Chapter 2—Purpose and Need

Since the publication of the DEIS, the following substantive changes have been made to this chapter:

- Section 2.2.3 – Updated the current status of the STIP and the TIP for the Bloomington/Monroe County MPO.
- Section 2.3.4 – Updated **Table 2-3** to provide more recent crash rates.
- Section 2.5 – Revised the performance measures for Goal 4 by adding a new performance measure for crash rates (frequency).
- Section 2.5 - **Table 2-4** was revised to re-state the Tier 1 goals as included in the Tier 1 ROD and as presented in Section 2.1.1. Also, the new performance measure G4-B was added for Goal 4.

This document describes the project goals for the Tier 2 study of Section 4 of the I-69 Evansville to Indianapolis corridor. Section 4 begins at US 231 near the Naval Surface Warfare Center, Crane Division (Crane NSWC), and continues east/northeast to SR 37 southwest of the City of Bloomington in Monroe County. Section 4 is approximately 26.6 miles in length. The Purpose and Need Study Area for Section 4 includes Greene, Monroe, Lawrence, Martin and Owen counties. [1]

This Purpose and Need Statement describes the goals of Section 4, explains how these goals were determined, and gives the performances measures that will be used to evaluate how well the alternatives meet those goals. This document contains the following five sections, which parallel the five sections of Chapter 2, *Purpose and Need*, in the Tier 1 FEIS.

- ***Section 2.1—Statement of Purpose and Need*** contains the Statement of Purpose and Need for Section 4 of the Tier 2 project.
- ***Section 2.2—Transportation Plans and Policies*** describes federal, state, and local policies used to determine the Purpose and Need for Section 4. State and federal policies are described in less detail than in the Tier 1 FEIS, to which the reader is referred for further information. Local plans and policies that pertain to Section 4 are described in greater detail.
- ***Section 2.3—Needs Assessment*** describes the local needs that have been identified during the scoping process for Section 4.

[1] For impact analyses, the Study Area includes census geography in and contiguous to the Section 4 corridor in Monroe and Greene counties. See Section 5.2 for additional discussion. For analysis of cumulative impacts, the Study Area consists of locations where induced growth due to I-69 is anticipated. See Section 5.24 for additional discussion.

- ***Section 2.4—Public and Agency Input*** summarizes how public and agency input was used to determine the Purpose and Need.

- ***Section 2.5—Project Goals and Performance Measures*** identifies the local goals, describes how they support the overall project goals identified in Tier 1, and presents the performance measures that will be used to evaluate the relative ability of alternatives to achieve these goals.

2.1 Statement of Purpose and Need

The Purpose and Need identified in Tier 1 for the I-69 Evansville to Indianapolis project has been carried forward into Tier 2 and remains the foundation of the Purpose and Need for each Tier 2 section. The only modification to the Purpose and Need in Tier 2 involves the identification of goals specific to a particular Tier 2 section. These local goals are being identified for each Tier 2 section as part of the scoping process in Tier 2. Therefore, the Purpose and Need for Section 4 consists of two parts: (1) the overall project purpose as defined in Tier 1 for the I-69 Evansville to Indianapolis project and (2) local goals identified as part of the Tier 2 process.

2.1.1 Purpose and Need, I-69 Between Evansville and Indianapolis

The purpose of I-69 between Evansville and Indianapolis was determined in the Tier 1 FEIS. As defined in Tier 1 EIS, the purpose of I-69 is to provide an improved transportation link between Evansville and Indianapolis that:

- Strengthens the transportation network in Southwest Indiana;
- Supports economic development in Southwest Indiana; and
- Completes the portion of the National I-69 Project between Evansville and Indianapolis.

Specific goals were identified in Tier 1 that support this overall purpose. They are listed below, with core goals shown in *italics*. These core goals were identified in Tier 1 based on consideration of the policy/legislative framework as well as the transportation and economic development needs assessment. For each of the core goals, the selected alternative was required in the Tier 1 study to achieve a substantial improvement over existing conditions. The selection of core goals also recognized that this is primarily a transportation project.

Improved transportation linkages constitute one of a number of factors which can support economic growth. Supporting economic growth is one of the nine overall policies stated in INDOT's current long-range plan. Accordingly, in view of the demonstrated needs in Southwest Indiana, goals related to supporting economic development were established in Tier 1. At the same time, transportation is one of a number of factors needed to support economic development. Therefore, no core goals were associated with supporting economic development.

Transportation Goals

Goal 1 *Improve the transportation linkage between Evansville and Indianapolis*

Goal 2 *Improve personal accessibility for Southwest Indiana residents*

Goal 3 Reduce existing and forecasted traffic congestion on the highway network in Southwest Indiana

Goal 4 Reduce traffic safety problems

Economic Development Goals

Goal 5 Increase accessibility for Southwest Indiana businesses to labor, suppliers, and consumer markets

Goal 6 Support sustainable, long-term economic growth (diversity of employer types)

Goal 7 Support economic development to benefit a wide spectrum of area residents (distribution of economic benefits)

National I-69 Goals

Goal 8 *Facilitate interstate and international movement of freight through the I-69 corridor, in a manner consistent with the national I-69 policies*

Goal 9 Connect I-69 to major intermodal facilities in Southwest Indiana

As defined in Tier 1, the goals of the I-69 Evansville to Indianapolis project are regional goals: that is, they are expressed as goals for the entire Southwest Indiana region, which includes 26 counties and encompasses a quarter of the State of Indiana. These broad regional goals were used as the basis for evaluating alternatives in Tier 1, when the alternatives analysis involved comparing different corridors 140 to 160 miles in length spread across a broad geographic area.

2.1.2 Statement of Section 4 Tier 2 Purpose and Need

The purpose of the project in Section 4 is to advance the overall goals of the I-69 Evansville to Indianapolis project in a manner consistent with the commitments in the Tier 1 ROD, while also addressing local needs identified in the Tier 2 process. The local needs identified in Tier 2 for Section 4 include:

- Complete Section 4 of I-69 as determined in the Tier 1 ROD
- Increase personal accessibility for area residents
- Reduce existing and forecasted traffic congestion
- Improve traffic safety
- Support local economic development initiatives

These needs are defined in greater detail below in Section 2.3. Alternatives developed in Section 4 are to be consistent with the overall goals of Tier 1 and the local needs identified in this Tier 2 study.

