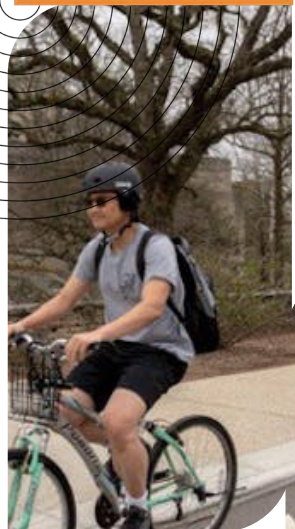


METROPOLITAN TRANSPORTATION PLAN

CIRCLE 20 50

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Approved by Transportation Policy Committee: December 4, 2024

Amendment Note: The most recent updates to the List of Projects are available online. Please visit indympo.gov/mtp to view the latest approved amendment.

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This plan was prepared in cooperation with the State of Indiana, the Indiana Department of Transportation, and the Federal Highway Administration. This financial assistance notwithstanding, the contents of this document do not necessarily reflect the official view or policies of the funding agencies.

If information is needed in another language, contact 317-327-1773.

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CONTENTS

CHAPTER 1

PURPOSE	1
WHAT IS THE MPO?	2
WHY WE PLAN	2
THE FEDERAL ROLE.....	4
VISION, GOALS, AND OBJECTIVES.....	5
PERFORMANCE MEASURES	5
UPDATING THE 2050 PLAN.....	6
OUR PLAN AND YOU	6
PLAN DEVELOPMENT	7
ENGAGEMENT AND PUBLIC INPUT	8

CHAPTER 2

AN UPDATE	13
TRANSPORTATION PROJECT IMPLEMENTATION	14
REGIONAL PLANNING INITIATIVES.....	14
POLICIES.....	21
REVENUE CHANGES	21

CHAPTER 3

THE REGION TODAY	23
HOW THE REGION HAS GROWN	26
EQUITY MAPPING	32
HOW THE REGION MOVES.....	34
HOW THE REGION COMPARES	51

CHAPTER 4

FRAMEWORK FOR GROWTH	55
FORECASTING	56
POLICY FRAMEWORK.....	60

CHAPTER 5

A PLAN FORWARD	71
IRTIP AND THE MTP	73
AVAILABLE REVENUES	73
ROADWAY PRIORITIES	76
CIRCLE 2050 MTP FISCALLY CONSTRAINED PROJECTS.....	80
EXISTING + COMMITTED PROJECTS INDOT	86
EXISTING + COMMITTED PROJECTS INDYGO	87
EXISTING + COMMITTED PROJECTS LOCAL JURISDICTIONS.....	88
TRANSIT PRIORITIES	90
PROJECT LIST FISCAL CONSTRAINT	90
BIKE AND PEDESTRIAN PRIORITIES.....	90
RED FLAG INVESTIGATIONS.....	91

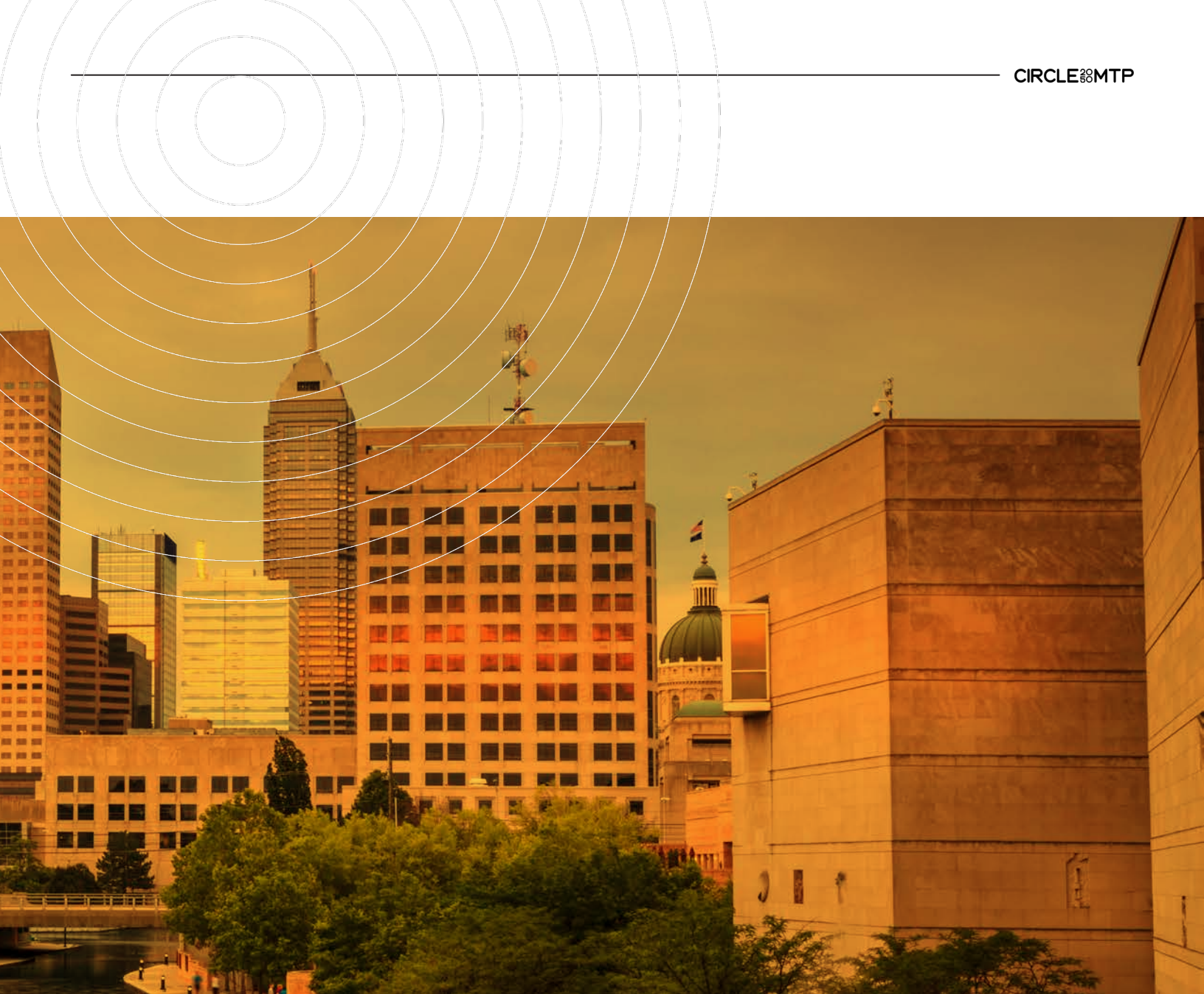
CHAPTER 6

LOOKING AHEAD	95
UNCERTAIN FUTURE	97
EMERGING TRANSPORTATION TECHNOLOGY IN THE INDIANAPOLIS REGION	98

APPENDICES

APPENDIX A – CONGESTION MANAGEMENT PROCESS	A-1
APPENDIX B – SYSTEM PERFORMANCE REPORT	A-15
APPENDIX C – LIST OF ENDANGERED SPECIES	A-25
APPENDIX D – POLICY FRAMEWORK.....	A-47
APPENDIX E – EQUITY MAPPING MEMORANDUMS.....	A-65
APPENDIX F – REVENUE PROJECTIONS.....	A-89
APPENDIX G – STATISTICALLY VALID SURVEY RESULTS	A-105
APPENDIX H – PUBLIC FEEDBACK	A-151

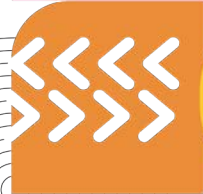




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CHAPTER 1

PURPOSE

1 PURPOSE

Almost every facet of our daily life is affected by transportation. From goods arriving at our doorstep to our daily commute, transportation plays a central role in our lives. Transportation can provide opportunities, but can also create barriers. Transportation planning seeks to understand how people and goods move around our region, and what projects are needed to meet future needs.

What is the MPO?

The Indianapolis MPO (IMPO) is the regional entity that plans and programs federal transportation funds for highways, transit, non-motorized transportation, and other means of moving people and goods in Central Indiana. The IMPO works within federal transportation requirements to guide the development of a multi-modal transportation system within the Metropolitan Planning Area (MPA) - an area that includes the Urbanized Area (UA), areas already mostly developed, plus areas expected to urbanize over the next 20 years.

The IMPO's Transportation Policy Committee (TPC) has 41 members, including 36 cities, towns, and counties in Central Indiana that pay dues to qualify for project programming and funding from the IMPO. Membership also includes regional transit agencies, the Indiana Department of Transportation, and other planning partners.

Why We Plan

Areas with a population over 50,000 are required to have a metropolitan planning organization (MPO). The IMPO's role is to provide a neutral forum for elected officials and technical experts to discuss and approve projects that will affect the region for decades. As a federally-required organization, we conduct planning to understand where infrastructure should be built. We cooperate with local and state officials in all of our planning efforts.

METROPOLITAN PLANNING AREA (MPA)

8 Counties

Boone, Hamilton, Hancock, Hendricks, Johnson, Marion, Morgan, and Shelby.

12 Cities

Beech Grove, Carmel, Fishers, Franklin, Greenfield, Greenwood, Indianapolis, Lawrence, Lebanon, Noblesville, Southport, and Westfield.

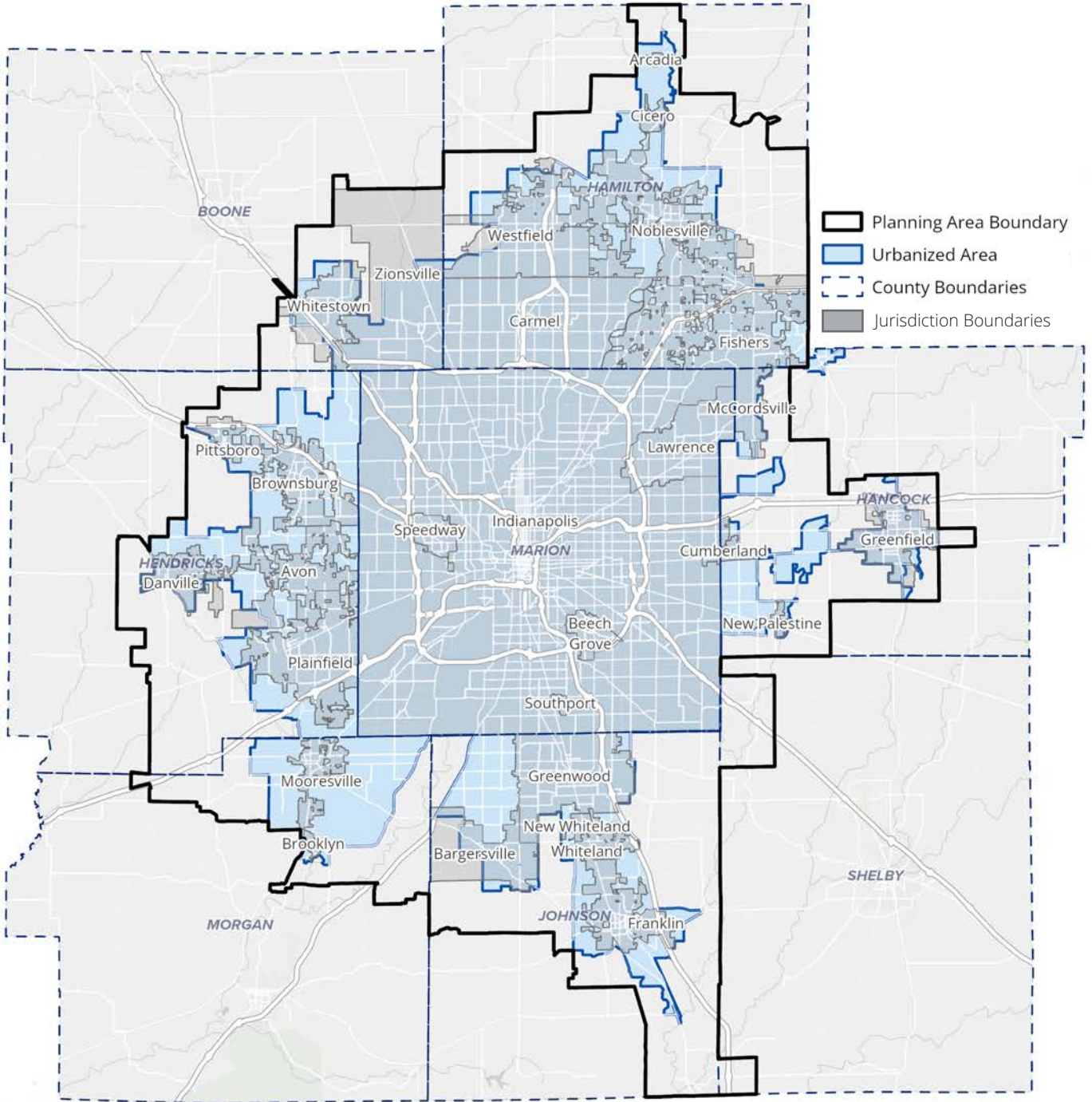
22 Towns

Arcadia, Atlanta, Avon, Bargersville, Bethany, Brooklyn, Brownsburg, Cicero, Cumberland, Danville, Edinburgh, McCordsville, Mooresville, New Palestine, New Whiteland, Pittsboro, Plainfield, Speedway, Spring Lake, Whiteland, Whitestown, and Zionsville.

PLANNING PARTNERS

IndyGo, CIRT, INDOT, Federal Highway Administration, Federal Transit Administration, Indianapolis Airport Authority, Ports of Indiana, Indiana Department of Environmental Management, Madison County Council of Governments, and Columbus Area Metropolitan Planning Organization

THE IMPO URBANIZED AREA (UA) AND METROPOLITAN PLANNING AREA (MPA)



The Federal Role

The IMPO's core products are outlined in federal legislation. As the designated transportation planning organization in Central Indiana, the IMPO is required to adhere to these regulations in order for the region to continue to receive federal transportation dollars. The amount and allocation of federal funds is determined through legislation. This legislation, commonly referred to as surface transportation acts, outlines national transportation policies and allocates resources to guide them.

The latest surface transportation act, the Infrastructure Investment and Jobs Act (IIJA), otherwise known as the Bipartisan Infrastructure Law (BIL), was passed in November 2021. The IIJA continued the commitment of the previous transportation legislation (the Fixing America's Surface Transportation Act, or FAST Act) to track the national transportation system through the use of performance measures. The IIJA carries forward the following federal planning factors established in the FAST Act:

- Support the economic vitality of the metropolitan area
- 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 and mobility of people and freight
- Protect and enhance the environment
- Enhance the integration and connectivity of the transportation system
- Promote efficient system management and operation
- Emphasize preservation of the existing system
- Improve the resiliency and reliability of the transportation system
- Enhance travel and tourism

In addition, the IIJA introduced new or reinforced areas of focus for consideration within the MTP:

- Improve the environmental resiliency of the transportation system
- Reduce transportation carbon emissions
- Promote equity in the transportation planning process
- Consider the link between the role of transportation and housing
- Promote transportation technology in metropolitan planning

The goals and objectives established in the CIRCLE 2050 MTP incorporate all of these planning factors and IIJA focus areas.

Vision, Goals, and Objectives

The CIRCLE 2050 MTP is guided by a vision statement that sets an aspirational long-term direction for change in the region.

Vision Statement: Develop a comprehensive, multi modal, regional transportation system that safely and efficiently addresses existing and emerging mobility needs, is economically viable, cost-effective, environmentally sustainable, equitable, and supports regional prosperity, health, and travel choices throughout the communities in Central Indiana.

Building from the vision statement, the CIRCLE 2050 MTP is guided by four overarching themes, each a broad statement of desired long-term results. Each theme is divided into a series of goals and accompanying objectives: statements of desired future conditions that are more specific, measurable, achievable, realistic, and time-specific. Later in the document, these objectives are broken down further in the policy framework in Chapter 4 with specific strategies and actions the IMPO can do or assist with to help achieve the objectives.

Performance Measures

Performance measures are useful in tying goals and objectives to metrics and outcomes, which can be tracked over time. The federal government, through the IIJA and its predecessor legislation, MAP-21 (2012) and the FAST Act (2015), instituted a series of performance measures to understand how the system is performing and target federal monies to critical measures. These are organized into five performance measurement areas:

- **Safety (PM1):** Traffic fatalities and serious injuries on all public roads
- **Condition (PM2):** The condition of roadways and bridges on the National Highway System (NHS)
- **Performance (PM3):** Congestion, travel time reliability, environmental sustainability, etc.
- **Transit Safety:** Developed by IndyGo
- **Transit Asset Management:** Developed by IndyGo

Several measures fall under each of these categories, as illustrated at www.fhwa.dot.gov/tpm/plan/. IMPO continues to monitor and update these performance measures, with the TIP and MTP being amended as necessary to include the most current performance measures. Chapter 4 of this document will provide more information about the federal performance measures, as well as regional key performance indicators, strategies, and actions identified as part of the CIRCLE 2050 MTP.



Updating The 2050 Plan

The Indianapolis MPO's Metropolitan Transportation Plan (MTP) serves as the regional transportation plan for Central Indiana. Every four years, the region revisits the MTP. The plan will guide the region towards an envisioned 2050 transportation system.

The CIRCLE 2050 MTP acts as a significant update to the previous 2050 MTP, originally completed in late 2021 and last amended in October 2024. Many policies, goals, and recommendations within the previous plan have been reviewed and maintained within the CIRCLE 2050 MTP, along with updates for current needs, including:

- Up-to-date existing conditions data and peer region comparisons
- Renewed goals, objectives, and key performance indicators for the region
- Revising regional transportation performance measures to meet emerging needs, available data, and new federal requirements
- Updated transportation equity process to identify vulnerable populations and geographies within the region

Our Plan and You

How does our plan affect you, your family, and your community? Projects that are considered regionally significant must be included in a region's metropolitan transportation plan. Regionally significant projects (also referred to as "capacity expansion") are projects that increase the capacity of the network, like building new roads or adding travel lanes to existing roads. The CIRCLE MTP is an integral part of funding and implementing the projects that address transportation needs and challenges your community identifies.

Plan Development

The CIRCLE MTP process included the following:

- **Current Trends**
By examining existing population, employment, and commuting patterns, we gain a better understanding of our trends.
- **Goals and Objectives**
Goals and objectives provide the framework for the planning process, helping guide its development.
- **Scenario Planning**
Evaluating a combination of land use and transportation alternatives contributes to the identification of a preferred future vision.
- **Key Performance Indicators**
KPIs help us track trends and identify areas where we are progressing toward goals and areas where we need to provide more support.
- **Call for Infrastructure Projects**
Counties, towns, and cities throughout the region conduct transportation planning for their own jurisdictions and develop project ideas. These proposed projects are collected and serve as the projects that the IMPO staff examines to evaluate their regional impact.
- **Financial Feasibility**
The MTP needs to be a realistic document; the plan should be able to be built. Existing state, local, and federal revenues are identified and forecasted, providing a realistic revenue point for the IMPO to use to prioritize projects.
- **Resource Allocation Goals**
The MTP establishes goals for what percentage of the IMPO's federal funding should go to project types such as capacity expansion, existing facility upgrades, bike and pedestrian projects, and transit.
- **Project Screening**
Needs exceed revenues for roadways, necessitating a project screening process to prioritize roadways for available funding. Project screening is tied to goals, objectives, and current performance.
- **Final Plan Development**
The final plan includes a list of capacity expansion projects that are regionally significant and regionally prioritized, including major transit and roadway projects. The plan also includes future recommendations for transportation plan development.



ENGAGEMENT AND PUBLIC INPUT

Public input and engagement with community organizations and other stakeholders are key parts of planning at the IMPO. The following describes engagement and public input initiatives within the CIRCLE 2050 MTP development process.

STEERING COMMITTEE

Steering Committees are often used to help guide the direction of a plan, particularly regarding a long-range vision, including goals and actions to achieve the vision. These groups are often made up of representatives from a variety of communities and organizations, representing diverse perspectives, and they're asked to help the plan development team confirm existing conditions and future assumptions, and to provide feedback on draft written materials and visuals.



For the CIRCLE 2050 MTP, six Steering Committee meetings took place between August 2023 and June 2024. Representatives from the following groups were invited to take part in the Steering Committee, including a review of the final draft document before it was shared for public review:

- Several Central Indiana community representatives
- U.S. Federal Highway Administration
- U.S. Federal Transit Administration
- U.S. Environmental Protection Agency
- Indiana Department of Environmental Management
- Indiana Department of Natural Resources
- Indiana Department of Transportation
- IndyGo (aka. Indianapolis Public Transportation Corporation)
- Central Indiana Regional Transportation Authority
- Indianapolis Airport Authority
- MIBOR Realtor Association
- AARP Indiana
- Marion County Public Health Department
- Health by Design
- Public Policy Institute
- Indianapolis Urban League
- Local Initiatives Support Corporation (LISC) Indianapolis
- Central Indiana Regional Development Authority
- Aspire Johnson County
- Avon Economic Development
- Develop Indy
- Indy Chamber
- IUPUI Transportation and Autonomous Systems Institute (TASI)
- Hoosier Environmental Council
- Indianapolis Office of Sustainability

FOCUS GROUPS

The IMPO held several focus groups to gather additional community feedback during the planning process. These groups met once early-on during the planning process, to provide early guidance and direction, and again during draft plan review. These groups included people and organizations to represent the following groups:

- Central Indiana development companies
- Community Development Corporation leadership
- Senior Services Agencies, staff and seniors
- Major Employers in Central Indiana
- Far Eastside Community Council (FECC)
- United Northeast Community Development Corporation (UNEC)
- Southeast Neighborhood Development Corporation (SEND)

PUBLIC FEEDBACK

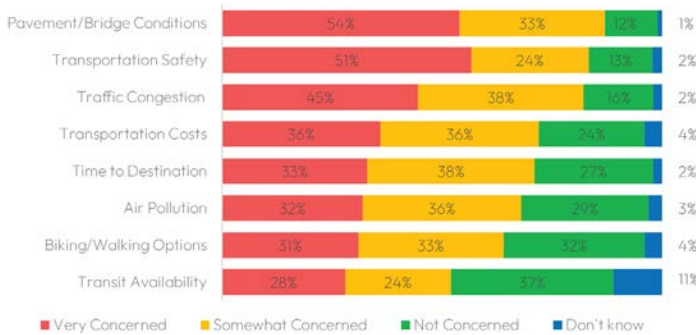
As an early contributor to the tone, goals, and vision for the CIRCLE 2050 MTP, a statistically valid public survey was given in fall of 2023 and a MetroQuest survey was advertised to the broader public from August 18, 2023 to September 17, 2023. Both surveys collected input from Central Indiana residents about a wide range of transportation and land development issues to help guide decisions related to MTP development. The findings provided a baseline for assessing changes in transportation behavior and attitudes over time to ensure IMPO is responsive to the changing needs of the region's residents. Major question topics included:

- Top five transportation concerns
- What goals and strategies the IMPO should focus on
- Transportation spending priorities
- Daily travel patterns for work and shopping
- Mode choices
- Additional demographic questions to understand how closely results matched the regional population

For the statistically valid survey, 1,223 surveys were completed. Key themes included:

- Transportation patterns are continuing to evolve, with more work from home and more use of delivery services
- Respondents to the statistically valid survey believe road conditions, safety, and traffic congestion are the top concerns, with safety and roadway congestion seen as the most important MTP goals
- For respondents to the statistically valid survey, fixing and maintaining existing roads and bridges was the top transportation funding priority, followed by building/widening roads and bridges, intersection/safety projects, and improving existing or adding more public transit

TRANSPORTATION CONCERNS

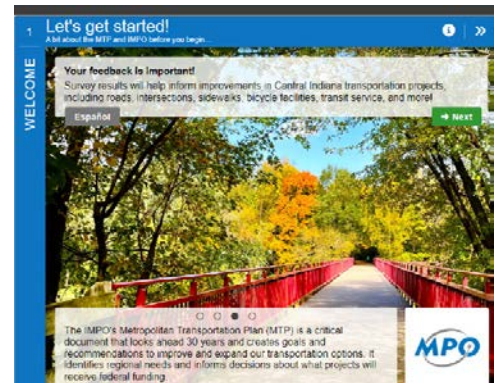


FUNDING PRIORITIES



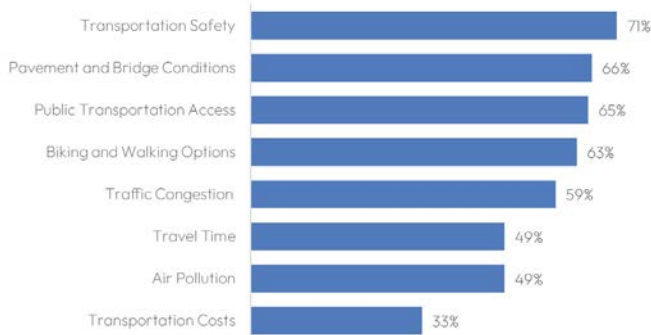
The MetroQuest survey had 413 participants. Key themes included:

- For respondents to the MetroQuest survey, transportation safety was the highest-ranked concern, followed by pavement and bridge conditions, public transportation access, and biking and walking options
- When choosing funding priorities, respondents' top three choices were road maintenance, public transit, and bikeways and sidewalks

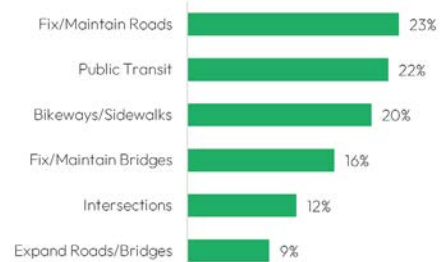


MetroQuest Survey Welcome Screen

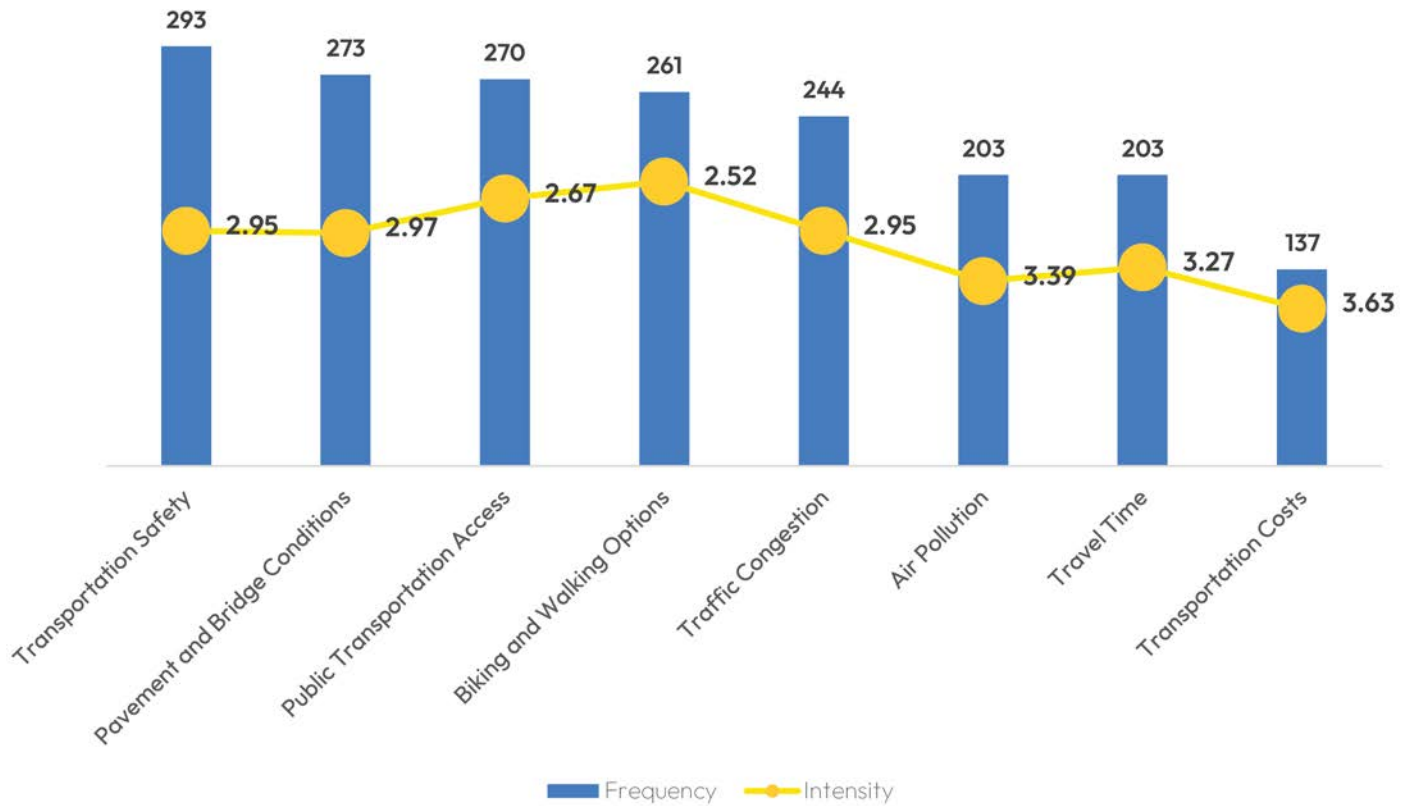
TRANSPORTATION CONCERNS



FUNDING PRIORITIES



TRANSPORTATION CONCERNS BY FREQUENCY AND INTENSITY RANKED



Frequency = how often a concern was chosen

Intensity = importance of concern to survey taker, with numbers closer to 1 meaning more important

ALLOCATION SUB-COMMITTEE

In addition to the Steering Committee, the IMPO created an Allocation Sub-Committee to help project planners determine a preference for regional spending goals. This committee met three times between July 2023 and January 2024 and included representatives from 20 of the voting communities on the IMPO’s Transportation Policy Committee.

Spending goals are set by the IMPO to aid in distributing funding for regional projects. Goals are established for categories such as new roadway construction, roadway redesign, bridge repair, bicycle and pedestrian facilities, roundabout intersections, and transit. The results of the public feedback were main sources of contributing information for this sub-committee. In addition, the committee reviewed spending goal recommendations from the project’s Steering Committee and Focus Groups. Using all of this information, a set of final goals for category spending were set, including the establishment of a new spending category for intersections (including typical intersections and roundabouts), and redefining the roadway redesign category. See more information on the spending goals in Chapter 5.





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CHAPTER 2

AN UPDATE

2 AN UPDATE

Central Indiana has continued to grow and evolve in a post-pandemic world since the completion of the last metropolitan transportation plan, first adopted in 2021. In addition to the 2021 Infrastructure Investment and Jobs Act (IIJA), which authorizes federal funding for transportation infrastructure, the region has advanced several new projects and initiatives.

TRANSPORTATION PROJECT IMPLEMENTATION

The MPO continues to partner with INDOT and local and regional entities to implement the projects identified in the 2050 MTP and programmed in the Transportation Improvement Program (TIP). A total of 154 capacity, safety, operations and multimodal projects representing \$235,599,797 of investment have been funded since 2021, and 446 projects representing \$3,877,639,433 in investment are currently programmed in the TIP.

Among the most significant project developments is the advancement of the regional high capacity transit network. In 2022, construction began on the IndyGo Purple Line, a 15-mile bus rapid transit project that will connect downtown Indianapolis to the City of Lawrence to the northeast. The Purple is planned for operation in October 2024, marking the region's second major BRT line since the Red Line began service in 2019.

Work also advanced on the Blue Line, a 34-mile BRT corridor that connects Indianapolis International Airport on the far west side, through downtown Indianapolis, to the Town of Cumberland east of Indianapolis.. IndyGo is in the process of adjusting their design to balance projected costs with available revenue, and the project is currently anticipated to have a 2027 opening date. When complete, the Blue Line will become part of an expansive regional transit network that puts many of the region's homes and employment centers within a short transit ride.

REGIONAL PLANNING INITIATIVES

The MPO has led or partnered in a number of important regional planning initiatives that have implications for the CIRCLE 2050 MTP. These initiatives are diverse and wide ranging, including active transportation, land use, housing, and resilience.

REGIONAL ACTIVITY CENTERS

Regional Activity Centers are major destinations where clusters of employment, residents, and/or visitors are located. Identifying these centers of high activity and trip generation helps engineers, planners, and elected officials plan for the long-term needs of the area and guide growth across the region in an efficient and predictable manner. Encouraging continued investment in identified activity centers helps communities ensure efficient use of utility and transportation infrastructure, support for economic centers, and develop a better jobs-housing balance.. These activity centers are also integrated into the region's Travel Demand Model, contributing to the model's intricacy.

In 2023, the IMPO led an update of the map and technical report for the Regional Activity Centers, originally developed in 2020. This update includes an expansion of the study area and the incorporation of the most recent data available. The Regional Activity Centers map supports transportation and land use efforts across the region, including the MTP's project development and prioritization process. The outcomes from this process are discussed in more detail in Chapter 4.

SCENARIO PLANNING

The IMPO has a preferred future land use scenario that illustrates how Central Indiana should grow and change over the next few decades. The preferred scenario was created using public and stakeholder input, and prioritized moderate density infill and transit-supportive land use and transportation investments. This preferred scenario placetype allocation was used to determine how population and jobs in 2050 would be allocated to the grid cells, informed by a population and employment forecast that was consistent across scenario options.

The Preferred Scenario was used in the transportation modeling to support the original 2050 MTP and has continued to be used in the current version.

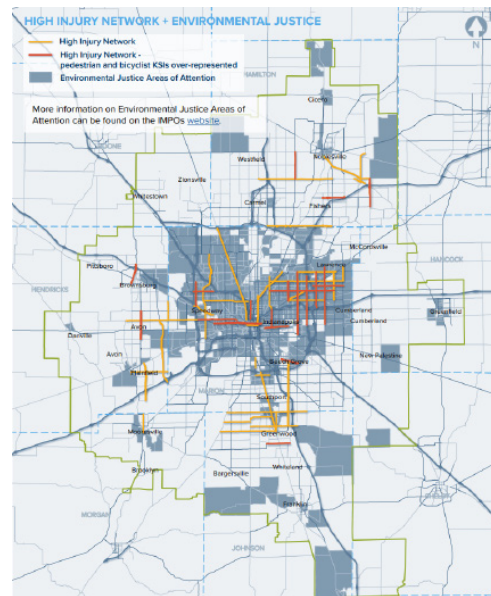
SAFE STREETS FOR ALL SAFETY ACTION PLAN

The **Safe Streets and Roads for All Safety Action Plan (SAP)** was adopted by the IMPO Board in 2022 and updated in 2023 and 2024. It consists of several components: goal setting, safety analysis, public engagement, equity analysis, policy and process proposals, and progress reporting. The SAP works toward ensuring safe, accessible, and desirable transportation in Central Indiana, central to the IMPO’s mission. The region has seen significant rises in fatal and incapacitating car crashes over the last several years, a trend which, without intervention, is unlikely to reverse itself.

