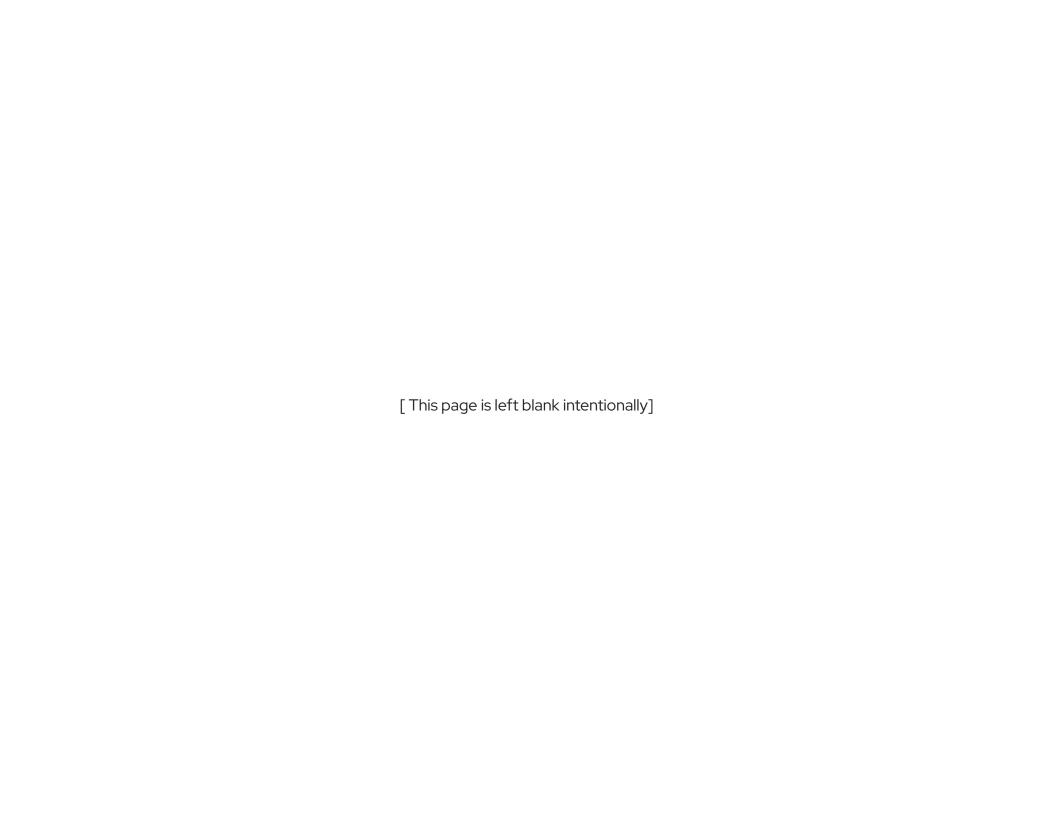
INTEGRATE I-69 CORRIDOR STUDY



MADISON COUNTY

I N D I A N A



Resolution 15 - 2024

ADOPTION OF Integrate I-69 Corridor Study

WHEREAS, each urbanized area with a population of 50,000 or more must designate a metropolitan planning organization (MPO) to carry out the transportation planning processes required for participating in the programs of the Federal Highway Administration and the Federal Transit Administration; and

WHEREAS, the Governor has designated the Madison County Council of Governments (MCCOG) as the MPO for the Anderson Metropolitan Planning Area encompassing all of Madison County, Indiana, certain areas around Daleville, Indiana in Delaware County, and certain areas around Fortville, Indiana in Hancock County; and

WHEREAS, the MCCOG must ensure that relevant transportation plans are maintained through a process that is comprehensive, cooperative, and coordinated; and

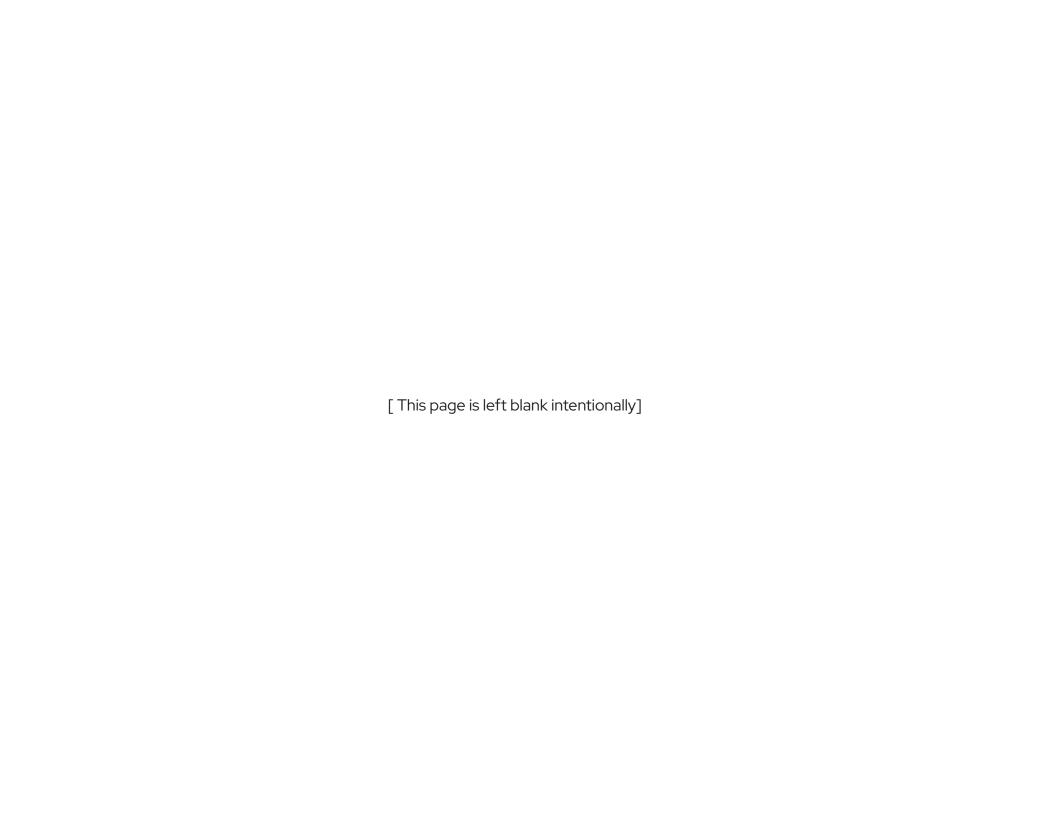
WHEREAS, the MCCOG staff has prepared a corridor study examining future developments along Interstate 69 (I-69) between Exits 214 and 226; and

WHEREAS, the MCCOG staff has consulted with representatives of INDOT, Madison County, the City of Anderson, the Town of Pendleton, the Town of Ingalls, and the Town of Lapel in the drafting of the corridor study; and

NOW, THEREFORE, BE IT RESOLVED THAT the MCCOG hereby certifies that the plans, program, and process of its transportation planning effort complies with Title 23 of the Code of Federal Regulations, Part 450.324, as revised on November 15, 2021, in the Infrastructure Investment and Jobs Act (IIJA), also known as the Bipartisan Infrastructure Law (BIL) and approves the Integrate I-69 Corridor Study.

ADOPTED by the Madison County Council of Governments Policy Committee, this 1st day of August, 2024.

Madison County Council of Governments



Acknowledgements

For clarification or any additional information, please contact the Heartland Metropolitan Planning Organization:

Jerrold Bridges, AICP, Executive Director

739 Main Street – Anderson, IN – 46016

Phone: (765) 641.9482 Fax: (765) 641.9486

All information contained herein is expressly the property of the the Heartland Metropolitan Planning Organization and the Indiana Department of Transportation. Should any or all of this publication be duplicated elsewhere, we request appropriate attribution for such usage.

Project Staff

John Lavine, PLA –
Project Manager
Ralph M Holmes III, AICP –
Principal Planner/Designer
Juli Kurnos –
Senior Planner/Designer
Annabeth Butler –
Planner & Editor
Hasinee Atigala –
Urban Planning Intern
Jesse Coakley –
Landscape Design Intern
Gabby Johnson –
Landscape Design Intern

Steering Committee

Brandon Burgoa, INDOT Statewide Bicycle Pedestrian Coordinator

Clayton Whitson, Madison County Chamber of Commerce CEO/President

Denise McKee, Town of Pendleton Assistant Planning Director

Hannah Urbanski, Town of Pendleton Planning Director

Jessica Bastin, Madison County Principal Engineer

Larry Strange, Madison County Planning Department Executive Director

Matt House, City of Anderson Engineer

Mike MacNeill, INDOT Greenfield District Traffic Engineer

Nathan Sturdevant, INDOT Emerging Mobility Director

Nathaniel Shellhamer, INDOT Senior Traffic Mobility Engineer

Neil Stevenson, Town of Ingalls Manager/Director of Planning & Development

Oksana Polhuy, Town of Lapel Planning Director

Scott Reske, Town of Pendleton Manager Special thanks to the City of Anderson, Town of Pendleton, Town of Ingalls, Town of Lapel, Madison County, and the Indiana Department of Transportation for their insightful discussions and ideas provided during the planning process. Their continual support helped create the framework necessary to complete the Integrate I-69 Corridor Study.

















[This page is left blank intentionally]

Table of Contents

Section A: Executive Summary	1
Section B: Introduction	5
Section C: Existing Conditions	11
Section D: Funding & Financing	37
Section E: Vision & Key Goals	43
Section F: Minimum Standards	57
Section G: Implementation & Phasing	103
Section H: Appendices	109





Study Summary

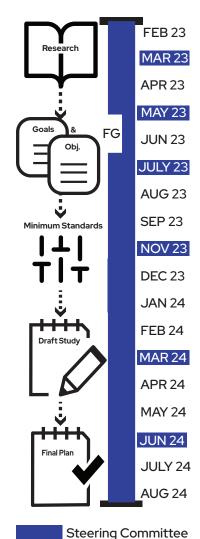
The Integrate I-69 Corridor Study provides proactive and holistic planning measures for the future of the Interstate 69 (I-69) corridor from Exit 226 in the City of Anderson to Exit 214 just before the Madison County/Hamilton County line. The study area includes the interstate right-of-way* as well as a 1-mile offset, which includes the jurisdictions of the Indiana Department of Transportation (INDOT), unincorporated Madison County, City of Anderson, Town of Pendleton, Town of Ingalls, and Town of Lapel.

A steering committee comprised of representatives from each of these jurisdictions guided the study's momentum, while the Heartland Metropolitan Planning Organization (MPO) coordinated the plan's development. The Integrate I-69 Corridor Study was driven by the vision statement:

"Embracing the collective spirit and success of the historic Interurban rail system that connected the State of Indiana in the early 20th century, the Interstate 69 corridor will connect Madison County's communities through a cohesive identity, balanced growth, **multi-modal transportation**, and sustainable development into the future."

*NOTE: Key terms are noted in bold. For further reading, see Appendix 3: Key Terms on p. 114-115.

Development Process



Steering Committee

MAY-JUN 23 Focus Groups

- 1: Administration & Sense of Place
- 2: Land Use & Economic Development
- 3: Transportation & Sustainability

Figure 1

Guiding Principles

The Integrate I-69 Corridor Study strives to follow all Federal Highway Administration (FHWA) goals for transportation planning in metropolitan areas as outlined in the **Infrastructure Investment and Jobs Act (IIJA)** and criteria outlined by Smart Growth America as sound planning principles for sustainable community growth into the future. The FHWA goals are:

- Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency.
- Increase the safety of the transportation system for motorized and non-motorized users.
- Increase the security of the transportation system for motorized and non-motorized users.
- Increase the accessibility of and mobility options available to people and for freight.
- Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth, housing, and economic development patterns.

- Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight.
- Promote efficient system management and operation.
- Emphasize the preservation of the existing transportation system.
- Improve the resiliency and reliability of the transportation system and reduce or mitigate stormwater impacts of surface transportation.
- · Enhance travel and tourism.

Smart Growth Principles

The Smart Growth America planning principles this document strives to achieve:

- Encourage community and stakeholder collaboration in development decisions.
- Make development decisions predictable, fair, and cost-effective.
- Strengthen and direct development towards existing communities.
- Foster distinctive, attractive communities with a strong sense of place.
- Create a wide range of housing opportunities and choices.
- Create walkable neighborhoods.
- Take advantage of compact building design.
- Preserve open spaces, farmlands, and critical environmental areas.
- Have a mix of land uses.
- Provide a variety of transportation choices.

These planning principles are the foundations of the study's goals and objectives. The goals and objectives are divided into six focus areas:

- Transportation
 (5 goals, 25 objectives)
- Administration
 (2 goals, 7 objectives)
- Land Use
 (5 goals, 19 objectives)
- Economic Development (4 goals, 16 objectives)
- Sense of Place (5 goals, 18 objectives)
- Sustainability
 (8 goals, 33 objectives)

There are 29 topics covered by the **minimum standards** under 5 of the 6 above focus areas. The minimum standards are divided into the following focus areas:

- Transportation (10 minimum standards)
- Administration (1 minimum standard)
- Land Use (2 minimum standards)
- Sense of Place (8 minimum standards)
- Sustainability

 (8 minimum standards)

Next Steps

The Integrate I-69 Corridor Study is intended to proactively determine future needs of the corridor while meeting present needs. Therefore, decision makers within the corridor's jurisdictions should actively coordinate to implement and maintain the study's goals and objectives, which will ensure the study is kept alive. This study contains an interlocal agreement Memorandum of Understanding (MoU), an intergovernmental agreement MoU, and recommended minimum standards to promote lasting multijurisdictional collaboration and establish a cohesive sense of place for the whole corridor moving forward.

The study's goals and objectives recommend focused, measurable outcomes for each jurisdiction to strive towards and the Implementation & Phasing chapter helps actualize the goals and objectives, even if the priorities for the corridor change over time. The Implementation & Phasing chapter contains a project list broken down into seqments according to different areas of the corridor, because each seqment is controlled by different jurisdictions and they each have different priorities and capabilities for changing elements of the corridor. Ultimately, the municipal jurisdictions within the study area must adopt the Integrate I-69 Corridor Study by resolution, and execute the interlocal agreement MoU with each jurisdiction within the study area.







Plan Purpose

Interstate 69 (I-69) is a major interstate highway connecting several Madison County communities to each other and to larger metropolitan areas throughout the state, including but not limited to the City of Indianapolis, City of Muncie, and City of Fort Wayne. The Indianapolis metropolitan area is continuing to grow, which will cultivate new opportunities and challenges for Madison County's communities. Furthermore, Madison County has prioritized maintaining and developing the I-69 corridor to capitalize on the growth traveling down the corridor from the Indianapolis metropolitan area.

The Integrate I-69 Corridor Study is intended to improve decision-making and coordination across multiple jurisdictions within the study area by reporting on the corridor's existing conditions and challenges then proposing potential solutions. This corridor study also includes a proposed interlocal Memorandum of Understanding (MoU) and minimum standards to promote continued multijurisdictional coordination after the study is completed. The MoU and minimum standards will help establish a shared sense of identity that both celebrates and connects the unique communities located along the corridor through both the natural and built environments.



Love's Truck Stop at Exit 214 interchange

Study Area Boundaries

The study area starts at Exit 214 and extends to Exit 226 with a 1-mile offset on either side, including State Road (SR) 38 and westbound to SR 13 to the 67th Street extension from County Road (CR) 400 West in Anderson. The communities located along the corridor include the City of Anderson, Town of Ingalls, Town of Lapel, Town of Pendleton, and unincorporated areas of Madison County. The study area is divided into three segments, because each segment contains unique communities with various goals for the future.

Segment 1 stretches from Exit 214 to Exit 219 and includes portions of unincorporated Madison County, Lapel, Ingalls, and part of Pendleton. Segment 2 stretches from Exit 219 to Exit 222 and includes parts of Pendleton, Anderson, and unincorporated Madison County. Segment 3 stretches from Exit 222 to Exit 226 and only includes parts of Anderson and unincorporated Madison County. The Indiana Department of Transportation (INDOT) has jurisdiction over all state-owned facilities in each segment of the study area.

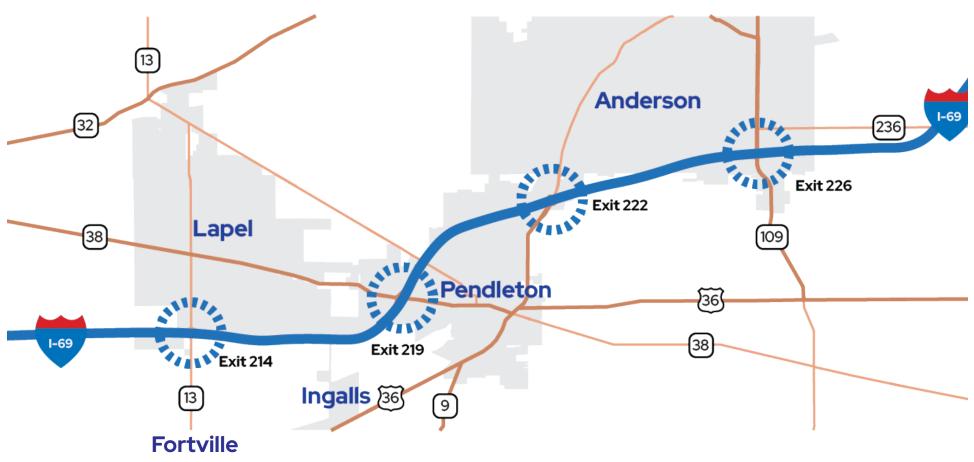


Figure 2

Steering Committee

The steering committee was composed of members from each of the study area's communities as well as INDOT. The steering committee gathered periodically during the study development process. Meetings were held in person, but the planning team provided a link for members to attend digitally. Moreover, the planning team provided all committee members with a link to a digital whiteboard where material presented and discussed during meetings could be viewed as well as revisited between meetings.

Meetings were discussion-based to gather as much input from the steering committee as possible. The first meeting was held on March 14th, 2023 to present the study's purpose while addressing a few example studies. The committee then discussed issues they wanted to see addressed in the corridor study and their desired futures for their respective jurisdictions.

The second meeting was held on May 11th, 2023, and focused on presenting research to the committee about various topics that the study would address. The committee also offered guidance for the minimum standards and the vision statement.

The third meeting was held on July 13th, 2023, and the committee was presented with findings of the study area's existing conditions and the first draft of the vision statement. The meeting ended with a discussion about possible solutions to establish a cohesive sense of place throughout the corridor using design elements.

The fourth meeting took place on October 19th, 2023, and the committee was presented with the second draft of the vision statement, then they were updated on the study's progress. The meeting concluded with a discussion about goals, objectives, and minimum standards.

The fifth meeting took place on April 30th, 2024, and the committee was presented with the final vision statement, updates to the study's progress, an overview of the draft goals and objectives, the draft minimum standards, and the draft MoUs. There were also discussions about the project list, next steps, and any other comments the committee members had to share before reading the full draft study. A link to the draft study was provided to committee members to read before the next meeting.

The sixth and final meeting took place on June 24th, 2024, and committee members were presented with draft pages of the study, as well as discussed how the document would be adopted. Committee members offered valuable feedback about the study's content to be incorporated into the final draft.

In between meetings three and four, separate meetings were held with each of the municipalities within the study area to collect information about their desired future land uses for their respective jurisdictions. A mapping exercise was conducted by the Integrate I-69 Corridor Study planning team with each municipality's planning department to evaluate their desired future land uses in the following categories: residential, industrial, commercial, mixed-use, and public open space. For more information about the findings of these meetings, see Growth Projections on p. 24.

In between meetings four and five, three focus group meetings were held to gather input about the draft goals. The focus groups were intended to allow each of the study's six focus areas to be discussed by steering committee members in detail. Two focus areas were discussed in each focus group meeting. The first focus group discussed the Administrative and Sense of Place goals, the second focus aroup discussed the Land Use and Economic Development goals, and the third focus group discussed the Transportation and **Sustainability** goals. Valuable discussions were had in each focus group meeting that further guided the planning team in establishing the study's goals and objectives.

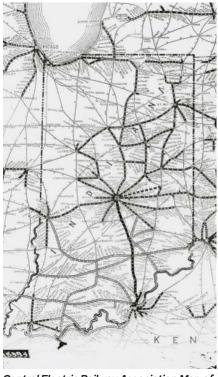


Steering committee meeting

Vision Statement

"Embracing the collective spirit and success of the historic Interurban rail system that connected the State of Indiana in the early 20th century, the Interstate 69 corridor will connect Madison County's communities through a cohesive identity, balanced growth, multi-modal transportation, and sustainable development into the future."

This statement guided the formation of the study's goals, objectives, and minimum standards. Furthermore. this statement defines how the steering committee values the legacy of the Interurban rail system and how this legacy will shape development decisions about the I-69 corridor moving forward. The Interurban rail system established Madison County as a destination for both transit travel and commerce in the early 20th century, and the steering committee believes that the I-69 corridor could have a similar, if not greater, effect on the county and the larger region.



Central Electric Railway Association Map of Interurban Railways



West Side of Exit 214

I-69 is a vital part of Madison County's identity because it connects many of the county's communities and offers various opportunities for growth; however, this growth must be balanced and sustainable to benefit all the communities within the study area. Establishing a cohesive identity for the Integrate I-69 Corridor Study area while implementing intentional development strategies will help prepare for growth projected to occur along the corridor and manifest the legacy of the Interurban rail system.

Focus Areas Overview

The Integrate I-69 Corridor Study's goals and objectives are divided into six focus areas to equip decision makers with specific strategies for planning the I-69 corridor's future. The Transportation focus area provides proactive measures for addressing roadway safety, aesthetics, road connectivity, and multi-modal transportation before they compound into larger issues as the corridor continues growing. The Administration focus area furthers coordination between each jurisdiction within the study area and addresses funding opportunities and strategies for proposed projects. The Land Use focus area advocates for utilizing responsible land use practices to ensure that the corridor is sustainable and developed in a coordinated manner. The Economic Development focus area ensures that the communities within the study area experience increased and appropriate economic growth. The Sense of Place focus area supports establishing a cohesive sense of place for the whole corridor through both the built and natural environments while maintaining the individual identities of the communities along the corridor. The Sustainability focus area advocates for improving the natural environment, preserving existing natural resources, increasing renewable energy usage within the corridor, and minimizing the impact of development on both the natural and built environments.

Relevant Planning Documents

Due to the multijurisdictional nature of the study area, there are many existing documents and plans that are relevant to consider while developing the Integrate I-69 Corridor Study. Each municipality within the study area abides by their own ordinances based on their own unique comprehensive plans, and some communities have their own transportation plans. Planning documents relevant to the Integrate I-69 Corridor Study's development include the:

- 2022-2026 TIP (2022)
- 2050 inMotion MTP (2022)
- Anderson Code of Ordinances (2019)
- Anderson SR 9 / Scatterfield Non-Motorized Safety Study (2019)
- Forward Madison County 2035 Comprehensive Plan (2020)
- Ingalls Unified Development Ordinance (2006)
- Ingalls Recreation Zone Improvement Plan (2022)
- Ingalls Bicycle and Pedestrian Master Plan (2023)
- Lapel Comprehensive Plan (2021)
- Pendleton Bicycle/Pedestrian Plan (2017)
- Pendleton Comprehensive Plan (2018)
- Pendleton Exit 219 Quadrant Plan (2021)
- Pendleton Unified Development Ordinance (2023)
- Protect 2030 (2023)
- State Street Corridor Study (2015)

Historical Background

In 1887, the first natural gas wells were discovered and drilled in Madison County. There was an abundance of natural gas offering cheap energy, which led to the Gas Boom. The Gas Boom led to exponential growth in both the county's population and wealth until the early 1920s. The second generation of industrialization began in the 1920s, and even though the gas economy declined, the automotive industry surged with manufacturing employment opportunities. As more manufacturing jobs became available, railway companies moved into Madison County to capitalize on the increased need for public transit.

The Interurban was an electric railway system offering frequent high-speed intercity and statewide service. Indiana's first interurban was the Union Traction Company headquartered in the City of Anderson and first connected Anderson to the City of Alexandria in 1897. The Union Traction Company Interurban soon stretched to larger surrounding cities including Indianapolis, Muncie, and Kokomo. The Interurban was the primary method of public transit connecting Madison County's communities to each other and the rest of the state until the early 1940s, which led to the Interurban becoming a source of pride and identity for Madison County residents.

Even though both the Interurban transit service and automotive manufacturing operations declined in the mid- to late-20th century, I-69 represents the legacy of rapid transit connecting Madison County's communities to each other and the rest of the State of Indiana. In addition, despite the automotive industry's decline throughout the county, there are still various manufacturing operations located along the I-69 corridor and other opportunities for both economic and transit development.



Indiana Union Traction #135, Alexandria City Car



Delco-Remy Plants in Anderson, IN





Introduction

This chapter contains all relevant, available information for understanding the existing conditions throughout the I-69 corridor. This information establishes a baseline for stakeholder conversations, goals and objectives formation, and phased implementation. The I-69 corridor serves many purposes, including but not limited to, ensuring reliable transportation, promoting economic development, and demonstrating the identity of Madison County as well as its individual communities. It is essential to evaluate the corridor holistically to effectively plan development and maintain existing resources where desired.



Intersection of South Scatterfield Road and East 56th Street

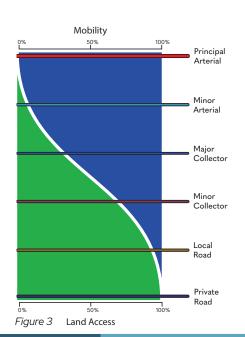
Transportation

There are 251 miles of roadway within the Integrate I-69 Corridor Study area. I-69 itself is owned and maintained by INDOT. The I-69 corridor contains 231.66 lane miles of roadway, 19.33 lane miles of which is owned and maintained by INDOT.

Even though I-69 serves many purposes, its main function is transporting goods, services, and people. I-69 is forecasted to experience growth moving up the corridor from the Indianapolis metropolitan area out to 2035, and new traffic patterns are already emerging. More specifically, the I-69 corridor pattern is expected to escalate as Madison County and the Indianapolis metropolitan area become more dependent on one another. Motor vehicle travel is the dominant mobility option for the Integrate I-69 Corridor Study area; however, there are limited opportunities for transit, rail, and bicycle/pedestrian travel. This section analyzes existing traffic patterns and future impacts on the corridor study area.

SR 9, SR 109, SR 38, SR 13, and SR 67 are the **Principal Arterial** roads within the study area consisting of 19.05 lane miles of roads. These lane miles are evenly distributed between 2- and 4-lane facilities with the 4-lane configuration varying between pavement marking, curbed median,

or grade separation. Principal Arterials within municipal boundaries have curbs with some exceptions, including SR 13 north of I-69, SR 9/67 from US 36 to I-69, and SR 109 south of I-69; however, these facilities will be upgraded by INDOT in the coming decade. INDOT is responsible for maintaining these roads as well as operating and maintaining all the 4-way-stop control lights at intersections along these roads in addition to the I-69 entrance and exit ramps. There are 212.33 lane miles of non-INDOT-controlled roads within the study area, which the municipal street departments responsible for maintaining in their respective jurisdictions.



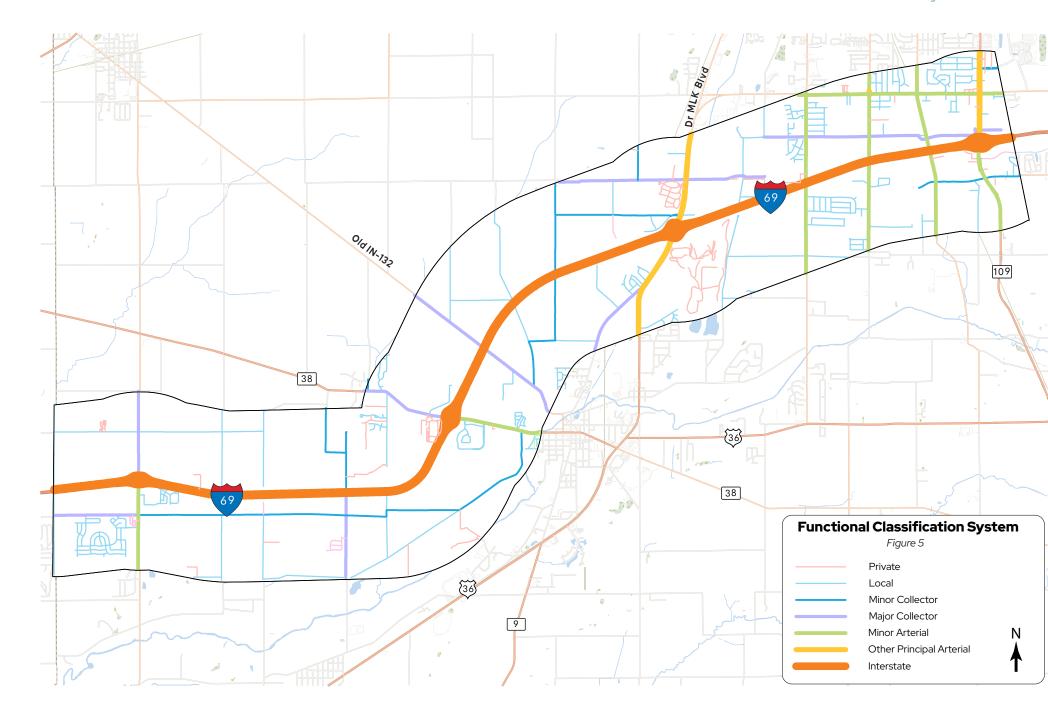
Federally Funded Projects

Transportation improvement programs are publicly available lists of all transportation projects expected to be funded within five years. The State Transportation Improvement Program (STIP) is INDOT's respective program, and the Transportation Improvement Program (TIP) is the Heartland Metropolitan Planning Organization's (MPO's) respective program. INDOT maintains the STIP, which includes all projects awarded by all MPOs and any direct awards by INDOT or the Federal Transit Administration (FTA).

Direct awards by INDOT to the municipalities within the Integrate I-69 Corridor Study area are made through an Open Call for Projects that usually occurs at least once per year. As of writing this study in spring 2024, there are currently no active INDOT construction projects within the study area, but there are 12 programmed projects that are scheduled to be constructed by 2029.

