



ACKNOWLEDGEMENTS

The Evansville-Vanderburgh County I-69 Gateway Subarea Plan is the result of the collective insight and efforts of residents, government agencies, other stakeholders, and the planning consultant. It is important to realize that if a plan does not involve those it intends to serve, it cannot fully realize its potential or vision. For this reason, those with a vested interest in how the City of Evansville and Vanderburgh County may evolve as a result of Interstate 69, put forth their time, effort, and ideas for this plan.

An integral part of this planning process included ongoing input from a group of local residents. The purpose or role of this "Steering Committee" was to advise the consultant of local issues, help create recommendations for the Subarea Plan, and review various drafts of the plan. Special thanks are given to members of the Steering Committee including:

- John Elpers, John Elpers Contracting
- Ann Ennis, Keep Evansville Beautiful
- Frank Farney, Farmer and Landowner
- Wayne Fehd, Farmer and Landowner
- Pat Keepes, Evansville City Engineer
- Dave Matthews, Dave Matthews Associates
- Jim McKinney, Regency Properties
- Katy Nimnicht, Evansville Mayor Representative
- Fred Padget, Citizen
- Bill Pedtke, Southwestern Indiana Builders Association, Inc.
- Darrell Rice, District Conservationist
- Steve Schaefer, Evansville Chamber of Commerce
- John Stoll, Vanderburgh County Engineer
- · Lloyd Winnecke, Vanderburgh County Commissioner

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Additional thanks to:

Jonathan Weinzapfel, Mayor Stephen Melcher, County Commissioner Troy Tornatta, County Commissioner Lloyd Winnecke, County Commissioner

Indiana Office of Community and Rural Affairs Indiana Department of Transportation

The I-69 Gateway Subarea Plan was presented to, and accepted by, the Evansville-Vanderburgh County Area Plan Commission on February 11, 2010.

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Chapter 1: Introduction



PURPOSE OF THE GATEWAY SUBAREA PLAN

The Evansville-Vanderburgh County I-69 Gateway Subarea Plan (Subarea Plan) represents a long term vision for the I-164 (I-69) corridor through Vanderburgh County. This plan was also born of recommendations in the 2004-2025 Comprehensive Plan of Evansville and Vanderburgh County to further study the northeastern portion of Vanderburgh County. The comprehensive plan states:

"Most of the land use changes from I-69 are planned for the northeast portion of Vanderburgh County where a major industrial corridor is proposed. Commercial development is expected around many of the interchanges."

The comprehensive plan recognized the importance of the I-69 corridor on the county, and this plan builds on those initial recommendations. This *Subarea Plan* will enable local decision makers and citizens to proactively and more effectively plan for the anticipated impacts that could occur as a result of improved local, regional, and national access that I-69 will provide when it connects to Indianapolis, and ultimately points south to Texas.

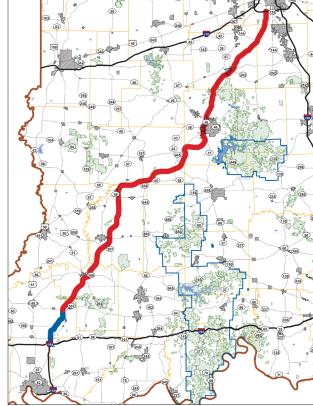
This I-69 Gateway Subarea Plan is intended to provide a certain amount of predictability in terms of what is possible and expected within the subarea. Diligent monitoring and maintenance of this plan's Goals and supporting Recommendations will ensure that this gateway to the county grows and develops in a manner that is commensurate with the extension of public services and infrastructure. It is also important to ensure any future changes in this area are executed in a manner that does not diminish the unique character of the area, which has made it a choice for many families to reside.

To further ensure compatible development that does not detract from the area's character, this plan will:

- Provide predictability
- Be used as a growth management tool
- Contain model development scenarios and guidelines
- Explore gateway features or themes
- Address major points of access



State and regional location of Vanderburgh County



Proposed I-69 Route - Section 1 in Blue

INDOT's I-69 PLANNING PROGRAM

Funding for this plan was obtained from a planning grant associated with the proposed I-69 extension between Evansville and Indianapolis. The Indiana Department of Transportation (INDOT) established the *I-69 Community Planning Program* and set aside approximately \$1.5 million for eligible communities to apply for grants of up to \$50,000 to proactively plan for anticipated growth impacts. This planning program was also established as part of mitigation measures for the project. As noted on INDOT's website:

"The purpose of the I-69 Community Planning Program is to establish a regional strategy for providing resources to local communities to empower them to manage the growth and economic development associated with I-69."

Although funded by INDOT, the Indiana Office of Community and Rural Affairs (OCRA) administered and provided oversight for these planning efforts. Recognizing the importance of this opportunity and the need to take a broad perspective, the City of Evansville and Vanderburgh County joined forces to apply for these planning funds. This cooperative effort resulted in the county and city receiving \$100,000 for the *I-69 Gateway Subarea Plan*.

Requirements for the I-69 Community Planning Program provide the flexibility for communities to tailor their planning efforts to reflect the specific needs and/or issues within each community. The program stresses the importance of a long term implementation strategy.



THE PROPOSED I-69 CORRIDOR

Since the 1940s, INDOT has considered a direct route between Evansville and Indianapolis. During the early 1990s, Congress designated "Corridor 18" as part of the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA). By the late 1990s, Congress determined Corridor 18 (the predecessor of I-69) would be part of a national interstate highway corridor creating a route from Canada, extending through Indianapolis to Evansville, and continuing south through Texas and into Mexico.

In 1999, a Tier 1 Environmental Impact Study (EIS) was initiated to look at a wide range of I-69 highway corridors to link Evansville and Indianapolis. The result was that in March 2004, the I-69 corridor between Evansville and Indianapolis was approved. During this phase of the project, INDOT established goals for I-69 that fell into three broad categories including:

- Strengthen the transportation network in southwest Indiana.
- Support economic development in southwest Indiana.
- Complete the portion of the National I-69 project between Evansville and Indianapolis.

For the purposes of more detailed Tier 2 Studies, the 142-mile I-69 corridor from Evansville to Indianapolis was divided into six sections. The corridor segment designated as Section 1 begins at the I-64 and I-164 interchange north of Evansville. This section extends approximately 13 miles northward to S.R. 64 near Oakland City. Currently under construction, this initial section of I-69 is scheduled to be completed in 2012 at a cost of approximately \$210 million. The proposed alignment for I-69 will enter Vanderburgh County in the northeastern corner and will follow the existing I-164 right-of-way. As traffic increases in the future, there are long term plans to potentially widen the interstate (existing I-164) from two to three lanes in each direction. This would likely be accomplished by constructing additional lanes in the median within the existing I-164 right-of-way. When the entire I-69 route is completed, there will be improved access and reduced travel time between Evansville, Bloomington and Indianapolis, congestion relief on local roads and highways, and improved access for local industries.

CHAPTER 1: INTRODUCTION

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UTILIZING THIS PLAN IN THE FUTURE

The Evansville-Vanderburgh County I-69 Gateway Subarea Plan encompasses the northeastern portion of Vanderburgh County most likely to be affected by the proposed I-69 Extension. This Subarea Plan is intended to provide recommendations for public improvements and appropriate private investment at specific areas along the I-69 corridor, as well as protect natural features and the rural character that local residents enjoy.

In the future, the recommendations included in Chapters 3, 4 and 5 of this plan could serve to inform or influence updates to the existing 2004-2025 Comprehensive Plan of Evansville and Vanderburgh County. The 1-69 Gateway Subarea Plan should be referred to by staff, local appointed and elected decision makers, economic development and business groups, and citizen planners to promote economic growth that is compatible with the area's unique character. Recommendations in the plan contain both overarching, long-term goals for the entire subarea, as well as additional design considerations for the primary access points (or "nodes") from the interstate into the county. In an effort to provide additional information regarding specific issues unique to this area of Vanderburgh County, a number of Profiles supplement the recommendations. In concert, these recommendations will help shape the future vision of this important gateway corridor through creative, yet realistic, methods.

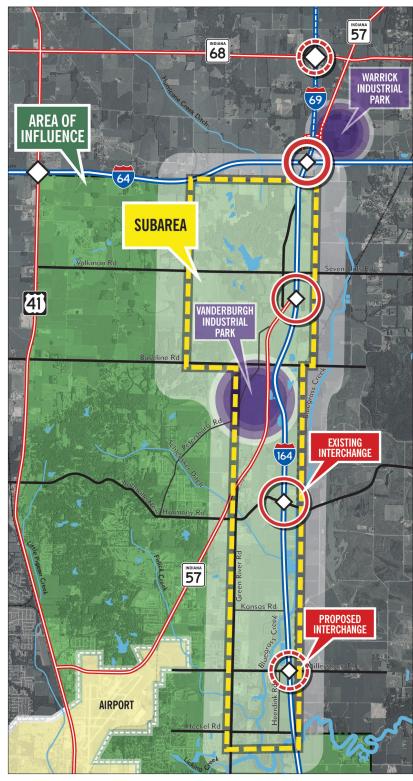
To be truly effective, the plan should be used in conjunction with other relevant planning documents including the Future Land Use Map, the Evansville Urban Transportation Study (EUTS), the Regional Bicycle and Pedestrian Plan, county zoning codes, and planning documents that have recently been adopted in adjacent Gibson and Warrick counties.

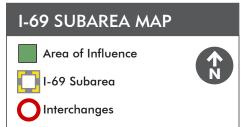
STUDY AREA RATIONALE

As noted previously, the northeastern part of the county has the greatest potential to be impacted by future growth due to access from the I-69 extension between Indianapolis and Evansville. In an effort to understand existing conditions that could affect future growth in the area, this Subarea Plan analyzes a broad area of influence and then focusses on the subarea and existing and proposed interchange nodes. These areas are described below and illustrated on the adjacent map.

- Area of Influence encompasses the entire northeastern part of the county between U.S. 41 and I-164. The purpose for including this area is to provide a larger overview or context of development patterns in the outlying county and how they could affect future development along the I-69 corridor (subarea).
- <u>I-69 Subarea</u> parallels I-164 extending approximately ten miles from the county's northern boundary (south of I-64) to just south of Heckel Road. The plan provides recommendations for compatible land uses within this corridor boundary.
- <u>Subarea Nodes</u> include existing interchanges at S.R. 57 and Boonville-New Harmony Road, as well as a potential interchange at Millersburg Road as illustrated on page 9. The nodes were selected because the I-69 EIS described the anticipated impact on land use as follows: "...the project may both generate new growth and shift existing growth to locations in proximity to the proposed Interstate, particularly to areas adjacent to proposed interchanges." Recommendations regarding design and development at these nodes are detailed in **Chapter 4**.

INTRODUCTION







PUBLIC INPUT PROCESS

This plan was prepared with community input and reflects a balance between the community's desires for preservation and conservation of the area's rural character, and the potential for economic development afforded by the enhanced access represented by the I-69 Extension.

Project Steering Committee

The Steering Committee was composed of fourteen members representing diverse sectors of the community. The group helped develop the plan's **Goals** and associated **Recommendations**, and provided feedback on the various plan drafts. The group met on five separate occasions to ensure the planning process was responding to the needs of the immediate communities and greater county.

Public Workshops

The first meeting was held on June 23, 2009 at St. John's Catholic Church in Daylight. Postcard invitations were mailed to property owners in the subarea inviting them to attend the meeting. The intent of the meeting was to inform them of this planning effort and solicit their input on existing conditions, issues and concerns. Approximately 55 - 60 people attended the workshop. The attendees viewed an informational PowerPoint presentation, completed surveys indicating their preferences for future growth or preservation, and mapped preferred locations for certain land uses.



June 2009 Public Meeting

The second public meeting, an open house to review the draft document, was advertised in many ways including flyers and a local newspaper article. The open house was attended by approximately 25 people who viewed a presentation addressing the components of the draft Subarea Plan, and took part in informal discussions with consultants and staff. Prior to the open house, the draft document was made available to the public online, at the Civic Center Complex, and at locations around the Daylight area.

Key Stakeholder Coordination

In addition to the ongoing input of Steering Committee members, the consultant coordinated with other local leaders who have a vested interest in the future of Evansville, Vanderburgh County, and surrounding communities. Some of these groups included:

- The Economic Development Coalition of Southwest Indiana
- Natural Resource Conservation Service
- Warrick County staff
- Gibson County staff
- Keep Evansville Beautiful
- Evansville Regional Airport
- Vanderburgh County Water & Sewer Utilities

Summary of Public Input

A common theme or issue noted by attendees during both public meetings was their desire to see this section of Vanderburgh County remain relatively rural. Initially, there was much concern by residents that the I-69 Extension and increased traffic through the county, could result in sprawling development that would impact the natural landscape and scenic views of the area. This concern was acknowledged by members of the Steering Committee who believed it is possible to promote responsible economic growth and development without sacrificing the unique features of the area. In an effort to balance these two viewpoints, the plan provides solutions to promote efficient development at the interstate interchanges in an effort to retain the rural character along the I-69 corridor.

