



AIRPORT ROAD, CARBONDALE

AN URBAN BEGINNING: MOVING FORWARD
TOGETHER
SIMPO 2045 LONG RANGE TRANSPORTATION PLAN



JUNE, 2020

Southern Illinois Metropolitan Planning Organization Structure

Policy Committee

Mayor, City of Carbondale

Mayor, City of Marion

Mayor, City of Herrin

Mayor, City of Carterville

County Chair, Jackson County

County Chair, Williamson County

One Village President representing Crainville, Cambria, Colp, Energy and Spillertown

One of the local Transit Agencies (JCMTD or RIDES)

Illinois Department of Transportation, District 9

Technical Committee

City of Carbondale

City of Marion

City of Herrin

City of Carterville

Jackson County

Williamson County

One Village President representing Crainville, Cambria, Colp, Energy and Spillertown

Transit Agency (JMTD or RIDES)

Illinois Department of Transportation District 9

Director

Joe Zdankiewicz

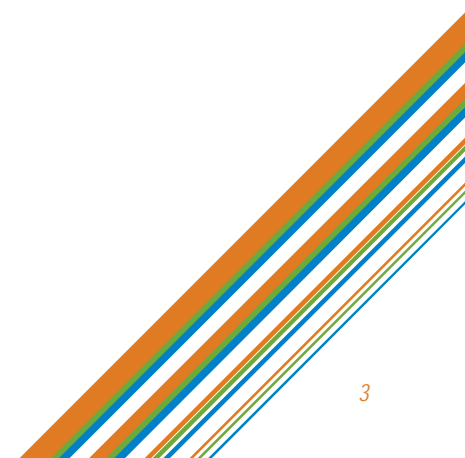


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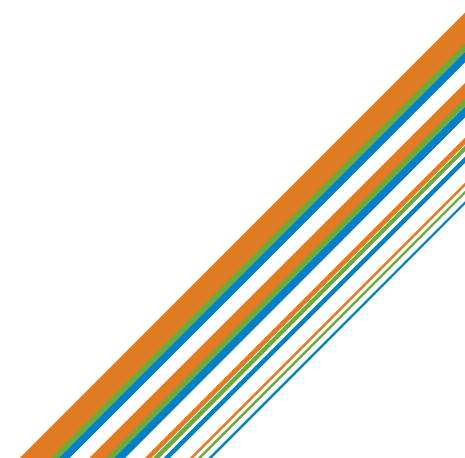
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Introduction

Long Range Transportation Plan

The Southern Illinois Metropolitan Planning Organization (SIMPO) Long Range Transportation Plan (LRTP), also known as the Plan, is a summary of the Carbondale-Marion region's transportation assets and an outline for expanding and maintaining those assets through the year 2045.

The Plan is focused on documenting the existing system and fostering coordination between the various entities and stakeholders within the SIMPO region. Consistent with Title 23 U.S. Code § 134, the Plan will be updated every five years.

The Plan consists of a demographic profile of the region, a summary of the state of the existing multi-modal transportation system, an outline of the region's transportation values and objectives, and a financially-constrained investment plan for maintaining and expanding the system.

Metropolitan Planning Policy

The framework for transportation planning in urbanized areas is governed by federal regulations. Metropolitan transportation planning policy was first addressed by the 1962 Federal-Aid Highway Act in order to "promote the development of transportation systems, embracing various modes of transport in a manner that will serve the States and local communities efficiently and effectively". This Act requires urbanized areas of more than 50,000 population to develop long-range highway plans that are based on a Continuing, Comprehensive, and Cooperative planning process, also known as the 3-C's of planning.

Title 23 U.S. Code § 134 has since evolved to cover the basic functions of Metropolitan Planning Organizations (MPO), the agencies responsible for transportation planning within their Metropolitan Planning Area (MPA). The most recent transportation bill, The FAST Act, specifies funding requirements for fiscal years 2016 through 2020.

Consistent with the Federal Highway Administration (FHWA) and Federal Transit Authority (FTA), the Illinois Department of Transportation (IDOT) has identified the core functions of an MPO to be to:

- **Establish a Setting**
- **Evaluate Alternatives**
- **Maintain a Long Range Transportation Plan**
- **Develop a Transportation Improvement Program**
- **Involve the Public**

(Source: IDOT's Overview of the Transportation Planning Process in Urbanized Areas)

What are the MPO's Responsibilities?

In order to carry out the transportation planning process, SIMPO is responsible for developing the LRTP, the Transportation Improvement Program (TIP), and the Unified Planning Work Program (UPWP).

The TIP is an annually updated list of transportation projects that will use federal funds over the next four-year period. All federally funded projects must be consistent with the framework of the LRTP in order to be included in the TIP.

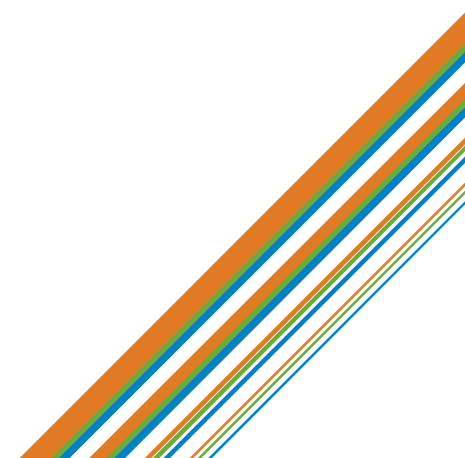
The MPO is also responsible for developing a UPWP, outlining all planning activities to be undertaken by the MPO, updated annually.

How Does SIMPO Benefit the Regional Transportation System?

The establishment of an MPO promotes regional planning and collaboration across the metropolitan area. The benefits of working together to provide better transportation for the region is particularly important in Jackson and Williamson Counties.

The linear shape of the urbanized area, the unique histories of each municipality, and the presence of natural barriers such as flood plains and the Crab Orchard Wildlife Refuge create challenges. However, the cooperation encouraged by working together as a united planning body in SIMPO allows the region's officials, technical leaders and residents to think and act in the best interest of the whole.

The result is a stronger and more successful region that plans together and invests its transportation resources regionally to improve the transportation system for all users.



The FAST Act - Federal Transportation Funding Bill

The FAST Act was signed into law on December 4, 2015. This bill dictates federal transportation funding policy for fiscal years 2016 through 2020.

The FAST Act maintains the focus on safety, keeps intact the established structure of the various highway-related programs managed by the FHWA, continues efforts to streamline project delivery and, for the first time, provides a dedicated source of federal dollars for freight projects.

The FAST act also maintains the focus on elements that can be measured and performance goals that the region can strive for. These goals are consistent with federal and state goals and objectives.

Regardless of the specific characteristics of transportation bills that will be signed in the near future, it is evident that performance-based transportation planning will be a requirement from now on.

The national performance goals established in MAP 21 and continued in the FAST Act are as follows:

- **Safety**
- **Infrastructure Condition**
- **Improved Mobility**
- **System Reliability**
- **Freight Movement**
- **Job Creation and Economic Growth**
- **Environmental Sustainability**
- **Accelerated Project Delivery**

IDOT Long Range Transportation Plan

The primary purpose of the Illinois Long-Range Transportation Plan (LRTP) is to provide strategic direction for the development of the Illinois transportation system. The 2017 LRTP vision for transportation in Illinois is to provide innovative, sustainable and multimodal transportation solutions that support local goals and grow Illinois' economy.

It is important for the efforts of SIMPO to be consistent with IDOT in order to leverage the resources of each agency to develop an efficient and accountable transportation program.

1 AREA PROFILE

AREA PROFILE OVERVIEW

REGIONAL HISTORY

POPULATION TRENDS

EMPLOYMENT TRENDS

LAND USE, ENVIRONMENTAL, AND HISTORICAL CONSIDERATIONS



Area Profile Overview

The Area Profile documents current and projected population and employment trends that play an important role in transportation planning.

The scale and characteristics of population and employment growth dictate the future needs of the transportation system. Where people live, how people commute to work, and the patterns of commercial growth all impact where transportation investments should be directed.

Regional History

The SIMPO area has been one of the primary drivers of the Southern Illinois region for over 200 years, from the settling of the frontier to the establishment of Illinois' fourth largest public University and the boom in Illinois coal production.

The MPA comprises the cities of Marion, Herrin, Carterville, Carbondale and Murphysboro, as well as the villages of Colp, Cambria, Crainville, Energy, and Spillertown. The Urbanized Area results from these separate municipalities growing together, with the Carbondale Micropolitan Area and the Marion-Herrin-Carterville Micropolitan Area finally becoming contiguous when they both reached Crab Orchard Lake.

The major artery linking the MPA together is Illinois Route 13, running east-west from Marion, along the south side of Herrin and Carterville, through the heart of Carbondale, all the way to Murphysboro.

Each part of the MPA has its own strengths, from the placement of Marion at the crossroads of I-57 and Route 13, to the presence of Southern Illinois University in Carbondale. Despite the seemingly separate nature of these cities and villages, the region will benefit from a comprehensive planning mentality.

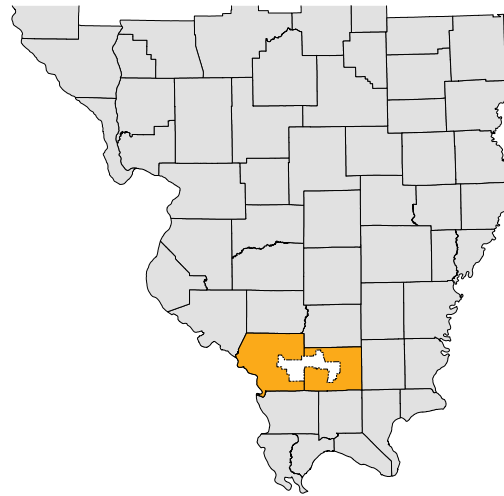
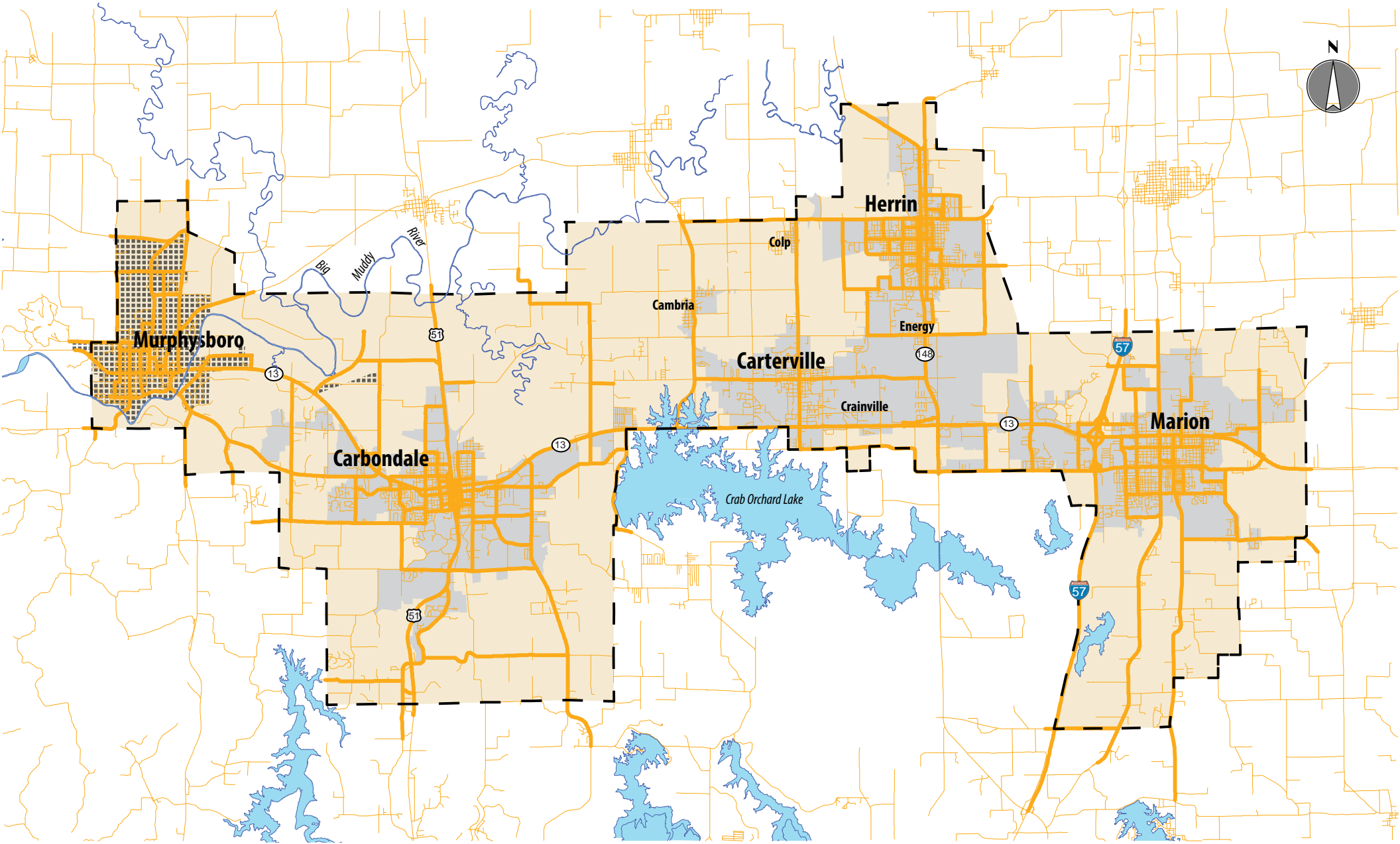









Figure 1. SIMPO Metropolitan Planning Area (MPA)



LEGEND

 Metropolitan Planning Area	 Body of Water	 Major Road in MPA
 2010 Census Urbanized Area	 Murphysboro Urban Cluster	 Other Road



Map 1. SIMPO Metropolitan Planning Area

Population Trends

As of the 2010 U.S. Census, Jackson and Williamson Counties have a combined population of 126,485 people. Historically, the employment generators of these two counties have differed, resulting in varying patterns of growth in past decades as shown in Table 3.

The population within the SIMPO MPA was developed by trimming Census data down at the block level. Currently, the MPA has a total population of 89,980 individuals, consisting of an urban population of 77,482 and a rural population of 12,498.

Table 1. Population by Area

Area	2010
SIMPO Metropolitan Planning Area	89,980
Carbondale-Marion Urbanized Area	67,821
Murphysboro Urban Cluster	9,661

Source: US Census

Table 2. Population by City

City	2000	2010
Carbondale	25,597	25,902
Carterville	4,616	5,496
Herrin	11,298	12,501
Marion	16,035	17,193
Murphysboro	13,295	7,970

Source: US Census

Table 3. Population by County

County	1940	1950	1960	1970	1980	1990	2000	2010
Jackson	37,920	38,124	42,151	55,008	61,522	61,067	59,612	60,128
Williamson	51,424	48,621	46,117	49,021	56,538	57,733	61,296	66,357

Source: US Census

Population Forecasts

Population and employment forecasts were generated using information compiled by Woods and Poole Economics, an independent consulting firm that specializes in long-term county-level demographic and economic projections.

The Woods and Poole data provided county-level projections, so the population growth within the MPA and Urbanized Area was estimated.

Given that the MPA comprises almost 3/4 of the total two-county population, the growth rate within the MPA was chosen to be 5.51%, consistent with that of the two counties. This results in a 2045 MPA population of 94,939 people.

The Urbanized Area population would experience a significant jump in 2020 if the Murphysboro Urban Cluster becomes contiguous with the Carbondale-Marion Urbanized Area. In general, the area is expected to experience moderate population growth, consistent with recent trends.

Table 4. Regional Population Forecasts

	2000	2010	Forecasted 2020	Forecasted 2030	Forecasted 2045	Total Growth 2010 - 2045	Avg. Annual Growth 2010 - 2045
Jackson County	59,612	60,128	61,302	61,700	61,330	2.00%	0.06%
Williamson County	61,296	66,357	69,143	71,293	71,665	8.00%	0.23%
Jackson+ Williamson County	120,908	126,485	130,445	132,993	132,995	4.90%	0.14%
SIMPO MPA	-	89,980	92,712	94,488	94,939	5.51%	0.18%
SIMPO Urbanized Area	-	67,821	79,504*	81,028	81,478	20.14%	0.61%

**The Urbanized Area is expected to include the Murphysboro Urbanized Cluster by 2020
Sources: US Census, Woods and Poole Economics, Lochmueller Group*

Race and Poverty

Table 5. Breakdown of Race within the MPA (2010)

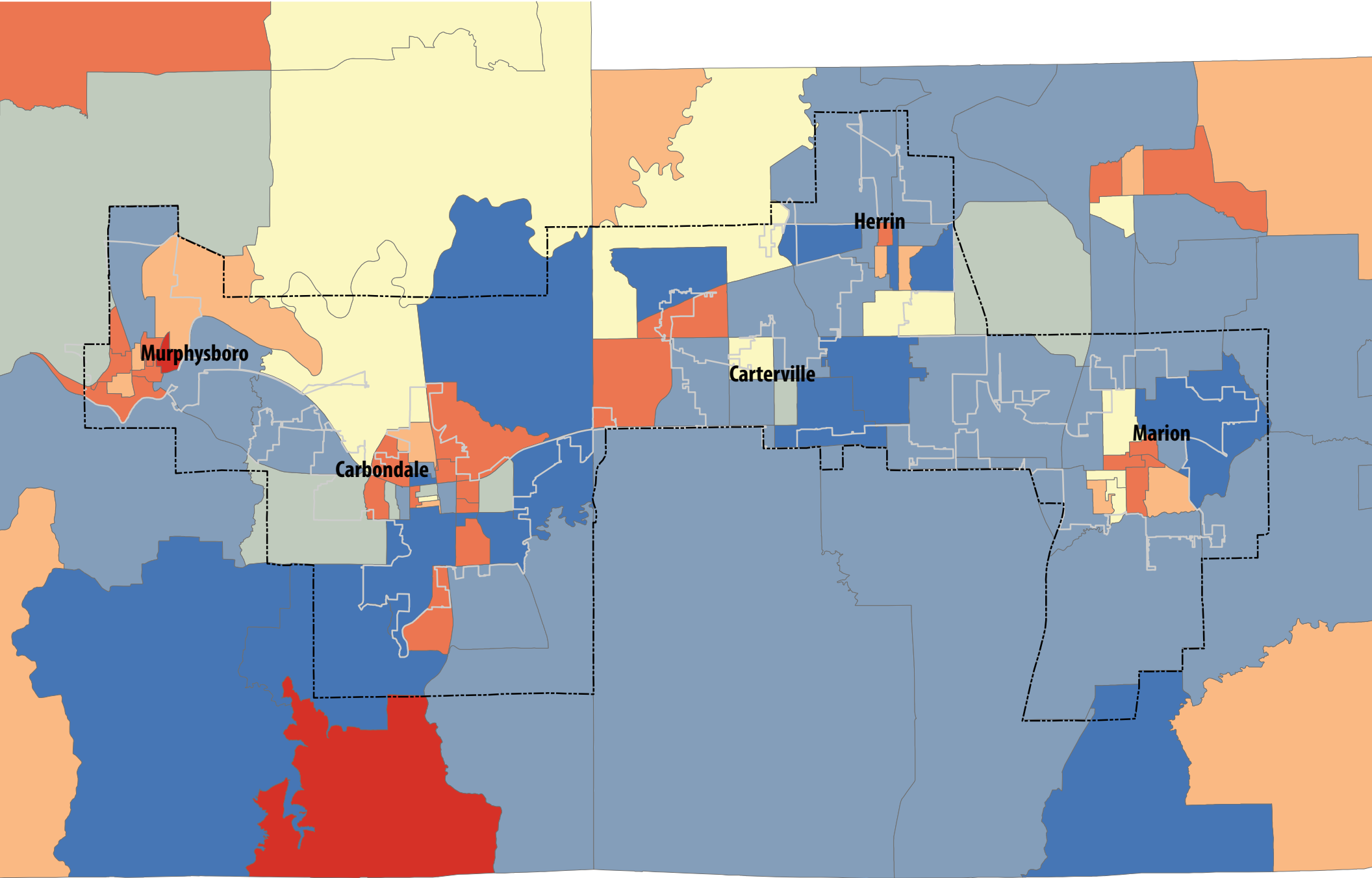
	Percent of Total
White	82%
Black or African American	12%
American Indian/Alaska Native	0%
Asian	3%
Native Hawaiian/Pacific Islander	0%
Other Race	1%
Two or More Races	3%

Source: US Census



Table 6. Breakdown of Population Below the Poverty Level within the Urbanized Area (2010)

	Percent Below Poverty Level
Total Population	28.2%
<i>By Age</i>	
Under 18 years	31.1%
18 to 64 years	31.1%
65 years and over	8.5%
<i>By Sex</i>	
Male	27.6%
Female	28.7%

Source: US Census



Source: US Census

LEGEND	
	Urbanized Area
	MPA Boundary
Change in Population, 2000 to 2010	
	-100% to -30%
	-30% to -5%
	-5% to -1%
	0%
	+1% to +5%
	+5% to +30%
	+30% to +185%



Map 2. Change in Population by Census Block, 2000 to 2010

Another major trend that is evident in the SIMPO region is the aging of the population. This can be seen in Figure 2, with almost every age group over 50 seeing increases or remaining steady. At the same time, most age groups under 50 are expected to see a decline in population or remain flat.

This has significant impacts on housing and transportation planning. An older population typically requires different housing than a younger population, and more public transit and medical transportation is needed.

These age group trends will need to be accounted for in the transportation planning process.

It should be noted that because of SIU in Carbondale, there is a built-in young adult population between 18 and 25 years of age that will remain fairly constant. However, it is not expected that a large proportion of this population will remain in the SIMPO region after graduation. This distinction is important when projecting the future demographics of the region so as to not overestimate the number of adults that will be present in the near future.

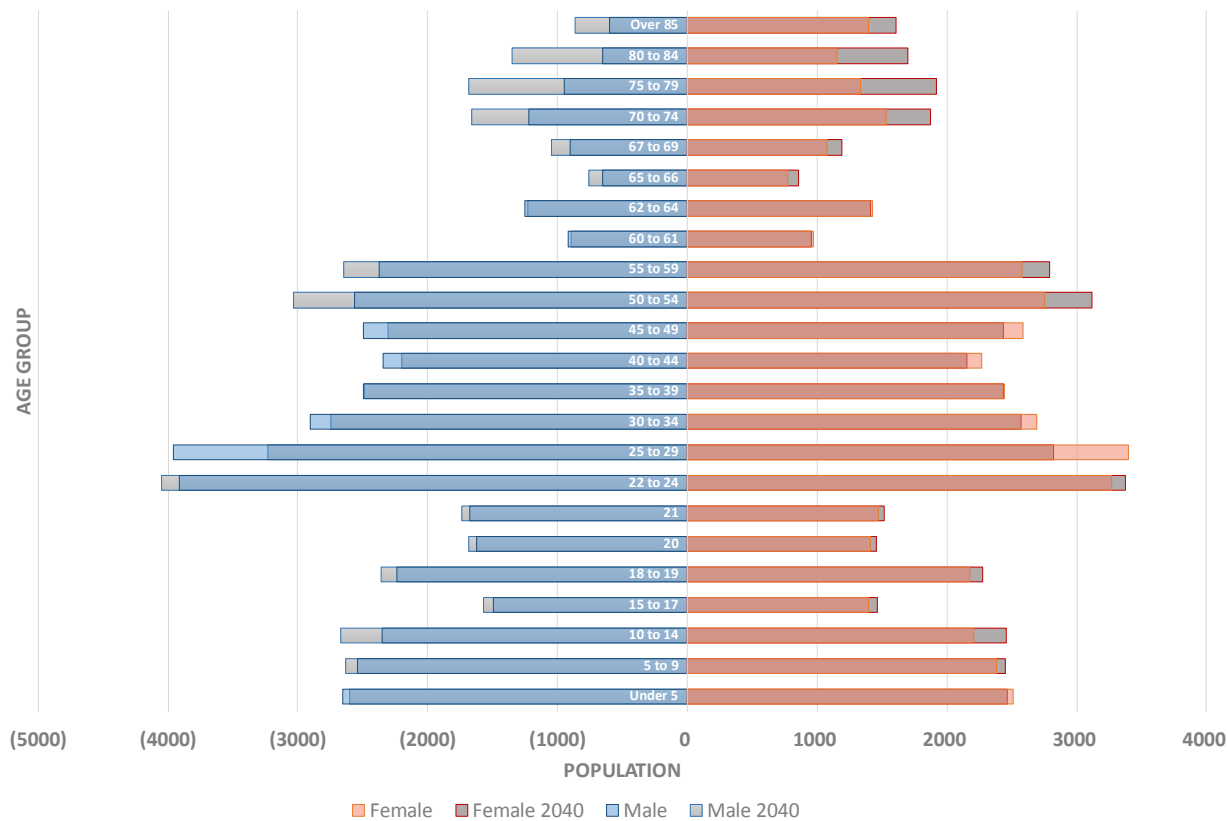


Figure 2. Sex and Age Pyramid within the MPA

Source: US Census; Woods and Poole Economics, Inc.

Employment Trends

Table 7. Forecasted Change in Employment for Jackson and Williamson Counties by Sector, 2010 to 2045

	2010	2045	% Change
Agriculture, Forestry, Fishing, Hunting, and Mining	2,258	2,817	+24.76%
Transportation, Warehousing, and Utilities	1,992	2,863	+43.72%
Construction	3,888	4,287	+10.26%
Manufacturing	2,786	1,955	-29.83%
Wholesale Trade	1,095	1,188	+8.49%
Retail Trade	8,356	9,968	+19.29%
Information	1,038	1,106	+6.55%
Finance, Insurance, Real Estate, and Leasing	5,594	7,579	+35.48%
Professional, Scientific, Management	2,751	3,007	+9.31%
Educational, Health, and Social Services	9,663	16,987	+75.79%
Arts, Entertainment, Recreation, and Accommodations	6,723	7,841	+16.63%
Other Services (except Public Administration)	6,812	11,046	+62.16%
Public Administration	19,638	20,946	+6.66%
Total	72,594	91,590	+26.17%

Source: Woods and Poole Economics, Inc.

Similar to the population projections, employment forecasts were developed for the two-county region using information from Woods and Poole Economics. There is an expected 26% increase in total jobs for the region. This estimate was compared to projections developed by the Illinois Department of Employment Security (IDES) and was determined to be consistent.

This growth in employment is driven primarily by growth in Service oriented jobs, including Educational, Health, and Social Services; Financial, Insurance, Real Estate, and Leasing; as well as Other Services (excluding Public Administration).

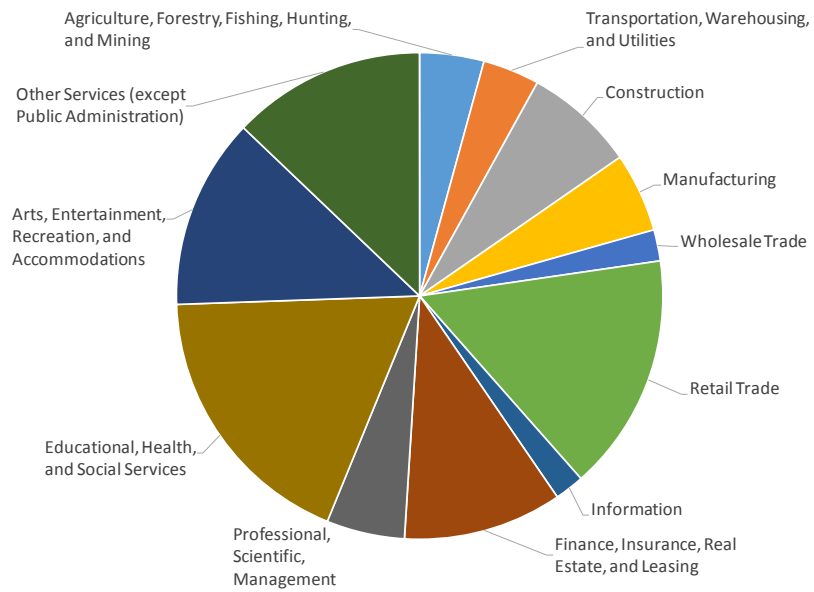


Figure 3. 2010 Employment Sector Breakdown for Jackson and Williamson Counties (Excluding Public Administration)

Source: Woods and Poole Economics, Inc.

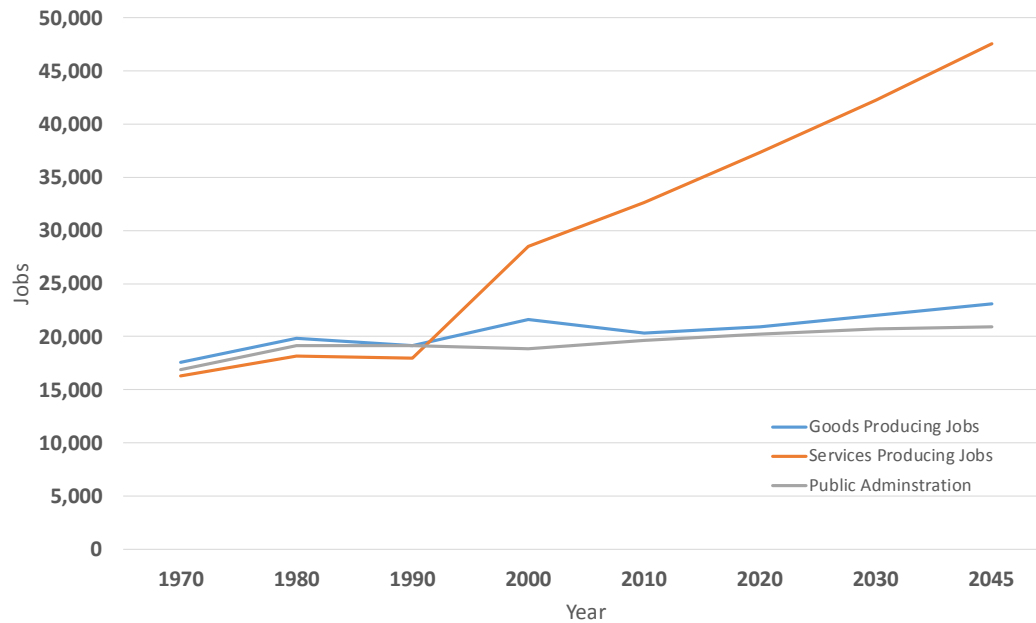


Figure 4. Transition to a Service Economy, 1970 to 2045

Source: Woods and Poole Economics, Inc.

Commute Patterns

Table 8 and Table 9 show the commute patterns for Jackson and Williamson Counties. As shown, approximately 15% of Jackson County workers commute from Williamson County. 33% of people who reside in Williamson County commute to other counties for work, while 19% of Jackson County residents commute to other counties.

These patterns are impacted by job availability, the influence of I-57 on commute times, and the presence of Southern Illinois University, among other things.

Table 8. Commute Patterns by County of Work

County of Residence	To	County of Work	Percent of Total
Jackson County		Jackson County	71.13%
Williamson County		Jackson County	15.35%
Union County		Jackson County	3.73%
Perry County		Jackson County	3.17%
Franklin County		Jackson County	2.32%
Other		Jackson County	4.29%

County of Residence	To	County of Work	Percent of Total
Williamson County		Williamson County	69.64%
Franklin County		Williamson County	10.84%
Jackson County		Williamson County	6.84%
Saline County		Williamson County	3.52%
Johnson County		Williamson County	2.44%
Other		Williamson County	6.71%

Source: US Census Longitudinal Employer-Household Dynamics

Table 9. Commute Patterns by County of Residence

County of Residence	To	County of Work	Percent of Total
Jackson County		Jackson County	81.64%
Jackson County		Williamson County	6.91%
Jackson County		Union County	2.32%
Jackson County		Perry County	2.21%
Jackson County		Franklin County	1.21%
Jackson County		Other	5.71%

County of Residence	To	County of Work	Percent of Total
Williamson County		Williamson County	67.60%
Williamson County		Franklin County	16.93%
Williamson County		Jackson County	5.15%
Williamson County		Saline County	2.51%
Williamson County		Johnson County	1.49%
Williamson County		Other	6.33%

Source: US Census Longitudinal Employer-Household Dynamics

Travel Time to Work

Consistent with comments received during the public involvement process, most people experience a relatively short commute to work. Over 40% of Jackson and Williamson County workers reported a commute between 10 and 20 minutes.

Means to Work

Jackson and Williamson Counties are relatively automobile-oriented, with 91% of workers using a personal vehicle to commute to work. 5% reported walking to work, and while public transportation options are prevalent in the region, they are not typically used for commuting to work.

Two obvious trends, demonstrated in Map 3 and Map 4 on the following pages, are that commute times decrease and the percent of people using an alternative means to work (anything other than a personal vehicle) increases the closer you are to the city centers. The area surrounding Southern Illinois University in Carbondale experiences some of the lowest travel times to work and the highest percentage of people using an alternative means to work.

