presence of HOV lanes. These naturally occurring dynamic ridesharing systems operate by having drivers and riders meet at central, easily accessible locations such as park and ride lots where they create instantaneous carpools based on desired destinations. The lines are highly successful, long lasting (30+ years in the case of DC), and robust commuting systems for thousands of people each weekday. Despite their success and interesting nature they have been severely understudied by academics and transportation professionals.

The focus groups complement a scan by researchers of dynamic ridesharing conducted in November and December 2010. The scan covered the logistics and operational aspects of dynamic ridesharing. The focus groups will provide information about motivational and influencing factors of people who use dynamic ridesharing.

While there is not a legal requirement to conduct this research, the effort will support the DOT strategic goal of "Reduce Congestion and other Impediments to Using the Nation's Transportation system." The practice of dynamic ridesharing is not prevalent in the United States; cities with HOV lanes in which it has been successful (e.g., Houston, TX, Washington, DC, and San Francisco, CA), have benefited from increased use of those lanes, reduced traffic congestion, thus helping the DOT Strategic Goal dealing with mobility. This research will provide the insight and understanding about the practice so that programs and related technologies can be developed to encourage more communities to facilitate dynamic carpooling and thereby reduce congestion.

2. How, by whom, and for what purpose is the information used:

The information collection will provide insight and knowledge into the process of slugging to determine the potential for additional research and opportunities for enhancing the process through technological means. The focus group findings will be used by FHWA to understand how dynamic carpooling is being utilized in the United States. If the information is not collected, FHWA's EAR Program will miss a vital link in gathering information for policy development or result in delays in furthering the subsequent research necessary to expand dynamic carpooling practices in the United States and beyond.

The information collected through the focus groups will provide important information about the nature and operations of programs currently in place and the social systems that facilitate their continued operations. DOT plans to use the results of the focus groups to explore and further inform the findings resulting from a national scan of dynamic ridesharing. Specifically, focus groups will allow for a more in-depth understanding of the nature of dynamic carpooling than quantities research. The information will be useful for DOT, Government agencies, transportation planning organizations, and others who want to introduce or expand their dynamic carpooling systems. The research will be useful to planners who need to go beyond the traditional ways of scheduling carpools. The research will inform planning on (1) technology/software that is needed to facilitate web-based and real-time rider/driver matching, payment, and route selection; and (2) infrastructure considerations such as determining the placement of dynamic carpooling loading zones (e.g., marked curbs or designated lanes).

The data may also be used by other Federal agencies, the public, academics as well as foreign governments and international organizations.

3. Extent of automated information collection:

This data collection does not involve the use of automated, electronic, and mechanical or other technological collection techniques. Focus groups were chosen as the research method for this study because they allow for in-depth discussion of issues important to this research with individuals of interest, namely persons who participate in dynamic carpooling. The focus groups, which will not involve automated information collection, will be a one-time discussion of relatively short durations with these individuals in three locations (Washington, DC; Houston, TX; and San Francisco, CA). The focus groups would also minimize the Government use of paper for this effort.

The primary factor for <u>screening</u> is whether participants have utilized dynamic carpooling, then the frequency of their use, and finally whether they work for the government or private sector so there is are representatives from both types of employers.

<u>Recruitment</u> will be of persons who use slugging as a regular method of commuting, including both drivers and passengers, in each of three cities: Washington, D.C. metro area, Houston, and San Francisco. In each city, recruitment will include use of existing databases or intercepting prospective participants in slug lines, or a combination of both, as deemed appropriate following an initial environmental scan of slug lines in the three target cities. This up-front endeavor will determine the best locations for recruiting, the best times of day, and the most beneficial approach. Recruitment of drivers may require supplemental means of contact, such as email lists, message boards, handing out flyers, or other approaches.

Potential respondents will be invited to attend and provided with details about the location, date, time, and amount of incentive offered. They will not be provided specific questions in advance.

Focus group studies are directed group discussions that do not produce quantitative data; rather skilled moderators and observers infer the findings of the group that were expressed during the discussion. To facilitate the interpretation, the discussions are recorded and videotaped so that an audio and visual record is available for review.

4. Efforts to identify duplication:

The EAR Program conducted reference searches and has not identified any studies that offer the information and insights sought through this information collection effort, nor is this data already in the possession of the Federal Government. Dynamic ridesharing has been severely understudied by academics and transportation professionals; as such, there is no similar information or research available from which the research objectives can be drawn. This IC constitutes a unique qualitative research effort to predominately study federal employees who engage in casual carpooling, either as a slug or as a driver.

