

AN URBAN BEGINNING: MOVING FORWARD TOGETHER

SIMPO 2040 LONG RANGE TRANSPORTATION PLAN



JUNE, 2015

What is SIMPO?

The Southern Illinois Metropolitan Planning Organization (SIMPO) is a public agency designated by the federal government to carry out transportation planning activities for the Carbondale-Marion urbanized area.

As of the 2010 Census, the urbanized areas of Carbondale and Marion, IL became contiguous, resulting in a single urbanized area with a population of 67,821 people. SIMPO was formed in 2013 to conform to federal policy that requires a Metropolitan Planning Organization (MPO) for all urbanized areas with a population greater than 50,000 individuals. SIMPO is funded by federal transportation planning funds.

It is SIMPO's responsibility to balance the needs of multiple modes of transportation across multiple jurisdictions.

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, represents Cambria, Colp, Energy, and Spillertown General Manager, One of the local Transit Agencies (JMTD or RIDES) Illinois Department of Transportation District 9 Representative

Technical Committee

City of Carbondale City of Marion City of Herrin City of Carterville Jackson County Williamson County Villages under 5,000 population (Cambria, Colp, Energy, and Spillertown) Transit Agencies (JMTD or RIDES) Illinois Department of Transportation District 9

Director

Cary Minnis





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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 2040.

As the first LRTP developed by SIMPO, the Plan 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 multimodal transportation system, an outline of the region's transportation values and objectives, and a financiallyconstrained 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, MAP-21, specifies funding requirements for fiscal years 2013 and 2014.

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 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 Crab Orchard Wildlife Refuge can 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 more wisely to improve the quality of life for all users.

MAP-21 Federal Transportation Funding Bill

The Moving Ahead for Progress in the 21st Century Act (MAP-21) was signed into law on July 6, 2012. This bill dictates federal transportation funding policy for fiscal years 2013 and 2014.

More importantly, this bill signaled the movement of federal policy towards a performance-based transportation funding system. The focus is now on an outcome-driven approach for reaching certain performance goals in the areas of safety, congestion mitigation, and livability, among others.

As a result, this LRTP establishes specific transportation elements that can be measured and performance goals that the region can strive for. These goals are consistent with the values of the region and established in line 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 are as follows:

- Safety
- Infrastructure Condition
- Congestion Reduction
- System Reliability
- Freight Movement and Economic Vitality
- Environmental Sustainability
- Reduced Project Delivery Delays

IDOT Multi-year Transportation Improvement Plan

IDOT's multi-modal, multi-year Transportation Improvement Plan for fiscal years 2015-2020 documents the agency's vision for creating an integrated transportation system. The plan states that:

"IDOT continues to emphasize the importance of planning and programming for a multi-modal transportation system that makes connections among all modes - highways, rail, transit, air, and bike/pedestrian. In accord with the department's vision of transforming transportation for tomorrow, IDOT strives to ensure that the millions of people and businesses who depend on the system are equipped with safe, accessible, dynamic, and sustainable travel options that improve the quality of life and promote economic vitality locally and gloabaly."

Major projects included in the IDOT program for FY 2015 - 2020 that are within the limits of the MPA include:

- I-57 from Perks Road 1.2 miles south of the Union County line to south of Old Illinois 13 in Marion: Rubblization and resurfacing on 31.9 miles.
- Bridge Street over Big Muddy River in Murphysboro: Bridge superstructure replacement.
- Illinois 37 from Illinois 146 in Johnson County to Olmstead in Pulaski County: Resurfacing on 18.4 miles.
- Williamson County Regional Airport: New terminal building.

Other major IDOT projects currently being completed within the MPA include:

- Illinois 13 grade separation over the BNSF railroad west of I-57.
- Illinois 13 interchange at Wolf Creek Road.
- Pedestrian Improvements along Route 13 from Lewis
 Lane to Giant City Road, including pedestrian crossing
 improvements at McKinney Avenue.
- Illinois 13 bridge replacement over the Big Muddy River.

IDOT has also developed, or is in the process of developing, specialized plans in support of the State's goals and objectives. These plans include Freight, Human Capital, Intelligent Transportation Systems, Rail, Bike, Transit, Statewide Congestion, Travel Demand Management, Safety, Sustainability, Climate Adaptation, and Storm Water Management.

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.



Southern Illinois Metropolitan Planning Organization



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.



Figure 1. SIMPO Metropolitan Planning Area (MPA)

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, and Murphysboro, as well as the villages of Colp, Cambria, Energy, and Spillertown. The Urbanized Area results from these separate municipalities growing together, with the Carbondale Micropolitan Area and the Marion-Herrin 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.

Despite the seemingly separate nature of these cities and villages, the region will benefit from a comprehensive planning mentality. 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.



Murphysboro Urban Cluster

As seen in Map 1, the Murphysboro Urban Cluster is considered a separate area compared to the rest of the Carbondale-Marion Urbanized Area. While these urban areas are not contiguous at present, they are expected to become contiguous by the year 2020.

This means that the current federal funding calculations for SIMPO do not include the Murphysboro Urban Cluster, and that Murphysboro is responsible for its own planning and financing of transportation improvements.