Table 10. Travel Time to Work

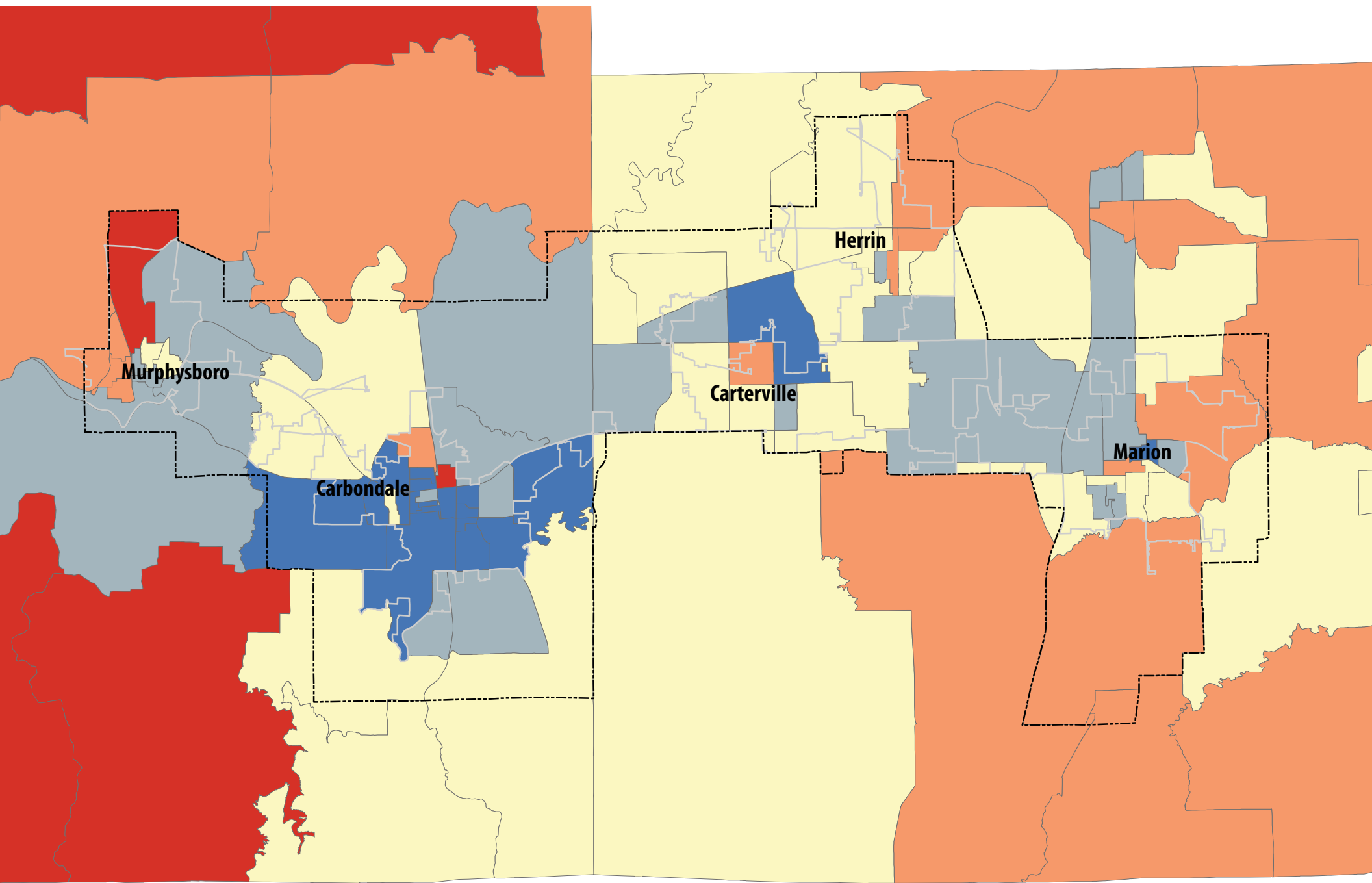
Time	Percent of Workers
Less than 5 minutes	4%
5 to 9 minutes	16%
10 to 14 minutes	21%
15 to 19 minutes	20%
20 to 24 minutes	13%
25 to 29 minutes	5%
30 to 34 minutes	9%
35 to 39 minutes	2%
40 to 44 minutes	2%
45 to 59 minutes	3%
60 to 89 minutes	3%
90 or more minutes	1%

Source: US Census American Community Survey



Table 11. Means to Work

Means to Work	Percent of Workers
Car, Truck, or Van	91%
Alternative Means	9%
Public Transit or Taxi	1%
Motorcycle	0%
Bicycle	1%
Walked	5%
Other	0%
Worked at Home	2%

Source: US Census American Community Survey



LEGEND

-  Urbanized Area
-  MPA Boundary

Average for Jackson and Williamson Counties = 21.4 minutes

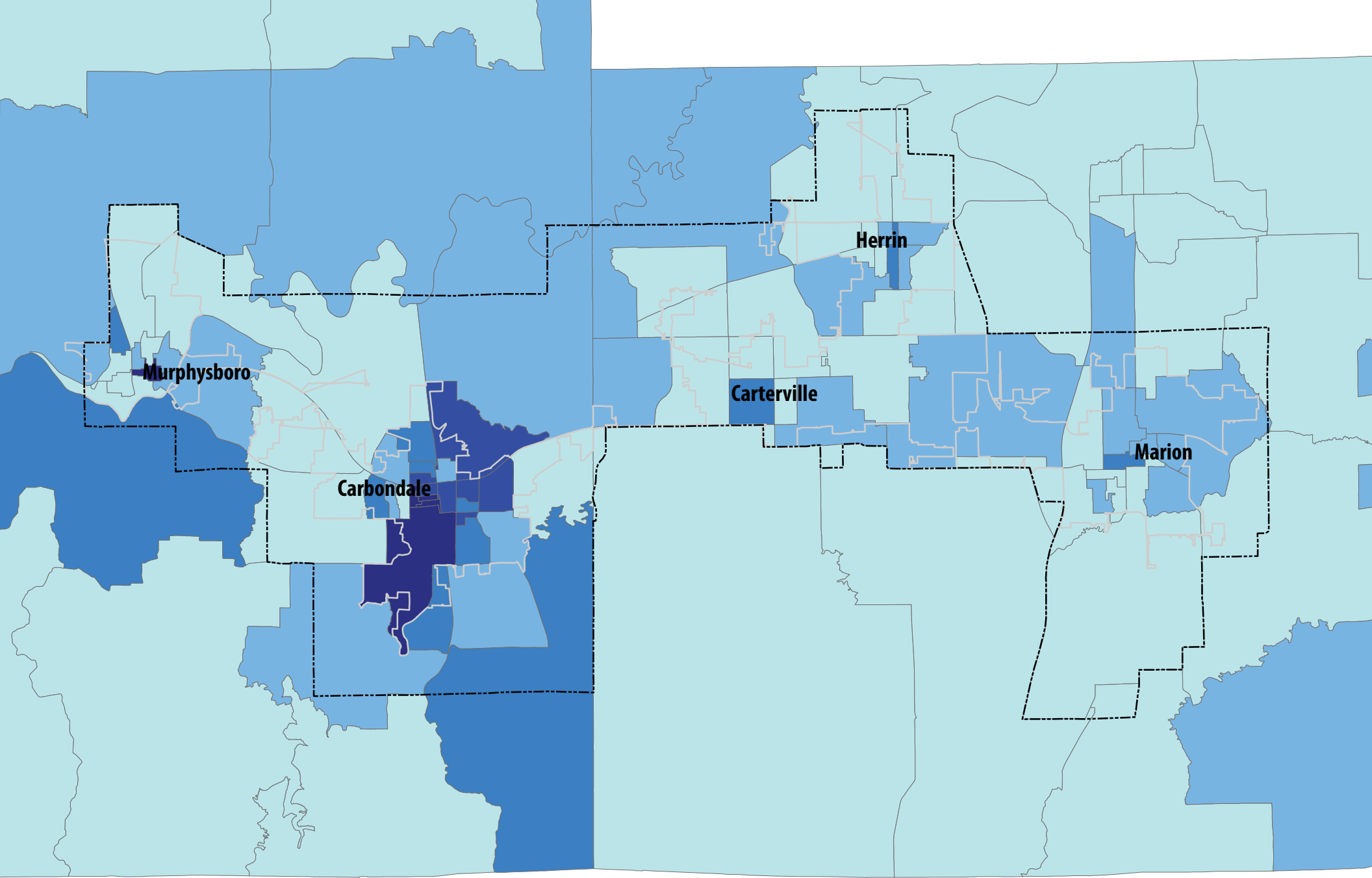
Average Travel Time to Work by Census Block

-  11 to 15 minutes
-  20 to 24
-  15 to 20 minutes
-  24 to 29 minutes
-  29 to 36 minutes



Source: US Census American Community Survey

Map 3. Average Travel Time to Work by Census Block Group



LEGEND

Urbanized Area	Greater than 43%	4% to 10%
MPA Boundary	20% to 43%	0% to 4%
	11% to 20%	

N

Source: US Census American Community Survey

Map 4. Percent Using Alternative Means of Transportation to Work by Census Block Group

Land Use, Environmental, and Historical Considerations

It is important to consider the connection between land use and the transportation system, and to take environmental and socially historic assets into account during transportation planning.

Land Use

There is a strong relationship between land use planning and transportation planning. The type and scale of land uses in a given area can dictate the character of the roadways and the transportation modes that serve that area.

Industrial land uses require direct connections to the interstate, along with robust pavement and wide cross sections to support truck traffic.

Institutional uses such as schools require calm traffic and quality bicycle and pedestrian facilities. Retail uses need easy access points and connections to residential areas.

Proactive land use planning, conducted by each member agency and coordinated through SIMPO, can provide a number of benefits to the region's transportation planning.

Environmental Features

As seen in Map 5 and Map 6, the region's low-lying land results in extensive wetlands and flood plains. The 100-year flood plain surrounds each urban core, creating a natural obstacle for transportation improvement projects.

Crab Orchard National Wildlife Refuge (CONWR) is a valuable environmental asset for the region, offering major recreational opportunities nearby to the city centers.

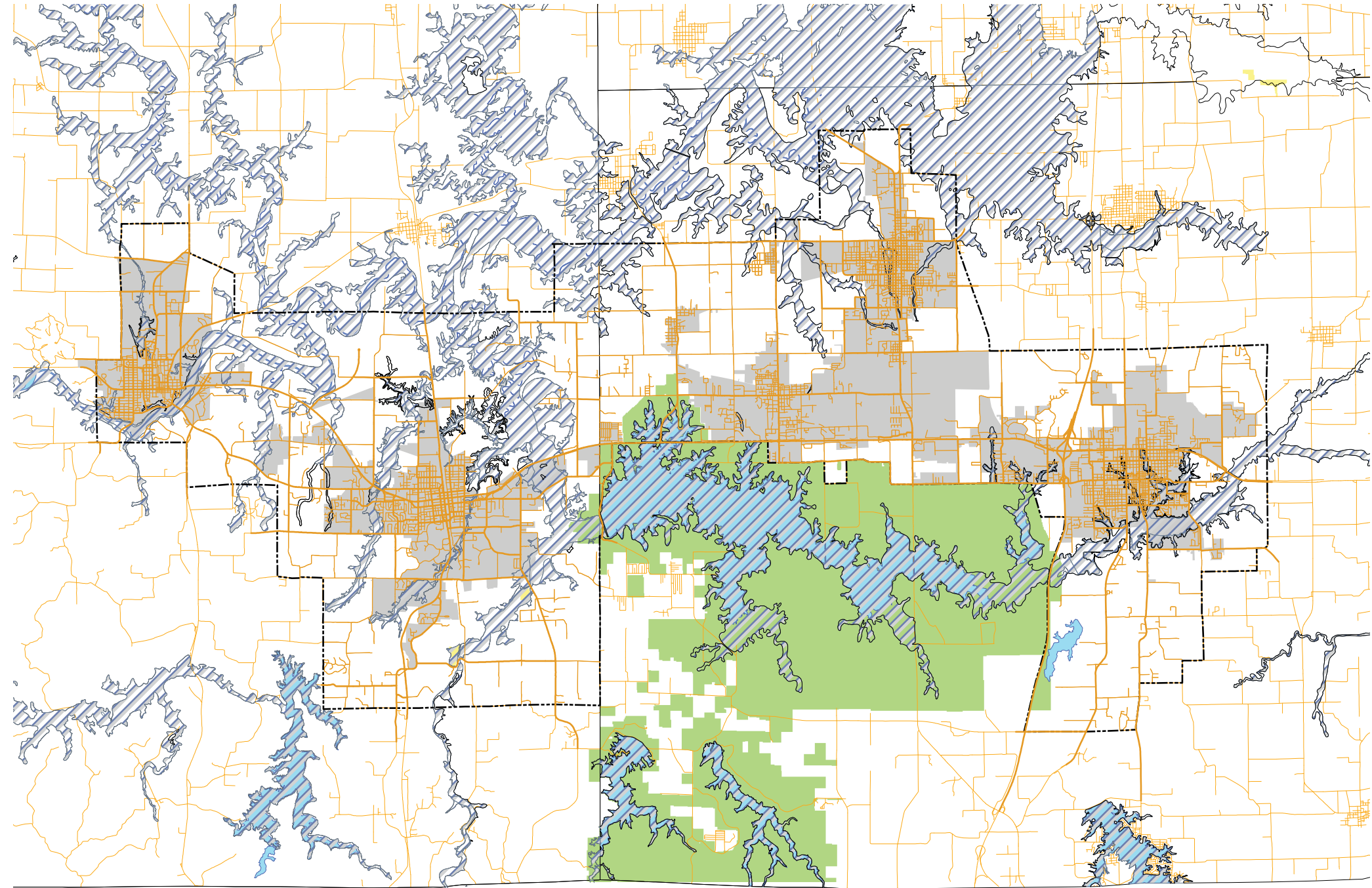
Crab Orchard Lake is central to the region, but also creates a barrier that increases improvement costs for projects such as widening Route 13 to six lanes between Carterville and Carbondale.

Similarly, the Big Muddy River runs just north of Herrin before splitting Carbondale and Murphysboro in two. While creating potential flood problems and driving up costs for roadway improvements in its vicinity, this is a natural resource that should be valued and considered during all planning activities.

Historical Preservation

Given the region's rich cultural heritage, considerations must be made for historical preservation. Transportation improvements should complement those sites identified as historically significant, and efforts should be made to ensure these sites are not disrupted.

Relationships with key stakeholders are important, including the Carbondale Historic Preservation Plan and the Williamson County Historical Society, among others.

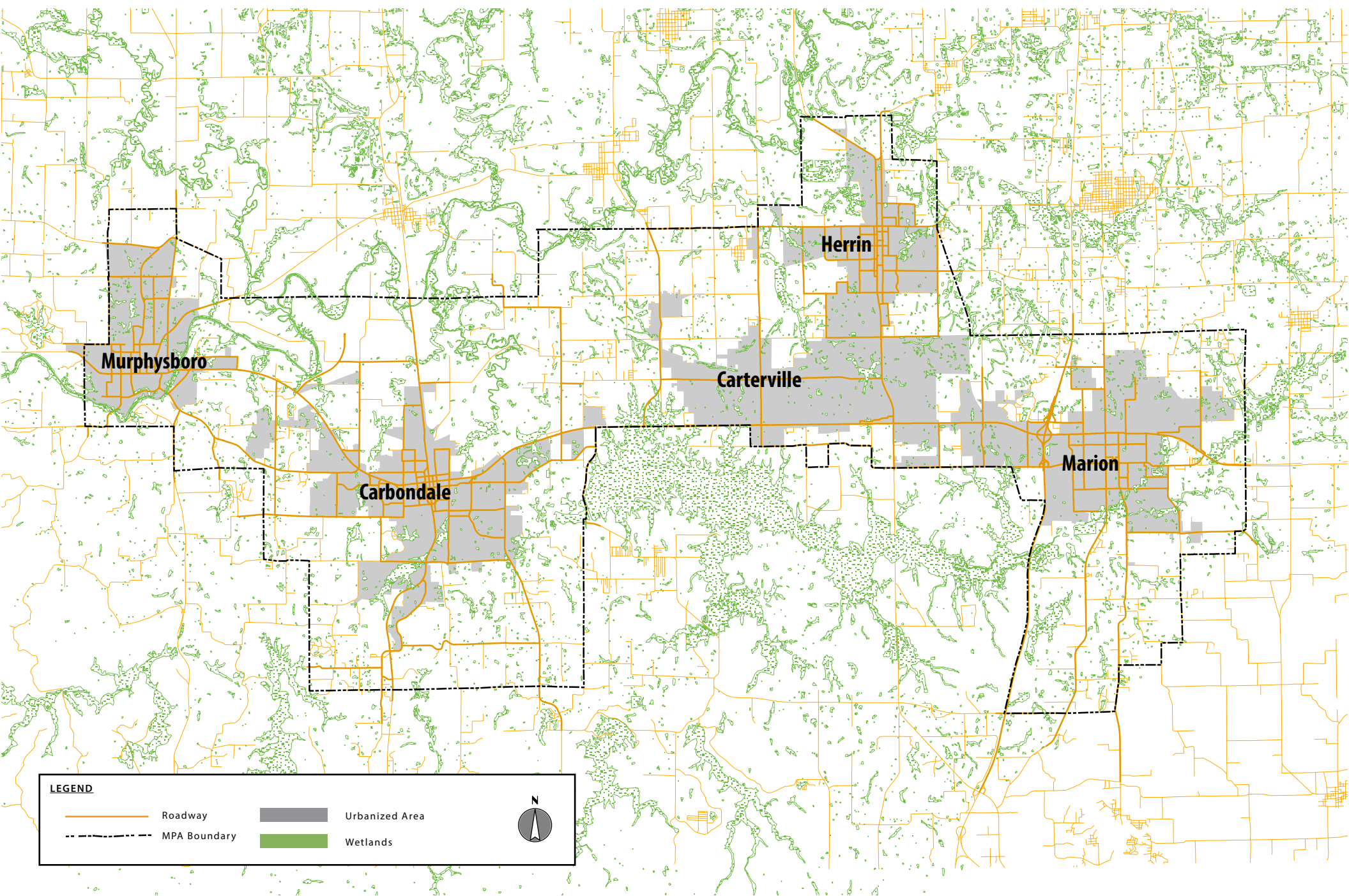


Sources: FEMA National Flood Hazard Layer , U.S. Fish and Wildlife Service

LEGEND

	Roadway		Urbanized Area		100 Year Flood Plain
	MPA Boundary		National Wildlife Refuge Area		

Map 5. Flood Plain and Wildlife Refuge Areas



LEGEND

— Roadway



Urbanized Area

- - - MPA Boundary



Wetlands



Map 6. Wetland Features

2 TRANSPORTATION INFRASTRUCTURE

- ROADWAY OVERVIEW
- VEHICULAR LEVEL OF SERVICE PERFORMANCE
- BICYCLE AND PEDESTRIAN FACILITIES OVERVIEW
- BICYCLE NETWORK
- PEDESTRIAN NETWORK
- AIRPORTS



Roadway Overview

The MPA is served by a roadway network consisting of everything from local roadways in downtown city grids to major state and interstate highway routes. Interstate 57 is the primary north-south corridor, while Illinois Route 13 is the primary east-west corridor. These corridors are supplemented by a large network of two-lane rural highways and urban grids.

Pavement Condition

The pavement condition rating for state maintained roadways with available data is shown in Map 8. Information like this can guide the decision making process for maintenance and reconstruction projects. It would be beneficial for SIMPO to document this type of information for all major collectors and above for the entire MPA. The FY20 UPWP includes a project to accomplish this for the MPA.

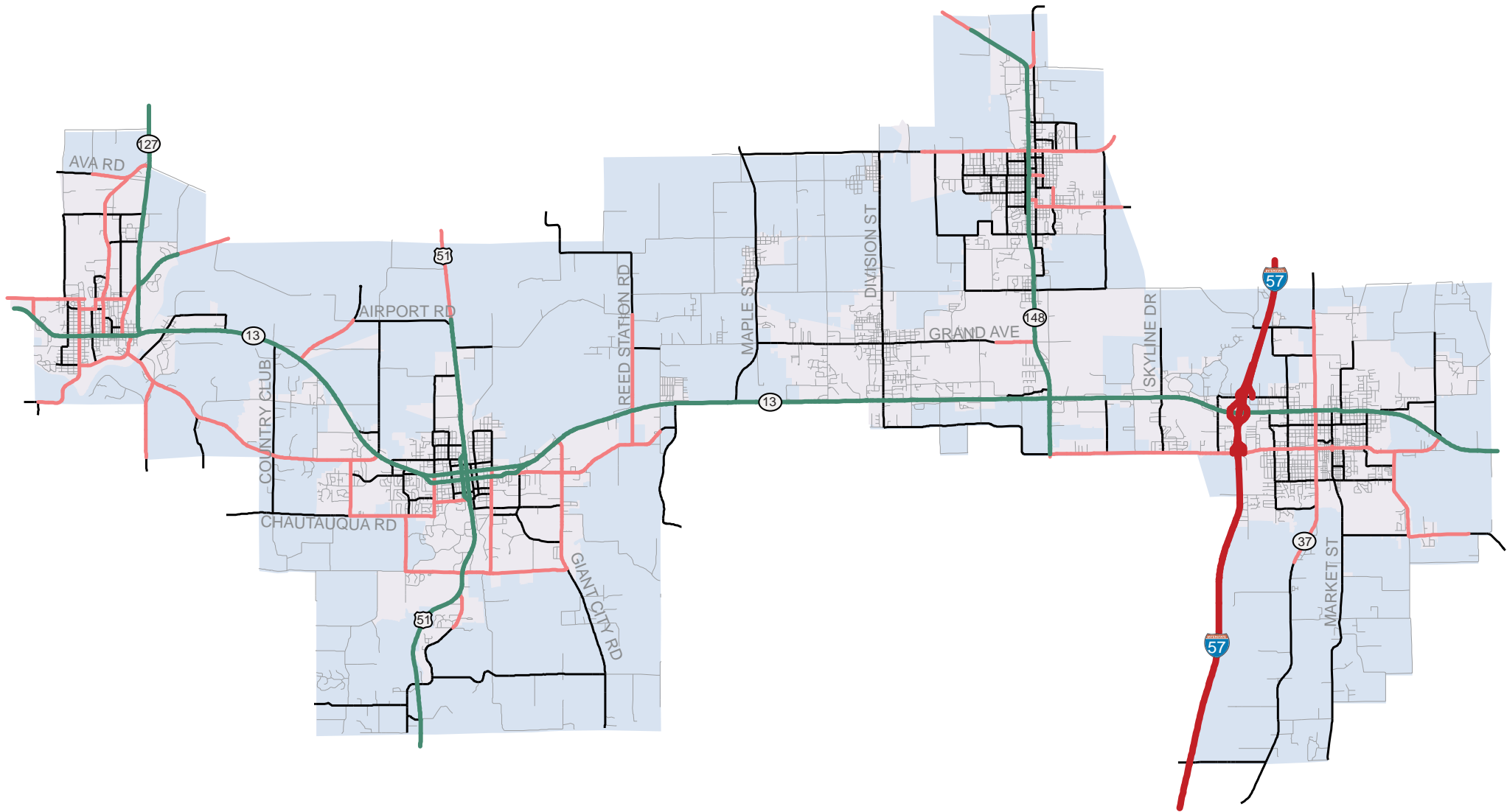
Functional Classification








The intended character of a roadway and the adjacent land uses can be described by the functional classification it is given. The process for assigning a functional classification to a roadway is relatively standardized and consistent across the nation, and is the responsibility of IDOT in cooperation with local agencies, the MPO, and FHWA.


In addition to indicating the intended character of the roadway, the functional classification can also dictate whether a certain roadway is eligible for some funding programs. For example, only roadways classified as collector and above are eligible for certain types of federal transportation funding. Data supplied by IDOT identified seven types of roadways, six of which are found in the MPA, as seen in Map 7 on the next page.

Table 12. Functional Classification Breakdown

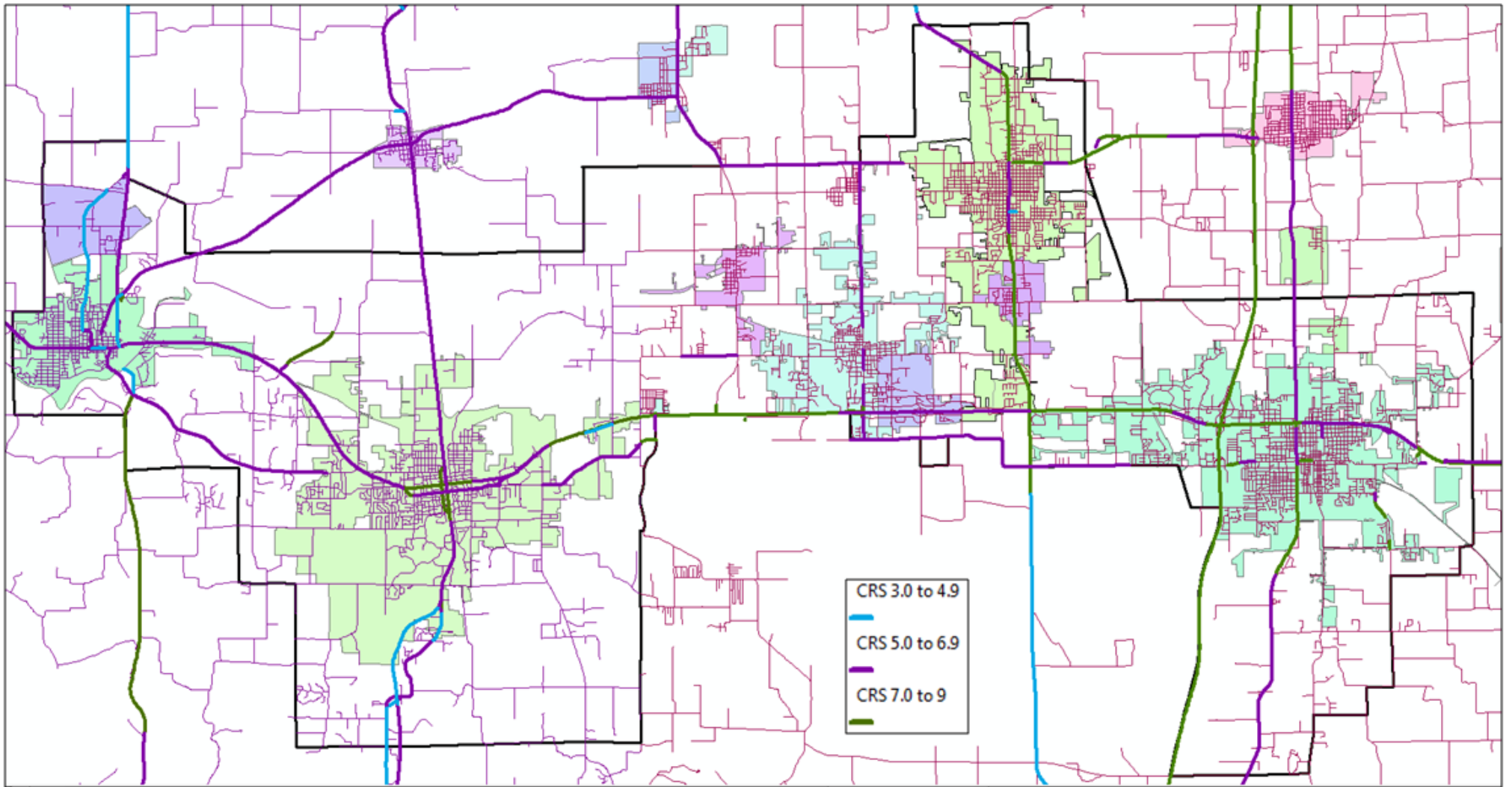
Functional Classification	Miles	% of Total	Services Provided
Interstate	14.53	1.67%	Full access control, high speed travel
Other Principal Arterial	52.88	6.07%	High speeds and long, uninterrupted travel
Minor Arterial	63.57	7.30%	High speeds and long, uninterrupted travel
Major Collector	148.81	17.09%	Collects traffic from local roads, distributes to arterials
Minor Collector	5.54	0.64%	Collects traffic from local roads, distributes to arterials
Local Road or Street	585.64	67.24%	Provides access to land, little or no through movement



LEGEND					
	MPA		Interstate		Major Collector
	Urbanized Area		Other Principal Arterial		Local Road or Minor Collector
			Minor Arterial		



Map 7. Functional Classification



Map 8. 2013 Pavement Condition Rating Survey for State Maintained Roads

Existing and Forecasted Traffic Volumes

In general, the level of traffic volumes within the MPA is appropriate for the roadway network. While there are some locations that experience unnecessary delay, particularly at busy intersections, most roadways operate satisfactorily.

The heaviest-traveled roadway is Interstate 57 at 40,600 vehicles per day north of IL 13. IL 13 between Carbondale and Marion is the second busiest roadway with volumes up to 30,300 vehicles per day. Expansion of these roadways to 6 lanes is long term goal for IDOT and a portion of these routes (IL 13 from Marion to Carterville and I-57 from Marion to Johnston City) have already been expanded.

Some of the most crucial operations within the MPA occur at the crossroads of commuter traffic and retail/commercial traffic. The three primary occurrences of this are Route 13 at Giant City Road in Carbondale, Park Avenue (Route 148) through Herrin, as well as Route 13 and the Hill Avenue in Marion. At these locations there can be several conflicting movements all peaking at the same time during the typical weekday.

Traffic volumes for the year 2045 were developed by SIMPO based on historical IDOT counts, land use trends, and population and employment forecasts. More information on existing and projected traffic volumes can be found in the "SIMPO Planning Documents" section of the SIMPO website (<http://www.greateregypt.org/SIMPO/simpo-planning-documents/>).

Traffic volumes for select roadways can be seen in Map 9 and Map 10.

Access Management

Access Management consists of proactive decision-making regarding the number of access points and the spacing between them. It is complementary to the adjacent land uses, as well as the Functional Classification, as seen in Figure 5. The higher the Functional Classification, the fewer amount of access points should be allowed. Proper Access Management can help improve the flow of traffic, increase safety, and reduce the number of conflict points for all users.

Within the MPA, there are several roadway segments that are examples of locations that have outgrown their existing access configurations and now operate poorly, including Division Street just north of Route 13 in Carterville and Park Avenue near Brewster Road in Herrin.

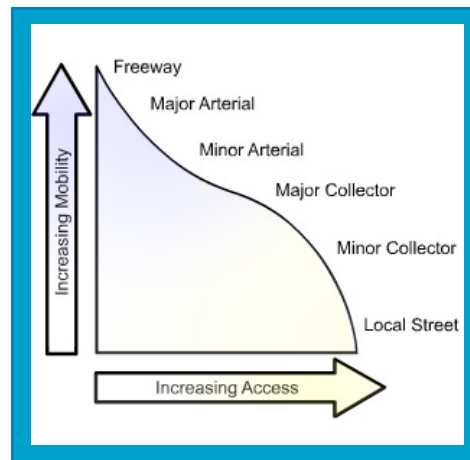


Figure 5. Conceptual Relationship between Functional Classification and Access

Vehicular Level of Service Performance

Roadway Segments

The performance of the roadway system was evaluated using the methods outlined in the Highway Capacity Manual (HCM), published in 2010 by the Transportation Research Board (TRB).

This analysis takes into account traffic volumes, along with physical characteristics of the roadway including number of lanes, functional classification, traffic signal density, and more.

Results under 2013 traffic volumes can be seen in Map 11, and are summarized in Table 13. Over 85% of the roadway segments in the MPA operate at Level of Service (LOS) of B or better.

In 2045, with moderate increases in traffic volumes expected, the LOS of some segments can be expected to degrade, assuming no major capacity improvements are made. This results in 13% of roadway facilities operating at an LOS D or worse.

Intersections

While roadway segments may provide sufficient capacity in general, the intersection of two major streets carrying moderately heavy traffic can cause issues. Many of the intersections along Route 13 cause frustration due to the heavy east-west volumes. Many smaller intersections in the vicinity of schools operate over capacity for short periods of time when the schools let out. Another example is Mill Street and Route 51 in Carbondale, which can be confusing as Route 51 transitions from one-way to two-way traffic among heavy traffic volumes.

