

**State of Wisconsin/Department of Transportation**  
**RESEARCH PROGRESS REPORT FOR THE QUARTER ENDING: December 31, 2007**

<b>Program: SPR-0010(36) FFY99</b>	<b>Part: II Research and Development</b>
<b>Project Title:</b> Assessment of Multimodal Freight Bottlenecks and Alleviation Strategies for the Upper Midwest Region	<b>Project ID:</b> MVFC 05
<b>Administrative Contact:</b> Jason Bittner	<b>Sponsor:</b> MVFC Pooled Fund
<b>WisDOT Technical Contact:</b> Sandy Beaupre	<b>Approved Starting Date:</b> October 1, 2007
<b>Approved by COR/Steering Committee:</b> \$91,690	<b>Approved Ending Date:</b> June 30, 2009
<b>Project Investigator (agency &amp; contact):</b> Jessica Guo, University of Wisconsin - Madison	

**Description:**

The project aims to develop a prioritized list of freight bottlenecks in the Mississippi Valley Region and to identify effective strategies for alleviating the bottlenecks. Specific tasks include:

1. Review existing studies on freight bottleneck analysis and ranking methodologies.
2. Interview major stakeholders to identify the locations and conditions of freight transportation bottlenecks.
3. Identify a list of potential freight bottlenecks in the region and develop an analysis framework for determining the relative rankings of bottlenecks.
4. Collect and compile existing data that describe the conditions of freight bottlenecks.
5. Develop preliminary rankings of freight bottlenecks across the different modes.
6. Develop a web-based DSS for reviewing and adjusting bottleneck rankings.
7. Deploy the web-based DSS to obtain the final bottleneck rankings.
8. Obtain information pertaining to the schedule and the nature of planned improvement projects in the MVFC region for addressing the bottlenecks.
9. Develop a list of recommendations regarding how to address regionally significant bottlenecks in a coordinated and effective manner.
10. Prepare the final report.

Total study budget	Expenditures for current quarter	Total Expenditures to date	Percent Complete
\$91,690	0	0	12%

**Progress This Quarter:**

(Includes project committee mtgs, work plan status, contract status, significant progress, etc.)

The research team has reviewed the FHWA-sponsored study of highway freight bottlenecks and the Intermodal Bottleneck Evaluation Tool developed by BTS publications. A broad literature scan of existing studies on freight bottleneck analysis and ranking methodologies was also conducted and summarized (task 1). A list of major stakeholders and a draft questionnaire are being compiled in preparation for the interviews (task 2). The research team has also investigated the hardware and software resources needed for developing the web-based DSS (task 6).

**Work Next Quarter:**

- Complete task 2: Finish interviewing stakeholders.
- Continue task 3: Identify potential freight bottlenecks and develop an analysis framework.
- Begin task 4: Collect and compile data.
- Continue task 6: Develop a web-based DSS for reviewing and adjusting bottleneck rankings.

**Circumstances affecting progress/budget:**

The research team reassessed the workplan and proposed a revised timeline based on two considerations. First, in order to ensure the quality of interviews with stakeholders, additional time is needed for task 2 to design, develop and test the interview instrument before the actual deployment. Second, as task 6 does not depend on the output of earlier tasks, it is feasible and desired to make an earlier start on the task than originally planned. The revised timeline is presented on the following page. Note that the adjustments made to the timeline do not affect the delivery dates of project products.