Chapter 2:
Analysis



INTRODUCTION

This chapter provides an overview and analysis of existing conditions within the Area of Influence (identified on page 8) which includes unincorporated northeastern part of Vanderburgh County in Scott and Center Townships. The inventory and analysis of this part of the county, and specifically within the I-69 Gateway Subarea along with input from the public and Steering Committee, informs the recommendations outlined in the latter chapters of this plan. This plan also examines in more detail the features and resources in this subarea that are likely to be impacted by the extension of I-69. A summary of opportunities and constraints is presented at the conclusion of the analyses.

EXISTING ZONING

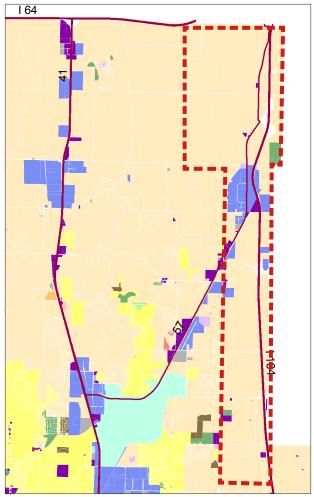
Nearly all of the subarea has been zoned for agricultural use except for a large area (Vanderburgh Industrial Park) that is zoned for industrial use and an area just southeast of the S.R. 57 interchange that is zoned for residential use. The few parcels zoned for commercial use within the study area are too small to be shown on the adjacent map.

LAND USE

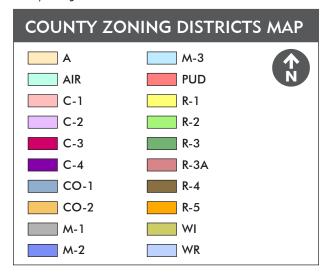
The history of Evansville is closely tied to Ohio River commerce from the early 19th century. The northeastern part of the county was blessed with an abundance of natural resources including fertile farmland, hardwood timber and coal mining. In the early 20th century, Evansville and Vanderburgh County were dominated by manufacturing and have remained so in spite of past and current economic downturns. The northeastern part of the county remains primarily agricultural in nature.

In the 2004 Comprehensive Plan, the Proposed Future Land Use (2025) Map designated large swaths of land for industrial / commercial uses. The plan states:

"...a major industrial corridor and limited commercial development around interchanges is likely to occur. The Comprehensive Plan also implies that undeveloped area throughout the



County Zoning Districts





remainder of the I-69 corridor will also be developed due to this project."

The plan goes on further to state:

"local government planning must designate sufficient land in a variety of locations to accommodate developers with a choice of sites that have potential for successful development, both economically and for the community as a whole."

Land use planning for northeastern Vanderburgh County was broadly addressed in the 2004 Comprehensive Plan. This broad overview was appropriate at the time due to the rate of growth and development in the area. The 2004 Existing Land Use map on this page reflects the actual uses on the ground in 2004. By contrast, the 2025 Future Land Use Map (page 14) proposes large areas of industrial growth adjacent to I-164, with some commercial growth surrounding the S.R. 57 interchange. Current land uses (as defined in the 2004 Comprehensive Plan) are described below.

Agriculture / Undeveloped

Existing agriculture occurs primarily in the northern half of Vanderburgh County and is the predominant land use in the subarea. Farms and woodlands dominate the landscape in the northern third of the subarea, sprinkled with low density, large-lot residential development. This area also contains several residences with horse stables as well as some commercial equestrian facilities.

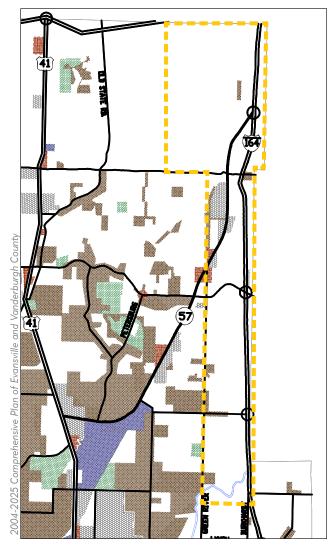
According to (2002) data in *Indiana Agricultural Statistics* **2006-2007**, approximately 55% of the 171,922 acres in Vanderburgh County are used for

EXISTING LAND USES MAP (2004)

Agricultural/Undeveloped
Commercial
Residential
Industrial
Government & Institutional
Parks & Cemeteries

agricultural purposes. With the exception of land adjacent to I-164, the 2004 Comprehensive Plan and 2025 Future Land Use map recommended most of the land remain in agricultural use. Much of the land that is not currently used for crops or grazing is covered in expansive woodlands or is low-lying and subject to flooding. These tree-covered expanses within the subarea belie the fact that Vanderburgh County ranks last of the 92 Indiana counties in the amount of woodland acres.

In the southern two-thirds of the subarea, existing land uses transition from a mix of agriculture / undeveloped land with large lot residential, to more traditional residential subdivisions. There is also commercial and





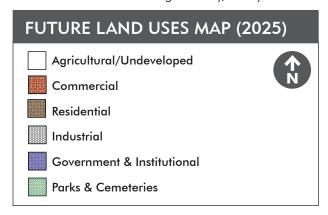


industrial development in this portion of the subarea including the Vanderburgh Industrial Park and mixed uses around Daylight. Much of the area south of Millersburg Road remains in agricultural use due to the confluence of the Bluegrass and Firlick Creeks and their expansive floodplain(s).

The 2004 Comprehensive Plan and 2025 Future Land Use Map indicate the continuation of agricultural land uses but also includes approximately 75 acres of land designated for commercial uses north and south of Millersburg Road at the Heerdink Road intersection. This designation corresponds to local efforts to develop a new interchange with I-164.

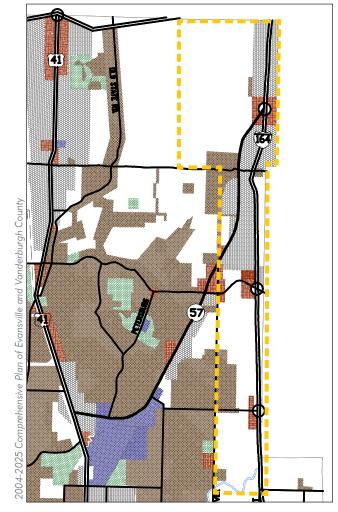
Residential

As mentioned in the previous section, there are several residences on large parcels set amongst the rolling terrain of farmland and woodlands that distinguish this area from the rest of Vanderburgh County. There also are residential subdivisions within the southern section of the subarea that have been approved and developed in recent years. However, due to the deep recession of 2008-2009 and subsequent slow down in the home building industry, many have not





been fully built out. As the real estate market and the home building industry begin to rebound in the coming years, new construction activity will eventually absorb these available homes/sites and future phases in northeastern Vanderburgh County.





In response to recent residential growth north of Evansville, a new middle / high school complex is currently under construction near the intersection of Baseline Road and Peck Road west of the subarea.

Commercial

Overall, little of the land within the subarea is currently zoned for commercial uses. However, a concentration of these commercial uses exists along S.R. 57 north of Boonville-New Harmony Road near the Daylight community. This commercial activity in Daylight can support some of the new residential uses south of there, but most residents utilize the commercial services further south around Lynch Road. The 2004 Comprehensive Plan provided 2025 projections for commercial development at nodes generally located at the existing and potential I-164 interchanges within the subarea as shown on the accompanying map. These proposed commercial areas occur at:

- S.R. 57 / I-164 interchange
- Along Boonville-New Harmony Road east and west of Green River Road
- Boonville-New Harmony Road / I-164 interchange
- I-164 / Millersburg Road (potential) interchange

The recently-completed 2009 Elberfeld/Greer and Campbell Townships (EGCT) Comprehensive Plan for Warrick County proposes future commercial land uses between Seven Hills Road and the S.R. 57 / I-164 interchange. These recommendations for northwestern Warrick County are discussed further in Chapter 4 (page 46).

Industrial

As noted above, this part of the subarea may be particularly affected by future plans in Warrick County. The EGCT Comprehensive Plan proposes to extend S.R. 57 from S.R. 68 and continue south approximately



1/2 mile east of I-69 where it would merge with the S.R. 57/I-164 interchange. As an incentive, the county has also created a Tax Increment Finance (TIF) District for future development

west of Elberfeld. Northeast of the subarea, Warrick County has also developed a "shovel ready" industrial business park.

The 2025 Future Land Use Map in the comprehensive plan designates approximately a five-mile corridor of industrial uses along S.R. 57 and I-164. As the map below indicates, there are also some small commercial areas proposed at the existing and potential interchanges within this area of the county.

Vanderburgh County has invested significantly in developing industrial land uses and business parks in the northeastern part of Vanderburgh County. This strategy was implemented to take advantage



The Vanderburgh Industrial Park

the excellent of vehicular and truck access provided by the intersection of I-64 and I-164 immediately to the north Gibson in County. This major crossroad. alona with increased traffic generated from 1-69, likely support new industrial development.

To promote such growth, the county invested in the development of the 200-acre Vanderburgh Industrial Park (VIP) just south of Baseline Road along S.R. 57. Opened in 2000, the industrial park has approximately one mile of frontage and is visible from I-164. The VIP contains warehousing, distribution and other light industrial uses. It is also designated a "shovel-ready" development which allows for an accelerated permitting process for prospective tenants, and results



The Shoe Carnival Distribution Center



in lower site development costs to improve the park's marketability. Currently, six sites/parcels remain undeveloped, averaging in size from 11 to 22 acres. Located across S.R. 57 from the VIP is the Shoe Carnival distribution center.

Parks and Recreation

According to the National Recreation and Park Association, a community should have at least five to eight acres of parkland per 1,000 people. Although the 2004 Comprehensive Plan does not designate land for recreational uses/facilities within the subarea, this should be a consideration as the area continues to witness residential growth. One way to accomplish this goal is by taking advantage of the county-wide parks taxing district established by the City of Evansville during the 1980s. The purpose of this district was create "satellite parks" throughout the county as a result of funds/taxes raised specifically for this purpose. The APC should partner with the parks department to allocate funds and identify locations for potential parks.

There are, however, a number of existing recreational uses within or near the subarea. In the northern part of the subarea, the Bell Conservancy Club provides recreational opportunities for its members. Located just north of Seven Hills Road, the club was founded in the early 1940s and has been a recreational outlet for current or former Telephone Company employees.

Just west of the subarea and north of the Green River Road and Heckel Road intersection is the Goebel Soccer Complex. This facility is comprised of nine grass soccer fields and one artificial turf field. The complex includes six lighted fields and is also home to a semi-pro football team.

Multi-use paths such as the Pigeon Creek Greenway exist outside of this plan's study area, but are an example of a popular recreational use that could be continued into the subarea along both the Bluegrass and Pigeon Creek corridors. Multi-use bike paths and other alternative transportation modes are addressed in **Chapter 4**.

The Blue Grass Fish and Wildlife Area and the Lost Hill Wetland Conservation Area are passive recreation areas (managed by the state) located nearby in western Warrick County. The Blue Grass Fish and



Vanderburgh Industrial Park

Wildlife area covers over 2,500 acres and provides hunting, fishing, and wildlife viewing opportunities. The Lost Hill Wetland Conservation Area covers over 350 acres. This natural area includes an underground aquifer system that extends along portions of Pigeon Creek and the Wabash and Erie Canal.

TRANSPORTATION NETWORK

Interstates I-64 and I-164, which provide access to Vanderburgh County, are relatively new additions to the sixty-year-old interstate system. However, with the addition of these interstates local access was compromised in the area. Prior to the construction of I-164, S.R. 57 served as the primary north-south route into Evansville along the eastern side of Vanderburgh County from Gibson and Warrick counties. This through connection was severed when



I-164 was constructed and the new interchange did not accommodate through-traffic along S.R. 57. This challenge has contributed to the slow rate of growth and development in the area. The northern gateways into Vanderburgh County and Evansville occur via two major highways: U.S. 41 and I-164.

The functional classification map on page 17 shows the hierarchy of roads in northeastern Vanderburgh County. The design of roads to safely move traffic is based on this hierarchy. Some of the east-west corridors traversing the subarea include Seven Hills, Baseline, Boonville-New Harmony, Millersburg, Kansas and Heckel Roads. North-south roads within the Area of Influence (west of the subarea) include Oak Hill, Volkman, and Green River Roads. Green River

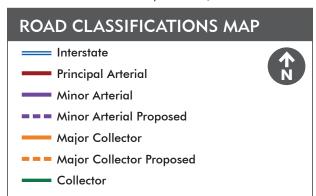


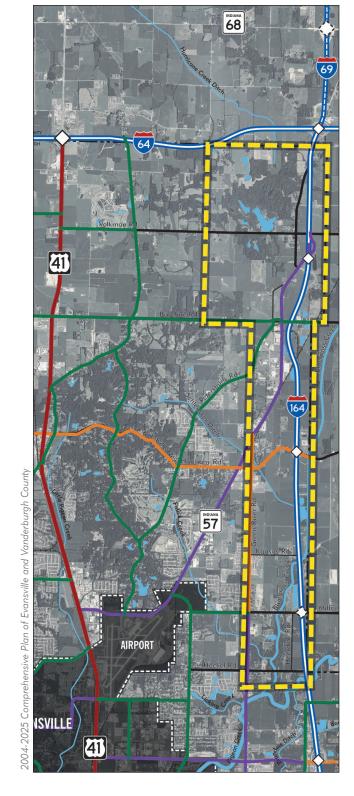
Typical local road in subarea

Road represents the majority of the western boundary of the subarea. It is currently being reconstructed and widened to accommodate increased traffic from new residential development that

has radiated north from Evansville.