2.2 Transportation Plans and Policies

2.2.1 Federal Legislation and Policies

In 1991, Congress passed the Intermodal Surface Transportation Efficiency Act (ISTEA), which designated "Corridor 18" from Indianapolis, Indiana, to Memphis, Tennessee, via Evansville, Indiana, as a high-priority corridor. This corridor was extended to the north and south in the National Highway System Designation Act of 1995. It was further modified in 1998 by the Transportation Equity Act for the 21st Century (TEA-21), which extended the corridor to provide a continuous link from the Canadian border to the Mexican border. In addition, TEA-21 designated Corridor 18 as "Interstate Route I-69." The entire I-69 corridor, from Canada to Mexico, is referred to in this study as the "National I-69 Corridor" (See **Figure 2-1,** p. 2-20).

The National I-69 Corridor was divided into 26 Sections of Independent Utility (SIUs), each considered to be an independent project for purposes of NEPA reviews and environmental studies. The Evansville to Indianapolis section of I-69 was designated as SIU #3 of the National I-69 project.

In March 2004 FHWA issued a Tier 1 Record of Decision (ROD) for the Evansville to Indianapolis section of I-69. The Tier 1 ROD selected a "corridor"—that is, a band generally 2,000 feet in width, but narrower in some places and broader in others—for I-69 between Evansville and Indianapolis. In addition, the Tier 1 ROD divided the Evansville to Indianapolis project into six separate sections for more detailed Tier 2 studies. Section 4 is the fourth section from the south; it extends from US 231 in Greene County to SR 37 in Monroe County.

2.2.2 State Legislation and Policies

A state law passed in 1991 directed INDOT to designate a system of Commerce Corridors that would serve the state's major economic centers and to specify levels of service to be achieved by highways designated as Commerce Corridors. Based on this law, INDOT identified a Commerce Corridor connecting Evansville to Indianapolis via Bloomington, as part of a statewide network of Commerce Corridors.

In 2001, INDOT issued its *2000-2025 Long Range Plan*. In that plan, INDOT identified a statewide network consisting of three levels of transportation corridors: Statewide Mobility Corridors, Regional Corridors, and Local Access Corridors. **Figure 2-2** (p. 2-20) shows these three levels. The Statewide Mobility Corridors are the highest level of the network and correspond closely to the previously identified Commerce Corridors (shown as **Figure 2-3** (p. 2-20)). The Statewide Mobility Corridors include a link from Evansville to Indianapolis via Bloomington. According to the Long Range Plan, these corridors are characterized by:

- Upper level design standards
- High speeds

- Free flowing conditions
- Serving long distance trips
- Large through volumes of traffic
- Heavy commercial vehicle flows
- Serving longer distance commuter trips
- Generally multi-lane divided design
- Full access control desirable, no less than partial access control
- Railroad and highway grade separations desirable
- Desirable to bypass congested areas
- No interaction with non-motorized vehicles or pedestrians
- Major river crossings

The Tier 1 ROD issued by FHWA in March 2004 approved completion of I-69 as an interstate from Evansville to Indianapolis, via Bloomington. The route approved in that study is consistent with the Commerce Corridor and Statewide Mobility Corridor designations in Indiana Department of Transportation's (INDOT) long-range plans, both those in effect at time as well as subsequent updates.

In June 2007 INDOT issued its *2030 Long Range Plan 2007 Update*. This update retains both the Statewide Mobility Corridors and Commerce Corridors. I-69 between Evansville and Bloomington is shown as both a proposed Statewide Mobility Corridor and Commerce Corridor. SR 37 between Bloomington and Indianapolis (which will be upgraded to complete I-69 to Indianapolis) is shown as both a Statewide Mobility Corridor and a Commerce Corridor.

In early 2011, INDOT issued for public comment its *2010-2035 Draft Long-Range Transportation Plan.* It is to be finalized later in 2011. It also shows I-69 between Evansville and Bloomington as a proposed Statewide Mobility Corridor. SR 37 between Bloomington and Indianapolis (which will be upgraded to complete I-69 to Indianapolis) is shown as a Statewide Mobility Corridor. This plan also designated four high priority corridors, which due to their size, complexity and cost are comprised of multiple projects whose completion will extend beyond 2020. One of these high priority corridors is Sections 5 and 6 of I-69 between Bloomington and Indianapolis.

Section 1 of the I-69 project is approximately 13 miles in length and runs from I-64 north of Evansville to SR 64 west of Oakland City. Section 2 is approximately 29 miles in length, from SR 64 west of Oakland City to US 50 east of Washington. Section 3 is approximately 25 miles in length from US 50 east of Washington to US 231 near Crane NSWC. The first two miles of I-69 from I-64 to SR 68 in Gibson County (part of Section 1) is completed, and first was opened to traffic in November of 2009. Construction in all remaining portions of the project in Sections 1 through 3 is underway. The entirety of Sections 1 through 3 will be completed and open to traffic by the end of 2012.

2.2.3 Metropolitan Transportation Plans

The corridor approved for the I-69 Evansville to Indianapolis project in the Tier 1 ROD connects three metropolitan areas: Evansville, Bloomington, and Indianapolis. In 2003, the metropolitan planning organizations (MPOs) for each of those areas updated their long-range transportation plans to reflect INDOT's preferred corridor for the I-69 project. The route approved in the Tier 1 ROD is currently included in the long-range transportation plan for each of the affected MPO areas. The north terminus of Section 4 is immediately south of the Bloomington Urbanized Area boundary. The Bloomington/Monroe County Metropolitan Planning Organization (BMCMPO) is the designated MPO for the Bloomington Urbanized Area. The MPO develops the transportation plan and transportation improvement program (TIP) for the Bloomington Urbanized Area and provides guidance of an advisory nature to Monroe County and the Indiana Department of Transportation on projects outside the Urbanized Area boundary.

On October 12, 2003, the BMCMPO adopted amendments to the *Bloomington/Monroe County Year 2025 Transportation Plan (Long Range Plan)* and the *Transportation Improvement Program (TIP)*. Both plans were amended to include I-69 along Corridor 3C in their list of recommended transportation projects in Monroe County.

Regarding the recommended I-69 project, the 2025 Long Range Plan (2025 LRP) amendment notes: "At this time (October 2003), the Plan recognizes that the State of Indiana has made a decision concerning the preferred route of Interstate 69 along a corridor known as "Route 3C." This proposed corridor would pass through the MPO's Urbanized Area as well as the larger region studied by this Plan. Therefore, the Plan is hereby being amended to include this project in its listing of Highway Capital Improvement Projects for the State of Indiana in Monroe County. This amendment further directs the BMCMPO to work closely with the Indiana Department of Transportation to study local transportation impacts associated with more limited access along this corridor. These impacts include future locations of interchanges, frontage roads, overpasses, and bicycle/pedestrian crossing points."