However, because it is anticipated to become contiguous before 2040 (the LRTP horizon year), the Murphysboro Urban Cluster was included in the SIMPO Metropolitan Planning Area.

All regional planning activities take the entirety of the MPA into account, including Murphysboro.

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 7	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

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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.

Table 4. Regional Population Forecasts

Given that the MPA comprises almost 3/4 of the total twocounty population, the growth rate within the MPA was chosen to be 5.51%, consistent with that of the two counties. This results in a 2040 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.

	2000	2010	Forecasted 2020	Forecasted 2030	Forecasted 2040	Total Growth 2010 - 2040	Avg. Annual Growth 2010 - 2040
Jackson County	59,612	60,128	61,302	61,700	61,243	1.85%	0.06%
Williamson County	61,296	66,357	69,143	71,293	72,211	8.82%	0.28%
Jackson+ Williamson County	120,908	126,485	130,445	132,993	133,454	5.51%	0.18%
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. <mark>1</mark> 4%	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
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	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 **Percent Below** Urbanized Area (2010) **Poverty Level Total Population** 28.2% By Age Under 18 years 31.1% 18 to 64 years 31.1% 65 years and over 8.5% By Sex Male 27.6% 28.7% Female Source: US Census

Area Population Shifts

Map 2 on page 13 shows the percent change in population for each Census block between 2000 and 2010. A general trend demonstrated here is the decrease in population near the center of each City and the increase in population for select Census blocks on the outskirts of town. This is a national trend that began in the 1950s and is only recently beginning to wane.

Particular areas of growth include Carterville, the south side of Herrin along Route 13, the northeast edge of Marion, and the southeast side of Carbondale.



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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.



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

Growth in Healthcare and General Services

The SIMPO region is expected to see continued growth in Health services. Carbondale, Herrin, and Marion all contribute to create a major hub for healthcare for all of Southern Illinois.

This highlights an opportunity for transportation investment to support an economic driver by ensuring direct routes to medical centers and reducing obstacles for emergency response vehicles.

General service jobs such as Educational, Social, Financial, and Insurance services are also expected to grow. These jobs are typically located closer to the city centers compared to Manufacturing and Agriculture jobs, making them more attractive for using alternative means of transportation to commute.

Employment Trends

Table 7. Forecasted Change in Employment for Jackson and Williamson Counties by Sector, 2010 to 2040

	2010	2040	% 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).

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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 2040 Source: Woods and Poole Economics, Inc.

Goods and Services

Consistent with the national economy, the SIMPO region has experienced a shift in employment from Goods producing jobs to Service producing jobs, as seen in Figure 4. This trend, starting around 1990, is expected to continue through the 2040 horizon.

Manufacturing is expected to be the only industry sector to see a decline in employment over the next 25 years. This decline could potentially be balanced by an increase in transportation, warehousing, and utilities jobs.

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 _{To} Residence	County of Work	Percent of Total	County of To To	County of Work	Percent of Total
Jackson County	Jackson County	71.13%	Williamson County	Williamson County	69.64%
Williamson County	Jackson County	15.35%	Franklin County	Williamson County	10.84%
Union County	Jackson County	3.73%	Jackson County	Williamson County	6.84%
Perry County	Jackson County	3.17%	Saline County	Williamson County	3.52%
Franklin County	Jackson County	2.32%	Johnson County	Williamson County	2.44%
Other	Jackson County	4.29%	Other	Williamson County	6.71%

Source: US Census Longitudinal Employer-Household Dynamics

Table 9. Commute Patterns by County of Residence

County of To Residence	County of Work	Percent o 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 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

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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 automobileoriented, 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 o <mark>r</mark> Taxi	1%			
Motorcycle	0%			
Bicycle	1%			
Walked	5%			
Other	0%			
Worked at Home	2%			

Source: US Census American Community Survey



Census Block Group



to Work by Census Block Group

Proactive Land Use Planning

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

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 heavy 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 uses.

Proactive land use planning, conducted by each member agency and coordinated by 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 Wildlife Refuge is a valuable environmental asset for the region, offering major recreational opportunities just outside of 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 made 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.





TRANSPORTATION INFRASTRUCTURE

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



Asset Management

It is important for SIMPO to have an understanding of the condition of the transportation assets in the region. This can be accomplished by performing an asset management inventory that documents and evaluates the condition of every road, sidewalk, and trail. With a comprehensive inventory of conditions, a systematic plan for proactive and preventative maintenance can be developed.

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.

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



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 roadway operate satisfactorily.

The heaviest-traveled roadway is Route 13, between Reed Station Road and Giant City Road, at 30,300 vehicles per day. This is consistent with input from stakeholders and the public, who both mentioned capacity issues along Route 13 east of Carbondale as well as capacity issues at the intersection of Route 13 and Giant City Road.

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 Morgan 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 2040 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(<u>http://www.greateregypt.org/SIMPO/simpo-planning-documents/</u>).

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

Roadway Level of Service (LOS)

While the precise assignment of an LOS can vary between different types of roadway facilities, the following provides a general idea of what each level represents.