Table 13. 2013 Vehicular Level of Service Summary

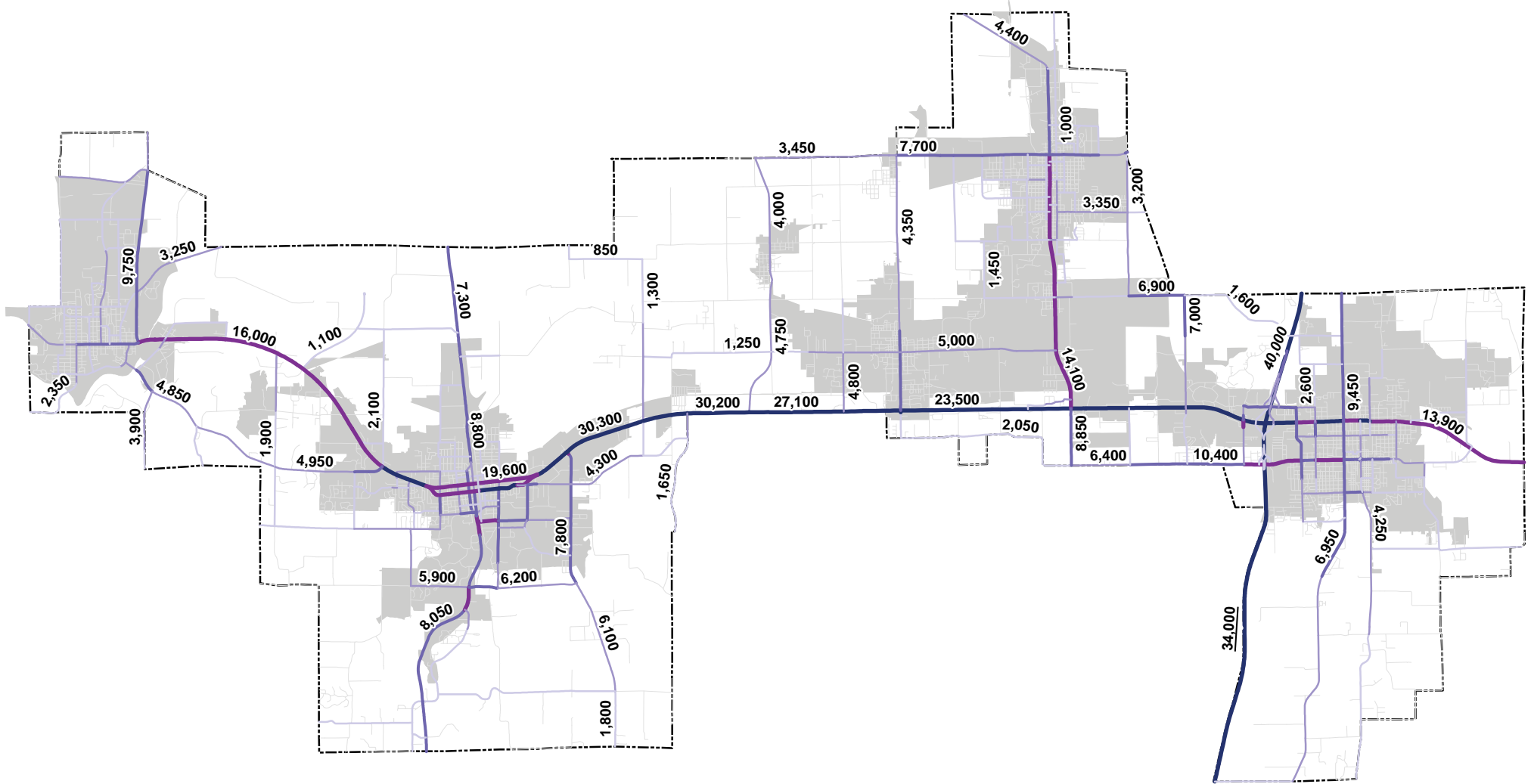
Level of Service	Vehicle Miles Traveled (VMT)	% of Total
VMT with LOS A	148,300	8%
VMT with LOS B	1,421,490	77%
VMT with LOS C	104,629	6%
VMT with LOS D	169,469	9%
VMT with LOS E	0	0%
VMT with LOS F	0	0%

Source: Lochmueller Group with data provided by IDOT

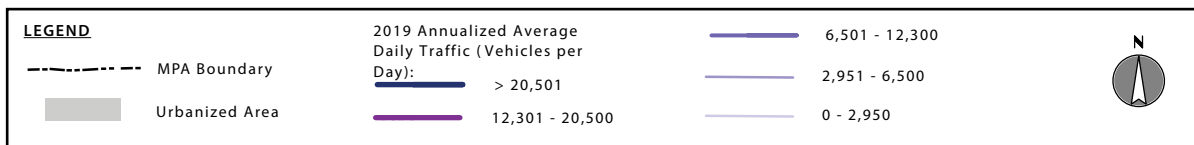
Table 14. 2045 Vehicular Level of Service Summary

Level of Service	Vehicle Miles Traveled (VMT)	% of Total
VMT with LOS A	121,140	5%
VMT with LOS B	1,484,800	63%
VMT with LOS C	452,184	19%
VMT with LOS D	256,902	11%
VMT with LOS E	45,575	2%
VMT with LOS F	8,262	<1%

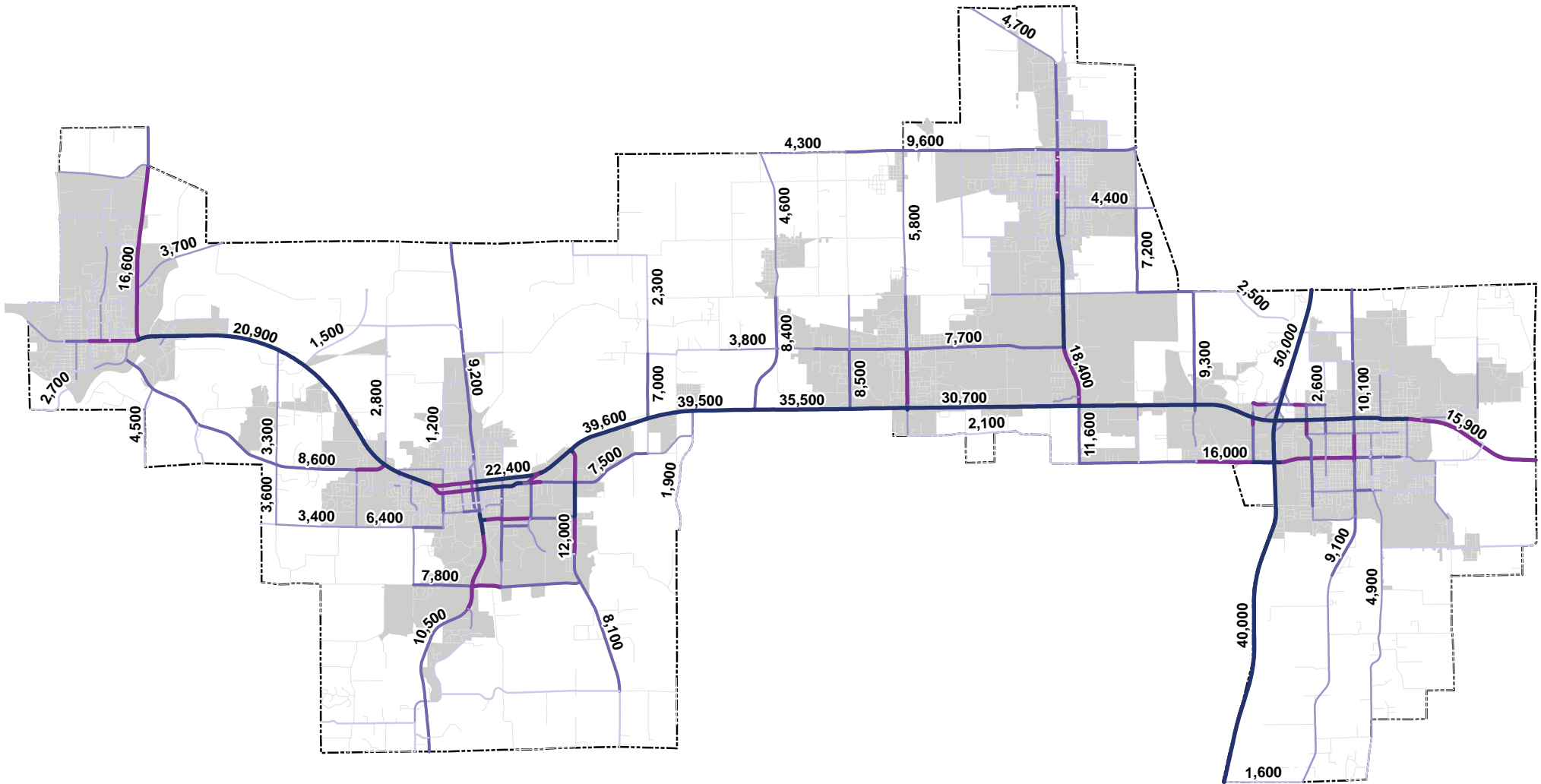
Source: Lochmueller Group with data provided by IDOT



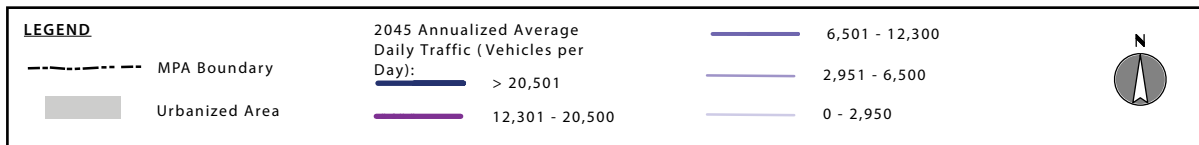
Source: Illinois Department of Transportation



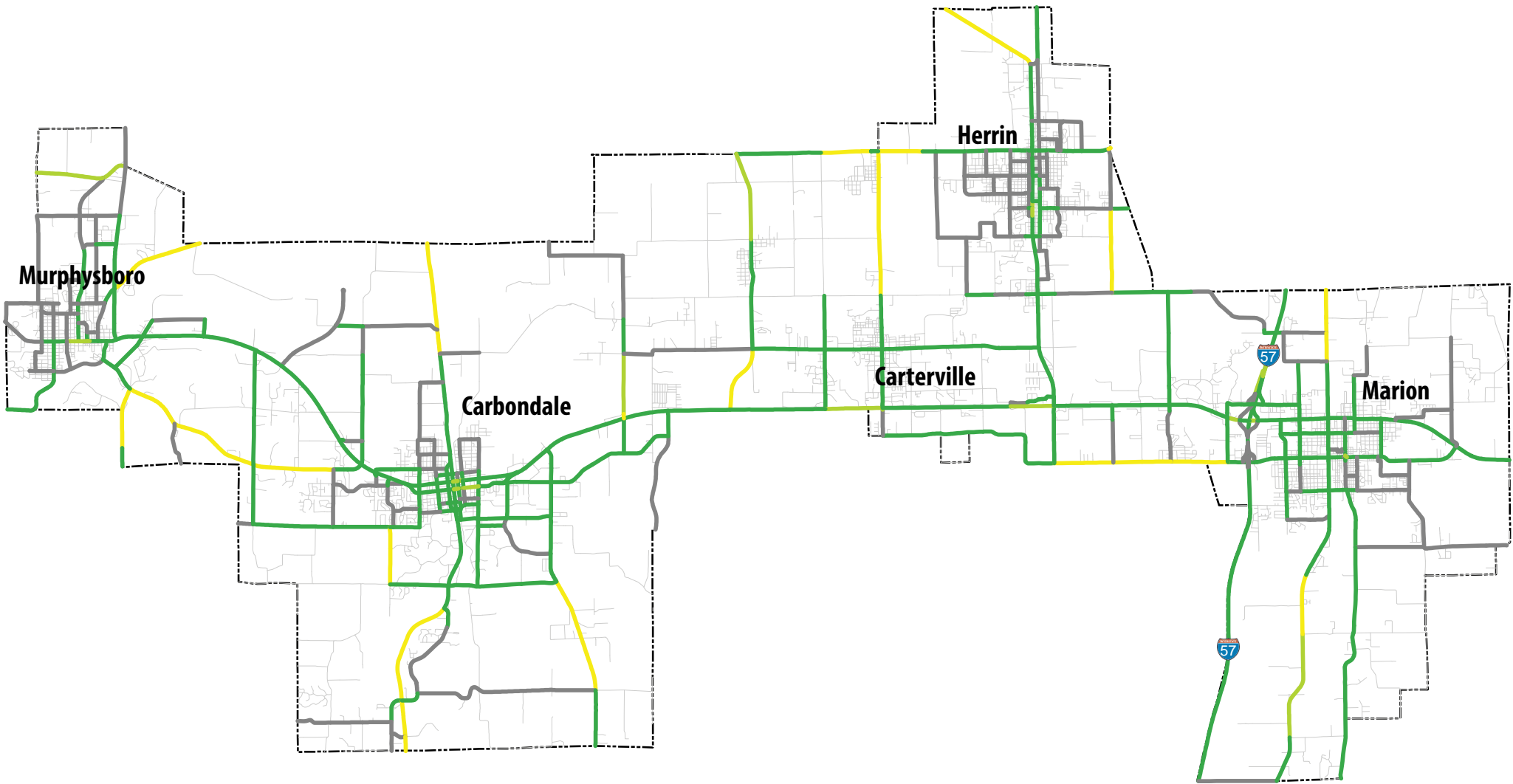
Map 9. 2019 Annualized Average Daily Traffic Volumes for Select Roadways



Source: Illinois Department of Transportation



Map 10. 2045 Annualized Average Daily Traffic Volumes for Select Roadways

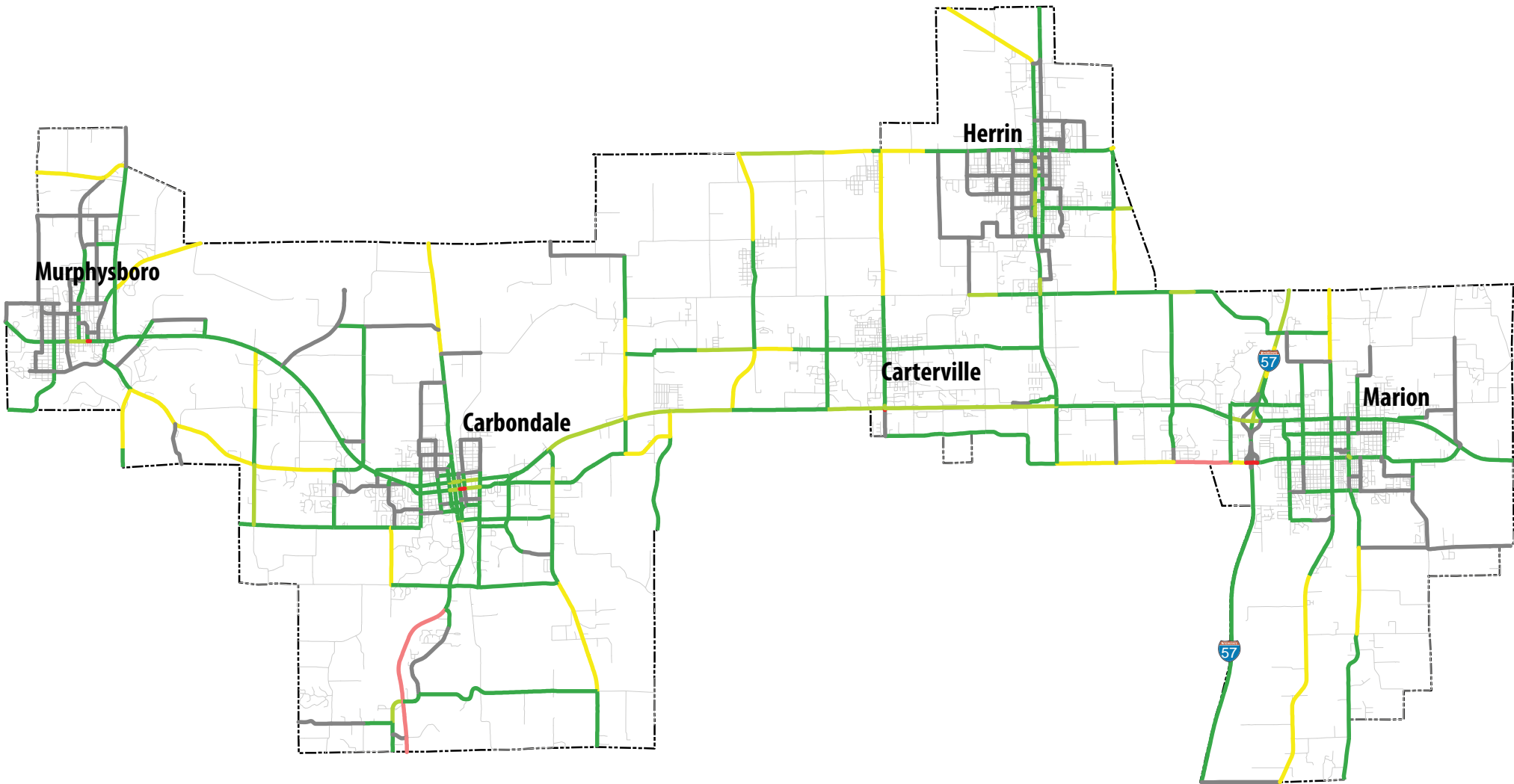


Source: Lochmueller Group with data provided by IDOT

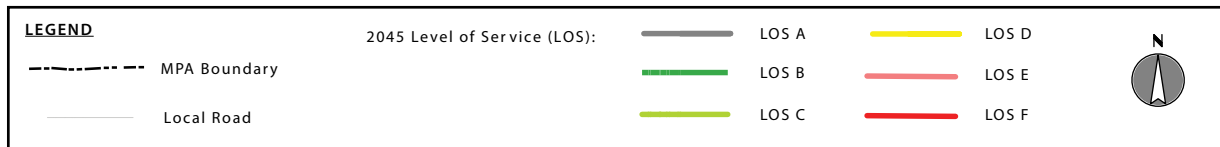
LEGEND	
	MPA Boundary
	Local Road
2019 Level of Service (LOS):	
	LOS A
	LOS B
	LOS C
	LOS D
	LOS E
	LOS F



Map 11. 2019 Level of Service for Major Collectors and Above



Source: Lochmueller Group with data provided by IDOT



Map 12. 2045 Level of Service for Major Collectors and Above

Bicycle and Pedestrian Facilities Overview

Bicycling and walking are integral components of a balanced, sustainable, and efficient multi-modal transportation system. Whether for short trips to nearby destinations or for longer recreational trips to regional parks and open spaces throughout the region, non-motorized transportation can play an important role in several areas:

- Reducing vehicle miles traveled,
- Minimizing wear and tear on vital transportation infrastructure,
- Increasing physical activity,
- Lowering individuals' transportation costs,
- Supporting local economic activity,
- Improving quality of life.

As the MPA continues to grow, incorporating non-motorized transportation into future roadway projects will ensure that people of all ages and abilities have the opportunity to travel about their community, regardless of their mode of choice.

The FHWA has stated that it is federal transportation policy to promote the increased use and safety of bicycling and walking as transportation modes. All on-street facilities must be included in the TIP. If an off-street trail is expected to be funded through programs requiring FHWA or FTA approval and is determined to serve primarily a transportation purpose (connecting logical origins and destinations) it should also be included in the TIP.

An assessment of the existing bicycle and pedestrian networks, completed by Alta Planning and Design, was performed in 2014 as part of a Multi-modal Transportation System Assessment. This included an on-street Level of Service analysis for bicycles and pedestrians, the identification of off-street facilities, the highlighting of bicycle and pedestrian crashes (discussed in the Safety section below), and a summary of the stakeholder meetings and public workshops.

SIMPO has sponsored or prepared three major bike studies since 2015. The Carbondale Bicycle Master Plan was completed in May of 2016, the Carbondale to Murphysboro Bike Route was completed in March of 2017 and the Marion to Carbondale Bike Route study was completed in February of 2018. These studies have led to significant funding of bicycle infrastructure in the region as well as official "Bike Friendly" designation by the League of American Bicyclists for the city of Carbondale. The following Bicycle infrastructure projects have been funded in the MPO since 2015:

- Multi-use path across the JALC campus
- Multi-Use trail and underpass of IL 13 near Airport road in Jackson County
- Multi-Use Trail along IL 13 from Giant City Road to Reed Station Road
- Multi-Use Trail from Greenbrier Road to the Crab Orchard Lake Campground.

These projects show significant progress toward a complete trail system that could span the entire Planning Area from west to east along the IL 13 corridor. A trail system of this extent integrated with the Crab Orchard National Wildlife Refuge would be a significant regional attraction and SIMPO will continue to support this effort in the coming years.



Bicycle Network

The SIMPO bicycle facility network is generally centered within and around Carbondale, as seen in Map 13. These facilities are primarily signed bike lanes, with a number of striped lanes and designated paths as well.

Beyond identifying the roadways that are striped or signed as bike lanes, an evaluation was completed to determine each roadway segment's suitability for bicycle use.

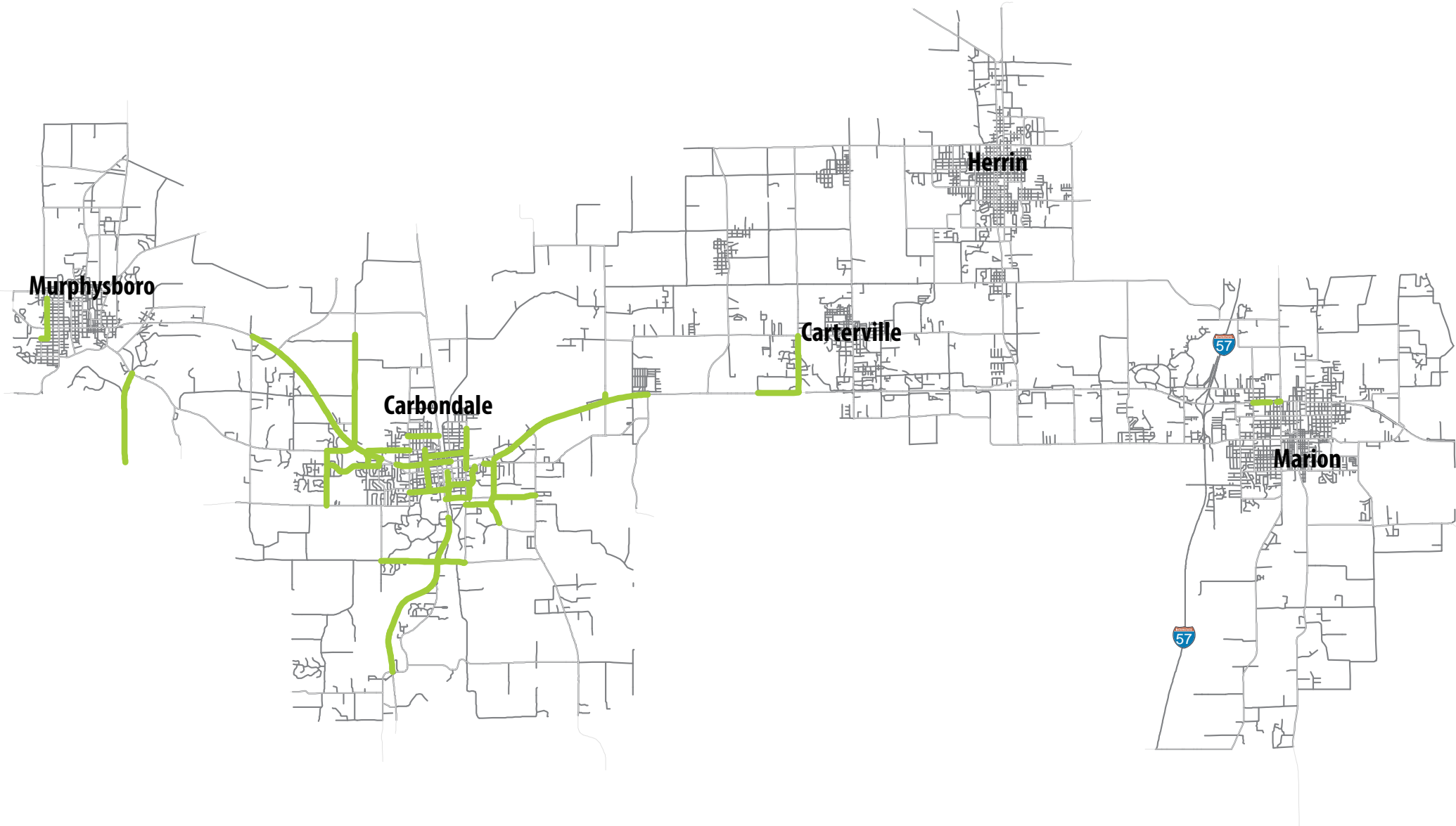
The evaluation criteria is based on roadway characteristics that impact the comfort level of bicyclists on the roadway. The criteria are provided in Table 15 and the results are summarized in Table 16, with the results graphically represented in Map 14. Approximately 29% of the roadways within the MPA could be described as Poor or Deficient for bicycle travel.

Table 15. Bicycle Level of Service Evaluation Criteria



BLOS Grade	BLOS Score	Description
A	<=1.5	Excellent bicycle environment
B	1.5-2.5	Good bicycle environment
C	2.5-3.5	Fair bicycle environment (acceptable to experienced and novice bicyclists)
D	3.5-4.5	Poor bicycle environment (acceptable to experienced bicyclists)
E	4.5-5.5	Deficient environment (unacceptable to experienced and novice bicyclists)
F	> 5.5	Unsafe environment (unsuitable for any bicycle travel)


Table 16. Bicycle Level of Service Results

BLOS Grade	Miles	% of Total	Description
A	26	3%	Short segments existing within city boundaries
B	205	24%	Pockets or island, generally within city boundaries. Generally connecting to grade C or D facilities
C	370	44%	Corridors within and connecting cities
D	234	28%	Corridors within and connecting cities
E/F	6.5	<1%	Mostly higher order roadways between cities



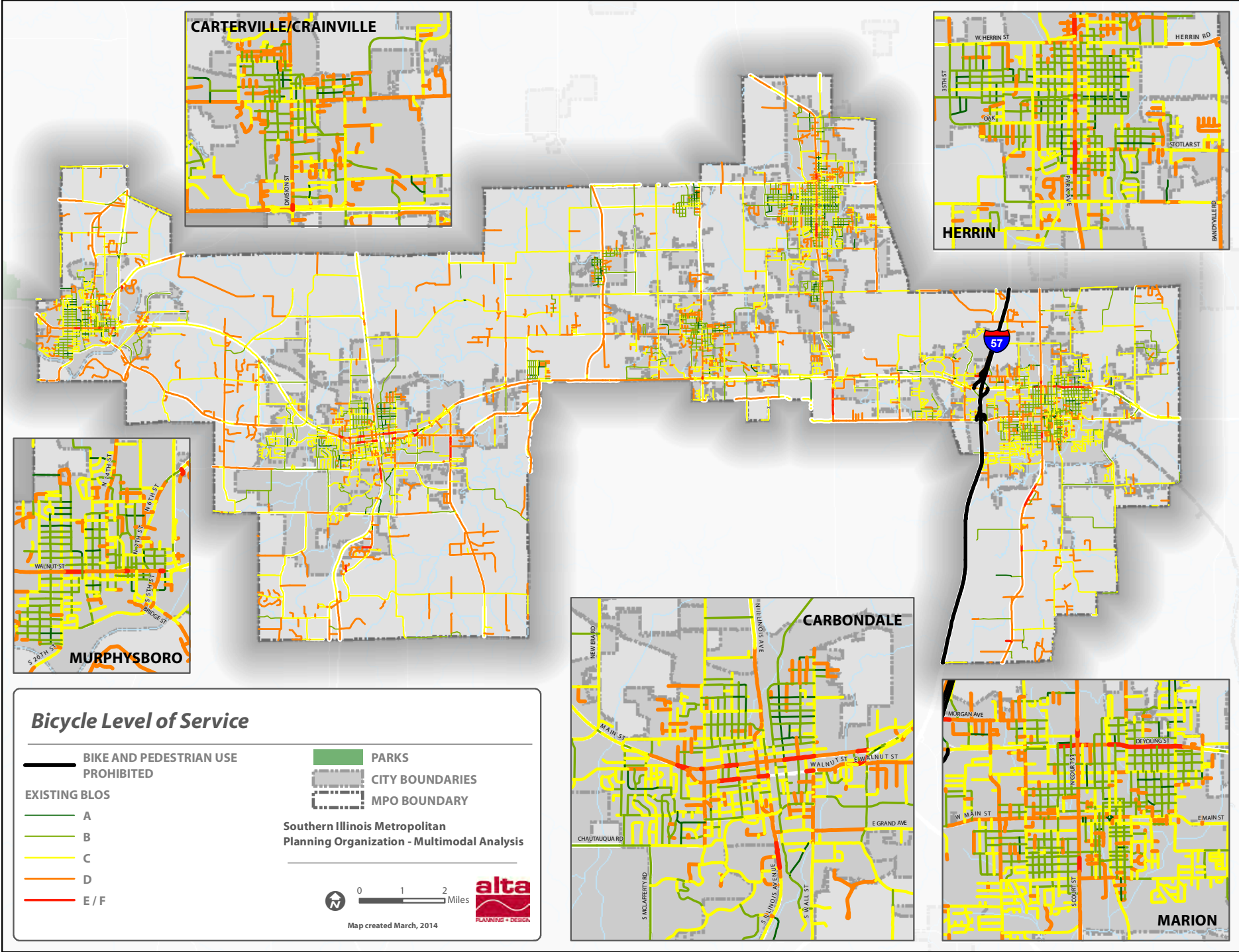
LEGEND

	Roadway
	Striped or Signed Bike Lane



N

Map 13. Striped or Signed Bike Lanes within the MPA



Map 14. Bicycle Level of Service Results

Pedestrian Network

The pedestrian network is substantial within the traditional grids of the city centers. However, as each city grew outward, sidewalks became less and less of a priority. An evaluation of the suitability of the MPA's roadways to accommodate pedestrians was completed.

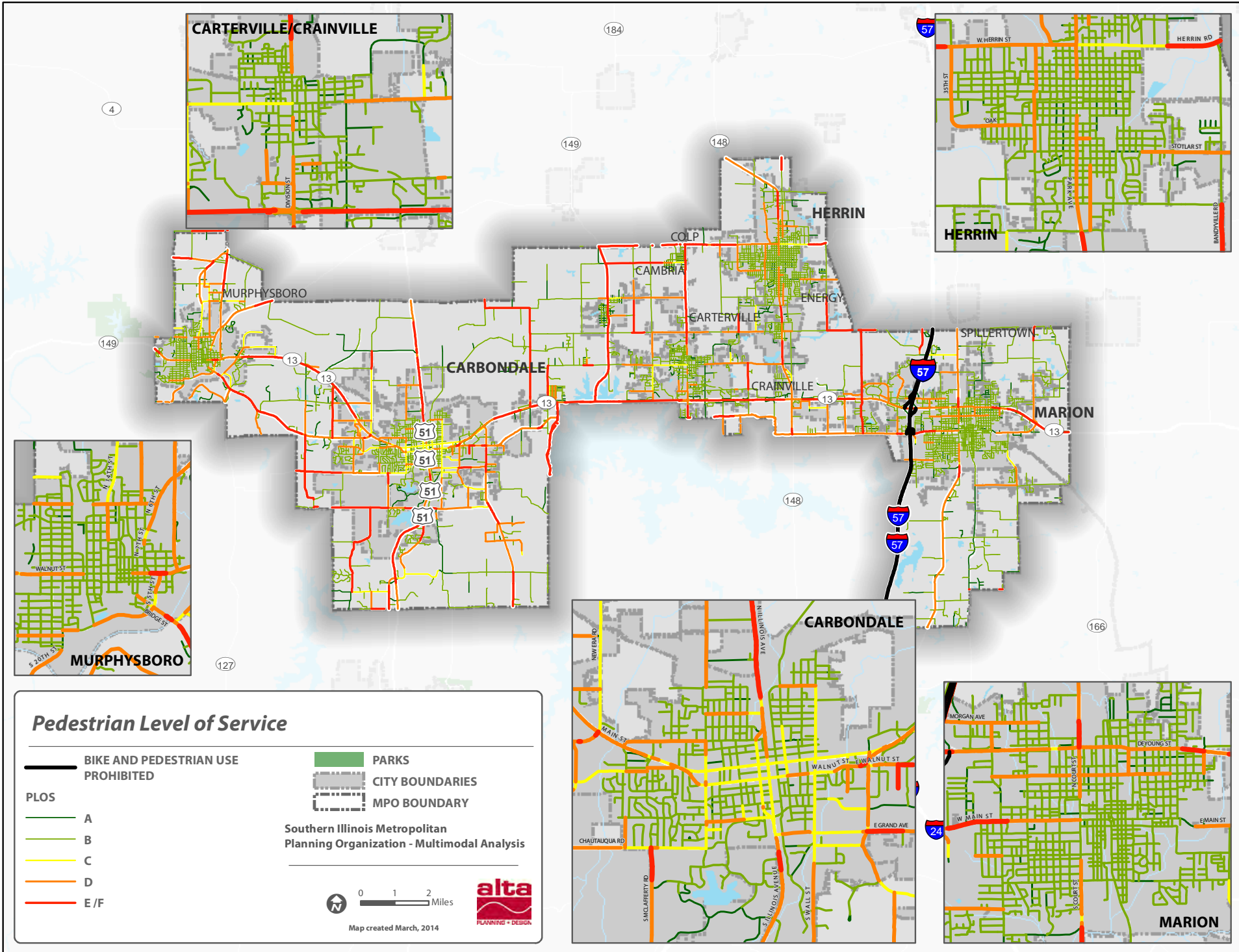
The evaluation criteria is provided in Table 17 and the results are summarized in Table 18, with the results graphically represented in Map 15. Approximately 10% of the roadways within the MPA have no dedicated space for pedestrian travel.

Table 17. Pedestrian Level of Service Evaluation Criteria

PLOS Grade	PLOS Score	Pedestrian Environment	Speed	Space
A	5	Best	<30 mph	Complete sidewalk or at least one 4 ft shoulder
B	4	Good	<30 mph	No dedicated space
C	3	Fair	30-35 mph	Complete sidewalk or at least one 4-ft shoulder
D	2	Moderate	30-35 mph 40-50 mph	No dedicated space Complete sidewalk or at least one 4 ft shoulder
E/F	1	Deficient/unsafe	40+ mph	No dedicated space

Table 18. Pedestrian Level of Service Results

PLOS Grade	Miles	% of Total	Description
A	81	10%	Mainly residential roadways that may or may not have a centerline, travel lanes are 9-12 ft. Sidewalk or shoulder is present
B	122	15%	Mainly residential roadways that may or may not have a centerline, travel lanes are 9-12 ft.
C	30	4%	Characterizes main streets in urbanized areas with complete sidewalks
D	520	61%	Category contains the most variation in roadway configuration, characterizes approaches to more urbanized areas, roadways in Carbondale with 'partial' sidewalk completion are included
E/F	86	10%	Typically large order roadways connecting more populous areas, roads have 2 to 4 travel lanes, lanes are typically 12 feet wide or greater



Map 15. Pedestrian Level of Service Results

Airports

There are two airports serving the MPA, Veteran's Airport of Southern Illinois and Southern Illinois Airport. Statistics for each airport are given in Table 23.

