## **IMS Summary**

The Brent Spence Bridge Corridor (BSBC) Project team recently shared the results of an Interchange Modification Study (IMS), which is an update of the existing 2012 study. The entire report can be found in the Documents section here (link to study). Below is a list of frequently asked questions to explain more details about the study.

## What is an Interchange Modification Study and why is it needed?

Controlling access to interstate and other freeway systems is critical to providing the highest levels of safety and mobility. Under federal rules, requests for new or revised highway access points require the preparation of several documents, including an Interchange Modification Study, to assure the changes will maintain or improve capacity and safety. Forecasting traffic demand, typically 20 years after a project is complete, is a key consideration in making those assessments.

# What's included in the BSBC IMS?

The updated BSBC IMS consists of three parts:

- A certified traffic report, which includes an analysis of current and future traffic projections.
- A traffic operations analysis, which reviews travel patterns and evaluates how efficiently traffic moves through the corridor.
- A safety analysis, which reviews current and projected crash data.

Each report compares the new data to the results of the original 2012 study.

#### How do highway professionals forecast traffic demand?

The project team uses computer-based models, which follow state and federal methodologies, to estimate travel patterns. Many factors are taken into consideration, such as land use, economic forecasts, and population, for example. Typically, the forecast projects demand 20 years after the "opening date" of a new interchange or series of interchanges. The current IMS is written to forecast travel demand changes from 2029 through 2049.

#### What does the new traffic study show vs. the 2012 study?

The 2012 study projected travel demand across the bridge in 2035 would be 197,000 per day if there is no build. The current study projects a slightly lower travel demand of 183,000 cars per day by 2049.

#### Does the reduced forecast lessen the need for the BSBC project?

No. Today's volume of traffic of approximately 160,000 vehicles per day justifies the need for this project. Any increase in traffic will worsen current traffic congestion and heightens the need to act.

#### Why is the current forecast for traffic in the corridor less than the 2012 forecast?

Traffic forecasts rely heavily on population and employment forecasts. For the 11-county region including and surrounding the project area, the project team is using the most current version of the Ohio-Kentucky-Indiana Regional Council of Governments (OKI) forecasting model, which is consistent with current best modeling practices. As a result, the current population forecast is down less than 1 percent in comparison to the 2012 forecast. The current employment forecast, however, is down 9 percent from the 2012 forecast. It should be noted, nonetheless, that both

population and employment are expected to grow in our region. Population is projected to grow 6 percent and employment 10 percent by 2050 based on current OKI forecasts.

### How much safer will drivers be when the project is complete?

The crash rate is forecast to be 40 percent lower on the companion bridge and 20 percent lower on the existing bridge when refurbished. Furthermore, both bridges are expected to experience similar reductions in the rate of those crashes involving fatalities and injuries. Moreover, most crashes involve property damage only, such as sideswipes and rear-end incidents. They, too, are projected to decline 40 percent on the companion bridge and 20 percent on the existing bridge.

# Why are the safety projections slightly better for Selected Alternative I?

Projections for the selected alternative design and the refined alternative design are both lower due to the safety improvements. Readers may note that the refined alternative (Concept I-W) has slightly higher crash projections than the selected alternative. Some of those refinements include narrower shoulders, which still meet standards while addressing community requests to reduce the project's footprint, but also slightly impacted safety projections. In addition, some safety standards have changed since 2012.