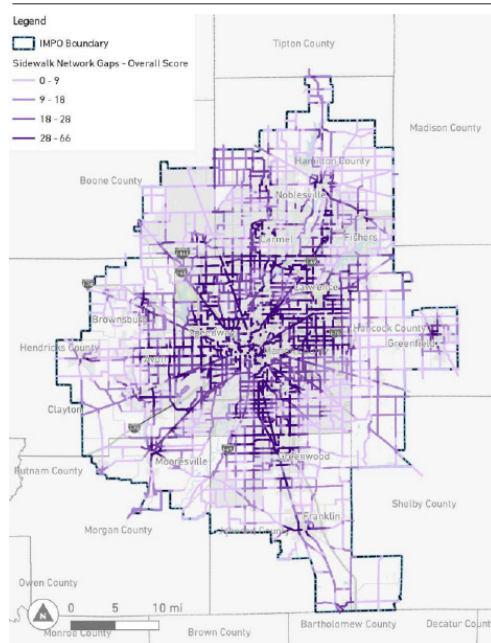
The SAP updates the IMPO’s Vision Zero statement by setting a goal of reducing fatal and serious crashes by 35% by 2040. It also identifies a High Injury Network (HIN), recommended interventions (projects) and plan and policy changes to address safety. This SAP represents the beginning of a more concentrated effort to improve safety in the Central Indiana region, provides a foundation for the IMPO to pursue supplemental planning work, and enables the IMPO and member jurisdictions to pursue federal implementation grant funding under the Safe Streets for All program. The High Injury Network identified in the SAP was taken into account as part of MTP project development and evaluation.

REGIONAL ACTIVE TRANSPORTATION PLAN

The **Regional Active Transportation Plan (ATP)**, adopted by the IMPO Board in 2024, provides an overall framework for Indianapolis MPO staff to implement a connected network of regional trails, bikeways, and sidewalks and serve as a planning resource for local governments in Central Indiana. The plan identifies priority gaps in the regional active transportation network, connectivity recommendations for transit and micromobility, and includes specific recommendations for policies and programs to support active transportation implementation.



High Injury Network Map for Safety Action Plan



Sidewalk Network Gaps Map from Regional Active Transportation Plan

TRAIL ORIENTED DEVELOPMENT STUDY

Trail Oriented Development (TrOD) is a relatively new development concept that organizes housing, activity, entertainment, and employment options around access to a regional trail network. The Trail Oriented Development Study was created by the IMPO in 2024 to identify success factors for TrOD in Central Indiana, including potential nodes on the existing/planned trail network, potential development guidelines, and potential tools for overcoming identified obstacles to success. The plan will serve as a resource guide and toolkit for local governments to enable and facilitate TrOD in their communities.



CONCEPT HIGHLIGHTS

- 1** Building visibility from both trail and major roads
- 2** Internal green corridor
- 3** Public plaza and active ground floors fronting trail
- 4** Narrow frontage road with safe crossing
- 5** Private outdoor space and trail-oriented residential with privacy
- 6** Parallel path connecting residential
- 7** Gates allowing neighborhood trail access

Conceptual renderings from the Trail Oriented Development Plan

REGIONAL INTELLIGENT TRANSPORTATION SYSTEMS (ITS) ARCHITECTURE UPDATE

Stakeholders throughout the region have developed applications of technology and operations management strategies that increase transportation safety, efficiency, and availability of information. These technology applications, including examples such as highway dynamic message signs and regional traffic management centers, are collectively referred to as Intelligent Transportation Systems (ITS). IMPO led an update to the Indianapolis Regional ITS Architecture both to inventory existing transportation technology systems and projects across the region and to identify planned systems and services that stakeholders expect to deploy over the next ten years. The architecture update began in March 2023 and was completed in January 2024.

This architecture identifies both needs for technology investment and needs for coordination among stakeholders in management of traffic and transportation safety throughout the region. Stakeholders included cities, towns, counties, Indiana Department of Transportation, the Federal Highway Administration, and regional transportation partners such as IndyGo and Indianapolis Airport. By developing this plan using a cooperative multi-agency approach, IMPO and its partner agencies will be able to consider pooling funds and collectively maintain and deploy ITS projects whose benefits and impacts are felt across the Indianapolis region and, in some cases, statewide.

CENTRAL INDIANA HOUSING STUDY

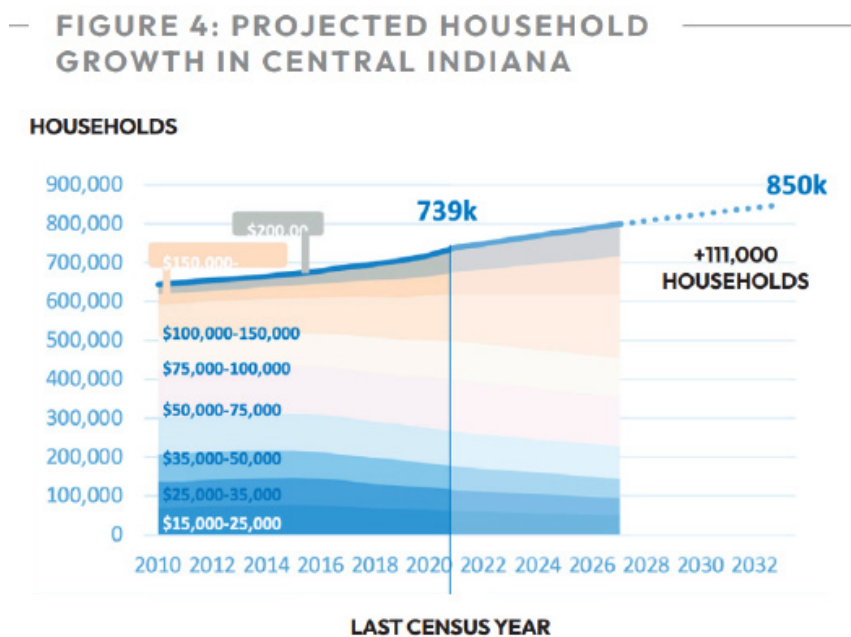
As part of the IMPO’s work towards advancing the Central Indiana region and recognizing the importance of housing in its long-term success, the IMPO undertook the Central Indiana Housing Study throughout 2023. The study seeks to foster communication and support the development of a more equitable, accessible, attainable, and connected housing supply for current and future residents of the Central Indiana region. Understanding each community has their own plans guiding development and housing, the study does not dictate what each community should do regarding housing, but instead seeks to provide information to aid in Central Indiana’s continued growth and vibrancy.

The full study is broken into three phases.

- Phase 1 includes a detailed assessment of existing plans and policy, regional socioeconomics, and housing market conditions like development patterns and current housing costs.
- Phase 2 assesses current issues the region is facing, including a housing gap analysis and demand summary, a contributing factors assessment, and an analysis of the impact corporate single-family investors (companies with 25 or more residential properties in the region) have had on the region.
- Phase 3 provides a toolkit of policy options intended to help address the problems identified in Phase 2, considers next steps the IMPO could take following the study conclusion, and provides an educational curriculum for people and groups focused on understanding housing and creating solutions.

Public and stakeholder engagement were major parts of the study process, including steering committee meetings, meetings with municipal staff from IMPO jurisdictions, a series of stakeholder conversations, and public open houses and speaker events. Stakeholder conversations and steering committees included people from a variety of organizations serving various groups and purposes, including:

- Non-profit developers, funders, and local CDCs (community development corporations) involved in housing
- For-profit developers for both single-family and multifamily
- Economic development professionals
- Housing advocates; transportation professionals
- Organizations representing the immigrant community, seniors, people with disabilities, and the Black community
- Community center representatives
- Trade association representatives



Graphic depicting projected household growth from the Central Indiana Housing Study

REGIONAL RESILIENCY SNAPSHOT

Central Indiana faces an increasingly uncertain future due to changing environmental conditions, population growth, and other factors such as rising temperatures and flooding. As the designated regional planning organization, the IMPO recognizes the criticality of regional resiliency planning to prepare for these challenges. The IMPO approved the [Regional Resiliency Snapshot](#) in 2024, which serves as the region's Resilience Improvement Plan (RIP) and includes eight counties: Boone, Hamilton, Hendricks, Marion, Hancock, Morgan, Johnson, and Shelby counties.

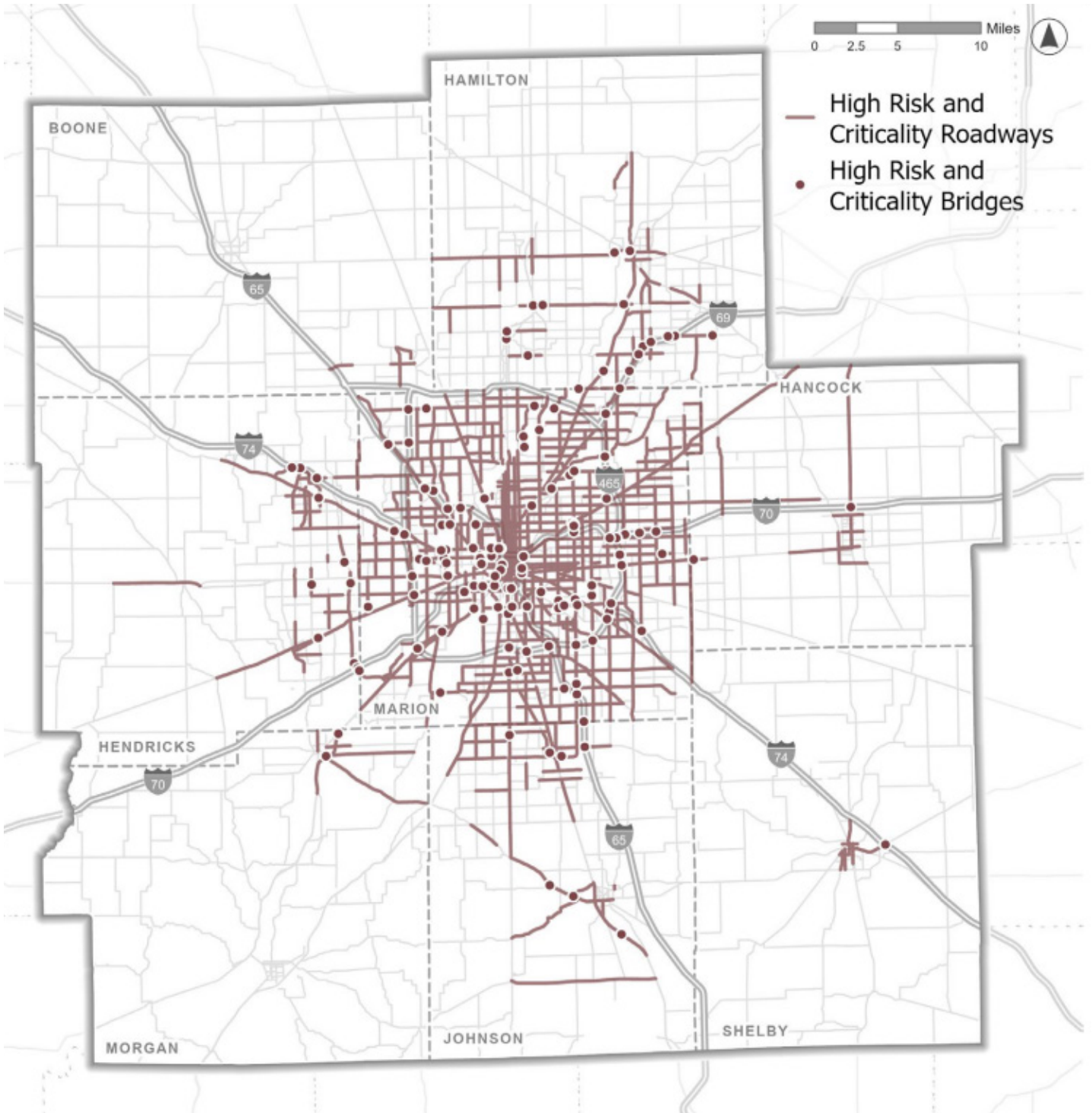
In alignment with its commitment, the IMPO developed this Snapshot to inform the region about potential future shocks and stressors while evaluating Central Indiana's preparedness to confront them. The region is characterized by continuous growth, varying population dynamics, and economic advancements. Regional assets spanned three community capitals -- Natural, Social, and Financial -- crucial for sustainability, economic development, and community vitality. Throughout this effort, equity played a central role in planning and analysis to prepare the region to be protected against significant threats that worsen existing social vulnerabilities.

The Snapshot assessed seventeen regional threats/hazards, such as flooding, severe weather, and air quality impacts, for their probability and impact, indicating high-risk factors for the region. A comprehensive risk-based assessment of transportation infrastructure was conducted for four regional threats/hazards, focusing on asset exposure, sensitivity, adaptive capacity, and criticality indicators like mobility, equity, and connectivity to prioritize assets. Town centers across the region had high criticality due to higher density, multiple mobility options, and access to key amenities and higher risk, with higher costs and hazard probability compared to the rest of the region. Additionally, over 200 roadway segments and over 100 bridges throughout the region were identified as high risk and high criticality. MTP projects were assessed for resiliency with a prioritized project table included in Section 5 of the Snapshot.

The Snapshot provides recommendations that span diverse topics such as infrastructure, natural features, mobility options, emergency communities, and community engagement, including:

- **Equitable Infrastructure Development:** Prioritize diverse natural infrastructure to mitigate flooding and urban heat, benefiting vulnerable communities.
- **Resilient Infrastructure Planning:** Implement systematic evaluation processes for ongoing maintenance and new projects to enhance infrastructure resilience against disasters.
- **Renewable Energy Focus:** Support renewable energy sources for backup power systems and critical facilities to ensure reliability during emergencies.
- **Preservation of Natural Elements:** Protect and expand green spaces, wetlands, parks, and water resources to bolster resilience and sustainability.
- **Community Access and Engagement:** Improve access to essential services, diverse housing, and transportation options while engaging communities transparently in planning and implementation processes.

ROADWAYS AND BRIDGES WITH HIGHEST RISK AND CRITICALITY



Sources: IMPO Regional Resiliency Snapshot

COMPREHENSIVE ECONOMIC DEVELOPMENT STRATEGY

The Central Indiana Comprehensive Economic Development Strategy (CEDS) was adopted by the Indianapolis MPO Executive Committee on May 20, 2022. The plan is designed to guide economic development efforts across the Central Indiana region over the next five years. The three goals in the CEDS—talent, innovation, and place—are structured to complement and build on one another to create a holistic approach to economic development. The place goal in particular is relevant to the MTP because of its focus on infrastructure to improve quality of life for residents and visitors.

REGIONAL FREIGHT PLAN

The Central Indiana Regional Freight Plan was updated in 2022 to expand the identified Freight Network Map, highlight issue locations for safety, mobility, condition, and environmental/community impact, identify performance measures and recommended follow-up items and key issues to monitor over time. The updated map and recommendations were used to inform the CIRCLE 2050 MTP.

CIRCLE²⁰

TRAVEL AND TOURISM



Lucas Oil Stadium

Tourism is often a major part of economic development. Similar to freight movement and other economic transportation activities, travel and tourism often bring unique transportation needs to ensure effective movement of residents and visitors to their destinations. The following are a sample of organizations focusing on tourism within the region.

- Visit Indy | Information about places, events, hotels, neighborhoods, etc.
- Indiana Convention Center & Lucas Oil Stadium | Hosts events, sports, concerts, etc.
- Gainbridge Fieldhouse | Pacers (NBA) venue, major concert venue, etc.
- Indianapolis Motor Speedway | Indianapolis 500, Brickyard 400, etc.
- Indiana State Fairgrounds & Event Center | State Fair is biggest event, occurs in August. Facilities also used for other miscellaneous events throughout the year.
- Palladium | Events venue in Carmel, IN
- Hamilton County Tourism

POLICIES

The Indianapolis MPO approves policies that affect federally-funded transportation projects. These policies mandate certain components to a project or require the disclosure of information about a project. As the Indianapolis MPO, through recommendations from the Transportation Policy Committee, implements the CIRCLE 2050 MTP, policies in addition to those listed here may be considered and adopted.

COMPLETE STREETS

Complete Streets are those streets that allow all residents and visitors (whether able or not; whether in a car or not) to use the street. Typically, a complete street infrastructure application is a sidewalk, multi-use path, or bike lane. Complete Streets allows all residents to utilize the transportation network without requiring them to own or operate an automobile.

[The Indianapolis MPO Complete Streets policy](#) requires all infrastructure projects submitted to the MPO for federal Surface Transportation Blog Grant (STBG) or Transportation Alternatives (TA) funds to include a non-automobile facility on every roadway, such as a sidewalk on at least one side or bicycle lanes. There are certain exceptions to the rule, including excluding limited access thoroughfares like Binford Boulevard. Transportation Committee member agencies that submit projects for MPO federal funds continue to meet the policy standard. Compliance to the Complete Streets Policy is ensuring a better transportation network for Central Indiana.

VISION ZERO

The IMPO's Transportation Policy Committee passed a [resolution supporting Vision Zero](#) in 2018. Vision Zero is the concept that all transportation-related injuries and deaths are preventable, and communities should make efforts to reduce the number of injuries and deaths to zero. Vision Zero efforts usually consist of a combination of infrastructure design improvements and community education. In 2022 the Transportation Policy Committee updated their Vision Zero commitment by adding a target to reduce fatal and serious crashes by 35% by 2040. The IMPO continues to look for ways to support the region's communities in these efforts.

Revenue Changes

FEDERAL EXCHANGE

In August of 2020, the IMPO signed an agreement with the Indiana Department of Transportation (INDOT) to exchange the IMPO's annual allocation of Federal transportation program funds for State funds for projects in the Indianapolis Regional Transportation Improvement Program (IRTIP). The IRTIP documents the Federally funded transportation improvements proposed for the Indianapolis Metropolitan Planning Area (MPA) over a four-year period. Under this agreement, the first funding year for the exchange will be for 2025 IRTIP projects, and the Indianapolis MPO would receive 90% of its federal allocation, with INDOT keeping the other 10%. This program is known as the Federal Funds Exchange. Details of the implementation of the Federal Funds Exchange are still under development by INDOT. It is likely that Transportation Alternatives funding will remain federal and not be included in the exchange. The terms of the Federal Funds Exchange will continue to be revisited and documented through subsequent updates to the IMPO's TIP and MTP..

The IMPO pursued this program after careful review of similar programs in other regions and after significant dialogue with regional stakeholders. The IMPO has been actively working to gain more flexibility in programming policy to improve project delivery and reduce risks to the overall transportation funding program. The IMPO Federal Fund Exchange Program is intended to provide eligible local public agencies (LPAs) within the Metropolitan Planning Area with greater flexibility in funding and delivering regional transportation projects.





METROPOLITAN TRANSPORTATION PLAN
CIRCLE 20
50

**CENTRAL
INDIANA**
REFLECT
CREATE
LEAD
EXCEL



CHAPTER 3

THE REGION TODAY



3 THE REGION TODAY

Understanding Central Indiana's existing transportation outlook is key to making informed decisions about its future. This chapter evaluates the existing conditions of the region as part of the CIRCLE 2050 MTP around three sections:

HOW THE REGION HAS GROWN

A LOOK AT ECONOMIC AND DEMOGRAPHIC CHANGES IN THE LAST DECADE

HOW THE REGION MOVES

AN EVALUATION OF THE TRANSPORTATION SYSTEM

HOW THE REGION COMPARES

A DRAWING OF PARALLELS BETWEEN THIS REGION AND OTHER PEER MPOS IN THE COUNTRY

This chapter is not intended to be a compendium of all existing conditions information that may exist in the region. Rather, it is intended to analyze key pieces of data, particularly for transportation infrastructure, that represent the region in a snapshot of time.

How the Region Has Grown

POPULATION GROWTH

The Central Indiana region has seen significant growth in population since 2000. The eight counties that overlap with the IMPO gained 452,829 people between 2000 and 2022, a 23.5% increase. About 58% of that growth has happened since 2010.

Much of the region's population growth has happened in its outer counties. While Marion County made up 58.4% of the eight county area's population in 2000, it only made up 50.4% in 2022.

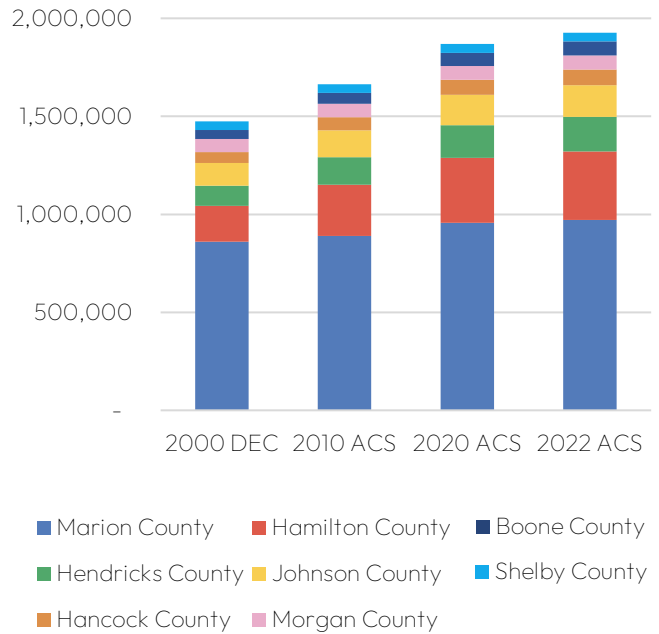
Despite having one of the slowest rates of growth amongst the eight IMPO counties, Marion County still added the second highest number of people during this time behind Hamilton County.

AGE

As seen in the table to the right, the population of the eight IMPO counties is fairly evenly spread across age cohorts of teens and working-age adults. The Central Indiana region is home to a significant amount of children under age 14, and Millennials (approximated by people ages 25-44) make up the largest share of the population at 28.1%. However, the region's fastest growing age cohorts from 2010 to 2022 were the four oldest. With this diversity of ages and growth in older populations, the region will need to consider investing in travel modes that support people of all ages and abilities.

There was a 49.7% increase in people age 65+ from 2010 to 2022. In contrast, there was only a 10.4% increase in people under 24.

POPULATION OVER TIME



AGE COHORTS

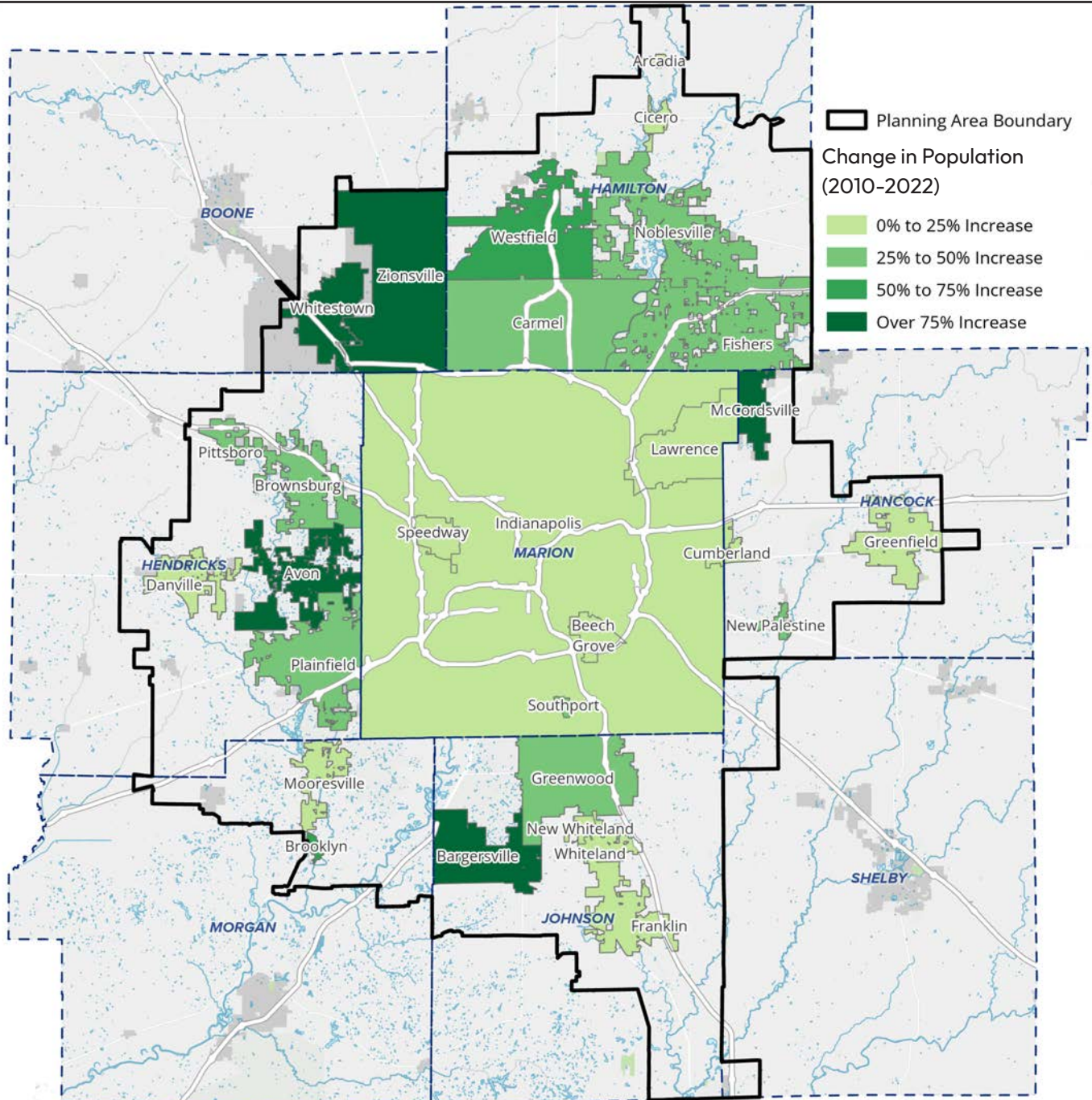
Cohort	2010	2022	% Change
0 - 14	366,588	394,063	7.5%
15 - 24	219,340	252,955	15.3%
25 - 34	239,676	278,204	16.1%
35 - 44	245,304	262,729	7.1%
45 - 54	245,336	240,346	-2.0%
55 - 64	170,391	234,092	37.4%
65 - 74	94,386	161,056	70.6%
75-84	59,574	72,437	21.6%
85+	22,781	31,075	36.4%

Sources: ACS 5 year Estimates (Counties), Decennial Census (Counties)

POPULATION GROWTH BY LOCATION

This map shows change in population between 2010 and 2022 across MPA jurisdictions. While all municipalities within the MPA have grown since 2010, they have grown at differing rates. While Marion County has seen much of the MPA's total growth, most Marion County municipalities at the region's center grew less than 15% during that time; other municipalities around the edge of the area like Greenfield, Franklin, Mooresville, Danville, and Arcadia also saw growth under 25%. Meanwhile, the ring of suburbs surrounding Marion County has seen substantial growth, with Zionsville, Whitestown, McCordsville, and Bargersville growing by more than 100%.

CHANGE IN POPULATION (2010-2022)



Sources: ACS 5 year Estimates (Block Groups)

DIVERSITY

Within the IMPO Metropolitan Planning Area (MPA), approximately 71.7% of residents identify as White, 17.0% identify as Black, 4.0% identify as Asian, and 2.8% identify as two or more races. Roughly 8% of the IMPO population identifies as Hispanic or Latino. Much of the area’s “minoritized”, or racially underrepresented population, is concentrated in certain geographic areas.

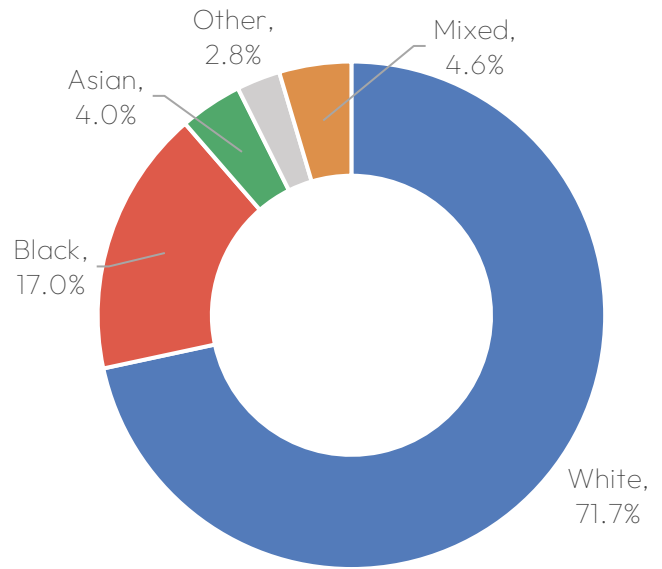
Approximately 88.8% of the IMPO planning area’s Black population is within Marion County. About 81.5% of the IMPO’s Asian population is within Hamilton, Marion, and Johnson Counties.

RACIAL DISTRIBUTION

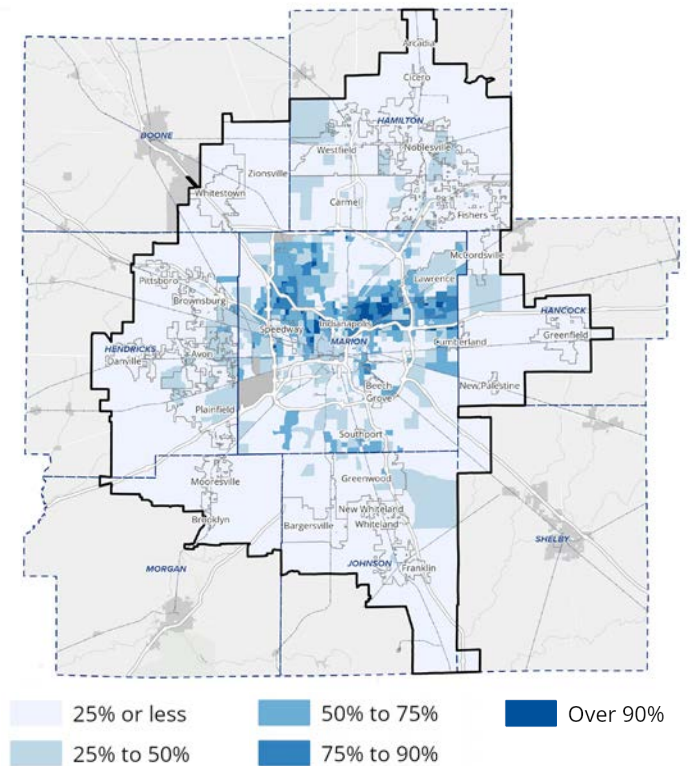
Northern and Central Marion County have the largest minoritized populations of the IMPO MPA. Generally larger minority populations overlap closely with more urbanized areas on and around the edges of Marion County, with the most predominant minority areas located roughly along I-65 and I-70.

The central areas with the highest minoritized population overlap closely with lower income areas; however, several of the low income communities in southern Marion County and the surrounding counties are predominately White.

2022 POPULATION DIVERSITY



PERCENT NON-WHITE POPULATION

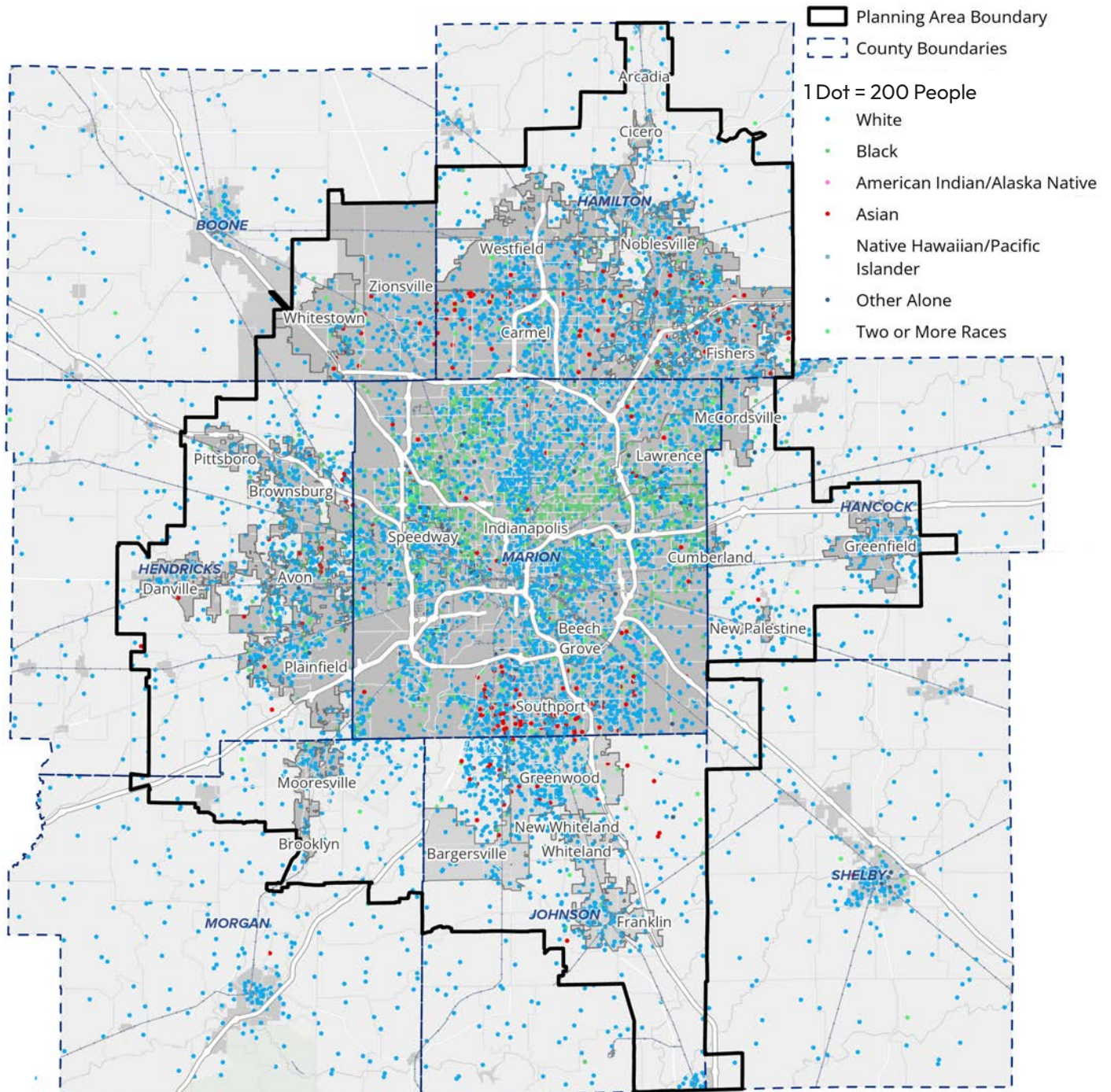


Sources: ACS 5 year Estimates (Block Groups)

POPULATION DENSITY BY RACE

The map below shows population density by race throughout the IMPO MPA, where one dot is equal to 200 people. The region's population density is generally higher along radials going north, south, and west from the center of the region, with Marion County, southern Hamilton County, eastern Hendricks County, and northern Johnson County seeing the highest density. The region's Black population is largely concentrated in the northeast and northwest of Marion County, while the Asian population is highest in southern Marion County and north of the Marion County border.