The 2025 LRP also notes "As a result of the increase in population and households, continuing decline in household size, increase in the number of vehicles per household, increase in employment in Monroe County as a regional retail and employment center, and increase in external travel passing through Monroe County, there will be a significant increase in trip-making activity from 1997 through 2025 – daily vehicle miles of travel increasing by 44 percent and daily congested vehicle-hours of travel increasing by 58 percent. Thus, the increase in the level of congestion over the next 29 years cannot be accommodated by merely taking transportation system management actions (low-cost capital investments such as intersection and signalization improvements) to preserve the capacity of the existing roadway network or by doubling public transportation's share of the person trips."

The overall Purpose and Need established for I-69 in Tier 1 and Section 4's locally identified goals are consistent with and supportive of the 2025 LRP's *Transportation Vision Statement*. The Transportation Vision includes:

- a well-integrated system using all available modes;
- transportation investments to protect and enhance the environment, conserve energy and improve quality of life;
- increased safety and security;
- the support of economic vitality;
- the improvement of goods movement;
- integrated transportation investments; and
- preservation of existing transportation investments.

In order to maintain the required 25-year time horizon, a long range transportation plan should be updated at least every five years. On March 31, 2006, the *2030 Long Range Transportation Plan* (2030 LRP) was adopted by the BMCMPO (amended on June 8, 2007). The 2030 LRP includes alternative scenarios with I-69 and alternative scenarios without I-69 that reflect the City of Bloomington's position in which they do not see I-69 as an inevitable project.

INDOT will fund the entire project through construction with traditional transportation funding, using both federal and state funds. Amendment #10-31 to the fiscally-constrained FY 2010-2013 Indiana Statewide Transportation Improvement Program (STIP) was approved by FHWA on December 10, 2010 to include I-69 Section 4 between US 231 and the BMCMPO planning area boundary (see **Appendix C**, *Agency Coordination Correspondence*). The approval included funding for preliminary engineering, right-of-way, and construction activities.

Approximately 1.8 miles of the Section 4 project are located within the boundary of the BMCMPO. On November 5, 2010, the MPO's Policy Committee approved adding that part of the Section 4 project to the proposed FY 2010 – 2013 amended TIP. The approval included funding for preliminary engineering and right-of-way activities. On May 13, 2011, the BMCMPO Policy Committee voted to remove I-69 from its proposed FY 2012 – 2015 TIP. This TIP has not been approved by the Governor, and remains under review by the Indiana Governor's Office. The BMCMPO was notified on June 20, 2011 that its current Year 2010 – 2013 TIP (which includes funds for preliminary engineering and right-of-way activities) remains as the current TIP, and that INDOT used its 2010 – 2013 TIP in its FY 2012 – 2015 STIP. This STIP was submitted to FHWA on June 20, 2011. The letter documenting these actions is included in Appendix P, *Correspondence – Government Other Than Resource Agencies*. INDOT will continue to coordinate with the BMCMPO regarding an amendment to the TIP to include funding for construction activities within the MPO planning area.

Each alternative provides the BMCMPO with a set of possible improvement projects, an identification of problem areas, and the performance of the alternative upon the system-wide transportation network. For those alternatives that include I-69, it was found that I-69 will have a minimal effect upon socioeconomic forecasts. However, because Monroe County is a regional retail and employment center, the increase in employment and external trip demand (largely due to I-69) will contribute to a significant increase in trip-making activity from 2000 to 2030. As such, the 2030 LRP notes that "the projected increase in traffic congestion over the next 30 years

cannot be accommodated by merely taking capacity preservation or network modification actions (low-cost capital investments such as intersection and signalization improvements or other transportation system management actions) alone to maintain the capacity of the existing roadway network."

Like the 2025 LRP, overall Purpose and Need established for I-69 in Tier 1 and Section 4's locally identified goals are consistent with and supportive of the *Transportation Vision Statement* of the 2030 LRP.

2.2.4 Other Local Plans and Studies

The following plans and studies address the role of the I-69 project in meeting the transportation needs of the Study Area for Section 4:

- ***2004-2025 Monroe County Comprehensive Land Use Plan***. This plan identifies Monroe County as "…already one of the most rapidly growing counties in Indiana." The plan further states: "This plan was developed with the expectation that this trend will continue through the next decade. The prospect of continued growth has prompted the County to take steps to promote economic vitality and manage growth through comprehensive planning." The Purpose and Need for Section 4 focuses, in part, on local and regional transportation needs. Monroe County is in the process of updating their Comprehensive Plan.
- ***Bloomington, Indiana, State Road 37 Corridor Accessibility Study***. This 2004 study prepared for the Bloomington/Monroe County MPO identified circulation patterns and local transportation improvement needs along the SR 37 Corridor in Bloomington and Monroe County that may be needed in preparation for the future development of I-69. The overall Purpose and Need established for I-69 in Tier 1 and Section 4's locally identified goals are consistent with and supportive of the plans' emphasis on improving the transportation network to provide increased mobility, safety, and regional access.
- ***Greene County Comprehensive Plan***. This 2009 plan identifies growth management, community, and economic development objectives for Greene County that "encourage appropriate future commercial and industrial development to locate near proposed I-69" and that "develop a cooperative, continuing, and comprehensive economic development program to retain and attract business to Greene County and to capitalize on the opportunities of I-69."
- ***I-69 Corridor Plan for Greene County.*** The corridor plan presents priorities for Greene County focusing on "projects that assist development opportunities around the future I-69 interchanges, especially the US 231 interchange, including the extension of sewer lines, water lines, and other utilities to create shovel ready sites."
- ***Town of Bloomfield Comprehensive Plan.*** This 2009 plan emphasizes the importance of utilizing I-69 as an asset to attract commercial development. It also recommends that new residential developments should be created in and around Bloomfield that can accommodate the potential population growth associated with I-69. To take advantage of development opportunities around Bloomfield resulting from development of the WestGate@Crane Tech Park and I-69, utility recommendations in the plan state that Bloomfield must expand wastewater capacity to adequately serve potential new development.

