TRANSPORTATION POOLED FUND PROGRAM
QUARTERLY PROGRESS REPORT

Lead Agency (FHWA or State DOT): FHWA

INSTRUCTIONS:
Project Managers and/or research project investigators should complete a quarterly progress report for each calendar quarter during which the projects are active. Please provide a project schedule status of the research activities tied to each task that is defined in the proposal; a percentage completion of each task; a concise discussion (2 or 3 sentences) of the current status, including accomplishments and problems encountered, if any. List all tasks, even if no work was done during this period.

Transportation Pooled Fund Program Project # *(i.e, SPR-2(XXX), SPR-3(XXX) or TPF-5(XXX)* TPF-5(158)	**Transportation Pooled Fund Program - Report Period:** ☐ Quarter 1 (January 1 – March 31) ☐ Quarter 2 (April 1 – June 30) ☑ Quarter 3 (July 1 – September 30) ☐ Quarter 4 (October 1 – December 31)	
Project Title: FHWA Traffic Noise Model: Version 3.0 Software Development		
Name of Project Manager(s): Mark Ferroni	**Phone Number:** 202.366.3233	**E-Mail** mark.ferroni@dot.gov
Lead Agency Project ID: FHWA	**Other Project ID (i.e., contract #):** IAA with the U.S. DOT Volpe Center	**Project Start Date:** July 2007
Original Project End Date: December 2012	**Current Project End Date:** December 2012	**Number of Extensions:** 0

Project schedule status:

☑ On schedule ☐ On revised schedule ☐ Ahead of schedule ☐ Behind schedule

Overall Project Statistics:

Total Project Budget	Total Cost to Date for Project	Percentage of Work Completed to Date
$226,500	166,500	80%

Quarterly Project Statistics:

Total Project Expenses and Percentage This Quarter	Total Amount of Funds Expended This Quarter	Total Percentage of Time Used to Date
NA due to additional funding by FHWA	NA	NA

Project Description:

The FHWA Traffic Noise Model (FHWA TNM) was originally released in 1998 and has undergone several upgrades. On May 2, 2005 the FHWA TNM, Version 2.5 became the required traffic noise prediction model to be used on Federal-aid highway projects.

FHWA TNM Version 3.0 Software Development:
FHWA is currently funding the development of the FHWA TNM Version 3.0. The main objective of Version 3.0 is to contemporize the software, making sure that the FHWA TNM does not become obsolete as computers/operating systems advance. Contemporizing FHWA TNM will allow for more efficient upgrades and future maintenance.

The pooled fund participants at the time that this project was started, identified the following enhancement to be included in TNM version 3.0:

1. Barrier Reflections
2. Enhanced Contours
3. Multi-lane tools
4. GIS Import/Export
5. Enhanced Contours

The scheduling and progress of this pooled fund is not independent of itself, but rather depending on the continual progress and funding of the overall version 3.0 development. The above referenced project schedule is accurate for the overall completion of TNM version 3.0. The specifics of percentages of funding remaining is difficult to specify since the FHWA continually adds funding to the above enhancements and other 3.0 development and since a vast majority of enhancements are overlap and/or coincide with each other.

Progress this Quarter (includes meetings, work plan status, contract status, significant progress, etc.):

A status update was provided during the ADC40 summer meeting in Portland Oregon, July 2011. A status update for the items identified and being paid for by this pooled fund are:

Tasks Currently in Progress:
1. Barrier Reflections: This item has been started, but will need the additional funding in order for it to be completed. The reason for this is due to the complexity of this task as well as some unforeseen programming obstacles associated with the other tasks.

2. Enhanced Contours: This task is about 90% complete. The display of noise contours in TNM will use color gradients rather than lines.

Tasks Completed:
1. Multi-lane tools: Users will be able to start with existing roadway or from scratch and create a multilane roadway

2. Basic DXF Import: TNM will allow users to import shp, dxf, and dgn files. Import of dwg files is in development. Users will be able to export TNM cases as dxf or shp files.

3. GIS Import/Export: TNM 3.0 will allow users to import georeferenced images or unreferenced images to use as a base
for noise model cases. Users will also be able to import and export TNM cases as shapefiles.

Anticipated work next quarter:

Continue to develop/complete the barrier reflections and the enhanced contour functionality in anticipation of beta-testing 1st/2nd quarter of 2012.

Significant Results:

Progress is on target for beta-testing in early 2012. All states apart of this pooled fund are invited to be beta-testers.

Circumstance affecting project or budget. (Please describe any challenges encountered or anticipated that might affect the completion of the project within the time, scope and fiscal constraints set forth in the agreement, along with recommended solutions to those problems).

Any programming or budgetary issues have been resolved to date. However, due to the difficulty in the barrier reflections enhancement, this may be an issue the is identified in the 2011 4th quarter report.

Potential Implementation:

Once TNM version 3.0 is completed including the 5 identified enhancements from this pooled fund, the FHWA will publish a 23 CFR 772 Notice of Proposed Rulemaking requiring the use of the FHWA TNM version 3.0.