

**State of Wisconsin/Department of Transportation/Midwest Regional University Transportation Center  
RESEARCH PROGRESS REPORT FOR THE QUARTER ENDING: March 31, 2005**

<b>Project Title:</b> Providing a Real-Time Evaluation of the Columbus Metropolitan Freeway Management System <b>Administrative Contact:</b> Jason Bittner <b>WisDOT Technical Contact:</b> Nina McLawhorn <b>Approved by COR/Steering Committee:</b> <b>Project Investigator (agency &amp; contact):</b> Ohio State University, Benjamin Coifman	<b>Project ID:</b> 04-02  <b>Sponsor:</b> MRUTC <b>Approved Starting Date:</b> October 1, 2003 <b>Approved Ending Date:</b> May 1, 2005
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**Description:** The work covered in this project will extend the evaluation for ODOT by providing a continuous, real time system to present various performance measures of the Columbus Metropolitan Freeway Management System (CMFMS). Such an extension should help optimize transportation investment by reducing peak demands on the system while educating the wide range of users.

Task 1: develop the necessary data fusion tools to merge these diverse data sources in real time, exploit the specific strengths of a given source, and address any discrepancies between conflicting data sources.

Task 2: produce and provide meaningful information for travelers.

Task 3: produce tools to automatically extract data useful to practitioners, employing the same philosophy behind the Freeway Performance Measurement System (PeMS).

Task 4: develop a tool to provide the archived loop detector data to researchers.

Total study budget	Expenditures for current quarter	Total Expenditures to date
\$98,467	\$19,536	\$88,473

**Percent Complete: 88%**

**Progress This Quarter:**

Catching and processing data from the Columbus Metropolitan Freeway Management System (CMFMS) continued in real time on campus this quarter as part of the back end of the web server. These data are now fed into the continually evolving web page, which can be viewed at:

<http://tml.ece.ohio-state.edu/~redmill/>

The web presence has proven more difficult than anticipated, in part due to technical difficulties beyond our control, e.g., our network link was down for several weeks. As we approach the final month of the project we are continuing to refine the presentation of the data. At this point it looks like some of the features will not be as user-friendly as we had hoped, but the original intent of this project was proof of concept. We have amassed numerous means of presenting historical data from a freeway surveillance system that should be directly transferable to any city.

Finally, we met with the oversight committee during this quarter.

**Work Next Quarter:**

Improving the speed and user friendliness of the web interface and submit a draft of the final report by the end of April.

**Circumstances affecting progress/budget:**

The research is progressing roughly proportionally with the budget but slower than the time allotted. Given this fact in combination with the delayed start date, we have requested and received a no cost extension.

**Please attach Gantt chart**

<u>Month</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>11</u>	<u>12</u>
task 1	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX		
task 2						XX	XX	XX	XX	XX	XX	XX
task 3	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX
task 4						XX	XX	XX	XX	XX	XX	XX