- ***Martin County Comprehensive Plan***. This 2009 plan identifies growth management objectives for Martin County that "encourage appropriate future commercial and industrial development to locate near the future I-69/US 231 interchange, especially in the WestGate @ Crane Technology Park and around Loogootee and Shoals.
- ***City of Loogootee Comprehensive Plan.*** This 2009 plan identifies growth management, community, and economic development objectives for Loogootee that "promote the transportation opportunities associated with the future I-69 north and west of Loogootee" and that "encourage appropriate future commercial and industrial development to locate along US 231 and US 50, which are both routes to future I-69 interchanges
- ***Bedford/Lawrence County 2020 Plan.*** Crane NSWC has a tremendous impact on Lawrence County and the plan addresses I-69 and its impact upon Crane NSWC by stating that "The proposed route would improve access to and from the Crane NSWC, and thus create greater economic opportunities to the region." The plan also encourages Lawrence County to proactively plan for the primary and secondary effects of I-69.
- ***City of Bedford Comprehensive Plan.*** The city of Bedford completed a Comprehensive Plan in 2010 using a community focus fund grant from the Office of Community and Rural Affairs. The plan mentions the impact I-69 will have on the Crane NSWC. Growth of the Crane NSWC will improve economic opportunities at the East Gate Business and Technology Center on the city's west side, as well as other areas in and around Bedford.
- ***Town of Ellettsville Comprehensive Plan.*** Regarding I-69, this 2007 plan states that "The Interstate highway will focus a real investment interest within its corridor, which will affect Ellettsville economically well into the future."
- ***Survey of Bloomington Area Businesses (June 14, 2004).*** In this survey prepared by the Kelley School of Business at Indiana University, the report states that "many firms pointed out the poor highway links between Bloomington and other places businesses need to connect to, including Indianapolis, Evansville and other cities…" When asked for other comments or suggestions, additional points raised included the need for Interstate 69 to connect Bloomington.

2.3 Needs Assessment

The Needs Assessment describes the local needs that have been identified during the scoping process for Section 4. The Purpose and Need Study Area for Section 4 includes Greene, Monroe, Lawrence, Martin, and Owens counties.

2.3.1 Completing Section 4 of I-69 Between US 231 at Crane NSWC and SR 37 South of Bloomington

The completion of Section 4 of I-69 responds to the Congressional policy to complete the National I-69 Corridor. This policy was adopted by Congress based on feasibility studies of the corridor. The decision by Congress to designate I-69 as a "high priority corridor" reflects a national commitment to complete this new interstate corridor as part of the National Highway System. For this reason, the Tier 1 EIS for I-69 from Evansville to Indianapolis focused on

alternatives for completing I-69 as an interstate highway. The Tier 1 EIS selected a route for the project (defined as a "corridor" generally 2,000 feet in width), and divided that corridor into six sections for Tier 2-level analyses. Section 4 of I-69, the project analyzed in this document, is the fourth section from the south of the approved I-69 Evansville to Indianapolis corridor. Based on the Tier 1 EIS and Tier 1 ROD, there is a need to complete I-69 as an Interstate highway between Evansville and Indianapolis, including Section 4.

2.3.2 Personal Accessibility

Access for local residents and communities has been highlighted as a key factor to be considered in choosing the final alignment for I-69 Section 4. As shown in **Table 2-1** and **Table 2-2** on the following page, communities within the Section 4 Purpose and Need Study Area are forecasted to have poor access in terms of mileage and travel time to the current interstate system and to major destinations such as: Indianapolis, Bloomington, and Evansville.

Table 2-1: Forecasted Difference in Actual* and Straight-Line Mileage to Key Destinations (mi.)

Location	Distance To							
	Current Interstate		Indianapolis		Bloomington		Evansville	
	Straight Line	Actual	Straight Line	Actual	Straight Line	Actual	Straight Line	Actual
Bloomfield	30	38	66	75	24	27	81	90
Scotland	39	46	71	81	27	32	74	86
Doans	39	49	69	78	24	29	76	89
Koleen	37	46	66	74	21	24	80	93
Owensburg	42	49	66	72	20	23	80	96
Cincinnati	36	41	60	65	15	16	86	101
Hobbieville	37	43	61	67	15	18	85	102
Solsberry	31	36	57	64	13	15	89	102
Stanford	31	38	54	58	9	9	91	107
Kirksville	35	42	55	60	9	10	91	108
Crane NSWC West Gate	40	48	73	83	28	34	73	85
Crane NSWC North Gate	42	49	67	73	21	24	79	94

Source: *Indiana Statewide Travel Demand Model, Version 4, for 2030, E + C Network.*
* Actual mileage is via shortest-time path on highway system.

Table 2-2: Forecasted Difference in Actual* and Straight-Line Travel Time to Key Destinations (min.)**

Location	Travel Time To							
	Current Interstate		Indianapolis		Bloomington		Evansville	
	Straight Line	Actual	Straight Line	Actual	Straight Line	Actual	Straight Line	Actual
Bloomfield	33	44	72	88	26	37	88	101
Scotland	42	52	78	92	29	40	81	96
Doans	43	54	76	89	26	36	83	99
Koleen	40	53	72	86	23	33	87	107

Table 2-2: Forecasted Difference in Actual* and Straight-Line Travel Time to Key Destinations (min.)**

Location	Travel Time To							
	Current Interstate		Indianapolis		Bloomington		Evansville	
	Straight Line	Actual	Straight Line	Actual	Straight Line	Actual	Straight Line	Actual
Owensburg	46	57	72	84	22	31	87	107
Cincinnati	39	47	65	74	16	22	93	113
Hobbieville	40	50	66	77	16	24	93	115
Solsberry	34	41	62	75	15	22	97	116
Stanford	34	42	59	67	10	14	100	120
Kirksville	38	46	60	68	10	16	99	123
Crane NSWC West Gate	44	53	79	94	30	42	80	95
Crane NSWC North Gate	46	56	73	83	23	30	86	105

Source: *Indiana Statewide Travel Demand Model, Version 4, for 2030, E + C Network.*
* Actual travel time is average (24 hour) travel time via shortest time path.
** Straight-line travel time is that traveled at 55 mph via straight-line path.

From the communities in the Section 4 Study Area, the distance to the closest existing interstate interchange currently ranges from 36 to 49 miles. The travel times to these access points are forecasted as between 41 to 57 minutes. Forecasted travel times to major destinations are as high as 94 minutes from the Crane NSWC West Gate to Indianapolis, 42 minutes from the Crane NSWC West Gate to Bloomington, and 123 minutes from Kirksville to Evansville.

Many of the communities in the Section 4 Study area use county roads or a combination of county roads and state highways to reach Bloomington, which is the nearest urban center to the Section 4 Study Area. Most of these communities are small with populations less than 250 people. However, Bloomfield, which is the county seat of Greene County and which has a much larger population with over 2,600 people, best reflects the indirect nature of the highway network in the Section 4 Study Area as well as the limitations which topography imposes on travel speeds along the existing state highways. The forecasted actual travel time between Bloomfield and Bloomington is over 11 minutes longer than the hypothetical straight-line path, or about a 42% increase in travel time.