POPULATION DENSITY BY RACE



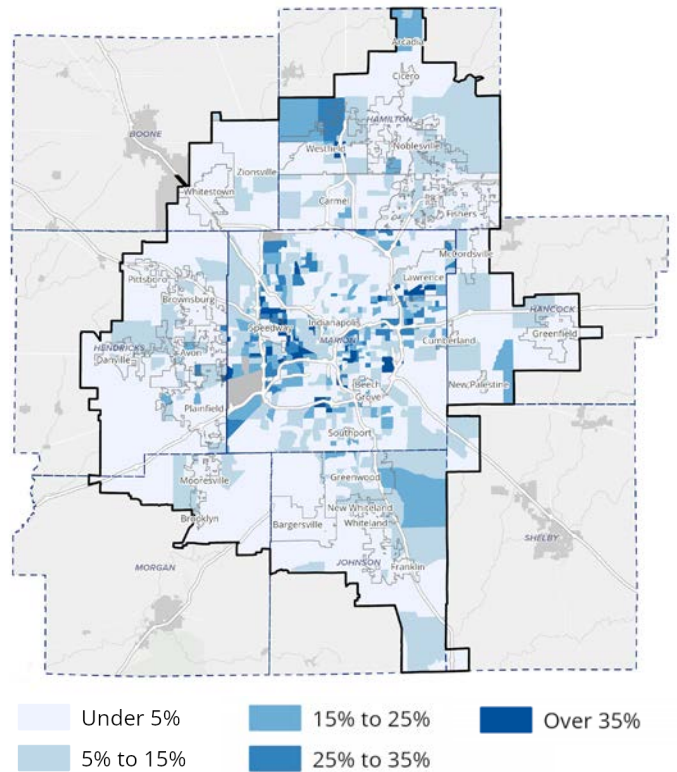
Sources: ACS 5 year Estimates (Block Groups)

HISPANIC/LATINO DISTRIBUTION

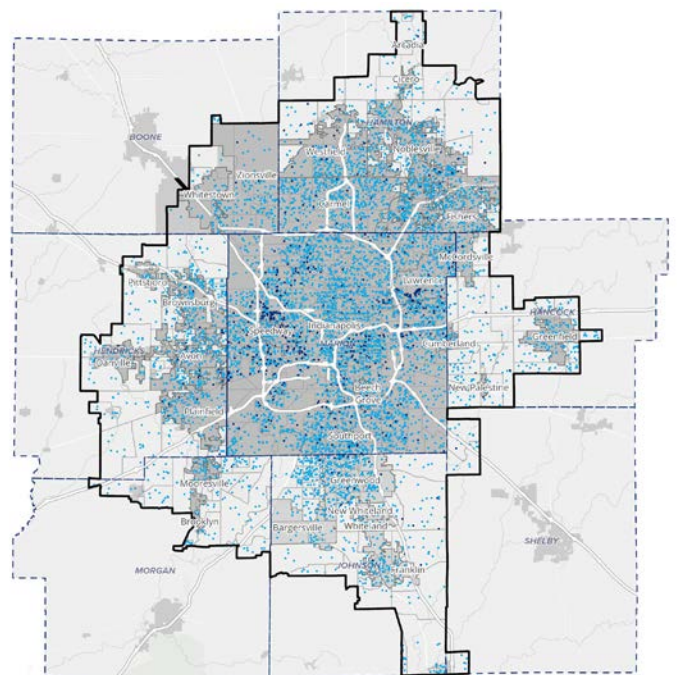
Central Marion County has much of the MPA's Hispanic and Latino populations. Similar to other minority populations, the Hispanic/Latino population overlaps heavily with more urbanized areas on and around the edges of Marion County, including the areas surrounding Speedway and southern Lawrence. Hendricks County and parts of outer Hamilton County also have areas of high Hispanic/Latino population.

The central areas with the highest Hispanic/Latino population overlap closely with the highest minoritized populations.

PERCENT HISPANIC/LATINO POPULATION



POPULATION DENSITY BY ETHNICITY



1 Dot = 200 People

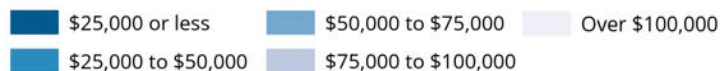
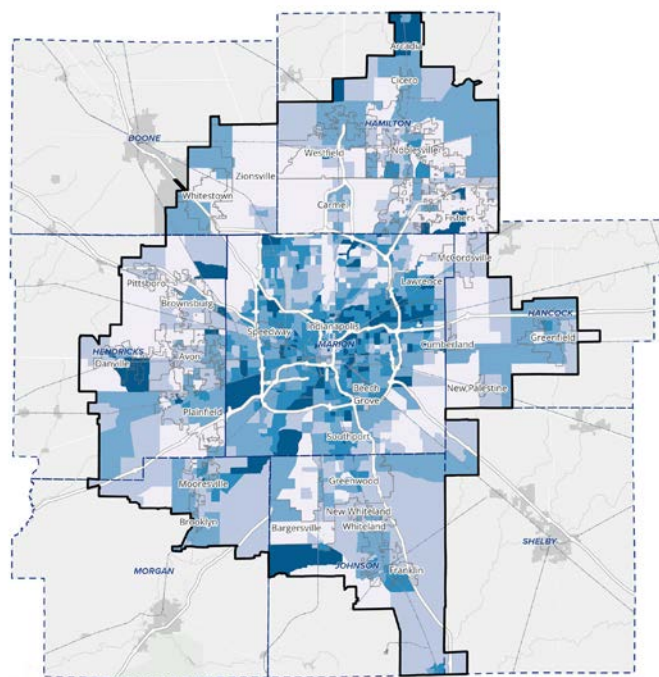
- Hispanic/Latino
- Not Hispanic/Latino

Sources: ACS 5 year Estimates (Block Groups)

INCOME

While Indianapolis and other municipalities in Marion County are home to most of the IMPO MPA's lower income block groups, several of the surrounding Central Indiana municipalities also have areas with fairly low median household incomes. Danville, Fishers, Fairland, and Arcadia all have populations with median incomes of \$25,000 or less in or near them, and other municipalities such as Franklin and Mooresville include populations with median incomes of \$25,000 to \$50,000; however, several of the lowest income block groups are often sparsely populated areas, which may skew the data since income information for the small population size will be shown as a large geographic footprint on the map.

MEDIAN HOUSEHOLD INCOME

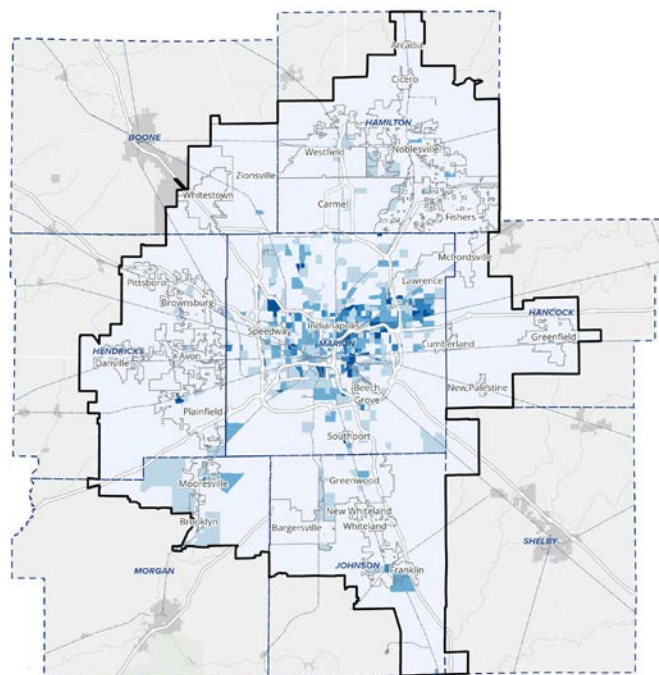


LOW WAGE HOUSEHOLDS

The map to the right shows areas where workers in Central Indiana live who make \$1,250 or less per month. These households of workers are less likely to be able to afford a motor vehicle, which highlights the need to improve access to a variety of quality transportation options for these residents and workers.

The highest concentration of low wage households are in the same location of Marion County where much of the area's minoritized population lives; however, the surrounding counties also see some concentrated areas of low-wage workers, mostly along roadway corridors radiating from central Indianapolis.

INCOME UNDER \$1,250 PER MONTH



Sources: ACS 5 year Estimates (Block Groups)

Equity Mapping

A key concern of the IMPO is how the transportation network affects the region's most historically marginalized communities. The equity planning task of the CIRCLE 2050 MTP involves revising the MPO's current approach to identifying social equity emphasis areas in the region. The updated equity prioritization framework combines an assessment of transportation disadvantage and system investment need.

TRANSPORTATION DISADVANTAGE

"Transportation disadvantage" refers to a disproportionate burden from pollution, unemployment, lack of economic opportunity, poor health, and inadequate access to jobs and services.

Transportation disadvantage is determined by evaluating transportation insecurity, climate and disaster risk from extreme weather, environmental burdens like pollution and proximity to polluting land uses, health vulnerability like rates of asthma and cancer, and social vulnerability (demographic factors like poverty and education level).

SYSTEM INVESTMENT NEED

"System investment need" refers to areas where the current transportation system poses safety issues for people walking, biking, and rolling; where the infrastructure has high environmental resilience risk exposure; and where residents have inadequate transportation access.

This includes looking at transportation demand indicators like density and short trip origin density, safety risk factors like bicycle-and-pedestrian-involved crashes and extreme weather threats, and inadequacy of non-auto travel options like active transportation and transit.

UPDATED EQUITY EMPHASIS AREAS

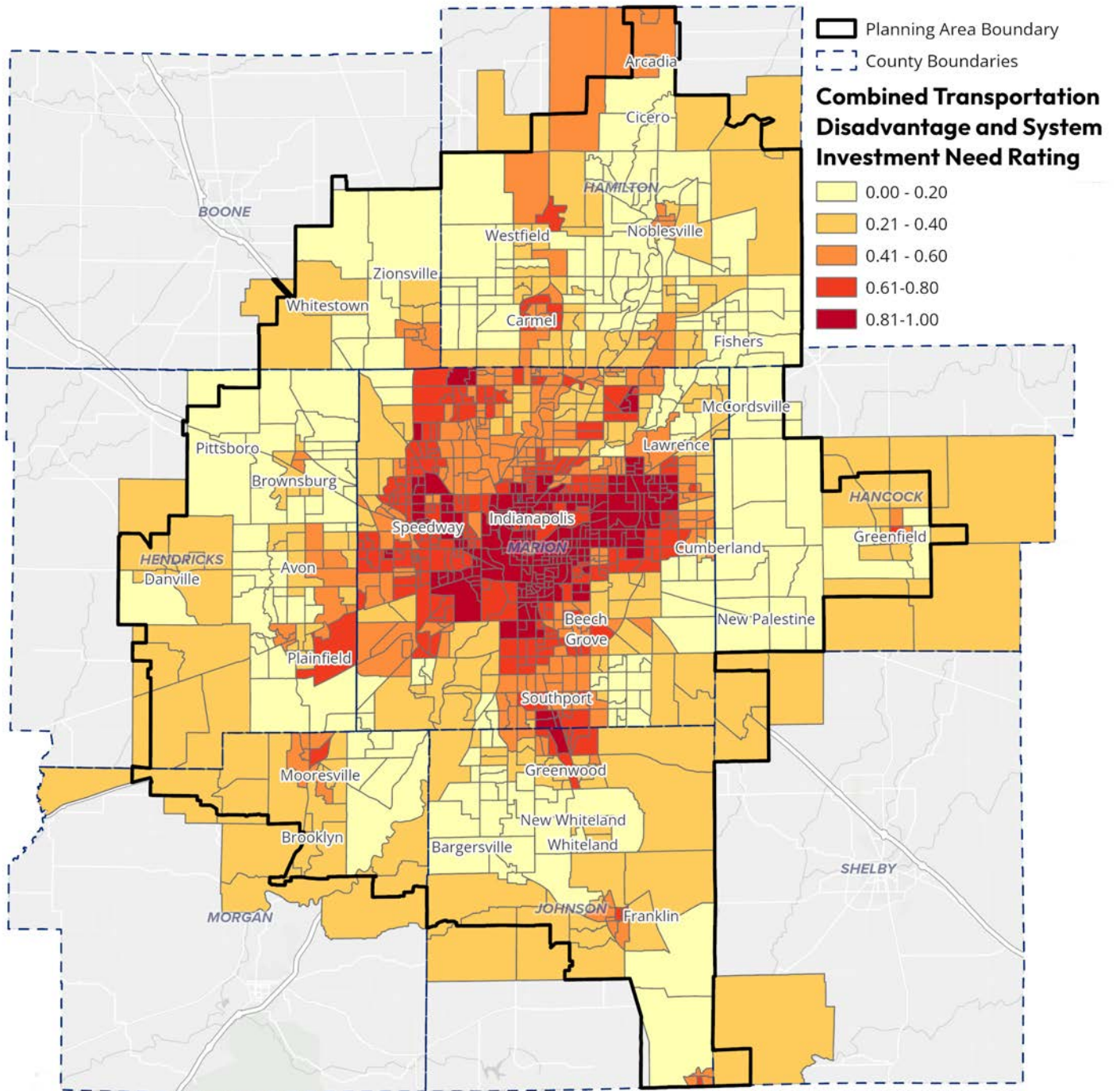
The resulting combined needs rating identifies areas where the IMPO can focus planning and outreach to develop projects that deliver benefits and mitigate harms to the most in-need areas of the region.

The map on the following page shows the updated equity emphasis area map using the methodology described above. Each census block group in the IMPO region received a needs rating for both Transportation Disadvantage and System Improvement need, which was then combined into a single combined needs rating. Higher ratings represent a greater need for transportation investments based on both social/demographic disadvantage and the existing deficiencies of the built environment and transportation systems. These combined needs ratings are a useful starting point for determining where the region should prioritize transportation projects, but should be considered alongside the individual ratings for Transportation Disadvantage and System Improvement Need.

As shown in the map, there is generally a concentration of high need in Marion County within and outside downtown Indianapolis, particularly directly east and west of downtown, along US 31 at the Marion/Johnson County line, and in Lawrence. There are also medium-to high-need areas around the rural/exurban periphery of the IMPO area.

More mapping and a more detailed explanation of the methodology used to generate the needs rating are available in Appendix E.

COMBINED TRANSPORTATION DISADVANTAGE SYSTEM INVESTMENT NEED RATING



How the Region Moves

TRAVEL PATTERNS AND MODE SHARE

TODAY

The Central Indiana region today is heavily car-dependent. Approximately 78.5% of workers in the IMPO region drive alone to work. Only 21.5% travel by some other mode (walking, biking, transit) or telework.

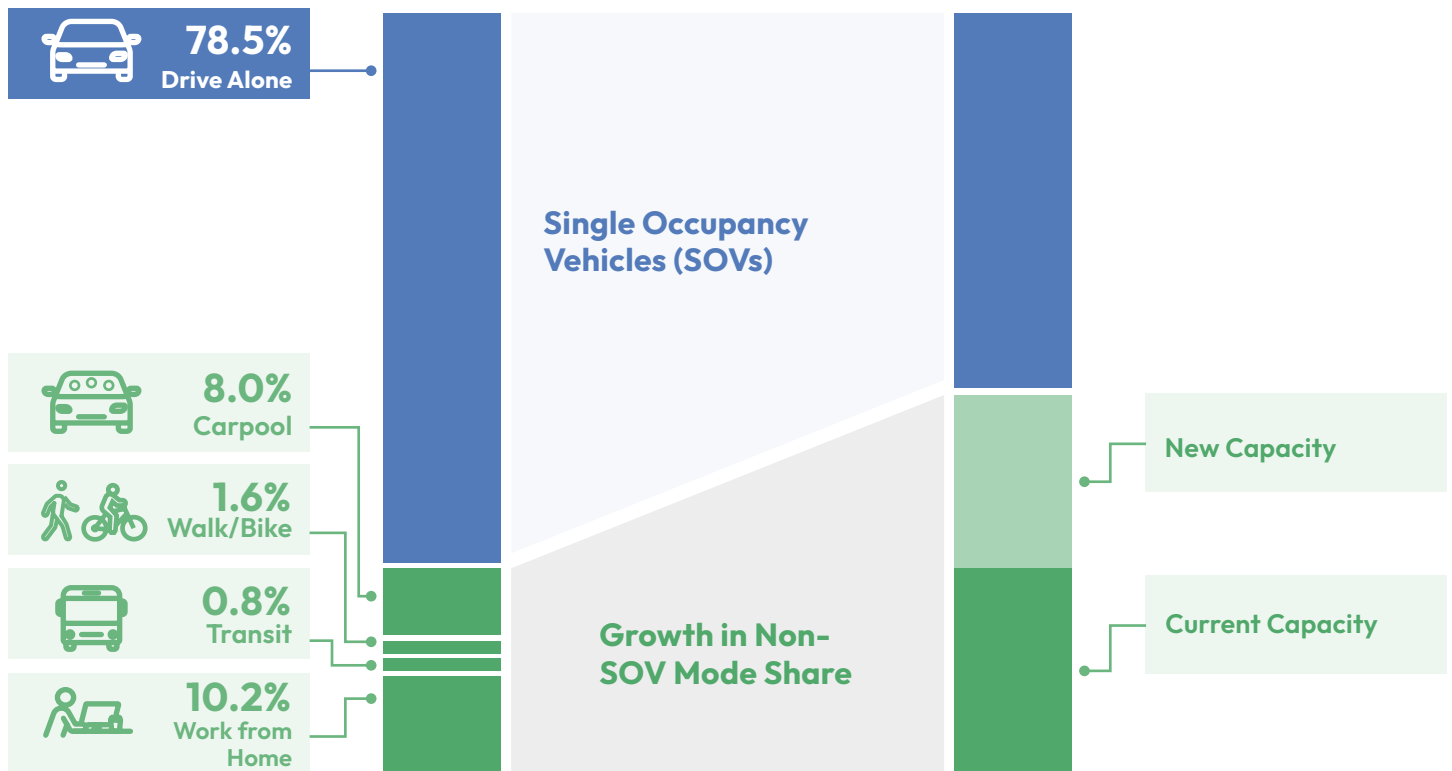
Post-pandemic, almost as many people telework (10.2%) as take transit, walk, bike, or carpool combined (10.4%).

This reliance on cars is closely related to several mobility challenges for the region, including the burden of high transportation costs for households, excessive roadway maintenance, congested roads, and safety concerns for people walking and biking.

FUTURE

Pursuing a more balanced mode split is a critical part of enhancing transportation options for all users and plays a key role in achieving the region's mobility goals, helping to:

- Manage rapid growth,
- Alleviate congestion,
- Support safe travel for all users and all modes,
- Provide affordable mobility,
- Improve access to opportunity, and
- Preserve the environment.

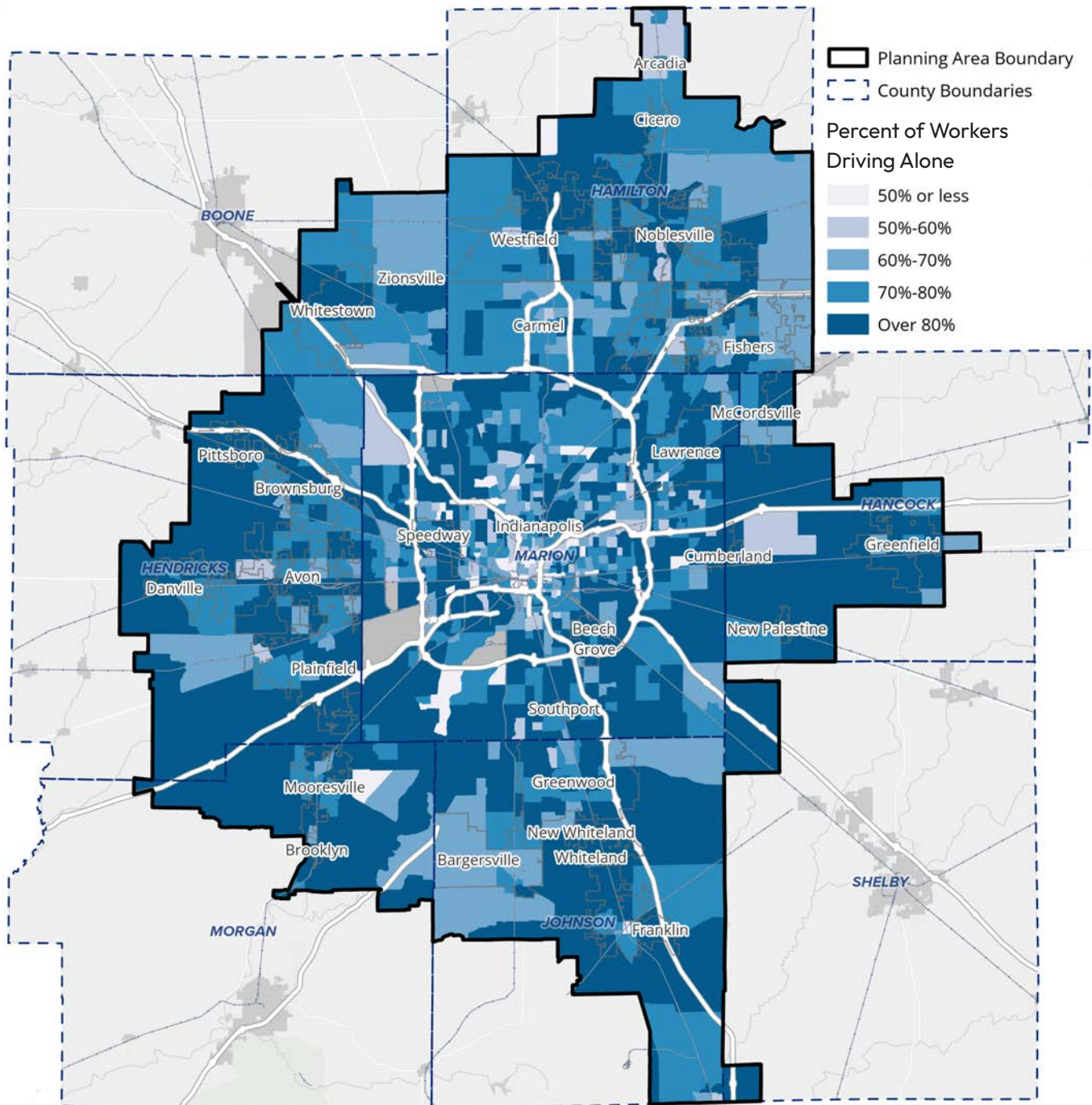


Sources: ACS 5 year Estimates (Block Group)

SINGLE OCCUPANCY VEHICLE (SOV) DISTRIBUTION

Generally, the farther someone lives from downtown Indianapolis, the more likely they are to drive alone to work. This is especially true on the southern side of the IMPO along I-65, I-70, and I-74. The immediate area surrounding downtown Indianapolis is representative of people who are least likely to use SOV travel for their daily commute. Many of these areas also correlate to areas where high percentages of no vehicle access households are seen.

PERCENT OF WORKERS DRIVING ALONE



Sources: ACS 5 year Estimates (Block Groups)

TRANSPORTATION AFFORDABILITY

VEHICLE ACCESS

Roughly 40,000 of households in the MPA do not have access to a car. In a region like Central Indiana that has been designed and developed for vehicular travel, it is very difficult to travel throughout the region without one. This is especially burdensome for those within vulnerable communities who are less likely to be able to afford a vehicle.

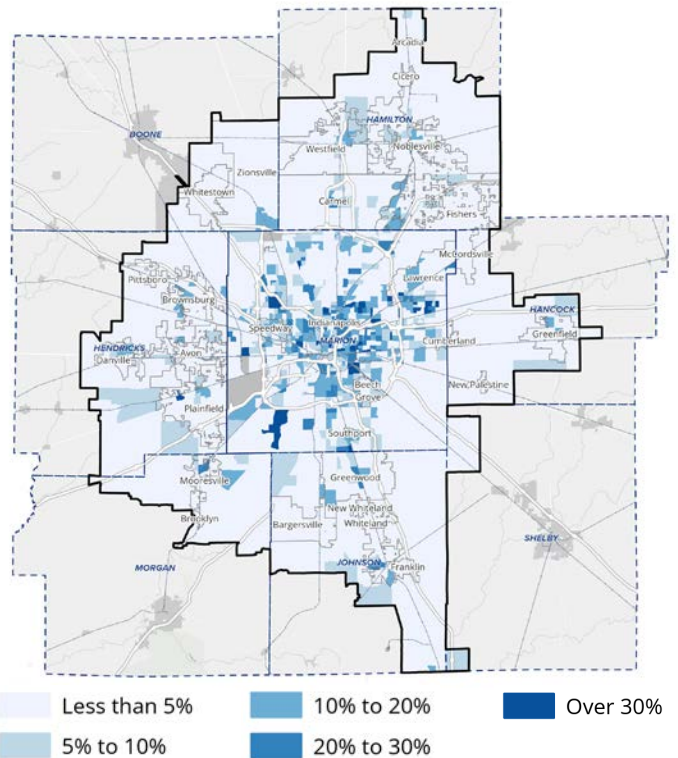
Almost 40,000 households in the MPA do not have access to a vehicle, and the vast majority of these households are within the I-465 beltway near downtown and on the eastside.

HOUSING COST-BURDENED

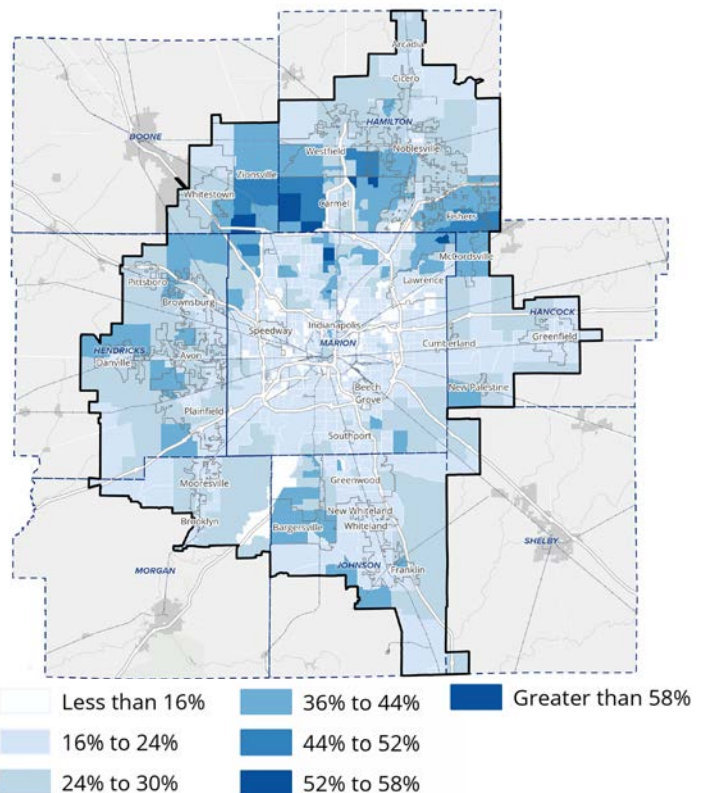
This map displays housing cost burden by block group in the MPA. The United States Department of Housing and Urban Development (HUD) defines cost-burdened families as those who spend 30% or more of their median income on housing expenses. The majority of cost-burdened households in Indianapolis are located outside of the I-465 beltway in the northern towns. Areas of the highest burden include Zionsville, Fishers, Carmel, Noblesville, and Whitestown. Inside the beltway, the Nora-Far Northside neighborhood is the predominant hot spot for housing cost-burdens.

Approximately 17.6% of households in the MPA spend more than 30% of their median income on housing expenses, and the vast majority of these households are outside of the I-465 beltway.

HOUSEHOLDS WITHOUT VEHICLE ACCESS



HOUSING COST AS A PERCENT OF INCOME

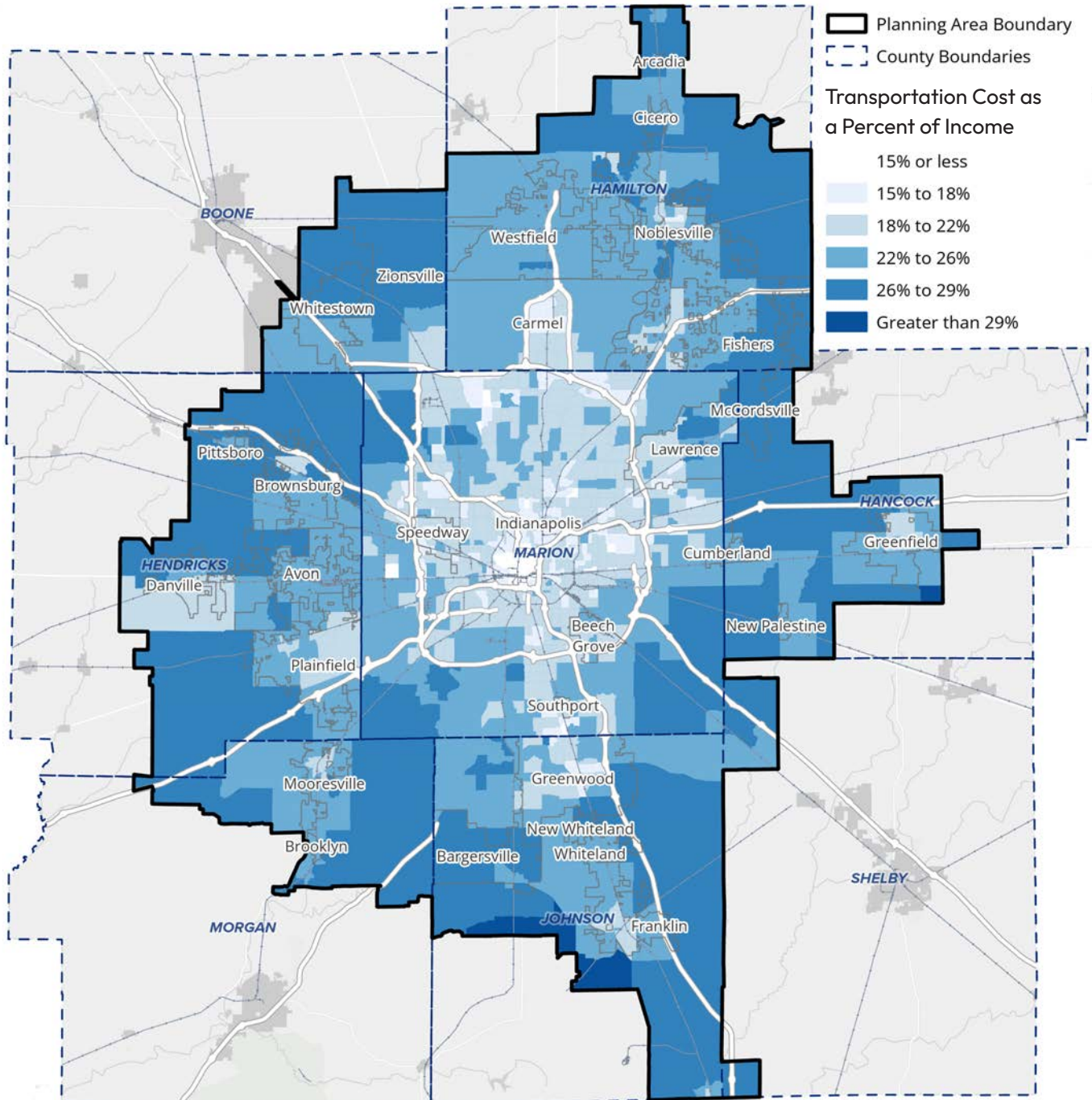


Sources: ACS 5 Year Estimates (Block Groups); H+T Index (MPO, Block Groups)

TRANSPORTATION COST-BURDENED

The map below displays transportation cost burden by block group in the IMPO MPA. The Center for Neighborhood Technology (CNT) defines transportation cost-burdened families as those who spend 15% or more of their median income on transportation expenses. In general, the percentage of transportation cost-burdened families increases the farther you get from downtown and from radial highways. Areas of the highest burden include parts of Johnson County south of Franklin and areas in Shelby and Hancock Counties.

TRANSPORTATION COST AS A PERCENT OF INCOME



Sources: H+T Index (MPO, Block Groups)

TRANSIT FACILITIES AND ACCESS

CURRENT BUS SERVICE

INDYGO

IndyGo is the main transit agency serving Indianapolis and Marion County. The system currently operates 30 routes, most of which are concentrated in the I-465 loop.

While most routes peak at a frequency of every 30-60 minutes, IndyGo recently implemented the Red Line, a Bus Rapid Transit (BRT) route with dedicated lanes and limited stations, to provide 15-minute service north-south through the center of the city. In addition, routes 8 and 39 currently provide 15-minute peak frequency along parts of 38th Street and Washington Street. Route 39 is currently being upgraded to become the Purple Line and Route 8 is planned to be upgraded to become the Blue Line.

TRANSIT ACCESS

Currently, very little of the MPA is accessible by transit. While many of the denser parts of Indianapolis have access to transit, regional fixed route bus connections in outer areas are currently very limited. Outside of IndyGo, only Whitestown, eastern Plainfield, and the US 31 corridor in Johnson County have service. The CIRTAs Workforce Connectors in Whitestown and Plainfield also primarily serve suburban employment centers and do not connect well to area town centers.

Using the Environmental Protection Agency's (EPA) Access to Jobs and Workers via Transit tool, the only block group that can access over 20% of the population by transit within 45 minutes is in downtown Indianapolis. However, the areas that can access 10%-20% do overlap well with areas with low incomes and less vehicle access.

The EPA's transit mapping tool did not appear to include the CIRTAs and Access Johnson County services in its analysis; however, as transit service in the outer counties is very limited in coverage and frequency, this likely did not have a significant impact on the data.

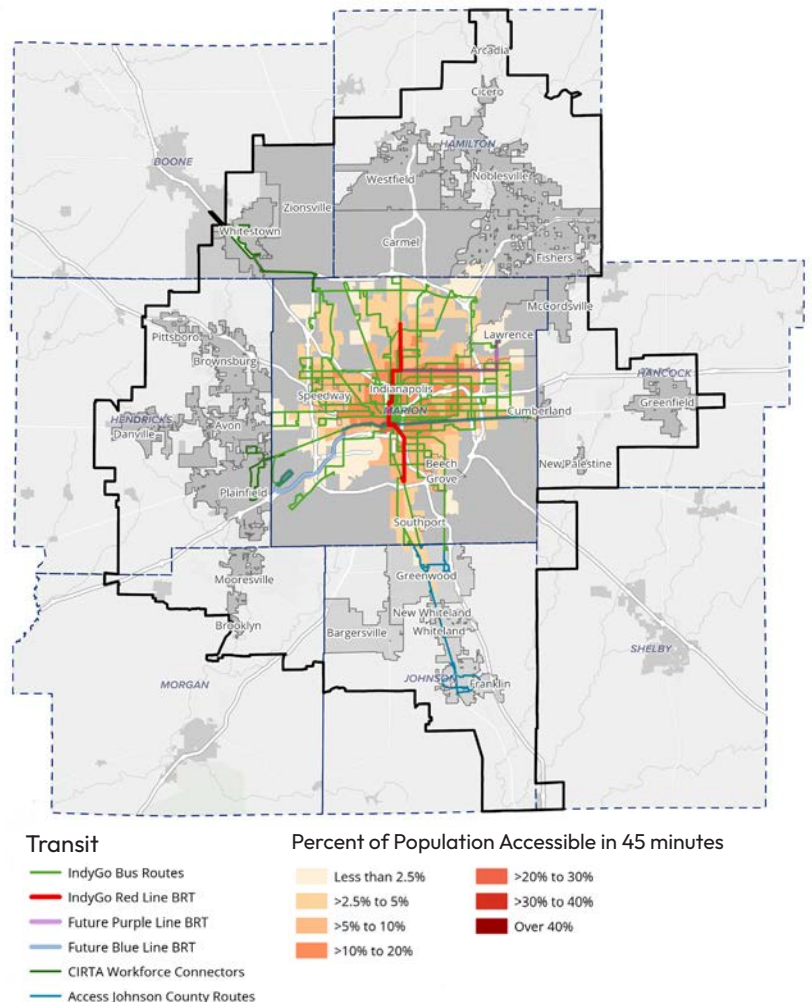
Other AGENCIES

Additional fixed route service in the planning area includes:

- Central Indiana Regional Transportation Authority (CIRTA) Workforce Connector routes in Whitestown and Plainfield, serving suburban employment centers
- Access Johnson County routes in Greenwood, Whiteland, New Whiteland, and Franklin

CIRTA Workforce Connector and Access Johnson County routes connect to IndyGo routes near county lines.