DES#	Project Description
2100092	CR 800 South (136th Street) Corridor Improvement Project: Phase 1, Atlantic Road (East CR 168 - Hamilton-Madison County Line) to SR 13 (CR 900 West/Madison Street) [includes PE Phases 1 & 2, RW & CN Phase 1 only]
2101290	CR 800 South (136th Street) Corridor Improvement Project: Phase 2 , Intersection Improvement With Roundabout @ Atlantic Road (East CR 168 – Hamilton-Madison County Line)
1592299	67th Street Extension Project: Layton Road (CR 400 West) to SR 38 (PE Phase) & 67th Street Extension Project: Phase 1, Layton Road (CR 400 West) to .13 miles West of Foster Branch Ditch (RW & CN Phases)
1900171	SR 13 @ CR 800 South (New Signal Installation)
2001814	Pendleton Business Park Trail: Phase 4, South Side of Pioneer Trace to State Street (Old SR 38) Along East Side of Heritage Way
2001815	Pendleton Business Park Trail: Phase 5, West Side of Enterprise Drive to East Side of Heritage Way (Includes Pedestrian Crosswalks)
2000170	I-69 NB Bridge Over Old SR 109/Columbus Avenue
2000568	SR 13, I-69 to .93 Miles South of SR 32 East
2000584	SR 109, SR 38 to I-69 (HMA Overlay, Preventative Maintenance)
2000597	SR 13, US 36 to I-69 (HMA Overlay, Preventative Maintenance)
2002125	SR 13, US 36 to I-69 (Bridge Painting)

Figure 4



Modes of Transportation

Motor vehicle travel is the dominant mode of transportation within the Integrate I-69 Corridor Study area like the rest of Madison County. Unfortunately, walking, cycling, and riding transit are not viable options within the study area due to lacking infrastructure. The following passages detail the existing travel patterns and available modes of transportation within the study area.



Riders board their CATS bus



TRAM bus

Vehicular Traffic

75.52% of vehicle traffic on I-69 consists of class 1-3 vehicles, which are considered private motor vehicles. The remaining 24.48% of the traffic is considered commercial traffic with 21.1% being class 9 vehicles and 3.2% being class 6 vehicles. Please see the Vehicle Classification Table in Appendix 10: Current INDOT MS2 Output on p. 128 for a full description of vehicle classifications. The traffic stations on Principal Arterials adjacent to the I-69 interchanges more closely mirror I-69's vehicle distribution than stations on other Local roads. See Figure 5 on p. 13 for a map of all functional classifications of roads within the study area. See the Traffic Counts Tables in Appendix 10: Current INDOT MS2 Output on p. 128 for the most current average annual daily traffic (AADT) volumes throughout the corridor study area.

Interstate traffic volumes increased at a rate of 3% per year from 2019 to 2022 within the study area, with adjacent roadways increasing at higher rates closer to the Indianapolis region. For example, traffic on SR 13 south of the interchange increased at a rate of 13% per year since 2021. Traffic volumes decreased during the COVID-19 pandemic between early 2020 and fall of 2023; however, traffic volumes have exceeded pre-COVID-19 pandemic levels on all I-69 traffic segments as of writing this document in spring 2024.

Induced Demand

Induced demand is the phenomenon where an increase in the supply of a consumable reduces its associated costs which, in turn, increases its rate of consumption. In terms of transportation planning, the consumable is roadway capacity because there is a hard design limit to the amount of AADT that a facility can handle. When a facility begins to approach the capacity limit, the overall speed of the facility decreases and motorists seek alternate routes or modes of transportation to reach their destination. In addition, reducing a facility's functional speed also reduces the effective commuter population that the facility services due to the inverse relationship between speed and travel time to a destination. Drivers are usually forced to live closer to their destination to commute to their destination within a timely manner. Similarly, when capacity is added to a facility, functional speeds increase, allowing for more users from more distant areas to reach destinations in a timelier manner.



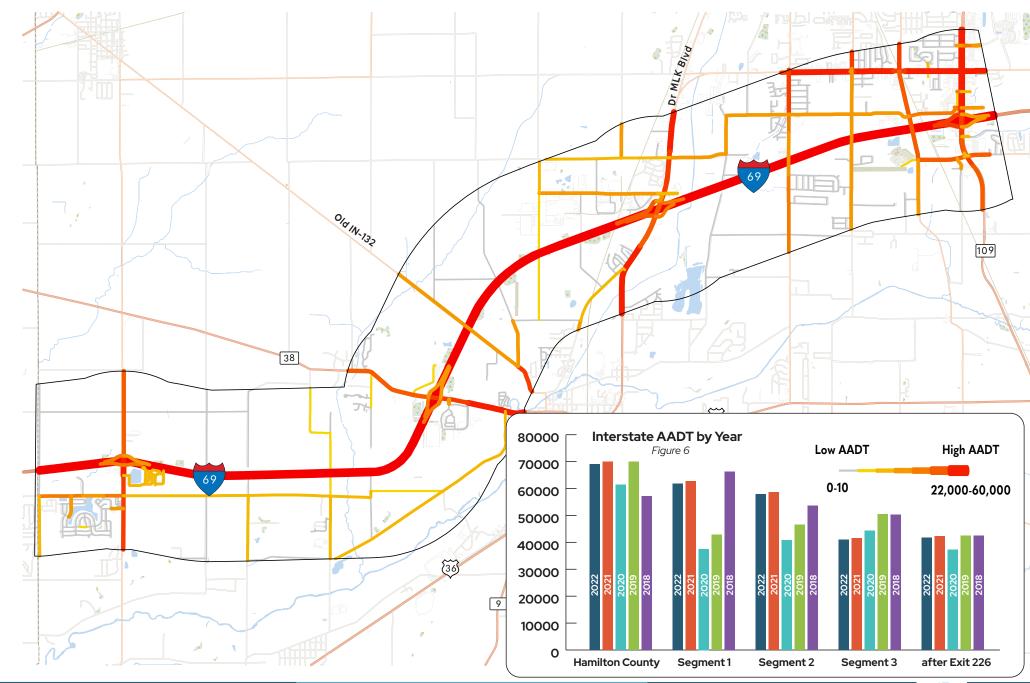
South Scatterfield Road

There are two primary methods for increasing the capacity of a road-way facility, either physically adding capacity in the form of additional lanes, or prioritizing mass transit over single-occupancy motor vehicles.

In 2019, as a part of the **Next Level Roads** initiative, INDOT expanded I-69 into a 6-lane facility from the SR 37/Exit 205 exchange in the City of Fishers to Exit 226 in the City of Anderson. This expansion has dramatically increased the rate of development along the interstate corridor between Fishers and Anderson, which has also led to steadily increasing interstate traffic.



I-69 corridor and traffic



Crashes

The most recent crash data for the Integrate I-69 Corridor Study area is from 2018-2021 and includes when the I-69 corridor was under major reconstruction, which accounts for more crashes per segment than normal. Intersection crashes cluster around Exit 214 and Exit 222. Scatterfield Road off Exit 226 in Anderson accounts for the most intersection crashes within the study area. Most of these crashes are classified as "No Visible Injury" by the federal KABCO rating system. For more information about crashes within the corridor study area, see Figure 7 on p. 17. The KABCO rating system is a nationally standardized system as established by the Model Minimum Uniform Crash Criteria that police in every US jurisdiction use to rate the injuries sustained by any person and the overall severity of a crash. For more information about the KABCO rating system, see Reference 11 in Appendix 5: Supplemental Resources on p. 118.

Traffic Calming

Traffic calming is a term that has emerged to describe a range of methods for slowing cars without banning them from moving through commercial and residential neighborhoods. The goal of traffic calming is to ensure cars drive at speeds that are safer and more compatible with pedestrians and cyclists; furthermore, traffic calming creates an equilibrium

amongst motorists, pedestrians, and cyclists, so one mode does not dominate at the expense of another. Reducing the speed of vehicular traffic and/or reducing the number of conflict points on a given facility will reduce the number of crashes and fatalities the facility will experience each year. Examples of traffic calming include but are not limited to, speed bumps, traffic circles, chicanes, and reduced roadway widths. For more information about the benefits of traffic calming, see Reference 23 in Appendix 5: Supplemental Resources on p. 119.

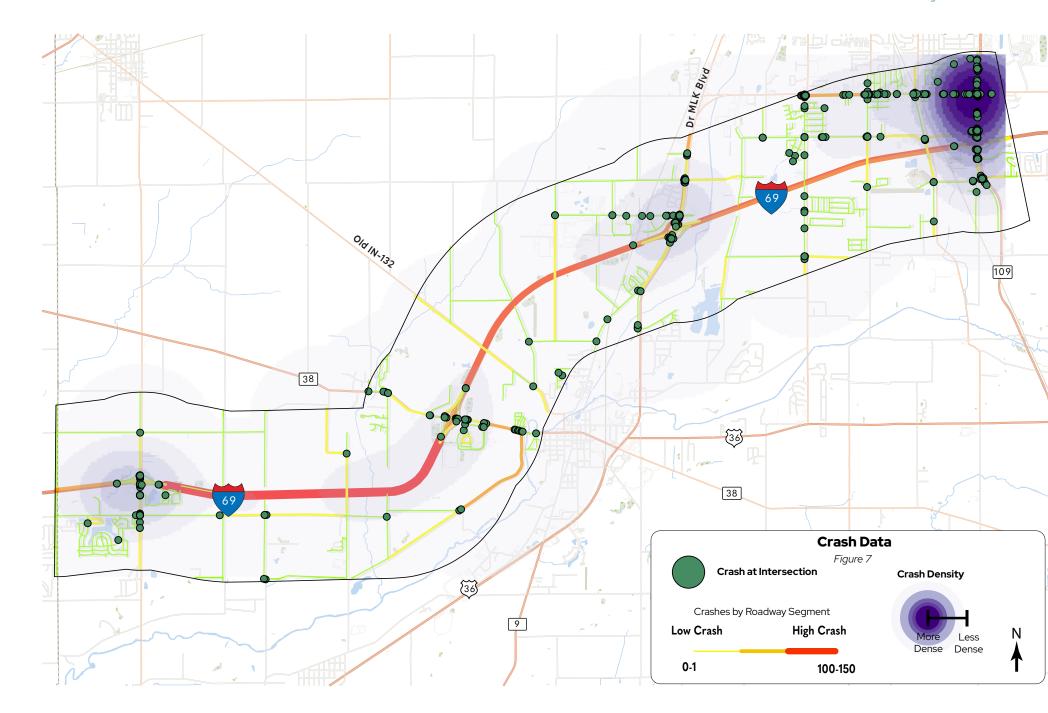
Complete Streets

Complete Streets policies ensure the context-sensitive consideration of walking, cycling, and transit modes in roadway projects. Current procedures require the justification of adding sidewalks, bike facilities, etc. to new roadway projects; however, Complete Streets policies require the justification of removing such facilities from a project. The MCCOG Road Right Sizing Tool indicates that two facilities in the study area could be retrofitted into Complete Streets to further connect the corridor as a whole.

The Town of Pendleton and unincorporated Madison County are the only jurisdictions that have adopted a formal Complete Streets policy in the study area. The current best practices for establishing a Complete Streets policy can be found in the 2023 Complete Streets Policy Framework by Smart Growth America and the National Complete Streets Coalition, see Reference 12 in Appendix 5: Supplemental Resources on p. 119 for more information.



16



Bicycle & Pedestrian Traffic

There is limited existing infrastructure for bicycle and pedestrian travel within the study area. Bicycle and pedestrian travel are prohibited within the interstate right-of-way. The only existing dedicated bike lanes within the study area are located on Columbus Avenue north of 53rd Street. There are 5.86 miles of Local, 4.04 miles of **Minor Collector**, 3.48 miles of **Major Collector**, and 0.45 miles of Minor Arterial roads that are designated as signed routes or separate bicycles paths across 4 jurisdictions. Users of these designated bicycle trails share the roadway facility with normal motor vehicle traffic.

As of writing this document in spring 2024, there are 31.8 miles of sidewalk within the corridor study area located in 3 jurisdictions. These sidewalks are typically located in the rights-ofway of Collector and Local roads. In addition, there is a dedicated pedestrian bridge over I-69 at Exit 219. The majority of the sidewalks within the corridor study are too old to be compliant with the **Americans with Disabilities Act (ADA)**. However, any newer sidewalks completed in the last five years as components of INDOT projects may be ADA compliant.

Rail Traffic

There are 8.05 total track miles of railroad within the study area. CSX owns the primary north-south link in Madison County known as the Indianapolis-Cleveland line, which branches off into two smaller lines within the study area. One branch runs perpendicular underneath the I-69 corridor west of Exit 226 in Anderson. The second branch runs perpendicular underneath the I-69 corridor west of Exit 222 in Anderson, then curves southwest through Pendleton and Ingalls. In addition, there is a small line connected to this branch that services the Nestle manufacturing plant.

Public Transit

There are two existing transit providers within the study area: City of Anderson Transit System (CATS) and Transportation for Rural Areas of Madison County (TRAM). CATS services only the City of Anderson and offers both fixed-route and demand-response services. CATS trips must both originate and terminate within the City of Anderson. The TRAM system is a demand-response service operated by Madison County covering the entire county outside of Anderson. TRAM offers trips anywhere in the county for a low cost, but the service is not a reliable source for immediate needs due to staffing, vehicle, and scheduling limitations.

Administration

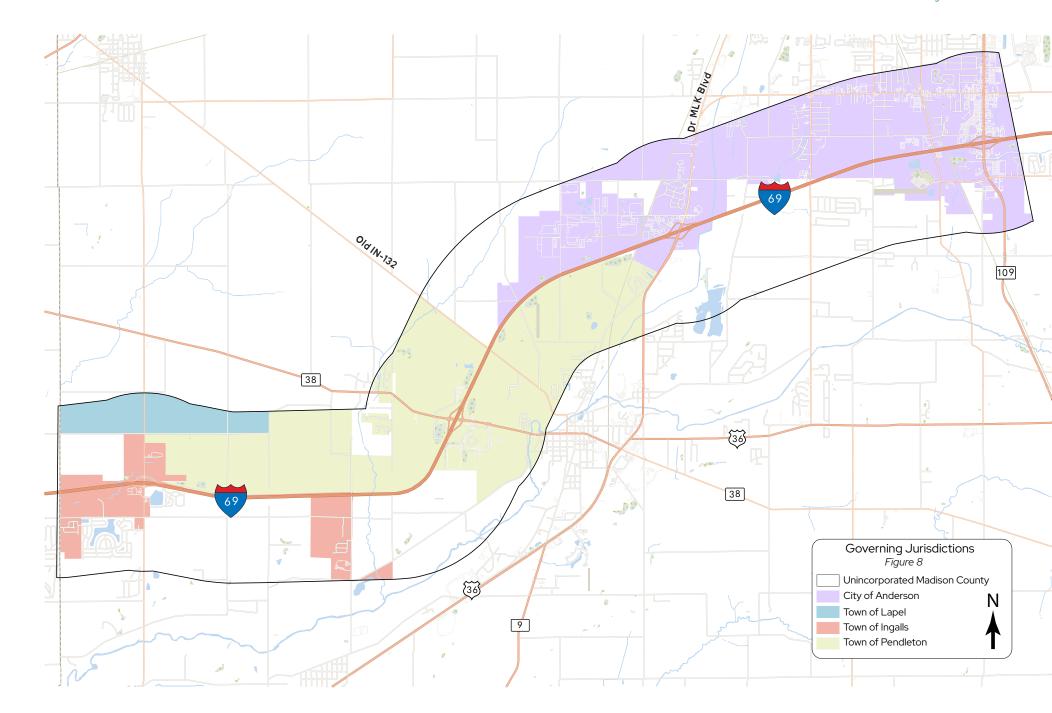
The I-69 corridor is multijurisdictional in nature concerning both governing bodies and public services. These governing bodies and public service providers are primarily responsible for ensuring that the recommendations in this study are implemented. Outlining each of these entities empowers all stakeholders within the study area with the knowledge of which decision makers or service providers must be considered when implementing changes to the corridor. Coordination between both governing bodies and public service providers is necessary to ensure that the Integrate I-69 Corridor Study is implemented effectively.

Government Overview

There are five jurisdictions along the I-69 corridor with unique governing bodies as well as state-owned facilities to consider. Fostering coordination between the jurisdictions requires each governing body to understand how the other governing bodies within the study area operate. The following section contains overviews of each governing body represented within the study area. For contact information for the applicable governing bodies in this section, see Appendix 6: Community Contacts on p. 120.



Madison County Government Center



INDOT Greenfield District Office

All interstate facilities along the I-69 corridor are owned and operated by the INDOT Greenfield District office. The Greenfield District is responsible for maintaining 4,375 lane miles of state roads, 1,300 lane miles of interstate roads, 1,366 large culverts, 1,133 state-owned bridges, 194 snow routes, 539 traffic signals, 146 flashers, 51,500 road signs, and 1,500 panel signs. See Appendix 6: Community Contacts on p. 120 for the office contact information.

Unincorporated Madison County

The Board of Commissioners is the executive governing body for Madison County with jurisdiction over matters concerning either the exercise of regulatory or administrative powers. The legislative body for Madison County is divided between the Commissioners and County Council. The Madison County Council has jurisdiction over fiscal matters. The Madison County Planning Department, Planning Commission, and Board of Zoning Appeals have jurisdiction over all county planning and zoning matters.

There are other departments with jurisdiction over unincorporated Madison County that may need to be considered when making decisions about the future of the Integrate I-69 Corridor Study area:



INDOT Greenfield District Office

- Assessor's Office
- Auditor's Office
- Drainage Board
- Emergency Management & Office of Homeland Security
- Engineering Office
- Highway Department
- Purdue Extension Madison County
- Sheriff's Department
- Surveyor's Office

City of Anderson

The City of Anderson is the largest municipality in the study area with a population of just over 55,000 people. The Mayor's Office is the executive authority of the City of Anderson. The Department of Municipal Development is responsible for promoting excellent planning and building standards by distributing permits, enforcing zoning laws, and

- Anderson Redevelopment Commission
- Board of Public Safety
- Board of Public Works
- Board of Zoning Appeals
- CATS
- City Clerk
- Community Development
- Economic Development
 Department
- Engineering Department

handling all other planning matters for the city. There are other boards and departments with jurisdiction over the City of Anderson that may need to be considered when making decisions about the future of the Integrate I-69 Corridor Study area:

- Fire Department
- Light & Power Department
- Park Board
- Parks & Recreation Department
- Plan Commission
- Police Department
- Storm Water Department
- Streets Department
- Tree Commission
- Utility Office
- Water Department



Anderson City Hall

Town of Pendleton

The Town of Pendleton is the second-largest municipality in the study area with just over 5,100 people. The Pendleton Town Council is the executive authority of the town and is primarily responsible for allocating the town's annual budget. The Pendleton Planning Department promotes the town's comprehensive growth, oversees zoning/land use policies, issues building permits/certificates of occupancy, and works to encourage

- Board of Stormwater Management
- Board of Zoning Appeals
- Clerk-Treasurer Department
- Economic Development Commission
- Historic Preservation Commission
- Parks and Recreation Board

appropriate economic development within the community. The Pendleton Plan Commission reviews rezone petitions/primary plat plans, initiates amendments to the town's unified development code, and updates the zoning map. There are other boards and departments with jurisdiction over the Town of Pendleton that may need to be considered when making decisions about the future of the Integrate I-69 Corridor Study area:

- Parks Department
- Police Department
- Public Works Department
- Redevelopment Commission
- Town Manager
- Urban Forestry Committee
- · Utility Office
- Waterworks Board

TOWN HALL

Town of Ingalls

The Town of Ingalls is the third -largest municipality in the study area with just over 2,500 people. The Ingalls Town Council is the executive authority of the town. The Department of Planning & Development oversees zoning, permits, inspections, and code enforcement by collaborating with the Ingalls Plan Commission, Town Council, Board of Zoning Appeals, and other stakeholders. These entities collaborate to promote responsible development to preserve the town's character, safety, and sustainability.

There are other boards and departments with jurisdiction over the Town of Ingalls that may need to be considered when making decisions about the future of the Integrate I-69 Corridor Study area:

- Economic Development Commission
- Police Department
- Redevelopment Commission
- · Stormwater Utility Board
- Street Department
- Town Manager
- Water Utility Board

Town of Lapel

The Town of Lapel is the smallest municipality in the study area with just under 2,400 people. The Lapel Town Council is the executive authority of the town. The Lapel Planning Department enables citizens to apply for building permits and check building regulations. The Lapel Planning Commission primarily makes recommendations to the town council regarding land use and development.

There are other boards and departments with jurisdiction over the Town of Lapel that may need to be considered when making decisions about the future of the Integrate I-69 Corridor Study area:

- Board of Zoning Appeals
- · Code Enforcement
- Park Department
- Redevelopment Commission



Lapel Town Hall

Public Services

There are various police and fire protection entities within the corridor study area serving different jurisdictions. Police and fire protection providers must be considered when implementing new residential and commercial developments as well as any changes to the transportation network. The following section contains overviews of each police and fire protection provider within the study area. For contact information for public services providers in this section, see Appendix 6: Community Contacts on p. 120.

Police Protection

The Indiana State Police regularly patrols the I-69 corridor from the Pendleton 51 District post. The Madison County Sheriff's Department has jurisdiction over all areas in the county with support from each municipal police department. Each municipality within the study area has its own police department to provide protection within municipal limits.



Madison County Sheriff's Department car

Fire Protection

There are three different fire protection jurisdictions within the study area. The City of Anderson has its own full-time fire department with seven stations throughout the city. The Town of Lapel operates the Lapel Stony Creek Township Fire Territory volunteer force with one station in the town. The South Madison Fire Territory is a collaborative emergency services organization serving multiple communities, including the Town of Pendleton, Fall Creek Township, and Green Township. The Town of Ingalls is served by the South Madison Fire Territory through a contractual agreement with the intent to join the territory by 2026. There are two stations in the territory located in the Town of Ingalls and the Town of Pendleton. The Lapel Stony Creek Township Fire Territory is discussing joining the South Madison Fire Territory in the future. Each fire protection jurisdiction also provides emergency medical services.

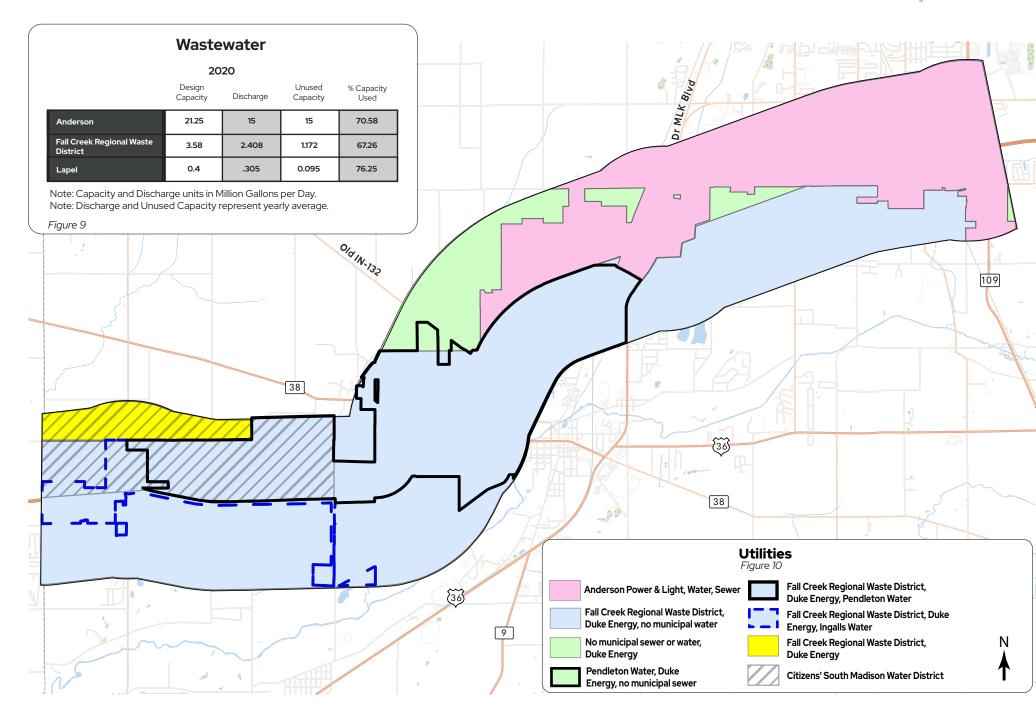


IMPA Anderson Solar Park 2 on the north side of Anderson

Utilities

There are 13 different utility providers to the communities within the study area. Some areas within the study area are connected to the same utilities; however, there are several unique utility connection situations as seen on the map in Figure 10 on p. 23. Anderson, Pendleton, and Ingalls own and operate their own water utilities. Lapel as well as parts of unincorporated Madison County, Ingalls, and Pendleton have water provided by the Citizens' Energy Group Westfield South Madison utility. CenterPoint Energy is the sole natural gas provider to the communities within the study area. The Fall Creek Regional Waste District (FCRWD) encompasses the three southernmost townships in Madison County and provides wastewater treatment to most of the communities in the study area that have sewer access, except for Anderson, which has its own municipal sewers. Duke Energy provides electricity to most communities in the study area, except for Anderson and Pendleton, which have their own municipal electricity providers. Waste Management Inc. and Best Way provide solid waste collection to residential and commercial customers in the study area's municipalities. Best Way also offers recycling services for an additional fee to municipalities within its current service area. See Appendix 6: Community Contacts on p. 120 for contact information for each utility provider in the study area.

There are two primary hurdles that the existing utilities pose to development within the study area. The capacities of existing utilities must be considered and efficiently planned to meet the future demands of expanding residential, commercial, and industrial uses. As of writing this document in spring 2024, the FCRWD treatment plant is at 70% design capacity for wastewater handling and this district services 65.57% of the study area. Any large-scale development that would consume a significant portion of the plant's remaining capacity would necessitate FCRWD to invest in expanding its treatment infrastructure. In addition, while there is sufficient power within the study area to supply residential, commercial, and industrial users, there is not enough infrastructure in place to provide high voltage to additional commercial and industrial users. Rural sites that are attractive for this type of development require installing new substations and transformers to connect the development to the power grid. Depending on the development's needs, it can take between four months and four years for energy providers to install this infrastructure. These hurdles to future development will require the various jurisdictions within the study area to coordinate with one another



Land Use

Land use specifically refers to locating and regulating development through zoning/design strategies, revitalization efforts, public participation, and regional planning. Land use regulations ensure that development occurs in the appropriate places. Most of the land uses within the study area are Agricultural, Conservation Residential, and Single-family Residential and these three uses amount to approximately 1,800 acres. Land along the corridor is owned by the City of Anderson, Town of Ingalls, Town of Lapel, Town of Pendleton, and unincorporated Madison County. Most of the undeveloped land within the study area is split evenly between Pendleton and unincorporated Madison County. See the Current Land Use map for the breakdown of the study area's current zoned uses.

The combination of access to the newly expanded interstate, proximity to urbanized areas, amount of available **greenfield** space, and available utility capacity make the I-69 corridor highly attractive for all forms of development. These same factors drove the rapid growth of the City of Fishers and City of Noblesville areas in neighboring Hamilton County 30 years ago. Today, the areas adjacent to I-69 are mostly built out and have forced development to migrate further east along the interstate into Madison County. The I-69 corridor is the most rapidly changing area within Madison County.

To capitalize on projected tax revenue to be generated by future development, many of the municipalities adjacent to the I-69 corridor have annexed large portions of unincorporated land into their jurisdictions since 2018. Once annexed, these areas no longer fall within the land use categories and desired future uses of Madison County and its comprehensive plan. The land use decisions for 59.2% of the study area are currently governed by the planning departments of 4 municipalities, their unique comprehensive plans, and subsequent ordinances.

To better understand each municipality's desired future for the land within their jurisdictions, the planning team conducted meetings with the planning departments of each municipality as well as the Madison County Planning Department utilizing a future land use mapping exercise. This exercise was designed to ascertain the desired maximum build-out scenario for the land within a 1-mile buffer of the I-69 right-ofway. The results of these exercises were then aggregated by the planning team to generate a unified land use forecast for the corridor by utilizing the program **UrbanFootprint**. See p. 25 for resulting maps and infographics about projected land use.

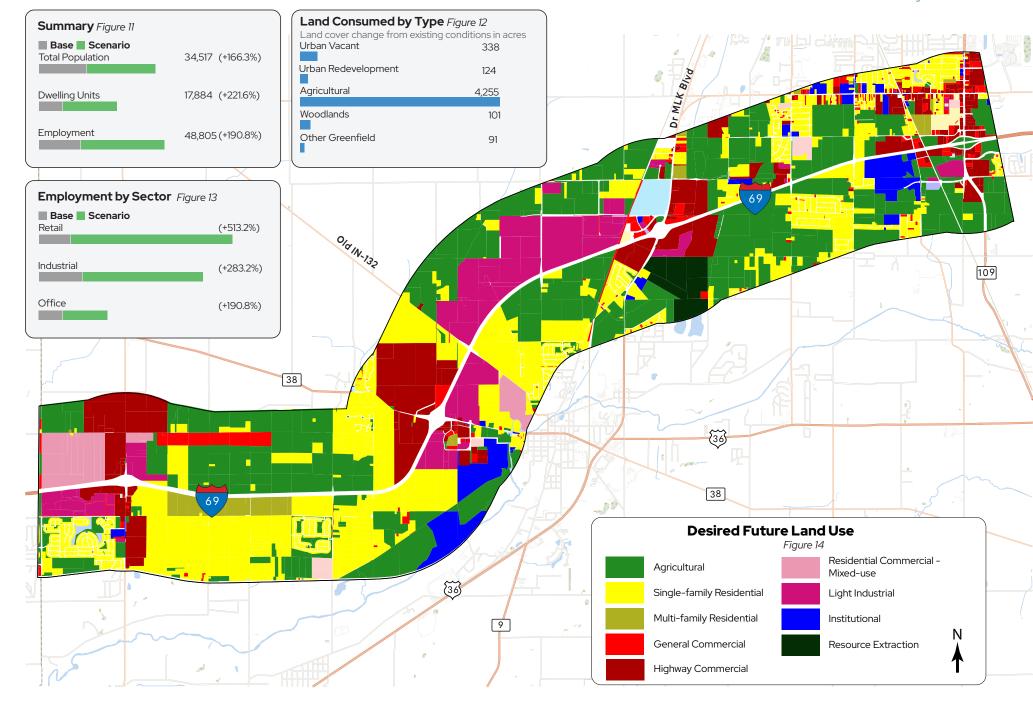
Growth Projections

The Forward Madison County 2035 Comprehensive Plan contains high-level population and employment forecasts derived from the Urban-Footprint software. Urban-Footprint is a mapping and analyzing tool that utilizes nationally available datasets including census information to provide insight into the impacts of changing development patterns and densities. Urban-Footprint provides a high-level overview of potential impacts growth may have.

Following the examination of the current population growth trends in Madison County, population forecasts are shown for each of the three subregions: North, Central-East, and Southwest. The entire county's population is expected to increase by 10,218 at an average annual growth rate of 0.25% between 2015 and 2035. The number of jobs in the county is expected to increase by 8,288 at an average annual growth rate of 0.51% between 2015 and 2035. As the Indianapolis metropolitan area continues growing, the gap is starting to close between Indianapolis and the outlying municipalities in central Indiana. This growth is spreading along the state's interstate corridors, and the Integrate I-69 Corridor Study area is expected to share in a portion of this projected growth.