LOS A - primarily free-flow operation LOS B - reasonably unimpeded operation LOS C - stable operation LOS D - less stable operation LOS E - unstable operation and significant delay LOS F - traffic flow at low speeds with high delay and extensive queuing

Source: 2010 Highway Capacity Manual

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 2040, 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. 2040 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









Map 10. 2040 Annualized Average Daily Traffic Volumes for Select Roadways



Source: Lochmueller Group with data provided by IDOT







Map 12. 2040 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.



Bicycle Network

The SIMPO bicycle facility network is generally centered within Carbondale, as seen in Map 13. These facilities are primarily limited to signed bike lanes, with a number of striped lanes 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
А	<=1.5	Excellent bicycle environment
В	1.5-2.5	Good bicycle environment
С	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)
Е	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
А	26	3%	Short segments existing within city boundaries
В	205	24%	Pockets or island, generally within city boundaries. Generally connecting to grade C or D facilities
С	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






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
А	5	Best	<30 mph	Complete sidewalk or at least one 4 ft shoulder
В	4	Good	<30 mph	No dedicated space
С	3	Fair	30-35 mph	Complete sidewalk or at least one 4-ft shoulder
D	2	Moderate	30-35 mph	No dedicated space
_	-		40-50 mph	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
А	81	10%	Mainly residential roadways that may or may not have a centerline, travel lanes are 9-12 ft. Sidewalk or shoulder is present
В	122	15%	Mainly residential roadways that may or may not have a centerline, travel lanes are 9-12 ft.
С	30	4%	Characterizes main streets in urbanizes 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

Cost Sharing for Sidewalk Improvements

A number of opportunities exist for the public agencies, private residents, and business owners to share the cost of new or reconstructed sidewalks. These opportunities need to be explored across the MPA to create a standard that all entities agree on.

This has the potential to leverage resources and result in a substantially improved sidewalk network.



Map 15. Pedestrian Level of Service Results

SAFETY IN THE MPA

SAFETY OVERVIEW VEHICULAR CRASHES PEDESTRIAN AND BICYCLE CRASHES SAFETY LOCATIONS OF INTEREST



Illinois Strategic Highway Safety Plan (SHSP)

The federal transportation bill that preceded MAP-21, SAFETEA-LU, required that each State develop and implement a Strategic Highway Safety Plan in order to be eligible for certain safety funding. Illinois has developed a plan consistent these requirements and heavily based on statistics and performance measures, with the primary goal being to reduce fatalities and serious injuries resulting from crashes on the highway system.

Developing a safety program for SIMPO that is consistent with IDOT's SHSP is important for providing the most safety benefit.

Crashes and Traffic Volume: A Non-Linear Relationship

Historical data demonstrates that there is a relationship between the amount of vehicles on the road and the number of crashes that occur, but that this relationship is not linear. In other words, the number of crashes does not necessarily go up or down at the same rate as traffic volumes go up or down.

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 is in the process of completing 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



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
2009	2,058	8	131	1,919
2010	2,232	2	146	2,084
2011	2,129	10	117	2,002
2012	2,021	8	133	1,880
2013	2,022	6	110	1,906

Source: Illinois Department of Transportation

The total number of crashes has remained relatively consistent over the last five years of available data. In 2009, Illinois increased the minimum dollar amount of property damage for a reported crash from \$500 to \$1,500. This resulted in a much lower number of crashes, as minor accidents were no longer reported. Since that time, the SIMPO MPA has averaged just over 2,000 crashes per year.

The MPA has experienced between 2 and 10 fatal crashes per year, totaling 34 fatal crashes in five years. These were generally spread out throughout the region, as shown in Map 16.

There was also between 110 and 146 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.

Spot Location vs. Systematic Safety Improvements

There are two primary ways to approach safety improvements. Spot location safety improvements identify specific segments or intersections with safety concerns that can be mitigated by safety improvements. These locations are generally determined by crash history and an analysis of the site's physical characteristics.

Systematic safety improvements are generally low-cost measures applied across a number of locations. These include rumble strips, signing, resurfacing, and the elimination of roadside obstacles.

Both methods have been proven to be effective when done right, and both methods can be funded through the Highway Safety Improvement Program funding.





Map 16. Fatal Crashes within the MPA (2009 - 2013)

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 nine fatal crashes involving pedestrians between 2009 and 2013. Seven 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
2009	1	20	17
2010	1	24	24
2011	3	22	25
2012	2	33	25
2013 🦳	2	26	20

Source: Illinois Department of Transportation





Safety Locations of Interest

Safety on the roadways is a very complex problem. As part of the 2014 SIMPO Multi-modal Transportation System Assessment, six elements of safety information were combined to give a comprehensive picture of traffic safety. A full description of the elements evaluated can be found in the Multi-modal Transportation System Assessment, and a summary is given in Table 21 (intersections) and Table 22 (segments).

Locations of interest are those intersections and segments that have experienced over 25 crashes over five years, and therefore offer the greatest opportunity for a beneficial impact of safety improvements.

