

## Preparing Input Data for MOBILE 6 Vehicle Emissions Model

*Start Date:* 7/1/2003  
*Duration:* 12 months  
*Completion:* 6/30/2004  
*Funding:* State Planning

**Principal Investigator:**  
*Chester G. Wilmot, Ph.D., P.E.*  
Associate Professor  
Louisiana State University

**LTRC Contact:**  
*Harold "Skip" Paul, P.E.*  
Assoc. Director, Research  
(225)767-9102

### Problem

The Clean Air Act amendments of 1990 require regular vehicle emissions analyses for regions that have been documented as non-compliant with air quality regulations. Beginning in January 2004, the Environmental Protection Agency (EPA) will require the use of its MOBILE 6 vehicle emissions model for these analyses. In moving from the current MOBILE 5 model to the MOBILE 6 model, the level of detail for input data has been significantly increased. This places greater

demands upon metropolitan planning organizations (MPOs) responsible for conducting the emissions analyses.

### Objective

The objectives of this research are to (1) identify data sources that can provide information for use as input to the MOBILE 6 model, (2) identify statistical analyses necessary to prepare the data in the format required for input to the model, and (3) document the procedure used to acquire and prepare the input data.



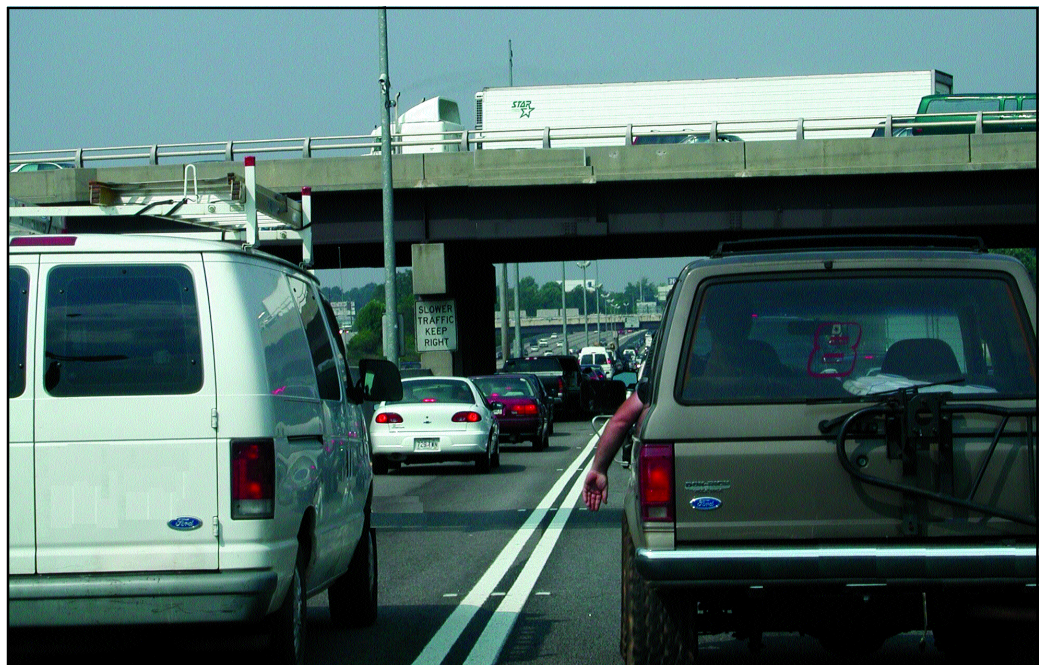
LTRC



Louisiana Transportation  
Research Center

Sponsored jointly by the  
Louisiana Department of  
Transportation and  
Development  
and Louisiana State University

4101 Gourrier Avenue  
Baton Rouge, LA 70808-4443



Highway traffic congestion

## Description

After conducting a thorough literature review, including a survey of non-attainment areas outside of Louisiana, alternative best practices for collection and preparation of MOBILE 6 input data will be evaluated for use in Louisiana.

By reviewing the state-of-the-practice for preparation of MOBILE 6 input data, procedures will be tested for application in Louisiana. Procedures that provide acceptable results will be adopted, and new procedures will be developed where satisfactory existing procedures do not exist.

Procedures for identification, location, and preparation of MOBILE 6 input data will be documented in a manual for use in Louisiana. The manual will assist users with data preparation and also serve as a reference that can be reviewed, evaluated, and updated as conditions or requirements change.

## Implementation Potential

Subsequent to this research, a workshop will be organized to provide guidance to MPOs on the collection and preparation of data for use in preparing vehicle emission estimates. A documented process will allow MPOs to convey information to the EPA in a more efficient manner.

Standardization of the process will also facilitate comparison among MPOs.