Talking Traffic

A Special Session on Vehicle Occupancy Data Development

Title:

Developing and Deploying Methods of Vehicle Occupancy Estimation

Presenter:

Vidya Mysore, Office of Highway Policy Information, Federal Highway Administration

Q/A Panel:

Lokesh Hebbani, Danny Jenkins, Clayton Clark, Stacey Bricka, Robert Krile, Elizabeth Slone, and Matt Austin

Date and Time: Thursday November 19, 2020. 2:00 PM – 3:30 PM ET

Link: Join Microsoft Teams Meeting

Background:

The transportation community relies on vehicle-based measures to characterize highway demands. The two most common and widely adopted standards are the annual average daily traffic (AADT) and the annual average daily truck traffic (AADTT). While such vehicle-based measurements provide highly effective assessments for highway planning, construction, operations, and maintenance, gaps exist in the number of persons traveling in a vehicle, and the tonnage and dollar values of freight moved on trucks.

On the freight front, efforts such as the truck weigh-in-motion program and the Vehicle Inventory and Use Survey (VIUS) at the national level have been providing information to link truck flow data to the tonnage and dollar values of goods moved. On the passenger travel front, the National Household Travel Survey (NHTS), along with limited state and local surveys, offer a glimpse of vehicle occupancy information. Unfortunately, the current household survey data are not robust enough in deciphering more disaggregated strata such as time of day, seasonality, geographical area, and roadway types regarding vehicle occupancy.

The FHWA Office of Highway Policy Information (OHPI) has carried out two phases of major research and development effort, attempting to derive vehicle occupancy data without resorting to the traditional survey approach.

In this webinar, the OHPI will present a set of vehicle occupancy factor estimation methods developed for passenger vehicles, trucks, and buses. Professionals interested in translating vehicle miles traveled (VMT) data to person miles traveled (PMT), assessing how occupancy data are developed for travel demand modeling and forecasting, and attempting to create new measures for highway needs analysis, operational efficiency evaluation, and performance assessment, are encouraged to attend.

Objective:

The objective of this vehicle occupancy estimation webinar is twofold:

- Share the advanced data analytics with the community to promote data innovation,
- Gather feedback from the transportation community on potential further method improvements.