Currently, commercial growth is proiected to spread south along the SR 109 corridor from Exit 226 and residential growth is projected to spread along the US 36 and SR 38 corridors east from Pendleton. The model predicts a net annual .06% loss of employment for the Central-East subregion including Anderson, Chesterfield, Markleville, and surrounding unincorporated areas. These jobs are predicted to migrate to the Southwest subregion, because 60.5% of projected population growth and 98.3% of projected employment growth are anticipated to occur in the incorporated areas of Lapel, Ingalls, and Pendleton. For more information about population and employment forecasts, see Reference 12 in Appendix 5: Supplemental Resources on p. 118.

During the Integrate I-69 Corridor Study's development process, the planning team met with each municipality's planning department to collect information about their desired locations for future housing uses, commercial uses, industrial uses, and public spaces. The collected information was entered into UrbanFootprint as a scenario and used to generate housing unit, total population, employment, and land consumption metrics. See Figure 14 on p. 25 for a complete map showing the desired future land use changes throughout the study area.



Growth Projections Continued

The desired land use changes will have substantial impacts on the corridor, because 2,953 acres of greenfield will be consumed to develop the following uses:

- 2 new commercial centers that will be located on Exits 214 and 219,
- A new light industrial/commercial mixed-use area at Exit 214,
- An expansion of the Flagship Enterprise Center at Exit 222,
- A multi-family housing development in Lapel,
- A large suburban single-family housing development in Ingalls, and
- A multi-family/retail development in Pendleton.

If all these desired land use changes come to fruition within the next 30 years, the study area's population is projected to increase by approximately 12,000 people, 6,300 dwelling units, and 34,500 new jobs. This desired land use scenario results in a total population increase slightly over the Forward Madison County 2035 Comprehensive Plan's projected "high forecast" for the population of Madison County's Southwest region and accounts for all the forecasted employment gains for the entire county. For a full breakdown of the projected housing, population, and employment metrics, see Figures 11, 12, and 13 on p. 25.

Agriculture

There are 721 total acres (1.12 sq. mi) of land within the study area zoned for agricultural uses, which translates to 25.8% of all land within the study area. 561 acres of this land can be found on the north and south sides of the I-69 corridor between Exits 214 and 219. The largest tract of contiguous agricultural land is 147 acres located southeast of Exit 219 behind the Tractor Supply Company Distribution Center. Most of the agricultural activity along the I-69 corridor consists of cash crop production including soybeans, feed corn forage, wheat for grain, and sod. According to the US Department of Agriculture (USDA) 2022 Census of Agriculture, the average farm is approximately 288 acres and a median size of 10-49 acres. The average farm produces approximately \$300,000 of agricultural product annually, and the median farm sales are \$100.000 or more of product annually. For the full Census of Agriculture report, see Reference 1 in Appendix 5: Supplemental Resources on p. 118.



Combines plowing field

Economic Development

Market Area Analysis

I-69 is a regional commerce artery allowing goods and services to be easily accessible to a much wider population than exists within the Integrate I-69 Corridor Study area. The I-69 corridor represents a regional market attracting economic activity from a wider geographic area than this study's 1-mile geographic buffer. Therefore, the market area for the Integrate I-69 Corridor Study is defined as a 30-minute driving distance from the corridor. All economic development conditions must be examined and taken into consideration for this market area as growth and development (or lack thereof) will have profound impacts on Madison County's communities nearest to the I-69 corridor. See Figure 15 on p. 27 for more information about the I-69 corridor market area boundaries.

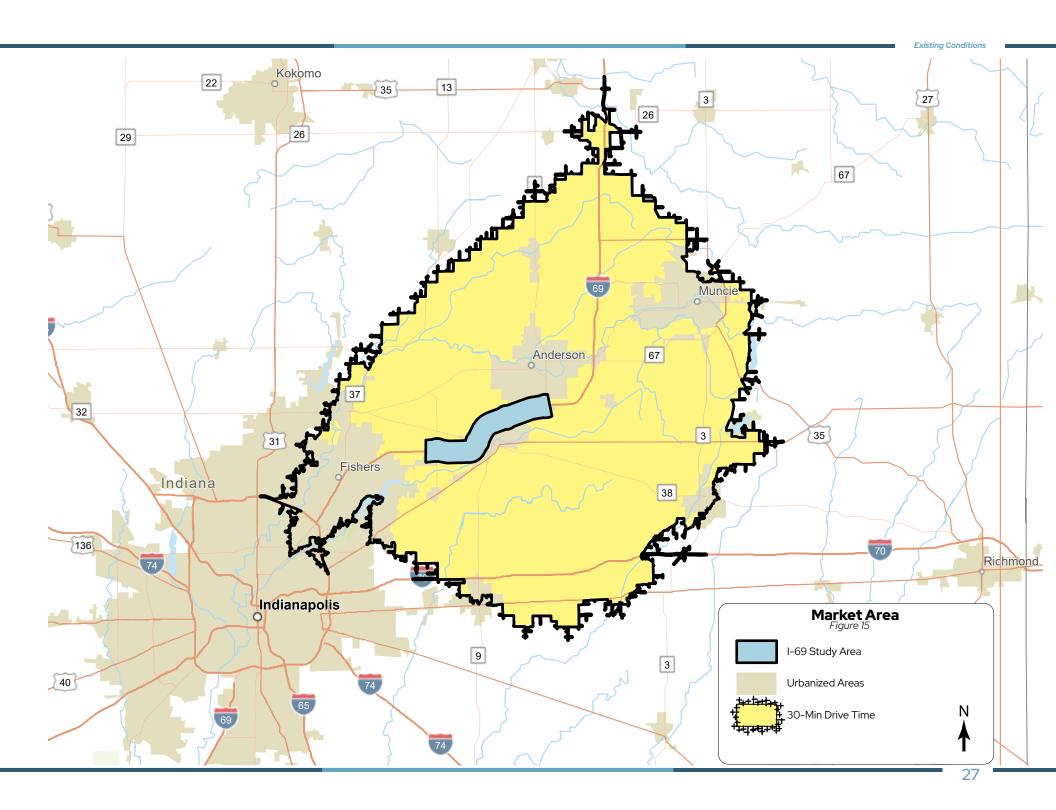


Hamilton Town Center Clock & Traffic Circle

Labor Force

The foundation of economic development depends on retaining and recruiting employees that produce or add value to the basic goods or services that the community requires. A community's labor force is calculated by two different metrics, the participation rate, and unemployment rate. The participation rate is the count of the population who are of employable age (16-65), are not incapacitated by a long-term illness or disability, and are not currently serving in the armed forces. The unemployment rate is the number of people who could be working but have not done so over a 4-week period. Both metrics paint a picture of a given area's economic health.

As of 2023, the labor force participation rate of the I-69 corridor market area is 1,635,163 persons, or 66% of the market area's total population. This rate is higher than both the 2023 national labor participation rate of 62.5%, and the 2023 State of Indiana labor participation rate of 63.0%. As of 2023, the unemployment rate for the I-69 corridor market area is 39,802 persons, or 3.7% of the market area's total population. This rate is equivalent to the 2023 national unemployment rate at 3.7%, and higher than the 2023 State of Indiana unemployment rate at 3.5%.



Industries

The following passages delve into the different industry sectors present within the market area as defined by the US Department of Labor's Occupational Safety and Health Administration's Standard Industrial Classification Manual (SIC). For further reading, see Reference 21 in Appendix 5: Supplemental Resources on p. 119.

Arts, Entertainment, Recreation, Accommodation, Food Services

This sector encompasses various establishments for the public's enjoyment or recreational purposes, which are often of historical, educational, or cultural interest. These establishments include entertainment providers, those who furnish lodging, and retail establishments who sell prepared foods and drinks for immediate consumption. 10.4% of all businesses within the I-69 corridor market area belong to this sector, and most of these businesses are located along I-69 at Exits 205 and 210 in Fishers. IN.

Healthcare & Social Assistance

This sector is comprised of establishments providing healthcare and social assistance for individuals. The sector includes both healthcare and social assistance because it can be difficult to distinguish between these two industries. All industries in the sector share common processes, namely, health practitioners and social workers must have requisite expertise to be employed in either industry. 9.6% of all businesses within the I-69 corridor market area belong to this sector, and most of these businesses are located along I-69 at Exit 210 in Fishers, IN, and Exit 222 in Anderson, IN.

Manufacturing

This sector includes establishments engaged in transforming mechanical or chemical materials and substances into new products. Materials processed by Manufacturing establishments include products of agriculture, forestry, fishing, mining, quarrying, and products of other manufacturing establishments. 3.7% of all businesses within the I-69 corridor market area belong to this sector, and most of these businesses are located along I-69 at Exit 222 in Anderson, IN.

Services

This sector includes businesses engaged in providing a service to an individual, business, or government establishment. Examples of these businesses include but are not limited to, hospitality, entertainment, legal, architectural, engineering, and/or professional services. 41% of all existing businesses within the market area belong to this sector, and most of these businesses are located along I-69 at Exit 205 in Fishers, IN.

Retail Trade

This sector includes establishments that sell merchandise for personal or household consumption and render services incidental to the sale of goods. 19.7% of all businesses within the market area belong to this sector, and most of these businesses are located along I-69 at Exit 205 and Exit 210 in Fishers, IN.

Transportation, Warehousing, Utilities

This sector includes establishments providing passenger transportation, freight transportation, communications services, and utilities services to the public and other business enterprises. 2.2% of all businesses within the market area belong to this sector, and most of these businesses are located along I-69 at Exit 219 in Pendleton, IN, and Exit 222 in Anderson, IN.

Employment

Over the past 15 years, the nation has experienced 2 "once-in-a-lifetime" economic events, the 2008 financial crisis that triggered a global recession and a global pandemic lasting from 2020-2023. The I-69 corridor market area has significantly shifted away from traditional manufacturing sectors towards retail sectors because of the economic upheaval caused by these two once-in-a-lifetime economic events. and losing General Motors manufacturing facilities that were major employers for much of the study area in the late 20th and early 21st centuries. In addition, the construction of the Hamilton Town Center retail shopping complex at Exit 210 significantly increased retail employment for the I-69 corridor market area.

The current dominant industries within the I-69 market area are Services, Retail Trade, and Manufacturing. Businesses that fall within the SIC sectors 70-89 are classified as Services and represent most of the employment within the market area, accounting for 46.1% of all the area's employees. The second-largest sector of employment in the market area is businesses within the SIC sectors 52-59 classified as Retail Trade, which employ 18.5% of all the area's labor force. The third-largest sector of employment in the I-69 corridor market area is businesses. within the SIC sectors 20-39 classified as Manufacturing, which employ 9.3% of all the area's labor force.

Location Quotient

Alocation quotient is a ratio referring to the concentration of an industry or number of jobs in an industry area, such as the I-69 corridor market area, that is then compared to the whole US. A location quotient above 1 means that an industry is more concentrated in the I-69 corridor market area than in the whole US, while a location quotient below 1 means that an industry is less concentrated in the I-69 corridor market area than in the whole US. The location quotient demonstrates key data points of industries to decision makers so they know which industry sectors warrant economic development investment, and which sectors are decaying.

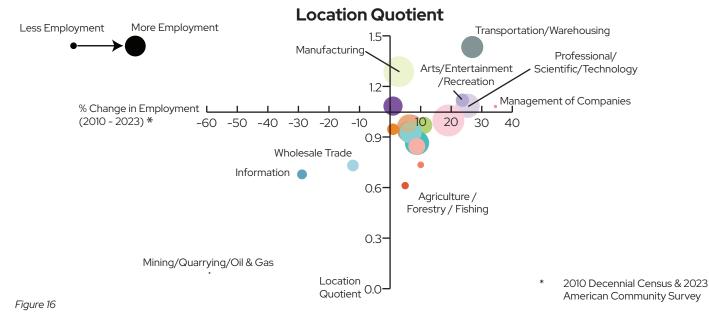
These quotients are then plotted against an industry's employment trend over time. When taken altogether, all industries plotted this way fall within one of four categories: declining, stagnating, emerging, or growing. A declining industry will have a low location quotient with a negative employment trend over time. A stagnating industry will have a high location quotient with a negative employment trend over time. An emerging industry will have a low location quotient with a positive employment trend. A growing industry will have a high location quotient with a positive employment trend. The location quotient analysis is also supplemented by the percentage of the industry's employment within the whole market area's employed population.

Upon analyzing the I-69 corridor market area industry sectors, all sectors except for Wholesale Trade, Information Technology, Manufacturing, and General Retail are growing. The location quotient analyses for the Professional, Scientific, Management and Transportation, Warehousing, Utilities sectors demonstrate that these industries are rapidly growing both within the I-69 corridor market area and nationally; furthermore, there is a low concentration of these industries within the I-69 corridor market area, which makes them easy industries for new businesses to start up in. The location quotient analyses of the Wholesale Trade and Information Technology sectors indicate that both sectors are declining in the I-69 corridor market area.

The location quotient analyses of the Manufacturing and General Retail Trade sectors indicate that both these sectors are stagnating because they experienced very low to no growth between 2015-2023, which indicates that these sectors are fully saturated within the market area. See Figure 16 below for more information about the location quotient analysis of the I-69 corridor market area.

Major Employers

The Services sector accounts for much of the employment within the I-69 corridor market area because there is a large volume of businesses belonging to that sector located in the market area. Each individual business employs between 10-25 people. The largest single employers are within the Manufacturing and the Transportation. Warehousing, Utilities sectors. Nestle USA is the largest single employer with 813 employees, NTN Drive Shaft is the second-largest single employer with 535 employees, Carter Logistics is the third-largest single employer with 498 employees, and BorgWarner Products is the fourth-largest single employer with 368 employees.



Retail Market

Retail leakage and surplus are metrics presented at the North American Industry Classification System sector level derived from directly comparing known retail sales to businesses and consumer spending. Leakage, also known as unmet local consumer demands, and local industry surpluses can be shown by comparing information from the US Census of Retail Trade and Bureau of Labor Statistics. Generally, retail leakage is a gap in local consumer demands characterized by excessive consumer spending in an industry sector that is not being captured by local businesses. Conversely, an industry surplus is indicated by a local business having greater retail sales than the local population's consumer spending. Information about local surpluses and unmet consumer demands is vital for decision makers because they rely on this information to target economic development efforts towards economic sectors demonstrating leakage and away from sectors demonstrating a surplus.

Therefore, municipalities can capture a greater amount of consumer spending that is otherwise leaving the area or being spent on online shopping. While it is beneficial to have businesses that attract surplus consumer spending from outside the market area, decision makers should be reluctant to approve new businesses that attract sales beyond

what the local population supports, because the local market will become oversaturated. Oversaturation of a single retail sector could make the local economy more susceptible to economic downturns.

As of writing this document in spring 2024, no retail sector is experiencing significant retail leakage, except for Travel Agencies and Computer Components Suppliers. These sectors continue to decline nationwide as consumers shift their purchasing habits away from physical locations to ecommerce options. Businesses within the General Goods, Luxury Items, Furniture, Family Restaurants, and Fast-Food Restaurant sectors are net attractors within the market area. The net revenue for each of these sectors exceeds the local population's net spending, which indicates that consumers from beyond the I-69 corridor market area are attracted to spend their disposable income on these types of establishments. Chief among these sectors is restaurants, in which the Environmental Systems Research Institute (ESRI) Business Analyst program estimated that the Family Restaurant and Fast-Food Restaurant establishments in the I-69 corridor market area generated \$4 billion in revenue in 2023, whereas the total household expenditures on "food away from home" was estimated at \$2.7 billion for the same area and year.

Consumer Spending

Consumer spending is the total money spent by households on final goods and services for personal use that is measured by accounting for all goods purchased in the retail sectors of the market area. ESRI Business Analyst provides consumer survey data and detailed estimates of consumer spending habits for any given market area, which allows for improved accuracy when predicting what businesses consumers are likely to spend their time and money on.

The population of the I-69 corridor market area is capable of driving and maintaining its own economy without needing to attract consumers from outside the market area. The I-69 corridor market area contains an estimated 824,233 households and an estimated population of 2.05 million people, which is broadly distributed across several income categories and age groups. The median annual income of the market area is an estimated \$76.187 and the median disposable income, income that is available after accounting for taxes, is an estimated \$54,000. Dining out activities are the dominant retail expenditure of households within the market area with 91.4% of every household visiting a restaurant at least once per month and 40.1% of all households visiting restaurants 9 or more times within 1 month. Popular chains like Applebee's, Olive Garden, and Texas Roadhouse attract a significant number of adults.

Consumer surveys indicate that there is a notable interest in fine dining restaurants, but their visitation rates are comparatively lower. Consumer surveys also indicate that the households within the market area prefer convenience when dining and only venture outside the market area if a suitable option is not present, which is the main driving force behind the growing popularity of food delivery services like Door-Dash and Uber Eats. Beyond food service retail spending, the market area population spends a significant amount of its disposable income on motor vehicles, home improvement. home furnishings, clothing, and electronic entertainment. Domestic travel for vacations is also common for the market area's population because there is significant spending on vacations and hotel stays.



Holiday Inn Express Hotel & Suites at Exit 226

Conclusions

The economic makeup of the Integrate I-69 Corridor Study market area is partially skewed towards the retail sector but is balanced out by a broad mixture of high educational attainment professions and skilled as well as unskilled manufacturing and service professions. Barring a national economic recession, the overall economy of the market area is stable and sufficiently diverse; therefore, the market area would be able to absorb the loss of a single large employer. Such a loss would present temporary problems for the local workforce but not on the devastating scale of the 2008 Great Recession.

There are several key takeaways that are applicable to the I-69 corridor market area. Firstly, the Retail sector in the overall region is saturated, and while it is a significant driver of the region's economy, virtually all economic activity occurs outside the Integrate I-69 Corridor Study area. Retail trade outside the I-69 corridor is well developed, satisfies all the immediate needs of the market area's resident population, and attracts consumers from well beyond the market area. Furthermore, the existing Retail establishments take full advantage of the existing urbanized infrastructure allowing for consumers to visit multiple vendors in a single trip. Barring the local population rapidly increasing, any new large-scale Retail development within the corridor would compete

directly with the existing Retail establishments for a portion of consumers who live outside the market area and visit these establishments to spend their money. Instead, any new Retail development within the study area should focus on fulfilling niche markets that are not currently met for the local population. For example, ESRI Business Analyst consumer surveys for the market area indicate there is a desire for family-focused sit-down restaurants, high-end steakhouses, and family breakfast or diner-style restaurants; in addition, these surveys indicate that there is growth potential for home furnishings and hobbyist stores.

Secondly, businesses that specifically cater to motorists traveling on the interstate are classified as highway-oriented retail, including but not limited to, fast food restaurants, drive-through restaurants, service stations, convenience stores, large franchise hotels, and small motels. The market for highway-oriented retail is saturated, so efforts should be made to avoid further market saturation by limiting highway-oriented retail beyond the immediate areas surrounding the interstate interchanges. Specifically, hotels should be concentrated around Exit 226 to capitalize on existing infrastructure and amenities while avoiding competition with hotels and lodging at Exit 210, which is just outside the study area.

Lastly, there is significant growth potential in the study area for the Manufacturing and Warehousing sectors. These sectors employ the third-largest share of the area's population but only represent 5.9% of all businesses in the market area. Most of the existing businesses in this sector are already located along the I-69 corridor and there is both workforce and land capacity available for expansion. These industries score well in their location quotient analyses, are growing nationally, and are currently underrepresented within the I-69 corridor market area. In addition, the lack of neighboring conflicting uses and proximity to both interstate and rail access make the study area ideal for businesses in these economic sectors.



Nesquik Bunny sign outside Nestle Factory in Anderson



Flagship Enterprise Center, Anderson, IN

Sense of Place

Sense of place refers to a community's distinct characteristics that make it an attractive place to live and visit. These characteristics can include natural elements, visual qualities, and unique cultural features that contribute to a healthy and resilient community. A strong sense of place also contributes to a strong identity that enriches the social fabric of the community. Both the built and natural spaces of a community can evoke powerful emotions and promote social interactions between residents and visitors. This focus area encompasses signage, wayfinding, and other design guidelines that promote active engagement with the build environment. Proactively setting design guidelines for development within the study area will establish a cohesive sense of place that builds off existing elements and seamlessly includes new development into the corridor.

Signs

Due to the multijurisdictional nature of the Integrate I-69 Corridor Study area, regulations regarding signs are far from uniform. Each jurisdiction within the study area has its own requlations regarding the time, place, and manner of display for signs that can be seen from the public right-of-way. Furthermore, each jurisdiction has different timeframes for how long a temporary sign may be displayed, and these timeframes range from one month up to one year. Federal and state regulations must also be considered for signs within the interstate right-of-way. Lastly, federal case law governing the constitutionality of regulating signs as a mode of speech is actively evolving with the most recent cases of Reed v. Town of Gilbert, AZ (576 U.S. 155, 2015) and City of Austin, TX v. Reagan National Advertising of Austin LLC (20 U.S. 1029, 2022). For more information about these cases, see Reference 16 and Reference 3 in Appendix 5: Supplemental Resources on p. 118.

The planning team identified 105 total signs within the study area by conducting field observations. Billboards are large 14-foot by 48-foot free-standing signs typically mounted on poles elevating them above the surrounding sight line obstructions. Billboards are signs owned by advertising companies who biannually rent out spaces on these signs. Most of these companies are in the process of upgrading static billboards to modern LED displays rotating multiple advertisements where local legislation does not expressly prohibit the upgrade. Considering all existing regulations, 26 billboards could be added directly adjacent to the I-69 right-of-way in the 1.79 miles of land along I-69 within industrial and commercial zones and in areas controlled by Ingalls. Considering these various regulations, there is potential for the number of signs visible along the I-69 corridor to increase.

Private signs are owned and operated on a property or building that the sign pertains to. These signs can be mounted on the walls of the business, elevated on a pole mount, or as a freestanding monument. The businesses operating these signs must undergo a rigorous local permitting process to install their private signs that typically prevents the signs from changing after their installations. If the owner of a private sign wants to change or update it, they are required to undergo another permitting process. Most of the identified signs within the study area are private signs along SR 109. The only limitation to new private signs being added to the study area is the amount of developable commercial or industrial land because most new developments in these zones are only permitted one private sign.

Temporary signs are small signs a single person can easily install on their own that typically advertise garage sales, residential contractor work, political support, or special events. These signs are typically made of paper, vinyl fabric, or are mounted on coroplast sheets, meaning, these signs are vulnerable to the elements if left unattended. Over the course of developing this corridor study, many of the existing temporary signs in the study area have expired and have been replaced with others at different locations.



Fall Creek at Falls Park

The outstanding property is a

farmhouse in the Greek Revival

architectural style on SR 38 within

Pendleton's municipal boundaries.

The notable property is a private

home in the Federal architectural

style within Pendleton's municipal

boundaries. The remaining 18

contributing properties are scattered

throughout the study area. The NRHP

is the official list of historic places

worthy of preservation in the United

States. The NRHP was authorized by

the National Preservation Act of 1966

Parks & Open Space

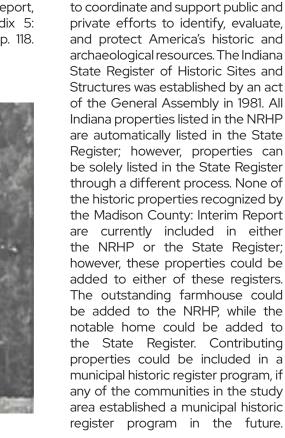
There are no existing parks or zoned greenspaces within the study area. Maintaining parks and open spaces is a shared priority among the communities throughout the corridor; however, there is lacking coordination in site location, facility distribution, and amenity availability throughout Madison County overall. The Madison County Parks, Trails & Open Space Master Plan adopted in 2024 aims to improve countywide coordination of parks and recreation amenities.

Much like the Integrate I-69 Corridor Study, the Madison County Parks, Trails & Open Space Master Plan emphasizes that multijurisdictional coordination is essential to establishing countywide park and recreational connections. According to the master plan, the county's southern and central areas possess the most park and recreational facilities; therefore, there are increased opportunities for connecting these facilities in the corridor study area. In addition, the I-69 corridor is specifically identified as causing barriers to connectivity that will require partnerships to improve, especially for bridges crossing over the corridor that do not currently provide adequate widths for shared use paths. A public survey was also conducted as a part of the park master planning process, and the top responses align with the priorities of the Integrate I-69 Corridor Study.

4.5% of unincorporated Madison County residents responded to the Madison County Parks, Trails & Open Space Master Plan survey. Overall, respondents expressed some satisfaction with the county's existing parks, but they are not overwhelmingly satisfied. Most respondents indicated that they desire constructing more paved walking trails to enjoy nature, preserving wildlife habitats, preserving the tree canopy, conserving/preserving sensitive habitats, and preserving undeveloped areas throughout the county. The I-69 corridor presents opportunities to transform from a connectivity barrier to a multi-modal link between parks and other greenspaces.

Notable Historic Sites

The Madison County: Interim Report identifies sites, structures, buildings, and districts that are deemed historically significant and potentially eligible for nomination to the National Register of Historic Places (NRHP) and/or the Indiana State Register of Historic Sites and Structures. Each property is given a rating in one of three categories: outstanding, notable, or contributing. There is 1 outstanding property, 1 notable property, and 18 contributing properties in the study area. For more information about the Madison County: Interim Report, see Reference 18 in Appendix 5: Supplemental References on p. 118.





Outstanding Greek Revival farmhouse in 1984

Sustainability

The Environmental Protection Agency (EPA) defines sustainability as meeting the social, economic, and environmental needs of the current generation while not jeopardizing future generations' abilities to meet their needs. Community decision makers must use forward thinking and other resources efficiently and equitably to remain sustainable.

The southernmost portion of the study area contains diverse environments including, but not limited to, natural unspoiled woodlands, the Fall Creek riparian corridor, natural wetlands, and prime agricultural land. These environments create habitats for various flora and fauna, including endangered mollusks and birds recognized by the federal government and/or the Indiana Department of Natural Resources (IDNR). Endangered mollusks that reside within these environments year-round include the Northern Riffleshell. Sheepnose, Clubshell, Rabbitsfoot, and Rayed Bean. Endangered birds that use these environments to migrate throughout the year include the American Bittern, Loggerhead Shrike, Black-crowned Night-heron, and King Rail. In addition to these endangered species, there are several species of mollusks, insects, and mammals classified as special concerns, rare, or on a watchlist according to federal or IDNR designations.

Fall Creek is a tributary of the White River that runs through the study area. This tributary is a key water resource for Madison County and the larger East Central Indiana region that must be protected to preserve its water quality. Industrial pollution and habitat destruction pose the greatest threats to the tributaries' water quality, particularly along West Fall Creek Drive and SR 38. The land adjacent to these roads is largely undeveloped and will be prime areas for commercial and industrial development due to their proximity to the Pendleton urbanized area and accessibility to I-69 via Exit 219. Excessive development without sustainable mitigation efforts within these areas would affect the downstream water quality of all areas in the White River's watershed.

Greenfields also represent a finite natural resource within the corridor study area. Greenfields are undeveloped or agricultural tracts of land that are ideal potential sites for industrial. commercial, or urban developments due to the land being the cheapest and easiest to develop; however, rapid development often leads to poor land allocation. Once greenfields are developed, it is near impossible to revert the land back to its original rich farmland qualities. As of writing this document in spring 2024, 90% of the land between Exit 219 and Exit 222 is considered greenfield.

Air Quality

The EPA established the National Ambient Air Quality Standards (NAAQS) to protect the public's health and welfare. These standards guard against six kinds of pollutants: carbon monoxide (CO), lead (Pb), nitrogen dioxide (NO₂), ozone (O₂), sulfur dioxide (SO₂), and large particles like soot or dust. Some pollutants have primary standards for both long-term and short-term discharges. Short-term standards protect people from any adverse health effects associated with acute exposure to air pollution. Longterm standards protect people from any adverse health effects associated with respiratory problems.

On June 15th, 2005, the EPA revoked the 1-hour Ozone Standards (1979). On April 6th, 2015, the EPA also revoked the 8-hour Ozone Standard (1997). On October 24th, 2016, the 1997 Primary Annual PM-2.5 NAAQS (level of 15 µg/m3) was revoked in attainment and maintenance areas for the NAAQS. On November 6th, 2017, the EPA issued a final ruling for the 2015 ozone NAAQS identifying counties that:

- Contain 1 or more monitors attaining the 2015 ozone NAAQS.
- Contribute to a violation of the 2015 ozone NAAQS.
- Contribute to a violation of the 2015 ozone NAAQS in another county.

In this final ruling, Madison County is included in the classification list as "Attainment/Unclassifiable."

On November 29th, 2018, the EPA issued the, "Transportation Conformity Guidance for the South Coast // Court Decision," which addresses how transportation conformity determinations can be made in areas that were "Nonattainment" or "Maintenance" for the 1997 ozone NAAQS. As a result of this ruling, air quality determinations are required for any transportation project that adds travel lanes, adds designated left/right turn lanes, or otherwise significantly impacts the region. Air quality determinations must be completed for both airsheds that Madison County is a part of before funding can be allocated for a project. For more information about the conformity guidance for the South Coast II court decision, see Reference 24 in Appendix 5: Supplemental Resources on p. 119.

Riparian Corridors

According to the US Forest Service, riparian corridors are areas where upland woods and aquatic habitats merge, as seen in Figure 93 on p. 95. Large contiguous riparian corridors provide food sources, nesting habitats, and migration areas for several species of wildlife that solely live in and/or migrate in riparian corridors. Maintaining the contiguous functionality of the hydrology and ecological functions of riparian corridors avoids breaking these vital habitats, which include but are not limited to perennial and intermittent rivers, streams, channels that show signs of scour, natural ponds, wetlands, springs, and seeps. When riparian corridors are well established and maintained. stream bank erosion is reduced. and downstream water quality is improved by filtering overland runoff and nonpoint source pollutants.

There are riparian corridors located within the study area along Fall Creek and its Foster Branch tributary, Thorpe Creek, and all Madison County-owned regulated drains. The existing riparian corridors are not implicitly protected under federal or state regulations; however, some statutory protections exist via development restrictions within floodplains and EPA restrictions on development in federally recognized wetlands. For more information, see Reference 7 in Appendix 5: Supplemental Resources on p. 118.