Table 23. Regional Airport Operations

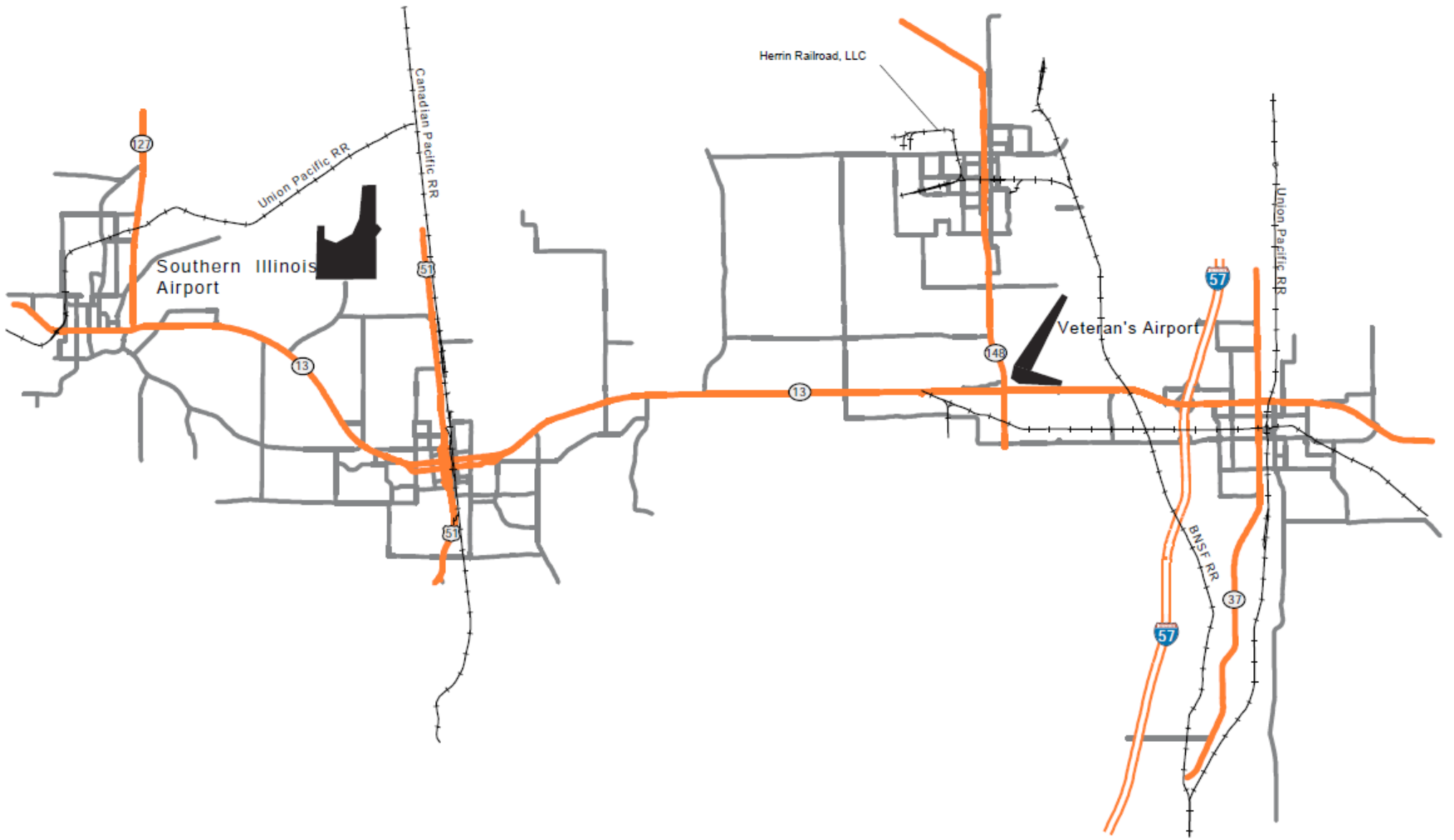
Veteran's Airport

Aircraft based on the field:	46
Single engine airplanes:	40
Multi engine airplanes:	6
Aircraft operations:	141/day
local general aviation	66%
air taxi	16%
transient general aviation	16%
military	2%
commercial	<1%






Southern Illinois Airport

Aircraft based on the field:	69
Single engine airplanes:	60
Multi engine airplanes:	6
Jet airplanes	1
Helicopters	1
Ultralights	1
Aircraft operations:	250/day
local general aviation	65%
transient general aviation	34%
air taxi	<1%
military	<1%
commercial	<1%

Source: www.aimav.com, for the 12-month period ending 28 February 2019



LEGEND

 Roadway	 Class I Truck Route	Airport	
 Railroad Line	 Class II Truck Route		

3 SAFETY IN THE MPA

SAFETY OVERVIEW

VEHICULAR CRASHES

PEDESTRIAN AND BICYCLE CRASHES

SIMPO SAFETY STUDY



Safety Overview

Once an afterthought of design and a reactionary effort, safety for all users is now a fundamental goal at all levels of transportation planning and design. However, the nature of transportation safety issues makes them difficult to identify and mitigate. All modes of transportation need to be addressed, and a variety of cost-benefit trade-offs must be considered.

In accordance with federal and state objectives, IDOT has developed a state Highway Safety Improvement Program (HSIP) and Strategic Highway Safety Plans (SHSP) for both Jackson and Williamson County. It is important that SIMPO coordinates with these efforts to maximize the benefits of safety resources.

The 4 E's of transportation safety are often used to describe the broad range of groups that play a role in improving safety. These groups should all be included in discussions and planning:

- **Engineering:** Roadway design, traffic, maintenance, operations, planning
- **Enforcement:** State and local law enforcement agencies
- **Education:** Driver education, citizen advocacy groups, educators, prevention specialists
- **Emergency Response:** First responders, paramedics, fire fighters, rescue workers

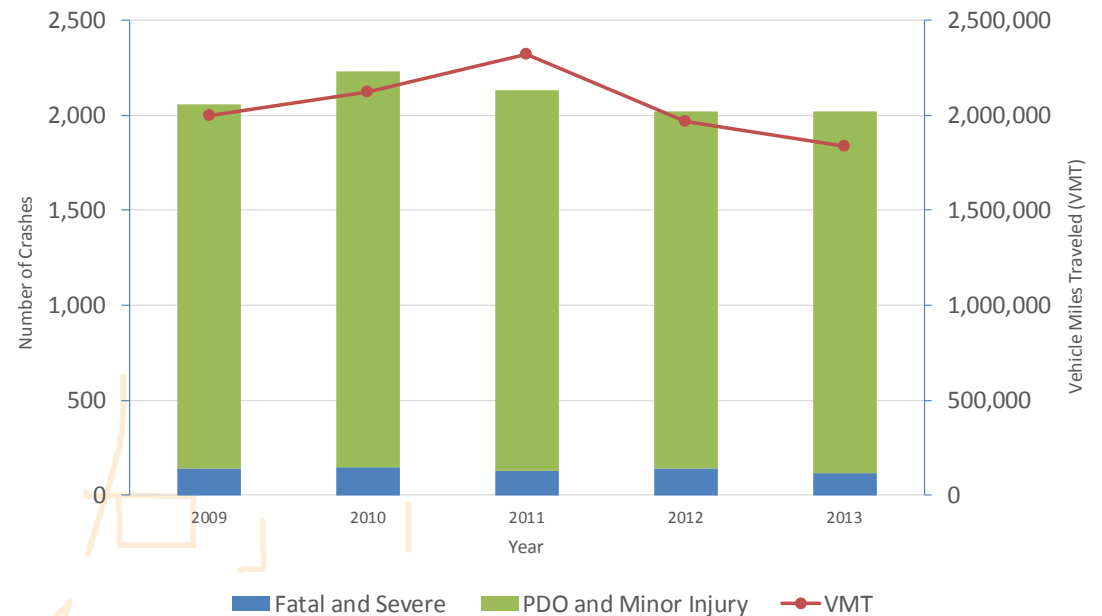


Figure 6. Historical Crash Data within the MPA
Source: Illinois Department of Transportation

Vehicular Crashes

Table 19. Historical Crash Data within the MPA

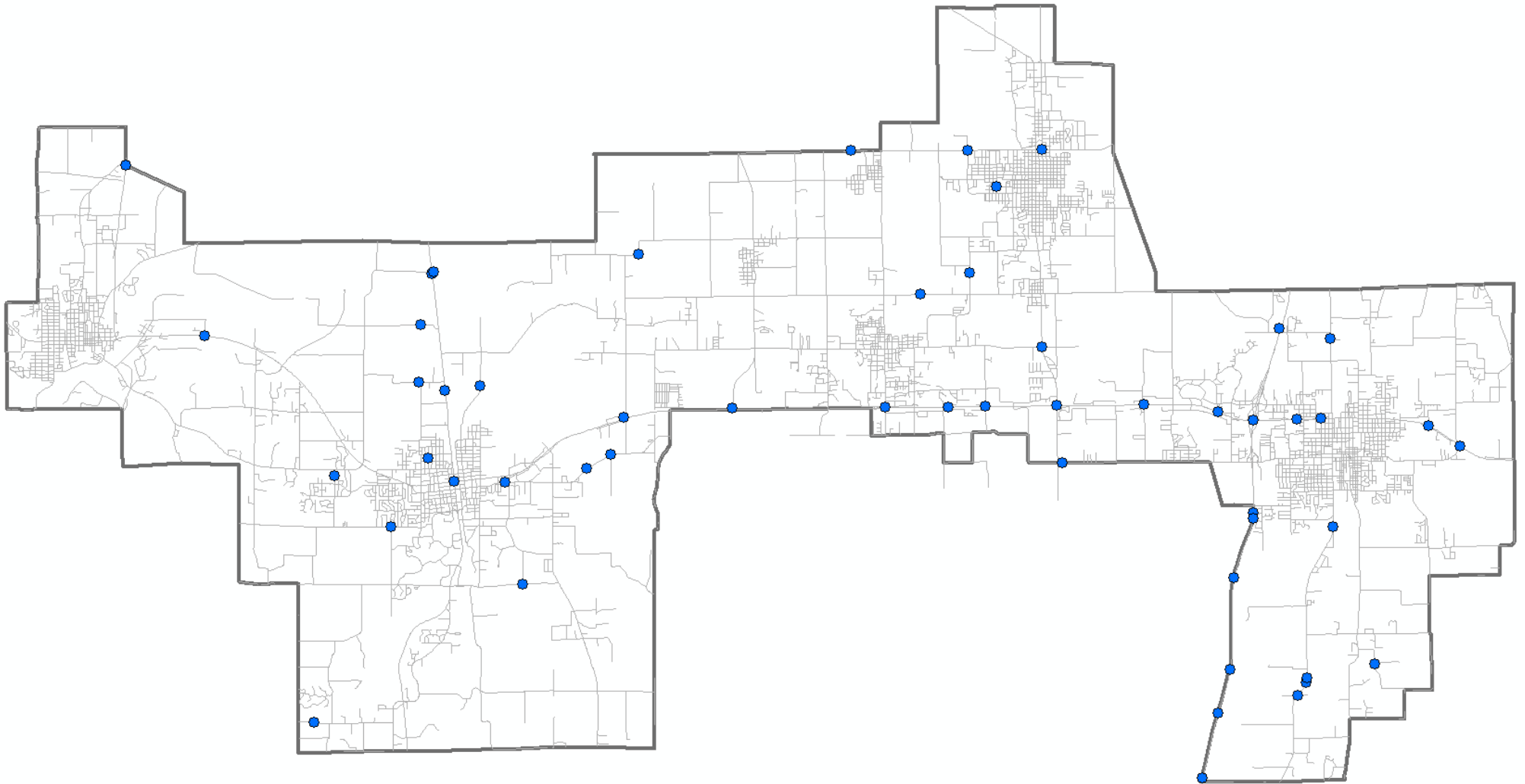
Year	Total Crashes	Fatal Crashes	Severe Injury Crashes	Property Damage Only and Minor Injury Crashes
2013	2,024	6	111	1,907
2014	2,021	6	117	1,898
2015	2,223	10	95	2,128
2016	2,378	16	100	2,262
2017	2,115	12	97	2,006

Source: Illinois Department of Transportation

The total number of crashes has remained relatively consistent over the last five years of available data.

The MPA has experienced between 6 and 16 fatal crashes per year, totaling 50 fatal crashes in five years. These were generally spread out throughout the region, as shown in Map 16.


There was also between 95 and 117 severe injury crashes each year. It will be a primary objective to reduce the number of overall crashes, fatal crashes, and severe injury crashes in the region. As part of this effort, SIMPO's 2019 UPWP includes a safety study of the MPO that will identify high crash locations, recommend counter measures and prepare applications for HSIP funding.



LEGEND

— Roadway

● Fatal Crash Location (50 Total)



Map 16. Fatal Crashes within the MPA (2014 - 2018)

Pedestrian and Bicycle Crashes

Pedestrian and bicycle safety is a critical factor in the encouragement of transportation choices and the development of a quality multi-modal system.

There are several factors in creating a pedestrian system that feels safe for users. These include quality sidewalks, crosswalk facilities at intersections, and roadway characteristics that complement safe walking conditions.

Similarly, creating a safe bike network requires a mix of quality bike facilities mixed with roadway characteristics that complement safe biking conditions.

As seen in Map 17, a majority of the crashes involving pedestrians and bicycles occurred near the city centers where pedestrians and cyclists are more frequent. It is important to develop systems in these areas where walking and biking is already prevalent, but it is equally important to foster an atmosphere in areas outside the city center that allows users to feel more safe and increases walking and biking.

There were 9 fatal crashes involving pedestrians between 2013 and 2017. Eight of these occurred on major state highways. While high speed travel is a desire along these roadways, vehicular traffic must be balanced with safe conditions for pedestrians.

Pedestrian and Bicycle Safety Education

Many stakeholders and the general public reported a general feeling that it can be unsafe to walk or bike within the MPA. This was partially due to the condition of the pedestrian and bicycle facilities, but also due to the perceived lack of awareness from vehicular drivers.

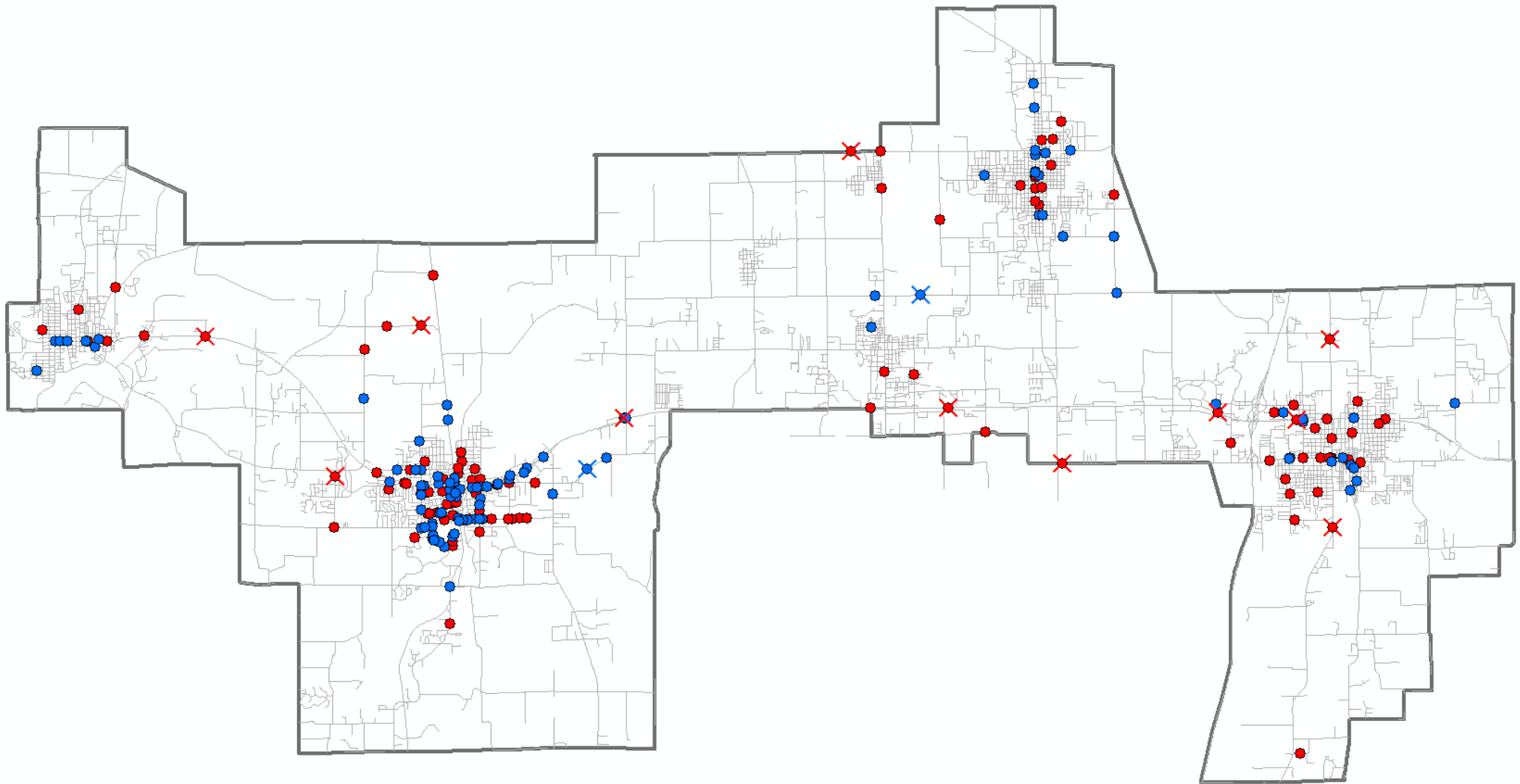
This brings about an opportunity to partner with health and education advocates to demonstrate the benefits of walking and biking and instill an environment that is safe for all users.





Table 20. Historical Pedestrian and Bicycle Crash Data within the MPA


Year	Pedestrian Fatalities	Pedestrian Crashes	Bicycle Crashes
2013	0	26	20
2014	4	24	19
2015	2	21	24
2016	0	16	25
2017	3	12	22

Source: Illinois Department of Transportation





LEGEND	
	Pedestrian Fatal
	Cyclist Fatal
	Cyclist Crashes
	Pedestrian Crashes



Map 17. Crashes Involving Pedestrians and Bicycles (2014- 2018)

SIMPO Safety Study

In June of 2018, SIMPO selected a consultant to perform a safety analysis of the Planning Area. This study evaluated crash data within the MPO from 2012-2018 to determine overrepresented crash types and identify high crash areas on the local roadway network. This study was conducted in coordination with the SIMPO Technical Advisory Committee.

Crash analysis was conducted to identify the priority locations within the MPO roadway system. This analysis was conducted using the entire crash database provided by IDOT. This database included crashes from January 1, 2012 through July 26, 2018.

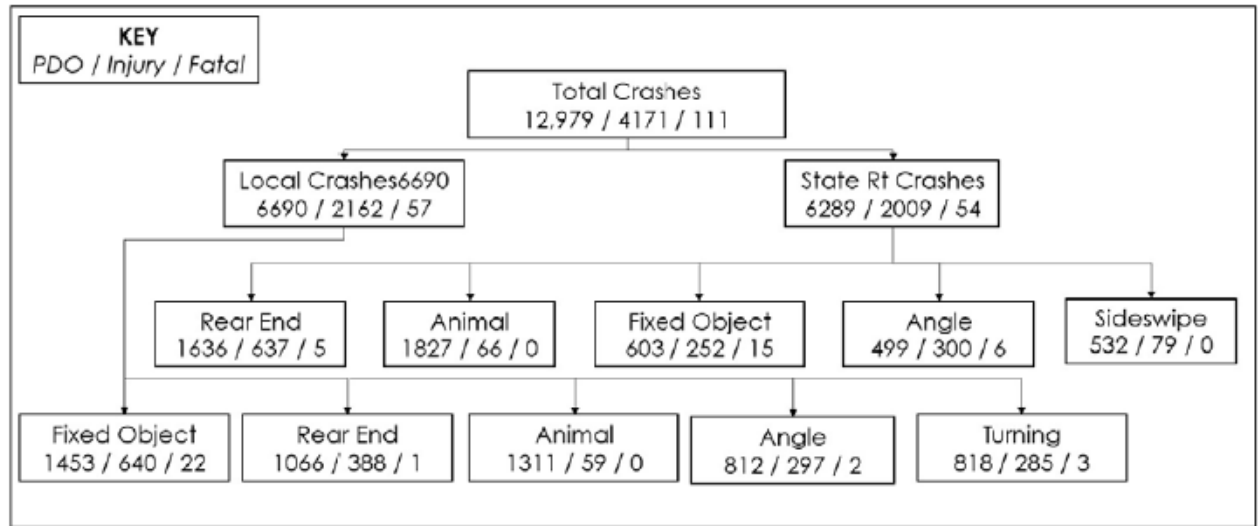
Prior to the identification of high crash locations area wide crash analysis was completed to determine emphasis areas within the MPO roadways that should be the focus of the safety efforts. The consultant conducted data tree analysis for this determination. Data Trees are a highly beneficial first step in determining roadway systems or which crash types should be the primary concern focus area.

The total crash frequency, injury and fatality rates are similar for both local and state systems. However, when comparing the type of crash on the two systems, the state-maintained system is dominated by intersection and/or congestion related crashes with the highest frequency of crashes being rear end crashes.

Conversely, fixed object crashes are the most frequent crashes on the local system, with over two times the number of crashes as the state system. Fixed object crashes also represents the highest frequency of fatal crashes. The second most frequent type of fatal crashes on the local system was overturned crashes, with 15 fatal crashes.



Figure 7: Data Tree Crash Analysis



Crash data was also analyzed to identify other patterns within the crash data that may assist in the identification of priority locations. Figure 8 shows the frequency of crashes by location. Williamson and Jackson Counties have comparable total crash and injury frequencies as the primary cities of Marion and Carbondale. However, it is noted that fatal crashes are significantly higher on the rural county roads than the city streets. This is likely due to the higher speeds associated with rural roads.

Figure 8: Crash Frequency and Severity By Location

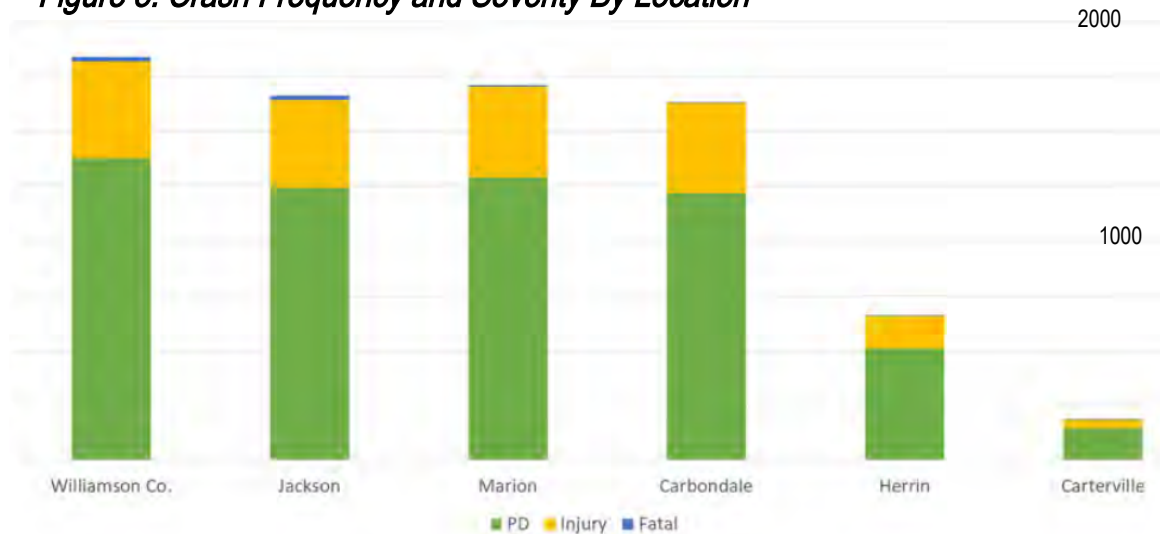
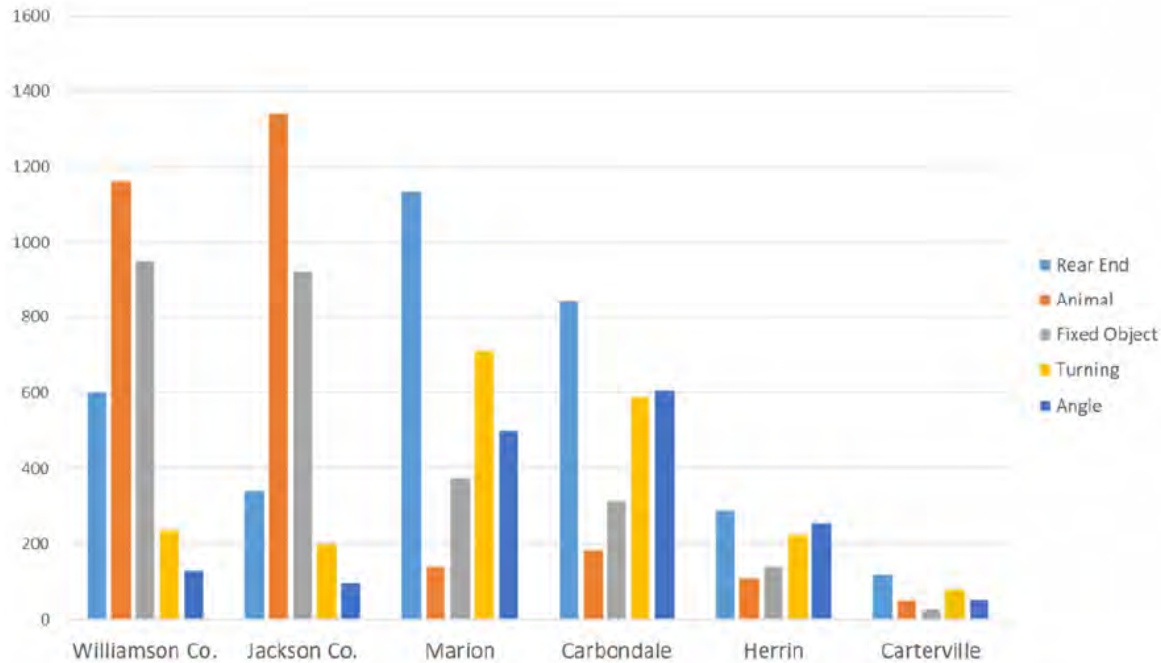


Figure 9 shows the changing crash types between each location. As expected, Animal and Fixed Object crashes are higher on county roads and intersection related crashes such as rear end and turning crashes are higher within cities.

Figure 9 Crash Frequency and Type by Location



A data driven approach was used to identify the priority locations for in depth review and the identification of safety countermeasures. Two types of locations were identified in this process, 1) Roadway Segments and 2) Intersections.

An Equivalent Property Damage Only (EPDO) measure was used to rank each intersection and segment. The EPDO ranking addresses the need to focus on higher crash severities as opposed to locations with high crash frequency but low severity. The EPDO assigns a weight based on the crash severity. For the purposes of this analysis, a weight of 25 was used for fatal crashes and a weight of 10 for A Injury crashes. All other crashes were weighted as one (1). This methodology is consistent with the EPDO ranking used by the Illinois DOT Highway Safety Improvement Program (HSIP).

Once EPDO rankings were determined based on the crash data set, sites were also reviewed to determine if they met the Illinois DOT HSIP eligibility requirements. This requires having a minimum of 1 fatal crash or 2 Type A Injury crashes over a 5-year period.

Based on the methodology presented above, the top 20 intersection locations and Top 20 Roadway segments were identified. After the prioritization of intersection and roadway segments, the top 6 intersection locations and top 5 segment locations were identified for in depth crash analysis and field review. This information was used to identify potential safety countermeasures based on the FHWA's Proven Safety Countermeasures, the Highway Safety Manual, and the Manual on Uniform Traffic Control Devices (MUTCD).

Specific counter measures were identified for the following priority locations:

Intersections

- Williamson County Parkway and 17th Street/Outer Road (Marion)
- Pleasant Hill Road and Giant City Road (Jackson County)
- Carbon Street and West Main Street (Marion)
- Herrin Road and 13th Street (Herrin)
- North Giant City Road and Frontage Roads (Carbondale)
- Grand Avenue and Wall Street (Carbondale)

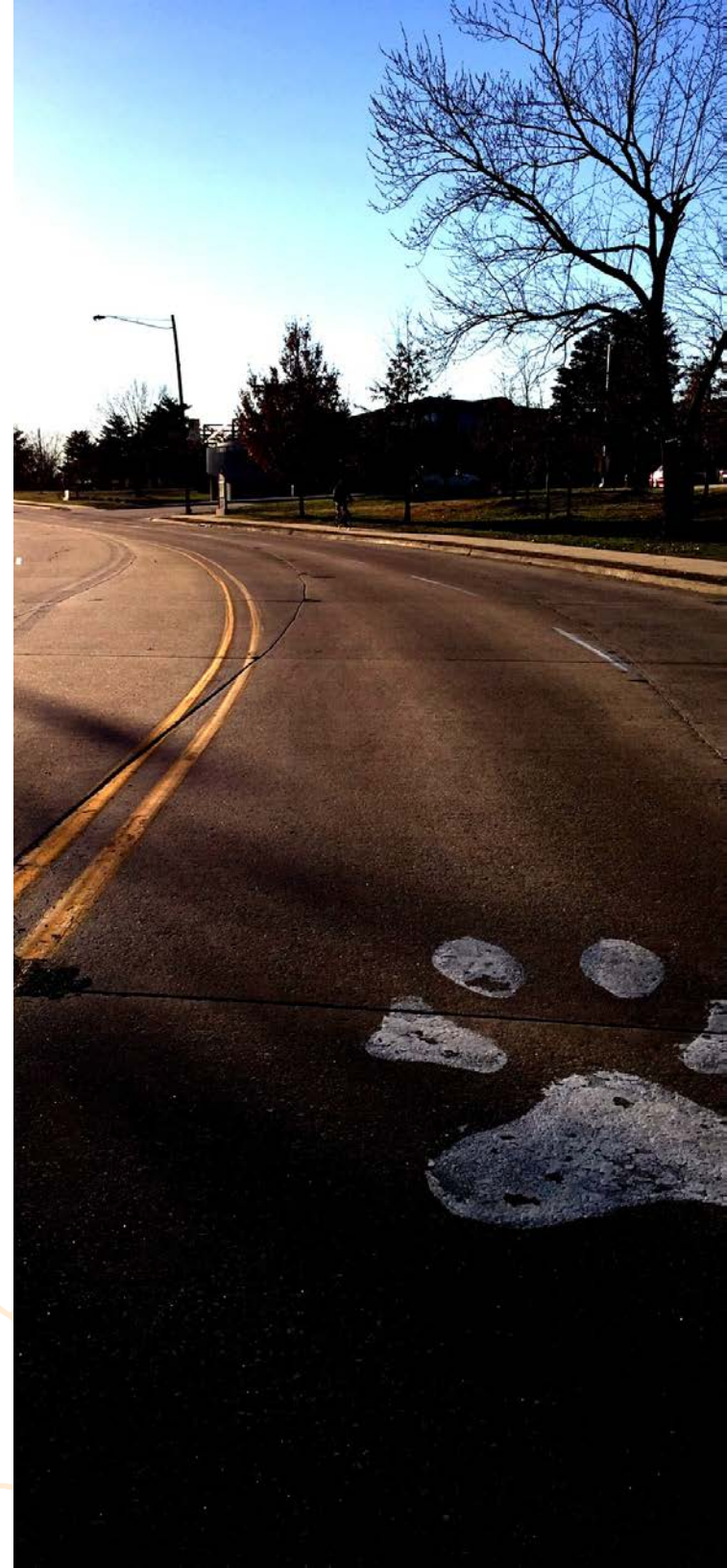
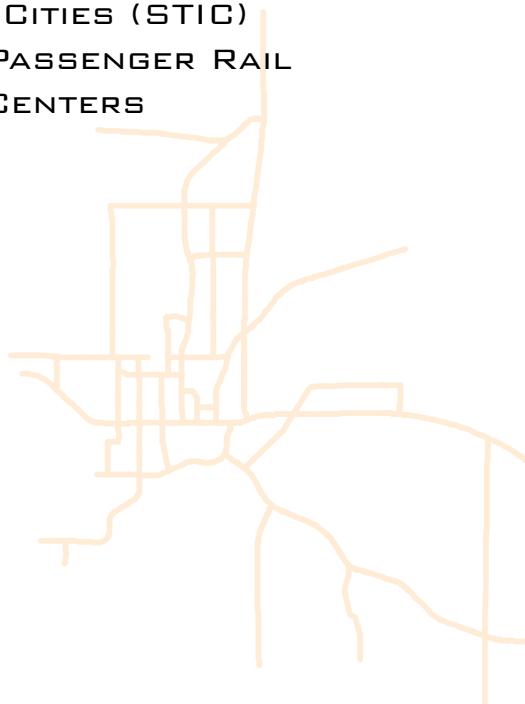
Segments

- Crenshaw Road (Williamson County)
- East Pleasant Hill Road (Carbondale Township/Jackson Co.)
- E. Vaughn Road (Desoto Township/Jackson County)
- W. Herrin Street (Herrin)
- N. Marion Street (Carbondale/Jackson County)

In July of 2019, HSIP applications were prepared for the Williamson County Parkway/Outer Road, Pleasant Hill Road/Giant City Road and Crenshaw Road/Skyline Drive intersections. All of these locations were approved for HSIP funding and all are moving forward to implementation. Given the success of this study, SIMPO plans to proceed with additional safety studies and HSIP applications in the future to further move the MPA toward the goals of reducing fatalities and serious injury roadway crashes.

4 PUBLIC TRANSPORTATION

REGIONAL TRANSIT OVERVIEW
RIDES MASS TRANSIT DISTRICT
JACKSON COUNTY MASS TRANSIT DISTRICT
SALUKI EXPRESS
SMALL TRANSIT INTENSIVE CITIES (STIC)
INTERCITY BUS, AIR, AND PASSENGER RAIL
PROPOSED MULTI-MODAL CENTERS



Regional Transit Overview

There are three public transportation systems within the urbanized area of SIMPO:

- RIDES Mass Transit District
- Jackson County Mass Transit District (JMTD)
- Saluki Express

In June of 2018 RIDES became the provider of the Saluki Express service which serves the SIU campus and the city of Carbondale with a fixed route system.

