### **FHWA MSAT Study**

US 95 Settlement Agreement

## Annual Progress Report, as of June 2009

## Introduction

In June 2005, the Federal Highway Administration (FHWA), the Nevada Department of Transportation (NDOT), and the Sierra Club settled a lawsuit filed to prevent the expansion of US 95 in Las Vegas, NV. In the settlement agreement, the FHWA agreed to conduct a study to characterize the emissions of mobile source air toxics (MSAT) and PM<sub>2.5</sub> in relation to traffic and meteorological conditions, and measure the dispersion of the emissions from the roadway. This progress report, required by Part 1, Paragraph 5 of the settlement agreement, describes the progress over the past year on the FHWA's fulfillment of its obligations under the agreement.

## **Funding**

Funding continues to be an issue. Project costs have risen and, to cover some of the anticipated and unanticipated increases associated with implementing the study, the FHWA and EPA continue to seek additional funds and other cost saving measures as well. With the Las Vegas site operational, methods to reduce and control project costs were evaluated in an attempt to conserve resources and enhance data, which would help enable us to extend the study for the second year of monitoring. See discussion of Las Vegas site operation.

The estimated FHWA funds remaining for interagency agreement: \$250,000. Even with the funds already under agreement, and EPA's match this will not be enough to cover an entire year in Southeastern Michigan. Given the remaining funding levels, it is likely that the study conducted in Southeastern Michigan would be performed using new equipment that would allow us to gather similar information to the Las Vegas study, but also stay within the budget.

#### Site Operation

#### Las Vegas

In December 2008, FHWA and EPA began monitoring and data collection in the "near roadway environment" in Las Vegas. The FHWA obtained an additional \$198,000 for the project this fiscal year and some of these funds were used by EPA to perform a comparison test of canister data and that from the use of new technology (Gas Chromatograph or "GC") to collect benzene and 1,3 butadiene in the 10 meter site in Las Vegas. EPA analyzed the results and determined that the use of GC equipment provided comparable results and a means of enhancing our data collection, while reducing the intensive labor and cost related to the canister method. Three additional gas chromatographs were purchased for installation in the three other trailers.

# Site Selection and Prospects for Further Study

## Southeastern Michigan

We continue to engage in discussions with the Michigan FHWA Division Office, State DOT and DEQ, as well as the Detroit area regional transportation planning council (SEMCOG) to find a location in Southeastern Michigan. They have been particularly helpful in searching for potential sites in the Detroit area to place the monitors. This past year more than 20 sites were investigated, however, our best option fell through. At this point, EPA and FHWA are assessing the situation and considering our best approach to other sites in the area.

#### Raleigh

While it would be advantageous to use the in-kind staff and lab support this location would provide, given the lack of funds available at this time it is highly unlikely we'll be able to do Raleigh as a third site without being provided an additional source of funds in the future.

## Conclusion

Over the past year, the FHWA has worked extensively with the EPA to start the monitoring in Las Vegas and collect and analyze preliminary data. Finding a location in Southeastern Michigan, and looking for cost saving measures was also a big part of this effort. We look forward to continued analysis and efforts to present the results at national forums and in scientific journals. Once data collection in Las Vegas is complete EPA will analyze the results and prepare a final report of that site.