Hydrology

The Integrate I-69 Corridor Study area lies within the Patoka-White River Watershed. Waterways generally flow from east to west or northeast to southwest in a sub-parallel drainage pattern. Drainage ditches have been constructed where necessary to improve drainage conditions. There are 16.11 miles of regulated drains within the study area that are owned and operated by the Madison County Drainage Board. In addition, 2.5% of the total land area within the study area is classified as federal wetlands. The largest contiguous wetland area is south of Exit 222 along SR 67. The corridor contains 118.31 acres of Federal Emergency Management Agency (FEMA) flood zones in the A and AE categories. Areas classified as flood zone A are particularly concerning because these areas have a 1% annual chance of flooding and a 26% chance of flooding over the life of a 30-year mortgage. New development is not permitted in any type A flood zones. Any developments in or near the lower classified zones need to include flood mitigation measures to offset the risks posed by the potential for flooding.



Northern Riffleshell mollusk

Woodlands

There are 349.13 total acres of tree canopy coverage within the study area that can be divided into three distinct categories: residential trees, scattered mature woodlands, and riparian corridor woodlands. All 3 categories are primarily comprised of deciduous trees whose canopy is 10 feet or taller. 124.8 acres, or 35.75%, of the canopy are considered riparian woodlands, which are part of a larger contiguous woodland, wetland, and/or river network. 84.5 acres, or 24.2% of the canopy are scattered mature woodlands, which are distributed throughout the study area as separate islands of wooded areas between improved farmland where the topography and soil composition is not conducive to agricultural activity. Mature woodlands are usually located around federally identified wetlands. The remaining 139.8 acres, or 40.05%, of the canopy are comprised of large mature individual trees planted for landscaping within residential and commercial developments.



Adult Loggerhead Shrike







Introduction

The funds and programs listed in this section are available to all levels of government and individual municipalities have been successfully awarded federal funding in the past. However, project financing and grant applications are much more likely to succeed when two or more local public agencies (LPAs) apply for a joint project, or an MPO applies for project funding on the LPA's behalf. For more information about all the programs listed in this section, see Reference 21 in Appendix 5: Supplemental Resources on p. 119.



FCRWD Collection System

Federal Funding & Grants

There are several federal funding avenues for large multijurisdictional projects. One avenue is provided by the US Department of Commerce through the Economic Development Assistance programs (EDAs), but these programs change frequently depending on national priorities and the current funding available through federal appropriations bills. EDAs generally provide grants to applicant communities for large projects, infrastructure investments, or for job creation in economically distressed regions. EDA grants have also been used for workforce development programs and entrepreneurial initiatives.

The Recompete Program is an EDA that was a subcomponent of the Creating Helpful Incentives to Produce Semiconductors (CHIPS) and Science Act, which is a competitive grant program investing federal funding into economically distressed communities in the Rust Belt. The program has allotted \$1 billion for communities to finance projects providing public benefits and improving the local economy for small businesses and entrepreneurs.

Another subprogram of the CHIPS and Science Act is the Regional Technology and Innovation Hubs Program, which Congress has made \$52 billion available to applicants nationwide. This program seeks to strengthen US economic and national security through investments in regions

across the country with resources that could become globally competitive in technology and other industries of the future. These investments are intended to create more jobs that start, grow, and remain in the US. The City of Lebanon, IN, partnered with the State of Indiana and was recently awarded \$100 million for the Limitless Exploration/Advanced Pace (LEAP) Innovation District. The funds will be used to improve the local infrastructure to make way for a 9,000-acre manufacturing, research, and development facility.

The Federal Highway Administration (FHWA) frequently provides grants for large infrastructure projects. The FHWA currently offers funding through the Surface Transportation Block Grant Program (STBG), Congestion Mitigation and Air Quality Improvement Program (CMAQ), Rebuilding American Infrastructure with Sustainability and Equity (RAISE), and the broader Bipartisan Infrastructure Law Grant (BILG) programs. The STBG program provides funding to both state agencies and LPAs for transportation projects that improve traffic conditions, repair/ upgrade outdated infrastructure, or improve public roads to include new pedestrian and/or bicycle facilities. CMAQ funding was initially created as a part of the Transportation Equity Act for the 21st Century (TEA-21) in 1998, but the program has continued to be reauthorized.

The primary goal of the CMAQ program is to finance infrastructure programs and projects that will improve a region's air quality and reduce the amount of greenhouse gases generated by transportation activities. Communities throughout the US have successfully been awarded CMAQ grant funds for a range of projects including but not limited to road right-sizing, transit improvements, and new pedestrian and/or bicycle facilities.

The US Department of Housing and Urban Development (HUD) currently has a loan guarantee program offered as a part of the Community Development Block Grant (CDBG) program called the Section 108 Loan Guarantee Program (Section 108). Even though HUD has many stipulations for when and how this funding can be awarded, the HUD is incredibly flexible with repayment terms of the loan once it is awarded. The loans are offered to communities as either low-interest or very long-term (20-year) loans with interest-only repayments for a set amount of time. Section 108 loans are offered to communities to provide public financing for economic development, infrastructure, housing, and public facilities. HUD currently offers this loan program directly to LPAs as a financing mechanism for eligible projects, or indirectly to an LPA's private project partner for work on an eligible project.

State Funding

The State of Indiana encourages municipalities to collaborate and form partnerships to share project costs. The state allows for joint applications for project financing to be submitted through the State Revolving Fund (SRF), which is a funding pool offering low- to no-interest loans to Indiana communities for large and complex infrastructure projects. The SRF can also be used for multi-objective projects seeking to solve issues related to water quality, public health, and environmental protection. Projects that demonstrate benefits in these specific areas include but are not limited to stormwater management, green infrastructure, water reuse, and ecosystem restoration. Furthermore, multijurisdictional projects that also seek to address these issues may receive priority consideration for project financing.



Hartman Toad/Foster Park Relief Sewer Construction

MPO Funding

The Heartland MPO serves as both an MPO and a Council of Goverments (COG). As an MPO, the Heartland MPO works with state and federal agencies to manage, prioritize, and allocate federal funding for transportation needs in urbanized areas. As a COG, the Heartland MPO supports communities within its region in various projects related to land use, economic development, connectivity, and sustainability. Given this dual role, there are several possibilities for funding multijurisdictional projects through the Heartland MPO:

Federal Transportation Funding: As an MPO, the Heartland MPO receives federal funding allocated for transportation projects in urbanized areas. These funds are administered through the Indiana Department of Transportation (INDOT) and federal agencies like the FHWA and FTA. These funds can be used for infrastructure improvements, transit enhancements, and other transportation-related initiatives that benefit multiple jurisdictions within the Heartland MPO's planning area.

Partnerships and Leveraging Resources: The Heartland MPO can leverage its relationships with state and federal agencies, as well as other regional organizations, to access additional funding opportunities and resources as well as serve as the primary administrator for multijurisdictional projects. By partnering with other entities and leveraging complementary funding sources, the Heartland MPO can maximize the impact of its funding allocation and support a broader range of initiatives.

Collaborative Funding Initiatives: The Heartland MPO can facilitate collaborative funding initiatives where multiple jurisdictions pool resources to finance shared projects. These collaborations could involve coordinating contributions from local governing bodies, private sector partners, nonprofit organizations, and other stakeholders to fund initiatives that address common regional challenges or opportunities.



CATS Bus Terminal

Joint Local Public Agency Funding

Financing large multijurisdictional infrastructure improvements can be complicated because these initiatives often involve multiple municipal departments and external organizations while necessitating the pooling of resources to otherwise accomplish what a single municipality could finance on its own. Joint Funding Agreements (JFAs) enable multiple entities to pool resources and jointly fund projects that align with their respective missions and priorities. Entities can maximize the impact of their investments in multijurisdictional initiatives by leveraging complementary funding sources. JFAs are enabled in the State of Indiana by Indiana Code (IC) 5-13-9-10 and enable a county and any participating political subdivision to enter into an agreement to jointly fund an infrastructure improvement project.

Recently, a JFA has been implemented in the City of Columbus, Indiana, to complete a large multijurisdictional rail and highway overpass. Several other municipalities across the country like the City of Detroit, City of Pittsburgh, City of Philadelphia, and City of Minneapolis employ similar financing strategies to improve large, shared infrastructure elements like bridges and parks.

Beyond county-municipal JFAs, the Indiana Code also allows municipal governing bodies to establish an investment pool through IC 5-13-9-11. This investment pool is overseen by the State Treasurer and allows a participating governing body to jointly deposit money for future capital improvement projects and maintain this fund to accrue interest over time.



Before construction of the Columbus railroad overpass



After construction of the Columbus railroad overpass

Impact Fees

Impact fees are required by municipal ordinances under state law and incurred by developers to provide new or expand existing public facilities that will serve their new developments. These fees are required to be based on a methodology and calculation derived from the cost, nature, and size of the development. Impact fees should only be utilized when a connection can be made between the impact of a new development and the need for new infrastructure to accommodate that development. Proper planning and analysis demonstrate the nexus between future build-out and the capital needed to support such growth. The fee established for specific capital improvements should be reviewed at least every two years to determine if an adjustment is required. In addition, the capital improvement plan and budget should be reviewed at least every 5-8 years to determine if adjustments are needed.

Typically, cash payments are required to be made in advance of the development's completion. The funds generated by impact fees will finance improvements offsite but will directly benefit the development the fee is extracted from. If applied in conjunction with a comprehensive plan and a capital improvement plan, these fees an effective tool for ensuring infrastructure upgrades or expansions are funded, which is effective in areas where significant population growth is anticipated. However, communities should rely on their zoning and other land use regulations consistent with their comprehensive plans to influence their respective growth patterns. The Indiana Code includes certain stipulations for communities seeking to establish impact fees.

According to IC36-7-4-1312, an impact fee advisory committee must be established in the municipality before the impact fee ordinance is adopted.

According to IC 36-7-4-1315, an impact zone or set of impact zones must be established for each infrastructure type covered by the ordinance. The impact zone may not extend beyond the jurisdictional boundary of the agency responsible for the infrastructure type for which the impact zone was established, unless an agreement under IC 36-1-7 is entered into by the infrastructure agencies.

According to IC 36-7-4-1318, the municipality must develop or substantially update a zone improvement plan for each impact zone prior to adopting the impact fee ordinance. The zone improvement plan must include the information outlined further in IC 36-7-4-1318 (b).

According to IC 36-7-4-1320, the impact fee ordinance must include an impact fee schedule for each impact zone that is to be imposed for each infrastructure type covered by the ordinance and a formula for each impact zone by which the amount of the impact fee for each infrastructure type may be derived. Furthermore, both the schedule and formula included in the impact fee ordinance must provide an objective and uniform standard for calculating impact fees to allow fee payers to accurately predict the fees that will be imposed on new development.

According to IC 36-7-4-1338, after an impact fee ordinance meets the above stipulations and is adopted by the municipality, an impact fee review board must be established to conduct hearings of appeals concerning impact fees, review the amounts of assessed impact fees, and adjust impact fee rates as they see fit. For more information about the stipulations of establishing impact fees, see the above Indiana Code citations.





Vision & Key Goals



Introduction

Examining the existing conditions revealed several areas of potential improvement, and discussions during steering committee meetings revealed additional concerns. These conditions and concerns are addressed by each focus area containing goals and objectives: Transportation, Administration, Land Use, Economic Development, Sense of Place, and Sustainability.

Goals are specific to each focus area and general enough to encompass several objectives about improving the study area. Objectives are measurable action items designed to track progress towards achieving their respective goals. The goals and objectives were developed by careful study from the planning team and are intended to help with both current and future problems. FHWA goals and Smart Growth principles serve as the foundation for all the goals and objectives.



Traffic calming elements

As the Indianapolis metropolitan area continues growing, the traffic volume will increase on Interstate 69 (I-69), which could create many significant challenges if not managed appropriately. The goals and objectives in this section provide proactive measures for addressing roadway safety, aesthetics, connectivity, and multi-modal transportation. The following FHWA goals and Smart Growth principles serve as the foundation for this section, which contains 5 goals and 25 objectives.

FHWA Goals:

- Increase the safety of the transportation system for motorized and non-motorized users.
- Increase the security of the transportation system for motorized and non-motorized users.
- Increase the accessibility of and mobility options available to people and for freight.
- Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight.
- Emphasize the preservation of the existing transportation system.

Smart Growth Principles:

- Provide a variety of transportation choices.
- Foster distinctive, attractive communities with a strong sense of place.
- Create walkable neighborhoods.

Goal 1: Prioritize roadway safety as the communities within the study area develop.

- **Objective 1:** Meet or exceed recommended minimum safety treatments for all Local facilities throughout the study area.
- **Objective 2:** Follow American Association of State Highway Transportation Officials (AASHTO) minimum standards for safe roadway construction.
- Objective 3: Adopt access control ordinances limiting the number of curb cuts on all facilities above Major Collector.
- **Objective 4:** Enact Memoranda of Understanding (MoUs) between relevant jurisdictions and INDOT to require municipal approval prior to curb cuts being granted on INDOT facilities.
- **Objective 5:** Enact MoUs between relevant jurisdictions to ensure that safety treatments are cohesive on facilities that cross jurisdictional boundaries.

Goal 2: Establish a cohesively and consistently built environment throughout the I-69 corridor.

- **Objective 1:** Meet or exceed identified minimum roadway design standards.
- **Objective 2:** Install similar roadway design elements on all Local facilities within the study area.

Adopt ordinar State ordinary S

Adopt ordinar Objective in Ata subdivisions, PUDs, businesses, and industrial parks to accommodate for future adjacent developments to connect to interior circulator roads.

Goal 3: Ensure the Local road network is complete, safe, and user-friendly for all transportation modes.

- **Objective 1:** Adopt rightof-way dedication ordinances for all facilities within the corridor
- **Objective 2:** Create a multijurisdictional Complete Streets oversight committee for the I-69 corridor.
- **Objective 3:** Ensure each jurisdiction within the study area adopts a Complete Streets policy.
- **Objective 4:** Establish a formal transit system to administer and operate transit services between all municipalities along the I-69 corridor.
- **Objective 5:** Adopt ordinances requiring new subdivisions, PUDs, businesses, and industrial parks to include sidewalks on interior circulating roads.
- **Objective 6:** Install sidewalks on all Local and Minor Collector facilities where feasible.

Goal 4: Employ strategies to reduce air pollution from transpor the study area that connects to each of the municipalities.

- **Objective 1:** Study interchange and intersection operational improvements to reduce vehicle idling times.
- **Objective 2:** Upgrade signalized intersections on Major Collectors and above to roundabouts where appropriate.
- **Objective 3:** Study the feasibility of installing "mini roundabouts" on Local- and Minor Collector-level intersections.
- **Objective 4:** Establish Transit-oriented Development (TOD) ordinances for new subdivisions where feasible to ensure future developments are accessible by all transportation modes.
- **Objective 5:** Create a multi-use trail network within the study area that connects to each of the municipalities.

Goal 5: Accommodate a wide range of multi-modal transportation.

- **Objective 1:** Study the feasibility of including electric vehicle (EV) infrastructure at large truck stops near interchanges.
- **Objective 2:** Study the feasibility of establishing an **intermodal transportation** distribution center within the study area.
- **Objective 3:** Study the potential impacts of **Connected Autonomous Vehicles (CAVs)** within the I-69 corridor.
- **Objective 4:** Include requirements for public bicycle storage in commercial PUDs, multifamily housing developments, and mixed-use developments.
- **Objective 5:** Develop ordinances to regulate the usage of bikeshares and scootershares in the study area.
- **Objective 6:** Partner with one or more shared pedestrian mobility product providers to offer services within the study area.

LAND USE

The I-69 corridor is facing intense pressure to develop and accommodate the rising number of people wanting to live and work within the study area. The goals and objectives in this section advocate for implementing responsible land use practices, providing various options, and adhering to appropriate land use patterns according to each community's unique priorities. The following FHWA goals and Smart Growth principles serve as the foundation for this section, which contains 5 goals and 19 objectives.

FHWA Goals:

- Protect and enhance the environment, promote energy conservation, improve quality of life, and promote consistency between transportation improvements and State and local planned growth, housing, and economic development patterns.
- Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight.

Smart Growth Principles:

- Strengthen and direct development towards existing communities.
- Foster distinctive, attractive communities with a strong sense of place.
- Have a mix of land uses.
- Create a wide range of housing opportunities and choices.
- Take advantage of compact building design.

Goal 1: Maintain compact development patterns in the appropriate areas according to each municipality's priorities.

 Objective 1: Develop an incentives package that includes floor-to-area bonuses to encourage compact, walkable development throughout the study area.

Regularly evaluate **Objective 2** If existing utilities for the feasibility of updating them to accommodate future growth.

Follow best land use planning practices by loca**Objective3**1ential developments and subdivisions directly adjacent to existing municipal centers.

Encourage mixed-use, dense, and TOD practice: Objective 4:

affordable multi-family residential dev**Objective** 5 acent to or as a part of planned business parks.

Goal 2: Maintain the unique rural character of the corridor in the appropriate areas according to each municipality's priorities.

- **Objective 1:** Establish Green Area Ratio (GAR) standards.
- **Objective 2:** Establish the use of cluster zoning where appropriate.
- **Objective 3:** Develop design regulations requiring street connectivity to adjacent neighborhoods
- Objective 4: Preserve agricultural land identified as .8 or above according to the USDA National Resources Conservation Services National Commodity Crop Productivity Index where feasible.

Goal 3: Maintain a current and relevant future land use map.

Goal 4: Increase residential density near travel opportunities.

Goal 5: Support developing various quality housing types throughout the corridor.

- **Objective 1:** Update all land use maps available within the study area to include the most current information available.
- **Objective 2:** Comply with all applicable Indiana state statutes regarding updating land use maps.
- **Objective 3:** Establish webbased land use maps for every municipality in the study area that publicly display the most current land use information.
- **Objective 4:** Actively maintain public-facing digital land use maps so they always contain the most current and accurate information

- **Objective 1:** Evaluate vacant land to determine prime areas near transit connections to residential developments.
- **Objective 2:** Encourage mixed-use, dense, and TOD practices.
- **Objective 3:** Incentivize development near public transportation, multi-modal connections, workplaces, and other daily travel needs
- **Objective 1:** Provide various housing options throughout the study area by developing duplexes and triplexes by right within residential zones.
- **Objective 2:** Establish mixed-use commercial and multi-family residential zones along Major Arterials and near existing urban centers.
- **Objective 3:** Limit the amount of property rezoned as exclusive single-family residential and/or as large-lot single-family residential.

ECONOMIC DEVELOPMENT

I-69 is a major commerce highway connecting the communities along the corridor to the growing Indianapolis metropolitan area, which makes the stretch of highway within the study area a very desirable place to develop. The goals and objectives in this section support appropriately increasing economic growth for the communities located along the I-69 corridor. The following FHWA goals and Smart Growth principles serve as the foundation for this section, which contains 4 goals and 16 objectives.

FHWA Goals:

- Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency.
- Protect and enhance the environment, promote energy conservation, improve quality of life, and promote consistency between transportation improvements and State and local planned growth, housing, and economic development patterns.
- Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight.
- Promote efficient system management and operation.

Smart Growth Principles:

- Make development decisions predictable, fair, and cost-effective.
- Encourage community and stakeholder collaboration in development decisions.
- Have a mix of land uses.

Goal 1: Coordinate economic development efforts between communities in the study area.

- Objective 1: Encourage governing bodies within the study area to become active partners with the Madison County Economic Development (MCED) and the Madison County Chamber of Commerce
- Objective 2: Perform the appropriate market analyses to ensure economic development strategies are successfully implemented.
- **Objective 3:** Establish a partnership between the City of Anderson, Madison County, and FCRWD to resolve wastewater utility issues preventing the Flagship Enterprise Center from continuing to expand.

Goal 2: Coordinate industry diversity and development in the study area.

- **Objective 1:** Adopt an overlay district to standardize zoning and coordinate development.
- **Objective 2:** Increase the Flagship Enterprise Center's site capacity to allow for expanding light and heavy industrial businesses.
- **Objective 3:** Incentivize warehouse and distribution industry businesses to relocate to or start up along the corridor with upgraded utilities
- **Objective 4:** Develop hightech industrial parks and other cluster-based developments along the corridor directly adjacent to existing interstate interchanges.
- **Objective 5:** Incentivize financial and professional service businesses to relocate to or start up along the corridor with upgraded utilities.
- **Objective 6:** Implement a marketing campaign to promote the corridor's development potential within the Indianapolis metropolitan area.

Goal 3: Grow local businesses along the corridor and retain them.

Goal 4: Develop a highly skilled and versatile workforce.

- **Objective 1:** Create partnerships between local stakeholders, educational institutions, community organizations, and governing bodies to distribute information about starting and running small businesses.
- **Objective 2:** Support potential businesses in identifying appropriate location sites.
- **Objective 3:** Help local businesses thrive within the study area.
- **Objective 4:** Remove regulatory barriers to starting new businesses

- **Objective 1:** Coordinate with local employers and educational institutions to bridge skill gaps in the study area's labor market.
- Objective 2: Make information about work skills development programs and employment opportunities more accessible within the communities in the study area.
- **Objective 3:** Create and maintain a database of local talent to attract potential employers to relocate to the study area.

SENSE OF PLACE

Steering committee members repeatedly discussed the identity of the I-69 corridor because it is a significant asset for all of Madison County. Many committee members were concerned about the corridor having a cohesive identity while distinguishing between each unique community represented along the corridor. The goals and objectives in this section address establishing a cohesive sense of place for the whole corridor through both the built and natural environments while maintaining the individual identities of the communities within the study area. The following FHWA goals and Smart Growth principles serve as the foundation for this section, which contains 5 goals and 18 objectives.

FHWA Goals:

- Protect and enhance the environment, promote energy conservation, improve quality of life, and promote consistency between transportation improvements and State and local planned growth, housing, and economic development patterns.
- Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight.
- Enhance travel and tourism.

Smart Growth Principles:

- Foster distinctive, attractive communities with a strong sense of place.
- Encourage community and stakeholder collaboration in development decisions.
- Make development decisions predictable, fair, and cost-effective.

Goal 1: Distinguish the Integrate I-69 Corridor Study area as its own unique segment and destination.

- **Objective 1:** Establish design standards for developments with building frontage and/or rear elements that are visible to passing motorists on I-69.
- **Objective 2:** Create additional unique signage for the corridor's major businesses and institutions that are visible to passing motorists on I-69.
- **Objective 3:** Prohibit temporary signs that are visible to passing motorists traveling on the I-69 corridor.
- **Objective 4:** Include landscaped berms as a design alternative to sound barrier walls in developments adjacent to the I-69 right-of-way.

Goal 2: Improve the overall sense of place within the I-69 corridor's right-of-way.

- **Objective 1:** Improve lighting conditions around all interstate interchanges within the study area.
- **Objective 2:** Remove damaged and/or defunct billboards along the corridor.
- Objective 3: Incorporate artistic elements into bridge spans that reflect the identity of the I-69 corridor and its communities.

Goal 3: Establish a cohesive corridor-wide identity through development decisions.

- **Objective 1:** Encourage communities along the corridor to update their existing ordinances to incentivize infill development.
- P Objective 2: Identify and preserve the unique identity of each community along the corridor.
- **Objective 3:** Establish a wayfinding system that incorporates each community's unique identity.
- **Objective 4:** Establish corridor-wide minimum standards for development.

Goal 4: Establish unique gateways within the study area that incorporate the I-69 corridor's identifying design elements.

- **Objective 1:** Use a corridor-wide approved plant list.
- **Objective 2:** Establish a materials palette for all interchange beautification efforts.
- Objective 3: Establish a cohesive selection of site furnishings.
- **Objective 4:** Create a gateways plan for communities in the study area.

Goal 5: Encourage civic engagement within the corridor.

- **Objective 1:** Create and promote a corridor-wide public forum to provide feedback about the corridor's development.
- Objective 2: Promote the formation of and participation in local public/private beautification groups, much like the Keep Indianapolis Beautiful and Keep Evansville Beautiful organizations
- **Objective 3:** Partner with local artists to incorporate art into public facilities that celebrates the unique identity of each of the communities along the corridor.

SUSTAINABILITY

The southern portion of the Integrate I-69 Corridor Study area contains several Environmentally Sensitive Areas (ESAs) that require forward-thinking decision-making to ensure they are protected and/or mitigated appropriately. The goals and objectives in this section are designed to lower the impact of development on the existing environment while appropriately preserving or mitigating existing ESAs. The following FHWA goals and Smart Growth principles serve as the foundation for this section, which contains 8 goals and 33 objectives.

FHWA Goals:

- Improve the resiliency and reliability of the transportation system and reduce or mitigate stormwater impacts of surface transportation.
- Protect and enhance the environment, promote energy conservation, improve quality of life, and promote consistency between transportation improvements and State and local planned growth, housing, and economic development patterns.
- Promote efficient system management and operation.

Smart Growth Principles:

- Preserve open spaces, farmlands, and critical environmental areas.
- Encourage community and stakeholder collaboration in development decisions.

Goal 1: Improve environmental conditions at every level of the corridor.

- Objective 1: Invest in projects that support climate change resilience.
- Objective 2: Require environmental impact studies of new developments.
- Objective 3: Integrate protecting and enhancing natural systems into local development ordinances.
- **Objective 4:** Map areas to be designated for continued agricultural uses
- **Objective 5:** Encourage new developments to follow and achieve Leadership in Energy and Environmental Design (LEED) and Sustainable SITES Initiatives standards and certifications.

Goal 2: Partner with regional stakeholders to determine the infrastructure investments needed to meet future demands.

- **Objective 1:** Support solid waste diversion or recovery solutions where appropriate.
- Objective 2: Support wastewater treatment upscaling solutions where appropriate.
- Objective 3: Promote efforts to increase composting rates in the study area.
- **Objective 4:** Project future demand based on current development patterns to determine the necessary infrastructure investments and expansions.
- **Objective 5:** Coordinate with INDOT to determine the appropriate traffic design capacity to meet future needs.
- **Objective 6:** Expand existing wastewater capacity by eparating sanitary sewers from urface stormwater drains.

Goal 3: Reduce vehicle miles traveled to support reducing transportation-related pollutants.

- **Objective 1:** Encourage utilizing mass transit, carpooling, and multi-modal transportation to reduce emissions from on-road vehicles.
- Objective 2: Prioritize investments that will improve corridor-wide access to bikeshares and other active transportation options.
- **Objective 3:** Update land use regulations to prioritize reducing the lengths and frequencies of single-occupancy vehicle trips by including standards for dense, walkable development near transit connections.

Goal 4: Prioritize protecting, enhancing, or expanding ESAs.

- **Objective 1:** Implement and incentivize best management practices to reduce agricultural runoff into waterways.
- Objective 2: Prioritize protecting and enhancing FEMA-designated floodplain areas.
- **Objective 3:** Increase the tree canopy throughout the study area using a corridor-wide approved plant list.
- **Objective 4:** Identify, protect, and expand connections between habitat areas.

Goal 7: Increase residential density near travel opportunities.

- **Objective 1:** Evaluate vacant land to determine prime areas for residential developments near transit connections.
- **Objective 2:** Encourage mixed-use, dense, and TOD practices.
- Objective 3: Incentivize constructing developments near public transportation networks, multi-modal connections, work-places, and other daily travel needs.

Goal 5: Improve water quality throughout the corridor.

- **Objective 1:** Coordinate with jurisdictions in the study area to incorporate GAR into local development standards.
- **Objective 2:** Prioritize protecting riparian corridors within new developments.
- **Objective 3:** Identify and repair local stream damage throughout the study area.
- **Objective 4:** Implement a corridor-wide watershed management plan.

Goal 8: Invest in energy-efficient development, equipment, and materials throughout the corridor.

- **Objective 1:** Prioritize using low-embodied energy materials in local projects.
- **Objective 2:** Prioritize using energy-efficient and low-emission equipment in all aspects of new development.
- **Objective 3:** Upgrade public utility assets and infrastructure to make them more energy efficient.
- **Objective 4:** Develop and implement guidelines for new projects to achieve net-zero environmental impacts.

Goal 6: Invest in resilient stormwater infrastructure.

- **Objective 1:** Develop a stormwater master plan for the study area.
- **Objective 2:** Invest in green stormwater infrastructure for public projects.
- Objective 3: Update existing stormwater policies and development standards in jurisdictions throughout the study area.
- Objective 4:
 Reduce

 Impervious surfaces and encourage onsite, nature-based design solutions to improve stormwater mitigation.

ADMINISTRATION

There are multiple jurisdictions with different goals represented within the Integrate I-69 Corridor Study area. The goals and objectives in this section ensure that coordination occurs between each jurisdiction and that development occurs intentionally. In addition, this focus area addresses funding opportunities and strategies for projects proposed in this study. The following FHWA goals and Smart Growth principles serve as the foundation for this section, which contains 2 goals and 7 objectives.

FHWA Goals:

- Protect and enhance the environment, promote energy conservation, improve quality of life, and promote consistency between transportation improvements and State and local planned growth, housing, and economic development patterns.
- Promote efficient system management and operation.
- Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency.

Smart Growth Principles:

- Encourage community and stakeholder collaboration in development decisions.
- Make development decisions predictable, fair, and cost-effective.

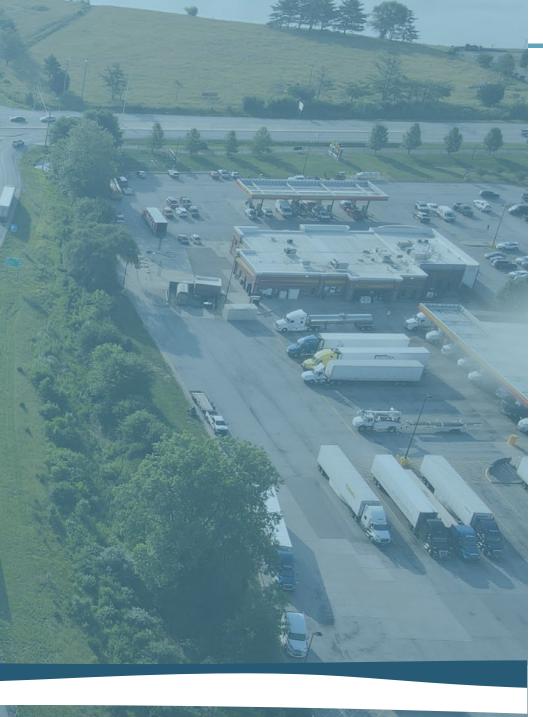
Goal 1: Establish an MoU between all jurisdictions within the Integrate I-69 Corridor Study area.

- Objective 1: Enact the "Memorandum of Understanding for Intergovernmental Cooperation in Development And Access Management Near Municipal Boundaries" between all municipalities in the study area.
- **Objective 2:** Enact MoUs between relevant jurisdictions in the study area and INDOT for the long-term maintenance of enhancements within the INDOT right-of-way.
- **Objective 3:** Enact MoUs between relevant jurisdictions to coordinate reconstruction and regular maintenance of non-INDOT facilities that cross boundaries.
- **Objective 4:** Enact MoUs between relevant jurisdictions to streamline the notification and approval process of property access curb cuts into INDOT-controlled rights-of-way.

Goal 2: Coordinate improvements throughout the I-69 corridor to enhance its sense of place.