Outside of Carbondale, RIDES generally operates in a point deviation or route deviation manner, JMTD generally operates in a curb-to-curb manner.

RIDES Mass Transit District

RIDES Mass Transit District is an 18-county system serving southeastern Illinois. It has operated in both the urban and rural portions of Williamson County since 2007.

The agency began as the Rural Initiative Development of Effective Services in 1977 with four 15-passenger vans providing service in Pope and Hardin Counties. During the intervening years, other counties were added to its service area. Since 2002, its administrative offices have been located in Harrisburg.

Most of RIDES service operates in a point deviation or route deviation fashion. The point deviation service operates in a zone setup with buses traveling from point to point in adjacent zones. Generally, if riders call in an hour before they plan to travel, service can be dispatched to meet their travel needs. Services are distributed across the 18-county service area focusing on towns with 2,500 or greater population.

Fixed route service is provided for the SIU campus and within the SIMPO urban area. Currently, four fixed routes are provided in the urban area Monday through Friday, these routes begin as early as 5:00am and end as late as 11:59pm.

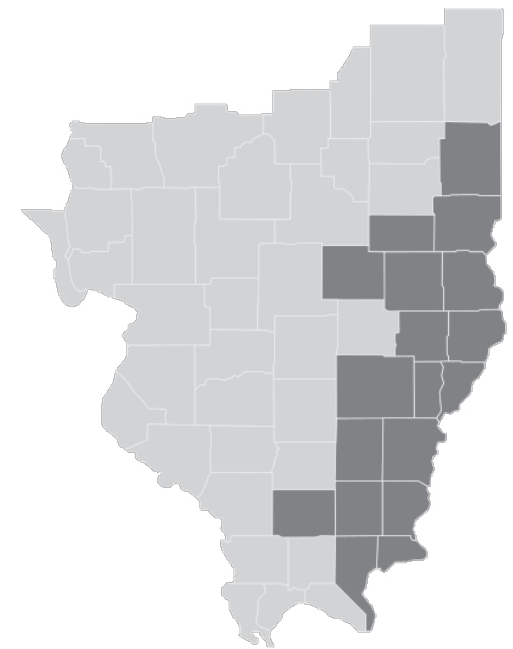


Figure 10. RIDES Service Area

Operations

RIDES has four “working groups” for purposes of operations, vehicle maintenance, vehicle storage and dispatching. Williamson County is its own working group; it is RIDES’ only single-county working group. Within Williamson County, vehicles are individually designated for operation within urban or rural areas; this is due to the separate funding streams used for vehicle purchase.

The facility in Williamson County has about 12,500 ft² of floor space. There is a minimal amount of indoor vehicle storage.

Passenger Facilities

The new RIDES transfer center near the state regional office building and Marion Veteran's Administration Hospital is now operational and serves as the primary transfer hub in the Marion area. Currently, there are limited passenger shelters and benches in the district but progress is being made to add those features. Williamson County was added to the RIDES service area only in 2010, which is the principal reason that such passenger facilities are somewhat limited in Williamson County. Many parts of the urban area lack sidewalks, which in places is a significant impediment to passengers accessing RIDES service.

Bus stop signs are located at major travel destinations. Examples of such destinations include major retail locations, such as Kroger and Aldi, as well as the Williamson County Senior Citizens Center.

Fares

RIDES service is available to any resident of the RIDES service area. The adult cash fare is \$2.00, with a child fare of \$1.00. Discounted multi-ride tickets and passes are available to adults, senior citizens and children. The \$2.00 adult fare is for riding within a single county, or traveling across county lines for trips of less than 25 miles.

Ridership

RIDES provides a significant degree of human services transportation. It has many contracts with sheltered workshops, senior citizen centers, head start schools, private schools and religious schools. It also provides Medicaid transportation. Table 21 provides ridership data by fiscal year.

Table 21. RIDES Annual Ridership

Fiscal Year	Unlinked Passenger Trips	Passenger Miles
2019	524,880	2,856,422

Source: National Transit Database Reports

Plans for the Future

RIDES management views its next initiative as beginning to provide traditional fixed route in urban areas within its jurisdiction. The urban area begins in Marion and extends through Herrin, Carterville, Carbondale and Murphysboro. This is a relatively narrow corridor requiring over 40 minutes to travel from end to end. Some of these fixed routes may have express portions. RIDES already has routes extending into Jackson County as far as Murphysboro. These are designed to serve residents of Williamson County.

RIDES has also recently completed a new park-and-ride facility in Williamson County. Currently, parking lots of major retailers and hotels are used for transfers. A park-and-ride facility will give riders a safe place to wait, as well as provide a common point for all transportation providers to schedule pickups, increasing connectivity throughout multiple transportation systems.

With the addition of the newly designated urban area, RIDES will be adding additional fixed route service along the Route 13 corridor within the next year. In order to provide the service, RIDES plans on adding 4 to 8 heavy duty buses to serve anticipated demand. In addition to the buses, RIDES will be adding cameras and fare boxes to all revenue vehicles within the next 2 to 3 years.

RIDES' short-term initiatives to improve communication both internally and externally include revamping its current web site. The layout for RIDES' new website will include an employee-only page which will give staff access to internal information and documents to help them perform their duties at a higher level. Customers will be able to purchase bus tickets or passes directly from the web site, as well as use the interactive maps to help them plan their trips.

Jackson County Mass Transit District (JMTD)

The Jackson County Mass Transit District provides door to door transit service for Jackson County residents. All trips must begin or end within Jackson County. Service is provided Monday through Friday between 9 am and 5:30 pm.

Fleet and Operations

The JMTD fleet consists of 12-14 passenger ADA-compliant paratransit vehicles and 7 passenger ADA-compliant minivans. All vehicles have lifts/ramps and wheelchair tie-downs. Operations are housed in a building leased from the City of Carbondale. Approximately 900 vehicle-miles of service are operated on an average weekday.

Fares

Riders are encouraged to schedule their travel 24 hours in advance. One-way fares for trips scheduled with 24-hour notice are:

- Adults - \$2.00
- Students - \$1.00
- Senior Citizens - \$1.00
- Children ages 6 to 15 - \$1.00

Personal attendants may ride with a disabled rider at no cost. Adults may purchase an 11-ride pass for \$30.00.

Ridership

Ridership levels for FY-19 are summarized in Table 22.

Table 22. JMTD Ridership Levels

Fiscal Year	Unlinked Passenger Trips	Passenger Miles
2019	56,215	258,112

Source: Jackson County Mass Transit District

Saluki Express

The Saluki Express provides fixed route bus service to the campus of Southern Illinois University (SIU) in Carbondale. This service extends from the campus to a number of destinations within Carbondale. It has been operated by SIU since August 1995. Since its inception, the service has been contracted by SIU, however, a major change occurred in June of 2018 when SIU entered into an Intergovernmental Agreement with RIDES Mass Transit for the Saluki Express service. This change was prompted by the 2017 SIMPO transit study which concluded that the SIMPO urban area could qualify for Small Transit Intensive Cities (STIC) funding if the urban transit providers (RIDES, JCMTD and Saluki Express) combined their ridership data for service in the urban area.

Operations

The Saluki Express operates nine regular routes, which run between 10 and 16 hours on weekdays. Three of these routes operate on Saturdays and Sundays. An additional late-night route operates five hours on Friday, Saturday and Sunday. A separate "Break Route" operates seven days a week only during times when SIU is not in session.

Real time bus location and "next bus" arrival information at specific bus stops is available at the Transloc web site (<http://siuc.transloc.com>).

Passenger Facilities

Seven Saluki Express stops have passenger shelters. These include the SIU Student Center, SIU Recreation Center, SIU Health Center, SIU Arena, Thompson Point/Lincoln, SIU McLafferty Annex, and Evergreen Terrace.

Fares

Students pay a \$50.50 fee per semester, which allows unlimited rides on the Saluki Express. Semester passes are available to the general public for \$52. Spouses and children of SIU Carbondale students may purchase a semester pass for \$42. Monthly passes are available at \$18 for any rider. Single ride cash fare is \$1.00; fare for children under 13 accompanied by an adult is \$0.50.



Small Transit Intensive Cities (STIC) Funding

The STIC program is a performance based funding program for small urban transit systems with higher levels of service and/or ridership. STIC funds are distributed to small urbanized areas, defined as those with populations under 200,000. To qualify for the funds, small transit providers must exceed the average performance of mid-sized transit providers, (serving area with populations between 200,000 and 999,999), in one or more of these six performance measures:

- Passenger miles traveled per vehicle revenue mile
- Passenger miles traveled per vehicle revenue hour
- Vehicle revenue miles per capita
- Vehicle revenue hours per capita
- Passenger miles traveled per capita
- Passengers per capita

These performance measures are calculated from the National Transit Database (NTD). FTA grant recipients receiving funds from the Urbanized Area Formula (5307) or Rural Formula (5311) programs are required to provide data annually to NTD.

Prior to June 2018, the Saluki Express system was not an FTA grant recipient and thus not required to report rider data to NTD. Further, the services provided by RIDES and JCMTD alone did not reach the performance measure criteria to qualify the urban area for STIC funding. With Saluki Express now operating under the RIDES umbrella, additional service data is captured and this boost in service has been sufficient to qualify the urban area for STIC funding under the "Passenger miles per revenue mile" and "Passenger miles per revenue hour" criteria.

This arrangement has resulted in an additional \$202,003 in 5307 funding for the Urban Area in FY18 and an additional \$523,823 in funding for FY19. The qualification of the urban area for STIC funding by combining the transit data of all the providers brings significant additional funding to the local transit systems and is a prime example of how the MPO can benefit the region.

Passenger Air, Passenger Rail, and Intercity Bus Travel

Passenger Air

Williamson County Regional Airport, located in the northeast quadrant of Route 13 and Route 148, offers passenger air service to St. Louis, Missouri and Nashville, Tennessee. Cape Air operates the service, with as many as 25 flights per day.

Figure 11. Cape Air Schedule for Williamson County

Regional Airport



1-800-CAPE-AIR
www.capeair.com

Marion, IL (MWA) to Nashville, TN (BNA)

Depart	Arrive	Flight#	Frequency
7:38 AM	8:59 AM	1120	Monday-Friday
3:03 PM	4:24 PM	1133	Monday-Friday
Depart	Arrive	Flight#	Frequency
10:33 AM	11:54 AM	1131	Saturday
Depart	Arrive	Flight#	Frequency
12:33 PM	1:54 PM	1133	Sunday

Nashville, TN (BNA) to Marion, IL (MWA)

Depart	Arrive	Flight#	Frequency
9:54 AM	11:15 AM	1130	Monday-Friday
5:19 PM	6:40 PM	1121	Monday-Friday
Depart	Arrive	Flight#	Frequency
2:14 PM	3:35 PM	1132	Saturday
Depart	Arrive	Flight#	Frequency
2:54 PM	4:15 PM	1130	Sunday

Schedules subject to change.
Please call for most current flight times.

Fast. Affordable. Reliable.



1-800-CAPE-AIR
www.capeair.com

Marion, IL (MWA) to St. Louis, MO (STL)

Depart	Arrive	Flight#	Frequency
7:00 AM	7:50 AM	1100	Monday-Saturday
9:28 AM	10:18 AM	1102	Monday-Friday
11:35 AM	12:25 PM	1130	Monday-Friday
5:20 PM	6:10 PM	1104	Monday-Friday
Depart	Arrive	Flight#	Frequency
3:55 PM	4:45 PM	1132	Saturday
Depart	Arrive	Flight#	Frequency
8:15 AM	9:05 AM	1102	Sunday
4:35 PM	5:25 PM	1130	Sunday
Depart	Arrive	Flight#	Frequency
8:15 AM	9:05 AM	1102	Sunday
4:35 PM	5:25 PM	1130	Sunday

Schedules subject to change.
Please call for most current flight times.

Fast. Affordable. Reliable.



1-800-CAPE-AIR
www.capeair.com

St. Louis, MO (STL) to Marion, IL (MWA)

Depart	Arrive	Flight#	Frequency
8:15 AM	9:04 AM	1101	Monday-Friday
1:55 PM	2:44 PM	1133	Monday-Friday
4:12 PM	5:01 PM	1103	Monday-Friday
6:35 PM	7:23 PM	1105	Sunday-Friday
Depart	Arrive	Flight#	Frequency
9:25 AM	10:14 PM	1131	Saturday
5:50 PM	6:39 PM	1103	Saturday
Depart	Arrive	Flight#	Frequency
11:25 AM	12:14 PM	1133	Sunday

Schedules subject to change.
Please call for most current flight times.

Fast. Affordable. Reliable.

Passenger Rail

Intercity passenger rail service is provided in the region by an Amtrak station in downtown Carbondale. This station is served by three routes:

1. Illini - Chicago to Carbondale
2. Saluki - Chicago to Carbondale
3. City of New Orleans - Chicago to New Orleans

A complete listing of the schedule and stops for each route is shown in Figure 13.

Ridership data for the most recent seven years available is shown in Figure 12.

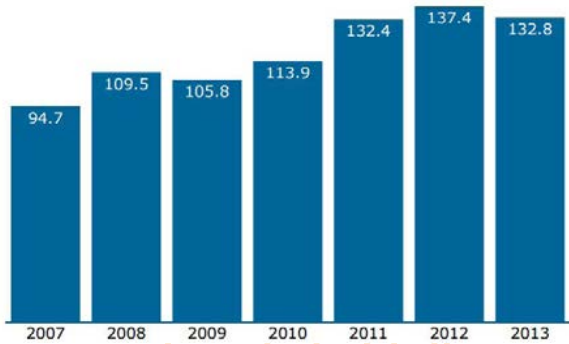


Figure 12. Amtrak Passengers Using the Carbondale, IL Station (in thousands)

Source: National Association of Railroad Passengers

Intercity Bus

Intercity bus service is provided in Carbondale and Marion by Greyhound Lines, Inc.

RIDES Mass Transit also offers intercity bus service to St. Louis, Champaign, Terre Haute, Danville, Evansville, Charleston, Mt Vernon, Vincennes, Paducah and Springfield. All of these destinations (except Paducah) are offered Monday Through Friday. The Paducah route is offered only on Tuesday.

Amtrak Schedules

Figure 13.

Saluki	Illini	City of New Orleans	◀ Train Name ▶			City of New Orleans	Saluki	Illini
391	393	59	◀ Train Number ▶			58	390	392
Daily	Daily	Daily	◀ Normal Days of Operation ▶			Daily	Daily	Daily
			◀ On Board Service ▶					
Read Down		Mile	▼	Symbol	▲	Read Up		
8 15A	4 05P	0	Dp	CHICAGO, IL -Union Station ☞ Madison—see page 2	Ar	09 20A	1 00P	9 45P
08 56A	04 46P	24	↓	Homewood, IL (METRA/IC Line)	↑	07 49A	11 44A	D8 27P
9 22A	5 12P	57	↓	Kankakee, IL	↑	07 18A	11 15A	8 00P
9 44A	5 34P	82	↓	Gilman, IL	↑		10 53A	7 38P
10 10A	6 00P	115	↓	Rantoul, IL	↑		10 27A	7 12P
10 25A	6 15P	129	↓	CHAMPAIGN-URBANA, IL ☞ Davenport, Indianapolis—see page 2	↑	06 15A	10 14A	6 59P
11 05A	6 55P	173	↓	Mattoon, IL (Charleston)	○	05 23A	9 31A	6 16P
11 29A	7 19P	200	↓	Effingham, IL	○	04 57A	9 07A	5 52P
12 16P	8 06P	253	↓	Centralia, IL	○	04 10A	8 23A	5 08P
12 49P	8 39P	289	↓	Du Quoin, IL	○		7 51A	4 36P
1 45P	9 35P	309	Ar	CARBONDALE, IL ☞ St. Louis, Kansas City—see page 2	Dp	03 16A	7 30A	4 15P
			Dp		Ar	03 11A		
		406	↓	Fulton, KY	○		01 04A	
		442	↓	Newbern-Dyersburg, TN	○		12 22A	
		528	Ar	MEMPHIS, TN	Dp	10 40P		
		597	Dp	Marks, MS	Ar	08 31P		
		654	Dp	Greenwood, MS	Dp	7 37P		
		706	Dp	Yazoo City, MS	Dp	06 42P		
		751	Ar	JACKSON, MS	Dp	05 44P		
		805	Dp	☞ Mobile, Dallas—see page 2	Ar	05 28P		
		784	↓	Hazlehurst, MS	○		04 17P	
		805	↓	Brookhaven, MS	○		03 56P	
		828	↓	McComb, MS	○		03 32P	
		881	↓	Hammond, LA	○		02 45P	
		934	Ar	NEW ORLEANS, LA (CT) -Union Passenger Terminal ☞ Baton Rouge, Montgomery, Mobile—see page 2	Dp	01 45P		

Proposed/Planned Multi-Modal Centers

As previously noted, RIDES is currently building a new multi-modal facility in Marion. This facility will be located near the VA Medical Center west of Downtown Marion. It is planned to facilitate bus route transfers for the various RIDES routes as well as an intercity bus terminal for Greyhound and a commuter park-and-ride.



Additionally, the City of Carbondale is in the process of creating their own multi-modal center in the heart of downtown. Build Grant funding (\$14M) for this facility was announced on November 6, 2019. Planned to be constructed at the current Amtrak station, this facility will enable transfers between Jackson County Mass Transit District (JMTD) buses, Saluki Express Buses, Rides Mass Transit buses, Greyhound intercity buses and Amtrak trains. It would connect roadway, bicycle and pedestrian facilities to those services and serve as a prominent landmark in Downtown Carbondale. This facility will serve as a major entryway for the City of Carbondale and SIU as well as providing enhanced coordination between the various public transit systems in the area.

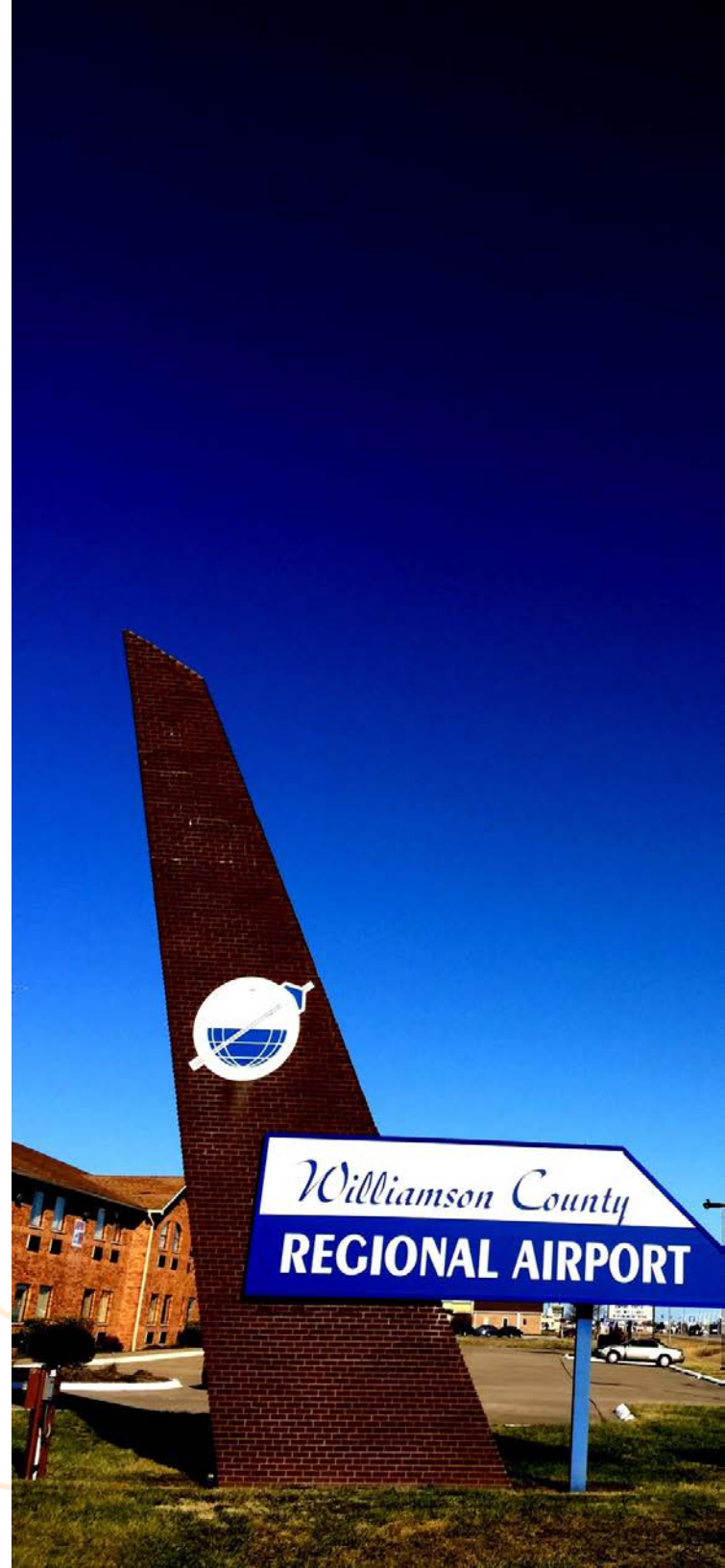


By creating strong multi-modal nodes on both the east and west sides of SIMPO, a new level of usability and intuitiveness can be achieved for transit. These facilities will form a strong base for expanding future transit service along the Route 13 corridor, combining access to local, regional and national locations as well as transit options in the same area.



5 FREIGHT MOVEMENT

AIR, RAIL, AND TRUCK NETWORK
FREIGHT PROJECTIONS
TRUCK VOLUME PROJECTIONS



Air, Rail, and Truck Network

Air

There are two airports serving the MPA, Veteran's Airport of Southern Illinois and Southern Illinois Airport. Statistics for each airport are given in Table 31.

Table 23. Regional Airport Operations

Veteran's Airport

Aircraft based on the field:	46
Single engine airplanes:	40
Multi engine airplanes:	6
Aircraft operations:	141/day
local general aviation	66%
air taxi	16%
transient general aviation	16%
military	2%
commercial	<1%

Southern Illinois Airport

Aircraft based on the field:	69
Single engine airplanes:	60
Multi engine airplanes:	6
Jet airplanes	1
Helicopters	1
Ultralights	1
Aircraft operations:	250/day
local general aviation	65%
transient general aviation	34%
air taxi	<1%
military	<1%
commercial	<1%

Source: www.airnav.com, for the 12-month period ending 28 February 2019

Rail

There are three national rail operators that run through the MPA: Union Pacific, Canadian Pacific, and BNSF. A regional rail operator, Herrin Railroad, LLC, also operates a short-line track. The rail network can be seen in Map 18.

Truck Network

Also shown in Map 18, several roadways within the MPA are IDOT-designated truck routes. These routes provide opportunities for industry and the movement of goods.





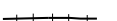

In 2017, the Illinois Vehicle Code was revised to describe all roads in Illinois as satisfying the criteria for Class III truck routes. This action effectively eliminated the Class III designation. The two remaining classes of truck routes are defined as:

- **Class I** – Interstate highways, tollways, and other highways deemed appropriate
- **Class II** – major arterials not built to interstate highway standards that have at least 11-foot lane widths

Two valuable data sets that arise from national freight planning efforts are long-range projections for the movement of freight and long-range projections for truck volumes on major truck routes.



LEGEND

	Roadway		Class I Truck Route		Airport	
	Railroad Line		Class II Truck Route			

Map 18. Air, Rail, and Truck Network

Truck Volume Projections

Truck volume projections for major truck routes are also provided by FHWA through the year 2045. These values do take into account the movement of goods through the region, and not just the goods coming in and out. As a national trend, truck volumes are expected to increase at a steady pace. This trend can be seen locally with increases on all major truck routes in the area.

As a long-distance route, I-57 is expected to double the amount of trucks it carries by 2045. Regional routes, such as Route 13 and Route 148, are projected to see a 50% increase in truck volumes.

These increases would have impacts on the transportation network, and should be monitored over time. Heavy truck volumes influence the design of pavement on new roads, produce a significant amount of wear on existing roads, and should influence the location and design of bicycle and pedestrian facilities.

Major Flows by Truck To, From, and Within Illinois: 2012

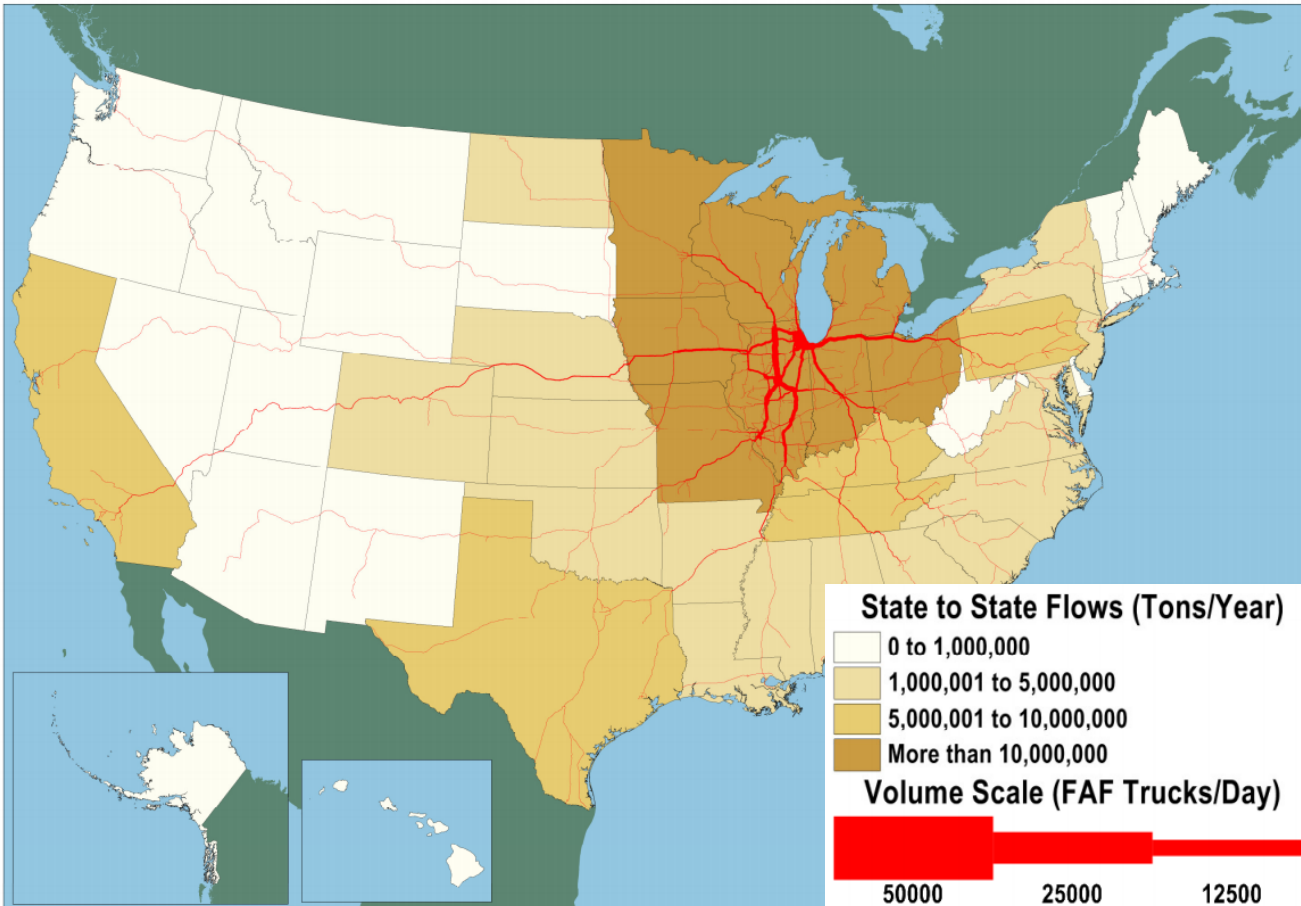


Figure 14

Major Flows by FAF Truck Through the State of Illinois: 2012

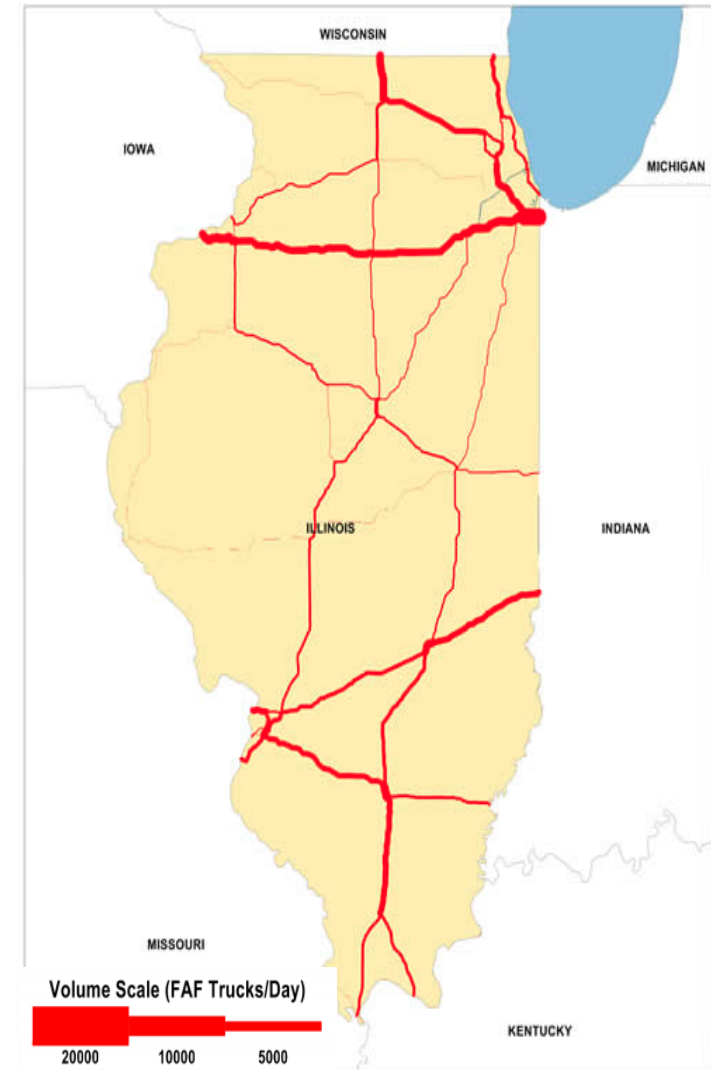
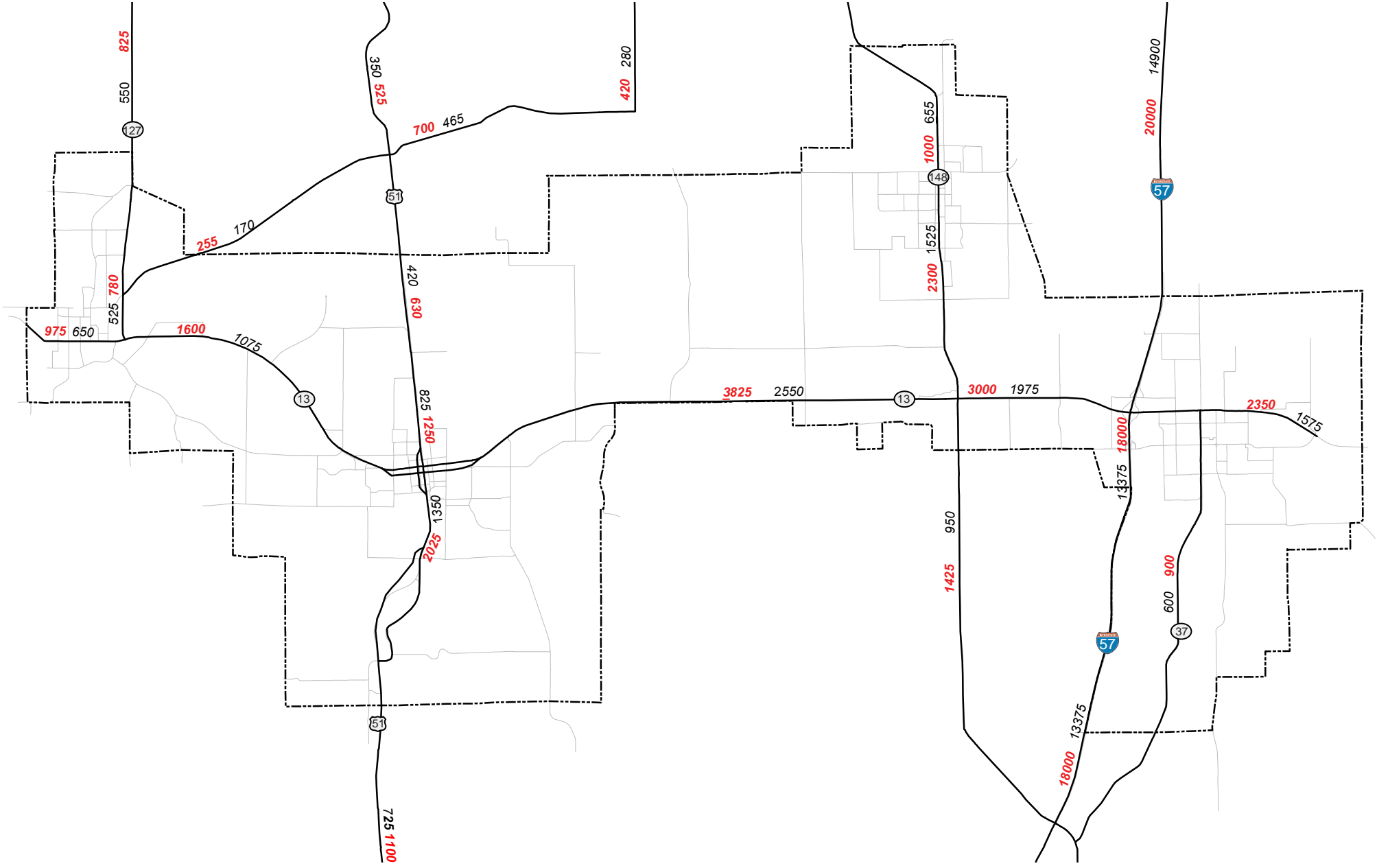




Figure 15



Source: Federal Highway Administration's Freight Analysis Framework

LEGEND

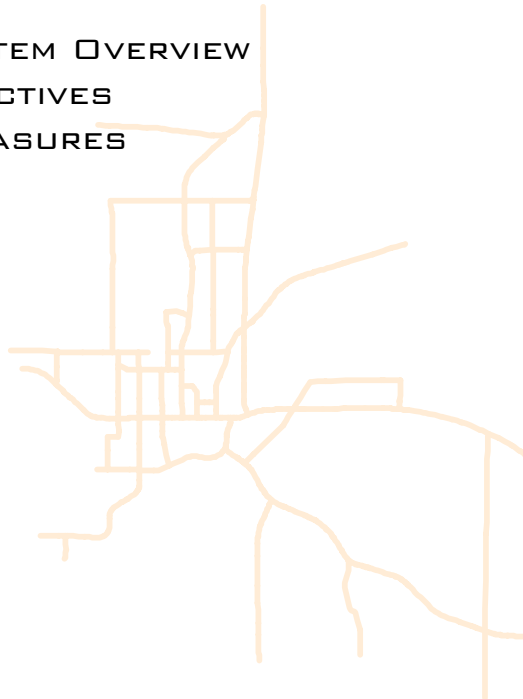
	Major Truck Route	XXX	2019 Truck Volume
	MPA Boundary	XXX	2045 Truck Volume



Map 19. Truck Volumes on Major Truck Routes

6 VALUES, OBJECTIVES, AND PERFORMANCE MEASURES

PERFORMANCE-BASED SYSTEM OVERVIEW
SIMPO VALUES AND OBJECTIVES
SIMPO PERFORMANCE MEASURES



Performance-based Transportation Systems

MAP-21 and the FAST act have introduced a focus on performance-based planning for statewide and metropolitan transportation planning. This approach to planning applies the development, application, and monitoring of performance data to guide transportation funding and improvements.