To date, none of the east-west roads have been improved to convey significant traffic volumes cross-county to U.S. 41. Baseline Road is currently being considered as that designated connection linking not only U.S. 41, but the new high school/middle school complex near the Peck Road intersection. If implemented, the road would be improved to a cross-section known as a "Super Two", with two 12'-0"







travel lanes and 8'-0" shoulders for improved safety. The information below details some of the additional transportation issues affecting the subarea.

The S.R. 57 Interchange

This northern-most interchange along I-164 in Vanderburgh County is approximately 2.5 miles south of I-64. From the interchange, S.R. 57 extends south connecting to Baseline Road which traverses pastoral and rural areas and connects with U.S. 41 west of the subarea. S.R. 57 is also an important route because it serves as a direct link to the interstate system from the Vanderburgh Industrial Park and other development around the Daylight community. The unusual geometry of this interchange does not lend itself to traditional development typically found at interstate interchanges. Since 1998, there has been a proposal to realign S.R. 57 in order to provide improved, direct access to the Warrick Business Park, the Town of Elberfeld and I-64. The junction of old and new S.R. 57 at I-164 does provide "direct" access to development adjacent to the interstate as indicated in the Comprehensive Plan and as shown on the Future Land Use Map.

The Boonville-New Harmony Road Interchange

Approximately three miles south of the S.R. 57 interchange is the I-164/Boonville-New Harmony Road interchange. It provides western access to the Daylight community and also connects circuitously to U.S. 41. Prior to this Subarea Plan, Boonville-New Harmony Road was to become a major east-west connection through northern Vanderburgh County. This corridor was chosen both because of its existing interchange with I-164 and because of its continuous/ uninterrupted route across the county. The road was proposed to be upgraded as a "Super 2" lane to safely accommodate increased traffic volumes. Because this road proposal met with significant public opposition, this route was dropped in favor of Baseline Road. This local east-west route was chosen due to its straight alignment and connection to I-164 via S.R. 57.

The Millersburg Road Underpass

Unlike Kansas, Hirsch and Heckel Roads which truncate at I-164, Millersburg Road passes under I-164 and ties into the Warrick County road network. Millersburg Road also provides access to the airport.

An interchange, desired by the local community and promoted by local officials, has been considered for Millersburg Road. Although INDOT has conducted initial studies regarding such a project, INDOT has not prepared or submitted to the FHWA an *Interchange Justification Report* seeking approval for a new I-164 interchange at Millersburg Road. An *Interchange Justification Report* must address a number of issues required by FHWA officials in order to justify additional access (interchanges) to the interstate system.

The Lynch Road Interchange

The Lynch Road interchange is approximately six miles south of Boonville-New Harmony Road. Located outside of the designated study area for this plan, it provides access to/from a rapidly-developing area northeast of Evansville. A number of highway commercial and retail uses are located adjacent to this interchange.

Vanderburgh County Projects

The county regularly evaluates plans and has the following transportation planning philosophy: "At the most basic level, the transportation planning process involves inventorying current facilities, collecting data, forecasting future land use, population and vehicle trips, and assigning vehicles on the future transportation network."

Relevant transportation projects from the 2004-2025 Comprehensive Plan have been identified on the "2007-2030 Proposed Transportation Projects" map and accompanying text.

Since the adoption of the 2004-2025 Comprehensive Plan, the **Transportation Improvement Program** (**TIP**) has been updated (2008-2011) to include the following projects:

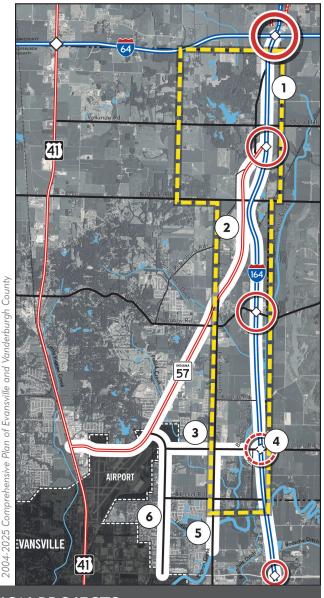
- Landscaping/beautification and other intersection improvements at the intersections of S.R. 62 / Oak Hill Road and S.R. 62 / Green River Road. The latter will also include a culvert project. These projects will provide visual gateways into Evansville from Warrick County.
- 2. Rehabilitation of I-64 approximately from S.R. 61 to S.R. 161. This roadway improvement will provide a more efficient/attractive route both along I-64 and connecting to the new I-69 corridor.

- 3. New I-69 construction/improvements along the S.R. 57 / I-164 segment north into Gibson County.
- 4. Widening of Green River Road from Lynch Road to Millersburg Road, and improvements to the Green River Road/Millersburg Road Intersection (turn lanes and a traffic control signal).



Green River Road Improvements

- I-164 (New Ohio River Bridge to I-64): Widen to six lanes to accommodate anticipated traffic increases along this vital international trade corridor.
- S.R. 57 (U.S. 41 to I-164): This proposed improvement would widen S.R. 57 to four lanes due to existing and projected growth in northeastern Vanderburgh County, and address safety concerns. Boonville-New Harmony and Oak Hill Roads, and Green River Road north of Millersburg are all designated as collectors that tie into the highway.
- 3. Millersburg Road (Oak Hill Road to I-164): Widen to four lanes between Oak Hill Road and extending into Warrick County with a proposed interchange at I-164 to accommodate increased traffic from the rapid residential growth occurring in this area. Since Millersburg Road continues into Warrick County, it will also provide safe and efficient flow between Vanderburgh and Warrick Counties.
- 4. Millersburg Road/I-164 Interchange: This proposal is to construct a new grade-separated interchange to address growth in the area. There are currently over five miles between the Boonville-New Harmony and Lynch Road interchanges, and this project will improve interstate access for local/regional traffic. This proposed Millersburg Road Interchange has not been approved and remains unfunded by INDOT.
- 5. Green River Road (Hirsch Road to Millersburg Road): Widen to four lanes with shoulders providing a better connection between the new residential areas in northeastern Vanderburgh County and the commercial areas to the south. Green River Road is designated as a minor arterial in the county's Thoroughfare Plan.
- 6. Oak Hill Road: From Lynch Road to S.R. 57 widen to three lanes to address increasingly heavy traffic from residential growth and potential airport transport traffic.



2007 - 2030 PROPOSED TRANSPORTATION PROJECTS



Additional Transportation Factors

Since the I-69 corridor subarea borders the edge of the county, it can be expected that transportation and land used decisions made in adjacent Gibson or Warrick Counties may have direct or indirect impacts on future development within the subarea. The following information outlines some of these issues.

I-69 Information

The portion of I-69 from I-64 to S.R. 68 (currently under construction) is included in the Evansville Transportation Improvement Program, 2008-2011. This project is part of a 2.6 mile section of I-69, from the I-64/S.R. 57 interchange to S.R. 68, and it is a funded project in the 2006-2010 funding period.

S.R. 57 Information

S.R. 57 runs north-south through the northwest corner of Greer Township. It connects to Evansville to the south and U.S. 231 (in Greene County) to the north. Prior to the construction of I-164, S.R. 57 was a continuous north-south route that intersected directly with I-64. As such, Elberfeld had reasonable, if not direct, access to I-64 from S.R. 57. The construction of I-164 resulted in the overlapping of I-64 and a segment of S.R. 57 which eliminated direct access via S.R. 57 to I-64 from the south. Since I-164 opened, Elberfeld's access to the interstate system has been indirect and circuitous.

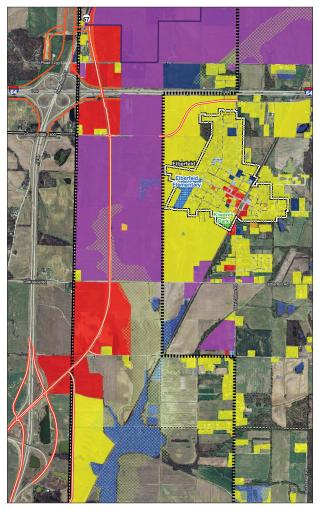
The new I-69 construction requires S.R. 57 to be closed at the I-64/I-164 interchange and relocated to Nobles Chapel Road (C.R. 950N in Warrick County, C.R. 1250S in Gibson County). Nobles Chapel Road is to be closed at existing S.R. 57 intersection and relocated to pass over I-69 connecting to the relocated S.R. 57 route.

Warrick County Proposed Roadway Rerouting

As a result of the anticipated terminus of S.R. 57 at Nobles Chapel Road because of the I-69 extension, the EGCT Comprehensive Plan calls for an extension of S.R. 57. This proposed north-south connector would extend from the S.R. 57 and Nobles Chapel Road intersection on the north (east of I-69) to the existing S.R. 57 interchange in Vanderburgh County. The proposal includes a realignment of the interchange

into a more traditional design, which would not only present increased opportunities for development within Vanderburgh County, but within Warrick County along the proposed route, which provides a vital connection to the North Warrick Industrial Park.

The EGCT Comprehensive Plan also notes the reconstruction of an improved two-lane facility with realignment of Millersburg and Heim Roads to form a continuous route from I-164 to S.R. 62. The project, included within the Evansville LRTP, is proposed for completion by 2025. The construction of a new I-164 interchange at Millersburg Road (one of the recommendations proposed within this plan and the LRTP) would connect the new alignment to I-164 (I-69). However, as noted previously, there have not



Proposed S.R. 57 in Warrick County



been any further studies or designs for the interchange to date, and the Millersburg interchange project remains unfunded by INDOT.

Bikeways / Routes / Greenways

The Indiana State Trails, Greenways and Bikeways Plan identifies a statewide trail network that connects regionally and locally. The 2006 trails system shows the Priority Visionary Trail following a north-south travel-way on the eastern edge of the county. This trail connects to the American Discovery Trail that traverses Vanderburgh County near the Ohio River.

The 2000 Regional EUTS Bicycle and Pedestrian Plan addressed the desire and need for dedicated space on roadways for bicyclists. The proposed network includes bike routes on three roads or future alignments within the study area: Green River Road and Oak Hill Road with Heckel Road connecting the two.

According to the plan, streets on the bikeway network were selected because they provide the best connections between residential areas, schools, parks, commercial areas and other popular destinations, and because adequate, parallel facilities are not available. On-street bikeways can be developed either by reallocating space on existing roadways, or by incorporating bikeways into new construction or reconstruction projects. "Share the Road" signs should posted along corridors where bike use is expected, auto traffic volumes are high, but where physical constraints rule out other treatments.

Road reconstruction in 2010 was recently approved to add bike lanes on Oak Hill Road from Pigeon Creek Bridge to Lynch Road south of the project area. Pigeon Creek is a recognized resource that the community has embraced, evidenced by the multi-phased project to make the natural corridor accessible for recreation. Ideally, these greenways should extend along other creek corridors that lace the project area including Bluegrass and possibly Firlick Creeks.

Impact of the Airport

The Evansville Regional Airport (EVV) provides air service to Evansville and the Tri-State area. The existing 140,000 square foot terminal has the capacity to accommodate 350,000 annual enplanements. Currently, two airlines (Delta and American) operate

from the terminal. The Evansville Regional Airport will be expanding its northeast-southwest runway toward the northeast. The potential impacts from increased air traffic on Millersburg Road and S.R. 57 due to longer runway has not been determined. Millersburg Road would likely be realigned to avoid the extended runway. Improvement projects to Millersburg Road and other roads are on the county's list of recommended projects, but as yet are unfunded and unscheduled.

Large Truck Traffic

The Evansville area contains several major truck terminals which serve as staging areas for the loading of trucks and for the warehousing of goods. Because trucking is the predominant mode of freight transportation, there are a number of trucking firms and private haulers in the Evansville area. Planning for this mode of freight transport must continue to address the impact of trucking on highway congestion, air pollution and roadway deterioration.

Rail

Although there has been a decrease in rail activity over the past decades, recent increases in fuel prices have generated a renewed interest or demand for rail service. The Indiana Southern Railroad traverses the subarea and parallels much of S.R. 57, where it eventually intersects with another rail line just west of U.S. 41 near the airport. The section of railroad passing through the subarea also includes a rail spur that serves businesses in the Vanderburgh Industrial Park. The proximity of rail service near the S.R. 57 Node could serve as an economic development tool for future development in the area.



Indiana Southern Railroad serving the Vanderburgh Industrial Park



NATURAL FEATURES

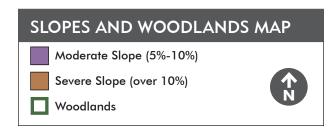
Expansive, picturesque views, rolling hills, woodlands, and farmland characterize much of the landscape in the northeastern area of Vanderburgh County. Woodlands are located along creek corridors and on hillsides contributing to the pastoral character and scenic views from the I-164 corridor.



