State of Wisconsin/Department of Transportation


<table>
<thead>
<tr>
<th>Program: SPR-0010(36) FFY99</th>
<th>Part: II Research and Development</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Title: Mississippi Valley Freight Coalition Pooled Fund</td>
<td>Project ID: TPF-5(156)</td>
</tr>
<tr>
<td>Administrative Contact: Jason Bittner</td>
<td>Sponsor: MVFC Pooled Fund</td>
</tr>
<tr>
<td>WisDOT Technical Contact: Sandy Beaupre</td>
<td>Approved Starting Date: 2/1/2007</td>
</tr>
<tr>
<td>Approved by COR/Steering Committee: $950,000</td>
<td>Approved Ending Date: 1/31/2011</td>
</tr>
<tr>
<td>Project Investigator (agency &amp; contact): Teresa Adams, Ph.D., Director, National Center for Freight and Infrastructure Research and Education (CFIRE), University of Wisconsin-Madison.</td>
<td></td>
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</table>

Description:

<table>
<thead>
<tr>
<th>Total study budget</th>
<th>Expenditures for current quarter</th>
<th>Total Expenditures to date</th>
<th>Percent Complete</th>
</tr>
</thead>
<tbody>
<tr>
<td>$738,771</td>
<td>$49,100</td>
<td>$542,401</td>
<td>90%</td>
</tr>
</tbody>
</table>

Progress This Quarter:

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

Pooled Fund Deliverables:

- A Regional Freight Transportation Workshop and Meetings  
  - Complete
- A Logistics Course for the Public Sector  
  - Complete
- The Development of Model Planning Approaches for Freight Transportation  
  - Complete
- MVFC Expanded Truck Parking Facilities  
  - Complete
- Assessment of Multimodal Freight Bottlenecks and Alleviation Strategies for the Upper Midwest Region  
  - See associated QPR, MVFC 05
- Mississippi Valley Freight Information Clearinghouse  
  - Complete
- 2008 MVFC Workshop and Meetings  
  - Complete
- Develop Regional Recommendations for Reauthorization  
  - See associated QPR, MVFC 09
- Transportation Profiles for MVFC Commodities  
  - See associated QPR, MVFC 10
- Freight Performance Measures for Evaluating Multi-state projects  
  - See associated QPR, MVFC 11
- Website  
  - MVFC Facilitator, Ernie Wittwer, and an in-house journalist have re-written the content of the MVFC and continued to edit the site, making it easier to navigate, remove clutter, and to bring more attention to the important news items.  
  - A student versed in website design is implementing the design.  
  - The new MVFC website was rolled out in late January.
- Coalition Action Plan  
  - The Coalition Action Plan consists of the scope of work for project initiatives. Project scopes were developed for nine of the twelve projects. Additional project scopes from the 2008 – 2010 project cycle will continue to be developed.
- Meeting minutes of the Executive and Technical Committees and the MVTOC can be viewed at http://www.mississippivalleyfreight.org/.  
  - MVFC Tech committee met on March 5th to provide updates on MVFC projects and to discuss the annual MVFC spring meeting upcoming in Kansas City, MO, in April 2009.  
  - Mississippi Valley Traffic Operations Coalition met on March 4th to discuss current projects, the annual meeting, and also received updates from the N/W Passage and LMIGA.
- Other business:  
  - Annual meeting was planned for April 27-29, 2010 in Cincinnati, OH. Staff has been working with state representatives to complete meeting details, agenda, recruit speakers, and organize related activities.
Work Next Quarter:

- MVFC Projects
  - Work will continue on the projects listed above with work being completed on MVFC 05, MVFC 10 and 11. Also will get MVFC 08: Outreach Materials, and MVFC 12: Critical Sections and Resiliency of Freight Corridors in the MVFC under contract.

- Website
  - With the completion of the website redesign, some work will continue with fixing broken links and replacing lost links.

- Coalition Action Plan
  - Will continue to carry out activities of the Coalition Action Plan.

- Committee Meetings
  - Plan to meet with MVFC Technical Committee in June to discuss the current MVFC projects, discuss the new projects (also looking for committee participation) and will provide a wrap up from the annual spring meeting.
  - Plan to meet with MVTOC on June 3rd.

Circumstances affecting progress/budget:

- None
State of Wisconsin/Department of Transportation
RESEARCH PROGRESS REPORT FOR THE QUARTER ENDING: March 31, 2010

<table>
<thead>
<tr>
<th>Program: SPR-0010(36) FFY99</th>
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<tbody>
<tr>
<td><strong>Project Title:</strong> Assessment of Multimodal Freight Bottlenecks and Alleviation Strategies for the Upper Midwest Region</td>
<td><strong>Project ID:</strong> MVFC 05</td>
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<tr>
<td><strong>Administrative Contact:</strong> Greg Waidley</td>
<td><strong>Sponsor:</strong> MVFC Pooled Fund</td>
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<tr>
<td><strong>WisDOT Technical Contact:</strong> Sandy Beaupre</td>
<td><strong>Approved Starting Date:</strong> October 1, 2007</td>
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<tr>
<td><strong>Approved by COR/Steering Committee:</strong> $92,500</td>
<td><strong>Approved Ending Date:</strong> May 31, 2010</td>
</tr>
<tr>
<td><strong>Project Investigator (agency &amp; contact):</strong> Jessica Guo, University of Wisconsin - Madison</td>
<td></td>
</tr>
</tbody>
</table>

**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.

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<tr>
<td>$92,500</td>
<td>0</td>
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</table>

**Progress This Quarter:**

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

- Obtain review comments from WisDOT reviewers on Feb 11, 2010.
- Revise the draft final report to incorporate review comments.

**Work Next Quarter:**

- Finalize the report based on review comments.