Several other agencies provide demand response service to the general public or for specific groups like older adults or people with disabilities.



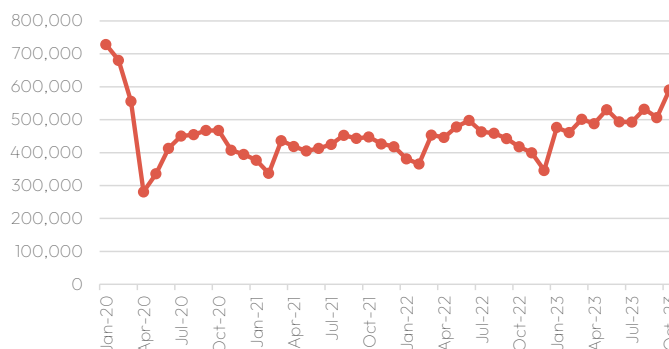
Sources: EPA Smart Location Mapping, IndyGo, GTFS Data

RIDERSHIP

As in other regions, Indianapolis area transit systems saw a large drop in ridership during the Covid-19 Pandemic. However, ridership is rebounding, with trends in recent months suggesting ridership recovery is accelerating.

IndyGo Ridership in October 2023 had recovered to 87% of pre-pandemic ridership (February 2020).

INDYGO RIDERSHIP



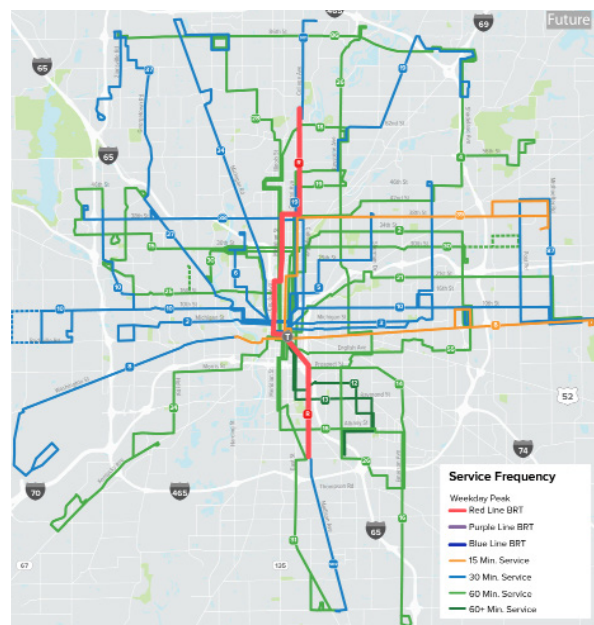
FUTURE TRANSIT PLANNING

INDYGO

Major transit improvements planned for IndyGo include:

- Implementing a system redesign moving towards a more grid-based network with higher frequency across the network and new crosstown routes
- Completing the Bus Rapid Transit system, including the Purple Line to Lawrence, the east-west Blue Line, and Red Line platform improvements
- Extending the Red Line north to Hamilton County and south to Greenwood

Purple Line construction and Red Line improvements are underway, with the Blue Line in late design. The system redesign (shown in maps below) will be implemented in phases, but is expected to be complete by 2027.



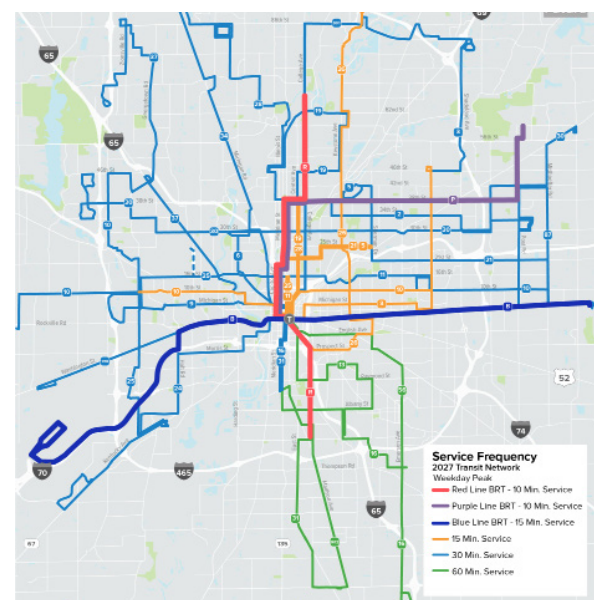
Today's IndyGo transit network (2023).

OTHER AGENCY PLANS

Elsewhere in the IMPO planning area, transit plans have proposed new service expanding on existing routes.

- Guilford Township's 2020 transit plan proposed three new routes building upon the existing CIRTAs Plainfield Connector to better serve Plainfield
- Northern Johnson County's 2021 transit plan included the Greenwood Red Line BRT extension and proposed new routes (including a CIRTAs Workforce Connector), and an Access Johnson County network redesign

The Hamilton County and Greenwood Red Line extensions are planned to occur within the timeframe of this MTP. Other plans for additional routes are currently unfunded and have no expected timeline.



IndyGo's planned 2027 transit network redesign.

ACCESS TO JOBS

JOB DENSITY

The data from the Census Bureau shown on the map to the right was used to evaluate the areas within Central Indiana that have the highest number of jobs. The map shows clusters of high employment areas inside the I-465 beltway with job density increasing closer to downtown. Clusters can also be seen in towns along the interstates radiating outward from Indianapolis, including Franklin, Greenfield, Mooresville, and Plainfield. Noblesville between I-69 and US-31 is another hot spot for jobs.

Downtown

6.2 jobs/acre

Beech Grove

2.0 jobs/acre

Franklin

1.1 jobs/acre

Greenfield

1.4 jobs/acre

Noblesville

1.6 jobs/acre

Plainfield

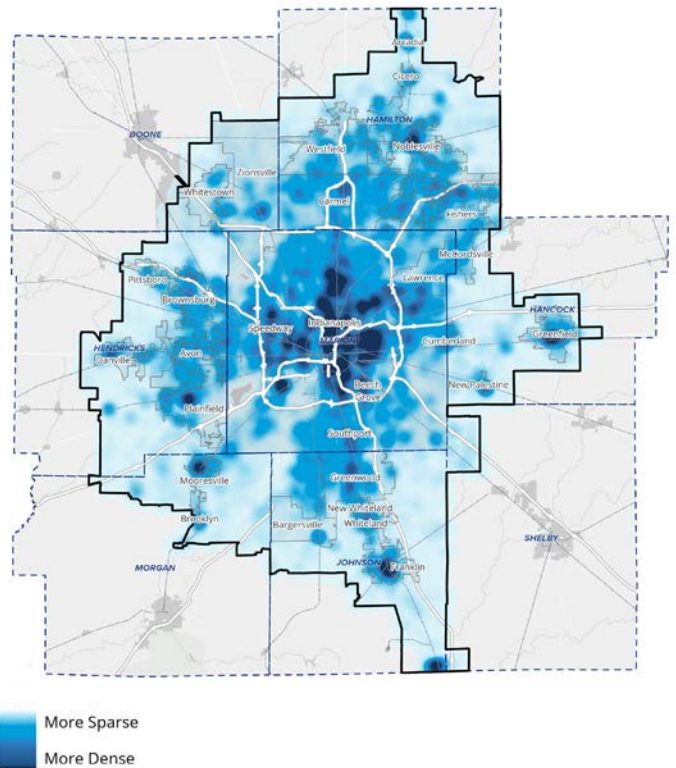
0.9 jobs/acre

TOP INDUSTRIES

In total, there were 897,308 jobs in the MPA in 2020. Health Care and Social Assistance and Retail Trade were the two largest industries, with almost 146,000 and over 90,000 employees, respectively; however, Transportation and Warehousing, Construction, and Professional, Scientific, and Technical Services have been the fastest growing industries between 2010 and 2020, growing 66.8%, 45.7%, and 43.3%, respectively, whereas Healthcare and Social Assistance increased only 33.3% over the same time span.

Combined, Health Care and Social Assistance, Administrative and Waste Services, Professional, Scientific, and Technical Services, and Finance and Insurance account for 36.6% of the MPA's workforce. As these and other office-based industries continue to grow, focus will need to be placed on efficiently moving commuters in and out of employment clusters.

JOB DENSITY (LEHD 2020)



MPA TOP INDUSTRIES BY NUMBER OF JOBS

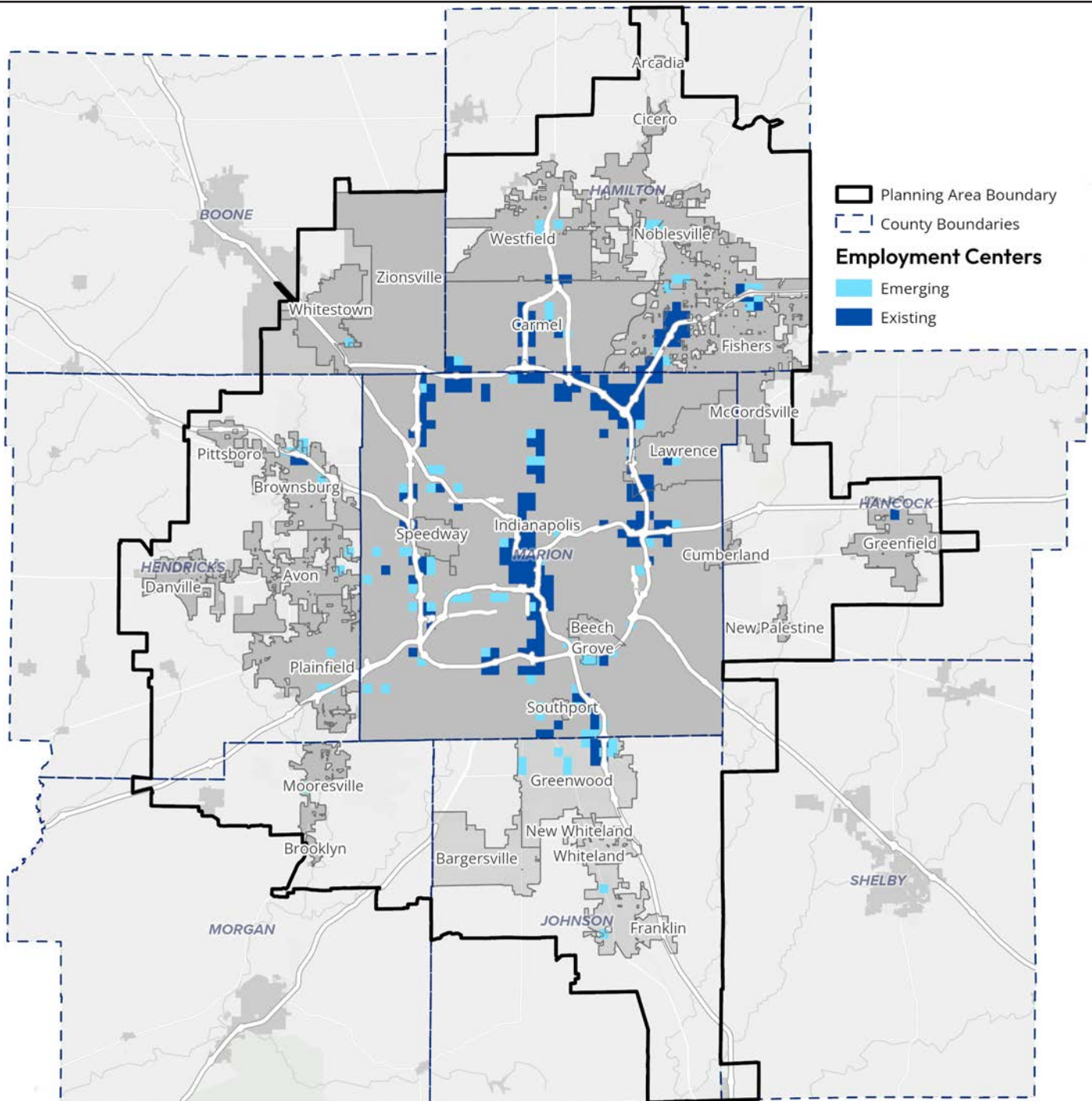
Industry	Count	Share	Change 2010-2020
Health Care and Social Assistance	145,960	16.3%	33.3%
Retail Trade	90,223	10.1%	11.2%
Manufacturing	78,293	8.7%	-0.5%
Administration & Support, Waste Management and Remediation	71,363	8.0%	34.1%
Transportation and Warehousing	67,205	7.5%	66.8%
Professional, Scientific, and Technical Services	62,065	6.9%	43.3%
Accommodation and Food Services	61,712	6.9%	5.8%
Educational Services	59,408	6.6%	0.2%
Finance and Insurance	48,038	5.4%	17.3%
Construction	47,755	5.3%	45.7%
Wholesale Trade	46,669	5.2%	14.9%
Public Administration	35,454	4.0%	-4.7%
All Other Industries	83,163	9.3%	

Sources: LEHD On The Map (MPA)

EMPLOYMENT CENTERS

As noted in Chapter 2, the IMPO recently led an update of the Regional Activity Centers, originally developed in 2020. Regional Activity Centers are major destinations where clusters of employment, residents, and/or visitors are located. While some areas may be considered an Existing Activity Center based on a combination of metrics and indicators, there are also areas that show signs of becoming an Emerging Activity Center based on metrics, available land, and growth in population or employment. These existing and emerging employment centers vary in type, ranging from downtowns and mixed-use centers to manufacturing/logistics centers. Additional employment centers were identified in Madison County, but are not pictured due to being outside of the IMPO eight-county area.

EMPLOYMENT CENTERS

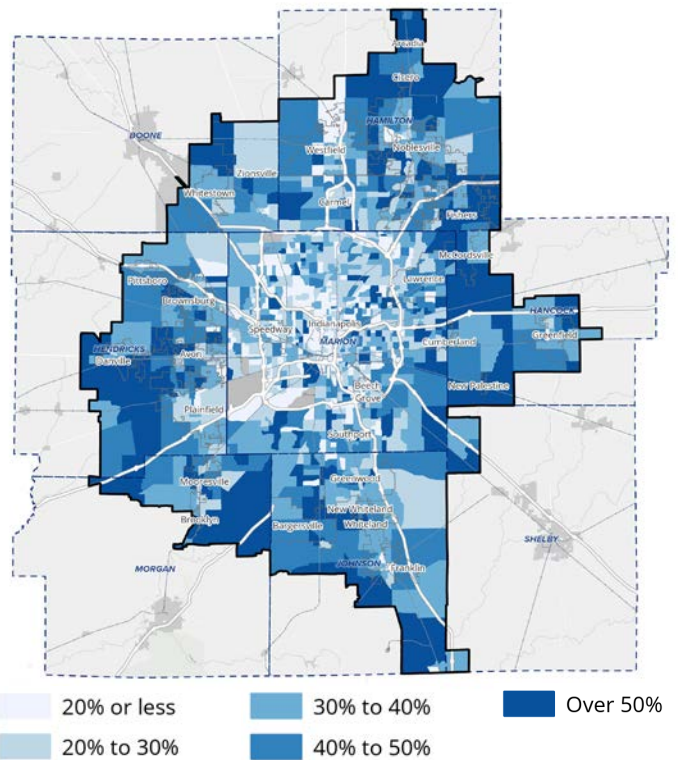


CAR TRAVEL

COMMUTING

The map to the right shows the percentage of commuters who live within the MPA and travel 30 minutes or more to work. In 2021, the mean travel time to work was 25.3 minutes within the broader Indianapolis Metropolitan Statistical Area (MSA). Commutes times are generally shorter in places that have access to transit and walking/ biking options to get to downtown - like areas along the Red Line. This includes the Red Line corridor along College Avenue as well as Broad Ripple, University Heights, and other downtown areas that have better biking and walking options.

COMMUTE TIMES OVER 30 MINUTES

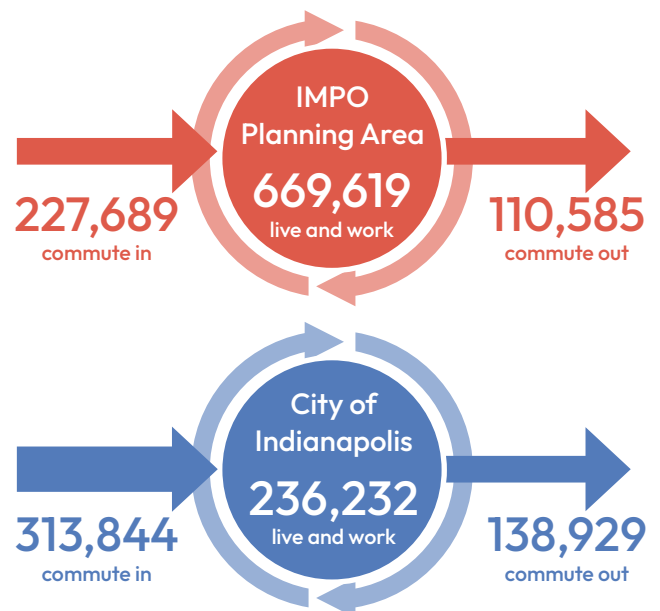


25.3 minutes Average Daily Commute Time (MSA)	39.9% Commute More than 30 Minutes Daily (ACS)
23% Average Household Income Spent on Transportation (H+T Index)	1.7% Commute More than 90 Minutes Daily (ACS)

INFLOW/OUTFLOW

The vast majority of employees and residents within the MPA both live and work within the MPA. Only about 14% of MPA residents commute out of the planning area to work, and only about 25% of MPA employees live outside the planning area.

However, the City of Indianapolis itself sees more employees commuting in (313,844) than living and working in the city (236,232). Many of these workers are likely from elsewhere in the MPA, as Indianapolis is the economic center of the region and where most MPA residents work (54.0%). Carmel (6.6%), Fishers (3.2%), Plainfield (3.0%), and Greenwood (2.8%) also are home to many of the MPA's jobs.



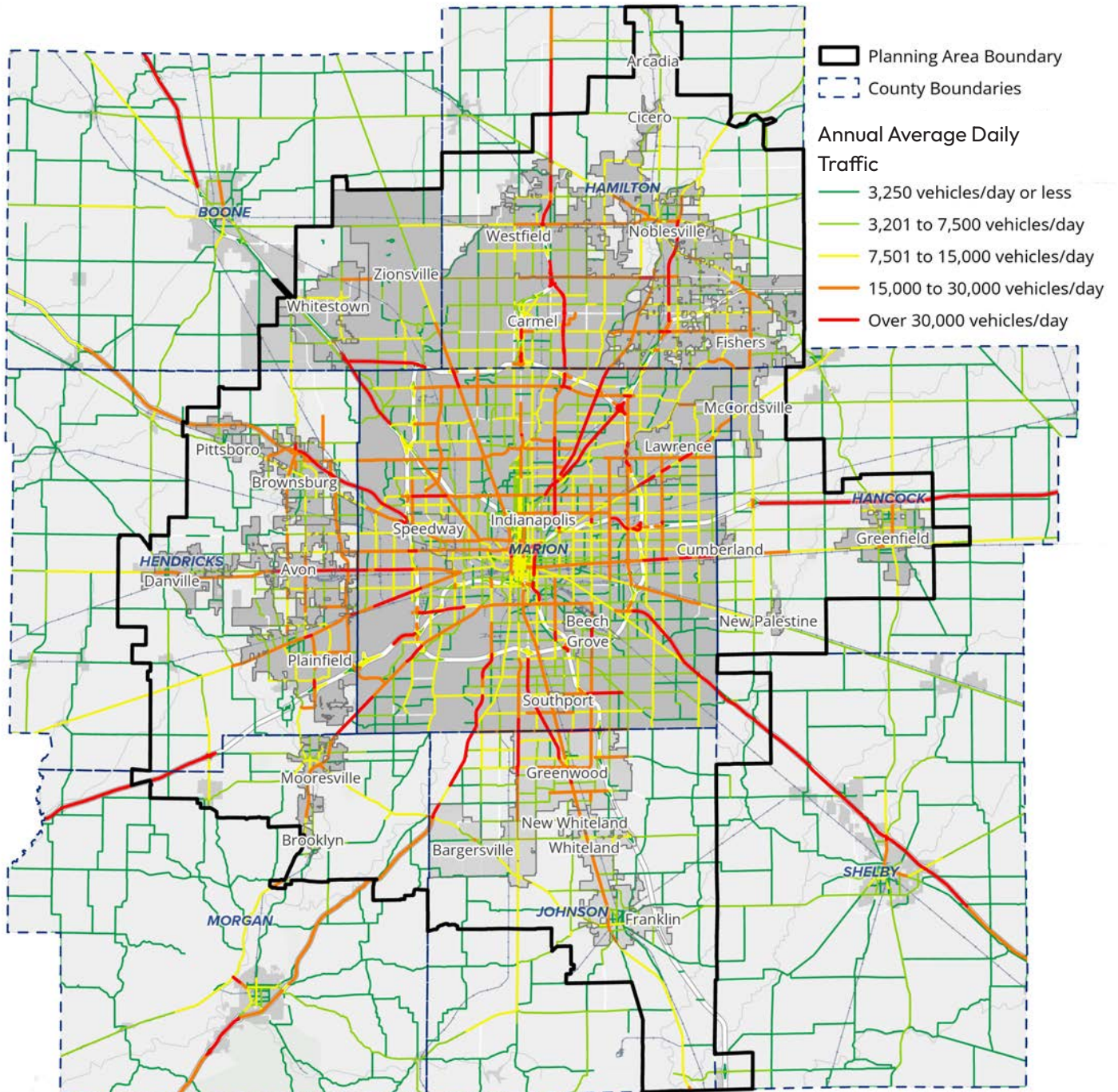
74.6% of MPA Employees Live and Work in the MPA	85.8% of MPA Residents Live and Work in the MPA	36.8% of MPA Employees Live in Indianapolis	54.0% of MPA Residents Work in Indianapolis
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Sources: ACS 5 Year Estimates (Block Group), H+T Index (MSA), LEHD On The Map (MPO)

TRAFFIC VOLUMES

Many of the highest volume roads in the MPA are the main arteries feeding into the I-465 beltway and downtown Indianapolis. Connections between neighboring municipalities (e.g., Plainfield and Brownsburg, Westfield and Noblesville) also see fairly high traffic volumes. Within Marion County, due to the radial and grid layout of the street network, roads carrying over 15,000 vehicles a day are spread somewhat evenly throughout; however, many of these high volume surface roads cut through communities in the city, which can pose safety challenges at the street level.

ANNUAL AVERAGE DAILY TRAFFIC



Sources: INDOT 2021 Traffic Count Data

WALKABILITY

CURRENT WALKING CONDITIONS

The Central Indiana region is not very walkable due to challenges like missing sidewalks, poor conditions of existing sidewalks, lack of amenities like lighting and benches, unsafe pedestrian crossings, and high traffic volumes.

The EPA created a National Walkability Index that looks at factors like sidewalks, land use, and street connectivity to provide a measure of how walkable a block group is. The most walkable parts of the MPA loosely follow a north-south corridor through central Indianapolis.

While parts of Carmel, Franklin, and other suburban municipalities have above average walkability, most areas outside of central Marion County have below average or least walkable index scores.

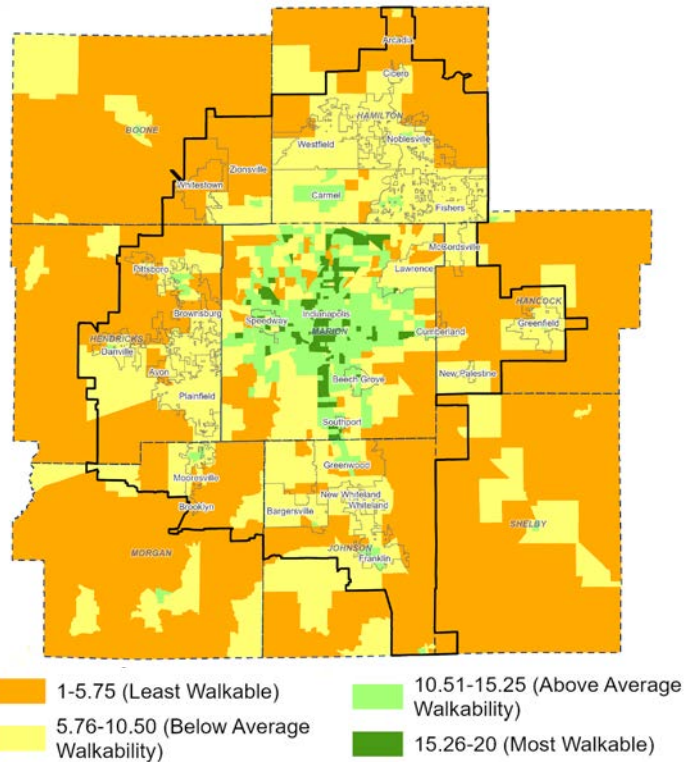
10.3 out of 20

Average Walkability Index Score

~10.2%

of 8-County Land Area with Above Average or Better Walkability

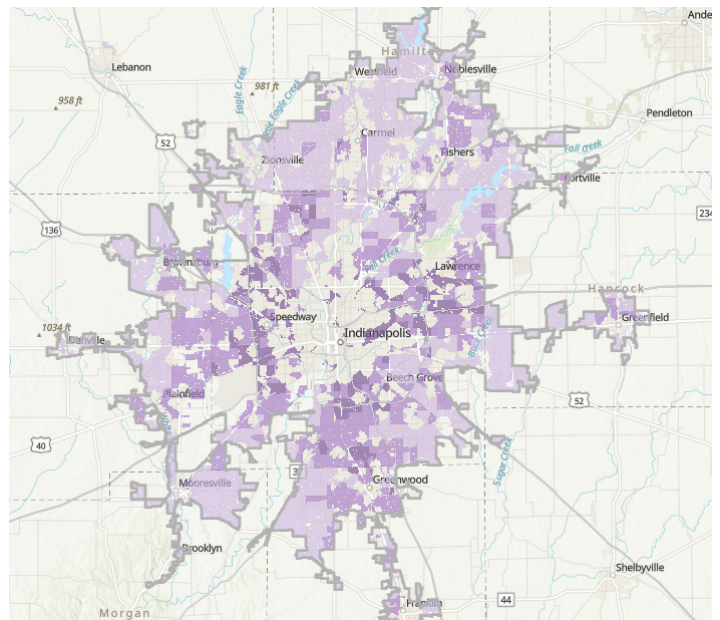
WALKABILITY INDEX



PARK ACCESS

The Trust for Public Land (TPL) publishes an annual “ParkScore” to showcase access to parks by measuring the percentage of residents that live within a 10-minute walk of a park. Currently, 31% of residents in the Indianapolis Urbanized Area (unadjusted) have that 10-minute walk access. The analysis considers several critical characteristics (income, race, age, population density, and more) to determine priority areas for new parks (see map to the right). Improving access to parks through mobility investment is imperative to improving public health and equity within the City.

PARK SCORE



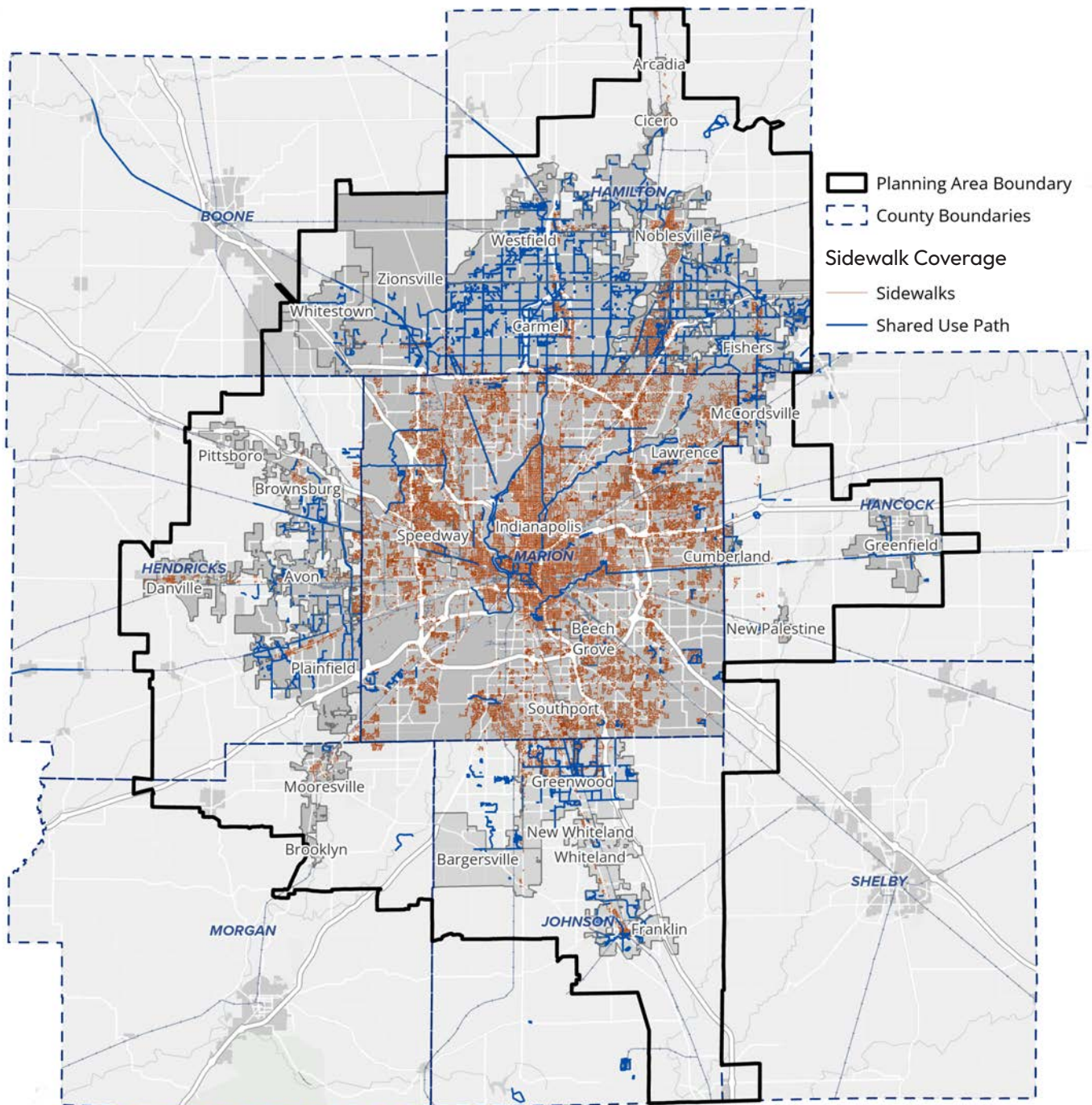
Darker purple areas indicate areas with higher priority for new parks and additional access.

Sources: EPA Walkability Index, Trust for Public Land ParkScores

SIDEWALK AND SHARED USE PATH AVAILABILITY

The developed parts of the planning area have good sidewalk and shared use path coverage; however, the connectivity of the network varies, and some large gaps remain. Areas in and around Marion County have fairly robust sidewalk coverage, but with several gaps in low-income and higher minoritized areas surrounding central Indianapolis. Outside of Marion County, most areas built shared use paths rather than sidewalks to provide a connected pedestrian and bike network along major corridors; however, the distance between pedestrian facilities in these areas is larger, which could make it harder to walk to or from some local destinations or residences.

SIDEWALK COVERAGE



Sources: IMPO

BIKING

CURRENT BIKE NETWORK

Central Indianapolis has several greenways and shared use paths, as well as protected bike lanes along major east-west and north-south corridors (Michigan Street, New York Street, Pennsylvania Street, Illinois Street). Despite this, the network is disconnected in areas, and the reach of these connections is limited. In much of the outer parts of Marion County, the only bike facilities are radial arterials or rivers with bike lanes or greenways along them, connecting Indianapolis to municipalities in surrounding counties.

While about 0.1% of the region's population does bike commute to work, the bike network in Marion County especially does not necessarily connect people well to jobs or other opportunities because of its disconnected nature. Reaching most destinations would require biking on-street.

Bike connectivity is significantly more robust in Hamilton, Hendricks, Boone, and Johnson Counties, since most of their major corridors are lined with shared use paths that can be used by both bikes and pedestrians.

Where bike facilities do not exist, smaller streets with low traffic volume and low travel speeds make up a low-stress road network that may be safer and less stressful for people biking.

8.6 MILES

of Existing Protected Bike Lanes

0.1%

Residents that Bike for Daily Commute

110+ MILES

of Existing Bike Lanes

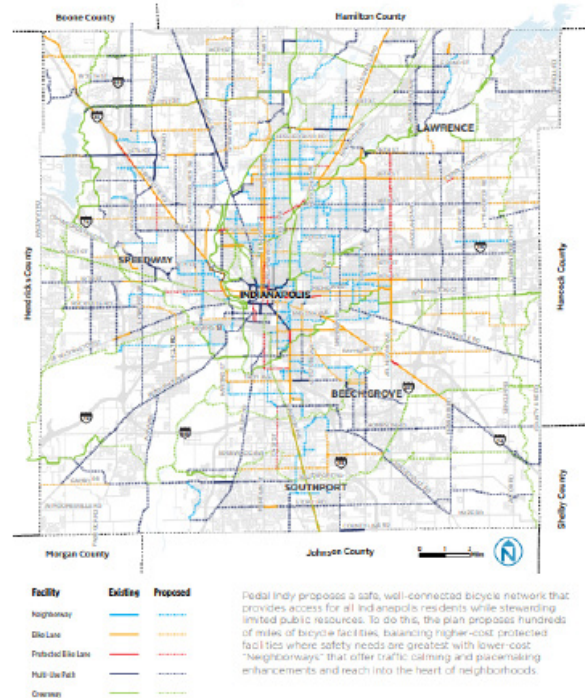
1,090+ MILES

of Existing Greenways, Trails, and Side Paths

GREENWAYS

The Central Indiana region is home to several greenways and trails. Within Marion County this includes the Fall Creek Trail, Central Canal Towpath, the Indianapolis Cultural Trail, White River Greenway, and Monon Trail. Surrounding municipalities including Noblesville, Fishers, and Plainfield also have their own fairly extensive trail networks.

The 2018 Indy Moves plan includes a focus on the Pedal Indy network, the Marion County portion of the regional greenway and bikeway network. Within Marion County the plan prioritizes protected facilities in areas with highest safety needs, including greenways radiating out of the city center and shared use paths along major arterials.



