# OHIO DEPARTMENT OF TRANSPORTATION QUARTERLY RESEARCH REPORT



For Quarter Ending: December 30, 2008

**Date Submitted:** January 31, 2009

Project Title: Monitoring and Modeling of Pavement Response and Performance

**Research Agency:** Ohio University

**Principal Investigator(s):** Shad Sargand, J. Ludwig Figueroa

**State Job No.:** 134287(0)

Agreement No.: 21182

Federal Contract No.: TPF-5(121)

Project Start Date: May 1, 2006 Contract Funds Approved: \$1,429,372.06

Project Completion Date: May 1, 2012

Spent and Encumbered To Date: \$972,314.16 (\$8713.17 encumbered)

68.0% Funds Expended 45% Work Done 44% Time Expired

List the Technical Liaisons and other individuals who should receive copies of this report: Roger Green, Aric Morse

#### SUMMARY OF PROGRESS FOR QUARTER

- Continued to collect TDR, temperature and weather station data from WAY30, DEL23 and NY I86.
- Continued to analyze environmental effects data collected from DEL23 test section in June.
- Conducted FWD testing on NY Route 9A, Freedom Tower site.
- Conducted LVDT installation and FWD testing on NY I86 Angelica and Olean sites.

Wrote most of draft Ohio portion of the project.

#### PROPOSED WORK FOR NEW QUARTER:

- Continue collecting environmental data from DEL23, WAY30, and NY I86, including weather (all sites) and LVDT and vibrating wire data (as made available with solar power, and not on I86 westbound)
- Analyze data collected in previous quarter.
- Complete and submit draft of report on Ohio portion of the project.

### **IMPLEMENTATION** (if any):

None

## PROBLEMS & RECOMMENDED SOLUTIONS (if applicable):

(The request from the Ohio DOT to replace the data acquisition system is still pending)

One of the data acquisition systems used for data collection on the DEL23 project site was flooded while on site and is no longer operable. A request to replace the system will be sent to ODOT. The in ground pull boxes used to house the sensor wires and data acquisition need to be inspected to make sure that drains are not plugged with debris.

A request for additional time and funding to complete a second set of controlled vehicle tests on DEL 23 will be submitted to ODOT for approval. The abnormally wet spring and the exceptionally dry summer in Ohio during 2008 made it difficult to find conditions typically observed at the site.

#### **EQUIPMENT PURCHASED (if any):**

None

CONTACTS & MEETINGS (if any):

None