- **Objective 1:** Establish a corridor-wide **overlay district** to synchronize land use regulations across municipalities within the study area.
- Objective 2: Encourage adjacent municipalities to establish JFAs to fund mutually beneficial sense of place improvements where feasible; moreover, strategies for establishing JFAs can be found in Section D: Funding & Financing on p. 40.
- **Objective 3:** Establish a design review committee with representatives from each jurisdiction within the study area.





Introduction

The minimum design standards provide a common floor to ensure unity between the four municipalities and the unincorporated areas of Madison County along the I-69 corridor. The recommendations presented in this study are a starting point for these communities to conduct further discussions about the corridor's future and implement projects. By establishing common design standards, the corridor will demonstrate a cohesive sense of place while allowing each community to showcase its own unique identity.

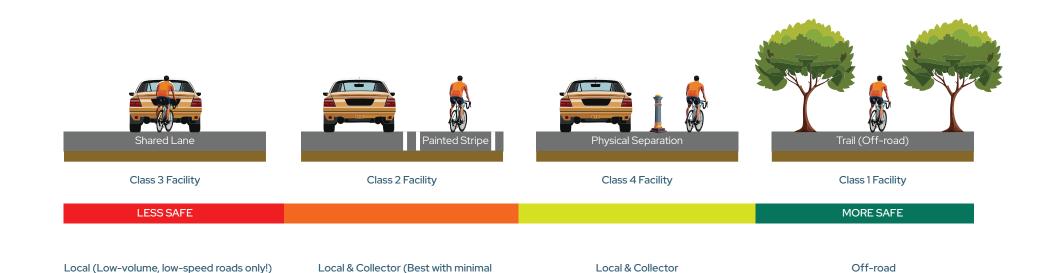
These standards are recommendations that do not supersede any local or federal regulations. All regulations should conform to ordinances at the jurisdiction's local level, INDOT design standards at the state level, and AASHTO standards at the federal level. AASHTO is an independent association comprised of transportation departments nationwide that publishes technical standards for design, construction, materials, and other technical areas. Policies at the state level can meet or exceed these minimum standards and. in turn, local ordinances can then meet or exceed state-level policies. The purpose of the minimum standards is establishing common design standards and governing ground rules within the study area. By implementing these minimum standards, the communities within the study area will continue carrying out effective planning practices while better coordinating development among the different jurisdictions. The minimum standards cover the design of buildings, structures, plantings, signs, streetscapes, setbacks, and other elements visible to the public that enhance a community's sense of place. Communities within the study area will have a reliable framework to guide their development with these standards, which then empowers them to make informed decisions that align with their long-term visions while ensurina compatibility with neighboring jurisdictions.

During the time this study was conducted in spring 2024, much of the land within the study area was undeveloped, which presented an opportunity for the communities to determine the identity and character of the corridor without much precedent. The building and form standards are especially important because they will enable the communities to actively shape the visual identity of the corridor as it grows.

Infrastructure within the public right-of-way needs to be safe, accessible, and user-friendly to all people within the I-69 corridor, regardless of the user's mode of transportation. There are piecemeal existing bike facilities on functionally classified roadways ranging from Local to Minor Arterial within the study area; however, there is no coordinated design treatment of these facilities amongst the municipalities within the study area.

Bike Facilities

- Bike facilities shall be designed according to a road's functional classification and site context.
- Pavement markings and/or separations shall be used for bicycle facilities according to the roadway's functional classification and Average Annual Daily Traffic (AADT).
- Conflict points between vehicles and cyclists shall be minimized at intersections.
- Bike facilities shall have provisions for connections to parks and trails.



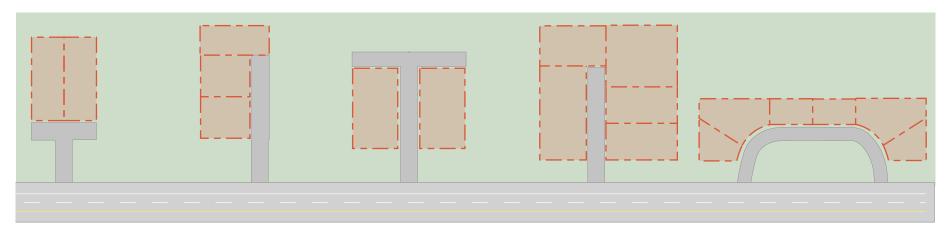
access drives and lower volume count roads.)

Figure 17: Shared Bike Lane Configurations

Shared Drives

Any facilities that have multiple single-property access points create safety hazards and reduce the capacity of the facility. Shared access drives are key to reducing the number of curb cuts into the public right-of-way, because these shared drives are especially useful in areas where parcel-limited frontage would otherwise place its legally required access point in conflict with intersections.

- Shared drives must abide by all the minimum requirements for single-access drives within this document.
- Shared drives shall be required when it is not possible for the normal placement of an access drive to comply with the minimum requirements for drive spacing distance from the edge of a development's parcel.
- Shared drives shall be prohibited from being located within 1,350 feet of any interstate access ramp.
- Shared drives shall not include signage or monuments that reduce or completely block the vehicle sight triangle.
- All shared drives shall include pedestrian crossings as a part of their design.



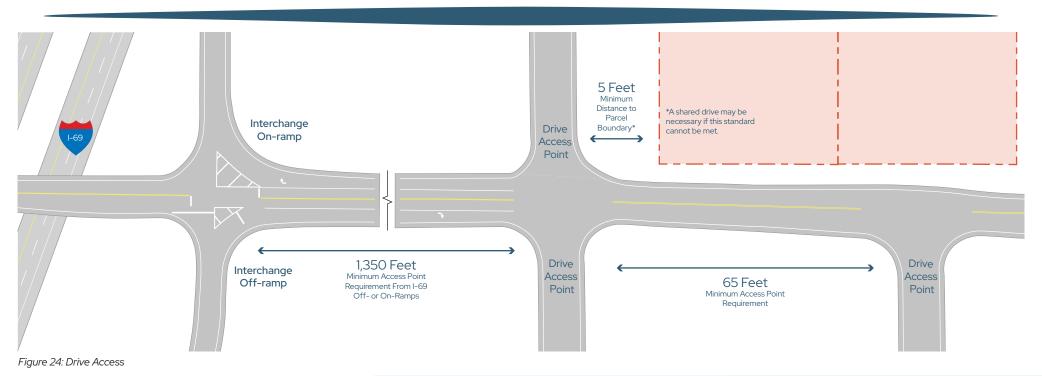
Minimum Shared Drive Maximum Shared Drive

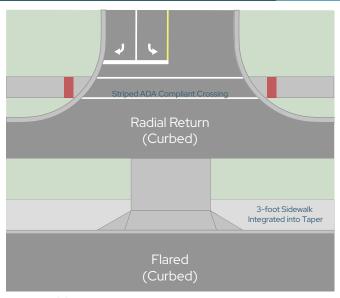
Figure 18: Example Shared Service Drives

Managing access drives adjacent to intersections within the study area will enable municipalities to better preserve the traffic flow on primary roads while simultaneously providing access to land developments. Therefore, the integrity of the public road system shall be preserved as the intersections become more urbanized. Limiting access points will prevent the overall safety, capacity, and traffic speed of these facilities from deteriorating in the future.

Drive Access Points

- Reduce conflict points immediately around intersections by closing and relocating existing curb cuts.
- New drive access points should be at least 1,350 feet from interstate off-ramps.
- New drive access points should be determined by the facility's speed limit and be located at least 130 feet from each other as well as all other intersections.
- New **drive tapers** are only to be permitted if they can be incorporated into the existing parcel frontage.
- Temporary drive access points closer to intersections shall be allowed for construction access.
- Right-in right-out access configuration should be used where access drives cannot meet minimum distances from intersections.
- If the property frontage is insufficient to allow for the minimum drive spacing, then drives shall be consolidated as a shared access point.
- Median openings should not be granted unless justified by a traffic impact analysis.

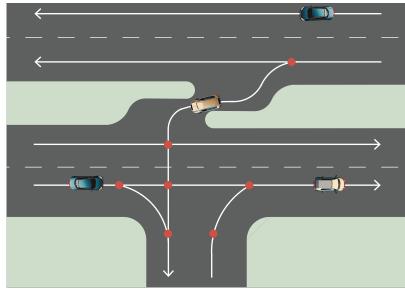




Acceptable Drive Tapers

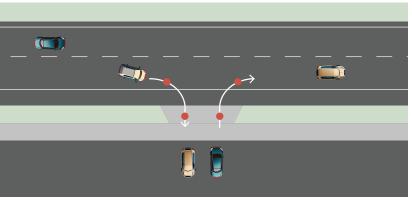
Figure 25: Access Drive Taper

Drive Access Conflict Points

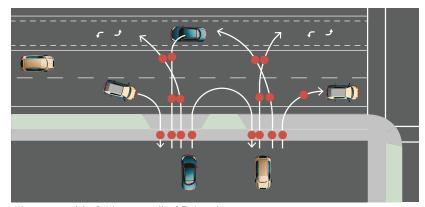


Acceptable Right-in Right-out with Median Opening

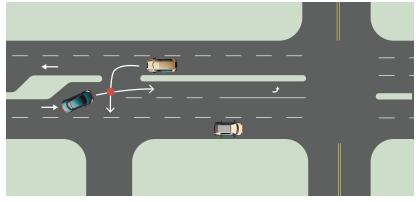
Figure 28: Cross-median Drive Access



Acceptable Right-in Right-out Drive with Full Median Figure 26: Acceptable Drive Access with Full Median



Unacceptable & Uncontrolled Drive Access Figure 27: Uncontrolled Drive Access



Unacceptable Median Opening with Left Turn Lane

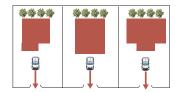
Figure 29: Unacceptable Cross-median Access

Service drives provide shared access between two or more parcels and/or a connection between abutting land uses. All situations where the driveway spacing minimum standards cannot otherwise be met require a service drive. Moreover, service drives may be required for all properties along Major or Minor Arterials.

Service Drive & Cross Property Access

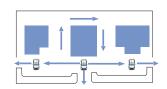
- Service drives are required to have a 30-foot setback from the public right-of-way.
- Service drives are required to provide safe access to pedestrians and cyclists by means of a paved path or sidewalk.
- All forms of parking on the service drive shall be prohibited.
- The minimum pavement width of a two-way service drive is required to be 26 feet, and 13 feet for a one-way drive.
- A service drive that intersects with another service drive for the purposes of interior site circulation shall be 36 feet wide at the intersection.
- Service roads shall be constructed parallel to the front property line.
- PUDs and residential subdivisions shall incorporate future connection roads and sidewalk stubs as a part of their interior transportation network.
- Adjacent commercial and retail developments shall connect their parking lots to one another.

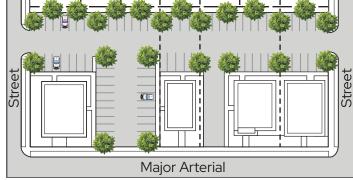
Avoid



Promote

Cross Access
Joint Access
Complete Onsite
Circulation





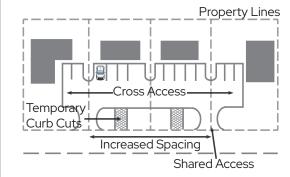


Figure 36: Enabling Cross-site Circulation

Figure 37: Side Street Cross-parcel Access

Figure 38: Cross Access Through Shared Parking

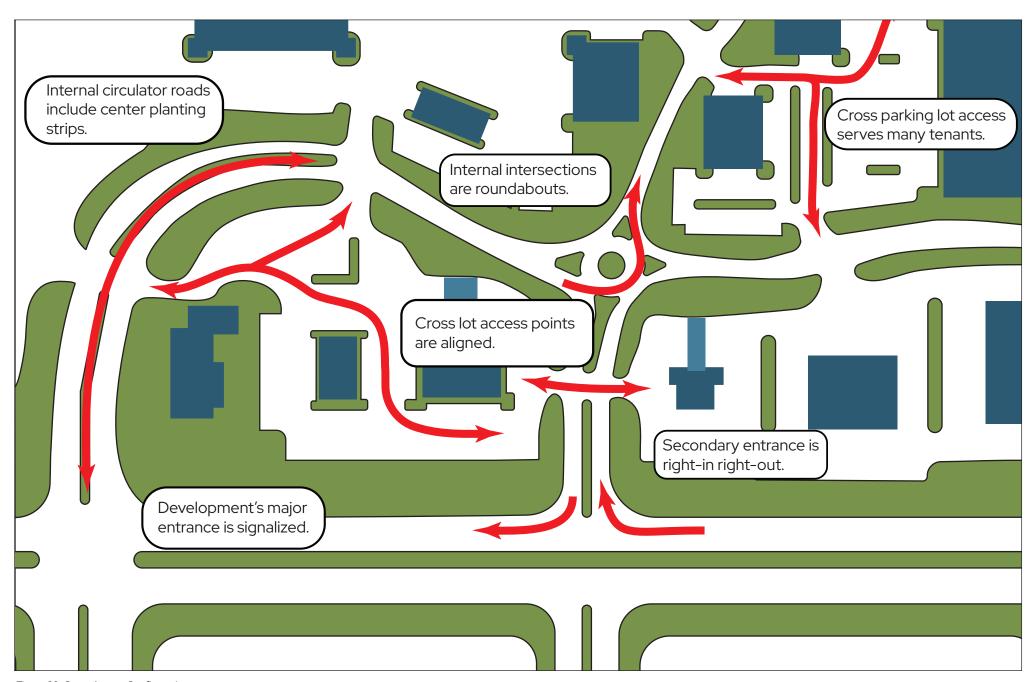


Figure 39: Cross Access Configurations

Curbs and gutters are vital elements to the function of any roadway by serving as hard boundaries between property access points and the roadway network. In addition, curbs and gutters also improve the aesthetics of a corridor, provide cost-effective drainage solutions, and can be an integral solution to right-sizing a facility to fit the community's needs.

Curbs & Gutters

- Curbs shall be included in all non-interstate facilities within the study area.
- Curb crossing bump-outs or curb extensions shall be incorporated into intersections with heavy pedestrian traffic.
- Curb radii at intersections shall depend on the facility's functional classification and designed speed limit.
- Gutters shall be included in all facilities within the study area.
- Combination rolled curb and gutter systems shall only be applied on roadways classified as Local and only within residential subdivisions.
- Valley gutter systems shall not span intersections.
- Surface drains shall be installed for all newly constructed roads and incorporated into the facility's drainage system.
- Existing shoulder and ditch road configurations shall be retrofitted to include curbs and gutters.



Ideal for drainage and locations that do not need to be mounted.



Figure 19: Curb and Gutter Configurations



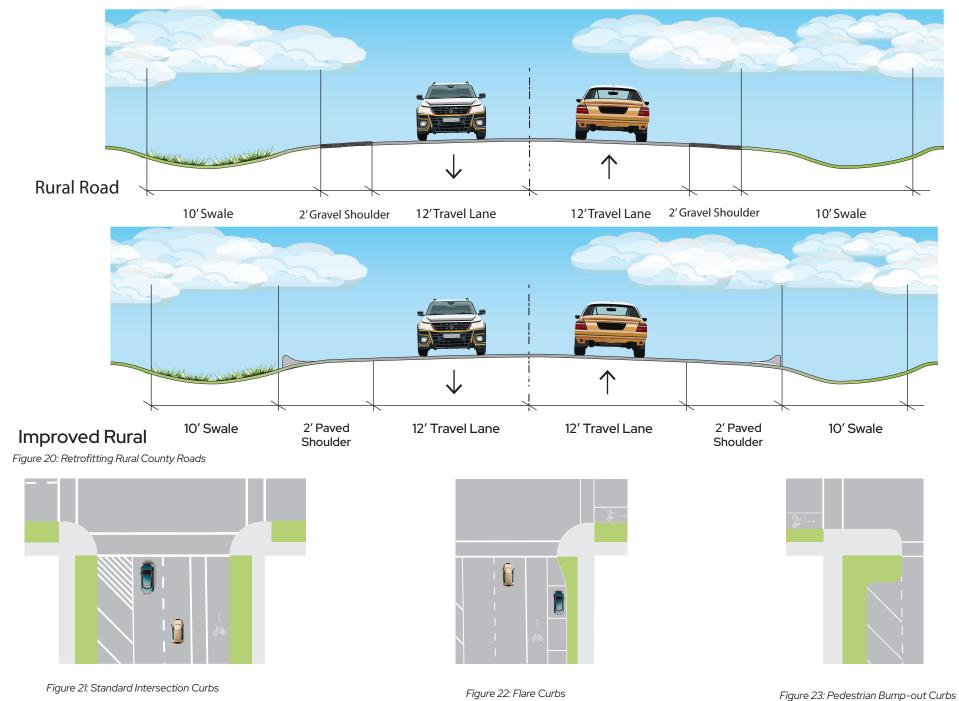
Ideal for locations that need to be mounted such as driveways; however, these curbs are only acceptable on Local roads.





Ideal for street centerlines for flush curb situations on low-speed, Local-level roads. Curbs shall not span intersections.





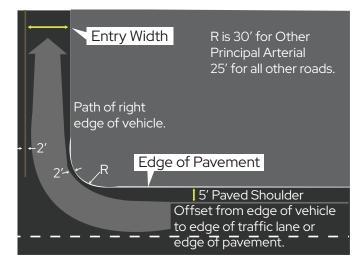
TRANSPORTATION |

Road intersections are a part of the greater transportation network as opposed to being individual instances of streets crossing and need to be designed as such. Well-designed intersections are necessary for the road network to function safely and efficiently. Intersections should be designed consistently throughout the road network to make navigating intuitive and predictable for both motorists and pedestrians.

Intersections

- No features, including but not limited to, access drives, driveways, signs, pedestrian amenities, ornamental plantings, and hardscapes shall be constructed such that they reduce or impede safe sight distances.
- Engineering studies for new intersections within the study area shall include a roundabout as an alternative to a standard signalized intersection.
- Signalized intersections that create a large vehicle queue or excessive turning conflict points shall be converted into roundabout intersections wherever feasible.
- All newly constructed intersections shall include Americans with Disabilities Act (ADA) and Public Rights-of-Way Accessibility Guidelines (PROWAG) compliant sidewalks and crosswalks.
- Curb radii at intersections should be rounded no less than 25 feet for Major Collectors and no less than 30 feet for any Minor Arterial and above.
- All intersections within the study area shall incorporate consistent design elements.
- Signalized intersections along Minor Arterials and above shall be synchronized with the facility's speed limit to enhance traffic flow.





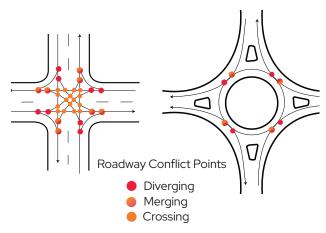


Figure 30: Intersection Sight Triangle

Figure 31: Intersection Radii

Figure 32: Minimizing Roadway Conflict Points

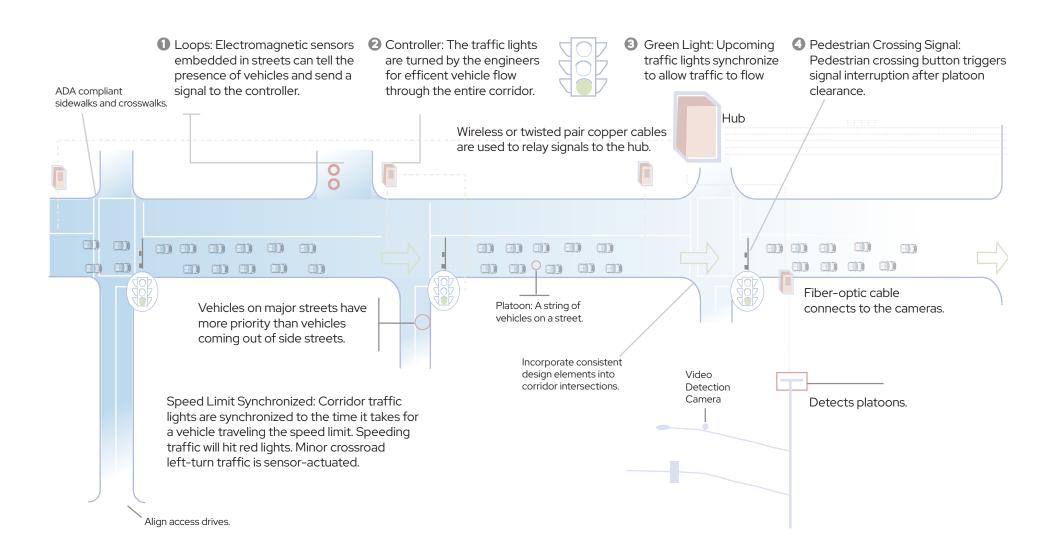


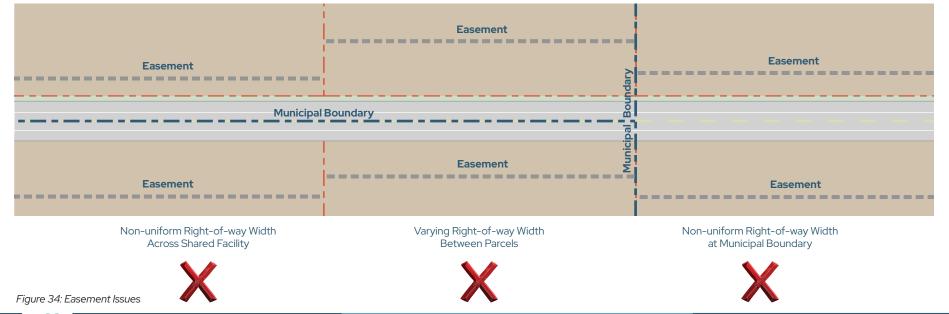
Figure 33: Corridor Signal Synchronization

TRANSPORTATION

Right-of-way

Maintaining the integrity of the right-of-way along the entire length of a roadway facility is vital to the future growth and development of the I-69 corridor. Irregular parcel setback and permanent structural encroachment into the frontage-dedicated easement will pose significant hurdles if a road needs to be improved. Rightof-way should be uniform for each facility to streamline any future roadway improvements, especially across jurisdictional boundaries and adjacent land uses.

- Minimum right-of-way widths shall be set according to functional classifications.
- Minimum right-of-way widths shall be consistent across jurisdictional boundaries.
- Roadway facilities serving as jurisdictional boundaries shall have a uniform width.
- The amount required for right-of-way dedication is half the required right-of-way measured from the street centerline.
- Each newly constructed road shall be designated as Suburban and have the appropriate right-of-way width for its functional classification.



TRANSPORTATION

Improving the integrity of a road's existing right-of-way is a worthwhile, yet laborious process. Existing developments often have easements and frontage that may not meet current right-of-way requirements, which will hinder future infrastructure improvements. All municipalities within the Integrate I-69 Corridor Study area shall adopt a right-of-way dedication ordinance requiring existing properties to dedicate the frontage necessary to mitigate any existing issues or future impacts the land use will have on the public facility.

Right-of-way Dedication

- Eminent domain should only be used as a last resort to rectify existing right-of-way conflicts within the study area.
- The right-of-way dedication ordinance shall include considerations for the necessary width required for reasonable maintenance to a roadway.
- The right-of-way dedication ordinance shall include considerations for including future pedestrian and/or cyclist improvements within the public right-of-way.
- The right-of-way dedication ordinance shall include considerations for including future frontage roads or frontage improvements.
- The right-of-way dedication ordinance shall include establishing a design review committee that facilitates case-by-case design considerations for dedicating additional right-of-way.
- Municipalities shall clearly identify when additional right-of-way dedication is necessary.

Examples Where Right-of-way Dedication is Needed

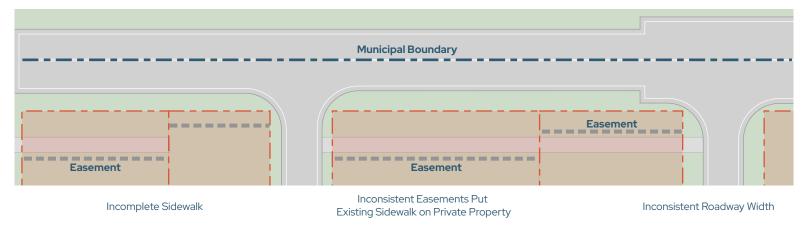


Figure 35: Locations Where Right-of-way Dedication is Needed

TRANSPORTATION |

Shared use path projects should be coordinated amongst jurisdictions to be implemented as a network. Connectivity existing and proposed developments, road projects, park spaces, and natural areas shall be implemented where feasible. Shared use paths should accommodate all nonmotorized vehicle users and achieve ADA compliance standards. All shared use paths within the study area shall be designed to the following standards.

Shared Use Paths

- Conflict points with intersections shall be avoided as much as possible.
- Shared use paths shall be 10 feet minimum in width.
- Shared use paths crossing jurisdictions shall have similar treatments and connect seamlessly.
- Shared use paths shall be included in all proposed housing developments to provide network links and fill gaps.
- Areas for dwell time shall be provided on path segments greater than .25 miles long.
- Paths shall be maintained frequently to ensure user safety.
- Directional/wayfinding signage must be incorporated into path segments greater than .25 miles long.
- Lighting shall be incorporated at key decision points along path segments.

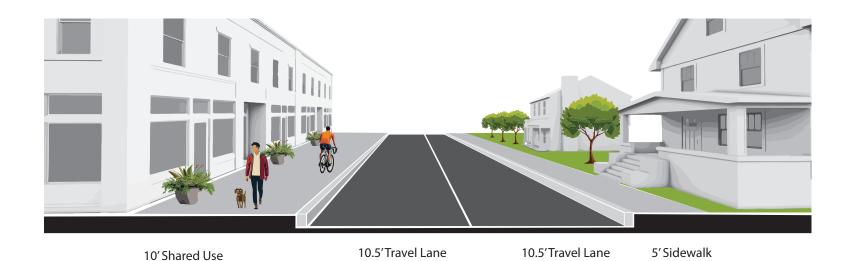
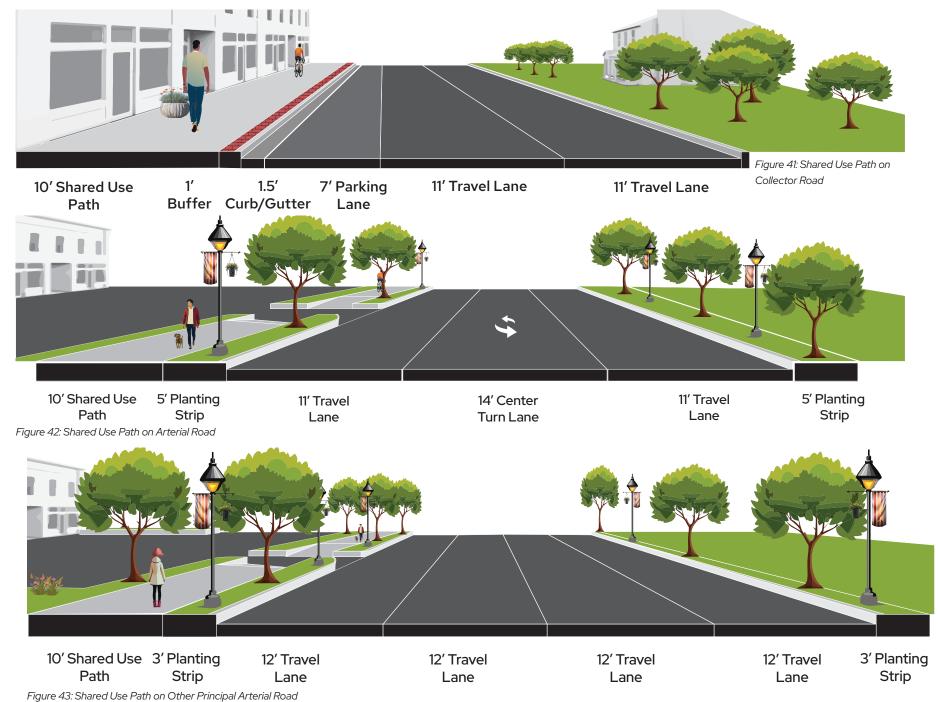


Figure 40: Shared Use Path on Local Road

Path

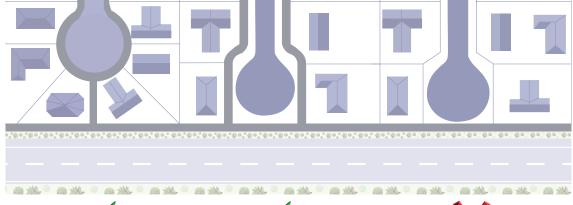


TRANSPORTATION

Sidewalks play a vital role in the life of urban environments by serving as conduits for pedestrian access to commercial spaces, enabling economic activity, and creating spaces for social interaction. Sidewalks need to be well-maintained in a safe and accessible comprehensive network to fully benefit the community.

Sidewalks

- All existing facilities from Minor Arterial and below within the study area shall have sidewalks.
- All proposed new construction facilities from Minor Arterial and below shall include pedestrian facilities.
- Sidewalks shall be 1 foot within the right-of-way as measured from the interior edge of a property's easement unless properties have structures built as a zero lot line.
- All sidewalks, both existing and newly constructed, shall be compliant with current ADA and PROWAG standards.
- All large commercial retail establishments shall be designed with direct sidewalk access from the
 establishment's main entrance to the public sidewalk network and/or to public open spaces directly
 adjacent to the establishment.
- A sidewalk plan shall be prepared for every lot within newly platted subdivisions and commercial PUDs.







Subdivision Sidewalk Connection Through Cul-de-sac



No Subdivision Sidewalk Connection

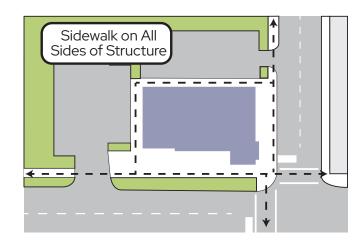


Figure 45: Public-to-Private Sidewalk Network



Stre	et	Ty	pe

Local

Local Residential

Minor Collector

Major Collector

Residential Major Collector

Downtown Major Collector

Commercial Major Collector

Minor Arterial

Industrial Minor Arterial

Major Arterial

Other Principal Arterial

-						
	Frontage Zone Desirable Width	Pedestrian Through Zone Minimum Width	Street Furniture /Curb Zone	Total Minimum Width (Without Frontage)		
	0′	4'	1′6″	6′		
	Ο'	4'	1′6″	6′		
	3′	5′	6′	14'6"		
	3′	5′	6′	14'6"		
	3′	5′	6′	14'6"		
	4′	6′	6′	16'6"		
	4′	6′	6′	16'6"		
	6′	8'	6′	20'6"		
	6′	8'	6′	20'6"		
	6′	8′	6′	20'6"		
	6′	8'	6'	20'6"		

Figure 46: Sidewalk by Functional Classification and Site Context

TRANSPORTATION

As the arteries connecting people to places, it is vital that the streets within the I-69 corridor provide context-sensitive design that supports multimodal mobility and access. Street design is informed by the purpose of the roadway, as well as the adjacent land uses. To ensure the proper right-of-way is obtained and preserved over time, standards are established based on the future street type and its associated design.