Rural view

Forested lands in the subarea can provide recreational, ecological, and economic (such as sustainable timber harvesting) benefits. Besides removing carbon dioxide from the air, another ecological benefit of a mature woodland is that it reduces stormwater runoff, which in turn can lessen soil erosion. Woodlands allow a greater amount of time for water to be absorbed into the ground than other vegetated or developed lands, thus filtering chemicals and toxins and recharging the underground aquifers (groundwater supply). Forested areas and dense woodlands also provide critical habitat for many species of birds and wildlife. Studies have also shown trees increase market value within new developments. These benefits are described further in the Wetlands and Riparian Corridors Profile on page 35.

As the table on the following page illustrates, farm fields and residential lots can produce approximately two to three times more runoff than forested land. In addition, commercial and industrial development create approximately five to seven times more runoff





Land Uses	Runoff from a 4-inch Rainfall (inches)	Runoff Volume from 4-inch Rainfall on 1 Acre (gallons)
Forest	0.5 inch	13,600
Grass (meadow, lawns, parks)	0.8 inch	21,700
Residential (1-acre lots)	1.2 inches	32,600
Corn or Soybeans	1.7 inches	46,200
Residential (1/4-acre lots)	1.7 inches	46,200
Industrial	2.7 inches	73,350
Commercial	3.7 inches	100,520

Runoff Expected from Four Types of Land Use; "Land Use & Water Quality (LU10)"; Purdue Extension Land Use Team.

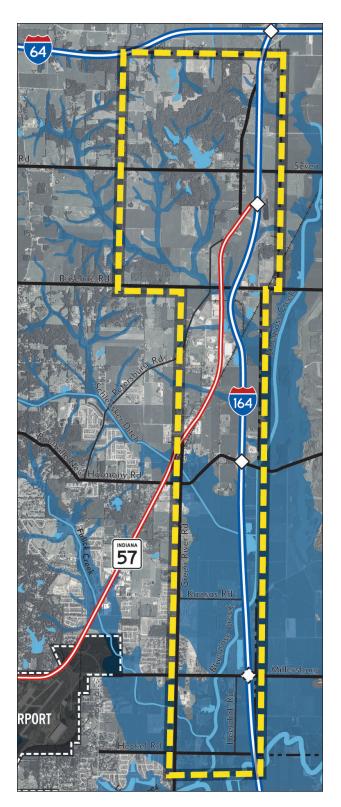
than forested land, mostly due to the high percentage of paved (impervious) surfaces typically associated with this type of development.

The Land Use Analysis, beginning on page 12, states that a majority of the subarea is designated "Agriculture" or "Undeveloped" land in the 2004-2025 Comprehensive Plan for Evansville and Vanderburgh County and that agriculture remains an important industry in this area. The Comprehensive Plan also notes that much of this land is comprised of soil complexes that have been identified as prime farmland supporting high agricultural productivity.

The natural character of northeastern Vanderburgh County is also influenced by Bluegrass, Pigeon and Firlick Creeks. Much of the land in the southern portion of the subarea is flat, low-lying and laced with these waterways. The map on this page illustrates that the southern subarea lies almost entirely within the designated 100-year floodplain. In response to a

¹ Prime farmland, as defined by the U.S. Department of Agriculture, is the land that is best suited to producing food, feed, forage, fiber, and oilseed crops. It has the soil quality, growing season, and moisture supply needed to economically produce a sustained high yield of crops. If it is properly treated and high level management and acceptable farming methods are used, prime farmland produces the highest yields with minimal inputs of energy and economic resources, and its use results in the least damage to the environment.







survey given during the June public workshop, 15 of 42 attendees reported incidents of flooding on properties and roads during significant rain events.

The northern subarea has many small tributaries that drain to Bluegrass and Pigeon Creeks, some of which have been dammed to create small lakes in the northern subarea. Located just north of Seven Hills Road and surrounded by wooded terrain is the largest lake in Vanderburgh County.

The portions of Bluegrass, Pigeon and Firlick Creeks that traverse the subarea are not legal drains and border privately-owned lands. As such, maintenance and stream bank stabilization measures for the creek are the responsibility of adjacent property owners rather than the county. Regulated drains fall under the purview of the County Surveyor's office which supervises construction, reconstruction, and maintenance of regulated drains and investigates alleged drainage obstructions. The county surveyor's office reviews development proposals on an individual basis to ensure the 25-year flood can be contained. This involves reviewing the capacity and cumulative effects of increased flows resulting from new impervious surfaces in the entire watershed, and deciding the best measures to control water volumes or make improvements. Management of the flow into these drains from new development can help protect existing development along the creeks from flooding and ensure that new construction does not create flooding/drainage issues further downstream.

If property owners in the future are interested in converting a waterway to a legal drain, Indiana State Statute IC 36-9-27-18 outlines the procedure.

Another option is to designate the creeks in the subarea as *Impacted Drainage Areas* which result in



Large ditch draining adjacent farmland

stricter controls on development based on a 100-year flood event. This is the case within Vanderburgh County at two locations - along U.S. 41 in the northern part of the county, and an area centered on Morgan Avenue along the eastern county line in both the City of Evansville and county.



Natural debris blockage along Bluegrass Creek



INFRASTRUCTURE

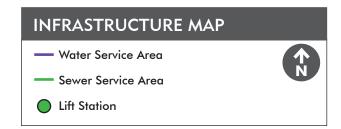
The availability of utilities varies within the project subarea. The northern-most (rural) corner of the county contains primarily single-family residences or farms that obtain water from wells and utilize septic systems. South of Baseline Road, infrastructure and utilities are located along the Green River Road and S.R. 57 corridors. A 10" water line serves both residential and commercial development around the Daylight community and extends south to serve recent residential development.

As the adjacent map illustrates, sewers serve much of the residential development west of the subarea as well as the residential area at the intersection of Green River Road and Kansas Road. There is also a larger sewer line (with associated lift stations) extending along S.R. 57 to the Vanderburgh Industrial Park.

In 2000, a 12" water line was extended north along S.R. 57 to serve the Vanderburgh Industrial Park as well as the Warrick County Industrial Park. There is also a 4" gas line that serves the Vanderburgh Industrial Park.

During the public workshop, several attendees noted that telecommunication services, including cellular phone and cable television, can be inconsistent or unreliable throughout this rural area.







OPPORTUNITIES AND CONSTRAINTS

This final section of the Analysis serves to summarize existing conditions within the subarea. Specifically, it examines the resulting opportunities and constraints to development within the subarea with a focus on the three nodes described on page 28.

City and county officials desire a strong economic base for all citizens. The I-69 Extension represents a tremendous opportunity to contribute to the vitality and prosperity of Evansville and Vanderburgh County. However, this desire for economic development should be weighed against natural or other conditions that could make development less viable/feasible. Existing conditions within the subarea, coupled with community input, have been synthesized to determine corridor areas most suitable for development. Much of this builds on existing development in the subarea, and seeks to retain the natural beauty and agricultural heritage of the area.

The potential or suitability for growth and development along the I-69 corridor in northeastern Vanderburgh County falls into two primary categories:

- Highly Suitable Areas
- Less Suitable Areas

Highly Suitable Areas

Highly suitable areas or segments for development are those adjacent to existing urbanized areas or with superior vehicular access such as interstate interchanges. The combination of location, access, utility availability, and/or ease of development (e.g. greenfields¹, non-floodplain, etc.) will likely create targeted areas for more development pressure than other areas within the subarea. Additional studies of demographics and market analyses should be important components in determining the feasibility of future development in such areas.

Less Suitable Areas

Less suitable areas are characterized as undeveloped or agricultural land that is not readily accessible by interstate interchanges, arterials, or collectors, and are

1 "Greenfields" are generally considered to be sites that have not been structurally developed in the past. They may include farmlands, pasture land, or brush/woodland. not in close proximity to utilities. These areas could also include undisturbed natural areas such as woodlands, wetlands, or sensitive riparian creek corridors.

In such instances, although development could be technically possible, it should be reviewed carefully and will likely be subject to higher construction costs. Many times, this is a decision that will be driven by the market, and it is incumbent upon the community to weigh all of the impacts and benefits.

Achieving a Balance

There will be areas that, based on this theoretical analysis, are not the most suitable for development but still may be subject to significant development pressure. In these cases, it is of the utmost importance to lessen the impact to sensitive areas through the use of low impact development tools which are described on page 35.

Concerns regarding the preservation of the subarea's rural character and the particular quality of life that is important to northeast county residents should also be considered by county leaders when promoting economic development within the subarea. This plan provides recommendations that strike a balance between what is good for nearby residents and what is good for the county's economic growth.

Results

The results of the previous analyses of existing conditions ranging from sensitive natural areas (constraints) to locations of recently extended utilities (opportunities) have been identified on maps throughout this chapter. In order to aid in the identification of areas most suitable for future development, the map on the following page illustrates only the strongest constraints combined into a single layer (floodplains, steep slopes, and dense woodlands).

Potential future growth areas (opportunities) are represented as "voids" on the adjacent map. These areas largely coincide with the county's (2025) Future Land Use Map which proposed industrial development approximately 1/2 mile on either side of I-164 and commercial growth at the S.R. 57 interchange.

ANALYSIS (2)



OPPORTUNITIES & CONSTRAINTS

Opportunities (void of color)

Constraints: combination of floodplain, slope (5%+), woodlands





SUBAREA NODES

Based on the opportunities and constraints discussed previously, input from the Steering Committee, and EMPO and APC staff feedback, a variety of overarching goals were crafted for the entire corridor or subarea. In addition, it was decided during the planning process to include additional recommendations at three "nodes" or access points to the community. These nodes, along I-164, coincide with the two existing interchanges at S.R. 57 and Boonville-New Harmony Road and a potential interchange at Millersburg Road. The nodes are further described below and also with precedent photos and sketches that are included in *Chapter 4*.

The S.R. 57 Node

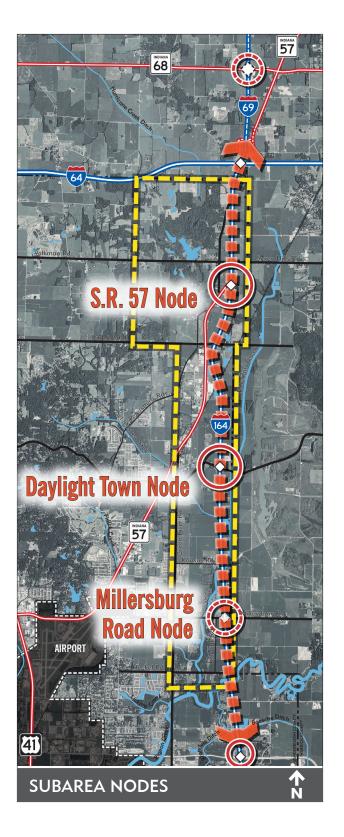
Because this is the northern-most node along the I-69 corridor, it represents the gateway into Vanderburgh County. A mix of innovative technology-based businesses and/or light industrial uses could complement industrial development at the Vanderburgh Industrial Park. By encouraging development with a limited "footprint" around the interchange, it is anticipated the surrounding rural landscape could be retained and panoramic views of the area would be maintained.

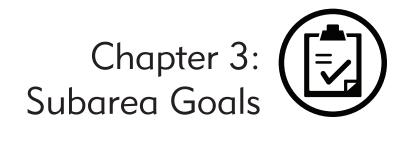
The Daylight Town Node

Future development within this area should respond to the needs of Daylight residents, and reflect the scale, character, and intensity of the built and natural landscape. In addition, Daylight could serve as a local "gateway" to natural and cultural destinations located east and west along Boonville-New Harmony Road.

The Millersburg Road Node

Future efforts within this node should center on balancing existing and future development with the natural limitations represented by Bluegrass and Pigeon creeks. Future development will also be dependent on the construction of a new Millersburg Road interchange with I-69 (I-164). Although such a project is a high priority of the community and noted in the Comprehensive Plan, to date INDOT has not conducted an *Interchange Justification Report* or any further studies for an interchange, and such a project remains unfunded.







SUBAREA GOALS

The following goals and objectives in this chapter specifically reflect the needs and issues previously identified in the Subarea Plan analyses and the desires of community residents. These recommendations are intended to have broad application along the overall subarea, and could be used as underlying principles for the three Subarea Nodes described in **Chapter 4**.

Roadways have always influenced development patterns and will continue to do so in the future. The construction of I-69 connecting to I-164 in the northeast part of the county will serve as a catalyst for future growth in the community. As the population of northern Vanderburgh County increases and diversifies, it is important to provide a variety of uses and services reflecting the needs and aspirations of all including government officials, business leaders, and residents. This plan addresses the relationship between transportation, land use, and preservation of a unique character.

The following goals and objectives reflect a vision generated primarily from area residents, the Steering Committee, EMPO and APC staff, and the consultant. Each goal is supported by specific objectives and focused actions necessary to achieve each goal. The goals and objectives center on four major themes:

- Land Use
- Transportation
- Economic Development
- · Character and Identity

LAND USE

Goal 1 - Encourage Efficient Development and Growth Patterns

- Promote compact growth patterns to guide new development to areas adjacent to existing development, and effectively utilize existing utilities or infrastructure.
- Encourage the creation of community-serving or neighborhood-scale commercial development at key nodes and intersections to support residential development.
- Ensure that utility and infrastructure improvements can accommodate future development.

