

## Ohio-Kentucky-Indiana Regional Council of Government (OKI) TRAVEL DEMAND MODEL

www.EasternCorridor.org

## FACT SHEET

The OKI Travel Demand Model is a nationally-recognized tool used by transportation planners and engineers to forecast travel demand. It is also used to estimate the impacts of travel on highway and transit facilities, including congestion, travel time and mobile-source emissions.

The OKI Travel Demand Model is a battery of computer programs and algorithms that make use of hundreds of independent variables to predict human travel behavior. The model allows for the identification of current and future transportation needs as well as the testing of projected impacts of implementing proposed improvements to the system, such as new or widened roadways, additional transit service, etc.

The Model is a trip-based model, which uses four major steps: trip generation, trip distribution, mode choice, and trip assignment. Additionally, the model is enhanced with special modules for the Greater Cincinnati-Northern Kentucky International Airport, King's Island Amusement Park, the EPA Motor Vehicle Emissions Simulator (MOVES), and many reporting programs.

The Model covers the counties of Hamilton, Butler, Warren, Clermont, Montgomery, Miami, and Greene in Ohio; Boone, Kenton, and Campbell in Kentucky; and Dearborn County Indiana.

## **QUICK FACTS**

- ✓ In 2013, the OKI Travel Demand Model will be celebrating its 41<sup>st</sup> year of operation.
- ✓ The model has been reviewed on two occasions for "State of the Practice" and was so awarded.
- ✓ For four decades, the model has been the source of traffic forecasts on almost every transportation project in the region, whether large or small. In fact, the state departments of transportation use the OKI Model for traffic projections in this region.
- ✓ The Model was built from 1968-72. It has gone through seven version updates (currently model version 7.6). The model is constantly updated. Just this past year, over 250 roads in Kentucky and many more in Ohio were reviewed for traffic movements.
- ✓ The model was overseen for many years by Dr. Cheng I-Tsai, a recognized national leader in traffic modeling. The current Manager of Transportation Modeling is Andrew Rohne. Mr. Rohne is a member of the Transportation Research Board, the most prestigious transportation research organization in the country. Mr. Rohne is a member of a committee that reviews the validity and innovation of traffic model applications from all over the world.
- More information about the OKI Travel Demand Model is available on the Eastern Corridor website, SR 32 Relocation Section: <u>http://easterncorridor.org/relocated-sr-32</u>.

## Eastern Corridor Implementation Partners

Hamilton County Transportation Improvement District • Clermont County Transportation Improvement District • City of Cincinnati Ohio-Kentucky-Indiana Regional Council of Governments • Southwest Ohio Regional Transit Authority • Ohio Department of Transportation

The Eastern Corridor Program is administered by the Ohio Department of Transportation in cooperation with the Federal Highway Administration (FHWA), the Federal Transit Administration (FTA) and the Eastern Corridor Implementation Partners.