The locations are ranked in order of their crash rate. For intersections, this is measured in crashes per million entering vehicles. For segments, this is measured in crashes per hundred million vehicle miles.

Other elements include:

- Whether or not the location is included in the IDOT State (S) or Local (L) 5% report
- Whether or not a fatal crash occurred at that location
- Whether or not the location was mentioned by a stakeholder as being perceived as a safety concern
- For segments, the IDOT Potential for Safety
 Improvement (PSI) value included

While this list will experience minor fluctuations from year to year, patterns can be observed, allowing efforts to be focused on those locations that consistently experience safety concerns.

Table 21. Intersection Safety Locations of Interest

Roadway		- Townshin	Crash	IDOT 5%	Fatal	Stakeholder	Entering AADT	Total Crashes
N/S	E/W	- township	Rate	1001 070	Crash	Mentioned	Entering AAD	(2009-2013)
S Poplar St	W College St	Carbondale	3.02	L			5,625	31
Market St	Main St	Marion	2.33				7,775	33
N Giant City Rd	SR 13	Carbondale	2.30	L		•	45,350	190
Giant City Rd	Pleasant Hill Rd	Carbondale	2.26				8,975	37
Bandyville Rd	Herrin Rd	Herrin	2.17				7,575	30
N 11th St	Walnut St	Murphysboro	2.10				14,900	57
S Wall St	Walnut St	Carbondale	2.08				30,250	115
Allen Rd	W Herrin St	Herrin	2.06				7,175	27
N Court St	W Main St	Marion	2.03				23,200	86
Halfway Rd	SR 13	Marion	2.01				41,400	152
Park Ave	E Monroe St	Herrin	1.93				16,775	59
Giant City Rd	E Grand St	Carbondale	1.93				12,800	45
University Ave	Main St	Carbondale	1.91				25,000	87
Division St	SR 13	Carterville	1.83	S			30,875	103
Carbon St	W Main St	Marion	1.83			•	19,800	66
University Ave	College St	Carbondale	1.79				11,025	36
S Wall St	Main St	Carbondale	1.74				26,450	84
13th St	Herrin St	Herrin	1.69				9,375	29
Park Ave	E Lyerla Dr	Herrin	1.67				16,050	49
S Wall St	E Grand St	Carbondale	1.66				20,500	62
SR 148	SR 13	Herrin	1.63				36,675	109
University Ave	Walnut St	Carbondale	1.62				27,100	80
Giant City Rd	Walnut St	Carbondale	1.61				17,000	50
S Illinois Ave	Walnut St	Carbondale	1.59				26,550	77
N Court St	Boulevard St	Marion	1.55		•		16,950	48
S Lewis Ln	E Grand Ave	Carbondale	1.51				13,100	36
University Ave	W Oak St	Carbondale	1.50				9,125	25
N Court St	DeYoung St	Marion	1.49		•		32,300	88
Park Ave	W Clark Tr	Herrin	1.48	S	•	•	22,275	60
SR 51	W Pleasant Hill Rd	Carbondale	1.43				21,400	56
Williams St	Walnut St	Murphysboro	1.39				19,700	56
S Illinois Ave	W Mill St	Carbondale	1.37			•	14,450	36
N Court St	Longstreet Rd	Marion	1.34				10,225	25
SR 127	W Industrial Park	Murphysboro	1.33				14,025	34
Lewis Ln	E Walnut St	Carbondale	1.33				14,450	35

Table 21. Intersection Safety Locations of Interest (Cont.)

Roadway		Townshin	Crash		Fatal	Stakeholder	Entering AADT	Total Crashes
N/S	E/W	Township	Rate	1001 5%	Crash	Mentioned		(2009-2013)
Country Club Rd	SR 13	Carbondale	1.31	S	•		19,725	47
S Illinois Ave	Main St	Carbondale	1.30				23,950	57
N 14th St	Walnut St	Murphysboro	1.30				15,175	36
Russell St	DeYoung St	Marion	1.26				31,350	72
S Wall St	E Park St	Carbondale	1.25				10,950	25
S Court St	Hendrickson St	Marion	1.23				13,350	30
N Washington St	Main St	Carbondale	1.22				20,275	45
N 17th St	Walnut St	Murphysboro	1.20				12,350	27
Carbon St	DeYoung St	Marion	1.19				36,350	79
Carbon St	Boulevard St	Marion	1.18			•	11,600	25
Skyline Dr	SR 13	Marion	1.15		•		29,500	62
Russell St	W Main St	Marion	1.15				17,225	36
N Oakland Ave	Main St	Carbondale	1.11			•	21,800	44
5th St	Walnut St	Murphysboro	1.09				15,025	30
I-57 SB Ramp	Main St	Marion	1.08				16,225	32
Reed Station Rd	SR 13	Carbondale	1.08		•		36,575	72
Halfway Rd	W Main St	Marion	1.06				15,450	30
Spillway Rd	SR 13	Carbondale	1.04				34,850	66
SR 127	SR 13	Murphysboro	1.03				21,800	41
S Washington St	E Grand Ave	Carbondale	1.01				15,700	29
Marion St	Main St	Carbondale	1.01				21,200	39
University Ave	W Mill St	Carbondale	1.01				15,250	28
Park Ave	Herrin St	Herrin	1.00				19,225	35
Lewis Ln	Main St	Carbondale	0.98				26,200	47
Pershing St	College St	Herrin	0.97				19,250	34
Spillertown Rd	DeYoung St	Marion	0.95				22,025	38
Park Ave	Railroad Ave	Herrin	0.94			•	19,825	34
Watson Rd	SR 13	Murphysboro	0.83				17,175	26
S Illinois Ave	E Grand Ave	Carbondale	0.81				25,600	38
Park Ave	E Grant St	Herrin	0.79				18,112	26
Park Ave	E Poplar St	Herrin	0.79				17,450	25
N Glenview Dr	Main St	Carbondale	0.78		•		27,425	39
Washington St	Walnut St	Carbondale	0.75				23,300	32