Goal 2 - Enhance Planning and Land Use Coordination

- Consider policies that require new development to incur the full or partial costs of the public infrastructure (e.g. roads, sidewalks, water and sewer) needed to serve these developments through dedication of easements and construction of infrastructure improvements.
- Prioritize the funding and construction of roadway and sewer infrastructure to direct development to designated areas.
- Consider amending the Subdivision Ordinance to provide the Area Plan Commission with the authority to require special studies (traffic, schools, fiscal impact) and to address off-site improvements as warranted to mitigate substantial development impacts on community infrastructure, public services, and drainage.
- Coordinate development review between city and county departments, local utilities and other agencies to ensure compliance with development standards.

Goal 3 - Promote Natural Resource Preservation / Conservation

- Encourage appropriate measures to preserve, enhance and protect unique natural resources and habitats.
- Encourage natural resource corridor protection to preserve stream water quality, wildlife habitat, and the rural character of the area.



Bluegrass Creek

PROFILE: Wetlands and Riparian Corridors

What are Wetlands and Riparian Areas?

Wetlands are areas inundated or saturated by surface or ground water seasonally or throughout the year. The presence of water at or near the surface is the dominant factor that determines soil characteristics as well as plant and animal communities.

Riparian areas are the wooded corridors along rivers and streams. These areas are a complex ecosystem vital to the protection of stream and river water quality and often include some of the richest varieties of plants and animals.

Why are These Resources Important?

Wetlands

Wetlands purify water by filtering and trapping sediment, chemicals, and excess nutrients before water enters other water bodies or groundwater. Wetlands provide habitat for fish, waterfowl, and other wildlife which use these areas to breed, find food, and protect their young. They also reduce flood damages by storing and slowing floodwaters. Wetlands regulate water levels within a watershed.

Riparian Corridors



Wolf Creek Riparian Corridor

Healthy riparian areas are typically composed of large trees, woody understory trees and shrubs, perennials, grasses, and groundcover. Well-maintained and managed riparian areas

are able to influence the physical, chemical, and biological characteristics of a stream. They can provide food, shelter and natural linkages for a wide variety of plant and animal communities; they can shade and cool streams to enhance aquatic habitats; they can filter sediments and pollutants, preventing



them from entering the stream or waterway; they can stabilize river banks, reduce bank erosion, and provide flood control.

Who Regulates These Resources?

Wetlands along waterways are protected primarily by the U.S. Army Corps of Engineers (Corps) under Section 404 of the Clean Water Act. The Natural Resource Conservation Service (NRCS), U.S. Fish & Wildlife Service (USFWS), as well as state and local environmental agencies may also regulate wetlands.

The U.S. Environmental Protection Agency (EPA), Corps, and USFWS have a public policy of "no net loss of wetlands" requiring acre-for-acre replacement of wetlands lost due to development. The replacement of lost wetlands can occur either on-site or within the same watershed.

In Indiana, the Indiana Department of Natural Resources (IDNR) has the authority to regulate riparian areas for water quality purposes. Often the local government represented by the County Surveyor may choose to regulate development.

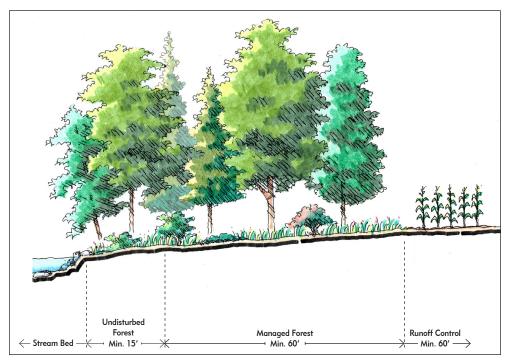
The Natural Resource Conservation Service (NRCS) of the USDA, has developed Conservation Standards for Riparian Forest Buffers (Code 391). These standards are site specific and will vary depending on the size of the waterway and floodplain. Most standards address an area ranging from 35 to 150 feet on either side of the stream. The ideal riparian area includes three zones for management in which development should be restricted. These zones, listed in sequence from the edge of the stream, are as follows:

- 1. Undisturbed Forest This zone is adjacent to the stream and is ideally 15 feet in width. Removal of vegetation is not permitted.
- Managed Forest This zone is ideally 60 feet in width and harvesting of older vegetation is encouraged to support better filtering/removal of nutrients through younger, faster growing vegetation. Grass is not a substitute for the younger, faster growing plants. The runoff over grass is rapid, allowing no time for filtering.
- Runoff Control This zone is ideally 20 feet and may be pastured, farmed for hay or mowed for recreational purposes. Pesticides and other chemicals should not be used within these zones in riparian areas.

SUBAREA GOALS

- Promote "low impact" or less intensive development or recreational uses within floodplains to minimize impacts on environmentally-sensitive areas.
- Encourage scenic or conservation easements that protect natural resources through agreements between land trusts and property owners.
- Explore incentives to encourage stormwater best management practices (BMP's) for new development that preserves or enhances the quality of the local waterways (e.g. Bluegrass or Pigeon Creeks).
 - Provide incentives such as a reduction in sewer tap fees or letters of credit for developments that integrate BMP's (See *Profile on page 37*).
- Preserve and/or maintain local waterways and associated riparian areas in order to preserve or enhance the quality of the local waterways (e.g. Bluegrass or Pigeon Creeks).
- Promote environmental/water quality awareness by providing roadway signage that identifies waterway crossings and watersheds, or by

- initiatives such as drainage inlet labels indicating that the stormwater run-off drains into local waterways (including the Ohio River).
- Encourage the use of native plants.
- Encourage innovative, low impact subdivision design principles to preserve open space or unique natural features.
- Consider providing shared stormwater detention facilities or regional detention for large parcel commercial and industrial development.



Planted or natural areas protect waterways from farm field runoff.

PROFILE: Best Management Practices

Best Management Practices (BMP's) are a combination of activities, measures, and structures designed to reduce the amount of pollutants in stormwater runoff, and mitigate the negative impacts of development on waterways or groundwater. Runoff occurs when rainwater strikes impervious surfaces such as roofs, parking lots, streets, and sidewalks. Runoff in urbanized or densely populated areas is often collected into stormwater sewers, resulting in higher pollutant concentrations prior to being discharged into a local waterway. For communities over a certain population, the use of BMP's must be incorporated into development plans that involve significant land disturbance to decrease pollutant concentration and presence.¹

The first step is source control. A mature woodland or forest is readily absorbent of stormwater and has a high rate of evapotranspiration, especially when compared to turf or any impervious surfaces such as asphalt or concrete.

On-site stormwater management measures may be structural on non-structural. The retention of a mature forest is non-structural. Examples of other BMP's range from constructed wetlands, green roofs, and retention ponds to rain gardens and vegetated swales. Vegetated swales are shallow depressions that collect and slow water velocity, thus filtering pollutants from runoff, and permitting its gradual absorption into the soil or groundwater. Incorporating native plant material into these BMP's examples provides additional benefits since they require less water and maintenance.

1 See 327 IAC 15-13-2 of the Indiana Administrative Code for criteria defining applicable communities.



Raingarden to treat parking lot runoff

What are the benefits to integrating BMP's?

- Less expensive to install and maintain
- Self-healing (do not require costly physical replacement of infrastructure in the event of damage to the runoff collection/filtration system)
- Value-added for people wanting to live in a healthy, natural environment
- Amenities that may increase property value
- May become recreational amenities
- More readily permitted by regulatory agencies
- Image enhancing for communities or companies wanting to be progressive or environmentallyfriendly

What can a community do to promote or reauire BMP's?

- Review ordinances to ensure alternative or innovative stormwater management practices are not prohibited
- Reduce the amount of impervious pavement
- Permit alternative permeable pavement products such as paver blocks, porous concrete and asphalt and the use of aggregate in appropriate situations
- Eliminate curbs on roads, where not necessary for pedestrian safety, to channel runoff to roadside swales where it can be filtered prior to recharging the groundwater
- Construct a median swale on roads or in a parking lots to retain and filter runoff
- Increase setbacks between development and sensitive areas such as creeks and wetlands
- Establish maximum (minimum are typical in ordinances) parking requirements to reduce unnecessary paved areas

SUBAREA GOALS

TRANSPORTATION

Goal 1 - Improve Direct Access to/from I-69 into Northeast Vanderburgh County

- Work closely with INDOT to ensure all recommendations or improvements to corridors are context sensitive, especially regarding interchanges or other roadway improvements.
- Maintain regular contact with INDOT to ensure that future projects are compatible with the goals of Evansville and Vanderburgh County.

Goal 2 - Create a Future Interchange at Millersburg Road

- Coordinate with INDOT to study the feasibility of creating an interchange at Millersburg Road.
- Provide a direct link between I-69 and Evansville Regional Airport via Millersburg Road.
- Increase regional mobility by creating a direct link to western Warrick County.

Goal 3 - Improve Connections Within Northeast Vanderburgh County

- Incorporate the transportation recommendations of this Subarea Plan into future updates to the county's transportation plans.
- Improve Baseline Road to promote a direct eastwest county connection.
- Continue to coordinate improvements for county and state roads with adjacent jurisdictions through regular participation in the EMPO.
- Minimize curb-cuts onto county roads and state highways by encouraging site design principles incorporating shared driveway access to contiguous parcels.
- Coordinate with INDOT to explore the feasibility of reconstructing the S.R. 57 interchange to improve direct access to the county and also link to the Warrick County road network.

Goal 4 - Promote Alternative Transportation

 Support the extension of greenways located in the southern part of the county into this plan's subarea.

PROFILE: Complete Streets

A complete streets policy ensures that the entire right-of-way is routinely designed and operated to enable safe access for all users including pedestrians, motor vehicles, transit, and cyclists. A complete street is a public place that enables people of all ages, interests, and abilities to feel comfortable moving through a circulation space. The most basic components of a complete street include vehicular travel lanes, a bike facility, crosswalks, sidewalks, or multi-use trails. Medians, street trees, lighting, signage and street furnishings also contribute to a more pedestrian-friendly setting.

In 2000, the Federal Highway Administration (FHWA) suggested "bicycling and walking facilities



be incorporated into all transportation projects unless exceptional circumstances exist." Boulder, Colorado was one of the first, building all arterials as multi-modal corridors for auto, pedestrian, bicycle, and transit. Since then, Seattle, Chicago, Sacramento, Charlotte, and Louisville have all adopted some form of Complete Streets policies, recommendations or ordinances. The State of Massachusetts Highway Department developed a road design manual addressing complete streets which gives cities and towns more local control over design decisions affecting their roads.



- Work with landowners toward a common goal of providing continuous trail systems.
- Consider varied facilities for bike travel as part of all future county road improvements. A signed bike route (shared road facility) appeals to a more serious, experienced rider. Multi-use paths separated by landscaping and set back a safe distance from the travelway are appropriate for other cyclists and pedestrians.
- Encourage new development that supports designated bicycle and pedestrian corridors.
- Update the Bicycle/Pedestrian Plan to promote the extension of bikeways into northeastern Vanderburgh County.
- Explore opportunities to create equestrian trails adjacent to multi-use greenways that could possibly link destinations within the subarea and points beyond.
- Expand EMPO's "rideshare" program to provide additional alternatives for county residents.

ECONOMIC DEVELOPMENT

Goal 1 - Strengthen Existing Incentives and Explore New Opportunities and Partnerships for Economic Development Along I-69

- Enhance economic development opportunities in areas appropriate for the expansion of commercial and industrial uses.
- Work with the Chamber of Commerce, the Economic Development Coalition of Southwest Indiana, and others to promote opportunities and "shovel ready" developments.
- Ensure adequate availability of a sanitary sewer system, water distribution system, stormwater facilities, and other utilities for new and existing development.
- Consider tax abatements, TIF's, or other incentives to promote "green" development or industries.

PROFILE: Low Impact Development Principles

One of the principles of "low impact development" (somewhat interchangeable with the concept of "Smart Growth") centers on strengthening or directing development towards existing communities. The application of this principle can result in preserving open space, farmland, natural features, and critical habitats. Another benefit is the efficient use of taxpayer dollars by establishing policies to guide new development within or adjacent to existing development and public services.

Some of the benefits of incorporating low impact development principles into mixed-use communities include:

- Reduced sprawl due to close proximity to existing development and/or infrastructure
- Redevelopment of blighted areas
- Improved air quality due to the reduction of automobile emissions and less traffic congestion resulting from shorter and/or fewer vehicular trips.

- Better health and quality of life as a result of more walkable communities, and greater variety of retail/service/recreational opportunities.
- Commercial stability and vitality resulting from a close, permanent customer base
- Increased personal safety due to more 24-hour activity from daytime businesses and residences.