**Circumstances affecting progress/budget:**

Project end date was extended by WisDOT to provide sufficient time for report revision.

**Gantt Chart:**
<table>
<thead>
<tr>
<th>Task/Month</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Review existing studies</td>
<td></td>
</tr>
<tr>
<td>2. Interview stakeholders</td>
<td></td>
</tr>
<tr>
<td>3. Identify potential freight bottlenecks and develop an analysis framework</td>
<td></td>
</tr>
<tr>
<td>4. Collect and compile data</td>
<td></td>
</tr>
<tr>
<td>5. Develop preliminary rankings</td>
<td></td>
</tr>
<tr>
<td>6. Develop web-based decision support system</td>
<td></td>
</tr>
<tr>
<td>7. Deploy decision support system and revise rankings</td>
<td></td>
</tr>
<tr>
<td>8. Obtain information pertaining to planned improvement projects</td>
<td></td>
</tr>
<tr>
<td>9. Develop recommendations</td>
<td></td>
</tr>
<tr>
<td>10. Prepare final report</td>
<td></td>
</tr>
<tr>
<td>* Finalize report based on review comments</td>
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</tbody>
</table>

* Finalize report based on review comments
State of Wisconsin/Department of Transportation  
RESEARCH PROGRESS REPORT FOR THE QUARTER ENDING: March 31, 2010

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<tbody>
<tr>
<td><strong>Project Title:</strong> Transportation Profiles for MVFC Commodities</td>
<td><strong>Project ID:</strong> MVFC 10</td>
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<tr>
<td><strong>Administrative Contact:</strong> Greg Waidley</td>
<td><strong>Sponsor:</strong> MVFC Pooled Fund</td>
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<tr>
<td><strong>WisDOT Technical Contact:</strong> Sandy Beaupre</td>
<td><strong>Approved Starting Date:</strong> Jan. 1, 2009</td>
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<tr>
<td><strong>Approved by COR/Steering Committee:</strong> $173,521</td>
<td><strong>Approved Ending Date:</strong> Sept. 30, 2011</td>
</tr>
<tr>
<td><strong>Project Investigator (agency &amp; contact):</strong> Teresa Adams, University of Wisconsin - Madison</td>
<td></td>
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</tbody>
</table>

Description:

This project will use alternative methods to develop information on the flow of commodities through the region. Part one will develop two commodities in depth with narratives and illustrations to demonstrate the importance of efficient transportation to the industry along with some of the issues that influence the decisions made by shippers and carriers as they move product. Part two will use the approach of disaggregating Freight Analysis Framework information and assigning the commodities to routes. Part three will develop a micro-simulations of commodities based on freight volume, economic activity and probabilities. Since this application will take it to new levels, only four commodities will be analyzed under this project. With successful demonstration, the technique might be expanded in future work.

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<tbody>
<tr>
<td>$173,521</td>
<td>$40,771</td>
<td>$40,806</td>
<td>80%</td>
</tr>
</tbody>
</table>

Progress This Quarter:

Work continues on the taconite case study. It will be finished by May 15.
UIC and UT researchers have developed the tools to make the data available over the freightview system. These will be demonstrated in Cincinnati.
The synthesis work continues with the gathering and analysis of materials on specific commodities and industries. Much of the code has been written.

Work Next Quarter:

Finalize the taconite story.
Demonstrate FreightView availability of data.
Continue synthesis effort. Test the concept with the defined commodities and document success/problems
Develop the final presentation of materials.
More team meetings

Circumstances affecting progress/budget: The project should be complete by September.
Red indicates changes from original schedule. We are slightly behind schedule, but will complete by September.
**Project Title:** Freight Performance Measures for Evaluating Mult-state projects  
**Administrative Contact:** Jason Bittner  
**WisDOT Technical Contact:** Ernie Wittwer  
**Project ID:** MVFC-11  
**Sponsor:** MVFC  
**Approved Starting Date:**  
**Approved Ending Date:** 9/30/11

### Description:

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<tr>
<td>73,333</td>
<td>6,922</td>
<td>32,607</td>
<td>45%</td>
</tr>
</tbody>
</table>

### Progress This Quarter:

- Met with University of Illinois-Chicago researchers to discuss data, information, and approach  
- Contacted Chicago MPO staff to gather information  
- Collaborated with Chicago MPO and CREATE consultant staff to gather information  
- Contacted Wisconsin DNR staff to evaluate feasibility of using airshed data to estimate environmental impacts  
- Scheduled meeting with I-70 Truck Only lane staff to discuss approach

Continued activities from previous quarter, including:  
- Literature review on a multitude of economic impact software tools (Mid Oct)  
- Literature review on broad economic impact studies, mainly academic (Mid Oct)  
- Briefed you on FHWA tools and findings from CREATE project documentation (Late Oct)  
- Literature review on the major concepts of performance measurements (early Nov)  
- Literature review on other performance measurement projects by state and federal transportation agencies (early Nov)  
  * Literature review of performance measures used to evaluate performance of transportation with a focus on freight performance. The primary freight performance measures identified are:  
    - Mobility: Average travel time; Average speed  
    - Reliability: Deviations from Average speed or travel time; Frequency of nonrecurring delays  
    - Economic: Benefit Cost Ratio; Freight contribution to GDP  
    - Safety: Freight-related crash rates; Insurance costs  
    - Environment: Emissions of different pollutants  
  * Survey of important information pertaining to CREATE that can be used to measure the performance of freight-related investments as different projects under CREATE are implemented.

### Work Next Quarter:

- Continue to refine research and data sources. Consult with CREATE public and private sector experts.  
- Gather additional CREATE information  
- Develop matrix/intelligent map to measure and allocate benefits to states  
- Conduct analysis for distributions

### Circumstances affecting progress/budget:

None