Table 22. Segment Safety Locations of Interest

Roadway	From	То	Township	Crash Rate	PSI	IDOT 5%	Fatal Crash	Stakeholder Mentioned	AADT	Length	Total Crashes 2009-2013
SPILLWAY ROAD	Old SR 13	South MPA Limit	Carbondale	615.06	-	-		•	1,650	2.16	40
CARBON ST	Hendrickson St	W Main St	Carbondale	357.08	-			•	6,700	0.60	26
GIANT CITY RD	E Park St	E Grand Ave	Carbondale	330.66	-				7,800	0.66	31
S GIANT CITY RD	E Grand Ave	E Walnut St	Carbondale	315.22	-				12,300	0.61	43
SR 13	Skyline Dr	Halfway Rd	Marion	310.25	2.597				25,200	1.07	149
REED STATION RD	SR 13	E Clayton Rd	Carbondale	309.86	-	L	•	•	4,000	1.15	26
OLD ILL 13 WEST	Pump House Rd	Country Club Rd	Murphysboro	304.18	7.878	-			4,700	1.61	42
OLD ILL 13 EAST	Giant City Rd	Reed Station Rd	Carbondale	297.05	14.950	-	••		4,300	1.46	34
S MARKET RD	Deer Run Rd	Golf Course Rd	Marion	290.07	-	L	•		1,750	5.83	54
MAIN ST	Wall St	Lewis Ln	Carbondale	288.78	-143.662				23,100	0.52	54
DIVISION ST	SR 13	Grand Ave	Carterville	285.17	-0.750				9,600	1.00	50
OLD ILL 13 EAST	Division St	Briggs Rd	Carterville	280.64	2.979	-			2,100	3.53	38
N GIANT CITY RD	E Walnut St	SR 13	Carbondale	251.77					10,900	0.60	30
OLD IL 13	Country Club Rd	N Tower Rd	Carbondale	239.77	9.957				4,950	1.43	31
DIVISION ST	Grand Ave	Herrin Rd	Carterville	231.85	2.689			•	5,800	3.50	86
S WALL ST	Pleasant Hill Rd	E Park St	Carbondale	219.26	-	L			6,700	1.08	29
BANDYVILLE RD	Crenshaw Rd	Stotlar St	Herrin	212.95	-	L	•		4,650	1.49	27
GRAND AVE	Cambria Rd	Division St	Carterville	201.86	-		•	•	5,300	2.30	45
GIANT CITY RD	Boskydell Rd	Pleasant Hill Rd	Carbondale	201.28	-				6,100	2.05	46
W MAIN ST	I-57 NB Ramps	Carbon St	Marion	188.36	-				14,400	0.57	28
N PARK AVE	Smith St	Big Buck Ln	Herrin	188.07	1.074				4,150	1.85	28
SR 13	Pentecost Dr	Skyline Dr	Marion	173.16	-6.061		•		25,000	1.02	73
DEYOUNG ST	State Rd	Fair St	Marion	172.11	-2.413				17,400	0.47	27
DEYOUNG ST	Russell St	N Court St	Marion	145.59	8.500		•		24,000	0.51	28
S ILLINOIS AVENUE	Willow St	Charles Rd	Carbondale	144.97	16.376		•		8,550	1.28	30
HERRIN RD	Maple St	Division St	Colp	136.75	13.245	S			5,700	2.53	36
WALNUT ST	Williams St	Watson Rd	Murphysboro	139.02	-4.041		•		16,700	1.09	44
MAPLE ST	Grand Ave	Herrin Rd	Carterville	129.71	-				4,800	3.52	40
S COURT ST	Grassy Rd	Wildcat Dr	Marion	128.98	6.424			•	6,400	4.95	81
S ILLINOIS AVENUE	Pleasant Hill Rd	E Grand Ave	Carbondale	110.54	16.376				18,400	1.22	42
SR 13	Division St	Briggs Rd	Carterville	108.51	2.140		••		24,900	2.28	106
MAIN ST	Lewis Ln	Giant City Rd	Carbondale	107.74	26.003	S	•	•	26,500	0.88	43
SR 13	Airport Rd	Striegel Rd	Carbondale	100.07	14.539				18,900	1.70	50
SR 13	Cambria Rd	Division St	Carterville	93.83	10.257		••	•	24,900	2.72	126
GRAND AVE	Division St	SR 148	Herrin	88.53	-				6,200	2.80	28
KEN GRAY EXPRESSWAY	Morgan Ave Ramps	North MPO Limit	Marion	54.68	-3.916				32,400	1.79	46
SR 13	Giant City Rd	Reed Station Rd	Carbondale	42.53	5.513			•	30,300	1.49	35
KEN GRAY EXPRESSWAY	SR 13 Ramps	South MPO Limit	Marion	30.99	6.454				27,100	7.71	113