Street Design

- All new streets shall be constructed with curbs and gutters.
- Rural county roads within the study area shall be upgraded to Urban cross-sections when feasible as a part of their regularly scheduled maintenance/improvement program or when adjacent properties are developed.
- Half-streets, single-lane roads, and/or one-way roads shall be prohibited within the study area.
- All newly constructed roads shall be built as Complete Streets that accommodate all users.
- The minimum pavement width should be based on the functional classification of the road facility.
- All street amenities and enhancements shall be determined by the facility's street type.
- A street's speed limit shall be determined by its functional classification and the adjacent land uses.
- Residential private streets shall be prohibited.
- Private commercial and industrial streets shall be constructed according to the same minimum standards as public streets.

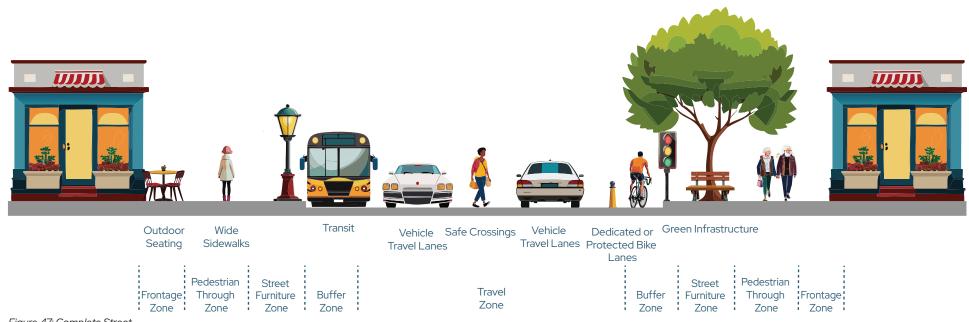


Figure 47: Complete Street

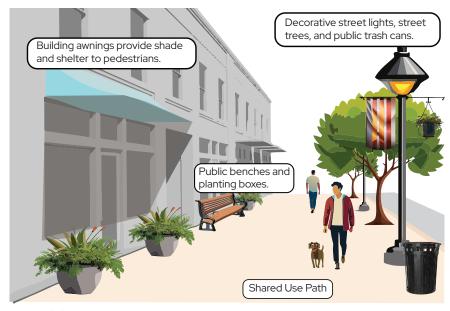


Figure 48: Street Amenities

Street Type	Right-of-way Width			
Local	60 Feet			
Local Residential	60 Feet			
Minor Collector	80 Feet			
Major Collector	80 Feet			
Residential Major Collector	80 Feet			
Downtown Major Collector	80 Feet			
Commercial Major Collector	80 Feet			
Minor Arterial	80 Feet			
Industrial Minor Arterial	100 Feet			
Major Arterial	100 Feet			
Other Principal Arterial	120 Feet			

Figure 49: Right-of-way Widths

Street Type	Sidewalk	Shared Use Path	Street Lights	Street Trees	Parking	Planting Boxes	Public Seating	Public Trash Cans	Wayfinding
Local					\checkmark				
Local Residential					\checkmark				
Minor Collector			\checkmark	\checkmark					
Major Collector		\checkmark	\checkmark	\checkmark				\checkmark	
Residential Major Collector		\checkmark	\checkmark	\checkmark	\checkmark				
Downtown Major Collector		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Commercial Major Collector		\checkmark	\checkmark	\checkmark		\checkmark	\checkmark	\checkmark	\checkmark
Minor Arterial		\checkmark	\checkmark	\checkmark					\checkmark
Industrial Minor Arterial		\checkmark	\checkmark	\checkmark					\checkmark
Major Arterial		\checkmark	\checkmark	\checkmark					\checkmark
Other Principal Arterial		\checkmark	\checkmark	\checkmark					\checkmark

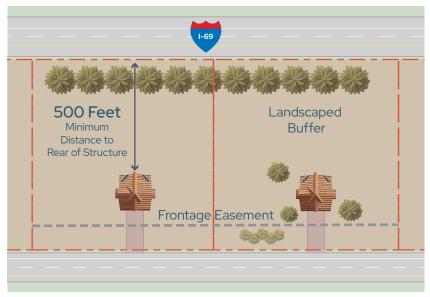
Figure 50: Recommended Street Amenities by Functional Classification and Area Context

LAND USE

Most of the land within the study area is currently zoned agricultural but will likely be upzoned as the corridor develops. Land use metrics including but not limited to minimum frontage requirements, lot setbacks, and lot depths may differ between land uses throughout the study area because it is multijurisdictional in nature. These metrics should be standardized for all land use categories to facilitate cohesive development.

Parcel Frontage & Setbacks

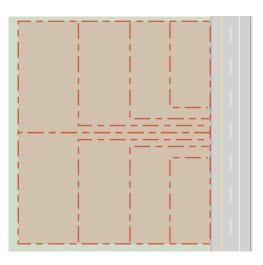
- Frontage setbacks shall be uniformly based on the functional classification of the road the property has direct access to.
- All municipalities shall coordinate their land use codes and zones to ensure land use requirements are uniform.
- Residential land uses directly adjacent to the Interstate 69 (I-69) right-of-way shall have a lot setback of 500 feet.
- Zero lot line development shall be prohibited along all facilities classified above Major Arterial.
- Flag lots or parcels shall be prohibited throughout the study area.



Private trees are discouraged in the frontage easement.

Planting beds are allowed within the frontage easement.

No permanent signs or hardscaping are allowed within the frontage easement.



Flag Parcels are Prohibited

Figure 52: Flag Parcels

Figure 51: Rear Lot Setback from the Interstate

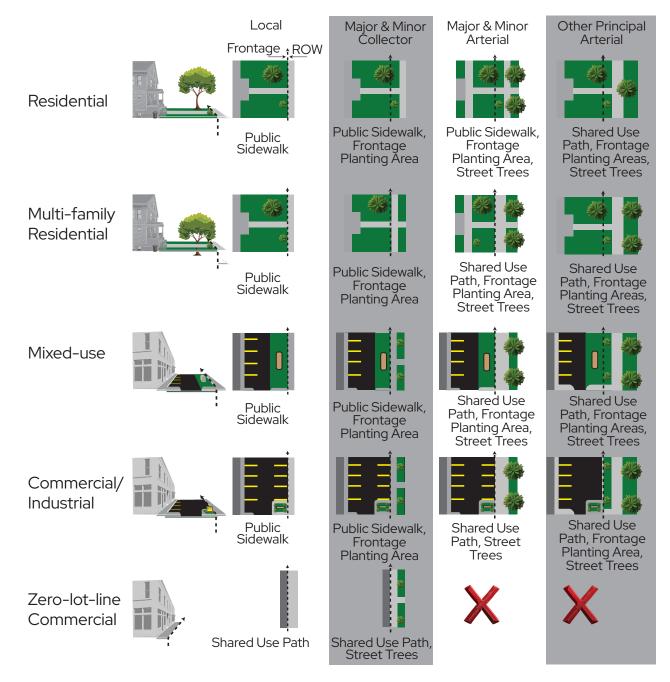


Figure 53: Parcel Frontage by Functional Classification and Area Context

Billboards are a long-standing form of traditional advertising that have been associated with the interstate system since the 1960s. Billboards have evolved from their original purpose of providing motorists with information about approaching attractions and services to digitally advertising products and services that, at best, have nothing to do with motorists and, at worst, create active distractions and visual clutter. Municipalities in the study area should incorporate additional requlations for billboards to create a cohesive corridor-wide sense of place.

Billboards

- New Electronic Messaging Center billboards shall be prohibited.
- Billboards shall have a maximum of two signs at any point in time.
- Billboards visible from the interstate shall have a minimum distance of 2,000 feet between each other.
- Billboards shall be no closer than 500 feet to merging on-ramps.
- Billboards shall not contain flashing, intermittent, or moving lights.
- Billboards shall not contain lighting that mimics emergency services vehicles, movable search lights, or brilliant directional light beams that shine directly into oncoming traffic.

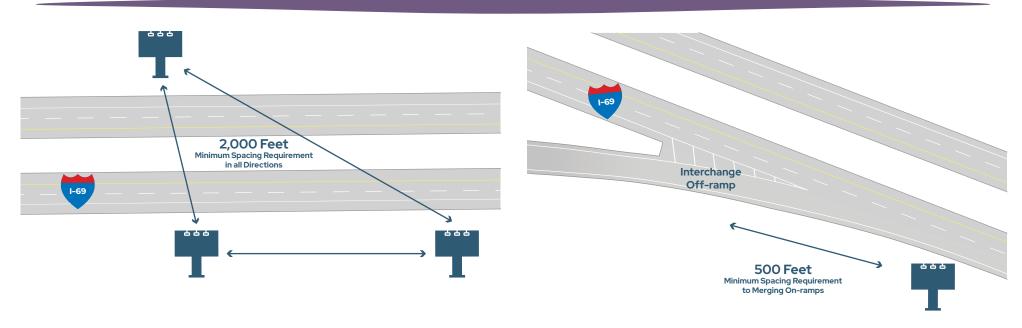
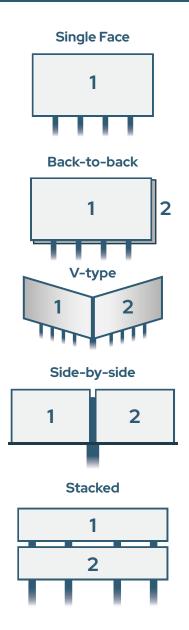


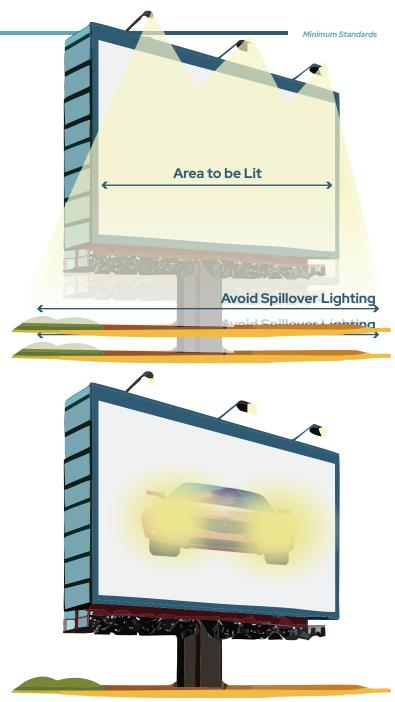
Figure 54: Billboard Spacing

Figure 55: Billboard Spacing from Interchanges



Permitted Configurations Maximum of 2 Signs

Figure 56: Billboard Configurations



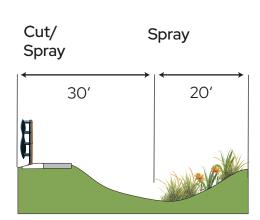
Billboards Shall Not Contain Distracting Brilliant Illumination

Figure 57: Billboard Lighting

The I-69 interchanges are the primary gateways into Madison County and its municipalities. Over 64,000 vehicles drive past the 4 interstate exchanges within the study area per day, and half of this traffic enters or exits the interstate system within the study area. Currently, the land adjacent to and between the on- and off-ramps is unimproved. Improving this land will enable Madison County and its municipalities to present a unified sense of place throughout the corridor. For further reading, see Reference 8 in Appendix 5: Supplemental Resources on p. 118.

Interchange Beautification

- All landscaping improvements shall follow the Policy for Public Art and Landscaping on INDOT Right-of-Way.
- Landscaping shall be regularly maintained according to the Indiana Department of Transportation (INDOT) guidelines.
- Municipalities shall coordinate with each other to develop a consistent landscaping application for all interstate interchanges within the study area.
- Landscaping shall follow the approved planting lists outlined in Appendix 8: Approved Corridor Planting List on p. 124 of this document.



Operational/Clear Zone

Figure 58: Operational/Clear Zone

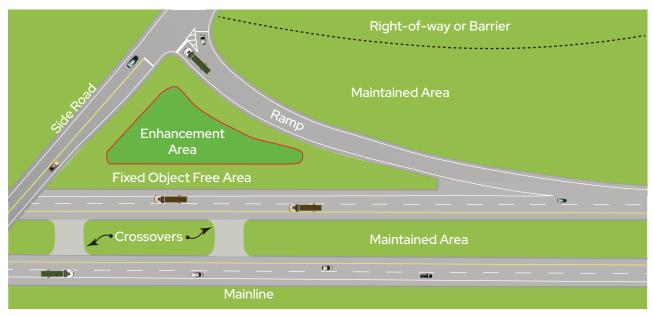


Figure 59: Interchange Enhancement Areas

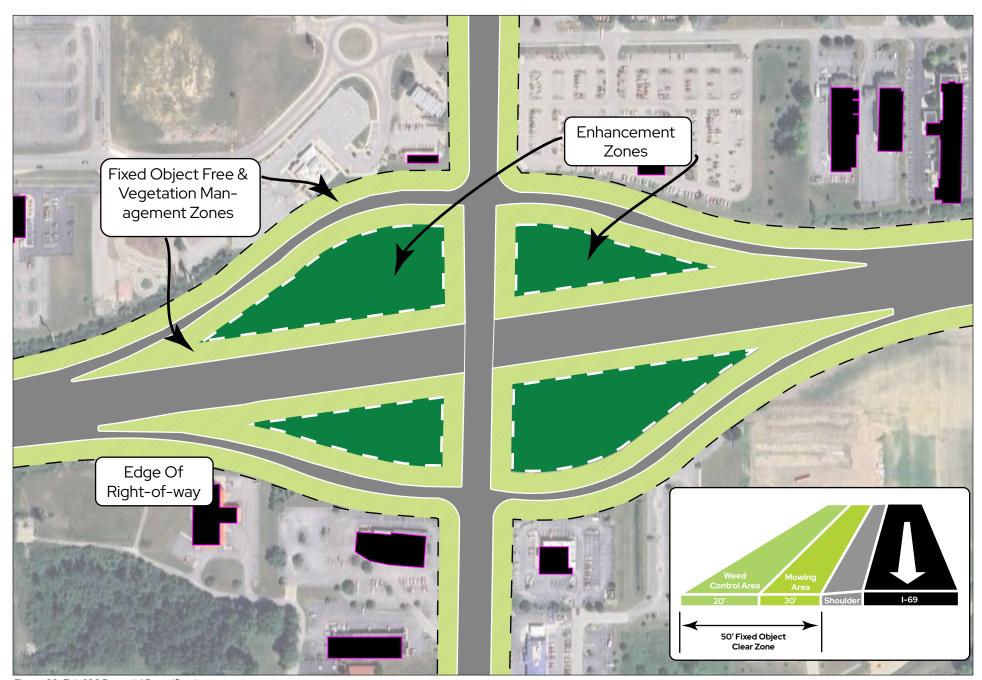


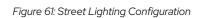
Figure 60: Exit 226 Potential Beautification

Light poles are often the most common public infrastructure element within the public right-of-way beyond street trees. Light poles present the opportunity to further establish a cohesive sense of place throughout the I-69 corridor. In addition, coordinating lighting conditions along public roads will improve public safety and reduce unnecessary light pollution.

Lighting

- Lighting within the public right-of-way shall meet all INDOT standards for permanently installed infrastructure.
- Street lighting shall be required to be installed along all facilities above Minor Arterial.
- Obsolete or substandard lighting within the study area shall be replaced with lighting that aligns with current INDOT standards.
- Lighting shall utilize LED or other low-energy cost lamps.
- Light poles shall include the capacity to hang public decorations including banners, flower baskets, and other seasonal decorations.
- Lighting shall include light shielding to reduce the amount of unnecessary night sky light pollution.





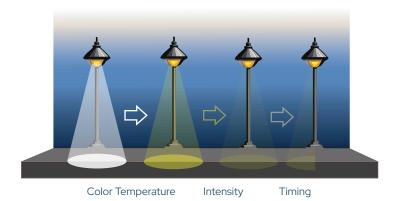


Figure 62: Street Lighting Illumination



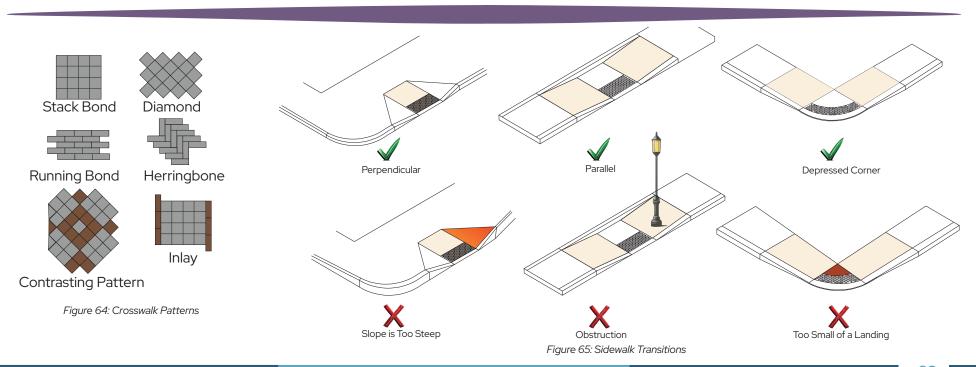
Example Lighting Decorations

Figure 63: Street Lighting Decorations

There are 346 intersections within the I-69 corridor as of when this document was written in spring 2024. This number will continue to increase as the corridor shifts from rural to more urban land uses, and each junction in the corridor needs to be safely navigable by pedestrians. To ensure the pedestrian transportation network remains safe and accessible as the corridor develops, crosswalk design elements should be standardized.

Pedestrian Crossings

- All pedestrian crossings shall be ADA and PROWAG compliant.
- All pedestrian crossings shall include standardized design elements to foster a cohesive sense of place throughout the study area.
- Pedestrian crossings on facilities classified as Minor Arterial and above shall be signal actuated with their activation times synchronized with the facility's traffic control system.
- Pedestrian crossings spanning a boulevard or median-divided facility shall have a pedestrian refuge island incorporated into the central median area.
- Pedestrian crosswalks shall be incorporated into the design of roundabout intersections.
- Crossings on high AADT facilities shall include traffic calming measures as a part of the crossing design.



Landscaping can be used to tie distant and otherwise disparate elements of the I-69 corridor together into a cohesive design. Incorporating landscape plantings into the public right-of-way and public amenities is a cost-effective solution to improving the corridor's sense of place, reducing stormwater runoff, and providing interesting elements for pedestrians to enjoy. Communities must deliberately include landscaping into the public rightof-way as a design element to take full advantage of its benefits.

Plant List

- Landscaping in the public right-of-way shall be comprised of plants listed in Appendix 8: Approved Corridor Planting List on p. 124.
- Landscaping that is planted as a stormwater reduction solution shall be comprised of plants listed in Appendix 8: Approved Corridor Planting List on p. 124.
- Municipalities shall adequately maintain their public landscaping.
- Maintenance plans should be included for any landscaping included in the public right-of-way.
- Landscaping shall not be planted as a monoculture to ensure the long-term viability of the landscaped area.



Figure 66: Urban-tolerant Plants

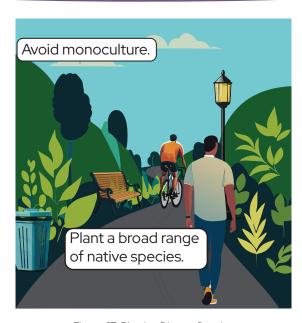
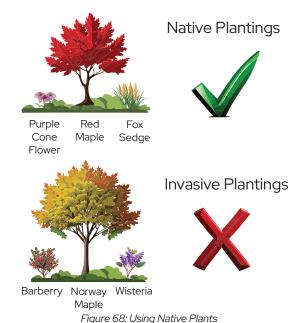


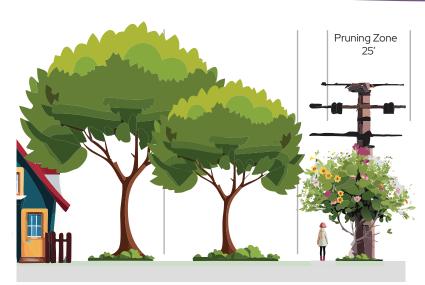
Figure 67: Planting Diverse Species



Adding street trees to facilities within the Integrate I-69 Corridor Study area will increase the social and practical functionality of the study area's roadways. Street trees offer several benefits, including but not limited to calming traffic on roads with higher-than-designed speeds, reducing the number of impervious surfaces to mitigate stormwater runoff, and providing aesthetically pleasing natural elements that improve an area's sense of place. Communities must deliberately include street trees into the public right-of-way as a design element to take full advantage of their benefits.

Street Trees

- Only street trees identified in Appendix 7: Approved Street Trees on p. 122 shall be planted within the public right-of-way.
- Municipalities shall follow the Indiana Department of Natural Resources' (IDNR's) guidelines for planting new street trees.
- Municipalities shall adequately maintain public street trees.
- When an existing street tree dies, it should be replaced by a new tree from the approved street tree list identified in Appendix 7: Approved Street Trees on p. 122.



Medium Tree Zone 20'-50' From Street Tree Height 20'-40' Figure 69: Tree Planting Zones Small Tree Zone Up to 20' From Street Tree Height 25' or Less

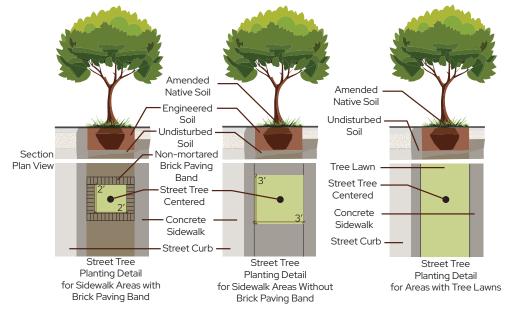


Figure 70: Street Tree Planting

Signs are an important and ever-present feature of public spaces allowing businesses to attract customers and provide important information to both motorists and pedestrians. Signs can be regulated in various ways, and some municipalities are stricter about their regulations than others. Due to the multijurisdictional nature of the I-69 corridor, all municipalities must consistently regulate signs to maintain the corridor's sense of place.

Signs

- The only signs allowed within the public right-of-way are posted by or on behalf of a governing body.
- Any sign attached to trees, shrubberies, or other vegetation shall be prohibited.
- Any sign simulating, or that is likely to be confused with, a traffic control sign, or the lights or markings on an emergency vehicle, shall be prohibited.
- Any building-mounted sign facing the side lot of an adjoining residential property shall be prohibited.
- Any sign containing parts that rotate or move, or that appear to rotate or move, containing search lights, or emitting sound, smoke, flame, scent, mist, aerosol, liquid, or gas shall be prohibited.
- Inflatable signs, devices, and balloons shall be prohibited.
- All permanent, non-regulatory signs within the public right-of way are prohibited on roads classified at or below Minor Collector.
- Municipalities shall coordinate their regulations for the lighting, area, height, landscaping requirements, and number of allowed signs.



Inflatable signs should be avoided.



Figure 71: Inflatable Sign



Temporary signs should not be used along the interstate.



Figure 72: Temporary Sign



Side mounted temporary building signs should be avoided.



Figure 73: Side Mounted Building Sign

Wayfinding systems networks of signs, placards, and maps that all have a shared set of colors and iconography to help users navigate and themselves within the I-69 corridor's complex multijurisdictional environment. When deployed correctly, wayfinding systems are a costeffective way to enhance how people interact with the public right-of-way.

Wayfinding System

- Wayfinding systems shall contain clear and concise directions to community amenities and government facilities.
- Wayfinding systems shall contain information for routes to and from interstate interchanges.
- Wayfinding systems shall identify walking times to destinations.
- Wayfinding systems shall include local area maps at key community amenities.



Figure 74: Wayfinding

Much of the Integrate I-69 Corridor Study area is projected to experience growth out to 2035, and this growth will include increased development as well as road construction for new and improved facilities. All these activities discharge air pollutants and greenhouse gas emissions, which will negatively affect the air quality of the study area. Minimizing the discharge of air pollutants as the corridor develops into a more urbanized area will help maintain and improve its air quality into the future. For more information about the EPA's conformity guidance, see Reference 24 in Appendix 5: Supplemental Resources on p. 119.

Air Quality

- Construction equipment shall not idle more than 5 minutes in any 60-minute period.
- Equipment with Tier O diesel engines shall not be used for construction projects.
- Wet and dry cement manufacturing for new development shall utilize the Selective Catalytic Reduction (SCR) process to reduce and/or eliminate nitrogen oxides (NO_x) and large particulate matter pollution.
- New developments shall seek to reduce carbon dioxide (CO₂) and nitrogen oxide (NO_x) emissions.
- New developments shall not include any structures that are heated by fuel oil or wood pellet combustion.
- Public green spaces shall be designed to minimize the amount of powered equipment needed for maintenance to reduce carbon dioxide (CO₂) emissions.



Figure 75: Construction Equipment Idling



Figure 76: Increasing Green Spaces



Figure 77: Electric Equipment for Maintenance

Green Area Ratio (GAR) is a metric commonly used by municipalities to ensure the appropriate amount of natural landscaping is included in new developments. The GAR seeks to integrate environmental considerations such as the reduction of stormwater runoff, mitigation of urban heat island effects, and overall improvements of local air quality by measuring the ratio of landscaped natural surface against the total project area. See Reference 16 in Appendix 5: Supplemental Resources on p. 118 for more information about how to score GAR.

Green Area Ratios

- Environmentally functional and attractive landscapes shall be required elements of new developments.
- Environmentally functional and attractive landscapes shall be rated on a value-based system of requirements as a part of the standard design review process.
- Municipalities throughout the study area shall synchronize their GARs.
- Municipalities throughout the study area shall synchronize their site review scoring systems.



GAR 30% Figure 78: GAR



Figure 79: GAR Site Application

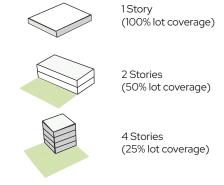


Figure 80: GAR to Increase Green Space

Equitable access to natural areas in daily life positively affects people's mental health and facilitates social connections, which are essential to healthy human habitats and include positive physical health outcomes. Incorporating accessibility, safety, and wayfinding elements into a development's planned facilities or amenities will help build stronger communities throughout the study area by providing economic and social enhancements.

Human Health & Well-being

- Common areas that are included as a part of a newly constructed site shall be clearly visible from the public right-of-way.
- Common green spaces that are included in a newly constructed site shall be directly visible from 50% of the site's regularly occupied buildings.
- Seating shall be provided for 5% of the site's total users.
- For sites with regularly occupied buildings, provide unobstructed views of vegetation from 50% of common spaces.
- Newly constructed public spaces shall contain elements that support public health and safety including but not limited to water fountains, public bicycle racks, and emergency call boxes.
- Developers shall clearly designate outdoor smoking areas and include adequate waste disposal in new development.
- Permanent signage shall be installed on public structures indicating the smoke-free policy within 10 feet of a building entrance.
- Universal design practices shall be incorporated into site designs of public spaces.



Figure 81: Public Right-of-way Shared Space

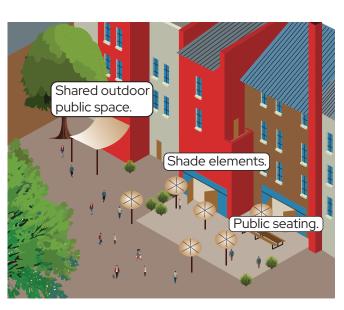


Figure 82: Public Shared Space



Figure 83: Public Trails Connecting Spaces

Continual maintenance is an often-overlooked aspect of urban design. Public spaces, street trees, planters, and pedestrian furniture all require regular maintenance and will degrade if neglected, which negatively affects a community's sense of place. Planned maintenance schedules need to be proactively prepared as public amenities are added within the Integrate I-69 Corridor Study area.

Maintenance

- A site maintenance plan shall be prepared for all new developments within the study area.
- New developments containing public green space elements shall have a long-term maintenance plan accounting for landscape, hardscape, equipment, and/or amenities.
- Newly planted trees shall be maintained for 3 years until they are established.
- Newly planted landscaping beds shall be maintained for 2 years until they are established.
- All landscaped areas within the public right-of-way shall be regularly maintained with necessary replanting, weed control, and trash removal.
- Decorations, plant containers, and pedestrian furniture within the public right-of-way shall be regularly maintained.







Figure 84: Street Sweepers Figure 85: Litter Cleanup Figure 86: Planting Maintenance

91

Utilizing local renewable energy sources provides opportunities to achieve a wide range of socioeconomic and environmental objectives. Renewable energy sources support much-needed sense of place improvements in urban areas by reducing the total amount of power that is consumed from non-renewable sources. Implementing local solar power generation reduces municipal energy costs, and those savings can be used to fund additional sense of place improvements throughout the Integrate I-69 Corridor Study area.

Renewable Energy

- Amenities within the public right-of-way shall use solar-powered alternatives to conventional products, if available.
- Amenities within public green spaces shall use solar-powered alternatives to conventional products, if available.
- New developments that include public parking shall include an Electric Vehicle (EV) charging facility.
- Newly constructed public facilities shall include active solar heating elements to reduce overall energy consumption.



Figure 87: Using Renewable Energy for Public Amenities

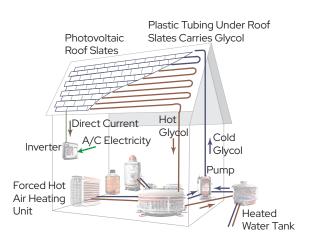


Figure 88: Residential Scale Renewable Energy

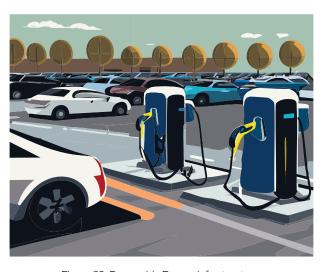


Figure 89: Renewable Energy Infrastructure

The urban heat island effect occurs where large land areas are covered with pavement or structures that absorb heat, which adversely affects the local climate and makes urbanized areas significantly warmer than the climate of a more natural space. This effect can be largely negated by incorporating sustainable design solutions into urban areas.

Urban Heat Island

- New site plans shall include information about materials and landscaping strategies that will reduce the site's total heat absorption by exterior surfaces.
- New site plans shall include a planting plan that will provide shade from appropriate trees, large shrubs, vegetated trellises, etc. to newly constructed impervious surfaces including but not limited to roads, sidewalks, and parking lots.
- Neither permeable concrete nor permeable asphalt meets the definition of an open-grid paving system because both are more than 50% impervious; however, the **Solar Reflectance Index (SRI)** value of permeable concrete may be greater than 0.33.
- New structures with pitched roofs shall have an SRI value greater than 39.
- New structures with flat roofs shall have an SRI value greater than 82.
- Architectural devices or structures that are designed to provide shade as a part of a new site shall have an SRI value greater than 0.33 at installation.
- Use new coatings and integral colorants for asphalt pavement to achieve light-colored surfaces instead of traditional dark surface materials when feasible.