Crane NSWC employs over 3,600 people with many employees residing in the Bloomington urban area. The forecasted actual travel time between Bloomington and the Crane NSWC North Gate (which is also informally called the Bloomington Gate) is 7 minutes longer than the hypothetical straight-line path, or about a 30% increase in travel time. Also, the forecasted actual travel time between Bloomington and the Crane NSWC West Gate, which is the main truck access gate to this defense facility, is 12 minutes longer than the hypothetical straight-line path, or about a 40% increase in travel time. It is important to note that the WestGate @ Crane Technology Park is being developed just outside the Crane NSWC West Gate and that the slower forecasted actual travel times would also be experienced by future employees, trucks, and vendors traveling between Bloomington and this new certified technology park.

In addition to the data cited above, other key sources have identified increased personal accessibility as a local need. These include:

- ***2004-2025 Monroe County Comprehensive Land Use Plan.*** This document notes that Monroe County anticipates that the construction of I-69 will improve the County's interstate and intrastate access. Alternatives will be evaluated during Tier 2, in part, on how well they can provide increased personal accessibility to area residents.
- ***Bloomington, Indiana, State Road 37 Corridor Accessibility Study.*** This 2010 study identified lack of accessibility to residents and businesses in eastern Greene County and southwestern Monroe County as a significant local need. The study notes "INDOT made a commitment in the I-69 FEIS not to add an interchange in southwest Monroe County between the SR 37 interchange and SR 54 interchange where the Monroe County Comprehensive Land Use Plan seeks to limit growth due to karst terrain. Nevertheless, an interchange in southwest Monroe County should be reconsidered because of the great distance between presently proposed interchanges. The lack of an interchange creates emergency access concerns to the surrounding area as well as to I-69 itself, and general access concerns for eastern Greene County and southwest Monroe County to Bloomington and the Crane NSWC. SR 45 is a very congested commuter route between Bloomington in Monroe County and Bloomfield in Greene County, and may see only minimal relief without an interchange on proposed I-69 near the Monroe/Greene County Line."
- ***2004-2025 Monroe County Comprehensive Land Use Plan.*** This document notes that Monroe County anticipates that the construction of I-69 will improve the County's interstate and intrastate access. Alternatives will be evaluated during Tier 2, in part, on how well they can provide increased personal accessibility to area residents.
- ***Community Input***. Improved access for local residents has been identified as a key need that this project can address. Community input has been provided by letters received from local governments (Greene County Board of Commissioners, Greene County Council, Monroe County Board of Commissioners), representatives of the Section 4 Community Advisory Committee (CAC), attendees of the Section 4 Project Office Open House (July 1, 2004), attendees at two Public Information Meetings (June 16, 2005, and November 16, 2005), and many visitors to the Section 4 Project Office. Community input is described in detail in Chapter 11, *Comments, Coordination, and Public Involvement.*

2.3.3 Highway Congestion

Traffic forecasts for the year 2030 show that, under the no-build scenario, there will be high levels of congestion on several major highways within and near the Section 4 corridor. Level of service (LOS) is the method commonly used to evaluate a roadway's functionality. LOS is a measure of operational conditions. These conditions are defined in terms of factors such as speed and travel time, maneuverability, and delay. There are six levels of service, which are designated by the letters "A" through "F." LOS "A" represents the most desirable operating conditions, while LOS "F" is an unacceptable level of service. The *Indiana Department of Transportation Design Manual* (Volume II, Part V: Tables 53-1 to 53-4) calls for providing at least LOS "C" on all rural state highways of functional class collector and above.

Figure 2-4 (p. 2-21) shows forecasted LOS (in the year 2030) for roads within the 5-county Study Area for Section 4. In includes a detailed inset map for only those roads within Monroe

County. These forecasts take into account all committed road projects in the Study Area but do not include I-69 in the build network. Roads close to the Section 4 corridor that are projected with a less than acceptable LOS (LOS D, E or F) under the I-69 No-Build scenario include:

- Greene County:
  - US 231 from Greene CR 50 S to SR 54 Junction in Bloomfield – LOS D
  - SR 45 from SR 445 Junction to Monroe County Line – LOS D

- Monroe County
  - SR 45 from Greene County Line to Curry Pike/South Leonard Springs Road – LOS D
  - SR 45 from Curry Pike to SR 37 in Bloomington – LOS E/F

Alternatives will be evaluated during Tier 2, in part, based on how well they can improve the projected LOS on roads within the Section 4 Study Area.

2.3.4 Highway Safety

The safety analysis conducted for the Tier 1 study identified many rural counties and rural highways in Southwest Indiana as having above-average crash rates for serious crashes.[2] These highways include SR 43, SR 59, and SR 67 in Greene County (Tier 1 Technical Report 3.3.4.1, p. 5). In addition, Owen, Martin, and Lawrence counties, also part of the Purpose and Need Study Area, have above-average county-wide crash rates (Tier 1 FEIS, Figure 2-20). In part, alternatives will be evaluated during Tier 2 based on how well they divert traffic from less safe rural highways to a safer freeway facility.

As the data in **Table 2-3** shows, a driver traveling on a non-interstate state highway is three to four times as likely to be involved in a fatal crash and about three times as likely to be involved in any crash than if traveling the same distance on an interstate highway. To the extent that travelers can make their trips on an interstate highway, they are much less likely to be involved in crashes. The forecasting and analysis tools used in this study account for the diversion of traffic to new facilities, and estimate the resulting crash reductions.

Table 2-3: Crash Rate Comparison, Indiana Highways

Facility Type	Crashes per 100 Million Vehicle Miles	
	Fatal Crashes	All Crashes
Indiana Interstate Highways	0.3-0.4	79-88
Indiana US-Numbered Highways	1.1	180-190
Indiana State-Numbered Highways	1.2-1.3	217-266

Sources: *Indiana Crash Facts 2009*, Indiana University Public Policy Institute, Center for Criminal Justice Research, 2010. *Indiana Crash Facts 2008*, Indiana University Public Policy Institute, Center for Criminal Justice Research, 2009.

[2] A "serious" crash is one resulting in at least one fatality or serious injury.

2.3.5 Local Economic Development

The analysis of economic conditions in Southwest Indiana during the Tier 1 study indicated a need to enhance economic development opportunities in the region. The study evaluated the role an improved transportation system could play in addressing this need. The study concluded that improving the transportation system can lead to enhanced economic growth by reducing business costs, reducing delivery times, and directly improving the economic well-being of individual consumers.