PUBLIC TRANSPORTATION

REGIONAL TRANSIT OVERVIEW RIDES MASS TRANSIT DISTRICT JACKSON COUNTY MASS TRANSIT DISTRICT SALUKI EXPRESS INTERCITY BUS, AIR, AND PASSENGER RAIL PROPOSED/PLANNED MULTI-MODAL CENTERS





Curb-to-Curb, Point Deviated, Route Deviated, and Fixed Route Transit Service

Service operating in a "curb-to-curb" manner picks up passengers at specific locations and drops them off at specific locations, with little or no deviation.

Service operating in a "point-deviation" manner is scheduled to be at specific locations at scheduled times. Dispatchers and drivers have discretion to operate between the designated locations along suitable routes to serve desired passenger origins and destinations.

Service operating in a "route-deviation" manner operates along a specific route. Dispatchers and drivers have the discretion to travel within a specified buffer area around the route to serve desired passenger origins and destinations.

Service operating in a "fixed-route" manner is scheduled to be at specific locations at scheduled times and operates along a specific route, without any deviation. While fixed route service results in more reliable service and travel times, it is considerably more expensive to operate across the same size service area compared to point deviated or route deviated service.

Regional Transit Overview

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

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

RIDES generally operates in a point deviation or route deviation manner, JMTD generally operates in a curb-tocurb manner, and the Saluki Express operates in a fixed route manner.

The great opportunity for transit in the SIMPO region will be the organization of these three operators into a cohesive service that covers the entire MPA, with the ultimate goal being a first-rate fixed-route system with passenger amenities and a coordinated fare structure.

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. It recently began to operate a limited amount of fixed route service between Harrisburg (Saline County), Marion (Williamson County), and Carbondale (Jackson County).

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.

Nearly all 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. The SIMPO area in Williamson County is the first MPO area to be served by RIDES.

Service is offered in Marion and the urban areas of Williamson County Monday through Saturday. Dispatching services generally are available Monday through Friday between 8 a.m. and 5 p.m., with limited availability on Saturday. Later service can be provided if it is arranged during normal dispatching hours.



Figure 7. RIDES Service Area

Operations

RIDES has seven "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. This facility (like other RIDES facilities) does not have in-ground pits for maintenance; 4-point jacks are used for undercarriage vehicle maintenance access. The \$1.6 million Williamson County operating facility was recently built as an ARRA project with state participation. There is now funding for six heavy-duty fixed route buses for the Marion UZA.

Passenger Facilities

Presently, the Williamson County working group office is used as a transfer center. There are passenger shelters and benches throughout the district, but not in the urban area. Williamson County was added to the RIDES service area only in 2010, which is the principal reason that such passenger facilities are not yet situated 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 Center and the Amtrak station in Carbondale.

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 \$0.75. 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 23 and Table 24 provide ridership data by fiscal year.

Table 23. RIDES Annual Ridership

	Unlink	ed Passenger Trips				
Fiscal Year	Urbanized Area	Non-Urbanized Area	Total			
2013	104,066	24, <mark>4</mark> 09	128,475			
2014	105,395	24, <mark>7</mark> 22	130,117			

Source: National Transit Database Reports

Table 24. RIDES Forecasted Annual Ridership

Fiscal Year	Total Trips
2015	145,100
2016	155,200
20147	163,000

Source: RIDES Mass Transit District

RIDES fleet information can be seen in Table 25 and major trip generators can be seen in Table 26.