In 2013, a peer exchange was held for small MPOs similar to SIMPO. The document resulting from this exchange is the FHWA “Performance-Based Planning for Small Metropolitan Areas” report.

This report identified five key themes in how small MPOs are successfully moving towards performance-based planning. As SIMPO continues to develop a plan for operating a performance-based transportation system, it must keep these themes in mind:

- Establishing a “performance-ready” planning process
- Collaboration with State DOTs
- Coordinated data sourcing
- Performance as a key tool for public and stakeholder engagement
- Cross sectoral planning

The most difficult next steps include selecting performance measures based on data that is feasible to collect and reliable over time, selecting measures that move the region in the direction that it wishes to go, and selecting targets that are obtainable and directly linked to the actions of the MPO.

Through extensive public involvement efforts, this LRTP identifies five major Values that the SIMPO region considers important. These values are also consistent with federal and state transportation goals.

SIMPO Values and Objectives

The five values identified in this LRTP are intended to represent what is important to the region. It was essential for these values to link to real transportation objectives, allowing for strategies to be formed that help SIMPO work toward measuring and achieving select performance targets.

SIMPO Regional Values

- 1. Support Economic Vitality and Quality of Life**
- 2. Encourage Transportation Choices**
- 3. Maintain a Safe Transportation System**
- 4. Preserve the Existing System**
- 5. Foster Coordination Throughout the MPA**

These values each contain specific objectives across multiple modes of transportation, as discussed on the following pages.

1. Support Economic Vitality and Quality of Life

The regional transportation system is a valuable asset contributing to the economic vitality and quality of life of Southern Illinois. SIMPO should make transportation decisions that support this contribution and enhance its benefits.

Projects that support economic vitality should be balanced with those that increase the quality of life for all people, including maintaining an environmentally sustainable system that does not impact the region's natural assets and supporting easy access to healthcare.

Promoting projects that support businesses, increase the movement of goods, and allow the population to get to and from work easily is critical to a thriving region.

Objectives

- 1.1 Reduce congestion at the crossroads of commuter routes and retail centers
- 1.2 Support easy access to healthcare providers
- 1.3 Enforce Access Management strategies along key routes
- 1.4 Improve truck freight movements and reduce the impact of truck freight on other modes
- 1.5 Support environmentally sustainable transportation system expansion
- 1.6 Support financially sustainable transportation system expansion
- 1.7 Encourage development in areas with existing infrastructure

National Goal Areas Identified in MAP-21 and the FAST ACT

Supporting Economic Vitality and Quality of Life is consistent with the national goals of (5) Freight Movement and Economic Vitality and (6) Environmental Sustainability.

Source: 23 U.S. Code § 150 - National goals and performance management measures





2. Encourage Transportation Choices

Encouraging transportation choices can help maximize the safety and efficiency of the transportation system, while improving health and providing access for all of the region's population.

SIMPO will strive to conduct a multi-modal planning approach that takes into account all modes of transportation. From walking and biking, to public transportation and personal vehicles, there are opportunities to create an efficient system for all users.

Objectives

- 2.1 Expand and improve the pedestrian facility network
- 2.2 Expand and improve the bicycle facility network
- 2.3 Increase transit usage
- 2.4 Expand fixed-route transit
- 2.5 Improve roadway system reliability
- 2.6 Maximize the performance of the existing system for motorized vehicles

National Goal Areas Identified in MAP-21 and the FAST ACT

Encouraging Transportation Choices is consistent with the national goal of (3) Congestion Reduction and (6) Environmental Sustainability.

Source: 23 U.S. Code § 150 - National goals and performance management measures

3. Maintain a Safe Transportation System

Reducing crashes that result in severe and fatal injuries is a priority at the local, state, and national level. It is important to bring together engineering, law enforcement, education, and emergency response representatives and to develop a safety program that utilizes the benefits of each.

By targeting spot locations that have a history of traffic crashes, implementing system-wide improvements that have been proven to increase safety, and considering pedestrians and cyclists in safety planning, great strides can be made in improving the region's transportation safety.

Objectives

- 3.1 Reduce the number of crashes
- 3.2 Reduce the number of fatal and severe injury crashes
- 3.3 Improve safety on pedestrian facilities
- 3.4 Improve safety on bicycle facilities
- 3.5 Improve safety for at-grade rail crossings
- 3.6 Improve safety within the vicinity of schools
- 3.7 Improve reliability for emergency response vehicles

National Goal Areas Identified in MAP-21 and the FAST ACT

Maintaining a Safe Transportation System is consistent with the national goal of (1) Safety.

Source: 23 U.S. Code § 150 - National goals and performance management measures





4. Preserve the Existing System

As the region's transportation system continues to age, maintenance and preservation became increasingly important, and increasingly difficult. SIMPO must strive to balance the needs of expanding the system with the requirements of maintaining the system. While bridge structures and pavement conditions are vital, considerations should also be made to preserve satisfactory sidewalk conditions and public transportation bus fleets.

It will be vital to develop a pro-active system, and to document the location and condition of the region's existing assets. Included in these considerations should be the environmental assets as well.

Objectives

- 4.1 Maintain satisfactory bridge conditions
- 4.2 Maintain satisfactory pavement conditions
- 4.3 Maintain satisfactory sidewalk conditions
- 4.4 Maintain a satisfactory bus fleet
- 4.5 Preserve existing environmental assets

National Goal Areas Identified in MAP-21 and the FAST ACT

Preserving the Existing System is consistent with the national goal of (2) Infrastructure Condition.

Source: 23 U.S. Code § 150 - National goals and performance management measures

5. Foster Coordination Throughout the MPA

The manner in which the Carbondale Urbanized Area and the Marion-Herrin Urbanized Area have grown together has created a unique Metropolitan Planning Area. Long and narrow, stretching along Route 13, each town and village may think of itself as separate from the rest. It is important for the region to think as one, to maximize the assets of each community, and leverage the resources of the area as a whole.

Along with each municipality working together, regional stakeholders should be continuously engaged, such as health and education advocates. Nowhere is this more true than with the area's transit operators.

Objectives

- 5.1 Increase coordination between key stakeholders to maximize the strengths of the region
- 5.2 Educate and inform the general public
- 5.3 Coordinate with economic, health, and education advocates to create a network of support groups
- 5.4 Coordinate transit service within the MPA

National Goal Areas Identified in MAP-21 and the FAST ACT

Fostering Coordination Throughout the MPA is consistent with the national goal of (7) Reduced Project Delivery Delays.

Source: 23 U.S. Code § 150 - National goals and performance management measures



SIMPO Performance Measures and Strategies

The following preliminary Performance Measures and Strategies have been developed to support the Values and Objectives that have been established. These measures have been selected because they are based on data sources that are reasonably feasible for SIMPO to obtain and measure.

The next steps in developing a performance-based system will be measuring the baseline conditions and selecting performance targets to work towards. The associated strategies should result in positive impacts for the objective, as evaluated by the performance measure.

Table 24. Strategies to Support Economic Vitality and Quality of Life

Objective	Performance Measure	Strategies
1.1 Reduce congestion at the crossroads of commuter routes and retail centers	Average delay per vehicle at select intersections	1.1a Identify crucial routes and intersections that serve commuter traffic and retail centers 1.1b Utilize traffic management principles at these locations 1.1c Promote and implement ITS solutions along the IL 13 corridor
1.2 Support easy access to healthcare providers	-	1.2a Provide quality regional and local connections to healthcare centers
1.3 Enforce Access Management strategies along key routes	Number of new developments along key routes that do not adhere to the Access Management Guidelines	1.3a Develop Access Management Guidelines 1.3b Highlight key routes to focus efforts
1.4 Improve truck freight movements and reduce the impact of truck freight on other modes	Complete a regional freight plan for the MPA consistent with state and national strategies	1.4a Identify intersections impacted most by truck freight 1.4b Investigate an origin/destination truck data source for the region
1.5 Support environmentally sustainable transportation system expansion	Zero net change in acres of protected wetlands and wildlife refuge	1.5a Promote environmental and historical assets as an item of consideration for all planning and design efforts
1.6 Support financially sustainable transportation system expansion	-	1.6a Evaluate proposed system expansion in the context of regional benefit and within the financial constraints of the Transportation Improvement Program
1.7 Encourage development in areas with existing infrastructure	minor change in acreage of agriculture and open land within the MPA	1.7a Develop a comprehensive land-use plan for the entire MPA

Table 25. Strategies to Encourage Transportation Choices

Objective	Performance Measure	Strategies
2.1 Expand and improve the pedestrian facility network	Length of sidewalk constructed or improved per year	2.1a Complete an MPO-wide inventory of sidewalks 2.1b Expand the sidewalk network with new sidewalk 2.1c Provide pedestrian crossing facilities at major intersections where feasible 2.1d Develop pedestrian safety programs with healthcare and education
2.2 Expand and improve the bicycle facility network	Length of trails or bike lanes constructed or improved per year	2.2a Develop a regional bicycle master plan 2.2b Incorporate bikeable shoulders into rural roadway projects 2.3c Seek funding for additional trail segments along IL 13
2.3 Increase transit usage	Transit ridership goals based on peer system comparisons	2.3a Improve scheduling and dispatching 2.3b Provide appropriate passenger amenities
2.4 Implement fixed-route transit	Establishment of an east-west fixed-route transit service connecting Murphysboro to Marion	2.4a Develop operational coordination between RIDES, JMTD and Saluki Express
2.5 Improve roadway system reliability	-	2.5a Provide direct roadway routes for major origins and destinations 2.5b Provide alternative routes into major retail centers near major commuter routes
2.6 Maximize the performance of the existing system for motorized vehicles	Vehicle Miles Traveled (VMT) within Level of Service C or better	2.6a Utilize transportation management practices along key routes, including optimizing signal timing, lane configurations, transit options, and more.

Table 26. Strategies to Maintain a Safe Transportation System

Objective	Performance Measure	Strategies
3.1 Reduce the number of crashes	Number of crashes on the roadway system	3.1a Coordinate with the IDOT Highway Safety Improvement Program 3.1b Maximize IDOT funding for safety projects 3.1c Complete an MPO wide safety study and identify potential HSIP projects
3.2 Reduce the number of fatal and severe injury crashes	Number of fatal or severe injury crashes on the roadway system	3.2a Coordinate with the IDOT Highway Safety Improvement Program 3.2b Maximize IDOT funding for safety projects 3.2c Complete an MPO wide safety study and identify potential HSIP projects
3.3 Improve safety on pedestrian facilities	Number of pedestrian crashes	3.3a Expand the sidewalk network 3.3b Provide pedestrian crossing facilities at major intersections 3.3c Produce an annual report of pedestrian and bicycle crashes
3.4 Improve safety on bicycle facilities	Number of bicycle crashes	3.4a Expand the bicycle facility network especially along IL 13 3.4b Develop bicycle safety education programs with health and education advocates 3.4c Produce an annual report of pedestrian and bicycle crashes
3.5 Improve safety for at-grade rail crossings	Zero at-grade rail crossing crashes	3.5a Provide grade-separated rail crossings where feasible 3.5b Provide adequate signing and signal control at all at-grade rail crossings
3.6 Improve safety within the vicinity of schools	Number of crashes during arrival and dismissal periods within the vicinity of schools	3.6a Provide extensive sidewalk facilities between schools and residential areas 3.6b Provide multiple entrance and exit options to reduce congestion
3.7 Improve reliability for emergency response vehicles	Average emergency vehicle response times for select facilities	3.7a Implement vehicle pre-emption for emergency response vehicles 3.7b Provide alternative routes for at-grade rail crossings 3.7c Provide regional and local connections directly to healthcare providers

Table 27. Strategies to Preserve the Existing System

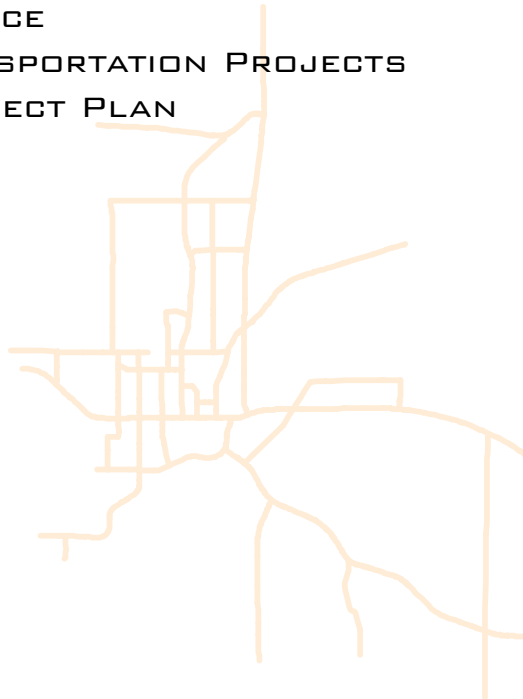
Objective	Performance Measure	Strategies
4.1 Maintain satisfactory bridge conditions	Number of bridges with an acceptable sufficiency rating	4.1a Prioritize bridge programs 4.1b Maximize IDOT funding for bridge projects
4.2 Maintain satisfactory pavement conditions	Miles of roadway with an acceptable IRI rating	4.2a Perform a roadway condition inventory 4.2b Coordinate with local and county agencies 4.2c Develop a prioritized list of maintenance projects within the MPO
4.3 Maintain satisfactory sidewalk conditions	Length of acceptable sidewalk	4.3a Complete an MPO-wide inventory of sidewalks
4.4 Maintain a satisfactory bus fleet	Number of vehicles in use beyond their FTA-recognized usable life	4.4a Provide a fiscally constrained capital replacement program to replace vehicles at appropriate intervals
4.5 Preserve existing environmental assets	Zero net change in acres of protected wetlands and wildlife refuge	4.5a Promote environmental and historical assets as an item of consideration for all planning and design efforts

Table 28. Strategies to Foster Coordination Throughout the MPA

Objective	Performance Measure	Strategies
5.1 Increase coordination between key stakeholders to maximize the strengths of the region	-	5.1a Foster coordination between member agencies 5.1b Foster coordination with ADA representatives 5.1c Consider issues of social justice in all transportation planning and service provisions 5.1d Foster coordination with retail and commercial partners
5.2 Educate and inform the general public	-	5.2a Provide easily accessible information to the general public
5.3 Coordinate with economic, health, and education advocates to create a network of support groups	-	5.3a Develop health and safety programs with health and education advocates
5.4 Coordinate transit service within the MPA	-	5.5a Provide coordinated transit information on the internet on a single web portal 5.5b Facilitate transit trip planning throughout the MPA 5.5c Coordinate transit fare and pass policy throughout the MPA

7 FINANCIAL INVESTMENT PLAN

OVERVIEW OF FUNDING SOURCES
REVENUE PROJECTIONS
OPERATIONS AND MAINTENANCE
PLANNED LONG-RANGE TRANSPORTATION PROJECTS
FISCALLY CONSTRAINED PROJECT PLAN



Transportation Investment Overview

The Intermodal Surface Transportation Efficiency Act (ISTEA), passed in 1991, changed the long range planning process from need-based analysis with little consideration of transportation revenue to a more financially constrained planning approach. Subsequent reauthorization bills, TEA-21 in 1998, SAFETEA-LU in 2005, MAP-21 in 2012, and most recently the FAST Act all require MPOs to ensure the long range plan is “fiscally constrained”, i.e. the projects programmed do not exceed the amount of revenue reasonably expected to be available for transportation improvements over the 25-year plan period.

The financial element of the long range plan identifies the existing revenue sources for the MPO, costs of maintaining and operating the transportation system, and the method used to calculate the revenue reasonably expected to be available for the planning period. The financial plan also includes the planning level estimated project costs and the estimated timeline for anticipated projects.

Overview of Funding Sources

This section provides an overview of funding sources that are used or potentially available for use to support the plan through the planning horizon. SIMPO’s transportation infrastructure improvements are funded by a combination of federal, state, and local revenue, with federal funding accounting for a major share.

Roadway Funding

Federal Funding Sources

The primary source of federal funding is the Highway Trust Fund, which is funded by federally assessed gasoline taxes, aviation fuel, and landing fees. These funds are apportioned back to the states on a formula basis. Most federal transportation grants require a 10-20% match from state, local or other funding sources. The latest transportation bill, the FAST ACT consolidates several programs from SAFETEA-LU into the following major funding programs:

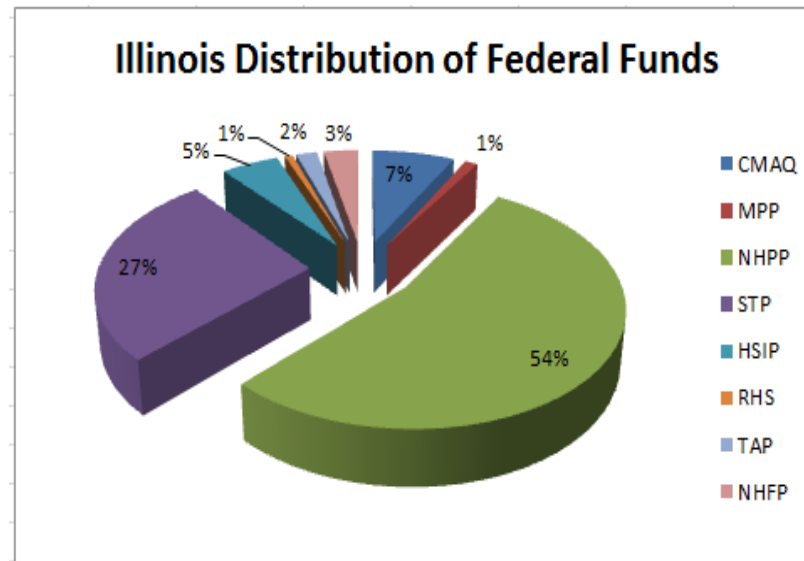
- National Highway Performance Program (NHPP)
- Surface Transportation Block Grant Program (STBG)
- STP-U(Urban) & STP-R(Rural)
- Interstate Maintenance Discretionary Program (IMD)
- Highway Safety Improvement Program (HSIP)
- Transportation Alternatives Program (TAP)
- Metropolitan Planning Program (MPP)

In Fiscal Year 2019, the states received a total apportionment share of at least 95% of the dollar amount of its contributions to the Highway Account of the Highway Trust Fund. The federal funding is then divided among the state's individual formula programs as shown in the following table. Table 41 presents the Illinois apportionment formula for each program in FY 2019.

Table 29. Federal Funding Apportionment at State Level

Program	Apportionment Formula	Illinois FY19 Apportionment
Cong. Mit. % Air Quality Imp. Program (CMAQ)	% of State's FY19 CMAQ \$	\$116,153,419
Metropolitan Planning Program (MPP)	% of State's FY19 Metro Planning \$	\$18,054,267
National Hwy. Performance Planning Program (NHPP) Surface Transportation Program (STP)	63.7% to NHPP 29.3% to STP	\$839,914,867
Highway Safety Improvement Program (HSIP)	7.0% to HSIP	\$80,878,820
(HSIP)National Railway Highway Crossings (RHS)	Funded from HSIP	\$11,082,199
Transportation National Highway Freight Program	3.6% of \$1.35B set aside	\$48,348,900
Transportation Alternatives Program (TAP)	2% set aside from NHPP, STP,HSIP, CMAQ & MPP	
TOTAL		\$1,565,210,018

Figure 16. The Federal-Aid highway program apportionment percentages for the State of Illinois for FY-19



National Highway Performance Program (NHPP)

The NHPP funding supports construction and maintenance projects on the National Highway System (NHS). The National Highway System is the network of about 220,000 miles of the nation's most important highways, including the Interstate and US highway systems that are essential to the nation's economy, mobility, and security.

MAP-21 expanded the NHS to include principal arterials in addition to interstates, intermodal connectors, and the strategic highway network. The NHPP combines the Interstate Maintenance, National Highway System, and Bridge Replacement and Rehabilitation (HBRRP) programs from SAFETEA-LU into one program, making it the largest federal highway program at 58% of the total Highway Trust Fund. The FAST Act continues the National Highway Performance Program, which was established under MAP-21. The NHPP provides support for the condition and performance of the National Highway System (NHS), for the construction of new facilities on the NHS, and to ensure that investments of Federal-aid funds in highway construction are directed to support progress toward the achievement of performance targets established in a State's asset management plan for the NHS.

Two percent of the NHPP funding is to be set aside for State Planning and Research (SPR) funds. States are permitted to transfer up to 50 percent of the NHPP dollars to other programs, including the Surface Transportation Program (STP), Highway Safety Improvement Program (HSIP), and the Congestion Mitigation and Air Quality Improvement program (CMAQ). The NHPP grants require a 10% non-federal match for most interstate projects and 20% for other NHPP projects. States are required to develop a risk-based asset management plan for the National Highway System to improve or preserve asset condition and system performance.

Surface Transportation Block Grant (STBG)

The FAST Act converts the long-standing Surface Transportation Program into the Surface Transportation Block Grant Program acknowledging that this program has the most flexible eligibilities among all Federal-aid highway programs and aligning the program's name with how FHWA has historically administered it. The STBG promotes flexibility in local and State transportation decisions and provides flexible funding to best address State and local transportation needs. This Program is the most flexible Federal-Aid highway program providing funding for State and local agencies for construction, reconstruction, rehabilitation, resurfacing and operational improvements to highways, transit capital and replacement and rehabilitation of bridges on public roads. The program also includes replacement and rehabilitation of Federal-Aid bridges not on the National Highway System. The following are to be set aside from a State's STBG apportionment:

- Funding for Transportation Alternatives
- 2% for State Planning and Research (SPR). [23 U.S.C. 505]
- Funding for bridges not on Federal-aid highways (see "Off-system bridges" below). [23 U.S.C. 133(f)]

Additionally, from the portion of a State's STBG apportionment available for use in any area of the State, the Governor of a border State may designate up to 5% for border infrastructure projects eligible under the SAFETEA-LU Coordinated Border Infrastructure program.

Congestion Mitigation and Air Quality Improvement Program (CMAQ)

The FAST Act continues the CMAQ program to provide a flexible funding source for transportation projects and programs to help meet the requirements of the Clean Air Act. Funding is available to reduce congestion and improve air quality for areas that do not meet the National Ambient Air Quality Standards for ozone, carbon monoxide, or particulate matter (nonattainment areas) and for former nonattainment areas that are now in compliance (maintenance areas). As of 2020, SIMPO continues to be an air quality attainment area and is not expected to reach non-attainment status in the near future.

A State may transfer to the National Highway Performance Program, National Highway Freight Program, Surface Transportation Block Grant Program, Transportation Alternatives, and Highway Safety Improvement Program up to 50% of CMAQ funds made available each fiscal year (excluding set-asides).

Highway Safety Improvement Program (HSIP)

The FAST Act continues the Highway Safety Improvement Program (HSIP) to achieve a significant reduction in traffic fatalities and serious injuries on all public roads, including non-State-owned public roads and roads on tribal lands. The HSIP requires a data-driven, strategic approach to improving highway safety on all public roads that focuses on performance.

The FAST Act continues to require FHWA to set aside, prior to apportionment, HSIP funding for the Railway-Highway Crossings program, and increases the amount of this set-aside. The FAST Act newly authorizes an annual set-aside (prior to apportionment) of \$3.5 million in HSIP funds to carry out specified safety-related activities and operate specified safety-related clearinghouses.

Two percent of the HSIP funding is set aside for State Planning and Research (SPR) funds. \$220 million of the HSIP funds is allotted towards railway-highway crossings. Eligible projects include, but are not limited to, intersection improvements, traffic calming, rural corridor improvements, and bicycle and pedestrian safety projects. The federal share of this program is 90%.

The FAST Act continues the overarching requirement that HSIP funds be used for safety projects that are consistent with the State's strategic highway safety plan (SHSP) and that correct or improve a hazardous road location or feature or address a highway safety problem. Under MAP-21, the HSIP statute listed a range of eligible HSIP projects. However, the list was non-exhaustive, and a State could use HSIP funds on any safety project (infrastructure-related or non-infrastructure) that met the overarching requirement. In contrast, the FAST Act limits HSIP eligibility to only those listed in statute—most of which are infrastructure-safety related.

In addition to this change, the FAST Act specifically identifies the following activities on the inclusions list:

- Installation of vehicle-to-infrastructure communication equipment.
- Pedestrian hybrid beacons.
- Roadway improvements that provide separation between pedestrians and motor vehicles, including medians and pedestrian crossing islands.
- Other physical infrastructure projects not specifically enumerated in the list of eligible projects.

Workforce development, training, and education activities remain an eligible use of HSIP funds.

Transportation Alternatives Program (TAP)

The FAST Act eliminates the MAP-21 Transportation Alternatives Program (TAP) and replaces it with a set-aside of Surface Transportation Block Grant (STBG) program funding for transportation alternatives (TA). These set-aside funds include all projects and activities that were previously eligible under TAP, encompassing a variety of smaller-scale transportation projects such as pedestrian and bicycle facilities, recreational trails, safe routes to school projects, community improvements such as historic preservation and vegetation management, and environmental mitigation related to stormwater and habitat connectivity.

As under TAP, the FAST Act requires all TA projects to be funded through a competitive process. Eligible applicants include all entities that were eligible to apply for TAP funds. The FAST Act also allows nonprofit entities responsible for the administration of local transportation safety programs to apply.

The FAST Act newly requires States and metropolitan planning organizations (MPOs) to report annually to DOT on project applications and projects that are awarded TA funding (including the RTP set-aside). DOT must make these reports available to the public.

State Funding Sources

In addition to sub-allocating federal funds, IDOT also collects revenue at the state level from state motor fuel tax, sales taxes and vehicle registration fees to supplement federal funding for transportation projects. Similar to federal funding, the state funding also requires a minimum of 20% local match from local agencies or private funding.

State Planning and Research (SPR) is derived from a two percent allocation of certain programs from the Highway Trust Fund. SPR funding is allotted by the state towards research projects aimed at addressing local, regional and statewide issues. In Illinois, research ideas are solicited annually through the Illinois Center for Transportation (ICT). Apart from IDOT, the Illinois Department of Natural Resources (IDNR) is another state agency that provides grants for greenways and trails. Similar to other state and federal funding sources, IDNR funding requires a local match.

Local Funding Sources

Local funding for transportation projects is accomplished primarily through state allocations, block grants, municipal and county budgets, local MFT, public transit fares, local park district budgets (for greenways and trails projects), institutions (such as Southern Illinois University), and private donations. Additional revenue can be obtained from property taxes, sales taxes and special assessments.

This funding is crucial to provide local matches for state and federally funded projects. Local agencies can also work with developers and business associations to obtain private funding through impact fees, right-of-way contributions, and cost sharing.

Transit Funding

Federal Funding Sources

The Fixing America's Surface Transportation (FAST) Act was signed into law in December 2015. The act, which supports transit funding through fiscal year 2020, reauthorizes FTA programs and includes changes to improve mobility, streamline capital project construction and acquisition, and increase the safety of public transportation systems across the country. Major federal transit grant programs include:

- The Urban Formula Program (Section 5307)
- New Starts (Section 5309)
- Elderly Individuals and Individuals with Disabilities Program (Section 5310)
- Rural Formula Program (Section 5311)
- State of Good Repair Program (Section 5337)
- Small Transit Intensive Cities (STIC)

FAST Act Authorized Funding

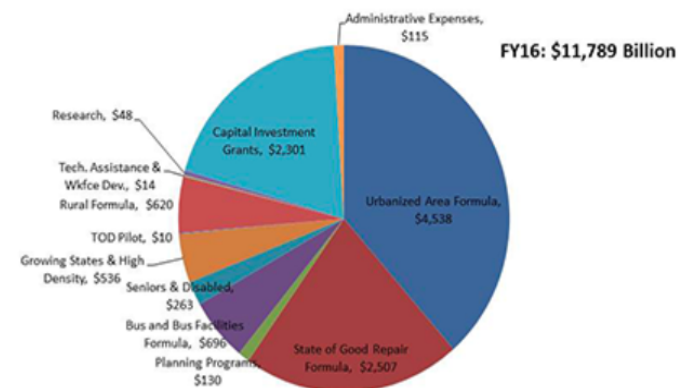


Figure 17

Urbanized Area Formula Program (Section 5307):

Section 5307 is the primary federal funding source to support public transportation. Funding is awarded directly to the designated recipient in each urbanized area over 200,000 in population. For urbanized areas with populations between 50,000 and 200,000, funds are apportioned to the Governor of each state or his designee.

Urban Formula Program funds may be used to support public transportation capital projects, operating assistance, job access and reverse commute projects, and for transportation-related planning. The MPO is responsible for designating the recipients of FTA Urbanized Formula funds. SIMPO has designated the Jackson County Mass Transit District and RIDES Mass Transit District to be the recipients of Section 5307 funds.

The federal share of eligible capital costs is 80%. For transit operations, the federal share of eligible costs is one-half of the net cost of service, subject to limitations in the total amount

State of Good Repair (Section 5337):

Grants under this Section 5337 program assist state and local governmental authorities in financing capital projects to maintain public transportation systems in a state of good repair. This program replaces the fixed guide-way modernization program (Section 5309).

FTA apportions State of Good Repair funds to designated recipients of urbanized areas (UZAs) that operate high intensity fixed guide-way and high intensity motorbus systems operating at least seven years. None of the existing public transit operators in the SIMPO service area meet these criteria and are not projected to meet these standards during the planning horizon.

Bus and Bus Facilities Program (Section 5339):

MAP-21 established a new Section 5339 Bus and Bus Facilities Program, changing the program from discretionary to formula. Funding is allocated to states and territories and designated recipients in urbanized areas. The Governor is the designated recipient of funds on behalf of small urbanized areas.

In Illinois, the Governor has designated the Division of Intermodal and Public Transportation (DIPT) as the administrative agency for these funds. The purpose of the new Bus and Bus Facilities Program is to assist eligible recipients in replacing, rehabilitating and purchasing buses and related equipment; and to construct bus-related facilities, thus allowing grantees to address replacement and capital expansion needs.

For the small urbanized areas, Section 5339 funds are apportioned to the states; the individual states are then responsible for determining the sub-allocation process and amounts that eligible small urbanized areas will receive. States will apply directly to FTA for funding on behalf of small urbanized area sub-recipients. Thus, the MPO must compete for funding with other small urban transit systems in Illinois for funding. The federal share of project costs is 80%. Like all other FTA capital programs, certain capital projects (Clean Air, bicycle, and ADA projects) may be funded at higher ratios.

Small Transit Intensive Cites (STIC)

A provision in the FTA Urbanized Area Formula program (Section 5307) to distribute funds to urbanized areas under 200,000 population. Under the formula for STIC, funds are apportioned to urbanized areas (UZA) with a population less than 200,000 that meet or exceed the average level of service for all UZAs with populations between 200,000 and 1,000,000. The UZAs must operate at a level of service equal to or above the industry average level of service for all UZAs with a population of at least 200,000 but not more than 999,999, in one or more of six performance categories:

1. Passenger miles traveled per vehicle revenue mile,
2. Passenger miles traveled per vehicle revenue hour
3. Vehicle revenue miles per capita,
4. Vehicle revenue hours per capita,
5. Passenger miles traveled per capita, and
6. Passengers per capita.

The transit providers in the SIMPO Urban Area have already qualified for \$726,000 in STIC funding (FY-18 & 19) by meeting performance criteria in categories 3 and 4. The providers expect to meet two additional performance categories in the near future which could provide over \$1 million dollars annually in additional performance based funding for transit in the urban area.