GREENWAY MAP

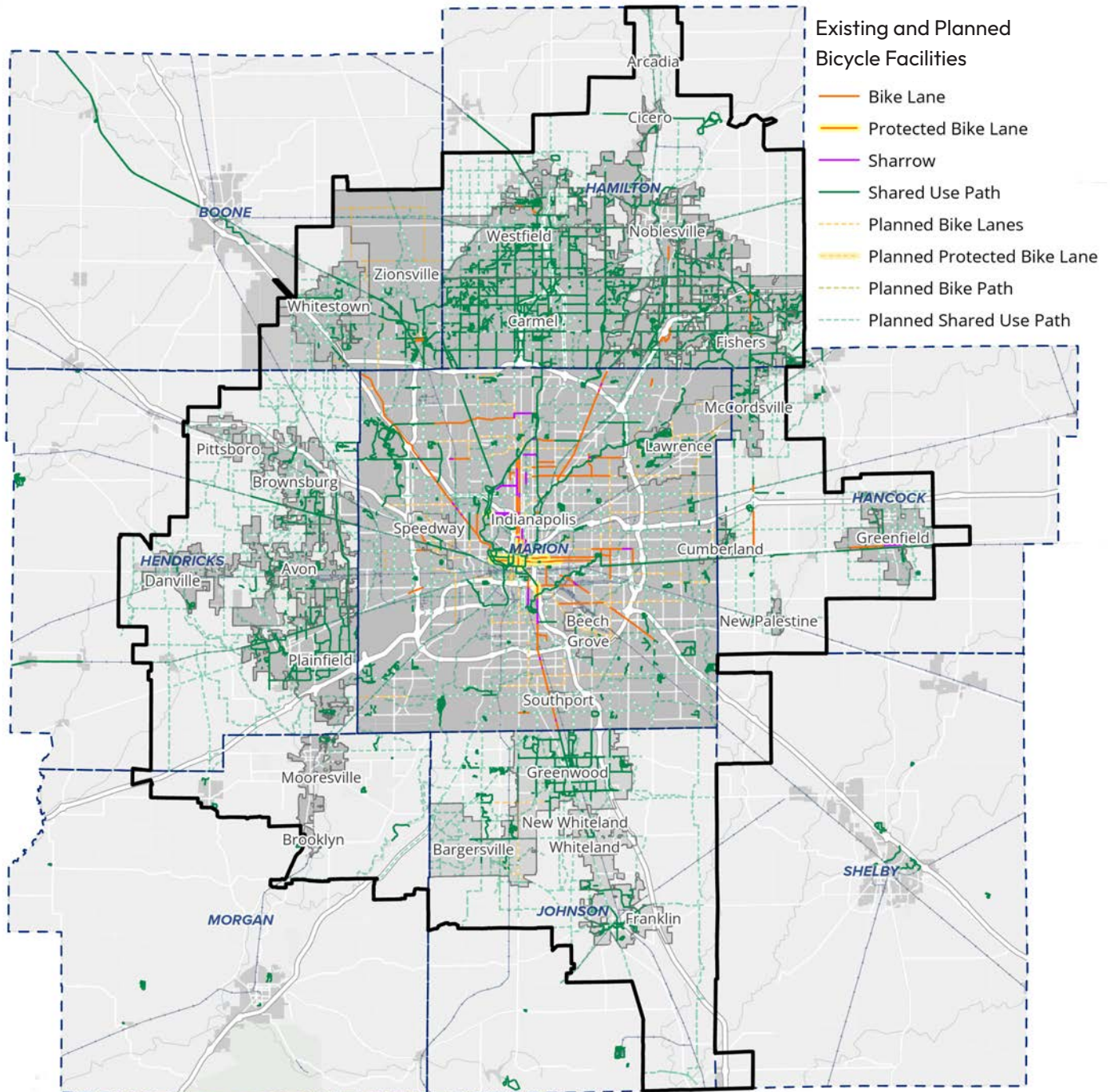
Several other municipal and regional plans have proposed greenway connections and shared use paths across the region, primarily in exurban areas in the region's outer counties. Many of these proposed connections are shown in the map on the next page.

The IMPO adopted the update to the Regional Active Transportation Plan in 2024. The ATP provides a framework for the MPO and its member jurisdictions to plan for and implement a connected network of regional trails, bikeways, and sidewalks.

BICYCLE FACILITIES

This map highlights existing and planned bicycle facilities, including all-ages-and-abilities (AAA) facilities (shared use paths, greenways, and protected bike lanes). Several outer counties have robust networks of shared use paths, and Downtown Indianapolis has several greenways, shared use paths, and protected bike lanes; however, much of outer Marion County lacks any AAA facilities, and several major existing bike lanes are unprotected. The buildout of the greenway network and continued use of shared use paths will help provide more facilities suitable for all ages and abilities.

EXISTING AND PLANNED BICYCLE FACILITIES



Sources: IMPO

HEALTH AND SAFETY

VISION ZERO

On August 17, 2022, the IMPO Transportation Policy Committee reaffirmed commitment to a Vision Zero Policy to guide safety transportation decision-making for the region. Vision Zero is the simple yet ambitious idea that there is no acceptable number of traffic deaths or serious injuries on our roadways. Now spread across many countries around the world, Vision Zero is a holistic strategy that acknowledges imperfect human behavior and puts safety first to eliminate all traffic fatalities and serious injuries.

The IMPO has developed a [Vision Zero Toolkit](#) to inform Central Indiana residents about Vision Zero and the data, strategies, and resources available to achieve it. Using these tools and strategies, the IMPO has set forth a target of reducing serious and fatal crashes by 35% by the year 2040 to make progress towards the ultimate Vision Zero goal.

SAFE STREETS AND ROADS FOR ALL (SS4A) ACTION PLAN

The IMPO updated its SS4A Safety Action Plan in May 2023. The SS4A federal grant program provides funds to public agencies to develop safety plans and design and construct transportation projects that improve safety. The core recommendations within the plan identify new policies and prioritized projects needed to move the needle on the region's safety goals.

Nearly twice as many severe crashes occur in areas with higher percentages of vulnerable populations than in other areas of Central Indiana.

The Central Indiana Region has set forth a target of reducing serious and fatal crashes by 35% by the year 2040 to make progress towards the ultimate Vision Zero goal.

28,000+

total crashes since 2015

1,400+

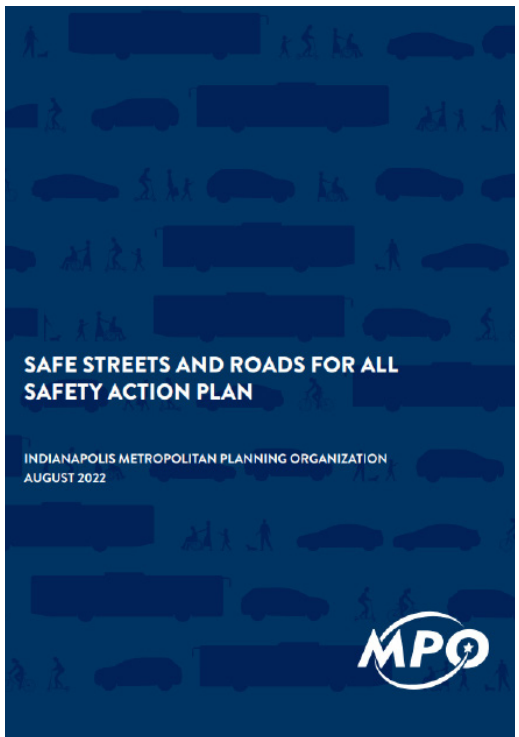
fatal crashes since 2015

25%

of fatal crashes involved bicycles or pedestrians

234

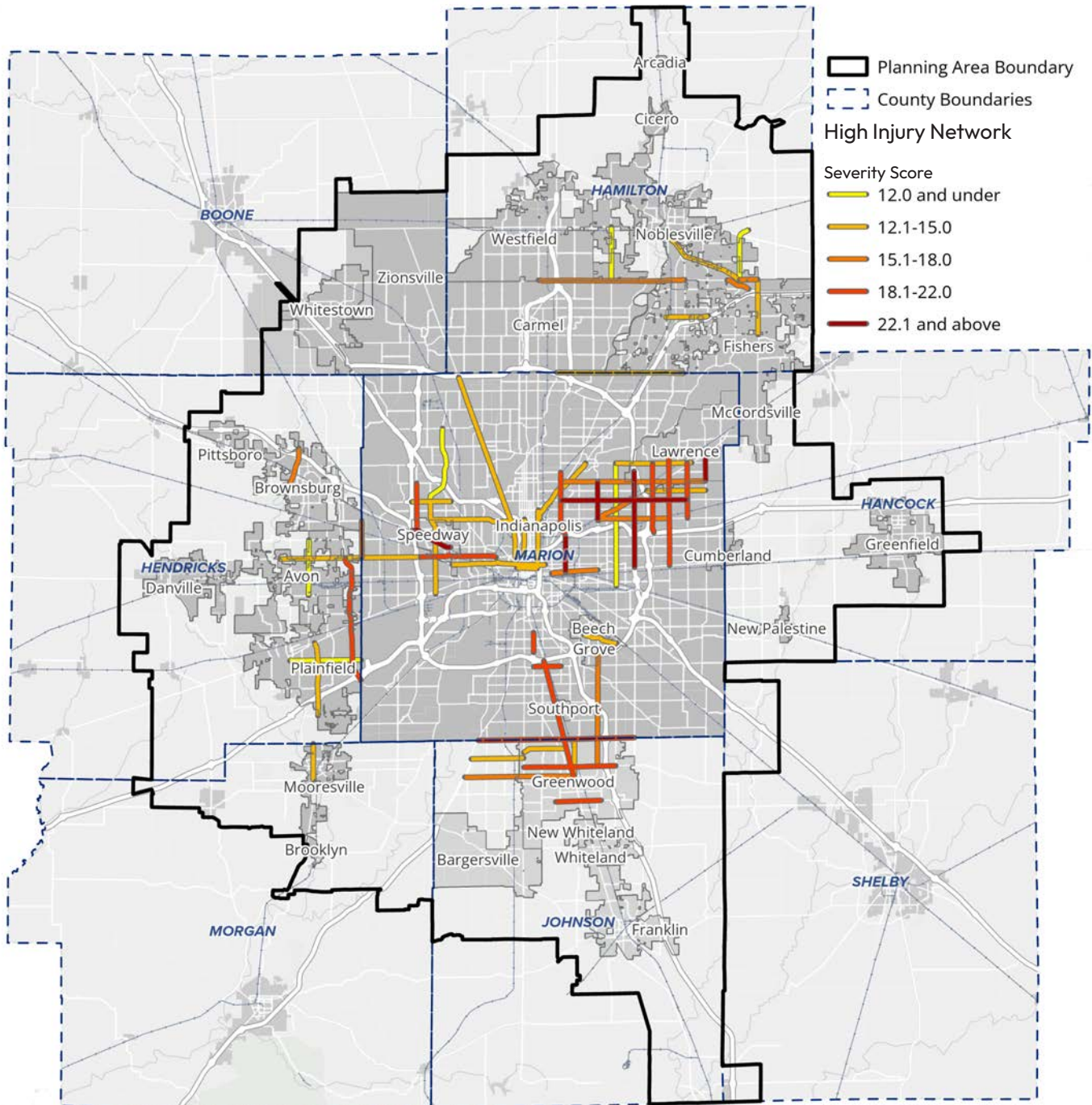
miles of regional collector and arterial streets make up the High Injury Network



HIGH INJURY NETWORK

The IMPO developed a High Injury Network (HIN) to identify the local corridors with the highest frequencies of crashes resulting in incapacitating injuries and fatalities within the MPA. The HIN represents the top 10% of regional collector and arterial streets scored by the number of incapacitating injury and fatal crashes per mile. The HIN enables the IMPO and local planning agencies to prioritize safety investments and other strategies on the streets with the highest frequency of severe crashes to make rapid progress towards regional safety goals.

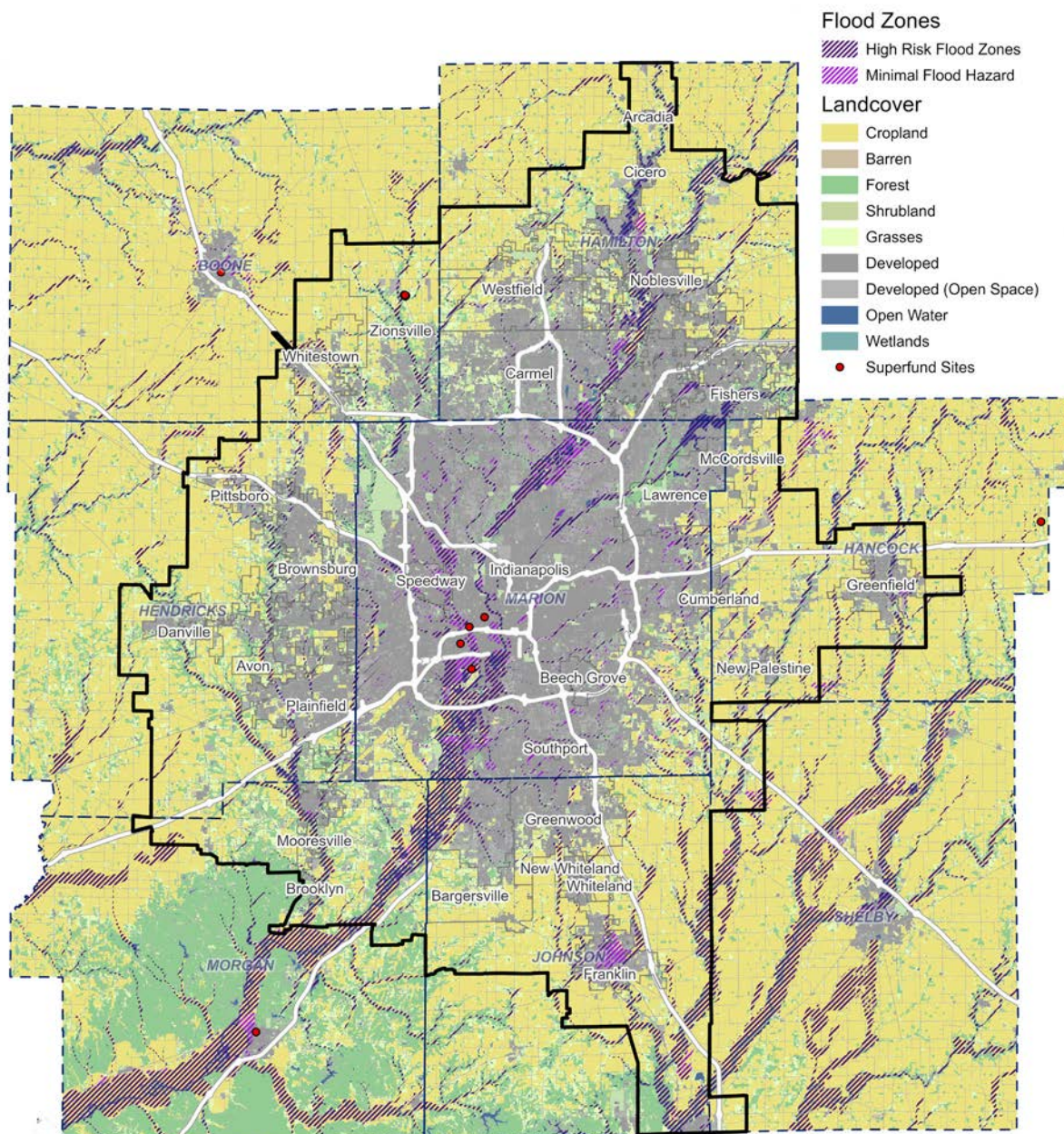
HIGH INJURY NETWORK



ENVIRONMENTAL CONSIDERATIONS

When developing transportation recommendations, environmental constraints are always taken into consideration to avoid or mitigate any negative environmental impacts. One way IMPO is working to mitigate environmental impacts is through the aforementioned Resiliency Snapshot, which helps tie together climate plans across the region and includes strategies to mitigate impacts of natural hazards on the transportation network using natural infrastructure, a vulnerability assessment to ensure populations most at risk are equitably protected and served, and recommendations to preserve and expand natural features across the region. The map below highlights the environmental constraints that merit consideration as a part of any transportation planning process. A list of endangered and threatened species within each of the eight IMPO counties can be found in Appendix C.

The transportation recommendations put forth in this MTP will also go through a state or federal environmental review later in the design process to ensure each project meets environmental standards.

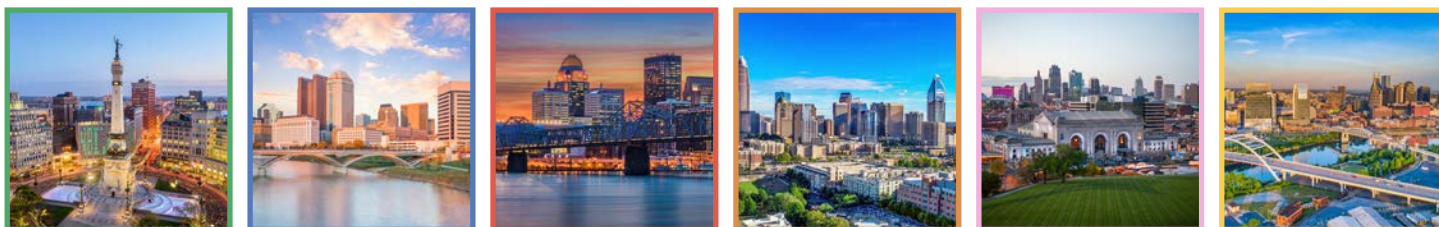


Sources: IndianaMap, USDA NASS

How The Region Compares

PEER REGION BENCHMARKS

To illustrate how IMPO and the Central Indiana region are performing on key metrics, it's important to compare against peer regions that have similar characteristics. These five identified peers were chosen because they of similar size, have similar transportation struggles, and/or have some aspirational qualities. Like Central Indiana, they are each grappling with modernizing their transportation systems, housing affordability concerns, and similar land use patterns. Showcasing these comparisons provides greater insight and context for evaluating the region's current transportation reality.



Central Indiana
(IMPO)

Columbus
(MORPC)

Louisville
(KIPDA)

Charlotte
(CRTPO)

Kansas City
(MARC)

Nashville
(GNRC)

1,692,054

MPO Population

1,592,957

MPO Population

1,108,038

MPO Population

1,462,929

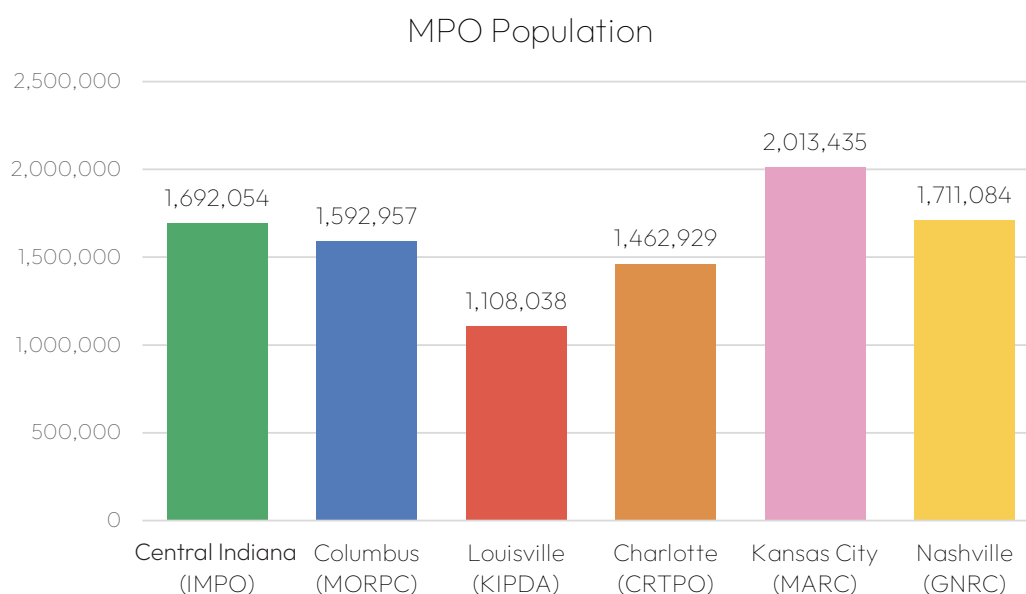
MPO Population

2,013,435

MPO Population

1,711,084

MPO Population



<u>Size Rank</u>	<u>MSA</u>
23	Charlotte, NC
31	Kansas City, MO
32	Columbus, OH
34	Indianapolis-Carmel-Anderson, IN
37	Nashville, TN
46	Louisville, KY

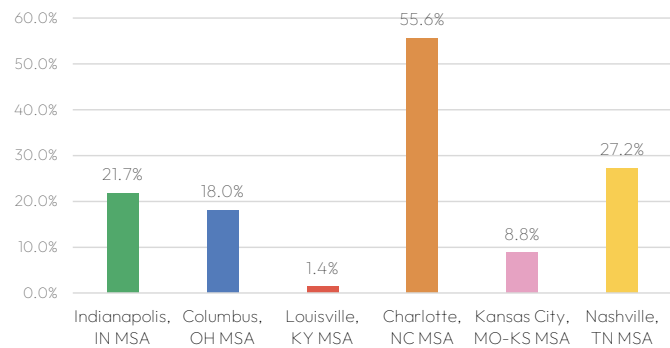
Sources: H+T Index (MPO), Zillow Data (MSA)

GROWTH AND AFFORDABILITY

POPULATION GROWTH

The Indianapolis-Carmel-Anderson MSA population base and steady growth over the past decade is most similar to the Columbus MSA. Both regions' population grew by around 20% between 2010 and 2021. While the Indianapolis and Columbus MSAs grew steadily, Louisville and Kansas City's grew by less than 10% over the same period. Charlotte and Nashville's MSAs both grew significantly faster than Central Indiana's, with Charlotte experiencing over 55% growth.

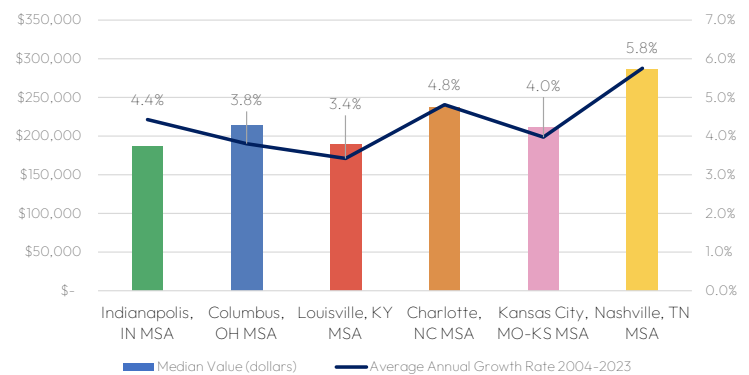
POPULATION GROWTH (2010-2021)



HOUSING AFFORDABILITY

Compared to the peer regions, the Indianapolis-Carmel-Anderson MSA has the lowest median housing value; however, the region also has the third highest growth in housing costs, placing a burden on buyers in the community. Nashville and Charlotte's MSAs have the highest median housing values and cost growth among the peer regions.

MEDIAN HOUSING VALUE AND AVERAGE VALUE GROWTH RATE



Sources: ACS 5 Year Estimates (MSA Level), Zillow Data (MSA Level),

The Indianapolis MSA experiences more affordable housing when compared with the other peer regions.

HOUSING AND TRANSPORTATION COST BURDEN

According to the H+T Index, all of the six peer regions are above the threshold of 45% for being considered housing and transportation cost burdened. Central Indiana is tied with Columbus and Kansas City for having the lowest burden with the average household paying 46% of their household income toward housing and transportation costs. Charlotte has the highest costs burden at 49%.

MPO	H&T Costs % Income Average	H&T Costs % income Range	H&T Costs > 44% of income	Housing costs % income	Housing costs > 30% income	Transportation costs % income	Median Household Income
Central Indiana (IMPO)	46%	22% - 89%	51.4%	24%	17.6%	23%	\$70,483
Columbus (MORPC)	46%	16% - 100%	44.0%	26%	24.5%	20%	\$75,250
Louisville (KIPDA)	48%	16% - 95%	57.5%	25%	19.8%	23%	\$65,356
Charlotte (CRTPO)	49%	14% - 98%	61.1%	27%	28.0%	22%	\$77,116
Kansas City (MARC)	46%	16% - 94%	45.9%	25%	21.9%	21%	\$73,911
Nashville (GNRC)	48%	13% - 93%	57.9%	26%	24.2%	22%	\$74,471

Sources: H+T Index (MPO Level)

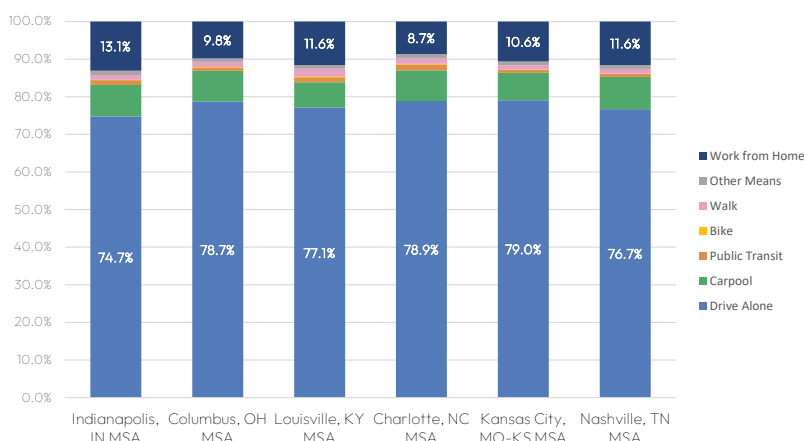
TRAVEL CHARACTERISTICS

MODE SHARE

Compared to its peers, the Indianapolis-Carmel-Anderson MSA contains the lowest percentage of daily SOV travel and the highest percentage of individuals working from home. Similar trends are experienced across all of the MSAs with driving alone, carpooling, and working from home making up the bulk of commuting types.

Among the peer regions, the Indianapolis MSA has the lowest percentage of SOV travel.

MODE SHARE DISTRIBUTION

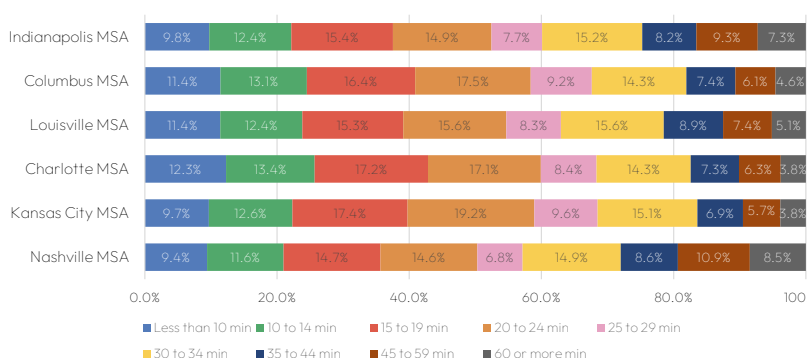


COMMUTING

In the Indianapolis-Carmel-Anderson MSA, over 47% of people commute 25 minutes or more every day. This is the second largest percentage amongst the peer regions, behind Nashville's MSA. Charlotte's MSA fares the best in this category, with just 40% of people having longer commutes.

The Indianapolis MSA has some of the highest commute times when compared to peers.

COMMUTE TIMES

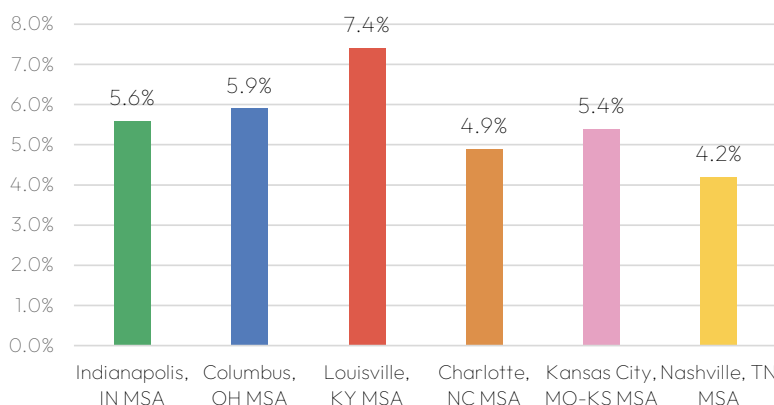


VEHICLE ACCESS

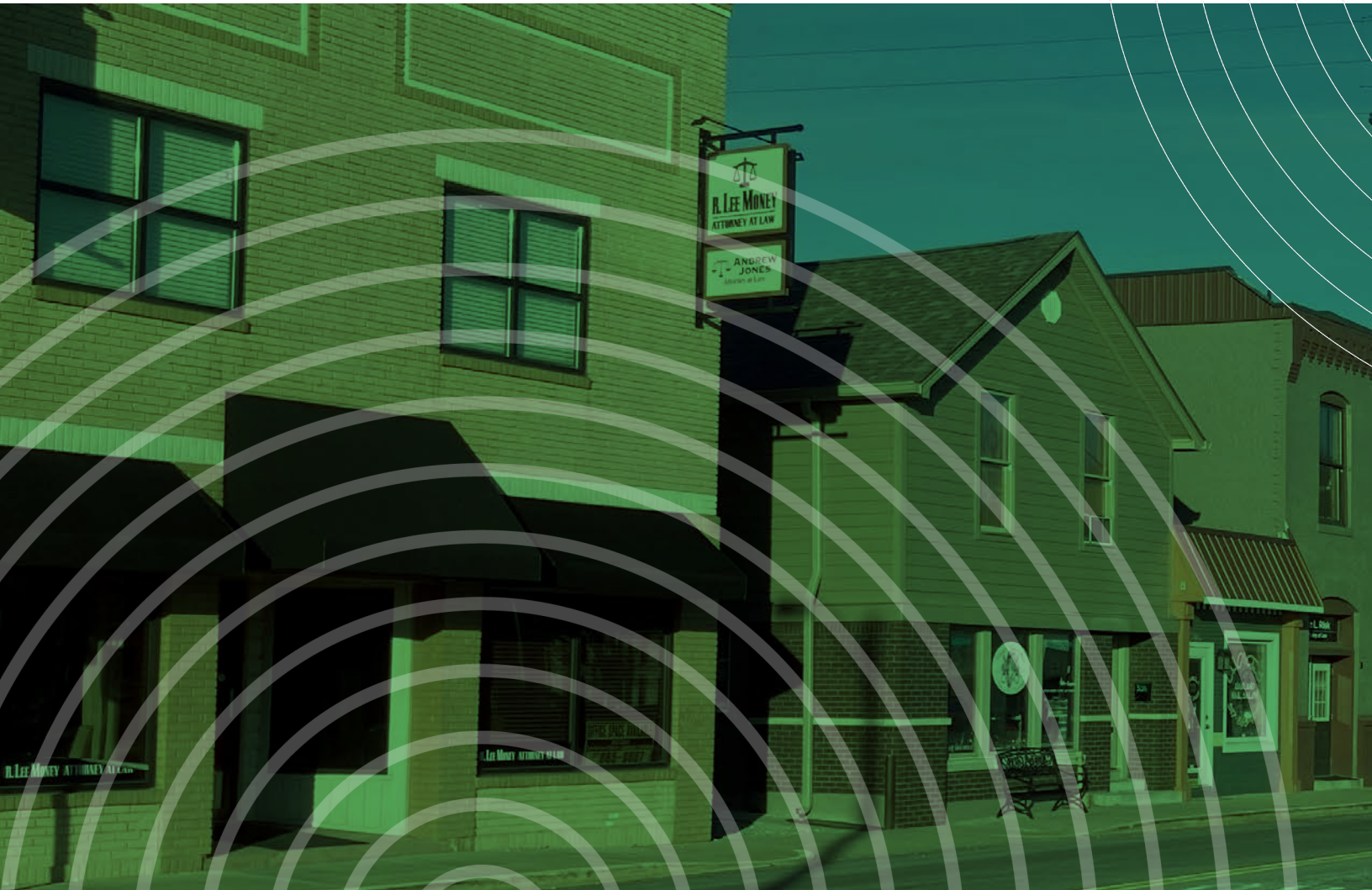
Among the peer regions, Louisville's MSA has the highest percentage of people without access to a vehicle (7.4%). The Indianapolis MSA falls in the middle at 5.6%. Nashville's MSA has the lowest percentage of the population without access to a vehicle, at 4.2%.

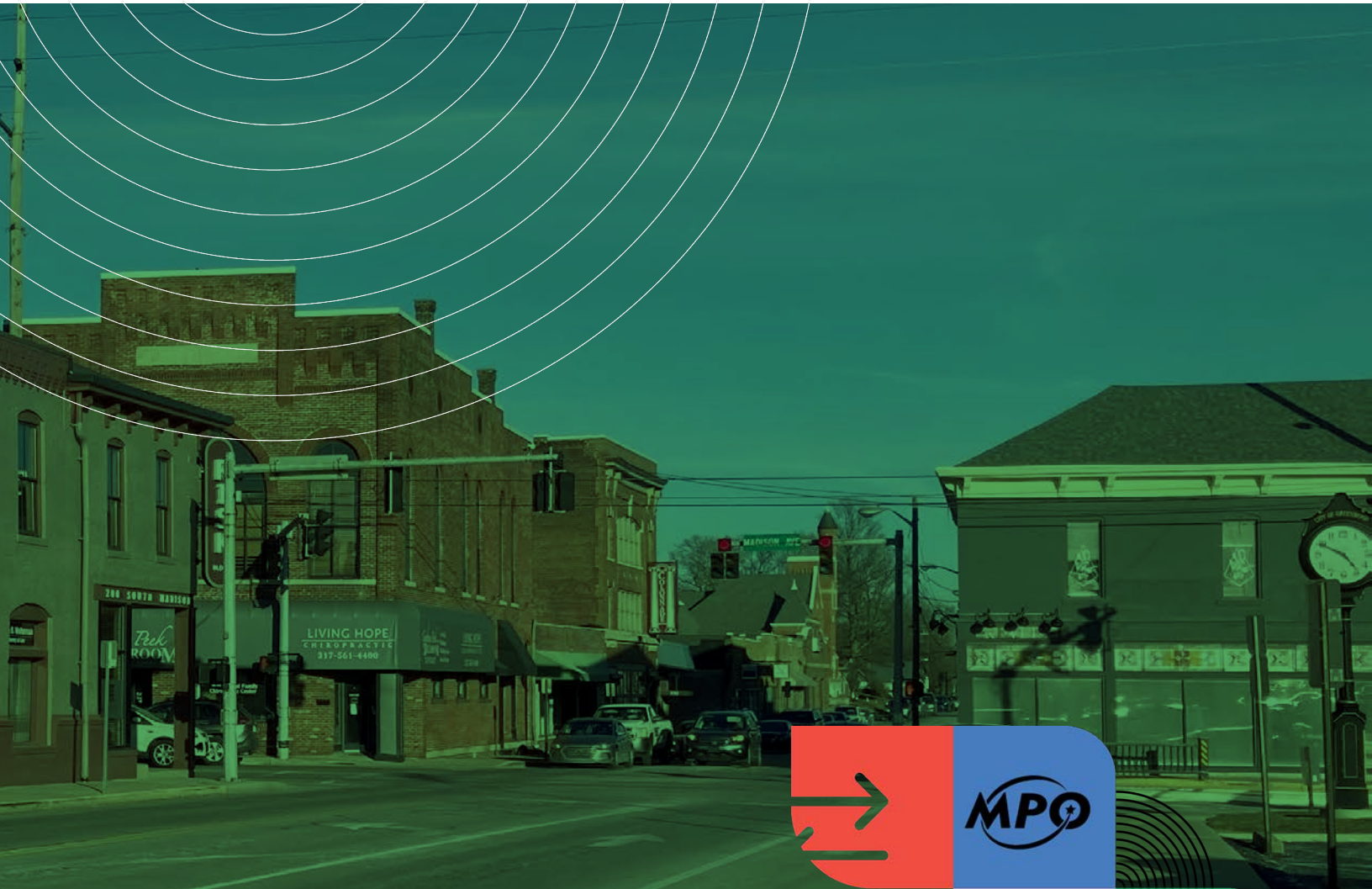
The Indianapolis MSA is about average amongst the peer regions for vehicle access.