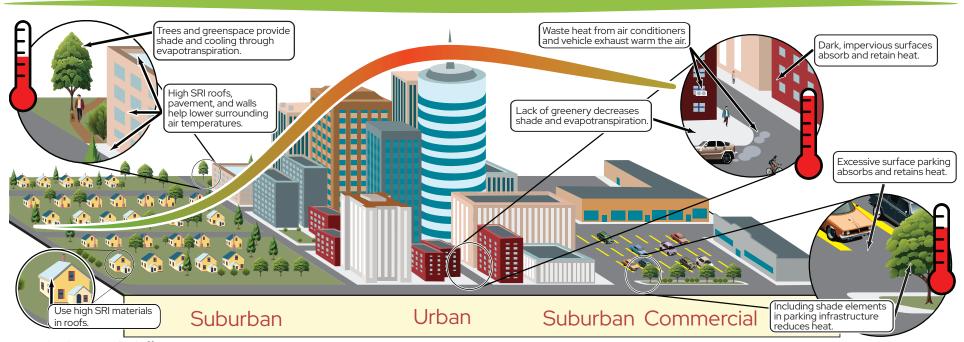


Figure 90: Urban Heat Island Effect

Oftentimes, landscapes, infrastructure, and buildings are designed without regard for their harmful impacts on natural habitats. All projects have the potential to protect, improve, and regenerate the benefits provided by healthy natural habitats. Decision makers for communities within the Integrate I-69 Corridor Study area should utilize approaches that reflect and sustain natural habitats while reestablishing the integral relationship between natural processes and human activities.

Natural Habitat Management

- Existing wildlands, forests, wetlands, and riparian areas shall not be removed or disturbed in any way.
- If an existing natural habitat must be disturbed by development, then all restoration and maintenance activities shall only occur during seasons where endangered animal species are not present.
- Protect all listed species from harm by performing construction activities that minimally impact site development.
- If a proposed project site is in range of potential habitats for any animal species on US federal or state threatened or endangered lists classified as critically endangered or endangered, developers shall identify all species that will be affected by the development.
- If a proposed project site is in range of any listed threatened or endangered animal species, then developers shall conduct a habitat assessment for each identified species.
- New development shall incorporate allowances for habitat corridors through the site and to adjacent sites to promote species connectivity.



Figure 91: Enhancing the Natural Environment

Figure 92: Riparian Habitat System

As the study area transitions from agricultural land uses to more urbanized land uses, the number of impervious surfaces will drastically increase. This increase in impervious surfaces will exacerbate any existing stormwater problems and may overwhelm the existing stormwater infrastructure. Stormwater mitigation practices must be reevaluated and updated to consider the impacts of the study area becoming more urbanized to avoid further exacerbating existing stormwater problems.

Stormwater Management

- New roads constructed within the study area shall have separate storm and sanitary sewers.
- New development constructed within the study area shall aim to treat all stormwater on site by adhering to all local stormwater ordinances and incorporating the best stormwater practices outlined by the Indiana Department of Environmental Management.
- New development shall be encouraged to include bio-infiltration basins where feasible as a part of GAR minimums.
- Municipalities throughout the study area shall limit the amount of new impervious surfaces by reducing mandatory surface parking minimums.



Figure 93: Reducing Combined Sewer Overflows



Figure 94: Separating Storm Sewers



Figure 95: Including Bioinfiltration



Figure 96: Improving Stormwater Runoff Quality to Reduce Treatment

ADMINISTRATION

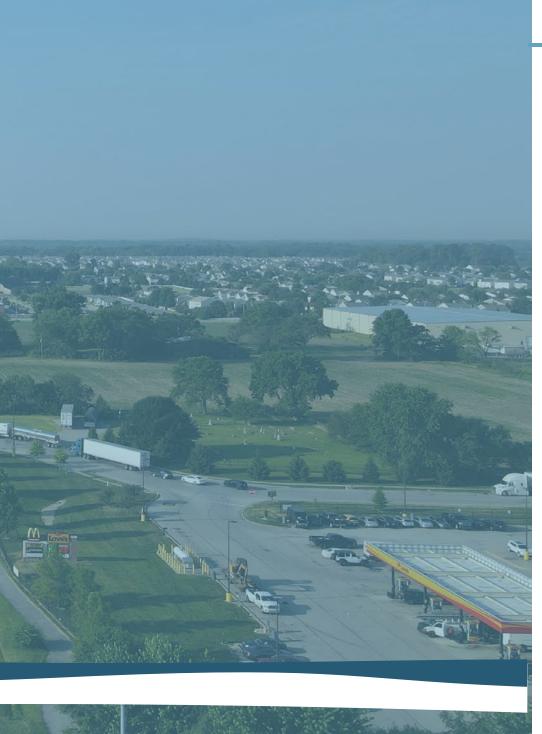
The Integrate I-69 Corridor Study area is a complex and ever-changing area that is set to develop rapidly as the easily developable land in the Indianapolis metropolitan area diminishes. However, these conditions create an environment where uncoordinated regulations lead to issues that will be cost prohibitive and/or impossible to correct in the future. The governing bodies within the study area need to increase their level of coordination to prevent future development issues.

- Municipalities shall notify each other prior to approving Planned Unit Development (PUD) uses, special exceptions, special uses, contingent uses, conditional uses, and use variances.
- Municipalities within the study area shall establish a multijurisdictional design review committee to provide input on development adjacent to shared jurisdictional boundaries.
- Municipalities shall notify each other prior to approving land use access to a shared non-INDOT-controlled facility.
- Municipalities shall coordinate on approvals of projects with access via a roadway that crosses a shared municipal boundary within 1 mile of the municipal boundaries.
- Municipalities shall coordinate on the approvals of projects that abut a shared right-of-way along municipal boundaries.
- Municipalities shall coordinate to review zoning changes concerning land use developments including apartments, retail, office, industrial, or institutional that may adversely affect shared local road conditions.



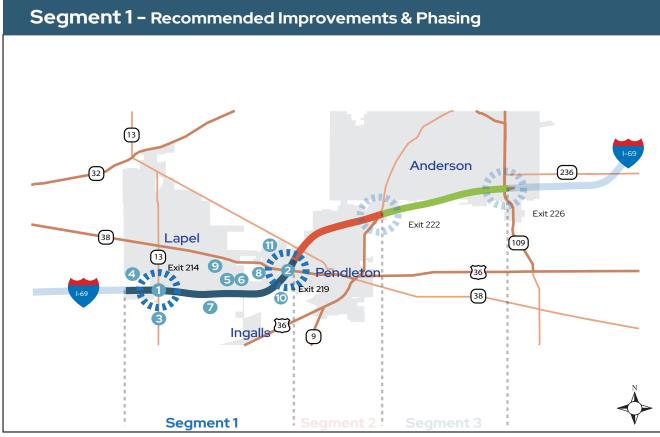
Figure 97: Administrating the Integrate I-69 Corridor Study





Introduction

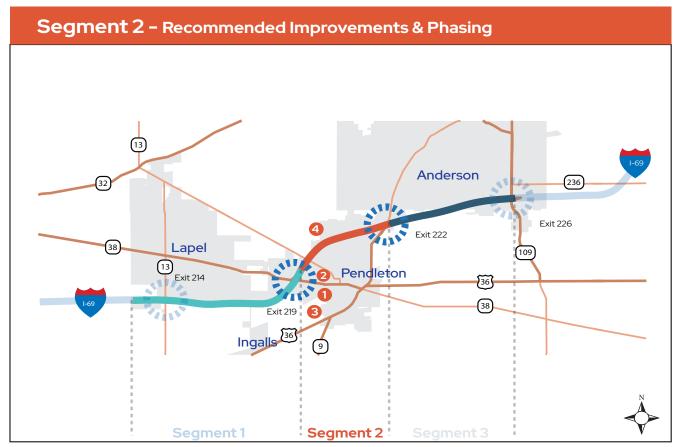
The following is a list of infrastructure improvement projects that have been identified by each of the municipal planning departments in the study area. The study area is divided into three segments, because each segment contains unique communities with various goals for the future. Segment 1 stretches from Exit 214 to Exit 219 and includes portions of unincorporated Madison County, Lapel, Ingalls, and part of Pendleton. Segment 2 stretches from Exit 219 to Exit 222 and includes parts of Pendleton, Anderson, and unincorporated Madison County. Segment 3 stretches from Exit 222 to Exit 226 and only includes parts of Anderson and unincorporated Madison County. The following pages contain more information about the details and locations of the projects in each segment.



Location **Treatment Improvements** Interchange aesthetic Exit 214 enhancement. Interchange aesthetic Exit 219 enhancement. Road to be uniform width from CR 700 S to Fall Creek Drive. SR 13 CR 700 S from Atlantic mprove road to Urban Minor Road to CR 750 W Collector cross-section. S CR 600 W from Fall mprove road to Urban Minor Creek Drive to CR 800 S Collector cross-section. Improve road to Urban Minor CR 650 W from Pendleton Pike to CR 800 S Collector cross-section. Improve road to Urban Minor CR 800 S Arterial cross-section. **New Construction** Extend road from CR CR 700 S 750 W to CR 600 W. North/south Segment of CR 750 W Extend road north to SR 38. Construct a new Major Collector Interstate Frontage Road from SR 38 to CR 600 W. Construct a new road from SR 38 New Major Collector to the intersection of Old Indiana Route 132 and CR 525 W.

Figure 99

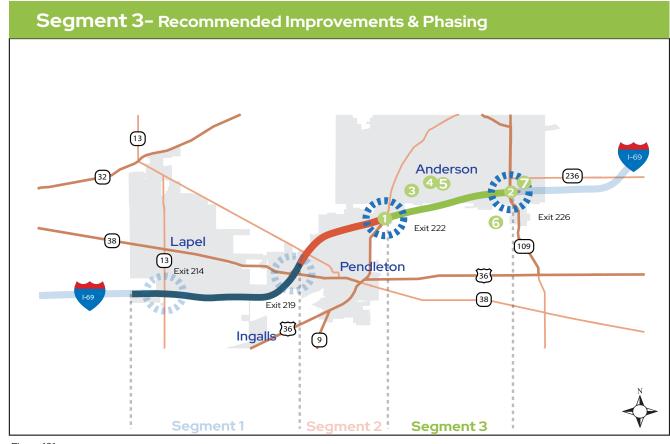
Project	Jurisdictions	Improvements	Priority Level	Timeline	Functional Class
1	INDOT, Ingalls, Pendleton	Beautification, Signage, Wayfinding	Low	2044-2054	-
2	INDOT, Pendleton	Beautification, Signage, Wayfinding	Low	2044-2054	-
3	INDOT, Ingalls, Lapel, Pendleton	Road Widening, Safety Improvement, Access Control	High	2030-2040	Other Principal Arterial
4	Ingalls, Lapel, Madison County, Pendleton	Complete Street Treatments	Medium	2030-2035	Urban Minor Collector
5	Madison County	Complete Street Treatments	Low	2044-2054	Urban Minor Collector
6	Pendleton	Complete Street Treatments	Medium	2034-2040	Urban Minor Collector
7	Ingalls, Madison County	Complete Street Treatments, Access Control	High	2030-2035	Urban Minor Arterial
8	Pendleton	New Construction	Low	2044-2054	Urban Major Collector
9	Pendleton	New Construction	Low	2044-2054	Urban Major Collector
10	Pendleton	New Construction	Medium	2034-2040	Urban Minor Collector
11	Pendleton	New Construction	Low	2044-2054	Urban Major Collector



	Location	Treatment		
1	New Construction			
1	S Heritage Way	Extend south to Fall Creek Drive.		
2	N Heritage Way	Extend north to Old Indiana Route 132.		
3	N Heritage Way	Extend north to intersection of CR 425 W and CR 600 S.		
4	67 th Street	Extend south to connect to Old Indiana Route 132.		

Figure 100

Proje	ct Jurisdictions	Improvements	Priority Level Timeline		Functional Class
1	Pendleton	New Construction	High	2030-2035	Urban Minor Arterial
2	Pendleton	New Construction	High	2030-2035	Urban Minor Arterial
3	Pendleton	New Construction	Medium	2035-2040	Urban Minor Arterial
4	Anderson, Pendleton	New Construction	Low	2035-2045	Urban Minor Arterial

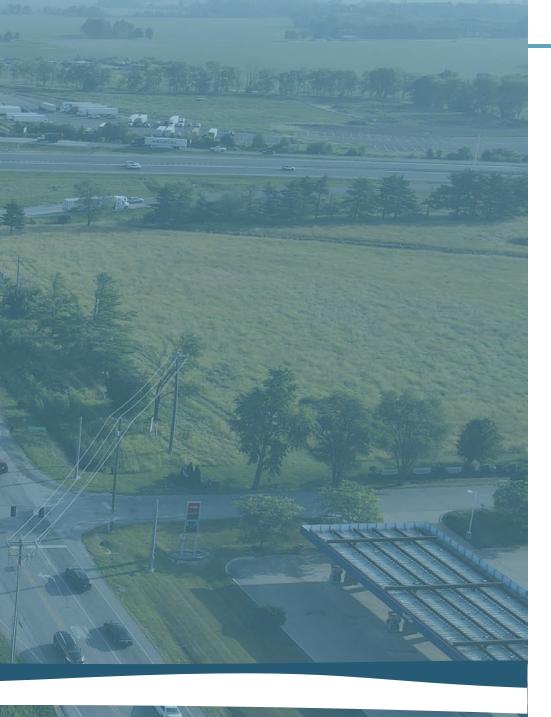


	Location	Treatment		
li	mprovements			
1	Exit 222	Interchange aesthetic enhancement.		
2	Exit 226	Interchange aesthetic enhancement.		
3	W 67 th Street	Improve from MLK Boule- vard to Ridgeview Drive into an Urban Minor Collector.		
4	Ridgeview Drive	Improve from 67 th Street to Madison Avenue into an Urban Minor Collector.		
5	E 60 th Street	Improve from Main Street to Rangeline Road into an Urban Minor Collector.		
	New Construction			
6	E 67 th Street	Extend road west to Main Street.		
7	E 59 th Street	Extend road east to Rangeline Road.		

Figure 101

Project	Jurisdictions	Improvements	Priority Level	Timeline	Functional Class
1	Anderson, INDOT, Pendleton	Beautification, Signage, Wayfinding	Low	2044-2054	-
2	Anderson	Beautification, Signage, Wayfinding	Low	2044-2054	-
3	Anderson	Complete Street Treatments	Low	2044-2054	Urban Minor Collector
4	Anderson	Complete Street Treatments	Low	2044-2054	Urban Minor Collector
5	Anderson	Complete Street Treatments	Low	2044-2054	Urban Minor Collector
6	Anderson	New Construction	Medium	2035-2040	Urban Minor Collector
7	Anderson	New Construction	Low	2044-2054	Urban Minor Collector





Appendix 1: Memorandum of Understanding Between Governing Bodies	108
Appendix 2: Memorandum of Understanding Between Governing Bodies & INDOT	110
Appendix 3: Key Terms	114
Appendix 4: Abbreviations	116
Appendix 5: Supplemental Resources	118
Appendix 6: Community Contacts	120
Appendix 7: Approved Street Trees	122
Appendix 8: Approved Corridor Planting List	124
Appendix 9: Example Green Area Ratio Score Sheet	126
Appendix 10: Current INDOT MS2 Output	128
Appendix 11: Photo Credits	130

MEMORANDUM OF UNDERSTANDING FOR INTERGOVERNMENTAL COOPERATION IN DEVELOPMENT AND ACCESS MANAGEMENT NEAR MUNICIPAL BOUNDARIES

BETWEEN THE (insert of names of LOCAL PUBLIC AGENCIES)

I. Purpose

The purpose of this Memorandum of Understanding ("MOU"), effective this _______ day of _______, 20_____, is to enhance cooperation between each of the Local Public Agencies within the Integrate I-69 Corridor Study area (hereafter referred to as the Study Area): _(Insertnames of LOCAL PUBLIC AGENCIES)

(hereafter referred to as the LOCAL PUBLIC AGENCIES), and collectively referred to herein as "PARTIES" to serve the mutual interests of the parties. Implementing the agreements in this MOU should promote lasting coordination and help establish a cohesive sense of place for the whole Study Area.

II. Background

The Study Area includes the interstate right-of-way as well as a 1-mile offset, different parts of which the PARTIES have jurisdiction over. Utilizing this MOU should further multijurisdictional coordination and maintain existing collaboration between the PARTIES so they may continue building, maintaining, and operating a superior transportation system for enhancing safety, mobility, and economic growth.

III. AGREEMENTS

- A. PARTIES agree to meet or exceed the minimum development standards for Transportation, Administration, Land Use, Sense of Place, and Sustainability for the areas identified within the Integrate I-69 Corridor Study.
- B. PARTIES agree to notify each other of cross-jurisdictional projects where appropriate to coordinate the review of all relevant parties to ensure the approval of one party does not occur without the knowledge and input of the other and to coordinate traffic patterns and access management on roadway facilities that cross municipal boundaries.
- C. PARTIES agree to involve each other in design plan review processes of projects and/or developments prior to finalizing designs for cross-jurisdictional projects. Furthermore, PARTIES agree to involve each other in any public meetings or hearings to enable both parties to address design concerns that may affect conditions in a neighboring PARTY's jurisdiction.

IV. Duration of Agreements, Amendments, & Captions

A. This MOU shall have no termination date, unless amended or terminated as provided herein.

ACCEPTED DV

- B. No alteration, modification, or amendment to this MOU is permitted, except by written agreement signed by all PARTIES.
- C. All captions, section headings, paragraph titles, and similar items are provided for the purpose of reference and convenience and are not intended to be inclusive, definitive, or to affect the interpretation of this MOU.

V. Signed

ACCEPTED BY:	ACCEPTED BY:	ACCEPTED BY:	ACCEPTED BY:
(Insert Name of Local Public Agency)			
Known as PARTY ONE	Known as PARTY THREE	Known as PARTY FIVE	Known as PARTY SEVEN
By:	Ву:	By:	Ву:
(insert Name and Title)			
Date:	Date:	Date:	Date:
ACCEPTED BY:	ACCEPTED BY:	ACCEPTED BY:	ACCEPTED BY:
(Insert Name of Local Public Agency)			
Known as PARTY TWO	Known as PARTY FOUR	Known as PARTY SIX	Known as PARTY EIGHT
By:	By:	By:	By:
(insert Name and Title)			
Date:	Date:	Date:	Date:

MEMORANDUM OF UNDERSTANDING FOR INTERGOVERNMENTAL COOPERATION IN ACCESS MANAGEMENT

BETWEENTHE INDIANA DEPARTMENT OF TRANSPORTATION AND (insert of name of LOCAL PUBLIC AGENCY)

This MEMORANDUM OF UNDERSTANDING ("MOU") is entered into this day of	20	, by and
between the Indiana Department of Transportation ("INDOT") and the (insert of names of LOCAL PUBLIC AGENCIES)	, 20	_, by and
(hereafter referred to as the LOCAL PUBLIC AGENCIES),	and collec	tively re-
ferred to herein as "PARTY" or "PARTIES".	aria conce	, tively ic

RECITALS

WHEREAS, INDOT is responsible for building, maintaining, and operating a superior state transportation system to enhance safety, mobility, and economic growth; is responsible for access management on the state highway system to preserve transportation carrying capacity and to improve safety; and is responsible for issuing driveway or right-of-way encroachment permits affecting access to the state highway system; AND

WHEREAS, the LOCAL PUBLIC AGENCY is responsible for the review and approval of the subdivision and development of lands abutting and in proximity to the state highway system; AND

WHEREAS, INDOT and the LOCAL PUBLIC AGENCY find that it is in the mutual interest of both parties to coordinate the approval of the location, manner, and design of access to and from properties abutting and in proximity to the state highway system with the review and approval of development and subdivision of land;

NOW, THEREFORE, the PARTIES agree as follows:

1. INDOT's Agreements.

- a. INDOT agrees to notify the LOCAL PUBLIC AGENCY of applications for driveway or right-of-way encroachment permits from developers to ensure the developer has or will comply with local land use regulations relative to the local development review and approval. (Note: This is intended to coordinate the review of INDOT and the LOCAL PUBLIC AGENCY to ensure the approval of one PARTY does not occur without the knowledge and input of the other.)
- b. INDOT agrees to notify the LOCAL PUBLIC AGENCY of agreements with developers concerning future signalization, roadway improvements, and access control restrictions. (Note: This will enable the LOCAL PUBLIC AGNECY to help INDOT with agreement enforcement.)

- c. INDOT agrees to notify the LOCAL PUBLIC AGENCY about planned roadway improvements prior to the execution of design contracts so that existing and planned crossroad improvements, and access management to abutting properties, may be addressed in the scope of design.
- d. INDOT agrees to involve the LOCAL PUBLIC AGENCY in the design plan review before the roadway design is finalized, and prior to any public meetings or hearings, so that the treatment of existing and planned crossroad improvements and access management to abutting properties may be reviewed.

2. LOCAL PUBLIC AGENCY Agreements.

- 1. The LOCAL PUBLIC AGENCY agrees to notify INDOT in the event of any of the following land use actions:
 - a. Proposed major residential subdivisions or land use rezonings of properties
 - i. abutting the State right-of-way, or
 - ii. with access via a local crossroad that has property with access within a ¼-mile of the state-owned right-of-way, and meeting INDOT warrants for a traffic impact study.
 - b. New land use approvals (including special exceptions, special uses, contingent uses, conditional uses, or use variances) before the local board of zoning appeals when properties abut the State right-of-way.
 - c. Proposals for minor residential subdivisions with direct access to State roadways. (Note: INDOT needs to verify adequate sight distance and driveway spacing. If the road has limited access, INDOT must verify entrance location is permitted and may require joint-use driveways or frontage roads if the proposed entrance is not permitted or violates spacing requirements.)
- 2. The LOCAL PUBLIC AGENCY agrees to notify INDOT of
 - a. any local site plan reviews, and
 - b. any local review actions concerning commercial developments (apartments, retail, office, industrial, or institutional)
 - i. if the site abuts the State right-of-way, or
 - ii. if the site access is via a local crossroad that has property with access within a ¼-mile of the State right-of-way and the site trip generation meets INDOT warrants for a traffic impact study.

- c. For all new buildings abutting State right-of-way (as well as expansions and changes to existing commercial uses), the LOCAL PUBLIC AGENCY agrees to coordinate the local building permit process with INDOT to ensure the existing driveways can accommodate or be improved to accommodate additional site traffic. (Note: Sometimes, commercial drives cannot be improved to accommodate additional site traffic.)
- d. The LOCAL PUBLIC AGENCY agrees to notify INDOT of dimensional variances (such as structure setbacks and height standards) on corner properties of State/crossroad intersections to ensure preservation of corner sight triangles and to avoid conflicts with traffic control devices.
- 3. **Duration and Renewal of MOU.** This MOU shall have no termination date, unless amended or terminated as provided herein.
- **4. Amendment.** No alteration, modification, or amendment to this MOU is permitted, except by written agreement signed by the parties.
- **5. Dispute Resolution.** Any dispute arising hereunder shall be submitted to the Indiana Department of Administration for final resolution.
- **6. Captions.** All captions, section headings, paragraph titles, and similar items are provided for the purpose of reference and convenience and are not intended to be inclusive, definitive, or to affect the interpretation of this MOU.
- **7. Integration.** This MOU and any documents or exhibits incorporated into this MOU represent the entire understanding between the PARTIES. Each PARTY hereby represents that it will not rely upon any agreement, contract or understanding not reduced to writing and incorporated into this MOU prior to the execution hereof or not reduced to writing and incorporated into written amendments of this MOU.

Non-Collusion and Acceptance

The undersigned attests, subject to the penalties for perjury, that he/she is the contracting party, or that he/she is the properly authorized representative, agent, member, or officer of the contracting party, that he/she has not, nor has any other member, employee, representative, agent, or officer of the contracting party, directly or indirectly, to the best of the undersigned's knowledge, entered into or offered to enter into any combination, collusion, or agreement to receive or pay, and that he/she has not received or paid, any sum of money or other consideration for the execution of this MOU.

In Witness Whereof, the PARTIES have, through their duly authorized representatives, entered into this Contract. The PARTIES, having read and understood the foregoing terms of this Contract, do by their respective signatures dated below hereby agree to the terms thereof.

Known as LOCAL PUBLIC AGENCY By: (insert Name and Title) By:	OFFERED BY STATE OF INDIANA:	ACCEPTED BY:
By:	Indiana Department of Transportation	(Insert Name of Local Public Agency)
(insert Name and Title) By:		Known as LOCAL PUBLIC AGENCY
Date: (insert Name and Title)	By:	
——————————————————————————————————————	(insert Name and Title)	By:
Date:	Date:	(insert Name and Title)
		Date:

Appendix 3: Key Terms

Access Control: Defined by the FHWA as the proactive management of vehicular access points to land parcels adjacent to all types of roadways through various techniques that promote safe and efficient use of the transportation network.

Americans with Disabilities Act (ADA): Federal civil rights legislation for persons with disabilities signed into law in 1990 that prohibits discrimination specifically in the areas of employment, public accommodation, public services, telecommunications, and transportation. Transportation requirements include providing, "comparable paratransit service," equivalent to public fixed-route service for persons who are unable to use regular transit services due to a disability.

Complete Streets: Streets with context-sensitve consideration to walking, cycling, and transit modes.

Connected Autonomous Vehicles (CAVs): Self-driving vehicles operated by artificial intelligence or a computer that can communicate with nearby vehicles and infrastructure to make driving decisions.

Curb Cut: A ramp cut into a street curb to provide pedestrian access between streets and sidewalks as well as vehicular access to drives or parking spaces.

Drive Taper: Located in transition and termination areas of temporary traffic control zones to move traffic laterally from one path to another.

Eminent Domain: The power of a governing body to take private property for public use, following paying just compensation.

Flag Lot: The shape of a certain type of lot where most of the property is nested within a larger existing lot (flag) and legal access to the rightof-way is provided by a narrow strip of property containing only a private driveway (flagpole). This type of lot is popular in rural areas, particularly where a private residence is set back far away from the road and crops create a screen from the road. which becomes problematic when other flag parcels are attached to a single private drive, because the drive then functions as a shared drive but is not constructed to service traffic from multiple flag lots. Flag lots can also be nested under each other, each with their own private drives, which creates a situation that is a safety hazard to road users where multiple right-of-way curb cuts are directly adjacent to each other.

Greenfield: An undeveloped or agricultural tract of land that is a potential site for industrial, commercial, or urban development.

Highway-oriented Retail: Businesses located immediately by the roadside that specifically cater to motorists traveling on the interstate including but not limited to fast food restaurants, drive-through restaurants, service stations, convenience stores, large franchise hotels, and small motels. These businesses do not require motorists to make a detour or move towards more crowded areas.

Induced Demand: The phenomenon where improvements to a road, especially capacity improvements, seem to result in an increased use of that road.

Infrastructure Investment and Jobs Act (IIJA): Also known as the Bipartisan Infrastructure Law signed into law on November 15th, 2021 that authorizes \$1.2 trillion for transportation and infrastructure improvements nationwide.

Intermodal Transportation: Moving freight and large-sized goods in the same steel-based containers through two or more modes of transport, including but not limited to truck, ship, and rail.

Local Road: Roadway facilities that are two lanes, provide the most direct access to individual properties, and have the lowest speed of any facility in the network. Neighborhood streets looping between Minor Collectors or dead ending in culde-sacs are considered Local roads.

Location Quotient: A ratio referring to the concentration of an industry or number of jobs in an industry within a market area that is compared to the whole United States. A location quotient higher than 1.0 means that an industry is more concentrated in the market area than the national average, whereas a location quotient lower than 1.0 means that an industry is less concentrated in the market area than the national average.

Major Collector: Roadway facilities that are between two to three lanes providing community connections to the larger regional roadway network. Major Collectors have lower travel speeds than Minor Arterials, have less traffic volume, and serve as an intermediate link between neighborhoods and larger roadway facilities.

Memorandum of Understanding (MoU): Bilateral or multilateral agreements between parties that express a shared desire between parties and indicate an intended action. MoUs are often used when parties cannot create a legally enforceable agreement or a legal commitment. Many public and private agencies use MoUs to define relationships between departments, agencies, or closely held companies.

Minimum Standards: A recommended framework of design elements for facilities within the Integrate I-69 Corridor Study area.

Minor Arterial: Roadway facilities that are between two and four lanes providing intracommunity connections, but generally not entering neighborhoods due to having lower travel speeds than Principal Arterials, having less traffic volume, and being used for shorter trip lengths. These roads typically carry local bus routes and have grade-separated multi-use paths within the public right-of-way. Examples of Minor Arterials within the corridor study area include Pendleton's State Street and Old Indiana Route 132.

Minor Collector: Roadway facilities that are two lanes and typically have lower travel speeds than Major Collectors, have less traffic volume, provide direct property access to commercial properties, and limit access to residential properties. Neighborhood streets connecting two Major Collectors are an example of this type of facility.

Multi-modal Transportation: In the context of this document, "multi-modal transportation" refers to the ability of a road or pedestrian facility to support the safe and comfortable use of various transportation modes including but not limited to motor vehicle, bicycle, and pedestrian.

Next Level Roads: INDOT's initiative to elevate Indiana's economic competitiveness and quality of life for all Hoosiers through an over \$30 billion investment in transportation infrastructure over the next 20 years.

Overlay District: A special zoning layer placed on top of the primary zoning district that may supplement or supersede those of the underlying zoning district.

Principal Arterial: Roadway facilities providing high-speed vehicle service between large urban areas and facilitating travel through the State of Indiana. To provide this high-speed vehicle service, this facility has limited access, and vehicles can only merge or exit at specific interchanges. I-69 is the only facility within the study area that falls within the Principal Arterial Interstate functional classification.

Right-of-way: Includes all through lanes, turn lanes, parking lanes, curbs, planting strips, sidewalks, trails, and public easements of transportation facilities.

Selective Catalytic Reduction (SCR): An add-on device that injects a reagent such as ammonia or urea into the gas stream with the presence of a catalyst to spur a chemical reaction. At the right temperature, 570°-750°F, the reagent and the catalyst convert nitrogen oxide (NO_x) to nitrogen and water. When designed and oper-

ated properly, an SCR system can reduce NO_x emissions by up to 97%.

Sense of Place: A combination of tangible and intangible elements that contributes to a community's overall character. Tangible elements may include but are not limited to natural features, common building elements, wayfinding, signage, and public art. The primary intangible element that contributes to a community's overall character is its public perception by both residents and visitors.