Low-impact, mixed use development example of Prairie Crossing (IL) created with small lot sizes and increased densities to preserve the surrounding agricultural land and natural features

SUBAREA GOALS

Goal 2 - Create an Environment to Attract High Technology, Life Sciences and Professional Services Businesses

- Expand fiber optics, high speed internet access, and similar services along the subarea corridor.
- Partner with local universities, medical facilities, and local entrepreneurial or high-tech initiatives to promote economic development along the subarea corridor.
- Support efforts of Southwest Indiana WIRED (Workforce Innovation in Regional Economic Development) promoting economic and workforce development in the region.

Goal 3 - Encourage Revenue-Generating Initiatives that Highlight the Unique, Natural or Cultural Features of Northeast Vanderburgh County

- Support agritourism in rural Vanderburgh County including U-Pick farms, truck farming and farmstands.
- Develop a county-wide wayfinding signage program to direct visitors and residents to prominent destinations.
- Encourage innovative economic development efforts that promote responsible stewardship of the county's natural resources.

CHARACTER AND IDENTITY

Goal 1 - Encourage the Preservation of the Area's Rural Character and Natural Features

- Preserve the rural character by increasing the public's awareness of existing farm operations and their importance to the local economy.
- Support the conservation of natural features and environmentally-sensitive areas.
- Support rural business operations such as orchards, riding stables, etc. that contribute to the unique character of the area through promotional or marketing efforts and the provision of wayfinding signage.

- Visually buffer less than desirable views (i.e. utility service areas, outdoor storage, truck parking) from roadways utilizing landscape screening or berms
- Work with developers to provide shared stormwater facilities where applicable and beneficial.
- Include sustainable development practices in the design for new development to reduce long-term costs and impacts.
- Provide signage along corridors designating creek or wildlife crossings to raise environmental awareness, and/or promote agri-tourism.

Goal 2 - Develop Quality Standards for New Development

- Encourage high quality architectural/site design for new commercial and industrial development within the designated Subarea Nodes.
- Consider policies that require new development to bury overhead utilities.
- Implement corridor beautification through landscaping using native and indigenous plantings such as wildflowers, grasses, shrubs and trees adjacent to and within the I-69 interchanges.

Goal 3 - Promote Initiatives Highlighting the I-69 Corridor as a Gateway to Vanderburgh County

- Create wayfinding signage directing residents or tourists to significant destinations or attractions.
- Partner with Keep Evansville Beautiful to develop gateway design features (i.e. welcome signage, landscaping, lighting, or public art) reflecting the unique identity of Vanderburgh County and the subarea specifically.
- Protect the views to open space by considering the viewshed when reviewing development proposals along the interstate corridor.
- Consider creating a branding or marketing effort for the subarea corridor that highlights or captures the unique aspects of northeastern Vanderburgh County to attract future investment.

PROFILE: Cultural Corridors

Highways offer much more than a way to travel from one place to another. Stops along the way can enhance the experience for tourists and locals alike. Because I-69/I-164 will serve as a gateway corridor for the county, it is important to promote or "advertise" to travelers the numerous opportunities Vanderburgh County has to offer. The corridor, including the development, signage, or design features along it, can serve as an opportunity for the community to "tell its story" regarding its history, current initiatives, and future vision.

Agritourism

Family-owned, multi-generational farms maintain connections to the community. The collections of farm buildings and surrounding farmland can "tell a story" about a particular place and its evolution over the years. Many communities have placed a greater emphasis on maintaining their rural/agricultural culture and history. Rural architecture and how these structures relate to the land should be maintained, and secondary land uses within the community that support the farming community as



a whole should be preserved in order to protect not only the physical structures but also the community's collective history.

"Agritourism" is a term used for

agricultural practices that focus on entertainment or the direct sale of locally-grown products in the context of traditional agricultural operations. It is usually attractive to small or independent farm owners. Opportunities for agritourism include small plant nurseries, the production and on-site sale of farm-raised goods (dairy products, grass-fed beef, etc.), and school and educational trips. Such operations could also center on entertainment activities such as "you pick" orchards and pumpkin patches, historically-themed working farms, and seasonal events such as hay rides or corn mazes.

Recreational Resources



Water features are valued not only as a natural resource, but also for their potential for recreation. The lakes and wooded areas in the northeastern

part of the county (such as the lakes around Bell Conservation Club) have made it a special place. In addition, Pigeon and Bluegrass creeks and their tributaries have enormous potential as greenways and blueways. The Bluegrass Fish and Wildlife Area in Warrick County represents a regional attraction covering over 2,500 acres that also offers a variety of recreational activities. Reclaimed from strip mine operations in the 1990s, this unique resource features approximately 28 lakes providing quality hunting, fishing, and wildlife watching opportunities.

Identifying Cultural Resources

Sites that are culturally or historically significant can be developed as roadside interpretive areas that attract visitors. They can be combined with or outfitted as roadside parks, viewpoints, heritage markers, pedestrian and bicycle facilities. These facilities provide another way to utilize context-sensitive and sustainable design.



Equestrian facilities located throughout northeastern Vanderburgh County

SUBAREA GOALS

PROFILE: Farmland Preservation Techniques

As the recommendations in the following chapter indicate, future development is proposed at the existing interchanges along I-69. In addition to accessibility or visibility, the concept behind this effort is to retain much of the existing agricultural land within the subarea. Although Vanderburgh County has an agricultural zoning district, there are also a number of other incentives that can be utilized to protect agricultural land if so desired. The following methods may require additional funding or management by local government agencies or a not-for-profit organization.

Transfer of Development Rights (TDR)

Transfer of Development Rights (TDR's) are voluntary agreements between senders and receivers, usually as a payment to the sender (farmer) and density bonus for the receiver (developer). In other words, a farmer relinquishes the right to develop his farmland to the county in exchange for a cash payment from the developer. In return for this payment, the county allows the developer to develop at a higher density than the existing zoning district permits. The density bonus would be determined by the county and the development would still need to be reviewed and approved at the higher density.

This program requires an administrator and detailed record keeping, but does not need funding to pay for the development rights. The administrator(s) only facilitate the transfer. The county holds the easement to the purchased development rights.

Purchase of Development Rights (PDR)

Purchase of Development Rights (PDR's) are voluntary agreements in which the rights to develop agricultural property are purchased from farmers by either local government, local land trust organizations, or similar organizations. The purchaser could:

- create guidelines to judge which properties to purchase,
- 2) determine future termination guidelines,
- 3) assess the land's value,
- create maintenance enforcement guidelines, and/or

5) procure funding for the purchase of development rights through taxes, donations, or other means.

Right-to-farm (RTF) Ordinance

A Right-to-Farm (RTF) ordinance is intended to relieve operating farmers from nuisance claims from new neighbors and developers, thereby insuring that farming operations are able to continue operation as long as the land/market permits. This ordinance can include:

- "Grandfathering" farm practices as pre-existing uses within zoning ordinances to aid in the relief of nuisance claims against them.
- 2) Requirements for realtors or developers to inform potential buyers of the neighboring farming operations and RTF Ordinance.
- 3) The establishment of a "grievance committee" to mediate disputes between neighboring uses.
- Levying of fines or damages resulting from vandalism or loss of livestock and/or domestic animals.

Agricultural TIF Districts

A TIF district is a financing mechanism in which taxes collected by local taxing districts (such as schools, townships, county, etc.) are frozen for a specific area where a new development project is occurring. The additional tax revenue generated due to the development, and subsequent development within the district, would be reinvested into the TIF district. This targeted revenue could be used to pay off debts and bonds or pay for additional necessary infrastructure. This technique can be beneficial for agricultural preservation by applying it to areas that are incurring agricultural business development. Some examples of development projects that could be considered for an agricultural TIF district would include large biofuel operations, grain processing and storage, or other businesses that are beneficial to the agricultural community. Through the use of agricultural TIF districts and reinvesting excess tax revenue in these areas, the county can increase the viability of farming, support the industry of agriculture, and support farmland preservation.

Chapter 4: Subarea Recommendations

SUBAREA FUTURE LAND USES

As noted previously, the Proposed (2025) Future Land Use Map in the 2004 Comprehensive Plan projects an increase in residential and industrial growth in the northeastern portion of the county along major corridors and thoroughfares. However, a majority of the land is planned to remain in agricultural use. The future land uses proposed in this Subarea Plan build on the 2004 Comprehensive Plan and specifically the 2025 Future Land Use Map.

The purpose of the following chapters is to provide recommendations to guide growth and development that could occur as a result of the I-69 Extension connecting to existing I-164. While economic market forces primarily dictate development location (and ultimately the level of economic success), it is also important to ensure that land use decisions are compatible with the plan, unless the benefit to the community from a proposal clearly overrides any inconsistencies with the plan.

Recommendations for this Subarea Plan reflect the community's vision as well as existing conditions in northeastern Vanderburgh County. Residents and property owners within the designated subarea, along with guidance from the Steering Committee, EMPO, and APC staff, were integral to the formation of the recommendations within this chapter. These recommendations reflect an effort to balance economic development needs with the desire to retain the rural character of the subarea. The designation of possible land uses centers on three nodes which coincide with existing and potential interchanges along 1-69.

As noted previously in this Subarea Plan's Introduction, INDOT's I-69 Planning Grant program provides city and county leaders with the opportunity and flexibility to examine, in greater detail, the impacts to the community as a result of the I-69 corridor. This plan anticipates potential growth and development in limited areas at the interchanges in an effort to retain the area's distinct rural character.

The future land use designations described in this section and illustrated on the following pages do not affect the current land uses, nor do they change the existing zoning. The purpose of these recommendations is to guide future development and lend predictability to businesses or residents seeking to invest at designated points along the I-69 corridor in northeastern Vanderburgh County. The designations listed below for the I-69 corridor are similar to those in the 2004 Comprehensive Plan with slight variations that respond to recent opportunities and/or input from community stakeholders.

Agriculture / Open Space

Agriculture includes land that supports crop production, livestock operations, and supporting agricultural operations such as equestrian stables. This land use designation may also support largelot single-family residential uses on farmland in wooded settings or adjacent to creeks. Increased economic development can come from leaving land in its undeveloped state or creating incentives in which agriculture can remain a viable land use. Agri-tourism could be promoted in these rural areas as it allows preservation, provides local food production, and sustainable economic advancement.

Open space can take the form of floodplains identified by the Federal Emergency Management Agency (FEMA), or recreational uses including parks, trails, or golf courses.

· Residential Mixed Use

This land use offers a mixture of housing types and small-scale neighborhood-serving commercial uses in close proximity to one another. Commercial development within these areas should be nonintrusive and compatible with surrounding residential uses. Examples of appropriate commercial uses include cafes, personal service establishments, and small professional offices. The diversity of housing types tends to be medium density (townhomes, duplexes, multi-family residential, and residential above retail) and offers an alternative to the traditional single-family and rural residential found in the subarea. The best development sites have good vehicular access, are connected to public water and sewer, have minimal slope, and are above the 100-year flood elevation.

Residential

Includes residential development such as traditional single-family detached housing in

subdivisions. This form of residential development should occur only where full public utility services exist or can be feasibly extended. These areas should also have good access to emergency services, schools, parks, and other public services.

• Commercial - Community

This land use designation is located at preferred nodes and is envisioned to serve neighborhood and community needs. It would be supported by the local population, have adequate vehicular, bike, and pedestrian access and include such uses as retail, professional offices, business services, restaurants, and agriculturally related sales and services. This type of commercial may be of a larger scale than that found within the residential mixed-use category.

• Commercial - Highway

This commercial designation is intended for high-visibility / high-traffic volume nodes such as those occurring at interstate interchanges. The development is typically characterized as medium to large scale, serving regional customers as well as local residents.

• Industrial / Business Center

designation includes industrial business parks supporting land uses such as manufacturing, wholesale, warehousing, distribution, light industrial, and flexible tenant spaces. New industrial development should be located in areas where full public utility services are readily available and that have a high level of access to transportation networks including rail and air. With appropriate buffers, some light industrial land uses may be incorporated into mixed-use development with higher intensity commercial land uses or in a campus-like setting. Access to quality communications such as cable, fiber optic, and broadband should be considered.

FUTURE LAND USES Agricultural / Open Space Commercial Residential Industrial / Business Park



The Subarea Future Land Use Map on page 41 illustrates the uses proposed along the I-69 (I-164) corridor. As discussed previously, the concept for future land uses focuses on the three interchange "nodes" (existing and proposed) and attempts to balance economic development, ecology, and quality of life for existing and future residents.

Additional Land Use Influences

It is important to maintain an awareness of the land management decisions made by other political entities. The recommendations for this Subarea Plan also considered the plans for growth and development to the north and east of Vanderburgh County. Like Evansville and Vanderburgh County, Warrick and Gibson County officials developed comprehensive plans in an effort to proactively address future development that could result from I-69. Because this subarea is directly adjacent to development plans in Warrick County, relevant recommendations in Warrick County's comprehensive plan update are summarized below.

Warrick County Comprehensive Plan Projections

Commercial land, occupied by retail/services, professional office uses, and industrial development is expected to increase between 2008 and 2030. Most of the projected commercial uses will be located around Elberfeld. If a north-south connector road extending from the S.R. 57/I-164 interchange to existing S.R. 57 north of I-64 is built in Warrick County, commercial growth could occur at the S.R. 57/I-164 interchange and along this new connector near Elberfeld.