Therefore, to the best of our knowledge, this focus group study is unique and does not duplicate other efforts.

5. Efforts to minimize the burden on small businesses:

Not applicable. No small businesses will be involved in this information collection, as it strictly focuses on people who participate in dynamic carpooling.

6. Impact of less frequent collection of information:

This is a voluntary, one-time information collection request and less frequent collection of information would mean that respondents would not submit data at all.

7. Special circumstances:

There are no special circumstances associated with this one-time information collection.

8. Compliance with 5 CFR 1320.8:

In accordance with 5 CFR 1320.8(d), EAR published a notice in the Federal Register on December 29, 2010 to which no comments were received. See docket number FHWA-2010-0171-0001.

9. Payments or gifts to respondents:

It is a standard practice to reimburse focus group respondents for their time.

The payment for this focus group is estimated as \$75 for each participant. The use of a stipend usually ensures better attendance because it creates an obligation in the mind of the participant. Experience with participants in the selected cities and participants in transportation focus group strongly suggests that an incentive of \$75 will result in around two-thirds of the individuals recruited (12- to 14 for each focus group) participating in the focus group sessions (yielding seven to eight participants).

10. Assurance of confidentiality:

Respondents are informed that their information will be protected in the phone call before participation in the focus groups and as a part of the introduction to each of the groups. Participants are assured that answers given will be kept confidential and used for research purposes only. Participants will be further informed that only aggregated results that do not permit the identification of individual participants will be reported.

The confidentiality of respondents will be assured by using an independent contractor to collect the information, by enacting procedures to prevent unauthorized access to respondent data, and by preventing the public disclosure of the responses of individual participants.

We provide confidentiality for the focus group participants in two ways. First, names of the participants will only be recorded on the audio recordings made during the sessions, mainly through introductions. If interviews are transcribed, we will remove the names of each participant from the written record and substitute a number. Second, the full names of participants are not recorded or referred to in the written report.

11. Justification for collection of sensitive information:

No questions will be asked that are of a personal or sensitive nature.

12. Estimate of burden hours for information requested:

The total burden hours for the data collection with participants in dynamic carpooling programs as drivers or riders, is based on an estimated sample of no more than 108 focus group participants, depending on how many actually show up for the meetings (the optimal number is approximately 8, but we will recruit as many as 12 to account for expected no-shows). We expect the length of the focus groups to be 90 minutes.

General locations of the focus groups (by location)	Focus group participants (Per group)	Number of groups	Frequency of response	Total participants	Hours per group	Participant burden hours
Washington, DC	8 to 12	3	1	36	1.5	54
Houston, TX	8 to 12	3	1	36	1.5	54
San Francisco, CA	8 to 12	3	1	36	1.5	54
Total						162

Table 1. Participant Burden Estimate

The estimate of annual costs to respondents for the proposed data collections is calculated as the product of the total burden hours for each focus group and mean participant wage rate. For the focus group participants, the annual cost to respondents was calculated as 162 hours * 35.00/hour = $5,670.^{1}$

13. Estimate of total annual costs to respondents:

Not applicable. Respondents will have no additional burden beyond the hours of burden shown in item 12. Respondents will not need capital equipment or provide on-going recordkeeping operations or services to provide the information.

¹ As an estimate of the per hour wage paid to administrative staff who are the most likely to participate, we used an average value of \$30.00 for the occupation code pertaining to business operations specialists, all other (SOC 13199). The actual simple average over the three study locations listed was \$35.22.

14. Estimate of cost to the Federal Government:

The estimated cost to the Federal Government is \$50,826. This includes the costs paid to the contractor to set up the focus group, renting meeting space, recruit participants, moderate the groups (includes travel and subsistence), payment of incentive, and analyze the data and draft a report. Time is also incurred by the EAR Program staff to manage the contract and review deliverables.

15. Explanation of program changes or adjustments:

Not Applicable. This is a new collection.

16. Publication of results of data collection:

There are no tabulated results for the information collection. Information is qualitative in nature.

With this in mind, the EAR Program will disseminate focus group findings when appropriate and will include specific discussion of the limitations of focus group results with regard to being nonqualitative and non-generalizeable to the population as a whole.

17. Approval for not displaying the expiration date of OMB approval:

The EAR Program is not seeking this approval.

18. Exceptions to certification statement:

No exemptions are required; these activities will comply with the requirements in 5 CFR 1320.9.

Part B. Collections of Information Employing Statistical Methods

Not applicable. There are no plans to publish this information for statistical use.