

## The Supporting Statement

This information collection is an element of the Exploratory Advanced Research (EAR) Program sponsored project conducted by the University of Michigan titled "Effects of Automated Transit and Pedestrian/Bicycling Facilities on Urban Travel Patterns." This is a new, one-time request.

### Part A. Justification

#### 1. Circumstances that make collection of information necessary:

The EAR Program addresses the need to conduct research on longer term and higher risk breakthrough research with the potential for transformational improvements to plan, build, renew, and operate safe, congestion free, and environmentally sound transportation systems. This research project is part of the EAR Program focus area for new technology and advanced policies for energy and natural resource conservation. The research has the potential to lead to policies and approaches that could substantially reduce the percentage and total number of short trip using private vehicles and increase the percentage and number of trips using current and future transit technology and non-motorized trips. This has direct bearing on successfully meeting the Departmental Environmental Sustainability Strategic Goal through reduced use and thus dependence on fossil fuels and associated reduction in pollution impacts. The research also supports the Departmental Livability Strategic Goal because it could lead to evidence-based approaches for increasing access to transportation choices and improved networks for transit and non-motorized transportation.

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

The information will be collected by the University of Illinois at Chicago under contract to the University of Michigan, which is the prime contractor for performing the overall research project. The principal investigator is Moira Zellner, an Assistant Professor at the University of Illinois at Chicago. The information is an element of an EAR Program sponsored research project. The overall purpose of the project is to gauge potential travel-behavior response to far-reaching improvements in the pedestrian, cycling, and transit environments of neighborhoods. The transit improvements are inspired by the frequency and quality of service that might be made possibility of automated (driverless) neighborhood transit, though the study will not seek to convey the automated aspect to respondents. The project is studying the capacity of these improvements to generate the following kinds of shifts: (1) Modal shift of neighborhood trips from auto to other modes; (2) Increased use of regional public transit based on improved station access; and (3) Shift of more remote non-work destinations to destinations within the neighborhood.

To explore these issues, the research team is building a model that integrates activity-based and agent-based components. The models in turn will be based on a survey of residents in four neighborhoods of metropolitan Chicago. As part of the survey, respondents will be presented with images representing potential improvements to the pedestrian, cycling, and transit environments of their neighborhoods and will respond to scenarios regarding their travel under these altered conditions.

The information will be used solely for exploratory advanced research. The design and results of the collection will **not** allow for generalization of travel behavior **nor** allow for transfer of results to other groups or locations.

3. Extent of automated information collection:

This is a one-time IC with no retained records once analysis is completed. Accordingly, electronic submission does not provide any practical benefit and increases the risk. See 10, Assurance of Confidentiality below.

4. Efforts to identify duplication:

Existing travel surveys describe behavior on existing networks, modal choices, and technologies. To assess the potential for new technologies and policies to radically change travel behavior requires an IC designed specifically for the research purpose.

5. Efforts to minimize the burden on small businesses:

Not applicable. The IC respondents are from residential households.

6. Impact of less frequent collection of information:

Not applicable. This is a one-time IC.

7. Special circumstances:

There are no special circumstances.

8. Compliance with 5 CFR 1320.8:

*Federal Register* Volume 76, Number 40 (Tuesday, March 1, 2011)] Pages 11309-11310. There were no comments.

9. Payments or gifts to respondents:

The \$50 incentive for participation will have to be offered conditional upon their eligibility for this study, i.e., we will inform them that only if they qualify for participation and complete the needed survey form and interview, they will receive compensation.

10. Assurance of confidentiality:

The IC also is under review by a University of Chicago at Illinois Institutional Review Board (IRB) for social and behavioral sciences.

The data collected on this project will consist of contact forms that the participants complete and return by mail, completed travel diaries, and phone interview dataset. The paper documents will be kept in securely locked cabinets until after the study has ended; then shredded. The dataset will be password-protected and destroyed once the data is analyzed and the study is completed. No data will be connected to participants. A case identification number is attached to all data. The contact / identifying information (name, address, and phone number) is kept separate (never attached to data), only used to mail to and call respondents, and is destroyed when data collection is complete. After the interviews are over, the data analyzed and the University of Michigan has received the dataset, the University of Illinois at Chicago will destroy all files and paper forms.

11. Justification for collection of sensitive information:

The IC does not include request for information commonly considered private.

12. Estimate of burden hours for information requested:

The IC design anticipates 1,463 postcard responses leading to approximately 800 (766) qualified participants. Each response would require 10-15 minutes to complete and return the postcard by mail, 10-15 minutes to complete the 24 hour travel diary, and 45-60 minutes to complete the telephone survey for a maximum hourly burden of one hour and 45 minutes for each respondent.

13. Estimate of total annual costs to respondents:

None

14. Estimate of cost to the Federal government:

The cost to the government for IC and analyzing the data is anticipated to be approximately \$234,840.00.

15. Explanation of program changes or adjustments:

Not applicable. This is a new IC.

16. Publication of results of data collection:

There are no plans to publish or make the dataset available. The IC is one task in a research project. Analysis of the results will be used to develop and test travel models. References to the survey may be included in professional papers describing the results of the overall research project.

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

None

18. Exceptions to certification statement:

None