State Funding Sources

Forty-six states and the District of Columbia provide funding to support public transportation. These funds are derived from a dedicated apportionment of revenues from sales taxes. Funds are used to support the Downstate Operating Assistance Program. Additionally, state funds derived from bond revenues are used to support capital needs.

Downstate Operating Assistance Program (DOAP):
The Downstate Public Transportation Act (30 ILCS 740/2), referred to as the Downstate Operating Assistance Program (DOAP), was established by the Illinois General Assembly to provide operating funds to assist in the development and operation of public transportation services statewide. Downstate operating assistance funds will pay up to 65% of eligible expenses (as defined in the Act). Funds are derived from an allocation of 80% of the funds derived from a 3/32 share of several general sale taxes collected by the Department of Revenue and distributed to the Mass Transit fund each year.¹ Approximately \$700 million is available to finance this program.

Eligible public transportation services provided by approved transportation providers within the established service area, plus any service extensions, and service provided in contiguous services areas (subject to IDOT approval) are eligible for reimbursement under the Downstate program. There is no matching requirement for DOAP funds. Eligible agencies must demonstrate maintenance of effort with existing transit revenues prior to the receipt of DOAP funds.

Elderly Individuals and Individuals with Disabilities Program (Section 5310):

This program addresses the special transit needs of seniors and individuals with disabilities by removing barriers to transportation service and expanding transportation mobility options. This program supports transportation services planned, designed, and is carried out to meet the special transportation needs of seniors and individuals with disabilities in all areas – large urbanized (over 200,000), small urbanized (50,000-200,000), and rural (under 50,000). Eligible projects include both traditional capital investment and nontraditional investment beyond the Americans with Disabilities Act (ADA) complementary paratransit services.

At least 55% of Section 5310 funds must be spent on "traditional" projects, or capital projects. Examples include:

- Buses and vans; wheelchair lifts, ramps, and securement devices; transit-related information technology systems including scheduling/routing/one-call systems; and mobility management programs.
- Acquisition of transportation services under a contract, lease, or other arrangement. Both capital and operating costs associated with contracted service are eligible capital expenses

The other 45 percent is for other "nontraditional" projects. Examples include:

- Travel training; volunteer driver programs; building an accessible path to a bus stop, including curb-cuts, sidewalks, accessible pedestrian signals; improving signage or way-finding technology; ride sharing and mobility management

¹ Survey of State Funding in Public Transportation, Final Report: FY 2013 Data, American Association of State Highway and Transportation Officials (2015).

¹ A proposal has been made to reduce the allocation formula for DOAP program. The proposal would reduce the allocation to 80% of 2/32 of the various sales taxes that comprise the program. This will have a substantial impact on available DOAP funds in the future if adopted by the legislature.

Illinois Capital Program:

This program is designed to supplement federal financial assistance by providing capital assistance to existing public transportation systems. Eligible costs include the purchase of revenue and non-revenue rolling stock; the purchase of maintenance and equipment directly related to the support of such service operations (e.g., maintenance tools, fare-boxes, wheelchair lifts, ramps, radios, etc.); and the purchase or construction of fixed facilities.

Funds are awarded to local governments in areas with fixed route transit systems and transportation authorities. Depending on the availability of funds, IDOT will provide the 20% non-federal share of capital improvements undertaken with federal funds. Capital projects undertaken strictly with bond funds will be based on 100% state participation.

Local Funding Sources

Local governments in downstate Illinois primarily use city or county general revenues to provide local support for public transportation. There are no known entities utilizing any dedicated source of funds exclusively for public transportation.

Revenue Projections

On December 4, 2015, the President signed the Fixing America's Surface Transportation (FAST) Act into law. The FAST Act is the first federal law in over decade to provide long-term funding certainty for surface transportation infrastructure planning and investment. The FAST Act authorizes \$305 billion over fiscal years 2016 through 2020 for highway, public transportation, motor carrier safety, rail and research among other programs. The FAST Act maintains the focus on safety, continues efforts to streamline project delivery and for the first time, provides a dedicated source of federal funds for freight projects.

The federal motor fuel tax of \$0.184/gallon has not been increased to keep up with inflation since 1993. Reduction of vehicle miles traveled (VMT) nationally and an increase in fuel efficient vehicles has resulted in a gradual decrease of motor fuel tax revenue. However, in early June 2019, the Illinois General Assembly passed a package of legislation to fund transportation capital projects, as well as other infrastructure needs. This legislation package will provide an estimated additional \$2.5 billion annually for transportation purposes. The source of this additional revenue is the doubling of the state MFT rate from 19 cents to 38 cents per gallon and an increase in vehicle registration and title fees. Registration fees will increase by \$50 (\$100 for trucks) and title fees will also increase \$50.

Roadway Funding Estimate

Since federal, state or local sources do not guarantee the same level of funding every year, estimating revenue for the 25-year planning period can be difficult to predict. Federal regulations require of the financial plan that "all cost and revenue projections shall be based on the data reflecting the existing situation and historical trends."

The revenue for the first four fiscal years of the planning period was obtained from the FY 2020 to FY2023 Transportation Improvement Plan (TIP).

As a guide in estimating future revenues, Table 42 presents the amount and source of funding allotted for projects in the SIMPO planning area during the past five years. The information was obtained from the implementation year of the last five available TIPs (FY 2015-2019).

Table 30. Historical SIMPO Funding Sources and Amounts

Funding Source	Funding (1,000's)					5 Year Average
	2015	2016	2017	2018	2019	
Federal						
STU	\$96	\$1,054	\$668	\$430	\$983	\$646
STP	\$96	\$2,726	\$5,160	\$915	\$720	\$1,923
NHPP	\$0	\$312	\$1,768	\$11,200	\$520	\$2,760
BRP	\$410	\$0	\$412	\$0	\$0	\$164
HSIP	\$0	\$0	\$540	\$1,260	\$1,071	\$574
RR Safety	\$0	\$0	\$0	\$172	\$0	\$34
TAP	\$0	\$102	\$0	\$0	\$0	\$20
SRTS	\$0	\$0	\$0	\$0	\$0	\$0
ITEP	\$680	\$0	\$169	\$0	\$65	\$183
USFWS	\$900	\$0	\$0	\$0	\$0	\$180
NHS	\$0	\$600	\$0	\$0	\$0	\$120
State						
IJN!						
State/Fed. Agreement						
State Match Funds	\$524	\$750	\$1,580	\$3,488	\$329	\$1,334
Local						
	\$346	\$453	\$1,071	\$215	\$393	\$496
Total	\$3,052	\$5,997	\$11,368	\$17,680	\$4,081	\$8,436

The funding projections at the federal, state and local level are discussed below. It should be noted that the revenue discussion does not account for private funding sources that may potentially be available to support transportation improvement in the future.

Federal Funding:

The FAST Act authorizes a total combined amount (\$39.7 billion in FY 2016, \$40.5 billion in FY 2017, \$41.4 billion in FY 2018, \$42.4 billion in FY 2019, and \$43.4 billion in FY 2020) in contract authority to fund six formula programs (including certain set-asides within the programs described below):

- National Highway Performance Program (NHPP)
- Surface Transportation Block Grant (STBG)
- Highway Safety Improvement Program (HSIP)
- Congestion Mitigation and Air Quality (CMAQ)
- National Highway Freight Program (NHFP)
- Metropolitan Planning

The federal funding for the 25-year plan period is estimated using the following assumptions:

- The FY 2020-2023 TIP was used to calculate federal funding for the first four fiscal years of the plan period. The federal portion of the funding allotted in FY 2020-2023 is \$19,801,000
- SIMPO's allotment of STP-U funding for FY2020 is \$788,383. The STU funding for the next 21 years was calculated using the FY 2020 apportionment with an annual inflation rate of 3%. The STU funding for the 25-year long range planning period is calculated to be \$28,391,000.

- The non STP-U funding includes all the other sources of federal revenue available to the MPO. The average non-STU Federal funding for the most recent 5 years available (2015-2019) is \$5.66M per year. This funding level is artificially high due to large projects in 2017 and 2018, \$4.0M annually would be a more realistic estimate. Expanding this from 2024 to 2045 and assuming 2% annual growth yields a total of approximately \$111,000,000 for the 25 year horizon.

The total federal funding for all programs over the 25-year planning period based on the above assumptions and recognizing the funding issues at the federal level is anticipated to be approximately **\$159,000,000**

State Funding

In early June 2019, the Illinois General Assembly passed a package of legislation to fund transportation capital projects. The legislation doubles the state MFT rate from 19 cents per gallon to 38 cents per gallon. In addition to increasing the state MFT, the legislation also increases several transportation-related fees. This is significant because such fees actually are the largest source of construction funding for the Illinois Department of Transportation. These include increasing passenger vehicle registration fees by \$50, truck registration fees by \$100, and certificate of title fees by \$55.

The FY2020-2023 TIP was used as an initial basis to calculate state funding for the first four fiscal years of the plan period. The total state funding allotted in FY 2020-2023 is \$980,000

Considering the impact of the Capital Bill the average funding was adjusted upward and the 21-year future state funding assuming 3% annual inflation is estimated to be \$16,000,000.

A conservative total state funding projection over the 25-year plan period is anticipated to be \$17,000,000.

Local Funding

Local agencies are expected to contribute the required local match for the transportation projects programmed in the TIP and the long range transportation plan. Local revenue sources include local Motor Fuel Taxes (MFT), municipal and county budgets, state allocations, sales taxes and other sources.

The local funding over the next 21 years of the planning period is assumed to be equal to 20% of the federal STU during the same period or \$5,680,000.

In total, the combination of federal, state and local funding for non-transit improvements over the 25 year planning horizon is estimated to be approximately **\$181,000,000**.

Transit Funding Estimate

The primary operations and capital funding for public transit providers within the SIMPO planning region is from federal and state sources. In FY 2020, the operating budget for Jackson County Mass Transit District (JCMTD) and RIDES Mass Transit District (MTD) was approximately \$3,731,000. The federal share of the operating cost was 37%, or \$1,380,000. IDOT (through DOAP) allocated \$2,300,000 (61%) and the local agency funding for RIDES MTD was \$40,000. The following section presents the local, state and federal revenue available for transit operations in the region for the 25-year planning period.

Federal Funding:

Until FY 2013, publicly supported transit systems in the study area (JCMTD and RIDES MTD) were supported strictly through the Rural Formula Program. With the designation of the Urbanized Area, Urban Formula Program funds have been made available to the MPO. The Carbondale UZA was included in the national apportionment process for the first time in Federal Fiscal Year 2013.

The Urban Area designation does bring the opportunity for the transit providers to qualify for Small Transit Intensive Cities (STIC) funding.

The STIC program is a performance-based funding program for small urban transit systems with higher levels of service and/or ridership. STIC funds are distributed to small urbanized areas, defined as those with populations under 200,000. To qualify for the funds, small transit providers must exceed the average performance of mid-sized transit providers, (serving area with populations between 200,000 and 999,999), in one or more of these six performance measures:

- Passenger miles per vehicle revenue mile
- Passenger miles per vehicle revenue hour
- Vehicle revenue miles per capita
- Vehicle revenue hours per capita
- Passenger miles capita
- Passengers per capita

In FY-2020 the urbanized area will receive an annual apportionment of Urban Formula funds in the amount of \$702,000 and STIC funding in the amount of \$689,000 for operating expenses. This amount is allocated by the MPO between the two public transit service providers in the SIMPO planning area (JCMTD and RIDES MTD). For Capital expenses in FY-2020 the urbanized area will receive \$375,000 in Federal funds and \$30,000 in State funds .

The total share of federal funding for public transit in the SIMPO planning region for the 25-year planning period is estimated to be \$71,000,000.

State Funds

State funds for the Downstate program over the last several years have been relatively stable, providing a reasonable amount of growth in each of the last five years observed. In FY 2020 JCMTD and RIDES MTD were allotted state funding of about \$500,000 and \$1,800,000 respectively, for operational costs.

The state funding allotted for transit operations for the first four fiscal years of the long range planning period is calculated from the FY 2020-2023 TIP to be \$9,645,000. Based on the state appropriations for transit operations in FY 2020 to FY 2023, the remaining 21 years of state transit funding assuming 3% annual inflation is estimated to be \$75,500,000.

The total share of state funding for public transit in the SIMPO planning region for the 25-year planning period is estimated to be \$85,145,000.

Local Funding

Major sources of local funding for transit agencies include fare revenue and transfers from the local general fund. In FY-2020 RIDES MTD allocated \$40,000 towards operational costs in the Planning Area. Based on past history the local revenue component for transit over the 25 year planning period is estimated to be \$1,415,000.

Total Transit Funding

The total revenue for public transit operations within the SIMPO region for the 25-year planning period is estimated to be **\$157,560,000**.

Table 43 and Table 44 show the revenue estimated to be available for transit capital and operations projects during FY 2020-2023 TIP.

Table 31. Programmed Levels of Transit Funding FY 2016 - FY 2019, Jackson County MTD

Budget Item	FY-2020	FY-2021	FY-2022	FY-2023
Jackson County MTD				
<u>Operating</u>				
Federal	\$340,000	\$364,000	\$385,000	\$402,000
Federal -STIC	\$145,000	\$156,000	\$165,000	\$173,000
State	\$500,000	\$520,000	\$550,000	\$575,000
Local	\$0	\$0	\$0	\$0
Sub-Total	\$985,000	\$1,040,000	\$1,100,000	\$1,150,000
<u>Capital</u>				
Federal	\$195,000	\$65,000	\$65,000	\$60,000
Federal -STIC	\$0	\$0	\$0	\$0
State	\$0	\$0	\$0	\$0
Local	\$0	\$0	\$0	\$0
Total - JCMTD	\$1,180,000	\$1,105,000	\$1,165,000	\$1,210,000

Budget Item	FY-2020	FY-2021	FY-2022	FY-2023
RIDES MTD				
<u>Operating</u>				
Federal	\$362,000	\$660,000	\$780,000	\$780,000
Federal -STIC	\$544,000	\$440,000	\$520,000	\$520,000
State	\$1,800,000	\$1,850,000	\$1,900,000	\$1,950,000
Local	\$40,000	\$45,000	\$50,000	\$55,000
Sub-Total	\$2,746,000	\$2,995,000	\$3,250,000	\$3,305,000
<u>Capital</u>				
Federal	\$180,000	\$285,000	\$144,000	\$180,000
Federal -STIC	\$0	\$0	\$0	\$0
State	\$30,000	\$0	\$36,000	\$0
Local	\$16,000	\$0	\$0	\$0
Total - JCMTD	\$2,972,000	\$3,280,000	\$3,430,000	\$3,485,000

Table 32. Programmed Levels of Transit Funding FY 2016 - FY 2019, RIDES MTD

Operations and Maintenance

In addition to the capacity improvement projects programmed in the LRTP, the operations and maintenance of the existing transportation system is important to preserve past investments and maximize the safety, efficiency and reliability of the existing system. State and local agencies dedicate a large amount of their revenue towards maintaining highway, bike/pedestrian and transit facilities in the region.

The operational costs include snow and ice removal, street lighting, traffic signals, drainage work, equipment purchases, administration and other related costs. Maintenance costs reflect investments associated with maintaining the existing Federal-Aid roadway infrastructure; including pavement rehabilitation, bridge resurfacing, replacement, etc.

IDOT's role includes the day-to-day operations and maintenance of the Federal-Aid eligible highway system in the state. The agency commits state dollars for general operations and maintenance of the roadway system. Local agencies within the SIMPO region maintain and preserve the local transportation system using state and local revenue streams.

Federal funds cannot be used for day-to-day operations or maintaining the road system (e.g., snow removal, streetlights, traffic signals, etc.). Local and state revenues are the main source for funding these items. The regular operations dollars spent by the state and local agencies are not considered to be significant at the individual project level and are not included in the SIMPO TIP or the long range plan. Only the major maintenance projects of regional significance, such as the resurfacing and reconstruction of highways or bridge replacements, are included.

Regional transit and paratransit providers also incur operations and maintenance costs, with operating costs being the major expense. Operations and maintenance needs include the repair, rehabilitation and restoration of existing transit facilities and fleets, and driver wages.

Planned Long-Range Transportation Projects

This chapter identifies the future regional projects identified through the engineering analyses summarized in previous chapters; public participation; and input from SIMPO staff and member agencies to address the existing and projected transportation needs through the long range planning period. The projects are aimed at enhancing the aforementioned regional values:

1. Support economic vitality and quality of life
2. Encourage transportation choices
3. Maintain a safe transportation system
4. Preserve the existing system
5. Foster coordination throughout the MPA

The priority projects identified for the purposes of this plan are listed below. It should be noted that these projects are not ranked in any way and include projects across the entire MPA.

For planning purposes, the projects are broadly separated into mid-term and long-term timeframes (as discussed in the next section). A brief description of select projects, preliminary estimated costs (in 2020 dollars), and their primary pertinence with regards to regional values and objectives are summarized below.

Illinois Route 13 - Shawnee Trail to Reed Station Road

This section of Route 13, currently consisting of four lanes, carries some of the densest traffic flow in the MPA at 35,400 vehicles per day (885 vehicles/lane/hour). To the east and to the west of this section, Route 13 consists of six lanes and several stakeholders and the public expressed frustration about congestion in the four-lane section during peak travel times. There are several safety concerns in this corridor that could be addressed by a full reconstruction as well, including an IDOT State 5% intersection at Greenbriar Road and Route 13. There are two critical constraints involved with this project, one being the overall length of the corridor and the other being the physical characteristics of the section that crosses Crab Orchard Lake. These result in an expensive project that could prove difficult to fund.

It should be noted that IDOT has completed a Phase I Report for this section. Since the last LRTP IDOT has completed short sections of the 6 lane expansion (Carterville to Shawnee Trail and Giant City Road to Reed Station Road.

Proposed Improvement: Reconstruction and Widening from 4 lanes to 6 lanes

Project Length: ~ 2.5 miles

Potential Funding Sources: IDOT Capital Plan, STU, NHPP, HSIP

Cost Estimate: \$30,000,000

SIMPO 2045 LRTP Objectives: 1.1 Reduce congestion at the crossroads of commuter routes and retail centers; 1.6 Support financially sustainable transportation system expansion; 3.1 Reduce the number of crashes; 3.2 Reduce the number of fatal and severe injury crashes

17th Street in Marion - Halfway Road to Civic Circle Boulevard

As a critical retail corridor and economic driver of both Marion and the east end of the MPA, maintaining available capacity along 17th Street is important to the region. IDOT and the City of Marion are currently constructing improvements to this roadway (known as Morgan Avenue east of Halfway Road) between Halfway Road and Carbon Street, including a new interchange at I-57. This will likely result in even more traffic being funneled into 17th Street, which currently consists of one lane in each direction and a two-way left-turn lane down the center. Long queues are already regular occurrences during peak travel times, particularly at the intersections of 17th Street with Halfway Road and 17th Street with Williamson County Parkway.

Proposed Improvement: Reconstructing and widening, Increase Capacity

Project Length: ~ 0.5 miles

Potential Funding Sources: STU, MFT, EDP

Cost Estimate: \$3,000,000

SIMPO 2040 LRTP Objectives: 1.1 Reduce congestion at the crossroads of commuter routes and retail centers; 1.7 Encourage development in areas with existing infrastructure

Illinois Route 148 in Herrin - Clark Trail to Brewster Road

Route 148, also known as Park Avenue in Herrin, serves as a state-maintained highway for regional traffic, a retail corridor, and a critical connection for residential traffic into and out of Herrin. This wide variety of uses and proliferation of access results in safety and operational issues along the entire corridor, but the segment from Clark Trail to Brewster Road experiences some of the most critical issues. The roadway has two lanes in each direction with a two-way left-turn lane down the center, 16 points of access in a ¼-mile stretch, a speed limit of 35 mph, and an AADT of 17,300.

The segment of Park Avenue just south of Clark Trail is an IDOT State 5% segment and has been consistently for a number of years. There is also a lack of pedestrian facilities for both crossing and walking along Park Avenue.

Proposed Improvement: Increase safety and operational efficiency. Provide pedestrian facilities

Project Length: ~ 0.3 miles

Potential Funding Sources: STU, HSIP, NHPP, MFT Cost Estimate: \$6,000,000

SIMPO 2040 LRTP Objectives: 1.3 Enforce Access Management strategies along key routes; 3.1 Reduce the number of crashes; 3.3 Improve safety on pedestrian facilities; 3.4 Improve safety on bicycle facilities

IL 13 ITS Improvements

Implementation of a Central Control Traffic Signal Corridor from Murphysboro to Marion would provide numerous benefits to IDOT, the local agencies along IL 13 and the traveling public. Central Control would allow users to continually monitor the system and make live changes remotely. Installation of fiber optic cable would allow for reliable broadband communication with the District Traffic Center and throughout the system.

Proposed Improvement: Central Control Software and fiber optic cable

Project Length: ~ 25 miles

Potential Funding Sources: NHPP, HSIP, ITS funding

Cost Estimate: \$3,000,000

SIMPO 2045 LRTP Objectives: 1.1 Reduce congestion 3.1 Reduce the number of crashes

Westminster Drive widening and sidewalks

The completion of the Halfway Road Extension from Main Street to Westminster Drive has significantly increased traffic on Westminster Drive as more local traffic utilizes this route to access the Marion High School and as a bypass to IL 37 south. Westminster Drive is currently a narrow residential street without pedestrian accommodations and is not designed to accommodate the increased traffic as well as existing pedestrian traffic. Widening with drainage improvements and sidewalks is needed to safely accommodate the new traffic patterns.

Proposed Improvement: Reconstruction, new sidewalks

Potential Funding Sources: STU, HSIP, MFT

Project Length: ~0.5 miles

Cost Estimate: \$3,000,000

SIMPO 2040 LRTP Objectives: 1.1 Reduce congestion, 3.1 Reduce the number of crashes; 3.6 Improve safety within the vicinity of schools



Herrin Road Extension (Cambria Rd to Reed Station Rd)

A westward expansion of Herrin Road was recommended in the SIMPO East-West Corridor Study that was completed in 2016. This westward expansion would supplement the IL 13 corridor and also provide improved access to Carbondale from the Herrin area. An additional benefit would be improved access to the Walker's Bluff resort and proposed casino.

In it's FY 2020-025 Highway Program, IDOT has committed \$2.5 million in funding for engineering and land acquisition to the project.

Proposed Improvement: New Roadway

Project Length: ~ 3.3 miles

Potential Funding Sources: IDOT Capital Plan, STU

Cost Estimate: \$17,000,000

SIMPO 2045 LRTP Objectives: 1.2 Support easy access to healthcare providers; 1.6 Support financially sustainable transportation system expansion; 1.7 Encourage development 3.1 Reduce the number of crashes; 3.2 Reduce the number of fatal and severe injury crashes

I-57 Expansion to 6 lanes from I-24 to Marion

The I-57 corridor through District 9 is very heavily traveled by both passenger car and freight traffic. North of Marion I-57 carries over 40,000 vehicles daily with 14,000 of those being heavy trucks. District 9 has been steadily working toward expanding I-57 to six lanes from Marion northward to Mt Vernon and this expansion is now completely funded in the District's six year program.

An additional goal is to extend the six lane facility southward to the I-57/I-64 junction near the Williamson/Johnson County line. Between Marion and I-24 the traffic on I-57 is also very heavy with a daily traffic of over 33,000 vehicles daily with over 13,000 of those being heavy trucks.

Proposed Improvement: Add Lanes

Project Length: ~ 10 miles

Potential Funding Sources: IDOT Capital Plan, NHS, STP

Cost Estimate: \$50,000,000

SIMPO 2045 LRTP Objectives: 1.4 Improve truck freight movements and reduce the impact of freight on other modes, 1.6 Support financially sustainable transportation system expansion; 1.7 Encourage development 3.1 Reduce the number of crashes; 3.2 Reduce the number of fatal and severe injury crashes

Giant City Road and Frontage Roads north and south of IL 13

This location and the widely varying issues surrounding it surfaced during stakeholder interviews, public workshops, and data analysis for nearly every element considered. Many of the problems arise from the heavy traffic generated by the retail land uses, poor access management, and the heavy commuter traffic along Route 13. The section of Route 13 to the east of Giant City Road carries the highest volume of traffic in the entire MPA at 35,400 vehicles per day. There are traffic signals at each intersection of Route 13 with Giant City Road, McKinney Avenue, and Lewis Lane, and the retail centers on each side generate a large number of turning movements and side street traffic at these intersections. Almost all retail traffic flows through these three intersections.

The frontage roads on the north and south side of Route 13 serve the retail centers. These roads do not provide adequate spacing from Route 13 at Giant City Road and McKinney Avenue, especially given the large amount of traffic volumes at these intersections. The layout and operations at the frontage roads can be very confusing. At Giant City Road, there were 182 crashes reported (61 of which resulted in some form of injury) at Main Frontage Road N, Route 13, and Main Frontage Road S. The section of Route 13 between McKinney Avenue and Lewis Lane has a PSI of 26.0, indicating there is a strong potential for safety improvement.

There is a lack of pedestrian facilities throughout the surrounding area. As a result, pedestrians tend to cross the street and walk in random locations. IDOT is making pedestrian crossing improvements to mitigate this, but a comprehensive analysis for the whole retail corridor is necessary to properly address this issue.

Overall, a corridor analysis is necessary to determine how the safety and operations of this area can be improved. Potential improvements include realigning the frontage roads to provide better spacing and operations, implementing access management controls to prevent unsafe movements, optimize the traffic signals along Route 13, provide a robust network of pedestrian facilities to encourage walking in designated areas only, and provide alternative access points aside from Route 13 (such as an extension of Oak Street from Wall Street to Lewis Lane) that would provide better connectivity and lessen the burden on the Route 13 intersections.

**It should be noted that further study is required to identify the specific improvements needed to accomplish this project. Consequently, the preliminary cost estimate should be considered very preliminary.*

Proposed Improvement: Vehicular and Pedestrian Safety, Access Management, and Operations.

Potential Funding Sources: IDOT Capital Plan, STU, HSIP, TAP, MFT, NHPP

Cost Estimate: \$8,000,000*

SIMPO 2045 LRTP Objectives: 1.3 Enforce Access Management strategies along key routes; 2.5 Improve roadway system reliability; 2.6 Maximize the performance of the existing system for motorized vehicles; 3.1 Reduce the number of crashes; 3.3 Improve safety on pedestrian facilities.

Grand Avenue in Carterville - Cambria Road to Carterville school complex

This segment of Grand Avenue west of Carterville school complex consists of narrow lanes, no shoulder, and a steep drop-off on each side. While it only carries 2,850 vehicles per day, this route has the potential of alleviating some of the congestion and safety issues that occur on Grand Avenue to the east of the school complex during the brief, but heavy school peaks. Traffic on this section is also expected to increase as residential development continues to the west of the school complex.

Upgrades to this section of Grand Avenue could potentially start with safety enhancements at Cambria Road, coinciding with IDOT's planned improvements of Cambria Road for 2016. The reconstruction and widening of the segment to the high school with pedestrian and bicycle infrastructure could be completed as the funding becomes available.

Proposed Improvement: Reconstruction and Widening

Project Length: ~ 0.5 miles

Potential Funding Sources: STU, HSIP, MFT

Cost Estimate: \$3,000,000

SIMPO 2040 LRTP Objectives: 1.1 Reduce congestion at the crossroads of commuter routes and retail centers; 3.1 Reduce the number of crashes; 3.6 Improve safety within the vicinity of schools; 4.2 Maintain satisfactory pavement conditions.

Reconstruction of Division Street in Carterville including improvements to the Division Street/Grand Avenue Intersection

Division Street in Carterville is a heavily traveled local collector with over 9,000 vehicles per day. The intersection of Division Street and Grand Avenue is the major intersection in Carterville and experiences significant delays during the morning and evening peak hours. Division Street is in need of reconstruction with new drainage, new curbs and new sidewalk needed throughout.

Proposed Improvement: Reconstruction and Widening

Project Length: ~ 1.0 miles

Potential Funding Sources: STU, HSIP, MFT

Cost Estimate: \$5,000,000

SIMPO 2045 LRTP Objectives: 1.1 Reduce congestion at the crossroads of commuter routes and retail centers; 3.1 Reduce the number of crashes; 3.6 Improve safety within the vicinity of schools; 4.2 Maintain satisfactory pavement conditions.

Herrin Shortline Railroad Improvements

The existing short line railroad serving the city of Herrin has been out of service since 1986 and is currently in a state of disrepair. The existing crossings, bridges and rail structure are not safe for rail traffic in their current condition, improvements must be made for rai service to be reestablished. A functioning Class III railroad is needed to provide freight service to existing businesses and industries.

The proposed project involves the rehabilitation of approximately 3.7 miles of existing track along with new sidings and the rehabilitation of 3 structures. The improvements will reestablish a connection to Class I rail service via a connection to the Burlington Northern Santa Fe (BNSF) line at the east end of the project.

Proposed Improvement: Railroad infrastructure

Length: 5 miles

Potential Funding Sources: IDOT Freight Grant, CRISI, BUILD

Cost Estimate: \$15,000,000

SIMPO 2045 LRTP Objectives: 1.4 Improve truck freight movements and reduce the impact of freight on other modes, 1.6 Support financially sustainable transportation system expansion; 1.7 Encourage development in areas with existing infrastructure

Completion of Ritter Road from Rushing Drive to Grand Avenue

A portion of this roadway was constructed along with new frontage roads as parts of IDOT's expansion of IL 13 to 6 lanes. Approximately, 0.6 miles of this proposed connection was completed leaving about 0.5 miles remaining to complete the roadway.

The finished roadway would improve access to medical facilities in the area and alleviate congestion at the intersection of Rushing Drive and IL 148. The new roadway would allow motorists to access IL 148 at the existing traffic signal at Grand Avenue reducing the current delays that occur at Rushing Drive.

Proposed Improvement: New Roadway

Project Length: ~ 0.5 miles

Potential Funding Sources: IDOT Capital Plan, STU Cost Estimate: \$2,000,000

SIMPO 2045 LRTP Objectives: 1.2 Support easy access to healthcare providers; 1.6 Support financially sustainable transportation system expansion; 1.7 Encourage development 3.1 Reduce the number of crashes; 3.2 Reduce the number of fatal and severe injury crashes



Pedestrian Safety Improvements in Downtown Herrin

This project involves streetscaping and pedestrian safety measures on IL 148 in Herrin's downtown district. The primary feature of the project will be curb bumpouts and raised center medians. These improvements will serve dual purposes of safety and streetscaping by providing a traffic calming effect as well as featuring low plantings of flowers/shrubs. Additional improvements are; pedestrian lighting, ADA ramps, enhanced crosswalks and countdown pedestrian signal heads.

The proposed safety and aesthetic enhancements will promote multi-modal transportation in the downtown area. The project will improve pedestrian safety and create a more walkable and inviting downtown. The proposed streetscape elements will protect vulnerable users (cyclists, pedestrians and the disabled) by reducing the unprotected crossing distance. The existing curb ramps do not comply with current ADA standards and the proposed improvements will correct this deficient condition.

Proposed Improvement: New Sidewalks, Pedestrian safety features

Project Length: ~ 0.5 miles

Potential Funding Sources: ITEP, STU

Cost Estimate: \$2.0M

SIMPO 2045 LRTP Objectives: 1.6 Support financially sustainable transportation system expansion; 1.7 Encourage development 2.1 Expand and improve the pedestrian facility network, 3.1 Reduce the number of crashes; 3.3 Improve safety on pedestrian facilities

Marion to Carbondale Bike Route

A regional bike route near the IL 13 corridor that provides access to the Crab Orchard National Wildlife Refuge would be a major recreational attraction for the region.

Significant progress on this trail has been accomplished with IDOT constructing the trail from the University Mall eastward to Reed Station Road. IDOT also has plans in its 6 year program to continue the trail eastward to the Crab Orchard Lake Campground connection the trail to a segment across the John A. Logan Campus which was recently funded with an ITEP grant.

Completion of this network eastward to Marion will require coordination with various stakeholders including the US Fish and Wildlife Service.

Proposed Improvement: New Multi-Use Trail

Project Length: ~ 8.0 miles

Potential Funding Sources: ITEP, STU

Cost Estimate: \$10M

SIMPO 2045 LRTP Objectives: 2.1 Expand and improve the pedestrian facility network, 2.2 Expand and improve the bicycle facility network

Park Street in Carbondale - Brush Hill Road to Giant City Road

This location has one of the highest crash rates in the MPA and was identified as a Local 5% segment. It has already been improved from Lewis Lane to Brush Hill Road, but the remaining 0.75 miles continue to pose a significant concern with potential for safety improvement. Potential upgrades include widening, expanded shoulders, new striping, and improvement to sight distance at Warren Road. From 2008 to 2012 there were 25 crashes reported in the unimproved section, 10 of which resulted in an injury (4 severe injury crashes). The improved segment of Park Street experienced 6 crashes during that same time frame, despite carrying almost double the traffic as the unimproved section. There is also the opportunity to include quality pedestrian and bicycle infrastructure on this corridor.

Proposed Improvement: Reconstruction, Widening, and Safety Improvements

Project Length: ~ 0.75 miles

Potential Funding Sources: STU, HSIP, MFT

Cost Estimate: \$3,200,000

SIMPO 2040 LRTP Objectives: 2.1 Expand and improve the pedestrian facility network; 3.1 Reduce the number of crashes; 3.2 Reduce the number of fatal and severe injury crashes.

Wall Street and Walnut Street in Carbondale

This Carbondale intersection has one of the highest crash rates of all intersections in the MPA. With 130 crashes in 5 years (31 of which resulted in some form of injury), it has an unusually high number of crashes compared to similar intersections along Route 13 within Carbondale along the one-way pair. Almost half of these crashes were Turning and Angle, which are considered dangerous crash types. It appears that many of these crashes are correctable by implementing relatively low to medium cost improvements to lane usage, signal timing, and sight distance, although more detailed study is required.