The North Warrick Industrial Park along S.R. 57 north of I-64 has 234 acres of land available for future industrial businesses. As land is developed in the industrial park, consideration could be made to expand the industrial park to adjacent areas. If S.R. 57 is extended near Elberfeld, land along this highway could also be used for industrial uses.

A Tax Increment Financing (TIF) district for western Warrick County has been established that runs from the Warrick-Gibson County boundary on the north, south along the Vanderburgh/Warrick County line to Baseline Road.



Agricultural/Fores

THE SUBAREA NODES

As the analysis of the subarea revealed, Vanderburgh County offers a number of assets that could assist the county in encouraging investment within this plan's subarea. Convenient access to two major interstates and two state highways connecting the Midwestern cities of St. Louis, Louisville and Indianapolis are features desired by potential businesses. Community leaders and organizations such as the Economic Development Coalition of Southwest Indiana can seek out medical technology, advanced manufacturing or similar business types that provide a balance to the existing distribution and traditional manufacturing activities located nearby. The potential for future development should be directed to three nodes along I-69 as described below and illustrated on the following page.

By their very nature, these subarea nodes are for the most part, considered suitable for development. There is existing interstate and thoroughfare access and limited utilities at the S.R. 57 and Boonville-New Harmony Road interchanges. By targeting these nodes for future development, the intention is to retain much of the rural character and the agricultural uses in the remaining subarea.

The State Road 57 Node

This northern-most node of the I-69 corridor is also the gateway into Vanderburgh County. Although this plan stresses the importance of infill development and contiguous growth patterns, it is also important to plan for future growth centered around the S.R. 57 interchange. By developing a scenario that limits the development "footprint" to an area around the interchange, it is anticipated that the qualities that have made the surrounding rural landscape desirable for



increased residential development could be retained. The node at S.R. 57 can be a model for compact highway commercial development serving I-69 motorists, and could be developed under a concept that respects the natural beauty and preserves scenic views of area. Industrial development south of this node could complement the Vanderburgh Industrial Park (VIP) with a mix of innovative technology and light industrial uses based on potential concepts that:

- Encourage business/industrial growth that reflects stewardship of the county's resources;
- Focus on economic development efforts that rely on the long term, sustainable use of natural resources;
- Create a quality development pattern that reflects the importance of this interchange as a gateway to the community; and
- Build on entrepreneurial initiatives such as Innovation Pointe in downtown Evansville.

The Daylight Town Node

Future development within this node should respond the needs of Daylight residents, and reflect the scale, character, and intensity of the surrounding built and natural landscape. New residential development should be encouraged in the vicinity of the Daylight community as an alternative to consuming agricultural land and to take advantage of the existing infrastructure. Additional development considerations for this area could include:

- Daylight as a local "gateway" to natural and cultural destinations east and west along the Boonville-New Harmony Road;
- Small scale, mixed-use development at the Boonville-New Harmony Road interchange serving local residents; and/or
- Efficient development patterns that retain surrounding farmland, minimize utility extensions, and alleviate potential drainage problems.

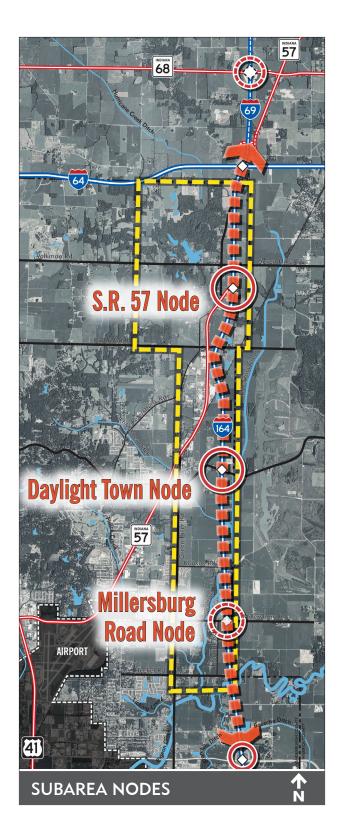
The Millersburg Road Node

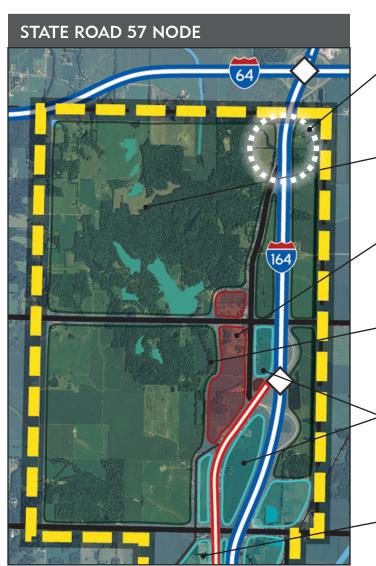
Future efforts within this node center on balancing existing and future development with the natural limitations represented by Bluegrass and Pigeon



creeks. Future development in this area will be dependent on the construction of a new Millersburg Road interchange with I-69 (I-164). As noted previously, although the project is desired by county and city officials, INDOT has only completed preliminary studies for this potential interchange, and it remains unfunded. Appropriate development opportunities or principles that could apply within this node include:

- Extension of the Pigeon Creek Greenway north into the subarea;
- Utilizing the Pigeon Creek corridor as a natural buffer between the proposed commercial development and existing residential development along Millersburg Road; and/or
- Compact commercial new and re-development east of the potential interchange.





See page 50 for continuation of map

County Gateway Feature

Partner with local stakeholders (e.g. Keep Evansville Beautiful, local artists) to develop gateway features based on local themes/ characteristics

Agriculture / Open Space

Continued rural residential development and small-scale farm operations that maintain rural viewsheds along the I-69 corridor

Commercial - Community and/or Highway

Commercial development reflective of the setting serving both local residential development and highway users; also secondary "gateway" to Vanderburgh County

Natural Corridors as Multi-use Paths

Contiguous riparian and/or multi-use corridors that do not impair drainage, preserve natural features, and connect to adjacent developments

Industrial / Business Center

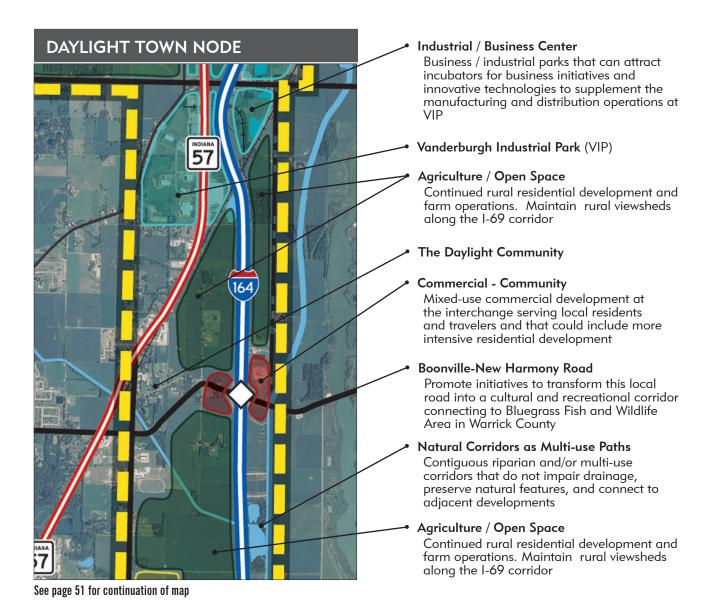
Business / industrial parks that can attract incubators for business initiatives and innovative technologies to supplement the manufacturing and distribution operations at VIP

Vanderburgh Industrial Park (VIP)













Agriculture / Open Space

Encourage existing agricultural uses and/ or open space with limited/low density residential development. Maintain rural viewsheds along the I-69 corridor

Residential - Low Intensity

Low impact residential development designed to conserve the riparian corridors and floodplain, and provide open space while not decreasing overall development densities. Maintain the riparian habitat of Bluegrass Creek as a buffer between residential and commercial development

Commercial - Highway

Traditional highway commercial uses at the proposed Millersburg Road interchange

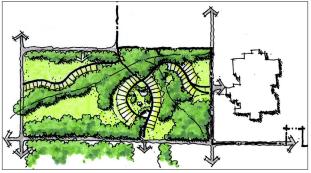
Agriculture / Open Space

Existing agricultural uses and/or open space in the low-lying areas between the two creeks. Limited/low impact residential development may be provided while maintaining visual and physical connections to open space.

Natural Corridors

Retain the wooded, riparian corridors in the floodplain and floodway and that help maintain the water quality and capacities of Bluegrass, Pigeon, and other creeks in the watershed. Provide multi-use connections (greenways) between land uses.





Example of a low intensity subdivision design that retains the same overall development density as a traditional subdivision but clusters the homes on smaller lots with common open space and riparian corridor buffers.

Transportation Plan

As noted previously in *Chapter 2*, there are a number of roadway improvements planned within the subarea. As with any planning effort, it is essential to consider the future transportation network of highways, local roads, sidewalks, and multi-use paths when proposing or making land use decisions. This final section of *Chapter 4* explores circulation issues as they relate to the previous recommendations outlined in this Subarea Plan. Many of these proposals mirror the transportation projects outlined in the 2004-2025 Comprehensive Plan.

Local Transportation Plans

As the adjacent graphic illustrates, Millersburg Road is one of the corridors considered for future enhancements. Preliminary plans include widening the roadway to four lanes from Oak Hill Road, east into Warrick County. In addition, the long term (and unfunded) effort is to construct an interchange at I-164. INDOT has conducted some preliminary studies at this location and have determined that "no fatal flaws were identified" with regards to the environmental requirements of that report¹. However, a number of environmental reports, engineering studies such as an Interchange Justification Report, and cost estimates would need to be undertaken prior to the start of any construction. County officials and the EMPO should continue ongoing discussions with INDOT for additional engineering studies to determine or justify the construction of an interchange at this location.

State Highway and Local Roadway Design

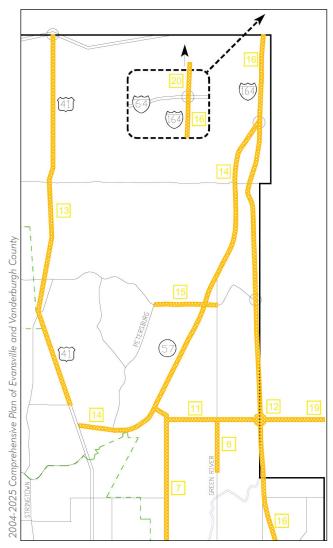
An Access Management Plan plays an integral role when making future development decisions along state highways, county roads, and primary thoroughfares that connect Evansville to the surrounding county. Uncontrolled points of access within close proximity to one another can decrease the efficiency of traffic flow and potentially reduce the existing and/or future

2007-2030 TRANSPORTATION PROJECTS Road Improvement New/Improved Interchange

economic viability along a corridor. It is important, when making land use decisions, to consider the effect on traffic operations along an entire corridor, rather than simply considering properties or proposals on a case-by-case basis. Two of the primary factors affecting such a scenario include:

- Traffic progression; and
- Inadequate spacing between intersections and access drives that can lead to vehicle queues extending back into the intersection/drive.

An Access Management Plan represents a proactive approach to minimizing the number of access points along a study corridor while also providing properly



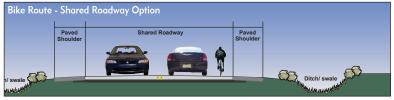
designed access point to serve future development. INDOT has created an Access Management Guide which provides access strategies along INDOT roadways. The EMPO has also developed access management standards that are based on INDOT's guide. These guidelines apply to those roadways that fall within the agency's jurisdiction.

Multi-modal Connectivity

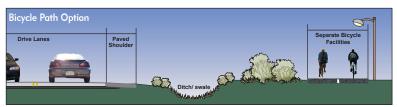
As noted previously in the Goals and Recommendations, providing alternative transportation options for motorists, bicyclists, and pedestrians is an important part of this Subarea Plan. Pedestrian connectivity is recommended within commercial areas as well as between residential and commercial areas. Providing residents with safe transportation choices can reduce the dependence on the automobile, and enhance recreational opportunities. The adjacent graphic

illustrates the importance of, and variety of ways to, integrate streets, sidewalks, and/or multi-use paths into a successful transportation corridor. Such a strategy is also an integral part of creating successful and vibrant mixed-use developments within the subarea.

1 Potential New Interchange - Project Review Summary # I-164-012 (VC)









Illustrations of a variety of bicycle and pedestrian travelways both on- and off-road.



Chapter 5: Additional Design Considerations



INTENT OF THE GUIDELINES

Ultimately, the purpose of this Subarea Plan is to provide recommendations fostering future development along the I-69 corridor that expresses the uniqueness of Evansville and Vanderburgh County. This chapter includes concepts to ensure development within the three Subarea Nodes is contextual, compatible, and attractive to residents, visitors, and potential businesses interested in locating to the county. In addition, these guidelines are intended to minimize negative impacts to the natural resources found along the corridor. These guidelines pertain directly to large-scale commercial and/or industrial land uses since such development will likely occur at these prominent interchanges.