Solar Reflectance Index (SRI): The measure of a material's ability to reject solar heat, as shown by a small temperature rise. Standard black material is a 0 with reflectance of 0.05 and emittance of 0.90, and standard white material is a 100 with reflectance of 0.90 and emittance of 0.90. For example, a standard black surface has a temperature rise of 90°F (50°C) in full sun, while a standard white surface has a temperature rise of 14.6°F (8.1°C) in full sun. Once the maximum temperature rise of a given material has been computed, the SRI can be calculated by interpolating between the values for white and black. Materials with the highest SRI values are the coolest choices for paving. Particularly hot materials can have slightly negative values, and particularly cool materials can have values that exceed 100.

Sustainability: Defined by the

EPA as meeting the social, economic, and environmental needs of the current generation while not jeopardizing future generations' abilities to meet their needs.

Traffic Calming: A range of methods intended to slow cars without banning them from moving through commercial and residential neighborhoods to create equilibrium amongst motorists, pedestrians, and cyclists so one mode of transportation does not dominate the facility at the expense of another mode.

UrbanFootprint: A mapping and analyzing tool that utilizes nationally available datasets including census information to provide insight into the impacts of changing development patterns and densitiesthroughscenariocomparisons.

Appendix 4: Abbreviations

AADT - Average Annual Daily Traffic

AASHTO – American Association of State Highway Transportation Officials

ADA – Americans with Disabilities Act

BILG – Bipartisan Infrastructure Law Grant

CATS – City of Anderson Transit System

CAV – Connected Autonomous Vehicle

CDBG – Community Development Block Grant

CHIPS and Science Act – Creating Helpful Incentives to Produce Semiconductors and Science Act

CMAQ – Congestion Mitigation and Air Quality Improvement Program

COG - Council of Governments

CR - County Road

EDA – Economic Development Assistance

ESRI – Environmental Systems Research Institute

EV - Electric Vehicle

FEMA – Federal Emergency Management Agency

FCRWD – Fall Creek Regional Waste District

FTA – Federal Transit Administration

GAR - Green Area Ratio

HUD – US Department of Housing and Urban Development

I-69 - Interstate 69

IDNR – Indiana Department of Natural Resources

INDOT – Indiana Department of Transportation

JFA - Joint Funding Agreement

LEAP Innovation District - Limitless Exploration/Advanced Pace Innovation District

LPA - Local Public Agency

MCED – Madison County Economic Development

MoU – Memorandum of Understanding

MPO – Metropolitan Planning Organization

NRHP – National Register of Historic Places

PROWAG – Public Rights-of-Way Accessibility Guidelines

PUD – Planned Unit Development

RAISE – Rebuilding American Infrastructure with Sustainability and Equity

SCR – Selective Catalytic Reduction

Section 108 – Section 108 Loan Guarantee Program

SIC – Standard Industrial Classification Manual

SR - State Road

SRF - State Revolving Fund

SRI - Solar Reflectance Index

STBG – Surface Transportation Block Grant Program

STIP – State Transportation Improvement Program

TEA-21 – Transportation Equity Act for the 21st Century

TIP – Transportation Improvement Program

TOD – Transit-oriented Development

TRAM – Transportation for Rural Areas of Madison County

USDA – United States Department of Agriculture

Appendix 5: Supplemental Resources

"2022 Census of Agriculture: County Profile." *United States Department of Agriculture.* 2022, https://www.nass.usda.gov/Publications/AgCensus/2022/Online Resources/County Profiles/Indiana/cp18095.pdf Web.

"23 CFR § 450.306 - Scope of the metropolitan transportation planning process." Federal Highway Administration, Department of Transportation. Current as of 29 November 2017, https://www.law.cornell.edu/cfr/text/23/450.306. Web.

Cityof Austinv. Reagan National Advertising of Austin, LLC, 596 U.S. (2022).

"EDA Program List." U.S. Economic Development Administration. 2024. https://www.eda.gov/funding/programs. Web.

"Federal-aid Programs and Special Funding- Surface Transportation Block Grant Program (STBG)." Federal Highway Administration. Updated 31 October 2022. https://www.fhwa.dot.gov/specialfunding/stp/. Web.

"Federal Programs Directory: Congestion Mitigation and Air Quality (CMAQ) Improvement Program." U.S. Department of Transportation. Updated 10 October 2023. https://www.transportation.gov/sustainability/climate/federal-programs-directory-congestion-mitigation-and-air-quality-cmag. Web.

"Forestry BMP | Riparian Management Zones." Indiana Department of Natural Resources. Copyright2024, https://www.in.gov/dnr/forestry/grants-and-help/forestry-best-anagement-practices/foestry-best-management-pactice/foestry-best-management-zones/. Web.

Hartke-Tarr, Monica. "Policy for Public Art and Landscaping on INDOT Right-of-Way." Indiana Department of Transportation. O2 April 2020, https://www.in.gov/indot/doing-business-with-indot/files/Public Art Landscaping Policy.pdf. PDF.

"Indiana Code Title 36. Local Government § 36-7-4-506." FindLaw. Current as of 08 June 2021, https://codes.findlaw.com/in/title-36-local-government/in-code-sect-36-7-4-506/. Web.

Jackson, Stephen T. "Railroads part of 'electrifying' era." *The Herald Bulletin.* 29 September 2012, https://www.heraldbulletin.com/community/railroads-part-of-electrifying-era/article_05efa2ac-d170-5f05-b4ad-a4a6bf4c053d.html. Web.

"KABCO Injury Classification Scale and Definitions." Federal Highway Administration. https://safety.fhwa. dot.gov/hsip/spm/conversion_tbl/ pdfs/kabco_ctable_by_state.pdf.PDF.

Lavine, John, et. al. "Forecasted & Future Land Use." Forward Madison County 2035 Comprehensive Plan. Madison County Council of Governments, published 20 April 2020, adopted 16 March 2021, p. 123-160. https://irp-cdn.multiscreensite.com/252c0953/files/uploaded/Final%2004 09 20 Web2.pdf. PDF.

National Complete Streets Coalition & Smart Growth America. The Complete Streets Policy Framework. April 2023. https://smartgrowthamerica.org/resources/elements-complete-streets-policy/.Web.

"National Register of Historic Places." National Park Service. Last updated 10 January 2024, https://www.nps.gov/subjects/nationalregister/index.htm. Web.

"National & State Registers." *Indiana Department of Natural Resources*. Copyright 2024, https://www.in.gov/dnr/historic-preservation/nation-al-and-state-registers/. Web.

Noonan, Margaret, et. al. "Green Area Ratio Guidebook." Department of Energy and Environment. November 2017, https://doee.dc.gov/sites/default/files/dc/sites/ddoe/service_content/attachments/GAR-Guidebook FINAL_November2017_OpdfPDF.

Reed v. Town of Gilbert, 576 U.S. 155 (2015).

Roberson, Samuel A., et al. *Madison County Interim Report*. Published by Pierson Printing, published in October 1984, obtained from the Madison County Council of Governments. Print.

"Section 108 Loan Guarantee Program." U.S. Department of Housing and Urban Development Exchange. 2024. https://www.hudexchange.info/programs/section-108/. Web.

"SITES v2 Rating System For Sustainable Land Design and Development." Green Business Certification Inc. The material on which the SITES v.2 Rating System is based was developed through a collaborative, interdisciplinary effort of the American Society of Landscape Architects Fund, The Lady Bird Johnson Wildflower Center at The University of Texas at Austen, and the United States Botanic Garden, 2014. https://www.usgbc.org/resources/sites-rating-system-and-scorecard. PDF.

"Standard Industrial Classification (SIC) Manual." *United States Department of Labor Occupational Safety and Health Administration.* https://www.osha.gov/data/sic-manual. Web.

"State Revolving Fund Loan Programs." Indiana Finance Authority, 2024. https://www.in.gov/ifa/srf/. Web.

"Traffic Calming ePrimer." Federal Highway Administration. https://highways.dot.gov/safety/speed-management/traffic-calming-eprimer.Web.

"Transportation Conformity Guidance for the South Coast II Court Decision." Transportation and Climate Division Office of Transportation and Air Quality US Environmental Protection Agency. EPA-420-B-18-050, November 2018. https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P100VQME.pdf. PDF.

"What is smart growth?" Smart Growth America. 2024, https://smartgrowthamerica.org/what-is-smart-growth/. Web.

Appendix 6: Community Contacts

Governing Bodies

City of Anderson

Ph: 765.648.6000

mayor@cityofanderson.com

INDOT Greenfield District

Ph: 1.855.463.6848

https://www.in.gov/indot/ about-indot/central-office/welcome-to-the-greenfield-district/

Fx: 317.462.7031

Madison County

Ph: 765.641.9470

tom.ecker@madisoncounty.in.gov

Town of Ingalls

Ph: 317.485.4321

Info@ingalls.in.gov

Fx: 317.485.5293

Town of Lapel

Ph: 765.534.3157

info@lapelindiana.org

Town of Pendleton

Ph: 765.778.2173

https://www.town.pendleton.in.us/

Utility Providers

Anderson Municipal Light & Power

Ph: 765.648.6480

tpochard@cityofanderson.com

Anderson Water Department

Ph: 765.648.6420

https://www.cityofanderson.com/236/Water-Department

Anderson Utility Office

Ph: 765.648.6187

https://www.cityofanderson.com/192/Utility-Office

Best Way Disposal Service

Ph: 765.649.7272

www.bestway-disposal.com

Fx: 765.649.7762

CenterPoint Energy

Ph: 800.227.1376

https://midwest.centerpointenergy.com/contact

Citizens' Energy Group

Ph: 317.924.3311

https://info.citizensenergygroup.com/

Duke Energy

Ph: 800.774.1202

https://www.duke-energy.com/customer-service

Fall Creek Regional Waste District

Ph: 765.778.7544

bhunter@fcrwd.com

Ingalls Water Department

Ph: 317.485.4321

mhiatt@ingalls.in.gov

Pendleton Utility Office

Ph: 765.778.2173

utilitybilling@pendleton.in.gov

Waste Management Inc.

Ph: 855.852.7110

https://www.wm.com/us/en/location/in/anderson

Police Protection

Anderson Police Department

Ph: 765.648.6700

https://www.cityofanderson.com/185/Police

Indiana State Police Pendleton District 51

Ph: 765.778.2121

https://www.in.gov/isp/districts/district-51-pendleton/

Ingalls Police

Ph: 317.485.4321

cthompson@ingalls.in.gov

Lapel Police

765.534.4600

police@lapelindiana.org

Madison County Sheriff's Office

Ph: 765.646.4070

kowen@madisoncounty.in.gov

Pendleton Police

Ph: 765.778.3933

mfarrer@pendleton.in.gov

Fire Protection

Anderson Fire Department

Ph: 765.648.6600

cravensd@cityofanderson.com

Fx: 765.648.6625

Lapel Stony Creek Township Fire Territory

Ph: 765.534.3747

https://www.lapelfd.com/

South Madison Fire Territory

Ph: 765.778.2400

info@pendletonstation80.org

Appendix 7: Approved Street Trees







Japanese Zelkova Zelkova serrata Large 65' Height and 65' Width

Ginkgo Ginkgo biloba Large 65' Height and 65' Width

American Linden Tilia americana Medium 50' Height and 40' Width



American Hornbeam Carpinus caroliniana **Medium** 30' Height and 30' Width



Hedge Maple Acer campestre **Small** 25' Height and 25' Width



Kousa Dogwood Cornus kousa Small 20' Height and 20' Width

Appendix 8: **Approved Corridor** Planting List



Littleleaf Boxwood Buxus microphylla **Small** 4' Height and 4' Width



Yew Taxus x media Medium 8' Height and 8' Width



Juniper Juniperus spp. Large 65' Height and 25' Width



Arborvitae Thuja occidentalis Large 20' Height and 10' Width 4' Height and 6' Width



Sweetspire Itea virginica **Small**



Oak Leaf Hydrangea Hydrangea quercifolia Medium 8' Height and 8' Width



Arrowwood Viburnum Viburnum dentatum Medium 10' Height and 10' Width



Bottlebrush Buckeye Aesculus parviflora Medium 12' Height and 15' Width 20' Height and 20' Width



Common Witchhazel Hamamelis virginiana Large



Echinacea purpurea **Small** 2' Height and 2' Width



Butterfly Milkweed Asclepias tuberosa **Very Small** 2' Height and 1'Width



False Blue Indigo
Baptisia australis **Small**4' Height and 4' Width



White Wild Indigo
Baptisia alba **Small**4' Height and 4' Width



Purple Prairie Clover

Dalea purpurea

Very Small

1'Height and 1'Width



Bee Balm, Wild Bergamot Monarda fistulosa **Small** 4' Height and 4' Width

Appendix 9: Example Green Area Ratio Score Sheet

Example score sheet obtained by the Government of the District of Columbia Department of Energy & Environment. For more information, see: https://doee.dc.gov/service/green-area-ratio-forms-and-documents.

				Gre	en Area Rati	o Scoresheet
* *	* Address	Squ	are		Lot	Zone District
	Other	1-4(-6)				CARCOUR
	Lot size (enter this value first) *	Lot area (sf)	Minimum Score		Multiplier	#DIV/0!
					SCORE:	#DIV/U:
	Landscape Elements		Square Feet	Factor		Total
Α	Landscaped areas (select one of the following for each	area)				
		,	square feet			
1	Landscaped areas with a soil depth < 24"			0.30		-
			square feet	· I		
2	Landscaped areas with a soil depth ≥ 24"			0.60		-
3	Bioretention facilities		square feet	0.40		
3	Bioretention racinties			0.40		_
В	Plantings (credit for plants in landscaped areas from S	ection A)			Native Bonus	
		•	square feet	i	square feet	
1	Groundcovers, or other plants < 2' height			0.20		-
2	Plants ≥ 2' height at maturity	# of plants	1		# of plants	
2	- calculated at 9-sf per plant		0	0.30		-
	- Calculated at 9-Si per plant	# of trees			# of trees	
3	New trees with less than 40-foot canopy spread	# OJ LICES	0	0.50	# Of trees	_
J	- calculated at 50 sq ft per tree		_	0.50		
		# of trees			# of trees	
4	New trees with 40-foot or greater canopy spread		0	0.60		-
	- calculated at 250 sq ft per tree		_			
_	December of existing two Client 42ll DDU	# of trees	-		# of trees	
5	Preservation of existing tree 6" to 12" DBH		0	0.70		-
	- calculated at 250 sq ft per tree	# of tracs			# of troop	
6	Preservation of existing tree 12" to 18" DBH	# of trees	0	0.70	# of trees	-
	- calculated at 600 sq ft per tree		_			
		# of trees			# of trees	
7	Preservation of existing trees 18" to 24" DBH		0	0.70		-
	- calculated at 1300 sq ft per tree					
8	Preservation of existing trees 24" DBH or greater	# of trees	٦ .	0.00	# of trees	
٥	- calculated at 2000 sq ft per tree		0	0.80		-
	calculated at 2000 34 It per tiee					

9	Vegetated wall, plantings on a vertical surface	square j	feet 0.60	square feet	-	
С	Vegetated or "green" roofs					
1	Over at least 2" and less than 8" of growth medium	square j	0.60	square feet	-	
2	Over at least 8" of growth medium	square j	feet 0.80	square feet	-	
D	Permeable Paving***					
1	Permeable paving over 6" to 24" of soil or gravel	square j	0.40		-	
2	Permeable paving over at least 24" of soil or gravel	square j	feet 0.50		-	
E	Other					
1	Enhanced tree growth systems***	square j	0.40		-	
2	Renewable energy generation	square j	0.50		-	
3	Approved water features	square j	0.20		-	
F	Bonuses	sub-total of sq ft = 0				
1	Native plant species	square j O	feet 0.10		-	
2	Landscaping in food cultivation	square j	0.10		-	
3	Harvested stormwater irrigation	square j	0.10		-	
*** Perm	*** Permeable paving and structural soil together may not qualify for more than one third of the Green Area Ratio score. Total square footage of all permeable paving and enhanced tree growth.					

Appendix 10: Current INDOT MS2 Output

ID	Location	Municipality	Functional Classification	Year of Most Recent Count	Most Recent AADT
29w468	Cyntheanne Rd 0.2 Mi N of 136 th St	Hamilton County (Noblesville)	Local	2023	1,862
29w460	E 136 th St 0.1 Mi W of Cyntheanne Rd	Hamilton County (Fishers)	Major Collector	2023	5,184
29w462	Cyntheanne Rd 0.1 Mi S of 136 th St	Hamilton County (Fishers)	Major Collector	2023	3,113
29w464	136 th St 0.1 Mi E of Cyntheanne Rd	Hamilton County	Major Collector	2023	2,883³
48w478	CR 800 S 0.5 Mi W of SR 13	Madison County (Ingalls)	Major Collector	2023	2,944³
48w480	CR 800 S 300' E of SR 13	Madison County	Minor Collector	2023	1,982³
972081	I-69 214 Ramp A SW	Madison County (Ingalls)	Interstate	2023	5,471
972082	I-69 214 Ramp B SE	Madison County (Ingalls)	Interstate	2023	3,380
972083	I-69 214 Ramp C NE	Madison County (Ingalls)	Interstate	2023	2,777
972084	I-69 214 Ramp D NW	Madison County (Ingalls)	Interstate	2023	5,135
480370	SR 13 0.17 Mi N of I-69/BR 5321	Madison County (Ingalls)	Major Collector	2024	5,980
480993	CR 650 W (IR 25) 100' S of I-69/BR 5323	Madison County (Ingalls)	Major Collector	2023	458³
972090	I-69 2.5 Mi N of SR 13	Madison County (Pendleton)	Interstate	2023	64,009
48w122	W 800 S (IR 286)	Madison County	Minor Collector	2024	340
480720	SR 38 3.79 Mi E of SR 13	Madison County (Pendleton)	Major Collector	2023	5,911³
48v1054	SR 38 Roundabout at Heritage Way	Madison County (Pendleton)	N/A	2020	11,434
481054	State St 0.13 Mi E of I-69/BR 4370	Madison County (Pendleton)	Minor Arterial	2023	12,434³
972094	I-69 219 Ramp D SW	Madison County (Pendleton)	Interstate	2023	4,247

ID	Location	Municipality	Functional Classification	Year of Most Recent Count	Most Recent AADT
972091	I-69 219 Ramp A SE	Madison County (Pendleton)	Interstate	2023	4,391
48v07202	SR 38 Roundabout at NB I-69 Ramps	Madison County (Pendleton)	Local	2023	3,187³
972092	I-69 219 Ramp B NE	Madison County (Pendleton)	Interstate	2023	2,126
972093	I-69 219 Ramp C NW	Madison County (Pendleton)	Interstate	2023	2,130
48v07201	SR 38 Roundabout at SB I-69 Ramps	Madison County (Pendleton)	Local	2023	3,187³
972100	I-69 1.0 Mi N of SR 38	Madison County (Pendleton)	Interstate	2023	63,681
48w260	Old SR 132 (IR 324) 100' E of I-69/BR 4727	Madison County (Pendleton)	Major Collector	2024	2,188
481039	Old SR 132 (IR 324) 100' E of I-69/BR 4727	Madison County (Pendleton)	Major Collector	2024	2,231
481037	CR 400 W (IR 169) 100' S of I-69/BR 4728	Madison County (Pendleton)	Minor Collector	2023	761³
953800	I-69 at MM 221.4	Madison County (Anderson)	Interstate	2024	65,122
481038	Pendleton Ave (IR 321) 100 S of SR 9 N RT	Madison County (Pendleton)	Major Collector	2023	1,892³
480210	SR 9 0.1 Mi N of Pendleton Ave LT	Madison County	Other Principal Arterial	2023	10,790³
972101	I-69 222 Ramp A SW	Madison County (Anderson)	Interstate	2023	7,094
972102	I-69 222 Ramp B SE	Madison County (Anderson)	Interstate	2023	3,794
972103	I-69 222 Ramp C NE	Madison County (Anderson)	Interstate	2023	3,726
972104	I-69 222 Ramp D NW	Madison County (Anderson)	Interstate	2023	7,265
481054	State St 0.13 Mi E of I-69/BR 4370	Madison County (Pendleton)	Minor Arterial	2023	12,434³
481041	Martin Luther King Blvd 0.1 Mi N of I-69/BR 4729	Madison County (Anderson)	Other Principal Arterial	2023	20,098³

ID	Location	Municipality	Functional Classification	Year of Most Recent Count	Most Recent AADT
48w472	67 th St 0.25 Mi E of Martin Luther King Bvd	Madison County (Anderson)	Major Collector	2023	1,411³
481035	CR 100 W (IR 67) 0.1 Mi S of I-69/BR 4731	Madison County	Minor Arterial	2024	3,310
972110	I-69 1.0 Mi N of SR 9	Madison County	Interstate	2023	55,164
48x342	Madison Ave 0.2 Mi N of I-69	Madison County (Anderson)	Minor Arterial	2024	4,124
481036	Main St (IR 75) 100' N of I-69/BR 4732	Madison County (Anderson)	Minor Arterial	2024	2,198
481048	Columbus Ave 0.1 Mi S of I-69/BR 4733	Madison County (Anderson)	Minor Arterial	2024	4,145
481033	53rd St (Seybert Rd) 100 E of Southern Ave LT	Madison County (Anderson)	Minor Arterial	2023	13,508³
481034	Columbus Ave 100' N of E 53 rd St	Madison County (Anderson)	Minor Arterial	2023	8,699³
481049	53 rd St (Old SR 109) 100' E of Columbia Ave	Madison County (Anderson)	Minor Arterial	2023	14,573³
48s012	Columbus Ave ES of E 53 rd St	Madison County (Anderson)	Minor Arterial	2023	5,086³
481052	53 rd St (Old SR 109) 100' E of Orlena Dr RT	Madison County (Anderson)	Minor Arterial	2023	13,922
480240	SR 9 100' N of SR 236 RT	Madison County (Anderson)	Other Principal Arterial	2023	24,894
480930	SR 236 0.1 Mi E of SR 9	Madison County (Anderson)	Minor Arterial	2023	13,062
481002	Whetstone Rd 100' W of SR 9	Madison County (Anderson)	Major Collector	2023	5,743³
480230	SR 9 100' N of Whetstone Rd	Madison County (Anderson)	Other Principal Arterial	2023	28,492
48w460	E 59 th St 100' E of SR 9	Madison County (Anderson)	Major Collector	2023	2,877³
480220	SR 9 0.1 Mi N of I-69/BR 4734	Madison County (Anderson)	Other Principal Arterial	2023	23,575³
480850	SR 109 3.47 Mi N of US 36	Madison County (Anderson)	Minor Arterial	2023	17,425³

ID	Location	Municipality	Functional Classification	Year of Most Recent Count	Most Recent AADT
972111	I-69 226 Ramp A SW	Madison County (Anderson)	Interstate	2023	7,706
972112	I-69 226 Ramp B SE	Madison County (Anderson)	Interstate	2023	2,213
972113	I-69 226 Ramp C NE	Madison County (Anderson)	Interstate	2023	2,060
972114	I-69 226 Ramp D NW	Madison County (Anderson)	Interstate	2023	8,223

Appendix 11: Photo Credits

- (p. 8 second column) W.H. Bass Photo Company, Central Electric Railway Association Map of Interurban Railways, Bass Photo Co Collection, Indiana Historical Society, 1910.
- (p. 9 top) Indiana State Library-Images from Madison County, Indiana Union Traction #135, Alexandria City Car, https://www.in.gov/library/collections-and-services/manuscripts/images-of-indiana-92-counties/counties-k-m/, 1905.
- (p. 9 bottom) Ted Vinson, Delco-Remy Plants in Anderson, IN, https://www. delcoremyhistory.com/Plant%20 Photos/acrepltphotos.htm via the Madison County Historical Society.
- (p.14 first column) John P. Cleary, Riders board their CATS bus, The Herald Bulletin: "City adding tracking system for buses in Anderson," 13 June 2024.
- (p. 14 fourth column bottom) Don Knight, I-69 Corridor Construction & Traffic, The Herald Bulletin: "The Madison County Council of Governments doing study of I-69 corridor," 08 August 2023.

- (p.16) City of Mountlake Terrace, Traffic Calming- Bulb-outs, https://www.cityofmlt.com/213/Traffic-Calming.
- (p. 20 second column top) Greenfield District Building, https://www.in.gov/indot/about-indot/central-office/wel-come-to-the-greenfield-district/.
- (p. 22 second column) Richard Sitler, The IMPA Anderson Solar Park 2 on the north side of Anderson, The Herald Bulletin: "County adopted new solar ordinance in 2024," 19 April 2024.
- (p. 26 third column) Hamilton Town Center Management, Hamilton Town Center Clock & Traffic Circle, <a href="https://www.tripadvisor.com/AttractionReview-g37389-d6898806-Reviews-Hamilton Town Center-Noblesville Hamilton County Indiana.htm://meda-atf/6898806/413735654p/?abumid=-160&type=0&category=-160.
- (p. 30) Leonardo, Holiday Inn Express Hotel & Suites Anderson, https://www.kayak.com/ Anderson-Hotels-Holiday-Inn-Express-Suites-Anderson.288981.ksp.

- (p. 31) Dutro, Kathleen M., Nestle Plant & Nesquik Bunny, https://my-indiana-home.com/farm/nestle-plant-uses-indiana-milk-to-produce-top-products/30January2016.
- (p. 32) Pendleton Falls Park, https://www.visitindiana.com/listing/pendleton-falls-park/14894/.
- (p. 33) Samuel A. Roberson, et. al, 004 Outstanding Greek Revival Farmhouse, Madison County Interim Report- Fall Creek Township (60001-031), p. 74, 1984.
- (p. 35 second column) Trisha Shetty, Northern riffleshell, https://alchetron.com/Northern-rif-fleshell, updated 27 October 2023.
- (p. 35 third column) Brian Sullivan, Adult Loggerhead Shrike, Macaulay Library, California, 06 January 2018.
- (p. 37 bottom) Fall Creek Regional Waste District, District Collection System, https://fcrwd.com/.
- (p.38) Ron Sheppard, Hartman Road/ Foster Park Relief Sewer Construction 3, https://utilities.cityoffortwayne. org/hartman, updated 01 May 2024.

- (p. 39) CATS Bus Terminal, https://www.cityofanderson.com/136/Cityof-Anderson-Transit-System-CATS.
- (p. 40 top) Before construction of the railroad overpass, https://www.columbus.in.gov/redevel-opment/railroad-project/, 2016.
- (p. 40 bottom) After construction of the railroad overpass 7, https://www.columbus.in.gov/redevel-opment/railroad-project/, 2020.
- (p. 43) Carmanah, What Is Traffic Calming?, https://carmanah.com/resources/traffic-calming/, 20 November 2018.
- (p. 122 top left) Japanese Zelkova trees lining a walkway, https://extension.okstate.edu/programs/oklahoma-proven/plant-profiles/japanese-zelkova.html, 2024.
- (p. 122 top middle) SEWilco, Ginkgo biloba MN 2007, https://commons.wikimedia.org/wiki/File:Ginkgo_biloba_MN_2007.JPG, 17 June 2007.

- (p. 122 top left) Fossil Creek Nursery, Tilia americana 'Sentry,' https://plants.jimwhitingnursery.com/Plant-Name/Tilia-americana-Sentry-American-Sentry-Linden, 2018.
- (p. 122 bottom left) Bobby Williams, American hornbeam - Carpinus caroliniana - Zone 3b - Mature size, https://www.pinterest.com/pin/ patios--172755335696593633/.
- (p. 122 bottom middle) Hedge Maple Tree, https://facts.net/ nature/plants/19-hedge-mapletree-facts/, updated 21 July 2024.
- (p. 122 bottom right) Dave Marciniak, Kousa Dogwood | Cornus kousa, https://www.revolutionarygardens.com/kousa-dogwood-cornus-kousa/, 15 February 2019.
- (p. 124 top far left) Buxus microphylla var. jarponica 'Green Beauty,' https://www.saundersbrothers.com/ plant/Buxus-microphylla-var-japonica-Green-Beauty, 2024.

- (p. 124 top second left) Hicks Yew, https://www.thetreecenter.com/hicks-yew/?attribute_pa_size=5-container&sku=7384-5&gad_source=1&gclid=CjOKCQjw-5y1BhC-ARI-sAAM_oKn_JFcLSERMk4DRxHgl-JqllX6nMjawd_ptC9jKDMay4qul-YQ5RTrDYaAvoKEALw_wcB, 2024.
- (p. 124 top middle) Sarah Yule, Planting Juniper, https://morningc-hores.com/growing-juniper/, 2024.
- (p. 124 top second right) thuja-cheer-drops-1, https://www. provenwinners.com/images/ thuja-cheer-drops-1jpg, 2024.
- (p.124topfarright) Virginia Sweetspire Itea virginica 1, https://www.longislandnatives.com/product/itea-virginica-virginia-sweetspire/, 2024.
- (p. 124 bottom far left) Hydrangea quercifolia (Oak Leaf Hydrangea), https://www.gardenia.net/plant/ hydrangea-quercifolia, 2024.
- (p. 124 bottom second left) Arrowood-Viburnum Dentatum, https://plantingjustice.org/products/ arrowood-viburnum-dentatum?_ pos=1&_sid=1ab925eb0&_ss=r, 2024.

- (p. 124 bottom middle) plant habit, summer flowering, https://landscapeplants.oregonstate.edu/ plants/aesculus-parviflora, 2024.
- (p. 124 bottom second right) 2 Witch Hazel Trees/Shrubs 8" Tall 4" Pots Live Plants Hamamelis virginiana, https://www.amazon.com/Witch-Hazel-Trees-Shrubs-Restrictions/dp/B0B52P7R71 2024.
- (p. 124 bottom far right) Echinacea purpurea (NGN), https://www.midwestgroundcovers.com/plant/purple-coneflower/, 2024.
- (p. 125 far left) ASCLE-PIAS TUBEROSA (Butterflyweed), https://www.pinelandsnursery.com/asclepias-tuberosa-butterflyweed-2-plug, 2024.
- (p. 125 second left) Baptisia australis Blue Indigo, https://sugarcreekgardens.com/product/baptisia-australis-blue-indigo-2/, 2024.
- (p. 125 middle) Baptisia alba var. macrophylla (NGN), https://www.midwestgroundcovers.com/plant/baptisia-alba-leucantha-ngn/, 2024.

- (p. 125 second right) Purple Prairie Clover (Dalea purpurea) 12-pack of plugs, https://www.blazingstargardens.com/plants/p/purple-prairie-clover-dalea-purpurea-native-plant-plugs, 2023.
- (p. 125 far right) Monarda fistulosa Wild Bergamot, https://www.bumbees.com/product/monarda-fistulosa-wild-bergamot/, 2024.