NTD ID	Year Made	Manufacturer	Model	Fuel	Seat/Pass Capacity	Status	Mileage
H13	2008	Eldorado	Aerotech	Diesel	22	ACTIVE	270260
H27	2008	Eldorado	Aerolite	Diesel	14	ACTIVE	229528
H24	2008	Chevy	E350	Gas	22	ACTIVE	262095
H147	2012	Eldorado	Aerolite	Gas	14	ACTIVE	91381
H3	2000	Plymouth	2500	Gas	10	ACTIVE	284992
H113	2009	Eldorado	Aerotech	Diesel	22	ACTIVE	175191
H2	2005	Eldorado	Aerolite	Gas	11	ACTIVE	279941
H142	2011	Eldorado	Aerolite	Gas	14	ACTIVE	120320
H56	2009	Chevy	E350	Diesel	22	ACTIVE	194421
H185	1998	Blue Bird	CSFE3000	Diesel	22	ACTIVE	123409
H111	2009	Eldorado	Aerotech	Diesel	22	ACTIVE	197468
H114	2009	Eldorado	Aerotech	Diesel	22	ACTIVE	171512
H1	2005	Eldorado	Aerolite	Gas	11	ACTIVE	314314
R184	2013	Plymouth	VAN	Gas	6	ACTIVE	19157
H99	2003	Eldorado	Aerolite	Gas	11	ACTIVE	269471
H20	2007	Eldorado	Aerolite	Gas	11	ACTIVE	214304
H143	2011	Eldorado	Aerolite	Gas	14	ACTIVE	133252
H26	2008	Eldorado	Aerolite	Diesel	14	ACTIVE	197110
H128	2008	Eldorado	Aerotech	Gas	22	ACTIVE	175843
H112	2009	Eldorado	Aerotech	Diesel	22	ACTIVE	184583
H52	1998	Eldorado	Aerotech	Diesel	14	INACTIVE CONTINGENCY	513233
H171	2012	Eldorado	SupSenator	Gas	28	ACTIVE	61370
H167	2012	Eldorado	SupSenator	Gas	28	ACTIVE	58895
H172	2012	Eldorado	SupSenator	Gas	28	ACTIVE	74638
H25	2008	Eldorado	Aerolite	Gas	12	ACTIVE	197292
H104	2010	Eldorado	Aerotech	Gas	14	ACTIVE	238671
H96	2002	Eldorado	Aerolite	Gas	11	INACTIVE PENDING DISPOSAL	374895
H84	2002	Eldorado	Aerolite	Diesel	14	INACTIVE PENDING DISPOSAL	393477
A4	1992	Dodge	Caravan	Gas	6	Maintenance	

Source: RIDES Mass Transit District

Table 26. RIDES Major Trip Generators in the SIMPO Area

Name	Address
Heartland Regional Medical Center	3333 W Deyoung St. Marion, IL 62959
Herrin Hospital	201 S 14 th St. Herrin, IL 62948
Marion VA Medical Center	2401 W Main St. Marion, IL 62959
DHS Family Community Resource Center	1107 W DeYoung St. Marion, IL 62959
Child Care Resource & Referral	700 Logan College RD. Carterville, IL 62918
The H Group BBT, IncICH	3111 Williamson County Parkway Marion, IL 62959
The H Group BBT, Inc Marion Campus	1307 W. Main Marion, IL 62959
Franklin-Williamson Bi-County Health dept.	8100 Express Dr. Marion, IL 62959
Franklin-Williamson Human Services	1307 W main St. Marion, IL 62959
Franklin- Williamson Bi-County Health Department	8160 Express Dr. Marion, II 62959
Aisin Mfg.	11000 Redco Dr., Marion IL 62959
Pepsi / Midamerica	2605 W Main St.; Marion IL 62959
John A. Logan	700 Logan College Dr. Carterville, IL 62918
BlueCross/ Blue Shield	5001 Meadowland Parkway, Marion IL 62959
U.S. Dept. of Justice	4500 Prison Rd, Marion IL 62959
AMC Centre 8	3107 Civic Circle Blvd., Marion IL 62959
Aldi	1305 N Russell St., Marion IL 62959
Borowiak's IGA	914 W Main St. Marion IL 62959
Kroger	1704 W Deyoung St. Marion IL 62959
Sam's	2709 Walton Way, Marion IL 62959
Save-A-Lot	1124 N Carbon St., Marion IL 62959
Small's Food Store	1005 E Main St. Marion IL 62959
Shepherd's Closet	704 W Boyton St., Marion IL 62959
Raquel's Couture	3000 W Deyoung St. <mark>,</mark> Marion IL 6 <mark>2</mark> 959
Rural King Supply	1301 Enterprise Way, Marion IL 62959
Melise's Boutique	928 W Main St., Marion IL 62959
Sears	300 W Deyoung St., Marion IL 62959
Maurices	Marion Shoppin <mark>g Center, Marion IL</mark> 62959
Menards	2500 Blue Heron Dr., Marion II 62959
Home Depot	3200 Banterra Dr, Marion IL 62959
Dillard's	300 W Deyoung St., Marion IL 62959
Walmart	2802 Outer Dr., Marion IL 62959
Target	3000 W Deyoung St., Marion IL 62959

Source: RIDES Mass Transit District

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. Services like these need to be more formalized to address travel needs along the entire urban corridor.

RIDES has a grant to build a transfer center in Marion. This is being constructed using only state funds. RIDES anticipates advertising for engineering design services for this facility in 2 - 3 months. The facility will be situated on formerly state-owned land adjacent to I-57, near a state regional office building and a VA hospital.

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.

The website will also include a cleaner design making it easier for both staff and customers to navigate. In addition to the website, RIDES has upgraded its inventory software to Manager Plus. This inventory software will make it easier for all assets and inventory to be tracked across RIDES' service area. While the software has been purchased, its implementation will take place in stages. In the next year, RIDES plans to have all of the parts inventory barcoded and scanned onto the system, with all assets to be scanned in by the following year.