Land use and transportation planning initiatives in the Section 4 Study Area identify I-69 as a catalyst for development, while at the same time citing the need for advance planning in anticipation of the development and growth that would be initiated by the construction of the new interstate. While I-69 does not have any economic development goals as core goals, it can serve to support clearly-defined local economic plans, such as those described below.

- ***2004-2025 Monroe County Comprehensive Land Use Plan***. This plan identifies transportation access as the primary factor in location of large-tract industrial uses within the county. The plan identifies "An area of approximately 1,000-acres around Dillman Road and SR 37 is recommended as an excellent location for employment uses." The plan also notes "The construction of I-69 proximate to this location would enhance it for large-tract industrial uses." The SR 37/Dillman Road intersection is located immediately south of the north terminus of Section 4.
- ***Survey of Bloomington Area Businesses***. This study was prepared in 2004 for the Bloomington Economic Development Corporation and the Monroe County Plan Commission by the Indiana Business Research Center, Kelley School of Business, Indiana University. The survey noted: "Many firms pointed out the poor highway links between Bloomington and other places businesses need to connect to, including Indianapolis, Evansville and other cities, plus the lack of access to other places by air."
- ***WestGate @ Crane Technology Park***. This industrial park is being developed approximately one-mile south of the south terminus of Section 4 at US 231 and approximately 1 mile from the entrance Crane NSWC. The technology region is located near the junction of Daviess, Greene, and Martin counties, and is closely associated with the concentration of technology-related employment at the Crane NSWC. In May 2004 the State of Indiana's Department of Commerce designated the Crane Technology Park as the State's ninth Certified Technology Park. Public and private property acquisition has been initiated for this 300-acre mixed-use facility, which will include office, industrial, commercial, retail, hotel and incubator operations. Current buildings that are under construction or are planned at the Park include a 25,000 square foot facility for EG&G, a major contractor at the Crane NSWC, a 37,000 square foot building for Science Applications International Corporation which is a defense contractor, a 7,000 square foot building for NAVMAR, a 7,000 square foot building for ML Enterprises, a 5,000 square foot building for Technology Service Corporation (TSC), and a 15,000 square foot facility for Crane Federal Credit Union. The businesses at the Park have an employment of around 450 to 500. The Park has cooperative agreements with Purdue University, Rose-Hulman Institute of Technology and other institutions allowing access to world class scientific and research facilities. Providing the

Crane Technology Park with reasonable access to the interstate system and the local transportation network continues to be an important issue and, as such, is being studied in concert with the I-69 Section 4 Tier 2 Studies.

- ***I-69 Corridor Plan for Greene County***. As stated in the 2009 Greene County plan, "the I-69 corridor and interchanges provide significant economic development opportunities." The Greene County Economic Development Corporation adopted the I-69 Corridor Plan on February 17, 2009, and is in the process of implementing the recommendations described in the plan.
- ***Martin County Comprehensive Plan and Loogootee Comprehensive Plan***. Both 2009 plans discuss the economic development opportunities fostered by I-69 and recommend a series of actions to capitalize on I-69.

2.4 Public and Government Agency Input

Public involvement and coordination with regulatory and other government agencies have been extensive and ongoing since the beginning of the Tier 1 process, and will continue throughout Tier 2. The public and agency input process into the Section 4 Purpose and Need Statement has included, to date: a Section 4 Project Office Open House (July 1, 2004), two Public Information Meetings (June 16, 2005 and November 16, 2005), four CAC meetings (December 2, 2004; April 7, 2005; May 26, 2005, and November 10, 2005) and meetings with government agencies. In these meetings, as well as in other communications, the following key points were raised by the public:

- Providing local and regional accessibility for residents.
- Supporting local economic initiatives.
- Improving regional accessibility for businesses and industries.

Environmental resource agencies have also been provided with the opportunity to provide input on the local purpose and need. As summarized in Section 3.2.2.2, a resource agency coordination meeting/web cast was conducted on December 19, 2005, to review and receive comments from environmental resource agencies on the Section 4 Purpose and Need. No substantial issues on Purpose and Need have been raised by the environmental resource agencies.

Chapter 11 of the Tier 2 DEIS, *Comments, Coordination, and Public Involvement,* will contain detailed information regarding the public input process, the key issues that were raised, and how they were addressed in the Purpose and Need Statement.

2.5 Project Goals and Performance Measures

All of the alternatives considered in Tier 2 are essentially equal in terms of their ability to meet the broad regional objectives contained in the Tier 1 Statement of Purpose and Need. Therefore, the transportation performance measures used in Tier 2 evaluated the ability of the alternatives to meet local goals. These performance measures were considered as part of the overall evaluation of alternatives, along with impacts and cost.

As stated in Section 2.1.2, **the proposed action in Section 4 supports the overall project purpose identified in Tier 1 while also addressing local needs**. To do this, it is necessary for the preferred alternative to perform at a level similar to that identified in the Tier 1 ROD. In Section 4, five local goals have been identified, primarily through an extensive public involvement process that is summarized in Section 2.4. This process included comments from the general public, local governments, local business owners/managers, members of the Section 4 CAC, and others.

Performance measures associated with each goal have been developed to help in the evaluation of alternative alignments within Section 4. These measures have been used in the alternatives evaluation process and in the selection of a preferred alternative. In addition to the performance measures, the evaluation of alternatives within Section 4 has considered other relevant factors, including environmental impacts, social impacts, and project costs.

Section 4 goals and their performance measures are described below, and are summarized in **Table 2-4** (p. 2-18). The build alternatives' ability to satisfy these performance measures and meet this Tier 2 Purpose and Need is evaluated in Section 3.3, *Detailed Performance Analysis of Preliminary Alternatives.*

GOAL 1: COMPLETE SECTION 4 OF I-69 BETWEEN US 231 IN SOUTHERN GREENE COUNTY AND SR 37 SOUTHWEST OF BLOOMINGTON

Tier 1 Goals Supported: Goals 1, 8, and 9

Performance Measure:

G1-A *Development of a freeway which meets current design standards.* A new freeway would meet current design standards. All build alternatives would be equal in their ability to satisfy this criterion.

