



## **Chapter 2: Purpose and Need**

### ***Executive Summary***

*Note to readers: This purpose-and-need statement is a work in progress. The findings and conclusions expressed in this draft are subject to change as the study progresses. The final version of the purpose-and-need statement will be published in the Final Environmental Impact Statement.*

This chapter contains the purpose-and-need statement for the proposed Evansville-to-Indianapolis section of I-69. The purpose-and-need statement contains five main parts:

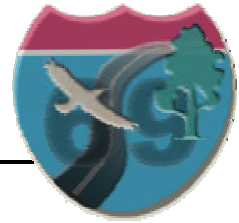
- **Policy Framework**: describes the key policy decisions affecting this project
- **Needs Assessment**: summarizes the results of a comprehensive assessment of transportation and economic needs in a 26-county area of Southwest Indiana
- **Public and Agency Input**: provides response to key issues raised by agencies and the public during development of the purpose-and-need statement
- **Project Goals and Performance Measures**: defines the goals of the project and performance measures for use in evaluating alternatives' ability to achieve those goals
- **Next Steps: Evaluating Alternatives**: explains how the purpose-and-need statement will be used to screen alternatives and to select a preferred alternative.

### **Policy Framework**

The proposal to complete the proposed action has been shaped by a series of policy decisions over the last 10 years at the federal and state level. These policy decisions include:

#### **Key Federal Policies**

- Focus federal aid on the National Highway System (NHS) – a 160,000 mile system that includes only 5% of the nation's highways but carries 40% of the traffic.
- Facilitate completion of I-69 as an Interstate highway from Canada to Mexico, along the route specified by Congress, in order to promote international and interstate trade and facilitate economic development along the I-69 corridor.



### **Key State Policies**

- Connect the State's major population, manufacturing, and trade and service concentrations to one another and to major markets in surrounding states with a high-quality highway system.
- Use the highway system in the State to sustain economic growth, to create the right environment for new business starts, to aid in the retention or expansion of existing business, and to enhance the attraction of new business.

### **Needs Assessment**

A comprehensive needs assessment has been conducted as part of this study. The needs assessment examined Southwest Indiana as a whole – a 26-county study area. The assessment focused on two main issues: transportation needs and economic development needs. Key terms and concepts in each of these areas, as well as key findings, include:

#### **Transportation Needs Analysis – Key Terms and Concepts**

- *Travel Demand Model:* The needs assessment was based upon traffic data generated by a newly developed, highly refined travel demand model. The model includes the entire Indiana federal and state highway road network plus additional road networks in Indiana as well as major highways in the adjacent states of Illinois, Kentucky, Michigan, and Ohio.
- *Current Year vs. Design Year:* The needs assessment describes conditions in the current year (or the most recent year for which data was available) and in 2025, which is referred to as the “design year” for this project.
- *“No Build” Scenario:* The needs assessment uses the “No Build” scenario as the basis for design-year (2025) traffic forecasts. Under the “No Build” scenario, the proposed project would not be built; INDOT still would maintain the existing road network and proceed with other projects for which funding already has been committed.
- *Mileage Index and Time Linkage Index:* A “mileage index” and “time linkage index” were used to evaluate the existing Evansville-to-Indianapolis connection. These indexes compared *actual* travel times and travel speeds (along the fastest existing route) to the *ideal* travel times and travel speeds (along a straight-line route).
- *Accessibility Index:* An “accessibility index” was used to measure the ease of access for Southwest Indiana residents to a range of destinations – e.g., population centers, employment centers, urban centers, airports.



