

TRAVEL DEMAND FORECASTING FOR FREIGHT

Historically, predicting future freight movements relied on an estimated percentage of heavy trucks per total Average Annual Daily Traffic (AADT), at a minimum. Given the growth pattern that is predicted for Mobile, this was not a reliable method for forecasting not only truck movements, but all modes of freight as well. The Mobile MPO's overall transportation infrastructure planning and tools must keep pace with our new realities. Nationally, freight planning for medium sized MPO's like Mobile, have used data analysis including employment numbers and trend forecasting that assumes trends from the past will continue in the future. This method of travel demand forecasting for freight assumes employment and households have a direct relationship with the movement of freight. Given Mobile's network configuration and geography, that is not necessarily the case.

Recognizing that the efficient movement of freight is vital to the growth of Mobile's economy, and that our area must provide for superior freight distribution and not become a freight chokepoint, the Transportation Department of the South Alabama Regional Planning Commission (SARPC) developed a bold, new planning tool to better recognize, understand, track, and predict freight movement in Mobile. With assistance of the University of Alabama at Huntsville (UAH), the Mobile MPO will have freight layered into our existing Long Range Plan, giving the MPO a single, comprehensive, multi-dimensional, multi-modal, and predictive tool for transportation infrastructure planning. Capable of conducting discrete freight event simulations, this tool is the first of its kind in Alabama. Given that Mobile has excellent transportation flexibility, it is essential that our freight planning tools take into account rail, truck, air, water borne, and multi modal freight components. The travel demand forecast model for truck freight has nine trip purposes, which is interfaced as a separate mode with the vehicular travel demand forecast model.

Mobile's business community and industries are diverse as shown below. The infrastructure to support them is diverse as well.