GOAL 2: ENHANCE THE TRANSPORTATION NETWORK IN THE SECTION 4 STUDY AREA TO IMPROVE PERSONAL ACCESSIBILITY FOR RESIDENTS OF THE AREA

Tier 1 Goal Supported: Goal 2

Performance Measures:

G2-A *Increase in access of area communities to the interstate system*. To evaluate the ability of each build alternative to access the interstate system, travel distance and travel time to the interstate system from the following communities will be measured:

- *Greene County*: Bloomfield, Newberry, Scotland, Doans, Koleen, Owensburg, Cincinnati, Hobbieville and Solsberry
- *Monroe County*: Stanford, Kirksville and Victor

The present distance and travel time from a community to the nearest interstate interchange will be compared with the distance and travel time to the nearest interstate interchange upon

completion of I-69. An overall measure will be derived which weights the improvement for each community by the population of each community.

G2-B *Reduction in travel time to regional destinations (Evansville, Bloomington and Indianapolis)*. The selected Tier 1 alternative (Alternative 3C) was found to provide significant improvement in travel time to these destinations. The quality of improved accessibility will be measured by comparing the travel time between each community identified under Goal 2-A to Evansville, Bloomington, and Indianapolis. The travel time provided under each alternative will be compared to that offered in the no-build case.

GOAL 3: REDUCE EXISTING AND FORECASTED TRAFFIC CONGESTION ON THE HIGHWAY NETWORK IN THE SECTION 4 STUDY AREA

Tier 1 Goal Supported: Goal 3
Performance Measure:

G3-A *Reduction in congestion on the highway network.* Indicators for this goal will include vehicle miles traveled (VMT) and vehicle hours traveled (VHT) on congested roads (i.e., roads operating at LOS D, E, or F).

GOAL 4: REDUCE CRASHES ON LOCAL AND STATE ROADS IN THE SECTION 4 STUDY AREA

Tier 1 Goal Supported: Goal 4

Performance Measure:

G4-A *Reduction in number of crashes in the Section 4 Study Area*. The reduction in the number of fatal, injury, and property-damage accidents in the Study Area will be calculated for each alternative.

G4-B *Reduction in the overall crash rate (frequency) in the Section 4 Study Area*. In order to provide a more robust analysis, this metric was added since the DEIS. It accounts for the nearly 20% increase in vehicle travel in the 5-county study area, which is caused by I-69 diverting large volumes of traffic from outside the study area. Comparison of the overall crash rates evaluates the ability of each build alternative to divert travel from lower functional class roads, with higher crash rates, and attracting them to use higher functional classification facilities, which are safer.

GOAL 5: SUPPORT LOCAL ECONOMIC DEVELOPMENT INITIATIVES

Tier 1 Goals Supported: Goals 5, 6 and 7

Performance Measures:

G5-A *Increase access of area businesses to the interstate system.* To evaluate the ability of each build alternative to provide business access to the interstate system, travel distance and travel

time to the interstate system from Study Area communities will be measured. Businesses within communities and major employment centers include:

- *Greene County*: Town of Bloomfield
- *Greene County/Martin County/Daviess County*: WestGate @ Crane Technology Park
- *Monroe County:* City of Bloomington
- *Martin County*: Crane NSWC

The present distance and travel time from a community to the nearest interstate interchange will be compared with the distance and travel time to the nearest interstate interchange upon completion of I-69. An overall measure will be derived which weights the improvement for each community by total employment in each community.

G5-B *Reduction in travel time to regional business destinations (Evansville, Crane NSWC, Bloomington and Indianapolis).* The selected Tier 1 alternative (Alternative 3C) was found to provide significant improvement in travel time to these destinations. The quality of improved accessibility will be measured by comparing the travel time between each community identified under Performance Measure 5-A to Evansville, Crane NSWC, Bloomington, and Indianapolis. The travel time provided under each alternative will be compared to that offered in the no-build case. The goals and performance measures associated with the Purpose and Need for Section 4 are summarized in **Table 2-4**. Tier 1 core goals are shown in ***bold italics***.

Table 2-4: Section 4 Goals and Performance Measures

Tier 1	Tier 2 Section 4	
	Section 4 Goals	**Section 4 Performance Measures**
GOAL 1—Improve the transportation linkage between Evansville and Indianapolis ***GOAL 8—Facilitate interstate and international movements of freight through the I-69 corridor.*** GOAL 9— Connect I-69 to major intermodal facilities in Southwest Indiana	**GOAL 1**—Complete Section 4 of I-69 between US 231 in Southern Greene County and SR 37 southwest of Bloomington	**G1-A**—Development of a freeway which meets current design standards
GOAL 2—Improve personal accessibility for Southwest Indiana residents	**GOAL 2**—Enhance the transportation network in the Section 4 Study Area to improve personal accessibility for residents of the area	**G2-A**—Increase in access of area communities to the interstate system
		G2-B—Reduction in travel time to regional destinations (Evansville, Bloomington and Indianapolis)
GOAL 3—Reduce existing and forecasted traffic congestion on the highway network in Southwest Indiana	**GOAL 3**—Reduce existing and forecasted traffic congestion on the highway network in the Section 4 Study Area	**G3-A—**Reduction in congestion on the highway network

Table 2-4: Section 4 Goals and Performance Measures

Tier 1	Tier 2 Section 4	
	Section 4 Goals	**Section 4 Performance Measures**
GOAL 4—Reduce traffic safety problems	**GOAL 4**—Reduce crashes on local and state roads in the Section 4 Study Area	**G4-A—**Reduction in the number of crashes in the Section 4 Study Area
		G4-B— Reduction in the overall crash rate (frequency) in the Section 4 Study Area
GOAL 5—Increase accessibility for Southwest Indiana businesses to labor, suppliers, and consumer markets. GOAL 6—Support sustainable, long-term economic growth (diversity of employer types). GOAL 7—Support economic development that benefits a wide spectrum of Southwest Indiana residents (distribution of economic benefits).	**GOAL 5**—Support local economic development initiatives	**G5-A—**Increase access of area businesses to the interstate system
		G5-B—Reduction in travel time to regional business destinations (Evansville, Crane NSWC, Bloomington and Indianapolis)