- *Volume-to-Capacity (V/C) Ratios and Level of Service (LOS) Ratings:* Congestion levels were evaluated by using two standard measurements:
  - ✓ The V/C ratio is determined by comparing the volume of traffic on a roadway segment to the capacity of that segment. As the volume approaches the capacity, the roadway becomes congested.
  - ✓ The LOS rating is determined by observing actual operating conditions on a roadway segment and rating those conditions on a scale from “A” to “F” – with “A” being free-flowing traffic and “F” being the highest level of congestion.
- *Serious Crash Rates:* Safety levels were evaluated by measuring serious crash rates for individual road segments and for entire counties. A “serious crash” was defined as a crash involving an injury or fatality. Safety problems were identified wherever crash rates exceeded statewide averages by more than 25%.

### **Transportation Needs Analysis – Key Findings**

- *Evansville to Indianapolis Linkage:* Evansville residents have the least efficient connection to Indianapolis of any major city in Indiana, based on the mileage and travel time indexes. Evansville ranks 12<sup>th</sup> out of 12 urban areas on three of four measures, and 10<sup>th</sup> out of 12 on the fourth measure.
- *Regional Accessibility:* Southwest Indiana as a whole has a much lower level of accessibility – to employment opportunities, to airports, and major population centers, including Indianapolis – than any other part of Indiana.
- *Congestion:* Overall, congestion is not a major problem on the highway network in Southwest Indiana, when compared to the rest of the State. However, there are some highly congested highway segments within Southwest Indiana.
- *Safety:* Overall, safety levels in rural counties of Southwest Indiana are worse than safety levels in rural counties elsewhere in the State. In addition, several counties and several individual highway segments in Southwest Indiana have accident rates that are significantly higher than statewide averages.

### **Economic Needs Analysis – Key Terms and Concepts**

- *USDA Strategic Plan:* The economic needs assessment draws upon a recent report issued by the Rural Development Agency in the U.S. Department of Agriculture (USDA), the *Indiana Strategic Plan, FY 2001*. The report evaluates economic



conditions in Indiana according to a wide range of measures. The USDA prepares similar reports for states across the country.

- *“Stressed” Ratings*: The USDA report identifies counties in rural Indiana that are economically and socially “stressed” and rates those counties in terms of the severity of their stress. The stress ratings are based on many factors, including household income, poverty rates, and employment.
- *CUED Panel*: The needs assessment summarizes some key findings of a report prepared by the Council for Urban Economic Development (CUED) as part of this study. The report evaluates the relationship between the highway system and economic conditions in Southwest Indiana. CUED is a national association of economic development specialists with expertise in both urban and rural development issues.

### **Economic Needs Analysis – Key Findings**

- Population and employment growth rates in Southwest Indiana – and in Indiana as a whole – have lagged significantly behind the national averages over the past 30 years.
- The most recent USDA annual report for Indiana indicates that economic conditions in Southwest Indiana – particularly rural Southwest Indiana – are significantly worse than in the rest of the State. Key findings include:

#### Stress

- ✓ 12 of the 19 rural counties in Southwest Indiana are rated as “stressed”
- ✓ the three most stressed counties in the state are all in Southwest Indiana

#### Poverty

- ✓ 10 of the 20 counties with the highest poverty rates in the state are in Southwest Indiana
- ✓ the four counties with the highest poverty rates in the state are in Southwest Indiana

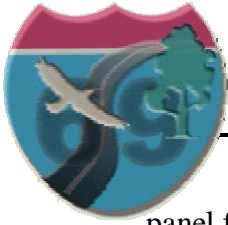
#### Unemployment

- ✓ 5 of the 8 counties with the highest unemployment rates in the state are in Southwest Indiana

#### Household Income

- ✓ 11 of the 14 counties with the lowest household income levels in the state are in Southwest Indiana

- The CUED panel found that one important factor restraining economic growth in Southwest Indiana is the inadequacy of the highway network. Conversely, the CUED



panel found that improvements to the highway network have significant potential to enhance long-term economic growth prospects in the region.