PERCENT OF HOUSEHOLDS WITH NO ACCESS TO A VEHICLE



Sources: ACS 5 Year Estimates (MSA)





METROPOLITAN TRANSPORTATION PLAN

CIRCLE 20 50

CENTRAL
INDIANA
REFLECT
CREATE
LEAD
EXCEL



CHAPTER 4

FRAMEWORK FOR GROWTH

4 FRAMEWORK FOR GROWTH

By 2050, Central Indiana is expected to have a population of over 2.6M residents and 1.9M jobs. The transportation needs arising from this growth must be proactively planned for and accommodated, based on best practices, to avoid future problems and challenges. Looking at current land use trends and creating a preferred land use and transportation growth scenario can help determine how the region will accommodate future growth. The creation of a supportive policy framework also helps to set the stage for the successful identification, implementation, and monitoring of transportation network improvements.

Forecasting

In order to forecast travel and land use, existing conditions need to be analyzed and future land use scenario selected. This data is then used in the Travel Demand Model (TDM) which simulates travel demand.

LAND USE FORECASTING

Land use is a major indicator of transportation use. The IMPO uses a combination of Land Use Scenario Planning and identification of existing and emerging Regional Activity Centers to review and project future land use conditions.

SCENARIO PLANNING

The IMPO uses a preferred future regional growth scenario that was built with Community Viz, an ArcGIS extension. The preferred scenario was developed by comparing base conditions from the region’s local future land use maps, development various scenario options, and applying public feedback to create a scenario that prioritizes moderate infill development and transit supportive land uses.

In sum, the land use model allocates almost 690,000 residents and 583,000 jobs to the IMPO region. The 2050 preferred scenario population and employment allocations form the basis of the 2050 travel demand model (TDM) forecasts as described later in this document. For more information on the land use model and allocation, refer to the [Indianapolis MPO CommunityViz Development Process](#) on the IMPO website.

POPULATION AND EMPLOYMENT GROWTH (2017/18 TO 2050)

	<u>Existing</u>	<u>2050</u>	<u>Change</u>
Population	1,804,500	2,492,200	687,700
Employment	1,276,200	1,859,200	583,000

Source: Indianapolis MPO CommunityViz Development Process, 2021

The preferred scenario population and employment allocations were aggregated to traffic analysis zones (TAZs) and used in travel demand model (TDM). The TDM results contribute to the MTP project scoring. In 2023, the data in the preferred scenario was updated to reflect new Census and other information, and the TDM was also updated accordingly.

The scenario planning process recommends several policies to achieve the preferred scenario:

- Implementation of the Marion County Transit Plan, particularly the Purple and Blue BRT lines. The Purple Line is currently under construction and will be operational in 2025. Construction has not yet started on the Blue Line, but the

planning and design has been completed and the programming process is well underway.

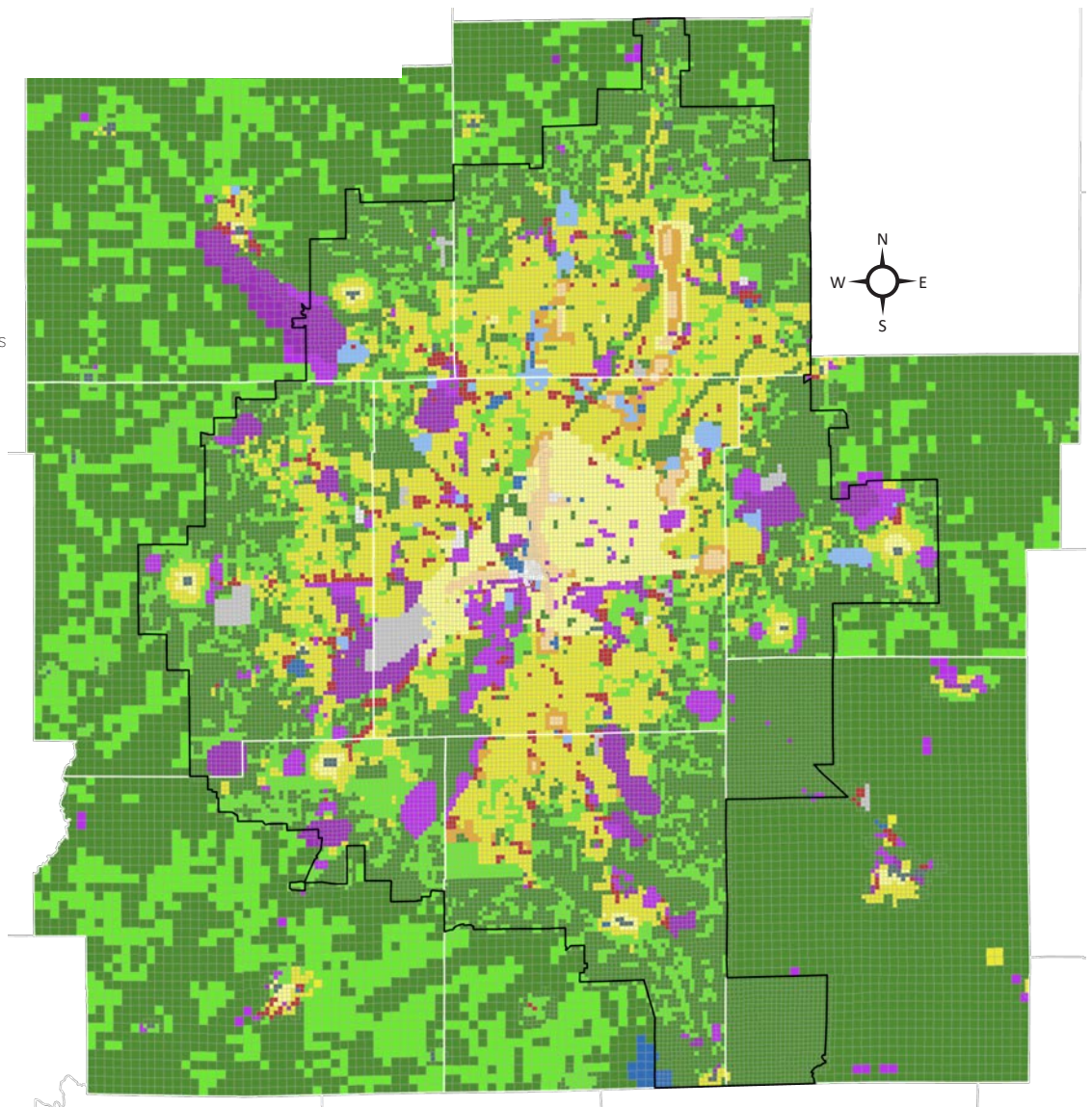
- Development of the Nickel Plate rail trail corridor from Indianapolis to Noblesville. Work continues on implementing the master plan and portions of the trail have been completed.
- Zoning ordinances that support mixed use development, multi-family housing development, and gentle density increases.
- Increasing the bike mode split by improving bicycle travel routes in areas with housing, employment, and destination density. In 2024 the IMPO completed the Regional Active Transportation Plan that recommends a connected network of trails, bikeways and sidewalks, and the Trail Oriented Development Study that provides resources for organizing housing, activity, and employment options around access to the regional trail network. Improving walkability with sidewalk investment.
- Preserving parks and open space areas, as well as prime agricultural areas.

INDIANAPOLIS MPA PREFERRED LAND USE SCENARIO

Preferred Scenario

- Agriculture/Conservation
- Rural Estate
- Suburban Residential
- Walkable Neighborhood
- Warehouse/Logistics
- Manufacturing/Mining
- Strip Commercial
- Mixed Use Urban Infill
- Suburban Mixed Use
- Office Park/Corporate Campus
- Airport
- Campus
- Traditional Downtown
- Downtown Indy
- Special Events/Uses

- Metropolitan Planning Area
- County



REGIONAL CENTERS

Regional Activity Centers are major destinations where clusters of employment, residents, and/or visitors are located. Identifying these Activity Centers can help cities, counties and the region focus limited transportation resources and funds towards areas of high activity and most trips generated.

There is a hierarchy of Activity Centers based on the degree to which residential, employment, and services are mixed. The hierarchy of Activity Center Types is listed below:

- A. Downtown Indianapolis
- B. Regional Mixed-Use Center
- C. Main Street Center
- D. Lifestyle Center
- E. Shopping Center
- F. Special Use Center
- G. Manufacturing/Distribution/Logistics Center
- H. Employment Center

The existing and emerging Regional Activity Centers are two of the eleven scoring criteria used to prioritize proposed capacity expansion projects in the region and fiscally constrain them in the CIRCLE 2050 MTP.

TRAVEL FORECASTING

The Travel Demand Model (TDM) is an advanced 4-step model used to forecast transportation demand. It has recently been updated and validated to reflect the current Base year. Demographics used in the modeling process were updated to be consistent with the IMPO scenario planning process. Using existing demographics for each traffic analysis zone (TAZ), the TDM estimates how much travel will occur in the region between each originating TAZ to the destination TAZ via the model road and transit networks. Once the number of trips to and from each TAZ is calculated, the model then finds the best route and determines the mode for that trip, such as transit or auto. The TDM also models various types of freight and truck trips that range from trucks driving through the region without stopping, to truck trips traveling to or between multi-modal freight facilities, and more local delivery trips by light commercial vehicles. Various types of truck industry and mobile data were used to update and calibrate the TDM to support the CIRCLE 2050 MTP.

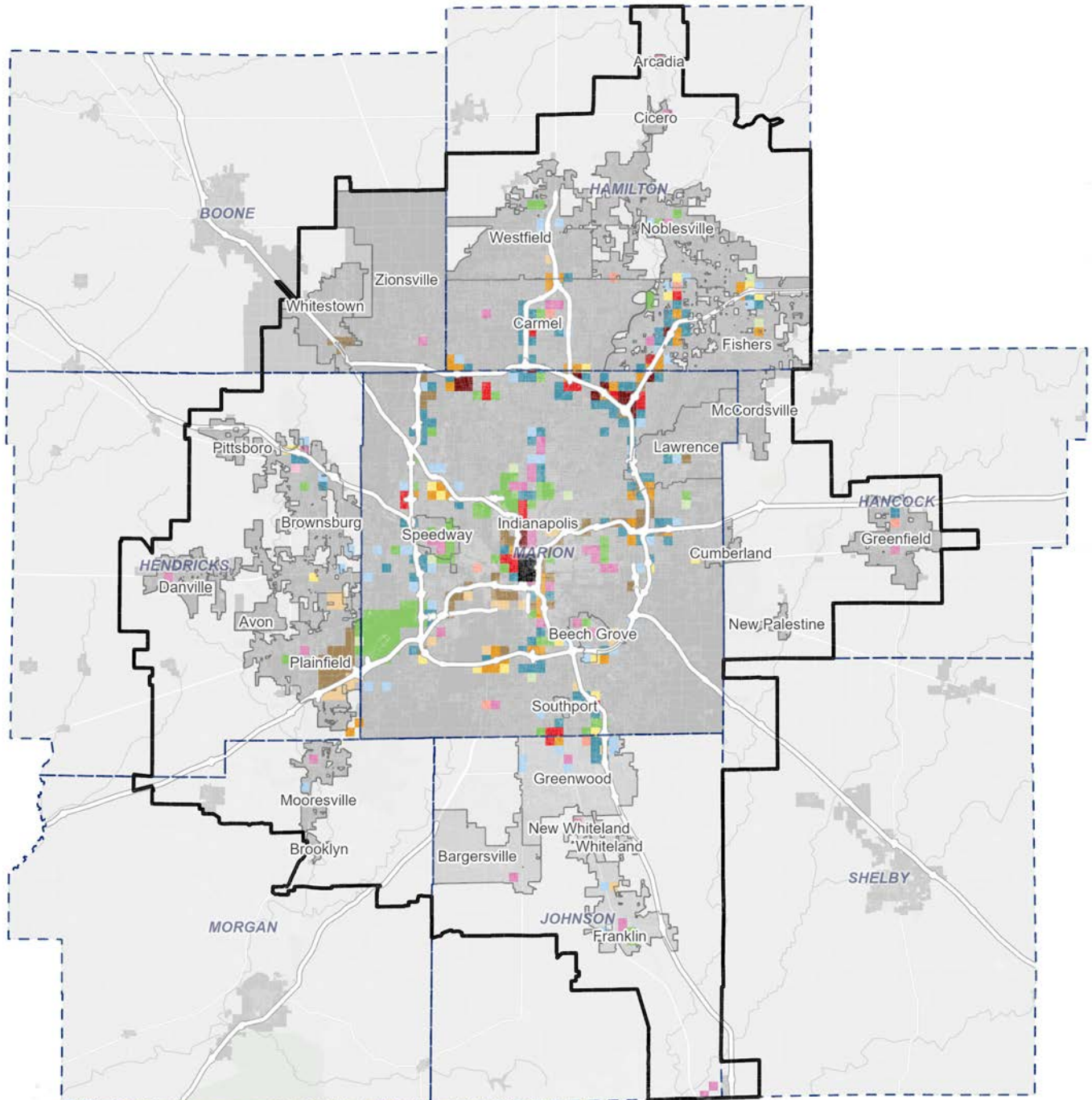
The 2050 model year includes population and employment projections based on the preferred land use scenario. As part of evaluating proposed capacity expansion projects for the MTP, the IMPO compares the TDM's base year model with the 2050 model to determine the potential effect on Vehicle Hours of Delay (VHD) and Congested Lane Miles (CLM). Projects that most reduce VHD and CLM receive more points within the scoring process that prioritizes all proposed regional projects into the recommended fiscally constrained list of projects (Chapter 5).

CONGESTION MANAGEMENT PLANNING

The IMPO is federally required to develop a Congestion Management Process (CMP) to better understand the region's congested network, analyze problem areas, and identify strategies to mitigate congestion. The CMP is an essential companion to understand how to identify roadway needs and how those needs can be addressed. The CMP is documented in Appendix A.

CENTRAL INDIANA EXISTING AND EMERGING REGIONAL ACTIVITY CENTERS

- | | |
|--------------------------------------|--------------------------------------|
| Existing Center Type | Emerging Center Type |
| Downtown Indianapolis | Regional mixed-use |
| Regional mixed-use center | Main street center |
| Main street center | Lifestyle center |
| Lifestyle center | Shopping center |
| Shopping center | Special-use center |
| Special-use center | Manufacturing/distribution/logistics |
| Manufacturing/distribution/logistics | Employment center |
| Employment center | |

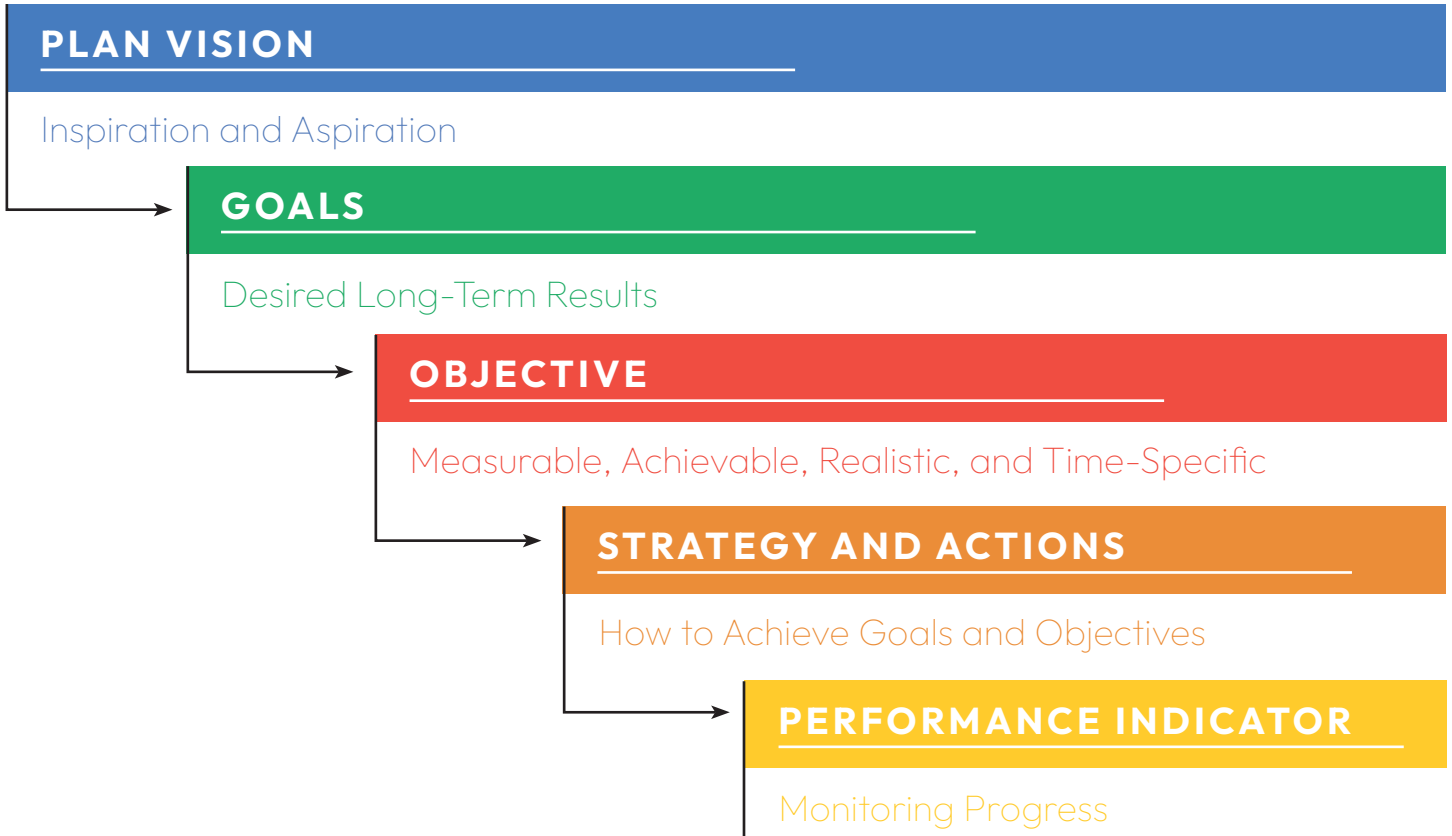


Source: Regional Activity Centers developed by MIG, Inc. and the Indianapolis MPO

Policy Framework

The CIRCLE 2050 MTP exists on a foundation of regional planning policy developed over many years. By developing a policy framework specific to the MTP, the details and intent of past plans are clarified and enhanced to articulate Central Indiana's transportation vision, goals, and objectives.

The following flow chart offers general guidance on the hierarchy and relationship amongst the content of the policy framework.



CIRCLE 2050 MTP VISION STATEMENT

Develop a comprehensive, multi modal, regional transportation system that safely and efficiently addresses existing and emerging mobility needs, is economically viable, cost-effective, environmentally sustainable, equitable, and supports regional prosperity, health, and travel choices throughout the communities in Central Indiana.

CIRCLE 2050 MTP GOALS

The MTP is organized into themes, each of which are further detailed by a series of goals:

MOVE



PROVIDE TRANSPORTATION CHOICES FOR PEOPLE TO EASILY ACCESS HOMES, JOBS, RECREATION AND SERVICES BY:

- Enhancing transportation options and choices for all users
- Implementing strategies that address congested transportation segments
- Providing equitable access to affordable and reliable transit and non-motorized travel options

PROSPER



FOSTER SHARED ECONOMIC VITALITY THROUGH STRATEGIC INVESTMENTS IN REGIONAL INFRASTRUCTURE TO INCREASE COMPETITIVENESS AND AFFORD ABILITY BY:

- Supporting economic mobility for all Central Indiana residents
- Ensuring the efficient movement of goods and freight
- Supporting land uses that allow for housing diversity and choice

MAKE SAFE



SUPPORT A SAFE TRAVELING ENVIRONMENT FOR ALL USERS BY MAKING STRATEGIC INVESTMENTS IN OUR REGION'S INFRASTRUCTURE THAT PRESERVE AND ENHANCE THE EXISTING SYSTEM BY:

- Improving safety for travelers system-wide especially in higher crash and hazardous areas
- Creating safe and comfortable mobility options for all by promoting good design practices

SUSTAIN



ENSURE A RELIABLE AND RESILIENT TRANSPORTATION NETWORK THAT PRESERVES OR ENHANCES THE ENVIRONMENT AND USERS' HEALTH BY:

- Preserving the existing transportation system
- Promoting the resilience of the transportation system
- Minimize negative impacts of the transportation system on the natural environment, air quality, and climate

OBJECTIVES, STRATEGIES/ACTIONS, AND KEY PERFORMANCE INDICATORS

Each of the goals within the MTP is supported by an objective, a series of strategies and actions, and potential performance indicators. The objective states desired future conditions in a more specific and measurable way. Strategies and actions for MPO staff are based either around methods to achieve the goals and objectives or the actual steps that need to be taken to implement an objective.

Each strategy/ action is classified into one or more of the MPO’s Pillars. These Pillars guide all of the IMPO’s activities:



Convene

Bring experts and community members together



Inform

Provide reliable data to support planning and policy-making



Plan

Create and adopt plans and track their implementation



Fund

Fund regionally-significant projects

It is also important to be able to quantitatively compare or estimate the performance of the transportation network in addressing each Goal and Objective. To do this, the policy framework includes a series of Key Performance Indicators (KPIs). KPIs are drawn from two main sources:

- Federally Required: Performance measurement areas required for reporting by the IMPO in the MTP and the Transportation Improvement Program (TIP)
- Regional Indicators: indicators that are meaningful to the Central Indiana region and go beyond what is required federally.

There are several important considerations that are a part of the development of the MTP’s Key Performance Indicators.




- Is the necessary data available?
- Is this a factual indicator? (not algorithmic or observational)
- Does it help achieve a goal?
- Does the indicator go beyond access or proximity to demonstrate usefulness? (e.g., I can get to a bikeway, but does that bikeway take me somewhere)

These considerations have been leveraged to shape the included KPIs. Additional topics were identified for consideration as KPIs that were ultimately not advanced. A list of these additional topics, along with more detail on the Policy Framework, is included in Appendix D.






The Goals, Objectives, Strategies and Actions, and Key Performance Indicators are presented in the series of tables that follow. Each strategy notes its corresponding MPO Pillar via an icon and text notation. KPIs that address multiple goals or that satisfy federal performance measures are denoted by symbology shown in a legend at the bottom of each page.

MOVE

GOAL 1 ENHANCE TRANSPORTATION OPTIONS AND CHOICES FOR ALL USERS





OBJECTIVE	Increase travel choices to ensure that increasingly more of the population has access to multiple modes of travel.
STRATEGIES/ ACTIONS	 PLAN: Continue to update and implement the Regional Active Transportation Plan.
	 FUND: Continue to support the IndyGo Comprehensive Operational Analyses (COAs).
STRATEGIES/ ACTIONS	 PLAN: Prioritize filling sidewalk and bikeway network gaps that provide connections to job centers, grocery stores, schools and colleges, and healthcare facilities.
KEY PERFORMANCE INDICATORS (KPIs)	<ul style="list-style-type: none"> <input type="radio"/> Bikeshare stations <input type="radio"/> Proximity to bikeshare <input type="radio"/> Total bikeway mileage <input type="radio"/> Miles of connected bikeways <input type="radio"/> Proximity of people to fixed transit

GOAL 2 IMPLEMENT STRATEGIES THAT ADDRESS CONGESTED ROADWAY SEGMENTS







OBJECTIVE	Maintain (or improve) travel reliability (requires a baseline and could include a “target”)
STRATEGIES/ ACTIONS	 PLAN/FUND: Address the needs identified in the Congestion Management Process.**
	 PLAN/FUND: Provide resources for improved roadway design and more transit and non-motorized options in “multi-modal” & “local-draw” Regional Activity Centers (RACs).**
	 CONVENE/INFORM: Support and increase awareness of the Indiana Traffic Incident Management Effort (IN-TIME) and Purdue University Local Technical Assistance Program (LTAP).**
	 PLAN/FUND: Continue to maximize the effectiveness of traffic operations systems and invest in Intelligent Transportation Systems.
KPIs	 FUND: Continue to support regional transportation projects that can encourage alternate modes to driving.
	<ul style="list-style-type: none"> <input type="radio"/> % of person miles traveled (PMT) on Interstates that are reliable † <input type="radio"/> % of PMT on non-interstate National Highway System (NHS) that are reliable † <input type="radio"/> Annual hours of peak-hour delay † <input type="radio"/> % of non-single occupancy vehicle (SOV) travel †

bold = same across multiple goals
 ** = similar across multiple goals

† = federal performance measure

GOAL 3 PROVIDE EQUITABLE ACCESS TO AFFORDABLE AND RELIABLE TRANSIT AND NON-MOTORIZED TRAVEL OPTIONS	
OBJECTIVE	Prioritize travel choice in areas with concentrations of traditionally underserved and Justice 40 communities.
STRATEGIES/ ACTIONS	 INFORM: Continue to map vulnerable and underserved populations throughout the region.
	 INFORM: Create awareness of traditionally underserved and Justice 40 communities (aka EJ or Environmental Justice areas) during the calls for projects, project evaluations, and prioritization processes.
	 CONVENE: Identify practices that accelerate implementation of various transportation facilities (walking, biking, transit, roadway, etc.) in EJ areas.
	 INFORM/PLAN: Prioritize transit and non-motorized transportation options in EJ areas with higher rates of zero-car households.
KPIs	<ul style="list-style-type: none"> <input type="radio"/> % bikeshare stations in EJ areas <input type="radio"/> % all ages/abilities bikeways in EJ areas

PROSPER

GOAL 4 SUPPORT ECONOMIC MOBILITY FOR ALL CENTRAL INDIANA RESIDENTS	
OBJECTIVE	Improve access to employment and higher education.
STRATEGIES/ ACTIONS	 FUND: Increase opportunities for residents to reduce transportation costs via more transportation options.
	 PLAN: Continue to create/update modal plans (transit, bike, ped, and trails).
	 INFORM/FUND: Encourage transportation investments into existing employment centers (Regional Activity Centers, aka RACs). **
	 INFORM/PLAN: Support the addition of new employment in transit-oriented or trail-oriented developments. **
	 FUND: Continue to fund congestion management priorities in areas with concentrations of employment.
KPIs	 FUND: Continue to fund measures that improve travel reliability in commuter corridors.
	<input type="radio"/> Proximity of people to fixed transit
	<input type="radio"/> Jobs near fixed transit
	<input type="radio"/> Grocery stores near fixed transit
	<input type="radio"/> Higher education near fixed transit
	<input type="radio"/> Housing and Transportation Cost Affordability

bold = same across multiple goals

† = federal performance measure

** = similar across multiple goals

GOAL 5 ENSURE EFFICIENT MOVEMENT OF GOODS AND FREIGHT

OBJECTIVE Improve the performance of designated freight corridors.



PLAN: Continue to update and implement the Regional Freight Plan.



PLAN: Continue to update and implement the Congestion Management Plan.**



INFORM: Consider tracking freight route investments in IMPO-funded projects.

**STRATEGIES/
ACTIONS**



CONVENE/PLAN: Support the development of a regional truck parking strategy.



CONVENE/INFORM: Support and increase awareness of the Indiana Traffic Incident Management Effort (IN-TIME) and Purdue University Local Technical Assistance Program (LTAP).**

KPIs

- Truck crash rate
- Railroad incident rate
- Truck travel time reliability index for the interstate system †

GOAL 6 SUPPORT LAND USES THAT ALLOW FOR HOUSING DIVERSITY AND CHOICE

OBJECTIVE Support the addition of new housing and housing affordability in the region.



FUND: Invest in transportation improvements in “multi-modal” & “local-draw” Regional Activity Centers to support diverse housing and varied transportation preferences. **

**STRATEGIES/
ACTIONS**



CONVENE/PLAN: Support infill development, including housing infill, along existing transit routes and promote transit-oriented development (TOD).



CONVENE/PLAN: Support infill development, including housing infill, along existing and future regional trails and promote trail-oriented development (TrOD).

KPIs

- Housing and Transportation Cost Affordability**

bold = same across multiple goals

† = federal performance measure

** = similar across multiple goals

GOAL 7 IMPROVE SAFETY FOR TRAVELERS SYSTEM-WIDE ESPECIALLY IN HIGHER CRASH AND HAZARDOUS AREAS

OBJECTIVE Reduce serious and fatal crashes by 35% by 2040 (per regional Vision Zero commitment).

- STRATEGIES/ ACTIONS**
- CONVENE/INFORM: Provide resources to support IMPO member jurisdictions with local Vision Zero strategies.
 - PLAN/FUND: Prioritize high-scoring projects in the regional SS4A Safety Action Plan and projects along the high injury network.
 - INFORM: Continue to update the High Injury Network and maintain the IMPO Crash Dashboard.
 - INFORM/PLAN: Perform regular road safety studies for high-crash corridors and intersections.
 - INFORM: Consider prioritizing and tracking safety improvements in IMPO-funded projects.
 - CONVENE/INFORM: Encourage coordinated enforcement strategies.
 - INFORM/PLAN: Set goals for level of traffic stress.
 - INFORM/PLAN: Use a systemwide approach to proactively identify locations with safety problems based on historical data and existing roadway conditions.

- KPIs**
- **Serious/fatal crashes**
 - **Serious/fatal vulnerable user crashes**
 - Number of fatalities †
 - Rate of fatalities per 100 million miles traveled †
 - Number of serious injuries †
 - Number of serious injuries per 100 million miles traveled †
 - Number of non-motorized fatalities and non-motorized serious injuries †
 - Total number of reportable transit fatalities †
 - Rate of reportable transit fatalities per total vehicle revenue miles by mode †
 - Total number of reportable transit injuries †
 - Rate of reportable transit injuries per total vehicle revenue miles by mode †
 - Total number of reportable transit safety events †
 - Rate of reportable events per total vehicle revenue miles by mode †

bold = same across multiple goals
 ** = similar across multiple goals

† = federal performance measure

GOAL 8

CREATE SAFE AND COMFORTABLE MOBILITY OPTIONS FOR ALL BY PROMOTING GOOD DESIGN PRACTICES

OBJECTIVE

Advance the influence of safe street design throughout the region.

**STRATEGIES/
ACTIONS**

- (((📄)) INFORM/PLAN: Increase awareness of Complete Streets and trail/transit-oriented transportation design practices.

- (((INFORM: Provide resources for the modification of local street design practices to integrate best practices for safe street design.

- (((INFORM: Encourage local communities to integrate safe designs as a part of regular maintenance activities.

- (((INFORM: Encourage the use of tactical urbanism / pilot redesign projects as low-cost precursors to permanent changes.

- (((INFORM: Consider prioritizing and tracking safety improvements in IMPO-funded projects.

- (((INFORM: Develop guidance on recommended cross-sections for regional roadways.

- (\$ FUND: Support the creation and maintenance of ADA transition plans.

KPIs

- All ages and abilities facilities







bold = same across multiple goals

† = federal performance measure

** = similar across multiple goals

SUSTAIN

GOAL 9 PRESERVE THE EXISTING TRANSPORTATION SYSTEM

OBJECTIVE	Reduce the percentage of the transportation network and/or assets in poor condition.
STRATEGIES/ ACTIONS	 INFORM: Continue to collect Pavement Condition Index (PCI), and Pavement Surface Evaluation and Rating (PASER) data from jurisdiction and agency partners.
	 INFORM: Assist jurisdictions in understanding available discretionary grant opportunities to mitigate railroad conflicts or other freight bottlenecks.
	 INFORM: Continue to monitor the National Bridge Inventory for the region, as well as bridge conditions measured by INDOT.
	PLAN/CONVENE: Support INDOT’s target percentage for bridge and pavement condition to reach “Good” on the associated rating scales by 2050.
	PLAN/FUND: Encourage local jurisdictions to close gaps in the sidewalk network and maintain walkways and bikeways in good condition through funding and policy.
	INFORM/PLAN: Encourage and support the development and implementation of asset management plans.
KPIs	<ul style="list-style-type: none"> ○ % of pavements on the Interstate system in good condition † ○ % of pavements on the Interstate system in poor condition † ○ % of pavements on the non-Interstate NHS in good condition † ○ % of pavements on the non-Interstate NHS in poor condition † ○ % of NHS bridges classified in good condition † ○ % of NHS bridges classified in poor condition † ○ Non-NHS bridge condition ○ Non-NHS roadway condition ○ Transit rolling stock asset condition † ○ Transit equipment asset condition † ○ Transit facilities asset condition † ○ System reliability - Mean distance between major mechanical failures by transit mode †

bold = same across multiple goals
 ** = similar across multiple goals

† = federal performance measure

GOAL 10 PROMOTE THE RESILIENCE OF THE TRANSPORTATION SYSTEM

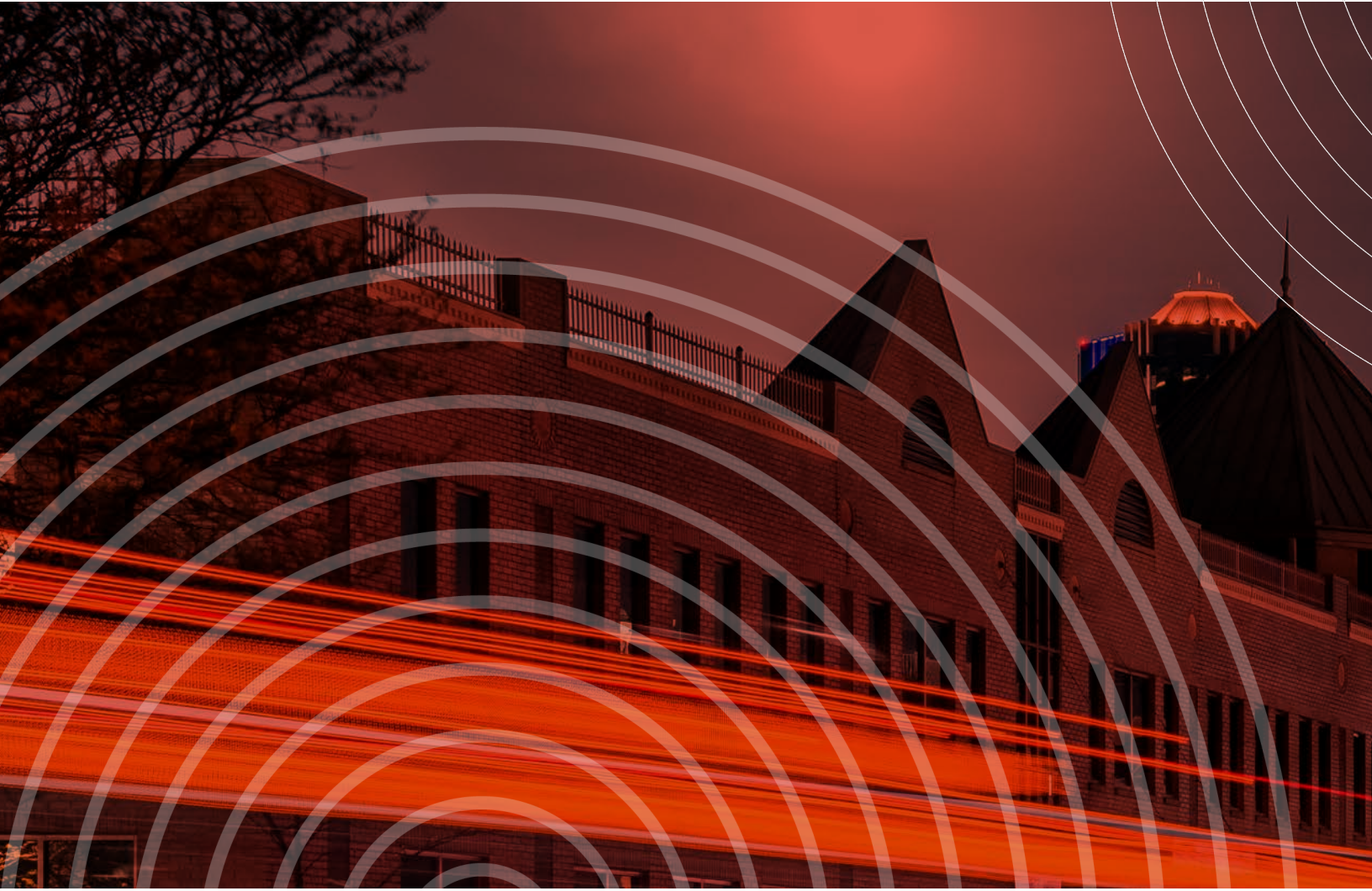
OBJECTIVE	Prioritize maintenance on the critical roadways that are most vulnerable to extreme events.
STRATEGIES/ ACTIONS	<p>(((INFORM: Maintain the risk assessment of transportation vulnerability in the Regional Resiliency Snapshot.</p> <hr/> <p>(((INFORM: Maintain the criticality assessment of transportation vulnerability in the Regional Resiliency Snapshot.</p> <hr/> <p>(((INFORM: Regularly update the prioritization of roads and bridges in the Regional Resiliency Snapshot.</p>
KPIs	<ul style="list-style-type: none"> <input type="radio"/> Roadway vulnerability <input type="radio"/> Bridge vulnerability

GOAL 11 MINIMIZE NEGATIVE IMPACTS OF THE TRANSPORTATION SYSTEM ON THE NATURAL ENVIRONMENT, AIR QUALITY, AND CLIMATE

OBJECTIVE	Reduce greenhouse gas (GHG) emissions, particulate pollution, and land consumption of transportation infrastructure to mitigate negative health and environmental impacts.
STRATEGIES/ ACTIONS	<p>(((o) INFORM/CONVENE: Provide resources on sustainable land use policies and how they can assist in managing growth, reducing consumption of land, and reducing environmental impacts to member jurisdictions.</p> <hr/> <p>(((o) INFORM/CONVENE: Provide member jurisdictions resources on the benefits of increasing non-single occupancy vehicle modeshare.</p> <hr/> <p>o((([] CONVENE/INFORM/PLAN: Encourage member jurisdictions to set land consumption targets.</p> <hr/> <p>[] PLAN: Encourage denser development for “multi-modal” & “local-draw” Regional Activity Center types that prioritize transit and non-motorized transportation.**</p> <hr/> <p>((([] INFORM/PLAN: Support a balanced road network that includes roadway design that serves various trip purposes (regional, community, neighborhood, etc.).</p> <hr/> <p>(((o) INFORM/CONVENE: Increase awareness of the negative community health impacts (asthma, hearing damage, etc.) that pollutants from SOVs have in partnership with local health agencies.</p>
KPIs	<ul style="list-style-type: none"> <input type="radio"/> EV adoption <input type="radio"/> Land consumption

bold = same across multiple goals
 ** = similar across multiple goals

† = federal performance measure





METROPOLITAN TRANSPORTATION PLAN

CIRCLE 2050

CENTRAL
INDIANA
REFLECT
CREATE
LEAD
EXCEL



CHAPTER 5

A PLAN FORWARD



5 A PLAN FORWARD

Implementation of the CIRCLE 2050 MTP policy framework is primarily done in three ways: establishing and enforcing policies that guide responsible transportation development; analyzing the available funds in Central Indiana through 2050; and prioritizing planned and proposed transportation projects to establish a realistic outlook for the future transportation network.