Figure 2-1: National I-69 Corridor

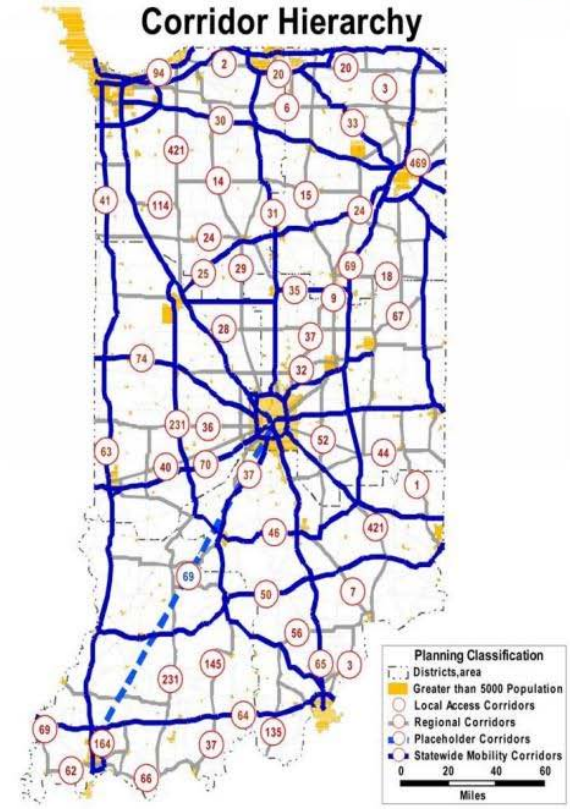


Figure 2-2: INDOT 2001 Plan - Planning Corridor Hierarchy

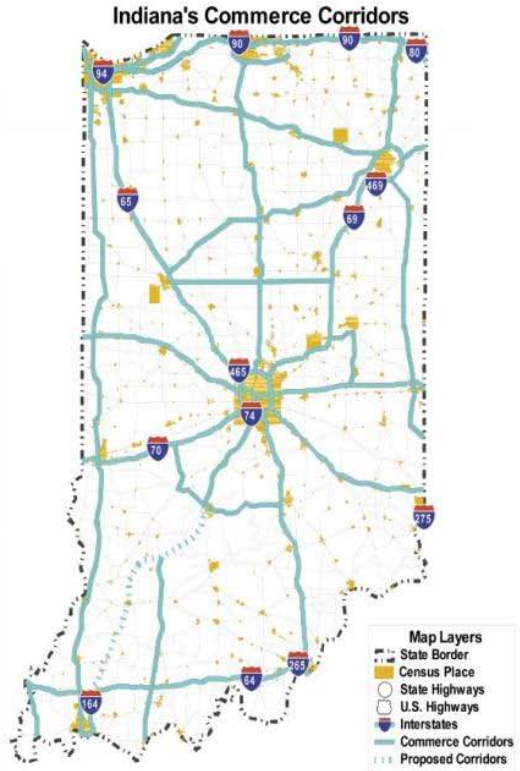
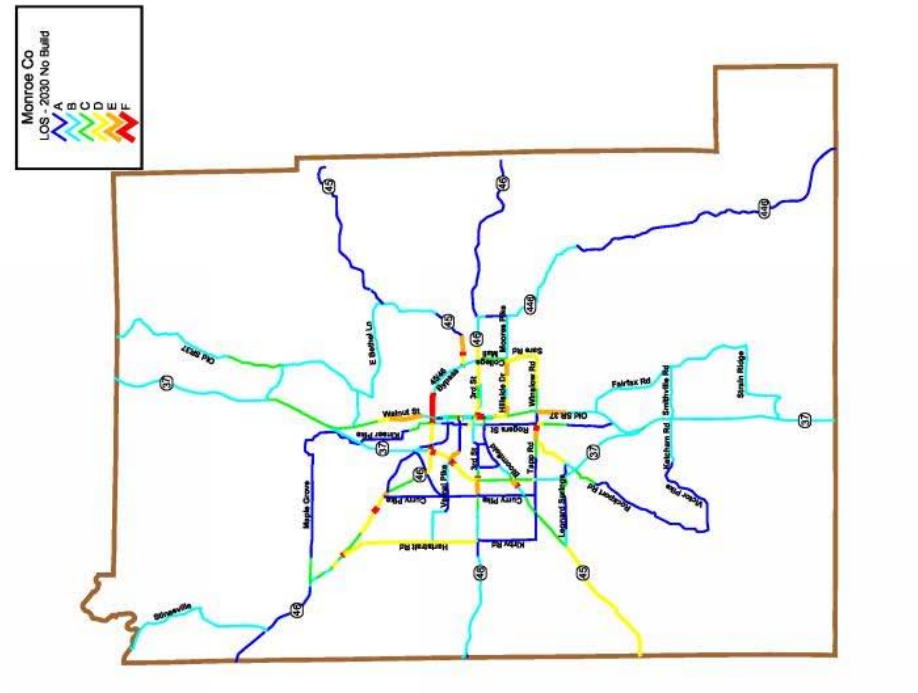


Figure 2-3: Indiana's Commerce Corridor



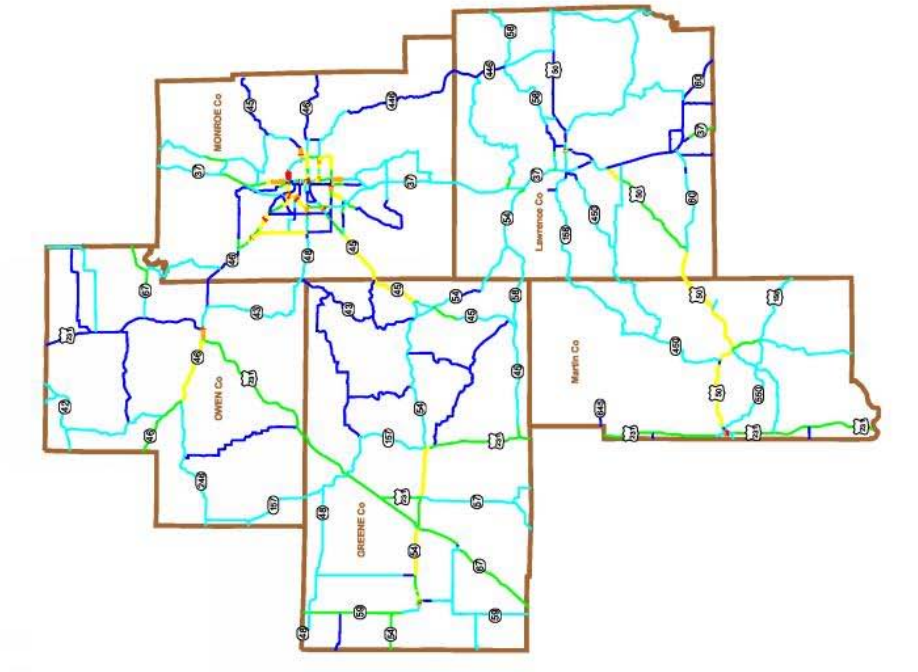


FIGURE 2-4: 2030 Forecasted No-Build LOS

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