## **Public and Agency Input**

This purpose-and-need statement has been prepared with extensive input from resource agencies and the public, including comments on the Purpose and Need Discussion Paper that was issued in August 2000. FHWA and INDOT have carefully reviewed the comments received, and have addressed those comments in the draft purpose-and-need statement. Key issues included: (1) the legal designation of the I-69 route, and particularly the issue of whether the legally designated route includes a connection to Bloomington; (2) the relationship of national and international I-69 goals to this particular project; (3) the use of environmental considerations in the purpose-and-need statement and in the screening of alternatives, and (4) the need to avoid “double-counting” when applying performance measures to the alternatives.

## **Project Goals and Performance Measures**

As stated above, the proposed action is the completion of I-69 as an Interstate highway from I-64, just north of Evansville, Indiana, to I-465, south of Indianapolis, Indiana. The purpose of this proposed action is to achieve the following goals:

### **Strengthen the Highway Network in Southwest Indiana**

- *Improve the transportation linkage between Evansville and Indianapolis*
- *Improve personal accessibility for Southwest Indiana residents*
- Reduce existing and forecasted traffic congestion on the highway network in Southwest Indiana
- Reduce safety problems in areas with significantly above-average accident rates

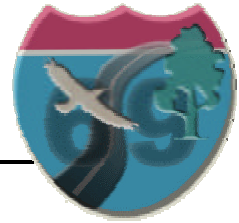
### **Improve Opportunities for Economic Development in Southwest Indiana**

- Reduce transportation-related “business costs” in Southwest Indiana
- Increase accessibility for Southwest Indiana businesses to labor, suppliers, and markets
- Support sustainable, long-term economic growth (diversity of employer types)
- Support economic development that benefits a wide spectrum of Southwest Indiana residents (distribution of economic benefits)

### **Support Completion of I-69 as a National and International Trade Corridor**

- *Facilitate interstate and international movements of freight and people through the I-69 corridor, in a manner consistent with national I-69 policies*
- Connect I-69 to major intermodal facilities in Southwest Indiana

The goals that are highlighted in *italics* have been identified as core objectives of the project, based on consideration of the policy/legislative framework as well as the needs



assessment. These goals will be given proportionately greater weight than other project goals when screening alternatives and when selecting a preferred alternative.

Specific performance measures have been developed for each of the project goals. For example, travel time and travel time savings will be used to measure improvements in the transportation linkage between Evansville and Indianapolis. Please refer to Table 13 for a complete list of project goals and performance measures.

## **Next Steps: Screening Alternatives**

After the purpose-and-need statement has been completed, the next step in the study process will be “screening” alternatives – that is, identifying the set of 3-5 alternatives that will be carried forward for detailed study. The screening process will involve the following steps:

- Each of the 14 route concepts will be comprehensively evaluated to determine its ability to meet the project goals listed in the purpose-and-need statement.
- The ability of an alternative to meet a project goal will be determined by applying the performance measures for that goal. (See Table 13.) The performance measures will be considered as a whole when evaluating an alternative; an alternative that performs poorly on one or more individual measures could possibly be carried forward for detailed study, if that alternative performs well on other measures.
- Additional factors – besides purpose-and-need – also will be considered in deciding which alternatives to carry forward. These factors include:
  - ✓ Geographic location
  - ✓ Cost
  - ✓ Environmental impact types
  - ✓ Public, governmental, and agency comments
- In weighing these factors, an effort will be made to identify a set of 3-5 alternatives that involve distinctly different geographic locations and distinctly different combinations of benefits and impacts.
- The consideration of these factors, in combination with the purpose-and-need factors, will necessarily involve the exercise of judgment, which will be made jointly by FHWA and INDOT in coordination with other federal and state agencies.
- The detailed analysis of 3-5 alternatives will lead to the selection of a single preferred corridor for completing I-69 from Evansville to Indianapolis (or will lead to selection of



the No Build alternative.) This detailed analysis will include a comprehensive review of the impacts, benefits, and costs of the various alternatives.

- The “No Build” alternative will be carried forward throughout this entire study. It will not be eliminated in the alternatives screening process.