IRTIP and the MTP

The Indianapolis Regional Transportation Improvement Program (TIP) is the federally-required short-term programming document for the Indianapolis MPA. Projects funded with federal monies are required to be included in the TIP, regardless of size or project type.

The MTP and the TIP are required to be consistent. Regionally significant projects (aka “capacity expansion” projects) in the IRTIP must also be identified in the MTP. The TIP also maintains consistency with the MTP by referencing the Resource Allocation Goals when recommending project funding during each annual call for projects, scoring, and selection.

Available Revenues

RESOURCE ALLOCATION GOALS

The financial constraint exercise for the CIRCLE 2050 MTP began with the development of resource allocation goals. The IMPO has historically established resource allocation goals for its MTP as a means to recommend the optimal balance of funding for different project types. The resource allocation goals are just that - a goal that the MPO can reference as they assign prioritized projects to the MTP financially constrained plan, and as they consider project submissions for the TIP. For the previous 2050 MTP, the resource allocation goals were based around the following spending categories:

- Roadway Expansion
- Road + Road Geometry
- Bridge Preservation
- Bicycle & Pedestrian
- Transit
- Operations and Maintenance (O&M)

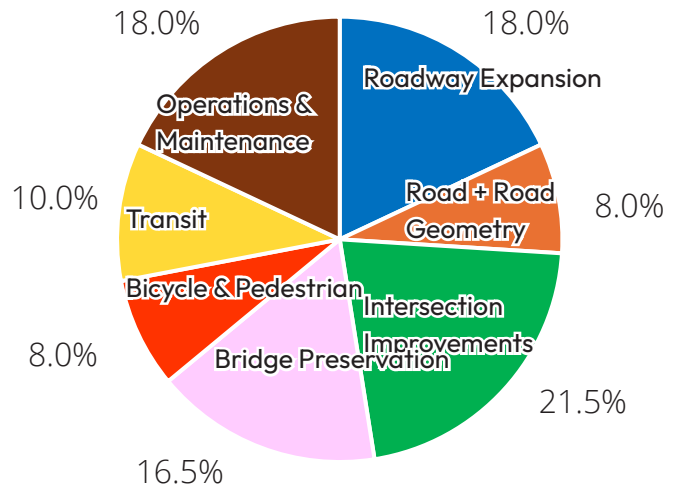
To develop the resource allocation goals for the CIRCLE 2050 MTP, the project team solicited feedback from a wide array of sources. Members of the public were asked their opinion about the level of importance of each the spending goals category through the statistically-valid survey and the Metroquest survey. For these surveys, the previous spending category of roadway preservation was divided into two categories: Road + Road Geometry, and Intersection Improvements. This change was recommended by the Resource Allocation Sub-committee to provide greater specificity to the types of projects being considered in these categories.

Following the feedback from the public, the Steering Committee was also provided an opportunity to review and comment on the project type goals of the spending categories. All of this information was brought back to the Resource Allocation Sub-Committee to help them arrive at new recommended resource category percentages.

Compared with the previous 2050 MTP, the Sub-committee recommended the following:

- Percentage funding increased: Road + Road Geometry, Intersection Improvements, Bicycle & Pedestrian
- Percentage funding unchanged: Transit, Operations and Maintenance
- Percentage funding decreased: Roadway Expansion, Bridge Preservation*

*Bridge Preservation tends to require more immediate action than the IMPO's funding program allows. The IMPO will be considering opportunities to support the region's existing bridges.



2050 CIRCLE MTP Resource Allocation

The recommended resource category percentages are shown in the figure at right. The Resource Allocation Sub-Committee signed off on these percentage recommendations. Following this, the recommended update of the resource allocation goals was presented to the IMPO's Transportation Policy Committee. The Committee supported the reallocated resource category percentages as recommended.

The resource allocation for the MTP notes a regional goal of 18% for operations and maintenance (O&M). While this number targets the MPO-directed funding to be allocated to O&M, local jurisdictions also dedicate a portion of their resources to O&M. In fact, recent reviews of LPA budgets indicate an average of 18% for maintaining local infrastructure. Continued provision for operations and maintenance funding will be essential to sustain the health of the transportation network through the life of the MTP.

REVENUE FORECAST

A key component of a metropolitan transportation plan is the revenue forecast. All reasonably available revenues are forecasted to the horizon year of the plan and used to create a fiscally constrained plan. In other words, available resources are determined and projects are included in the plan only if the project costs do not exceed the available resources. The fiscal constraint presents a realistic transportation plan for the region to use in its planning moving forward.

Revenue available for the IMPO region is considered within five categories: federal, state, IMPO, transit, and other funds. Projections consist of both near-term and long-term forecasts. Near-term forecasts are sourced from multiple documents describing funding within the above categories. These documents include the Indianapolis Region Transportation Improvement Plan (TIP), the Statewide Transportation Improvement Plan (STIP), state documentation of local spending, and the most recent budgets for the City of Indianapolis, IndyGo, and CIRT A. Long-term forecasts extrapolate the near-term forecasts at a 2.4% growth rate, an update from the 2022 analysis, which utilized the Federal Reserve's 2% target. This update has been made to reflect the higher inflation rates observed in recent years and to provide a more realistic growth rate.

The tables below provide a snapshot of all the transportation revenue forecasted for the three time periods of the plan. More information about the assumptions made in the development of the revenue estimates can be found in Appendix F.

Time Period	State	Federal- IMPO- Local	CIRT A	IndyGo
2024-2029	\$3.2 B	\$4.2 B	\$16.8 M	\$1.4 B
2030-2039	\$6.1 B	\$9.0 B	\$33.9 M	\$2.2 B
2040-2049	\$7.8 B	\$11.4 B	\$43.0 M	\$2.8 B
Total	\$17.1 B	\$24.7B	\$93.7M	\$6.4 B

Available Resources to Implementing Agencies in Central Indiana

Time Period	Available Revenue
2024-2029	\$386 M
2030-2039	\$758 M
2040-2049	\$961 M
Total	\$2,106 M
Already Committed	\$483 M
Available 2024-2029	-\$96 M

Forecasted Available Resources for Capacity Expansion

Roadway Priorities

FISCAL CONSTRAINT

In order to establish the amount of money available for roadway capacity projects, the IMPO applied the budget allocation amount of 18% for roadway capacity expansion projects to the total local revenue per period. Existing and Committed projects (i.e. those that are either under construction or already have committed funding) are deducted from the available amount in the first period (2024-2029). Proposed projects are sorted by score and the highest scoring projects are assigned to the first time period until its remaining projected funding is exhausted. Projects are then assigned to the second, followed by the third time period sequentially, until projected funding for both are exhausted. Projects that were not assigned to any of the three time periods are included in the MTP’s Illustrative List of Projects. In the case of this MTP, funding for the first time period (2024-2029) was already exhausted from existing and committed projects. Because of this, proposed projects were only assigned to periods 2 and 3 (2030-2039 and 2040-2049). There were several circumstances that led to the existing and committed projects comprising the entirety of the first funding period. First, the resource allocation goal for capacity expansion was decreased from 20% to 18%. However, previously committed projects were assumed to continue. Additionally, cost estimates were updated as part of the fiscal constraint development process. The increase in the cost of construction has led to higher estimated costs for all roadway capacity projects. As a result, fewer roadway capacity projects can be accommodated using available revenues.

There are no major transit or INDOT projects funded past 2030 that have been identified at this time. As a result, no additional transit or INDOT projects are accounted for within the financially constrained plan. Similarly, no future bicycle & pedestrian projects are identified beyond those funded within TIP.

PROJECT SCORING CRITERIA

Criteria for projects were developed by considering the goals, objectives, and key performance indicators developed within the MTP policy framework (documented in Chapter 4).

FUNCTIONAL CLASSIFICATION

The federal functional classification system (FCS) provides criteria to establish a hierarchy of roads from an interstate to a local road. Using the FHWA’s FCS guidance criteria, including, but not limited to, number of lanes, traffic volumes, and network role, projects were evaluated based on current or likely future FCS status and scored accordingly. Roads with higher classifications carry larger traffic loads and often have greater impact on regional transportation, and therefore receive higher scores. Those classified as local roads would not qualify for federal funding, but are sometimes included in the travel demand model in rural areas with fewer roads.

PUBLICLY VETTED

To prioritize projects that were already part of a jurisdiction’s public-approved plans, projects were given extra points if they had been included in a plan that had gone through a public feedback process and been approved by community leadership. These plans included comprehensive plans, thoroughfare plans, subarea strategic plans, and other similar plans.

SCORING CRITERIA	POSSIBLE POINTS
Functional Classification	10
Publicly Vetted	5
Resiliency Rank	5
Change in Congested Lane Miles	10
Change in Vehicle Hours of Delay	5
Proximity to Existing Regional Centers	10
Proximity to Emerging Regional Centers	10
Proximity to Freight Centers & Network	15
Opportunity to Improve Safety	15
On High Injury Network	5
Urbanized Area	10
Project Scoring Criteria	

RESILIENCY RANK

Ensuring that the network will be resilient going forward is an important long-term consideration for the MTP to address. Resiliency rankings for each project were developed developed using the same methodology used to assess community assets in the Regional Resiliency Snapshot. This resulted in a 9-box grid rubric comparing risk and criticality. Projects along roadways with highest risk and highest criticality scores received the most points. Environmental conditions affecting each project were considered as part of this criteria.

CHANGE IN VEHICLE HOURS OF DELAY

Projects were screened to see if they would reduce hours of vehicle delay. This is calculated by the travel demand model and reported by link for both the morning and afternoon peak traffic periods. This measures how much time in delay is experienced on a roadway or portion of it. The project that reduces the most hours of delay received the maximum points while the other projects are scored proportionately based on their impact on delay. Projects that add delay lose points.

CHANGE IN CONGESTED LANE MILES

Projects were also examined to determine their impact on congestion between time periods. This is part of the Congestion Management Process (CMP) for the IMPO. If a project in the travel demand model has a forecasted volume over capacity (V/C) ratio greater or equal to 0.80 in the AM or PM modeled time period, the link is considered congested. V/C is the volume of traffic compared to the determined capacity of the facility. Projects are scored based on which reduce congestion miles the most, then proportionately based on their impact. Projects that add congestion lose points.

PROXIMITY TO EXISTING REGIONAL CENTERS

As part of the 2050 MTP update, Existing Regional Activity Centers (RACs) were identified. These are major destinations where clusters of employment, residents, and/or visitors are located, and therefore generate a high amount of transportation trips. Proposed projects were scored based on their proximity to these Existing RACs, with the exception of Manufacturing, Distribution, and Logistics (MDL) centers, which were incorporated into their own score. Projects closest to Existing RACs received the most points, and those furthest away received no points. Because the projects being scored in the MTP are all capacity expansion projects, one exception was included. Any project that ran through an identified Main Street RAC received zero points because of the high likelihood for negative impacts of expanding a road facility through one of these areas.

PROXIMITY TO EMERGING REGIONAL CENTERS

Similar to Existing RACs, Emerging RACs were also identified. In order to be an Emerging RAC, an area must be close to meeting targets for an Existing RAC, have a minimum amount of vacant land available, and have shown a trend of growth in population and/or employment in recent years. Projects also received points based on their proximity to the Emerging RACs. As with Existing Regional Centers, any project that ran through an identified Main Street RAC received zero points.

PROXIMITY TO FREIGHT CENTERS & NETWORK

A Manufacturing, Distribution, Logistics (MDL) Center can significantly impact traffic as both people and goods are flowing in and out of them. Points were given based on the proximity of the project to both existing and emerging MDL centers. Points were also given based on whether a project is located on the Regional Freight Network, depending on which Tier of the network the project is located on.

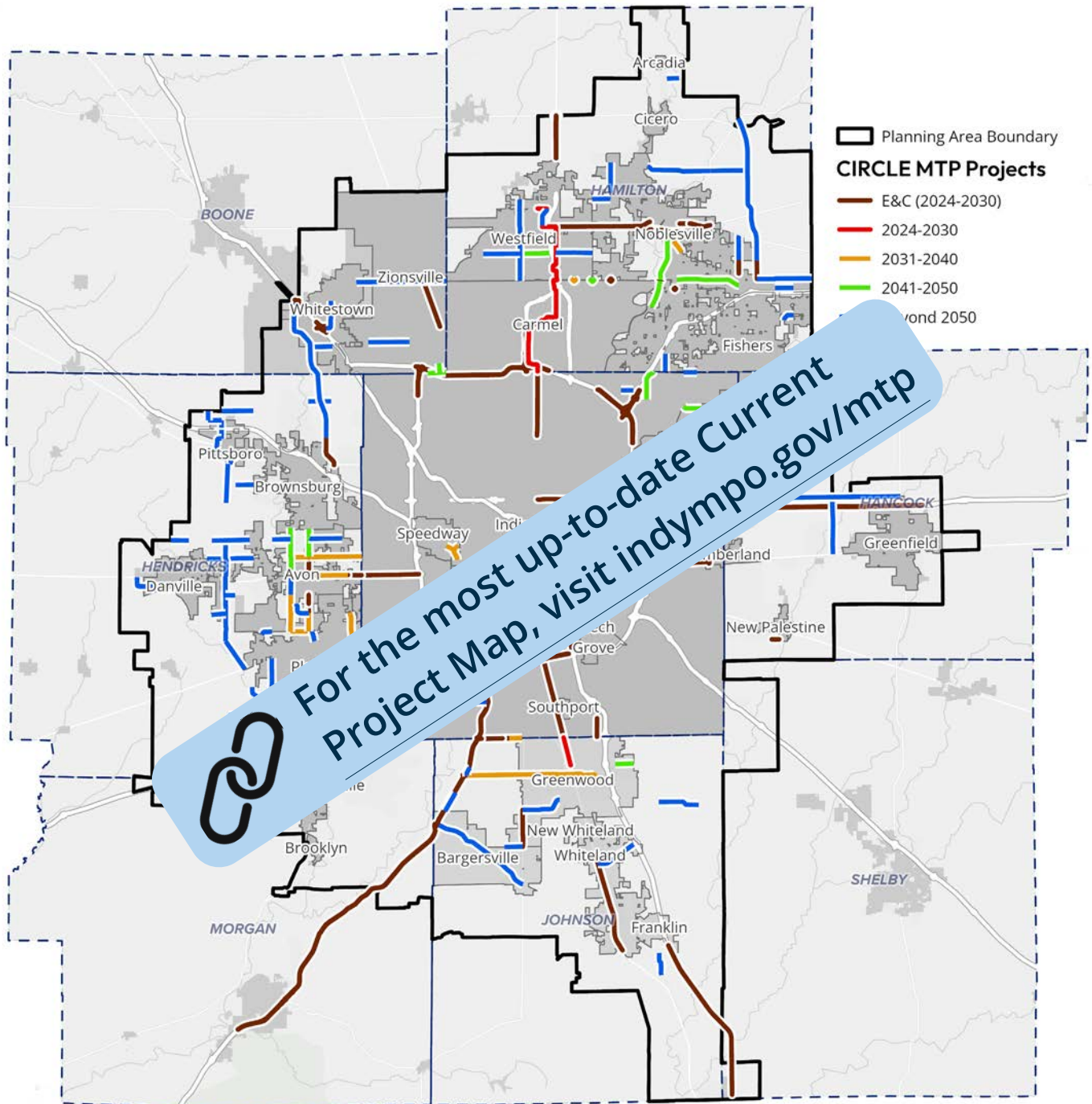
OPPORTUNITY TO IMPROVE SAFETY

Each project was analyzed regarding what, if any, proven safety countermeasures as identified by FHWA's Proven Safety Countermeasures initiative (PSCi) will be included in the project. Areas of safety considered include addressing curves on the road, intersections, speed, preventing cars from going off the road, signalization, geometric countermeasures, and operational adjustments. The IMPO also developed a High Injury Network (HIN) to identify the local corridors with the highest frequencies of crashes resulting in incapacitating injuries and fatalities within the MPA, enabling the IMPO and local planning agencies to prioritize streets with the highest number of severe crashes to make rapid progress towards regional safety goals. Projects along the High Injury Network were given additional points.

URBANIZED AREA

Projects that are within the Urbanized Area (UA) receive more points than those that are not. This boundary is defined by the U.S. Census Bureau and delineates urban versus rural development. If a project is located partially within the Urbanized Area, points are given based on the percentage of the project within the Urbanized Area boundary. Projects along the UA border are considered to be inside the UA.

2050 FISCALLY CONSTRAINED PROJECTS




CIRCLE 2050 MTP Fiscally Constrained Projects

The following project list includes capacity expansion projects submitted for inclusion in the CIRCLE MTP, as well as Existing and Committed projects. Project Fiscal Constraint information is explained after the project list.

MTP ID	LEAD AGENCY	DESCRIPTION	IMPROVEMENT	PERIOD	YEAR OF EXPENDITURE COST	
9004	IndyGo	Red Line BRT - Extension to Hamilton Co.	Transit New Route/Fixed Guideway	1	2024-2030	\$40,000,000
9005	IndyGo	Red Line BRT - Extension to Johnson Co.	Transit New Route/Fixed Guideway	1	2024-2030	\$2,965,650
2121	Hamilton County	146th St & Carey Rd	New/Modified Arterial Interchange	2	2031-2040	\$100,203,032
2501	Noblesville	Greenfield Ave from Allisonville Rd/10th St to SR 37	Widen from 2 lanes to 4 lanes	2	2031-2040	\$82,434,568
3310	McCordsville	Mt. Comfort Rd/CR 600 W from CR 750 N to CR 700 N	Widen from 2 lanes to 4 lanes	2	2031-2040	\$12,551,965
3312	McCordsville	Mt. Comfort Rd/CR 600 W from CR 600 N to Aurora Way	Widen from 2 lanes to 4 lanes	2	2031-2040	\$12,472,882
4005	INDOT (Hendricks)	US 36 from Avon Ave to Shiloh Crossing Dr	Widen from 4 lanes to 6 lanes	2	2031-2040	\$55,161,936
4006	INDOT (Hendricks)	I-70 from 0.76 mi W of SR 39 to SR 267	Widen from 4 lanes to 6 lanes	2	2031-2040	\$78,336,774
4105	Avon	CR 100 N (10th St.) from Raceway Rd to Avon Ave	Widen from 2 lanes to 4 lanes	2	2031-2040	\$66,144,748
4206	Avon	Avon Ave from CR 300 S to SR 37	Widen from 2 lanes to 4 lanes	2	2031-2040	\$45,137,451
4212	Avon	Dan Jones Rd from CR 300 S to SR 37	Widen from 2 lanes to 4 lanes	2	2031-2040	\$21,118,174
4504	Plainfield	Plainfield Rd from SR 37 to SR 135	Widen from 2 lanes to 4 lanes	2	2031-2040	\$14,975,484
4509	Plainfield	Plainfield Rd from I-70 to SR 135	Widen from 4 lanes to 6 lanes	2	2031-2040	\$24,109,585
5110	Johnson County	Smith Valley Rd from Mullinix Rd to Morgantown Rd	Widen from 2 lanes to 4 lanes	2	2031-2040	\$34,143,214
5111	Johnson County	Smith Valley Rd from Morgantown Rd to Peterman Rd	Widen from 2 lanes to 4 lanes	2	2031-2040	\$29,839,914
5112	Johnson County	Smith Valley Rd from Peterman Rd to Restin Rd	Widen from 2 lanes to 4 lanes	2	2031-2040	\$31,527,918
5203	Greenwood	Smith Valley Rd from SR 135 to Grassy Creek Ln	Widen from 2 lanes to 4 lanes	2	2031-2040	\$105,416,966
6172	Indianapolis DPW	16th St/Crawfordsville Rd/Holt Rd reconfiguration/roundabout	New Road 4 lanes	2	2031-2040	\$45,159,662
6173	Indianapolis DPW	County Line Rd from Wood Creek Dr to SR 135	Widen from 2 lanes to 4 lanes	2	2031-2040	\$30,606,179

 For the most up-to-date Current Project Map, visit indympo.gov/mtp


MTP ID	LEAD AGENCY	DESCRIPTION	IMPROVEMENT	PERIOD	YEAR OF EXPENDITURE COST	
1203	Zionsville	96th St from Zionsville Rd to Hamilton Co. line	Widen from 2 lanes to 4 lanes	3	2041-2050	\$27,266,285
1208	Zionsville	Complete Bennett Pkwy from 96th St (east of Hoosier Village Dr) to 106th St	New Road 2 lanes	3	2041-2050	\$30,835,881
2108	Hamilton County	146th St from SR 37 to Boden Rd	Widen from 4 lanes to 6 lanes	3	2041-2050	\$83,105,050
2120	Hamilton County	146th St & Gray Rd	New/Modified Arterial Interchange	3	2041-2050	\$155,697,652
2306	Fishers	Allisonville Rd from 131st St to 146th St	Widen from 2 lanes to 4 lanes	3	2041-2050	\$31,488,027
2402	Westfield	161st St from Farr Hills Dr to Spring Mill Rd	Widen from 2 lanes to 4 lanes	3	2041-2050	\$36,526,441
2502	Noblesville	Allisonville Rd from 146th St to Greenfield Ave	Widen from 2 lanes to 4 lanes	3	2041-2050	\$150,001,697
3308	McCordsville	Mt. Comfort Rd/CR 600 W from CR 900 N to CR 800 N	Widen from 2 lanes to 4 lanes	3	2041-2050	\$35,836,714
4207	Avon	Avon Ave from Northfield Dr to US 36	Widen from 2 lanes to 4 lanes	3	2041-2050	\$83,104,063
4210	Avon	Dan Jones from CR 100 N to Northfield Dr.	Widen from 2 lanes to 4 lanes	3	2041-2050	\$39,604,485
5207	Greenwood	Main St from Graham Rd to Combs Rd	Widen from 2 lanes to 4 lanes	3	2041-2050	\$12,970,010
5208	Greenwood	Main St from Combs Rd to Five Points Rd	Widen from 2 lanes to 4 lanes	3	2041-2050	\$21,016,676
6102	Indianapolis DPW	79th St from Fall Creek Pkwy to Sunnyside Rd	Widen from 2 lanes to 4 lanes	3	2041-2050	\$41,499,100
6162	Indianapolis DPW	New road from Moore Rd to Moore Rd	New Road 4 lanes	3	2041-2050	\$139,850,897
6170	Indianapolis DPW	Hughes Rd from 10th St to 11th St	Widen from 2 lanes to 4 lanes	3	2041-2050	\$61,447,271
1105	Boone County	Whitestown limits to Hamilton Co. Line	Widen from 2 lanes to 4 lanes	Illustrative	Beyond 2050	\$147,955,098
1107	Hendricks County	Ronald Reagan Pkwy from CR 750 N to I-65	New Road 4 lanes	Illustrative	Beyond 2050	\$272,945,554
1210	Zionsville	Oak St from Ford Rd to Whitestown Limits (just east of Stonegate Dr)	Widen from 2 lanes to 4 lanes	Illustrative	Beyond 2050	\$56,293,690
1301	Whitestown	New Road from CR 550 S & Perry Worth Rd to CR 575 E & CR 500 S	New Road 4 lanes	Illustrative	Beyond 2050	\$41,466,223
1302	Whitestown	Whitestown Pkwy from CR 475 E to Indianapolis Rd	Widen from 2 lanes to 4 lanes	Illustrative	Beyond 2050	\$44,605,984
1303	Whitestown	CR 575 E from CR 500 S to Albert S White Dr	Widen from 2 lanes to 4 lanes	Illustrative	Beyond 2050	\$75,395,374
2103	Hamilton County	206th St from SR 19 to Cumberland Rd	New Road 4 lanes	Illustrative	Beyond 2050	\$48,370,410
2105	Hamilton County	206th St from Hague & Carrigan Rd to SR 19	New Road 4 lanes	Illustrative	Beyond 2050	\$52,792,378
2106	Hamilton County	Olio Rd from 146th St to SR 38	Widen from 2 lanes to 4 lanes	Illustrative	Beyond 2050	\$48,302,637

 For the most up-to-date Current Project Map, visit indympo.gov/mtp

MTP ID	LEAD AGENCY	DESCRIPTION	IMPROVEMENT	PERIOD	YEAR OF EXPENDITURE COST	
2107	Hamilton County	Olio Rd from SR 38 to SR 32	New Road 4 lanes	Illustrative	Beyond 2050	\$70,389,837
2113	Hamilton County	206th St from Cumberland Rd to SR 37	Widen from 2 lanes to 4 lanes	Illustrative	Beyond 2050	\$63,715,789
2114	Hamilton County	206th St from SR 37 to Olio Rd	Widen from 2 lanes to 4 lanes	Illustrative	Beyond 2050	\$56,663,655
2115	Hamilton County	256th St from SR 19 to Mt Pleasant Rd	New Road 4 lanes	Illustrative	Beyond 2050	\$58,677,376
2116	Hamilton County	Olio Rd from SR 32 to 206th St	New Road 4 lanes	Illustrative	Beyond 2050	\$122,812,348
2117	Hamilton County	Olio Rd from 206th St to Strawtown Ave	New Road 4 lanes	Illustrative	Beyond 2050	\$80,072,139
2118	Hamilton County	Olio Rd from Strawtown Ave to SR 37/213	New Road 4 lanes	Illustrative	Beyond 2050	\$121,784,939
2305	Fishers	96th St from Cumberland Rd to Mollenkopf Rd	Widen from 2 lanes to 4 lanes	Illustrative	Beyond 2050	\$18,304,317
2308	Fishers	Lantern Rd from 96th St to 106th St	Widen from 2 lanes to 4 lanes	Illustrative	Beyond 2050	\$83,105,050
2309	Fishers	126th St from Cyntheanne Rd to Southeastern Pkwy & Florida Rd	New Road 4 lanes	Illustrative	Beyond 2050	\$46,981,353
2403	Westfield	161st St from Union St to Gray Rd	Widen from 2 lanes to 4 lanes	Illustrative	Beyond 2050	\$55,833,508
2405	Westfield	Spring Mill Rd from 146th St to SR 32	Widen from 2 lanes to 4 lanes	Illustrative	Beyond 2050	\$85,307,814
2410	Westfield	161st St from Gray Rd to Towne Rd	Widen from 2 lanes to 4 lanes	Illustrative	Beyond 2050	\$61,085,623
2433	Westfield	Spring Mill Rd from 146th St to SR 32	Widen from 2 lanes to 3 lanes	Illustrative	Beyond 2050	\$24,583,840
2441	Westfield	161st St from Gray Rd to Tournament Trail	Widen from 2 lanes to 4 lanes	Illustrative	Beyond 2050	\$17,622,117
2503	Noblesville	146th St from Little Chicago Rd to Mocktown Rd	Widen from 2 lanes to 4 lanes	Illustrative	Beyond 2050	\$66,822,674
2504	Noblesville	Boden Rd from 156th St to SR 38	Widen from 2 lanes to 4 lanes	Illustrative	Beyond 2050	\$81,831,063
2505	Noblesville	Little Chicago Rd from SR 38 to Carrigan Rd	Widen from 2 lanes to 4 lanes	Illustrative	Beyond 2050	\$112,702,645
2511	Noblesville	146th St from Olio Rd to Atlantic Rd	Widen from 2 lanes to 4 lanes	Illustrative	Beyond 2050	\$144,149,576
2512	Noblesville	141st St from Prairie Baptist Rd to Cyntheanne Rd	New Road 2 lanes	Illustrative	Beyond 2050	\$36,970,281
3107	Hancock County	CR 300 N from CR 500 W to CR 400 W	Widen from 2 lanes to 4 lanes	Illustrative	Beyond 2050	\$48,967,654
3110	Hancock County	CR 200 W from CR 300 N to US 40	Widen from 2 lanes to 4 lanes	Illustrative	Beyond 2050	\$18,579,974
3113	Hancock County	CR 300 N from CR 400 W to SR 9	Widen from 2 lanes to 4 lanes	Illustrative	Beyond 2050	\$188,627,529

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MTP ID	LEAD AGENCY	DESCRIPTION	IMPROVEMENT	PERIOD	YEAR OF EXPENDITURE COST	
3306	McCordsville	CR 800 N & CR 600 W to CR 500 W (1,300' south of CR 900 N)	New Road 2 lanes	Illustrative	Beyond 2050	\$36,122,425
3307	McCordsville	Mt. Comfort Rd/CR 600 W from CR 1000 N to CR 900 N	Widen from 2 lanes to 4 lanes	Illustrative	Beyond 2050	\$39,513,475
3309	McCordsville	Mt. Comfort Rd/CR 600 W from CR 800 N to CR 750 N	Widen from 2 lanes to 4 lanes	Illustrative	Beyond 2050	\$24,544,793
3311	McCordsville	Mt. Comfort Rd/CR 600 W from CR 700 N to CR 600 N	Widen from 2 lanes to 4 lanes	Illustrative	Beyond 2050	\$41,536,530
3313	McCordsville	Mt. Comfort Rd/CR 600 W from Aurora Way to CR 500 N	Widen from 2 lanes to 4 lanes	Illustrative	Beyond 2050	\$18,442,308
4107	Hendricks County	New road from Miles Rd & US 40 to CR 300 E & CR 350 S	New Road 2 lanes	Illustrative	Beyond 2050	\$47,679,991
4108	Hendricks County	CR 100 N from CR 200 E to CR 500 E	Widen from 2 lanes to 4 lanes	Illustrative	Beyond 2050	\$89,450,327
4109	Hendricks County	CR 100 S from CR 300 E to CR 400 E	New Road 2 lanes	Illustrative	Beyond 2050	\$9,295,996
4111	Hendricks County	CR 200 N from CR 225 E to CR 475 E	New Road 2 lanes	Illustrative	Beyond 2050	\$39,937,438
4112	Hendricks County	CR 200 N from CR 600 E to Avon Ave	New Road 2 lanes	Illustrative	Beyond 2050	\$27,542,777
4113	Hendricks County	CR 200 S from CR 225 E to CR 300 E	New Road 2 lanes	Illustrative	Beyond 2050	\$16,389,227
4114	Hendricks County	CR 500 N from CR 500 E to CR 400 E	New Road 2 lanes	Illustrative	Beyond 2050	\$18,649,526
4115	Hendricks County	CR 750 S from CR 500 E to CR 400 E	New Road 2 lanes	Illustrative	Beyond 2050	\$34,915,463
4116	Hendricks County	CR 500 N from CR 500 E to CR 925 E	New Road 2 lanes	Illustrative	Beyond 2050	\$25,940,019
4117	Hendricks County	CR 500 N from CR 500 E to CR 350 S to CR 200 N	Widen from 2 lanes to 4 lanes	Illustrative	Beyond 2050	\$85,874,944
4118	Hendricks County	Hendricks County Rd from CR 525 E to CR 925 E	Widen from 2 lanes to 4 lanes	Illustrative	Beyond 2050	\$93,477,770
4120	Hendricks County	CR 300 E from CR 400 N to Pittsboro (CR 375 E)	New Road 2 lanes	Illustrative	Beyond 2050	\$53,458,139
4121	Hendricks County	CR 900 N from CR 275 E to CR 500 E	New Road 2 lanes	Illustrative	Beyond 2050	\$33,814,081
4123	Hendricks County	CR 200 N from Washington St to CR 100 E	New Road 2 lanes	Illustrative	Beyond 2050	\$17,819,380
4202	Avon	CR 200 N (21st St) from Dan Jones Rd to Ronald Reagan Pkwy	Widen from 2 lanes to 4 lanes	Illustrative	Beyond 2050	\$67,221,802
4205	Avon	Avon Ave from CR 100 S to US 36	Widen from 2 lanes to 4 lanes	Illustrative	Beyond 2050	\$39,910,808
4211	Avon	New Road from Bradford Rd & Dan Jones Rd/CR 800 E to Oriole Way/CR 150 S & Turner Trace Pl	New Road 2 lanes	Illustrative	Beyond 2050	\$40,063,069

