The Supporting Statement

Introduction: FHWA Traffic Noise Model Version 3.0 Beta-Tester Information (New Request).

Part A. Justification

1. Circumstances that make collection of information necessary:

Prior to the release of the Federal Highway Administration Traffic Noise Model (FHWA TNM), the FHWA Highway Traffic Noise Prediction Model (FHWA-RD-77-108), or ``108 model,'' was in use for over 20 years. Although an effective model for its time, the ``108 model'' was comprised of acoustic algorithms, computer architecture, and source code that dated to the 1970s. Since that time, significant advancements have been made in the methodology and technology for noise prediction, barrier analysis and design, and computer software design and coding. Given the fact that over $500 million were spent on barrier design and construction between 1970 and 1990, the FHWA identified the need to design, develop, test, and document a state-of-the-art highway traffic noise prediction model that utilized these advancements. This need for a new traffic noise prediction model resulted in the FHWA TNM.

In March 1998, the Federal Highway Administration (FHWA) released the Traffic Noise Model, Version 1.0 (FHWA TNM). It was developed as a means for aiding compliance with policies and procedures under FHWA regulations. Since its release in March 1998, Version 1.0a was released in March 1999, Version 1.0b in August 1999, Version 1.1 in September 2000, Version 2.0 in June 2002, Version 2.1 in March 2003 and the current version, Version 2.5 in April 2004, which is required for use on Federal-aid highway projects per 23 CFR 772.

The FHWA is currently developing the TNM version 3.0, with an anticipated beta-testing of this version towards the end of 2012. Version 3.0 is an entirely new, state-of-the-art computer program used for predicting noise impacts in the vicinity of highways. It uses advances in personal computer hardware and software to improve upon the accuracy and ease of modeling highway noise, including the design of effective, cost-efficient highway noise barriers. This information request is to gather information from the beta-testers on their computer configurations, their experience using the FWHA TNM and availability of TNM files.

This IC supports the DOT Human and Natural Environment Strategic Goal. The FHWA is developing the FHWA TNM Version 3.0 to more accurately analyze noise impacts on Federal-aid highway projects. FHWA TNM Version 3.0 incorporated the latest technology therefore streamlining the noise analysis required by highway agencies per 23 CFR 772.

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

This information will be collected as part of the attached "FHWA Traffic Noise Model Version 3.0 Beta Test Participant Agreement", which has the FHWA Office of Chief Counsel has approved. This document will be electronically provided to each beta-tester for him/her to fill out and return to the FHWA. Appendix E of this document is where that participant will answer the following questions regarding the computer they will be using to beta-test the FHWA TNM Version 3.0. These questions include: PC Brand and Model, PC CPU and Speed, PC Memory (RAM), Operating System, Operating System Version and Service Pack, Graphics Card:, Graphic Card Driver Provider, Graphic Card Driver Date:, Graphic Card Driver Version and Display Resolution. The purpose of these questions is to ensure that the FHWA TNM Version 3.0 is compatible to a variety of computer configurations. In addition, if a beta-tester identifies a problem with the

FHWA TNM Version 3.0, this information allows the FHWA to determine if this problem is due to the programming of the model, or its incompatibility to a specific computer configuration.

3. <u>Extent of automated information collection</u>:

The information will be sent electronically to the beta-tester, filled out, and returned electronically.

4. <u>Efforts to identify duplication</u>:

No other similar information is available since the information being collected is specific to the computer that the beta-tester will be using to test the FHWA TNM Version 3.0.

5. <u>Efforts to minimize the burden on small businesses</u>:

Small businesses are not affected by this information collection effort.

6. <u>Impact of less frequent collection of information</u>:

The consequence of not collecting this information would result in the FHWA not knowing if the FHWA TNM Version 3.0 is compatible to a variety of computer configurations. Therefore, if a beta-tester identifies a problem with the FHWA TNM Version 3.0, the FHWA would not be able to determine if this problem is due to the programming of the model, or its incompatibility to a specific computer configuration. Technically, the FHWA would then not know if the FHWA TNM Version 3.0 is an accurate noise prediction model and would not be able to require its use on Federal-aid highway projects per 23 CFR 772.

7. <u>Special circumstances</u>:

There are no special circumstances associated with this information collection.

8. <u>Compliance with 5 CFR 1320.8</u>:

The proposed information collection 60-day notices is published in the Federal Register as follows: Federal Register / Vol. 77, No. 121, Page 37735 / June 22, 2012 [Docket No. FHWA–2012–0054]. No comments were received.

9. <u>Payments or gifts to respondents</u>:

There are no payments of gifts being offered to respondents as part of this information collection effort.

10. <u>Assurance of confidentiality</u>:

This information will only be known by U.S. DOT staff. There is no assurance of confidentiality in statute, regulation or agency policy; however the beta-testers will be assigned an identification number which will be clear from all personally identifiable information.

11. <u>Justification for collection of sensitive information</u>:

The information being collected is not sensitive. However, however the beta-testers will be assigned an identification number which will be clear from all personally identifiable information.

12. Estimate of burden hours for information requested:

There will be approximately 25 respondents. This information will only be collected once. It will take each respondent approximately 30 minutes to review the participation agreement and respond to the questions in Appendix E. The total burden will be 12.5 hours (rounding 13 hours). No annualized cost to the respondents is estimated.

13. Estimate of total annual costs to respondents:

There are no total capital/start-up costs or operation/maintenance cost associated with this IC.

14. Estimate of cost to the Federal government:

There are no payments to contractors. Federal professional staff will spend approximately 30 minutes reviewing documenting the individual responses.

Professional: 25 forms x 1 hr. x $39 per hour = $975.00.

15. Explanation of program changes or adjustments:

This is a new collection request.

16. Publication of results of data collection:

This information will not be published.

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

Approval for not displaying the expiration date is not being requested.

18. Exceptions to certification statement:

No exceptions to the certification statement are being requested.