Because these guidelines are descriptive in nature, they generally allow flexibility and creativity for determining appropriate solutions for specific sites. The following recommendations could be incorporated into covenants for new private development that encourages quality site and building design within the Subarea Nodes. The final section of this chapter addresses potential gateway elements or features within the I-69 right-of-way and/or public rights-of-way adjacent to the interstate corridor.

DEVELOPMENT GUIDELINE PRINCIPLES

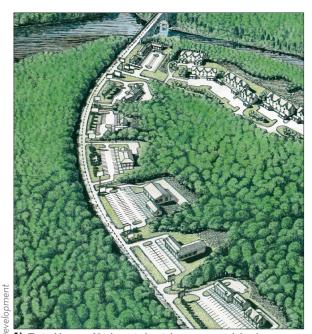
Vehicular Access

Light industrial development should be located on frontage roads or incorporated into larger industrial business parks. For development fronting on thoroughfares or frontage roads, cross-access

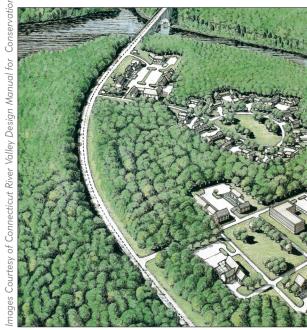


Frontage road development with screened parking

between parcels, and limited access to secondary entrances on cross-streets, can minimize congestion along secondary corridors that directly access the interstate interchanges.



1) Typical layout of highway industrial or commercial development



2) Clustered highway industrial or commercial development



Site Layout and Design

As illustrated in example "2)" below compact development patterns for large scale commercial and industrial business parks should include limited points of access. This reduces congestion on thoroughfares, minimizes conflict points, and reduces the need to extend expensive utility and roadway infrastructure.

Grading

Minimize grading and utilize the existing natural contours when siting new buildings and designing on-site drainage layouts. It is also important to select sites that do not require large amounts of fill to elevate the finish grade above the floodplain.

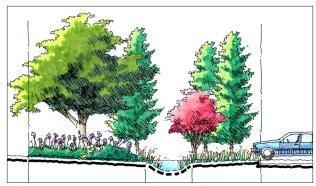
Parking Location and Design

Minimize parking areas by establishing maximum parking ratios and locating parking lots to the side or rear of structures. Use native plant material to screen parking from the interstate.

Sustainable Practices (Stormwater, Utility Extension)

When compatible, commercial, office, and light industrial uses should be clustered to minimize the extension/creation of utility and roadway infrastructure within the subarea nodes.

Bioswales incorporated into site design to assist with stormwater detention are another method in which to sensitively incorporate the natural landscape into new development. They can also serve as planted buffers between non-compatible land uses, visual screening between parking areas and adjacent rights-of-way, and shade paved surfaces to reduce ambient temperatures.



A landscaped bioswale drains and filters runoff from adjacent parking lot

Screening and Landscape Planting

The first option for new development should be to retain as much of the existing woodlands and other vegetation on a proposed site as possible. Although this may require additional design consideration, minimizing impacts to the natural landscape can reduce initial construction costs and long term maintenance costs for building tenants. Native plant materials should be used to enhance landscapes, shade paved surfaces to reduce ambient temperatures, and screen mechanical systems, outdoor storage areas, frontage roads, and parking areas from the interstate.

A 50-foot greenbelt is recommended between the I-69 right-of-way and new developments. Such a natural greenspace should include native plantings that, when properly planted and established, require little to no water and minimal long term maintenance.

Architectural Design

Buildings should have facade details that front both the interstate and other thoroughfares or internal drives. Buildings should include high-quality, sustainable materials or colors that do not detract from the natural landscape. Long or expansive facades should include visual relief such as recesses and projections to add visual interest to the building.

Signage Size, Location, and Design

Signage, including billboard advertisements within the subarea nodes should be limited in number and size. This will help in maintaining uninterrupted viewsheds and minimizing illumination for signage. Entry signs can also play an important part in defining the image of a development.



Ground-mounted entry signage for industrial development



Ground-mounted, multi-tenant sign with architectural detailing



INDUSTRIAL-BUSINESS PARK DEVELOPMENT

Intent:

To encourage quality master-planned industrial and business parks with multi-modal access within the S.R. 57 Subarea Node.

Characteristics:

Industrial or business park development should address access management principles, parcel size, site orientation, materials, streetscape treatments, screening of parking and loading facilities, shared stormwater detention facilities, and the use of sustainable stormwater management practices which can yield long term cost savings.

Recommendations:

- Create a master plan to accommodate multiple property owners and development that may be phased.
- Capitalize on existing rail access.
- Design shared stormwater detention facilities as a site amenity.
- Consider developing guidelines that address signage, lighting, screening, landscaping, and architectural features.
- Encourage sustainable building or site design principles as part of large parcel development.
- Manage access from public roads.



Site layout for office buildings designed to enhance and preserve wetlands and open space as shared amenities



Combination of landscaping, water feature, and a constructed wetland creates an identifiable image for this office park and an amenity for employees



Building constructed of durable materials with architectural detail, decorative lighting, screened loading docks, and landscaping



Ground-mounted entry signage is easily identifiable and complemented with landscaping



COMMERCIAL DEVELOPMENT

Intent:

To encourage quality commercial development adjacent to interchanges in the designated Subarea Nodes that serve travelers and local residents.

Characteristics:

Commercial development should address access management principles, parcel size, site orientation, durable authentic materials, the streetscape, screening of parking and loading areas, pedestrian and cyclist amenities.

Recommendations:

- Consider developing guidelines around a unifying theme that address signage, lighting, landscaping, building materials and architectural elements.
- Incorporate amenities that encourage pedestrian and bicycle access.
- Promote a range or mix of uses that encourage activity 24 hours a day, 7 days a week.
- Use the development as an opportunity to promote sustainable building and site design principles which can yield long term cost savings.
- Manage access from public roads and between developments to minimize traffic congestion.



Commercial development incorporating a plaza, pedestrian-scaled arcade with awnings, building recesses and projections for visual interest, large windows for natural light, and landscaping



Gas station constructed of durable building materials, incorporates recessed lighting to minimize light pollution, and has a pitched roof to better blend with the adjacent development



Fast food restaurant that incorporates design elements such as landscaping, screened outdoor storage/refuse area, durable building materials, and architectural detailing on all four sides of the building



A prominent cornice at the roofline, large windows, building recesses and projections, and building materials that include brick to add visual interest



"LOW IMPACT" DEVELOPMENT

Intent:

To encourage development adjacent to existing communities resulting in the preservation of open space, farmland, natural features, and critical habitats.

Characteristics:

Development takes on a compact form as new land uses are located within or on the edges of existing communities. This deliberate siting reduces sprawl and leap-frog type growth and allows decision makers to most efficiently commit taxpayer dollars for the extension of roads, infrastructure, and public services.

Recommendations:

- Minimize grading and other impacts to the natural landscape. Use buffers where necessary.
- Provide access to the natural features to encourage public awareness
- Guide new development into areas where utilities and public services currently exist.
- Incorporate sustainable natural systems (Best Management Practices - BMPs) into new development to control stormwater



Parking lot rain gardens help control and filter stormwater runoff



Tree canopies reduce the heat island effect from paved and built areas



Sensitive integration of development into a natural wetland setting



Natural building materials blend well with native landscaping



GATEWAY CONSIDERATIONS

explores opportunities to final section incorporate design elements within or adjacent to the I-69 corridor. This concept, referred to as context-sensitive design, strives to integrate the interstate system into the landscape of the county. Interstate components such as bridges, retaining and sound walls, lighting, and landscaping represent opportunities to incorporate Context Sensitive Design solutions along the interstate while also maintaining and enhancing the existing character of northeastern Vanderburgh County. Although there are currently no plans to update the existing I-164 corridor, some of these recommendations could be incorporated as part of future interstate improvements. As noted at the conclusion of this section, the Keep Evansville Beautiful (KEB) organization could be an integral stakeholder in developing gateway features along I-69. It is also important to partner with INDOT, to incorporate unique enhancements within or along the interstate right-of-way.

Gateways Elements

Gateway features can delineate and announce one's arrival into a region, city, neighborhood, or unique public place. Gateways should present a memorable experience for motorists traveling along



Partner with local stakeholders such as Keep Evansville Beautiful to develop gateway features based on local themes/characteristics

the interstate corridor through the county. Gateway features could include unique structural elements, landscape plantings, or special/accent lighting among other elements. These features can not only shape a visitor's first impression of an area, but can also reflect the unique features and character of the community. The scale of these gateways should relate to the scale and speed of traffic along the interstate. In this example, Evansville and Vanderburgh County represent a "gateway" to the State of Indiana from the south while the northeastern subarea serves as a gateway to Vanderburgh County for motorists traveling from the north on I-69.







Various gateway elements combining special signage and accent lighting



Monumental gateway feature along I-65 - Columbus, Indiana



Signage

The use of welcome signs is probably one of the most common ways to identify a community. Signs can be as simple as the standard metal reflective interstate highway signs within the right-of-way or as elaborate as billboard signs placed outside of the right-of-way. Billboards are generally not desired along scenic roadways as they may negatively impact scenic views and the character of the area. However, there are innovative ways to create signs so that they can be public art and can also be reflective of the area.

Landscape Features

Landscape treatments should be integral components of any interstate corridor improvement project. INDOT keeps the edges of the right-of-way mowed, but it is up to the local jurisdiction to partner with INDOT to provide enhanced landscape treatments to designate special areas. The special plantings of trees, shrubs, and wildflowers may be parallel to the roadway or within the interchanges. The intent is to integrate landscaping along interstate rights-of-way that enhances and complements the adjacent landscape. Landscaping may also be used to enhance and frame views, as well as screen unsightly or unwanted areas.





Landscape treatments along edges and medians that add visual interest and minimize on-going maintenance costs

Work within any interstate right-of-way must be approved by INDOT officials. It is critical to partner with INDOT officials to ensure that landscape or gateway treatments within the right-of-way meet established guidelines. According to INDOT:

- Landscaping and other scenic beautification landscape projects should enhance the aesthetic or ecological resources along, or at points of access to, transportation facilities and corridors.
- Projects must be part of a comprehensive strategy for the area in which the improvement will be made. Projects should significantly advance state and local tourism, recreation, or community development efforts.
- A proposed landscaping effort should be comprehensive in nature and applicants must demonstrate local long-term capacity to maintain and/or operate any improvements.
- Funds will not be used for routine or incidental maintenance or erosion control activities.

Public Art

The I-69 corridor's expansive right-of-way provides ample opportunity to incorporate public art along its edges and within the spaces at interchanges. This is especially true at the S.R. 57 interchange which offers ample open space to incorporate appropriate gateway features. Although not all areas along the corridor are physically accessible, the right-of-way provides numerous opportunities for motorists to visually



A pedestrian bridge crossing over an interstate that also serves as a piece of art

access design elements in the landscape. Public art energizes the somewhat sterile interstate corridor, and should reflect the rural character within the subarea. Integral features such as a niche in а retaining detail wall, guardrail, lighting system could become features design





Colored glass accents incorporated into sound wall / barrier

along the I-69 corridor and associated interchanges. Highlighting elements of the infrastructure, landscaping, or stormwater systems as expressive public art, rather than purely engineered solutions hidden from public view, provides one more opportunity to showcase the unique features and local talent inherent in the county.

Enhanced lighting or unique material color and textures could be incorporated at overpass locations to inform motorists traveling along I-69 that they are passing through this rural section of Vanderburgh County. Where appropriate, pedestrian and bicycle accommodations at each of the interchanges should be incorporated to promote circulation under or through the interstate corridor.

Existing Themes

The rich history of Evansville and Vanderburgh County offers a number of opportunities to celebrate the community's cultural or historic past. The iconic Four Freedoms Monument located on the riverfront,





The Four Freedoms Monument along the Evansville riverfront and a leaf sculpture proposed along the Lloyd Expressway.

is just one of many examples that could be used as an initial concept for I-69 gateway features. A more contemporary example that could serve as a theme is the Shirley James Gateway Plaza and sculpture.

The Shirley James Gateway Plaza is located at the Mead Johnson Trailhead along the Pigeon Creek Greenway Passage south of the Lloyd Expressway. The plaza is named in honor of Mrs. Shirley James, who was dedicated to making the Pigeon Creek Greenway Passage a reality. Installed in December 2009, the focal point of the plaza includes six stainless steel and wire mesh structures. These structures depict how various forms of transportation made Evansville into a commercial center.

The Keep Evansville Beautiful (KEB) organization is also working with the city and other stakeholders to develop gateway features in Evansville. One such initiative currently centers on enlisting local artists to develop large-scale artwork based on the area's hardwood industry. KEB is also working with stakeholders near the S.R. 57 / U.S. 41 intersection, and the airport entrance to enhance these highly-visible points along U.S. 41. City and county officials should partner and/or coordinate with KEB and their efforts to create gateway experiences into the community. Collectively, this would create a unifying theme along Evansville's network of major streets, and could potentially be extended to the outlying county corridors - including the I-69 corridor.



The Shirley James sculpture illustrating the different forms of transportation that shaped Evansville.



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