Safety improvements that reduce crashes can also provide significant operational and economic impacts for locations such as this that carry such heavy peak hour traffic. Walnut Street carries 22,400 vehicles per day into this intersection while Wall Street carries 9,100 vehicles per day. Limiting the delay caused by crashes for this many vehicles can have very positive overall impacts.

**It should be noted that further study is required to identify the specific improvements needed to accomplish this project. Consequently, the preliminary cost estimate should be considered very preliminary.*

Proposed Improvement: Intersection Safety Improvements

Potential Funding Sources: STU, HSIP, MFT

Cost Estimate: \$2,000,000*

SIMPO 2040 LRTP Objectives: 2.6 Maximize the performance of the existing system for motorized vehicles; 3.1 Reduce the number of crashes; 3.2 Reduce the number of fatal and severe injury crashes.



Multi-Use Trail from New Era Road to IL 13

The city of Carbondale has made progress towards completing a new Multi-Use Trail along the abandoned rail line from Oakland Avenue westward to New Era Road. This project would extend the rail trail west to an underpass of IL 13 near Wood Road which would also provide access to a trail recently completed by IDOT that connects to Airport Road. Together, these projects complete a significant portion of the Carbondale to Murphysboro Bike Route and continue the recent efforts by SIMPO and others to connect the various trail segments along the IL 13 corridor.

Proposed Improvement: New Multi-Use Trail

Project Length: ~ 1.3 miles

Potential Funding Sources: ITEP, STU

Cost Estimate: \$1.0M

SIMPO 2045 LRTP Objectives: 2.1 Expand and improve the pedestrian facility network, 2.2 Expand and improve the bicycle facility network

Dillenger Road Safety Improvements

The Herrin Road Extension Corridor Study completed by SIMPO in 2018 recommends that Dillinger Road be the focus for improvements from Reed Station Road to US 51. Improvements to Dillenger Road, coupled with improvements to Reed Station Road and an extension of Herrin Road would be a significant improvement to the existing roadway network while also addressing significant safety issues on Dillenger Road.

These improvements could be implemented incrementally with various safety projects addressing specific issues. It will be important to keep the overall plans and goals in mind as funding is sought for specific projects.

Proposed Improvement: New Roadway

Project Length: ~ 3.6 miles

Potential Funding Sources: IDOT Capital Plan, STU, HSIP

Cost Estimate: \$8,000,000

SIMPO 2045 LRTP Objectives: 1.7 Encourage development 3.1 Reduce the number of crashes; 3.2 Reduce the number of fatal and severe injury crashes

Fiscally Constrained Project Plan

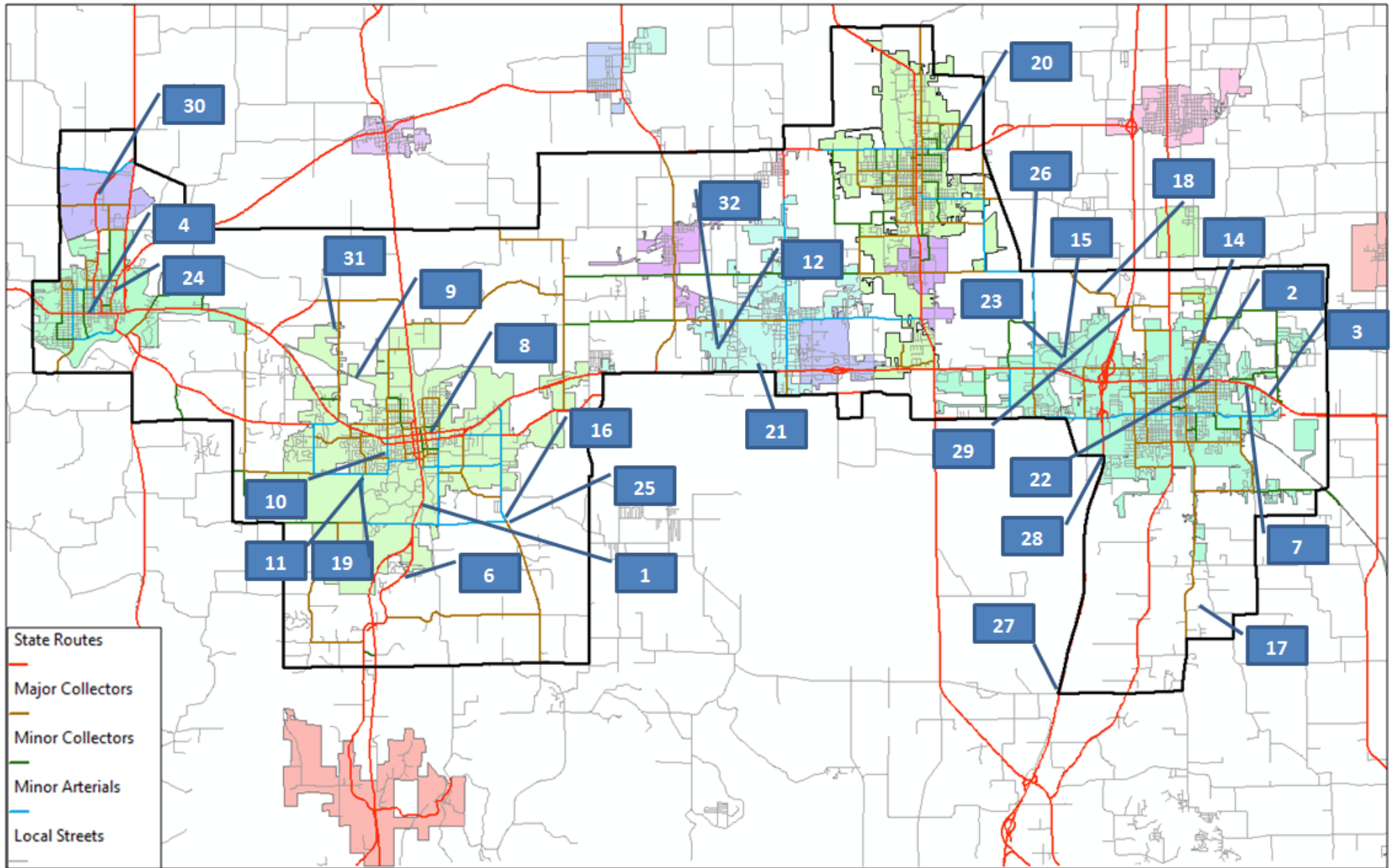
The cost of the planned projects are compared against the estimated revenue to ensure the projects are fiscally contained. For the purposes of this plan, the transportation projects are divided into short-range, mid-range and long-range planning horizons. All federally funded projects and non-federally funded but regionally significant projects with available funding are programmed in the fiscally constrained regional SIMPO FY 2020-2023 TIP and IDOT's FY 2020-2025 Statewide Transportation Improvement Plan (STIP) are considered short-term projects.

Fiscally Constrained Roadway Planning

Projects in the regional and statewide TIP have allotted planned funding, and the amounts shown in each TIP reflect the cost to complete the projects programmed. The estimated cost of implementing the short-range highway projects identified in the SIMPO FY 2020-2025 TIP (Table 33) is approximately \$28,000,000.

Table 33. SIMPO TIP FY 2020 - FY 2023 Transportation Improvement Projects (Short-Range)

Project	Project Type	Jurisdiction	2020	2021	2022	2023	
1. US 51 - Grand Ave. to Old US 51 in C'dale	Resurfacing	State	\$1,400				
2. IL 13 from IL 37 to Fair St in Marion	Resurfacing	State	\$900				
3. IL 13 from Fair Street to Crab Orchard Cr.	Resurfacing	State	\$1,600				
4. IL 149 from 22nd St to IL 13/127 in M'boro	Resurfacing	State	\$800				
5. Herrin Rd/Cambria Rd Intersection	New Roundabout	State	\$1,950				
6. Old US between New US 51 connectors	Resurfacing	State	\$1,100				
7. IL 13/Aurelia Dr East of Marion	Int. Reconstruction	State	\$1,000				
8. IL 13 EB Oakland Ave. to Lewis Lane	Resurfacing	State	\$1,900				
9. Multi-Use trail - Oaklane Ave to New Era	New Trail	Carbondale	\$960				
10. Oakland Ave. - IL 13 to Chautauqua	Reconstruction	Carbondale	\$1,780				
11. Chautauqua/Mclafferty Intersection	PE New roundabout	Carbondale	\$200				
12. West Bypass - Grand Ave to Pin Oak Dr	PE New Roadway	Cartersville	\$175				
13. Herrin St - Il 148 to 3rd St.	PE resurfacing	Herrin	\$75				
14. DeYoung St - Fair St to IL 37	PE New Sidewalks	Marion	\$15				
15. 17th St/Outer Drive Intersection	PE - Safety Imp.	Marion	\$50				
16. Giant City Rd/Pleasant Hill Rd Int.	PE - Safety Imp.	Jackson Co.	\$50				
17. Vickers Road UPRR Crossing	RR Crossing Safety	Williamson Co.	\$450				
18. Crenshaw Road - Pease Rd to Skyline Dr.	PE - Safety Imp.	Williamson Co.	\$60				
19. Chautauqua/McLafferty Intersections	New Roundabout	Carbondale		\$1,563			
20. Herrin St - Il 148 to 3rd St	Resurfacing	Herrin		\$975			
21. JALC - Multi-Use Trail	New Multi-Use Trail	JALC		\$494			
22. DeYoung St - Fair St to State St	New Sidewalks	Marion		\$157			
23. 17th St/Outer Drive Intersection	Safety Imp.	Marion		\$354			
24. 7th St. south of Industrial Dr -in M'boro	Resurfacing	Murphysboro		\$1,600			
25. Giant City Rd/Pleasant Hill Rd Int.	Traffic Signals	Jackson Co.		\$374			
26. Skyline Dr/Crenshaw Road Intersection	Safety Imp.	Williamson Co.		\$376			
27. I-57 - Grassy Road Overpass	New Bridge	State			\$2,500		
28. I-57 - Westminster Overpass	New Bridge	State			\$2,500		
29. I-57 - Cedar Grove Overpass	Bridge Repairs	State			\$150		
30. 14th St - Ava Rd to Poplar St in M'boro	Resurfacing	State			\$800		
31. New Era Rd - Airport Rd to Glenn Rd	Reconstruction	Carbondale			\$525		
32. West Bypass - Grand Ave. to Pin Oak Dr.	new roadway	Cartersville				\$2,150	
TOTALS			\$14,465	\$4,918	\$6,475	\$2,150	\$28,008



Map 20. Short-Term TIP Projects

The mid-range horizon covers projects anticipated from year 2025 up to 2035, while the long-range horizon includes projects planned from year 2036 up to 2045. Even though the projects in the mid-term and long-term horizon are fiscally constrained in accordance with reasonable revenue projections, they will only be implemented if federal and state funding becomes available.

The projects in the mid-term and long-term horizon are programmed in Year of Expenditure (YOE) dollars and are adjusted based on an assumed 3% annual inflation rate. The cost of construction can fluctuate significantly from year to year; however, by averaging the cost incurred over a longer period (mid-range and long-range) a reasonable estimate can be developed. The mid-range projects that are reasonably expected to be funded between FY 2025-2035 are presented in Table 34. These mid-range projects are estimated to cost a total of approximately \$84,000,000 during the ten-year period.

The long-range projects anticipated between FY 2036 and FY 2045 are listed in Table 35. These long-range projects are anticipated to cost approximately \$58,000,000 over the ten-year period.

Finally, four projects are considered illustrative at this point and will be included in subsequent SIMPO TIPs only if special funding becomes available. These large-scale improvements include the widening of I-57 to 6 lanes from I-24 to Marion and the Boulevard street Railroad underpass in Marion. The estimated combined cost (adjusted to reflect 3% inflation through 2035) of \$108,000,000 is shown in Table 36.

Mid-range TIP projects 2025 to 2035

Project	Project Type	Jurisdiction	Project Cost
1. Complete IL 13 6 Lane - Spillway Rd. to Shawnee Trail	Add Lane	State	\$30,000,000
2. IL 148 Pedestrian Safety Downtown Herrin	ITEP	Herrin	\$2,000,000
3. Herrin New Road from Grand Avenue Southward	New Roadway	Herrin	\$2,000,000
4. Carbondale - Multi-use Trail New Era to IL 13	New Trail	Carbondale	\$2,000,000
5. Reed Station from Lavern to Vaughn	Recons.	Jackson Co.	\$4,000,000
6. Union Hill Rd recons.	Recons.	Jackson Co.	\$4,000,000
7. Herrin/Club Road extension to Walker's Bluff	New Roadway	Wmson Co.	\$12,000,000
8. Grassy Road Resurfacing	Resurfacing/Safety	Wmson Co.	\$5,000,000
9. Crenshaw Rd Resurfacing/Safety	Resurfacing/Safety	Wmson Co.	\$5,000,000
10. IL 13 ITS Improvements	ITS	State	\$3,000,000
11. Westminster Drive - Carbon Street to I-57 overpass	Recons.	Marion	\$3,000,000
12. Marion To Carbondale Bike Route	New Trail	Varies	\$10,000,000
13. Wall and Walnut Street Intersection	Recons.	Carbondale	\$2,000,000
		Total	\$84,000,000

Table 34. SIMPO 2040 LRTP Mid-Range Fiscally Constrained Projects (2025 - 2035)

Long-range TIP projects 2036 to 2045

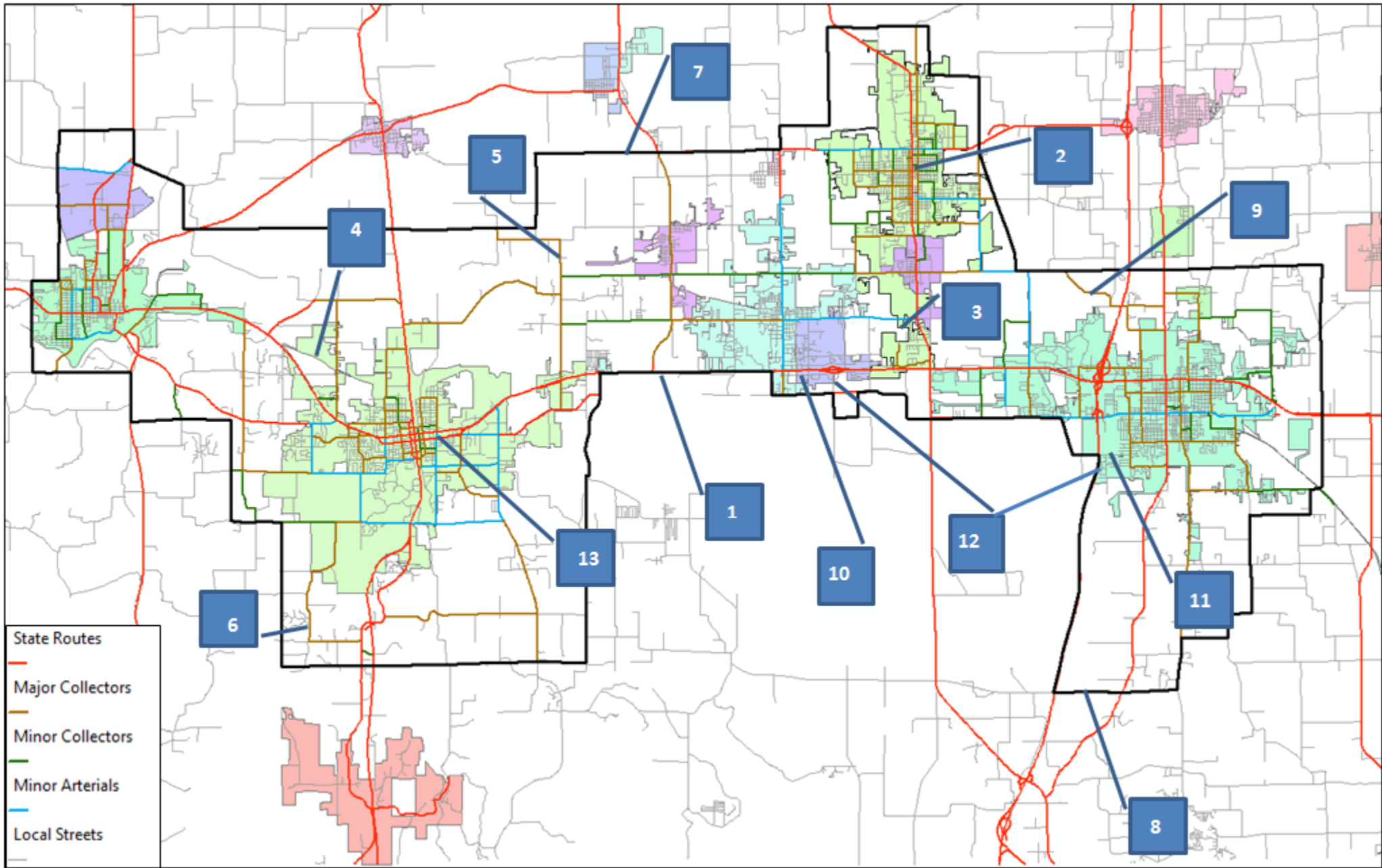
Project	Project Type	Jurisdiction	Project Cost
1. Crainville Main St Recons & Sidewalks	Recons.	Crainville	\$3,000,000
2. Cambria/Grand Intersection Recons./signals	Intersection recons	Wmson co.	\$2,000,000
3. Division St. recons. Commerce to Grand	Recons.	Carterville	\$5,000,000
4. Samuel Rd Recons. Poteete to Grand	Recons.	Wmson co.	\$3,000,000
5. Giant City & Frontage Roads Reconstruction	Recons./Safety	Carbondale	\$8,000,000
6. Dillenger Safety Improvements	Recons./Safety	Jackson Co.	\$5,000,000
7. Grand Avenue IL 148 to Hurricane Rd	Resurfacing/Safety	Wmson Co.	\$5,000,000
8. Greenbrier Rd Recons. Grand to Sycamore	Recons.	Carterville	\$3,000,000
9. Boskeydell Rd resurfacing & safety	Resurf./Safety	Jackson Co.	\$3,000,000
10. 17th Street - Halfway Road to Civic Circle Blvd	Add Lane	Marion	\$3,000,000
11. Herrin Rd. Safety & Left Turn Lanes	HSIP	Herrin	\$1,500,000
12. Grand Avenue Recons. High School to Cambria	Recons.	Wmson Co.	\$3,000,000
13. IL 148 Safety Improvements - Brewster to Clark Tr	Safety	State	\$6,000,000
14. Reed Station Road extension to Walker's Bluff	New Roadway	Jackson Co.	\$6,000,000
15. Park Street Safety Improvements	Safety	Carbondale	\$500,000
16. Murphysboro Downtown Pedestrian	ITEP	Murphysboro	\$1,000,000
17. Fox Farm Rd from Airport to US 51	Recons.	Jackson Co.	\$3,000,000
18. Airport Rd from east of the airport to US 51	Recons.	Jackson Co.	\$3,000,000
		Total	\$64,000,000

Table 35. SIMPO 2040 LRTP Long-Range Fiscally Constrained Projects (2036 - 2045)

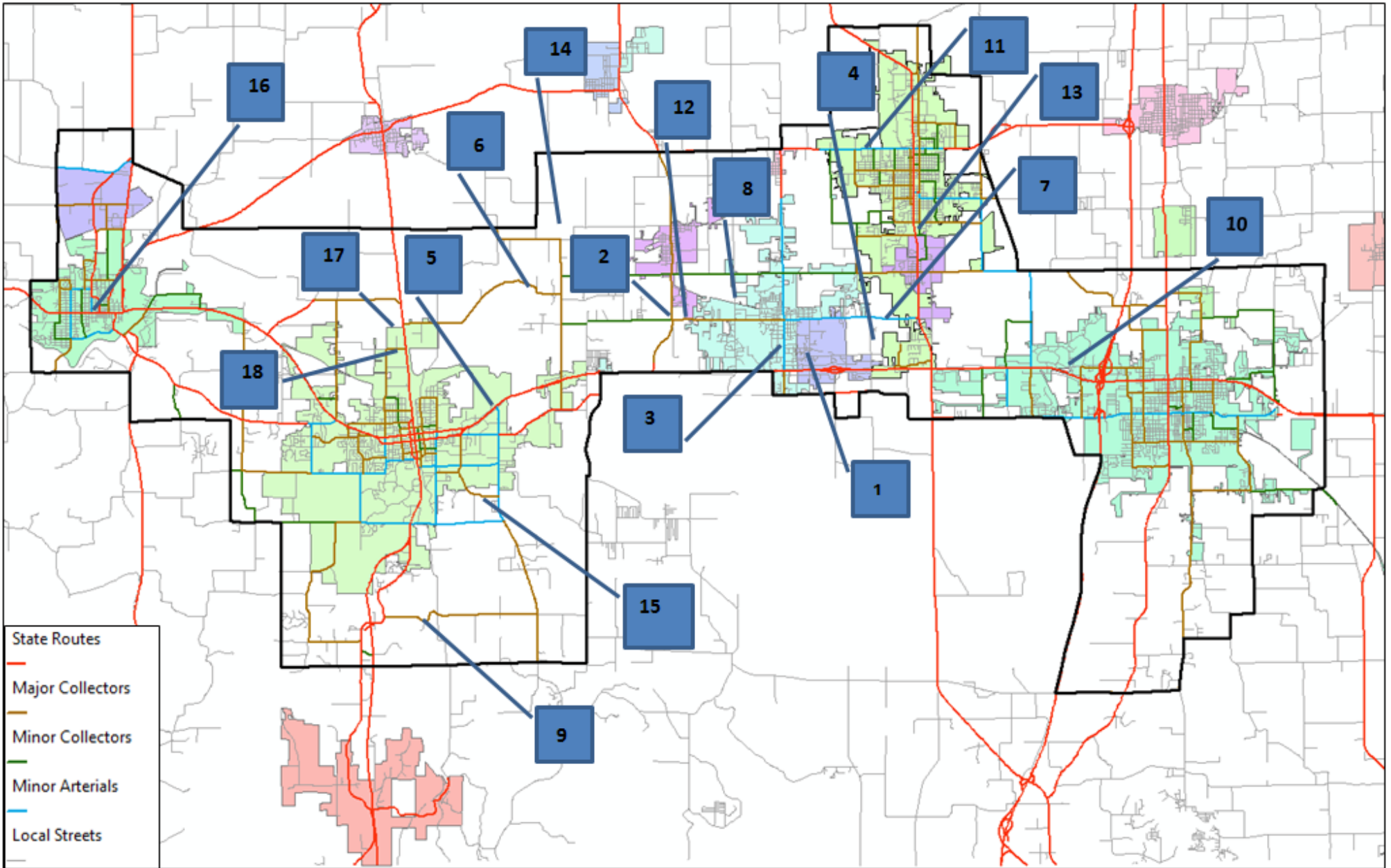
Long-range Illustrative Projects

Project	Project Type	Jurisdiction	Project Cost
1. Herrin Shortline Rail Improvements	Railroad	Herrin	\$20,000,000
2. BNSF Railroad Overpass over Old 13	New Bridge	BNSF RR	\$20,000,000
3. I-57 6 Lane from I-24 to Marion	Add Lane	State	\$50,000,000
4. Boulevard St. RR Underpass	Underpass	Marion	\$18,000,000
5. Extension of Robinson Drive to The Hill	New Road	Marion	\$4,000,000
6. Relocation of New Era Road from Airport to Fox F	New Road	Jackson Co.	\$3,000,000
		Total	\$115,000,000

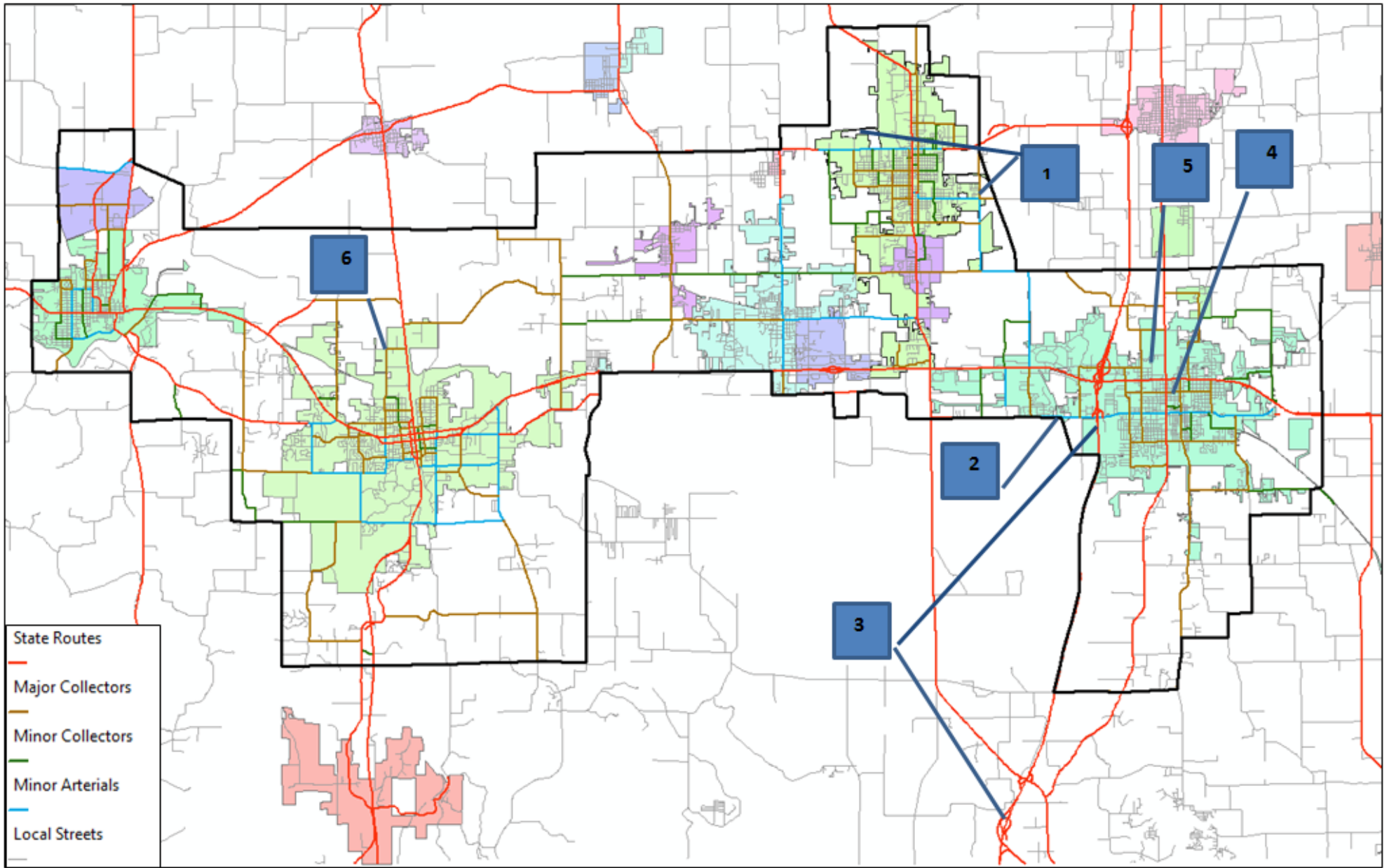
Table 36. SIMPO 2040 LRTP Long-Range Illustrative Projects



Map 21. Mid-Term TIP Projects



Map 22. Long Range TIP Projects



Map 23. Illustrative Projects

The project costs listed in Tables 34, 35 and 36 represent the total estimated costs shared by federal, state, and local agencies. It should be noted that these projects are not finalized and have been included in the long range plan to highlight the local transportation needs and infrastructure improvements needed for regional safety and economic benefit.

As previously noted, it is anticipated that SIMPO will receive revenue of approximately \$167,450,300 from federal, state and local sources over the 25-year long range planning period for non-transit infrastructure improvements. All of the projects anticipated over the next 25 years, including short-term, mid-term and long-term projects (non-illustrative) are estimated to cost a total of approximately \$98,366,400.

Overall, all of the non-illustrative projects included in the long-range transportation plan are fiscally constrained. It should be noted that only the short-term projects have been funded at this time. The projects identified in the mid-term and long-term are regionally important, but will be implemented only when funding become available. MPO staff will work with IDOT and the community to prioritize these projects and include in the subsequent SIMPO TIPs as priorities are established and federal, state and local cost share is determined.

Fiscally Constrained Transit Planning

Transit expenditures can generally be separated into operations and capital costs. Operations expenditures include costs necessary to keep the system operating, such as driver wages and maintenance costs. Capital expenditures include costs related to new vehicles, shelters at bus stops, office equipment and furnishings, and certain spare parts for vehicles.

Table 37 summarizes the planned expenditures of JCMT and RIDES MTD for FY 2016-2019. A comparison of these planned expenditures to the planned funding previously shown in Tables 3 and 4 demonstrates that expenditures are planned to match anticipated revenues.

Table 37. TIP FY 2016 - FY 2019 Transit Projects

Budget Item	Total Funds (Thousands)				
	Fund Type	FY-2020	FY-2021	FY-2022	FY-2023
Jackson County MTD					
Operating Assistance	5307	\$985	\$1,040	\$1,100	\$1,150
MD Paratransit Bus	5310	\$195	\$65	\$65	\$60
Totals - JCMTD		\$1,180	\$1,105	\$1,165	\$1,210
RIDES MTD					
Service Trucks	DOAP	\$45	\$0	\$0	\$0
Operating Assistance	5307	\$2,746	\$2,995	\$3,250	\$3,305
MD Paratransit Bus	5310	\$180	\$285	\$180	\$180
Totals - RIDES MTD		\$2,971	\$3,280	\$3,430	\$3,485

It is assumed that JCMTD and RIDES MTD will spend all funding received through the 25-year planning horizon towards either operational or capital expenditures, which is consistent with typical transit operations. Therefore, the amount spent will remain approximately equal to the revenue received over the planning period, and a fiscally constrained plan for transit expenditures is anticipated.

8 PUBLIC INVOLVEMENT



Public Involvement

SIMPO has made extensive efforts to inform the public on the recent changes to the region's transportation planning and funding structures that have occurred as part of the formation of the Metropolitan Planning Organization.

The development of the LRTP has been a culmination of public input and direct stakeholder engagement. Public workshops were performed across the MPA and stakeholder discussions were held with a diverse group of governmental, educational, and economical representatives.

From Carbondale to Carterville, Herrin to Marion, the diverse views of the region were voiced. This engagement directly informed the projects that were selected as part of this Plan.

A Public Participation Plan has been developed by SIMPO to steer future efforts. This plan clearly outlines action items to be performed during certain planning activities, gives methods and techniques for performing those items, and provides an extensive list of regional partners that should be considered in the planning process.

The action items on the following page have been completed or will be completed as part of the LRTP development.

FHWA holds the following views on public involvement:

“Public participation is an integral part of the transportation process which helps to ensure that decisions are made in consideration of and to benefit public needs and preferences. Early and continuous public involvement brings diverse viewpoints and values into the decision-making process. This process enables agencies to make better informed decisions through collaborative efforts and builds mutual understanding and trust between the agencies and the public they serve. Successful public participation is a continuous process, consisting of a series of activities and actions to both inform the public and stakeholders and to obtain input from them which influence decisions that affect their lives.

The public, in any one area or jurisdiction, may hold a diverse array of views and concerns on issues pertaining to their own specific transportation needs. Conducting meaningful public participation involves seeking public input at specific and key points in the decision-making process issues where such input has a real potential to help shape the final decision or set of actions.

Public participation activities provide more value when they are open, relevant, timely, and appropriate for the intended goal of the public involvement process. Providing a balanced approach with representation of all stakeholders and including measures to seek out and consider the needs of all stakeholders, especially those that are traditionally underserved by past and current transportation programs, facilities, or services.”

- FHWA Website

The following steps will be taken to afford the public the opportunity to engage in the development of the LRTP:

- Conduct key stakeholders meetings during the early stages of plan development to solicit input on multi-modal transportation short- and long-term needs throughout the system, as well as other elements of the plan
- Conduct public meetings/workshops during the early stages of plan development to solicit input on multi-modal transportation short- and long-term needs throughout the system, transportation goals and objectives, as well as other elements of the plan to ensure the transportation system facilitates the efficient movement of goods and people throughout the region
- SIMPO will coordinate with the Illinois Department of Transportation's transportation planning public involvement efforts
- SIMPO will consult with agencies and officials responsible for other planning activities within the MPA that are affected by transportation in order to coordinate the planning process functions
- The SIMPO planning area has a rich history of Native American Indian populations. Accordingly, Indian Tribal Nations will be informed of planning activities in order to determine their desire to participate
- SIMPO will seek input from low income and minority populations, persons with disabilities, and persons with limited English proficiency (by special arrangement)
- A legal public notice will be published in various regional and local newspapers no fewer than 15 days nor more than 30 days in advance of the public comment period
- In addition to the published notice for the public comment period, meetings will be publicized by way of press releases to print, radio and television outlets
- Make available the Draft LRTP at the office of the Greater Egypt Regional Planning & Development Commission, post it to the website at www.greateregypt.org/SIMPO/, and place copies at local libraries
- Provide a 45-day review and comment period on the Draft LRTP, generally to end one week prior to tentative plan adoption
- Provide a public comment summary memo to the Policy and Technical Committees prior to the plan adoption
- Provide public notification not fewer than 15 days nor more than 30 days in advance of consideration of action by the Policy Committee on the LRTP
- Technical Committee recommends action on the plan adoption and Policy Committee adopts final plan
- If comments received during the designated comment period affect a significant change to the content of the LRTP, SIMPO will provide additional opportunity for public comment