 For the most up-to-date Current Project Map, visit indympo.gov/mtp

MTP ID	LEAD AGENCY	DESCRIPTION	IMPROVEMENT	PERIOD	YEAR OF EXPENDITURE COST	
4401	Danville	Extend Lincoln St from Clear Creek Dr to US 36 & CR 200 W and from Tennessee St to US 36 & Main St	New Road 2 lanes	Illustrative	Beyond 2050	\$93,198,315
4505	Plainfield	Perimeter Pkwy SW/CR 600 S from Center St to Moon Rd	Widen from 2 lanes to 4 lanes	Illustrative	Beyond 2050	\$33,066,128
4506	Plainfield	Perimeter Pkwy NW/Gibbs Rd from Vestal Rd to Saratoga Pkwy	Widen from 2 lanes to 4 lanes	Illustrative	Beyond 2050	\$21,674,218
4507	Plainfield	Perimeter Pkwy SW/Moon Rd from US 40 to Hadley Rd	Widen from 2 lanes to 4 lanes	Illustrative	Beyond 2050	\$25,759,196
4510	Plainfield	New Road from Miles Rd & CR 600S to CR 525 E & CR 700 S	New Road 2 lanes	Illustrative	Beyond 2050	\$35,137,384
4511	Plainfield	New Road from US 40/Main St & Quaker Blvd to Township Line Rd/CR 300 S & Bluewood Way	New Road 4 lanes	Illustrative	Beyond 2050	\$77,261,148
4512	Plainfield	New Road 1A from Quaker Blvd & CR 750 S to 1 mile south, then 1.5 miles east to SR 1025 E	New Road 4 lanes	Illustrative	Beyond 2050	\$95,959,990
4513	Plainfield	New Road 1B from 2,600 feet south of SR 800 S & SR 1025 E, northeast to CR 800 S (200 feet east of CR 1050 E), with a midpoint connector to Heartland Blvd & SR 67	New Road 4 lanes	Illustrative	Beyond 2050	\$24,978,365
4514	Plainfield	New Road 1C from CR 825 E & Hendricks County Rd/CR 1000 N, northeast to a proposed intersection for New Road 1D	New Road 4 lanes	Illustrative	Beyond 2050	\$35,441,497
4601	Pittsboro	Jeff Gordon Blvd from US 136 St/CR 750 E to CR 375 E	Widen from 2 lanes to 4 lanes	Illustrative	Beyond 2050	\$13,200,149
4602	Pittsboro	Jeff Gordon Blvd from CR 750 E to CR 375 E	Widen from 2 lanes to 4 lanes	Illustrative	Beyond 2050	\$10,635,737
4603	Pittsboro	New Road #1 from US 136/Main St to CR 375 E	Widen from 2 lanes to 4 lanes	Illustrative	Beyond 2050	\$11,433,006
4604	Pittsboro	New Road #4 from 2,600 feet south of CR 900 N & Jeff Gordon Blvd to the west 2,300 feet	New Road 2 lanes	Illustrative	Beyond 2050	\$8,153,517
4605	Pittsboro	New Road #1 from US 136 (E of Brooks Way) to CR 375 E (E of CR 250 E)	New Road 2 lanes	Illustrative	Beyond 2050	\$16,159,087
4606	Pittsboro	New Road #2 from center of New Road #1 to CR 375 E (2,300 ft east of CR 250 E)	New Road 2 lanes	Illustrative	Beyond 2050	\$8,112,421
4607	Pittsboro	New Road #3 from US 136 & Mitchell Ave to CR 651 N & Maple St	New Road 2 lanes	Illustrative	Beyond 2050	\$18,485,141
4608	Pittsboro	New Road #5 from western end of New Road #4 to the west 1,600 feet	New Road 2 lanes	Illustrative	Beyond 2050	\$6,460,347
4609	Pittsboro	New Road #6 from 3,900 feet west of CR 900 N & Jeff Gordon Blvd, south 2,600 feet to New Road #5	New Road 2 lanes	Illustrative	Beyond 2050	\$10,323,404
5103	Johnson County	Clark School Rd from Franklin Rd/CR 440 E to east of Harvey Road/CR 600 E	New Road 2 lanes	Illustrative	Beyond 2050	\$36,090,819

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MTP ID	LEAD AGENCY	DESCRIPTION	IMPROVEMENT	PERIOD	YEAR OF EXPENDITURE COST	
5104	Johnson County	CR 144 from I-69 to Whiteland Rd	Widen from 2 lanes to 4 lanes	Illustrative	Beyond 2050	\$113,590,326
5109	Johnson County	CR 450 E from Greensburg Rd, south to Old US 31	New Road 2 lanes	Illustrative	Beyond 2050	\$24,213,973
5113	Johnson County	Whiteland Rd from Saddle Club Rd to SR 135	Widen from 2 lanes to 4 lanes	Illustrative	Beyond 2050	\$31,471,589
5114	Johnson County	CR 144 from Whiteland Rd to SR 135	Widen from 2 lanes to 3 lanes	Illustrative	Beyond 2050	\$99,001,120
5115	Johnson County	Frontage Rd from Stones Crossing Rd to Olive Branch Rd & Mullinix Rd	New Road 2 lanes	Illustrative	Beyond 2050	\$39,559,352
5116	Johnson County	Mullinix Rd from Smith Valley Rd to Wakefield Rd/Bluff Rd	New Road 2 lanes	Illustrative	Beyond 2050	\$40,816,900
5205	Greenwood	Stones Crossing Rd from Honey Creek Rd to SR 135	Widen from 2 lanes to 4 lanes	Illustrative	Beyond 2050	\$31,685,290
5206	Greenwood	Stones Crossing Rd/Worthsville Rd from Averitt Rd to Honey Creek Rd	Widen from 2 lanes to 4 lanes	Illustrative	Beyond 2050	\$17,720,748
5301	Whiteland	New Road from Hand Blvd & SR 300 E	New Road 2 lanes	Illustrative	Beyond 2050	\$150,938,694
6121	Indianapolis DPW	SR 140 from I-69	Widen from 2 lanes to 4 lanes	Illustrative	Beyond 2050	\$99,091,532
6136	Indianapolis DPW	New Road from Mooresville Rd to	New Road 4 lanes	Illustrative	Beyond 2050	\$124,727,438
6168	Indianapolis DPW	Henry St from Kentucky Ave to Drover St (across White River)	New Road 2 lanes	Illustrative	Beyond 2050	\$100,332,642
6171	Indianapolis DPW	86th St from Center Run Dr to Masters Rd/Craig St	New Road 2 lanes	Illustrative	Beyond 2050	\$21,920,796


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Existing + Committed Projects | INDOT

MTP ID	LEAD AGENCY	DESCRIPTION	IMPROVEMENT	TIME PERIOD	2050 COST
1002	INDOT (Boone)	I-65/SR 267 Interchange Modification & New Interchange at CR 550 E	Interchange Modification & New Interchange	E&C (2024-2030)	\$33,864,611
1003	INDOT (Boone)	US 421 ATL from 2.91 miles north of the north leg of I-465 to 2.86 miles south of SR 32	Added Auxiliary / Turn Lanes (2.8 miles)	E&C (2024-2030)	\$27,650,000
2019	INDOT (Hamilton)	US 31 & 236th St Interchange	New Interchange Construction	E&C (2024-2030)	\$22,589,885
2020	INDOT (Hamilton)	SR 32 from 19th St to Presley Dr	Widen from 2 lanes to 4 lanes	E&C (2024-2030)	\$2,819,427
2021	INDOT (Hamilton)	SR 32 from East St to Mensa Rd	Widen from 2 lanes to 4 lanes	E&C (2024-2030)	\$17,418,000
2022	INDOT (Hamilton)	SR 32 ATL between Cicero Creek and SR-38 W Junction	Widen from 2 lanes to 4 lanes	E&C (2024-2030)	\$3,531,594
2023	INDOT (Hamilton)	US 31 Access Control from SR 38 to 286th St	Access Control Interchange	E&C (2024-2030)	\$53,570,388
2513	INDOT/Noblesville (STBG-3)	Boden Rd from Beauty Berry Ln to 156th St	Widen from 4 lanes to 6 lanes	E&C (2024-2030)	\$9,512,500
2514	INDOT/Noblesville (STBG-3)	Olio Rd from 146th St to 156th St	Widen from 4 lanes to 6 lanes	E&C (2024-2030)	\$14,289,211
3002	INDOT (Hancock)	I-70 from 1.0 mile west of Comfort Rd to SR 9	Widen from 4 lanes to 6 lanes	E&C (2024-2030)	\$168,099,808
4002	INDOT (Hendricks)	US 70 from 100 S to CR 100 E	Widen from 4 lanes to 6 lanes	E&C (2024-2030)	\$10,676,697
4007	INDOT (Hendricks)	US 70 from 100 S to CR 100 E	Widen from 5 lanes to 6 lanes	E&C (2024-2030)	\$27,037,500
4201	INDOT (STBG3)	SR 100 from 100 S to CR 100 E	Widen from 2 lanes to 4 lanes	E&C (2024-2030)	\$11,330,395
5003	INDOT (Johnson)	SR 135 (Meridian St) from Stones Crossing to Whiteland Rd	Widen from 2 lanes to 5 lanes	E&C (2024-2030)	\$35,674,053
5004	INDOT (Johnson)	I-69 Section 6: SR 39 to I-465 + ATL on I-465	New Road	E&C (2024-2030)	\$2,033,149,334
5008	INDOT (Johnson)	US 31 from S Main St to Israel Ln	Widen from 4 lanes to 5 lanes	E&C (2024-2030)	\$64,828,453
5011	INDOT (Johnson)	I-65 from 0.54 miles N of SR 252 to 0.96 miles S of SR 44	Widen from 4 to 6 lanes	E&C (2024-2030)	\$46,917,544
6005	INDOT (Marion)	I-69/I-465 IM & ATL on I-69 from 2,000 ft south of 75th St to 86th St (Clear Path)	Added Travel Lanes & Interchange Modification	E&C (2024-2030)	\$767,375,681
6036	INDOT (Marion)	I-65 Safety & Efficiency Project (from I-465 to I-70 SE side)	Widen from 6 lanes to 8 lanes	E&C (2024-2030)	\$121,920,604
6039	INDOT (Marion)	North Split Interchange Modification	Interchange Modification Multi-Level	E&C (2024-2030)	\$408,677,725
6042	INDOT (Marion)	US 36 from Raceway Rd to I-465	Widen from 4 lanes to 6 lanes	E&C (2024-2030)	\$22,615,967


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MTP ID	LEAD AGENCY	DESCRIPTION	IMPROVEMENT	TIME PERIOD	2050 COST
6043	INDOT (Marion)	I-465 NW Added Travel Lanes from W 86th St to College Ave.	Added Travel Lanes & Interchange Modification	E&C (2024-2030)	\$301,825,000
6045	INDOT (Marion)	I-465 at US 36/SR 67/ Pendleton Pike (Exit 40)			\$9,281,709
6046	INDOT (Marion)	I-465 at US 36/SR 67/ Pendleton Pike (Exit 40)		E&C (2024-2030)	\$31,400,000
6047	INDOT (Marion)	I-465 at US 36/SR 67/ Pendleton Pike (Exit 40) Interchange modifications at W 106th Street & W 116th Street	Added Travel Lanes & Interchange Modification	E&C (2024-2030)	\$81,483,256

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Existing + Committed Projects | IndyGo

MTP ID	LEAD AGENCY	DESCRIPTION	IMPROVEMENT	TIME PERIOD	2050 COST
9003	IndyGo	Red Line BRT - Extensions to Marion Co. Line	Transit Enhancement Capital Projects		\$148,295,745
9006	IndyGo	Blue Line BRT			\$371,512,686
9007	IndyGo	Blue Line BRT		E&C (2024-2030)	\$182,770,759
9008	IndyGo	Blue Line BRT	Transit Holistic Network Changes	2024-2030	\$28,000,000

 For the most up-to-date Current Project Map, visit indympo.gov/mtp

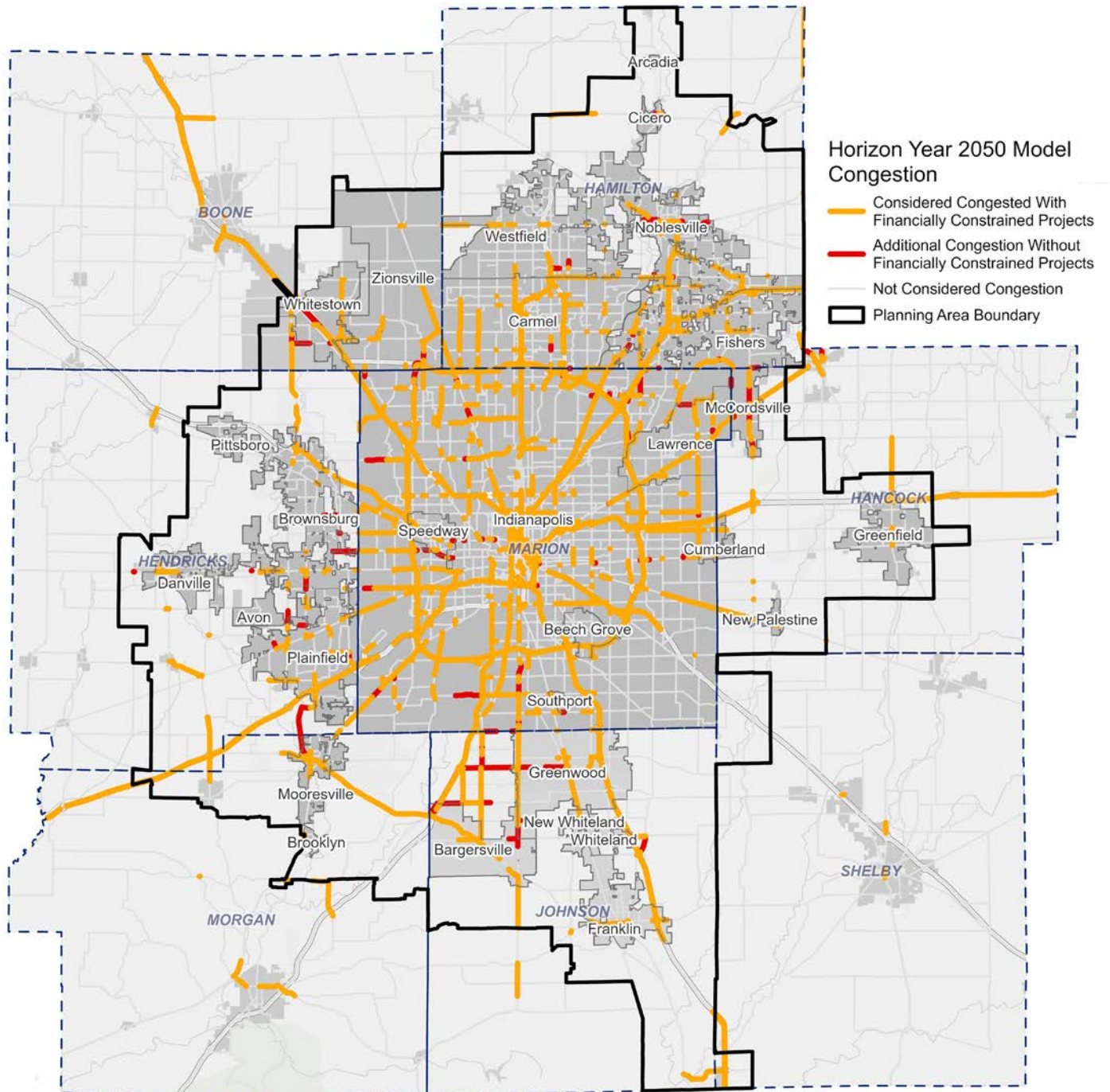
Existing + Committed Projects | Local Jurisdictions

MTP ID	LEAD AGENCY	DESCRIPTION	IMPROVEMENT	TIME PERIOD	2050 COST
2018	Fishers	141st St & SR 37 Interchange	New Interchange Construction	E&C (2024-2030)	\$38,950,791
2119	Hamilton County	146th St & Hazel Dell Parkway	New/Modified Arterial Interchange	E&C (2024-2030)	\$42,646,000
2122	Hamilton County	146th St & Allisonville Rd Interchange	Grade Separated Interchange	E&C (2024-2030)	\$42,557,000
2445	Westfield	SR 32 from Poplar to East St.	Widen from 2 lanes to 4 lanes	E&C (2024-2030)	\$15,000,000
2508	Noblesville	Pleasant St from 10th St to River Rd	Widen from 2 to 4 lanes; New Road - 2 lanes	E&C (2024-2030)	\$55,113,445
2509	Noblesville	Pleasant St from 10th St to 19th St	Widen from 2 lanes to 4 lanes	E&C (2024-2030)	\$17,820,000
2510	Noblesville	Pleasant St from River Rd to SR 32/Hague Rd intersection	New Road 4 lanes	E&C (2024-2030)	\$28,189,250
3102	Hancock County	600 W from 400 N to 550 N	Widen from 2 lanes to 4 lanes	E&C (2024-2030)	\$24,603,038
3106	Hancock County	CR 300 N from CR 600 W to CR 700 W	Widen from 2 lanes to 4 lanes	E&C (2024-2030)	\$9,580,380
3112	Hancock County	Stinemyer Rd from CR 600 W to CR 700 W	New Road	E&C (2024-2030)	\$3,441,553
4122	Hendricks County	CR 150 S from CR 100 W to CR 100 E	New Road 4 lanes	E&C (2024-2030)	\$68,900,067
4208	Avon	CR 150 S from CR 100 W to CR 100 E	Widen from 2 lanes to 4 lanes	E&C (2024-2030)	\$9,293,250
4209	Avon	CR 150 S from US 36 to CR 100 N	Widen from 2 lanes to 4 lanes	E&C (2024-2030)	\$13,352,356
6116	Indianapolis DPW	County Line Rd from I-69 to Depot Dr	Widen from 2 lanes to 4 lanes	E&C (2024-2030)	\$49,590,000
6160	Indianapolis DPW	County Line Rd from Depot Dr to Wood Creek Dr	Widen from 2 lanes to 4 lanes	E&C (2024-2030)	\$30,260,000
6164	Indianapolis DPW	Henry St from Harding St to White River Pkwy W Dr	New Road 2 lanes	E&C (2024-2030)	\$7,770,000
6165	Indianapolis DPW	Emerson Ave from Co Line Rd to Stop 11 Rd	Widen from 3 lanes to 5 lanes	E&C (2024-2030)	\$14,903,875

 For the most up-to-date Current Project Map, visit indympo.gov/mtp

FISCALLY CONSTRAINED MODEL CONGESTION

To measure congestion, the IMPO utilizes data from the travel demand model to calculate the ratio of volume to capacity. When the ratio value is 0.80 or more during the modeled time period, the link is considered congested. Following the development of the 2050 fiscally constrained network, the projects funded through 2050 were included in the travel demand model. The map below compares the level of congestion in the region when all financially constrained projects are completed to the level of congestion when no financially constrained projects are completed. Multiple municipalities will experience additional congestion if the fiscally constrained network is not completed including Whitestown, McCordsville, Speedway, Noblesville, Greenwood, and Bargersville.



Transit Priorities


The IMPO assisted in the development of Indy Connect, a transit initiative that developed and refined regional transit opportunities. One aspect of this plan included the implementation of Bus Rapid Transit (BRT) which operates in dedicated lanes and has raised station platforms that are level with the bus for easily entering/exiting the vehicle. Three BRT routes were identified: the Red Line, Blue Line, and Purple Line. Phase I of the Red Line has already been constructed and is now in service. Red Line Phase II and III, which extends the Red Line service into Hamilton County to the north and Johnson County to the south, and the Blue and Purple Lines are on the Existing and Committed List for time period one (2024-2030).

Project List Fiscal Constraint

The overall project list is considered to be fiscally constrained, as the estimated project costs/spending do not exceed available revenue.

Each of the projects is placed into a designated time period (2024-2030, 2031-2040, and 2041-2050). The recommended project list reflects the priorities of the region. Those projects that are not listed in a time period are considered the needs list, or the Illustrative List, aka Time Period 2050+. Projects on the Illustrative List would require an amendment to be placed into a designated time period in order to receive federal funding.

TIME PERIOD	2024-2030	2031-2040	2041-2050	TOTAL
State Revenues	\$5.2 B	\$10.9 B	\$13.9 B	\$30.1 B
State Spending	\$4.3 B	\$0.1 B	\$0.0 B	\$4.4 B
Fiscally Constrained?	✓	✓		✗
Total Local Revenues	\$2.1 B	\$0.0 B	\$0.0 B	\$2.1 B
Local Spending	\$0.0 B	\$0.0 B	\$0.0 B	\$0.0 B
Fiscally Constrained?	✓	✓	✓	✓
IndyGo Revenues	\$0.0 B	\$2.3 B	\$2.9 B	\$5.2 B
IndyGo Spending	\$0.8 B	\$0.0 B	\$0.0 B	\$0.8 B
Fiscally Constrained?	✓	✓	✓	✓

 For the most up-to-date Current Project Map, visit indympo.gov/mtp

Source: IMPO. All figures are rounded and in billions.

Bike and Pedestrian Priorities

The Indianapolis MPO does not include projects that do not significantly impact the capacity of the transportation network in its MTP. However, through the IMPO’s budget allocation process and the adoption of supportive plans, the bicycle and pedestrian priorities of Central Indiana are well-represented. The IMPO’s Complete Streets policy reinforces the region’s commitment to bicycle and pedestrian planning and projects, and the Regional Active Transportation Plan identifies and prioritizes network gaps.

Red Flag Investigations

A Red Flag Investigation (RFI) is a quantitative analysis of infrastructure, water, hazardous materials, historical features, and other data within a half-mile of a proposed transportation project. The IMPO has created a standard procedure for developing a RFI that is based on Indiana Map and other readily available datasets. The IMPO has made available an interactive map and downloadable GIS file of the data used in developing RFIs for LPAs to see what environmental features or issues may be near a potential project.

RFIs are created using an interactive map maintained by IMPO containing the following information:

- HazMat
- Infrastructure
- Historic Resources
- Water Resources
- Mining & Minerals

While most LPAs include a full RFI in the environmental documentation for a project, the IMPO process may help LPAs better understand what environmental features may impact a proposed project and thus lead to better scope and cost estimating development at the application stage. As such, upon request, the IMPO can prepare a simplified RFI report for LPAs to utilize in the application process. The IMPO recommends LPAs desiring an RFI report make a request to IMPO staff as early in the application development as possible.

Consulting with Environmental Resource Agencies

In accordance with federal requirements outlined in 23 CFR 450.324(f)(10), the IMPO consulted with several environmental resource agencies throughout CIRCLE 2050 MTP development, including the following:

- IUPUI Transportation and Autonomous Systems Institute (TASI)
- Hoosier Environmental Council
- Indianapolis Office of Sustainability

In addition to the above groups, the following groups were invited to review the final MTP document:

- Purdue Climate Change Research Center
- U.S. Environmental Protection Agency (EPA)
- Indiana Department of Environmental Management (IDEM)
- Indiana State Historic Preservation Office (SHPO)
- Indiana Department of Natural Resources (DNR)

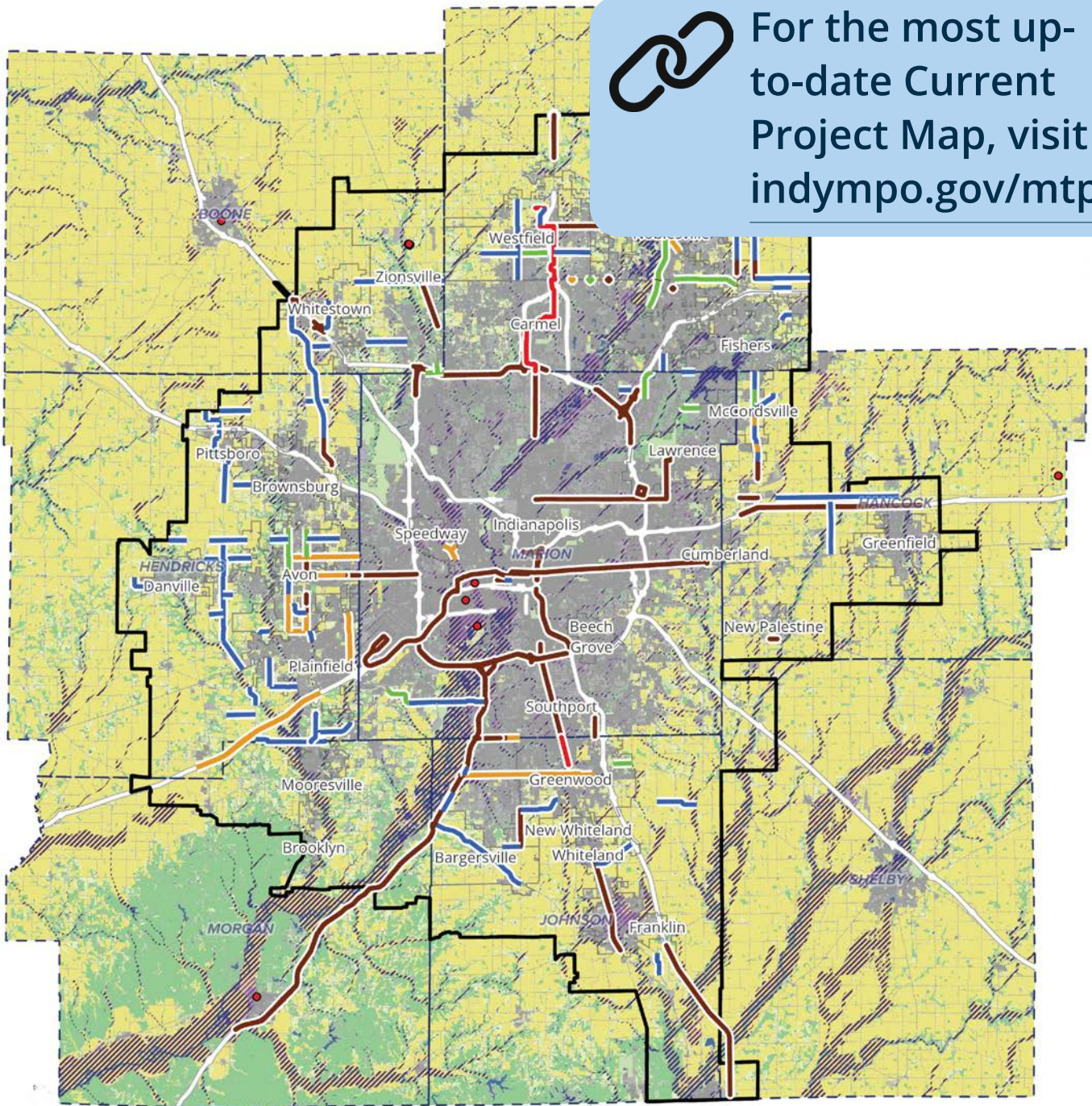
2050 Fiscally Constrained Projects and Environmental Features

The map on the following page shows the fiscally constrained project list overlaid with a subset of environmental features.

2050 FISCALLY CONSTRAINED PROJECTS AND ENVIRONMENTAL FEATURES



For the most up-to-date Current Project Map, visit indympo.gov/mtp



□ Planning Area Boundary

Flood Zones

- High Risk Flood Zones
- Minimal Flood Hazard

Landcover

- Cropland
- Barren

- Forest
- Shrubland
- Grasses
- Developed
- Developed (Open Space)
- Open Water
- Wetlands

● Superfund Sites

CIRCLE MTP Projects

- E&C (2024-2030)
- 2024-2030
- 2031-2040
- 2041-2050
- Beyond 2050







METROPOLITAN TRANSPORTATION PLAN

CIRCLE 30

MPO
CENTRAL
INDIANA
REFLECT
CREATE
LEAD
EXCEL



CHAPTER 6

LOOKING AHEAD

6 LOOKING AHEAD

Central Indiana continues to strive for a better quality of life for all of its residents. As the region looks forward, so does the IMPO. Completing the 2050 CIRCLE MTP process allowed the IMPO staff and the Transportation Policy Committee to think about planning activities moving forward.

Uncertain Future

HOUSING PREFERENCES

Aging Baby Boomers are downsizing and looking for housing types that are likely unavailable in Central Indiana. Millennials and Generation Z often make different housing choices than their parents. Cities around Central Indiana are responding to market demand for development that increases housing options. New apartments, condominiums, and town homes are being built in communities across Central Indiana, but demand for housing has outpaced supply. Both housing availability and affordability are concerns that local officials should work to address.

SHARING CULTURE / MICROMOBILITY

A sharing culture has emerged in recent years, in many forms. One is renting out personal items, like short-term rentals of homes or apartments when the owner will be away, or renting out a personal automobile when the owner isn't using it. Another is shared infrastructure, like bikeshare, carshare, scootershare, or even transit systems, as well as rideshare services such as Uber or Lyft. These can all impact overall community travel patterns.

COMMUTER TRAVEL PREFERENCES

Younger generations are increasingly looking for more transportation options, especially for their trips to work. Frequent transit routes and bicycling facilities are in higher demand. Choosing to live closer to where you work provides opportunities to walk. As desires to walk more increase, demand for better sidewalk conditions also increase.

E-COMMERCE

Instead of delivering a large quantity of goods by truck to stores, internet purchases create a demand for more distribution centers nationally, and the use of many smaller delivery vehicles traveling directly to the home of each customer. This rapid increase in small-scale freight has adversely impacted roadways by increasing traffic and wear on roadways, and new autonomous delivery could arrive in the region soon.

CLIMATE CHANGE

Environmental changes could challenge the resiliency of the transportation network. Roadways, bridges, and other transportation infrastructure are susceptible to environmental impacts including a higher frequency of flash flooding and unpredictability of pavement freeze-thaw cycles, which could lead to uncertainty of material lifecycles. These impacts have the potential to affect daily regional transportation operations.

PANDEMICS

The transportation system and how people use it has changed drastically from the start of the COVID-19 pandemic to current day. During early to mid 2020, thousands of commuters stayed home, either as a result of remote work or job loss, opening up wide avenues that used to slow traffic with congestion. Motorist speeds increased during that time and have decreased little as people returned to jobs. Alternatively, some road segments in dense areas with higher levels of walking and bicycling were shut down to only allow for pedestrian and cyclist use. This was an economic development tool to create more outdoor space for customers to patronize local businesses and restaurants, which had been impacted especially hard by the effects of the pandemic. Cities, towns, and counties should examine their roadway designs and respond appropriately to the new reality to increase safety and provide more transportation options as we continue into an uncertain future in relation to the effect of future pandemics.

Emerging Transportation Technology in the Indianapolis Region

As the region plans for its investments into transportation technology through efforts such as the Regional ITS Architecture Update, these planning efforts and subsequent project deployments will need to account for the increase in emerging personal mobility trends and vehicle technologies. Some of these trends, such as electric vehicles, have been present across the region for a decade or more and are now receiving significant regional and federal investment. Others, such as autonomous vehicles, are less mature technologies that still have the potential to disrupt the transportation behaviors and investment decisions that the Indianapolis region has experienced in the past.

AUTONOMOUS VEHICLES

What They Are: Vehicles that navigate the transportation network with limited driver control or input, or in some cases no driver influence at all.

Examples from Today: Many basic autonomous vehicle features are already present in newer vehicle model features such as automatic collision detection and emergency braking, or automatic lane guidance assist where the steering wheel will guide a vehicle back into a travel lane. A smaller number of vehicles have full autonomous vehicle modes that can be turned on or off by the driver.

Potential Impacts for Tomorrow:

- **Safety:** Autonomous vehicles could take action to avoid crashes with reaction times better than those of human drivers, thereby reducing the likelihood that a crash occurs and reducing the expected severity of a crash if one does occur.
- **Efficiency:** Autonomous vehicles could improve adherence to traffic devices that are designed to promote improved traffic flow, such as traffic signals or ramp meters.
- **Mobility:** Autonomous vehicles could improve personal mobility for citizens who never learned to drive or who are no longer able to drive.

Transportation Planning Considerations: Road maintenance focused on maintaining signage, striping, and encroaching landscaping, designation of autonomous vehicle lanes on some facilities, updates to motor vehicle codes.

CONNECTED VEHICLES

What They Are: Vehicles that include technologies that allow for exchange of information with other vehicles and with transportation infrastructure in the field.

Examples from Today: Some connected vehicle features are present in newer vehicle models on the road today, including those that provide countdown timers at traffic signals or allow for messages from regional traffic management centers to appear on the vehicle's dashboard center console. A basic analogue to connected vehicle technology that many drivers may already be familiar with is the ability for vehicles to connect to personal phones through on-board apps to display navigation information.

Potential Impacts for Tomorrow:

- **Safety:** Connected vehicles could provide timely safety information to vehicle operators and could exchange information with other vehicles to reduce uncertainty that can lead drivers to make decisions that result in crashes.
- **Emissions Reduction and Economy:** Connected vehicles could use technologies such as vehicle platooning on freeways and intelligent idling at intersections to reduce emissions and improve fuel economy for drivers.
- **Congestion Mitigation:** Connected vehicles could allow for optimized use of the transportation network through speed harmonization and personalized route guidance.

Transportation Planning Considerations: Widespread deployment of communications technology as part of infrastructure, digital records of roadway assets, updated emissions models.

ELECTRIC VEHICLES

What They Are: Vehicles that use stored electricity as a propulsion source, as opposed to an internal combustion engine.

Examples from Today: Many fully electric vehicles and hybrid electric vehicles (ones that supplement an internal combustion engine with battery-based electric storage) are already present on the roads in the Indianapolis region. This electric motor technology is also often found in other types of mobility devices, including transit buses, e-bikes, and electric scooters. To account for the increase in ubiquity of this technology, the region has already begun to invest in infrastructure such as public electric vehicle charging stations.

Impacts for Tomorrow:

- **Emissions Reduction:** Electric vehicles do not produce exhaust and therefore do not emit carbon dioxide or other air pollutants when they operate in the region.
- **Economy:** Electric vehicles allow for at-home charging, which often occurs overnight when electricity demands are traditionally lower. Compared to internal combustion vehicles, fueling costs for electric vehicle owners are much lower.

Transportation Planning Considerations: Continued deployment of charging infrastructure, addition of charging infrastructure for multi-unit housing first responder training for electric vehicles involved in crashes, updated emissions models.

SHARED-USE VEHICLES

What They Are: Vehicles that are used by multiple people without any requirement of ownership by those users.

Examples from Today: Carpool and vanpool programs were early versions of the shared-use vehicle concept. Today, many shared-use vehicle services exist for cars, bikes, and scooters. The City of Indianapolis operated a shared-use vehicle program called Blue Indy in the 2010s. The Pacers Bikeshare system is another example of shared-use vehicles in place within the region today. Other shared-use mobility service providers operating nationally that have a presence within the region include Bird and Lime shared-use mobility scooters as well as Turo for shared-use car rental.

Potential Impacts for Tomorrow:

- **Congestion:** Shared-use vehicles could reduce the number of vehicles in use through higher car occupancy or transitions to non-vehicular travel modes, reducing demand on the transportation network and related congestion.
- **Economy:** Removal of ownership requirements for access to personal vehicles through the shared-use vehicle model could allow for some occasional users of vehicles to save money on vehicle ownership and maintenance.
- **Land Use:** Shared-use vehicles could reduce the demand for land-intensive uses such as parking by decreasing the number of vehicles owned in the region and increasing the portions of time in which remaining shared-use vehicles are in use.

Transportation Planning Considerations: Updated travel demand modeling assumptions, updated land use planning methodology, parking and curb management planning





CIRCLE ²⁰/₅₀ MTP

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