RIDES currently has several short-term projects lined up to improve its infrastructure. Two new buildings are under construction in Harrisburg and Robinson, and RIDES will be moving into these new facilities within the next year. A third building was purchased in Edgar County and is in the early stages of remodeling. All three of these buildings will provide a larger garage area for maintenance than current buildings, as well as a larger staff lounge, and customer waiting area.

In addition to the new buildings, RIDES is also looking to build a park-and-ride facility in Williamson County within the next two years. 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 fareboxes to all revenue vehicles within the next 2 to 3 years.

Jackson County Mass Transit District (JMTD)

The Jackson County Mass Transit District provides curbto-curb transit system for Jackson County residents. All trips must begin or end within Jackson County. Service is provided Monday through Friday between 7 am and 5 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 tiedowns. Operations are housed in a building leased from the City of Carbondale. This includes only outside parking facilities and office space; there are no maintenance bays. Approximately 900 vehicle-miles of service are operated on an average weekday. No non-revenue vehicles are owned or operated.

Fares

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

Adults - \$3.00 Students - \$2.50 Senior Citizens - \$2.00 Children ages 6 to 15 - \$1.00

Personal attendants may ride with a disabled rider at no cost. Fares for same-day service are \$1.00 more in all fare categories. Exact change is required for all riders. Adults may purchase an 11-ride pass for \$30.00.

Ridership

Ridership levels were available for the most recent eight months and are summarized in Table 27.

Table 27. JMTD Ridership Levels

Month	Year	Total Ridership
July	2014	4,212
August		2,925
September		3,200
October		3,419
November		2,525
December		2,582
January	2015	3,025
February		2,525

Source: Jackson County Mass Transit District

Fleet

A complete listing of the JMTD bus roster can be seen in Table 28 on the next page.

Plans for the Future

JMTD anticipates a 50% increase in ridership over the next three years due to adding fixed deviated routes to the existing curb-to-curb service. The JMTD operations will relocate into Carbondale's Multimodal Center in 2017. Since JMTD will continue to lease space, no significant changes in expenses are anticipated due to this move.

Table 28. JMTD Bus Roster

Fleet #	Year Made	Manufacturer	Туре	Length	Status	Mileage	Vehicle Condition
1	2010	Ford	Paratransit	20'	ACTIVE	36,994	Excellent
2	2011	Ford	Paratransit	20'	ACTIVE	6,477	Excellent
3	2003	Ford	Paratransit	20'	RESERVE	135,241	Fair
4	2009	Ford	Paratransit	20'	ACTIVE	62,048	Excellent
5	2003	Chevy	Minivan w/ Ramp	16'	RESERVE	140,466	Fair
6	2006	Chevy	Minivan w/ Ramp	16'	ACTIVE	90,406	Good
7	2007	Ford	Medium Duty (14 pass)	23'	ACTIVE	76,819	Excellent
8	2007	Ford	Medium Duty (14 pass)	23'	ACTIVE	79,795	Excellent
9	2007	Ford	Medium Duty (14 pass)	23'	ACTIVE	78,570	Excellent
11	2012	Dodge	Minivan w/ Ramp	16'	ACTIVE	7,318	Excellent
12	2012	Dodge	Minivan w/ Ramp	16'	ACTIVE	3,952	Excellent
Funded v	vith Sec. 530	9 funds:					
10	2009	Ford	Paratransit	20'	ACTIVE	75,511	Excellent

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, service has been contracted by SIU, and the full costs of contracting service are paid by student activity fees, fares (paid by non-student riders) and a small subsidy from the City of Carbondale. Given these funding sources, the Saluki Express is not subject to FTA regulations and reporting requirements (such as National Transit Database reporting, FTA Title VI compliance, etc.).

Operations

The Saluki Express operates eight regular routes, which operate between 10 and 16 hours on weekdays. Three of these routes operate on Saturdays, and two operate on Sundays. An additional late-night route operates five hours on Friday and Saturday. A separate "Break Route" operates seven days a week only during times that 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).

Fleet

All vehicles are owned and operated by the lease operator, which at the present time is Beck Transportation. Fareboxes and pass readers on Saluki Express buses are SIU property. The contract with Beck Transportation requires that the contractor use "... good quality and new equipment, and upon request by the Board (of SIU), furnishing satisfactory evidence as to the type and quality of equipment." The contract (dated 09-01-11) also provides that the contractor purchase three new hybrid buses and operate them on specified routes. The contract also provides that fuel for Saluki Express buses be stored in a dedicated 10,000 gallon on-site (at the operator's facility) fuel tank.

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.

Operating Plans

Table 29 and Table 30 show the Saluki Express ridership and operating data for the three most recent years available. As seen, ridership has steadily increased over these three years.

The Saluki Express does not have any future capital expenditure plans. SIU's longer-range plans and services are not anticipated to result in significant changes in ridership on the Saluki Express.

For example, longer-range dormitory construction plans will upgrade or replace existing facilities, and will not provide for a significant change in the number of students housed on campus.

Whether the university would wish to pursue state or federal transit funding in the future is uncertain at this time.

Table 29. Saluki Express Total Ridership

Fiscal Yr	Total	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	Мау	Jun
2014	559,233	18,518	37,975	64,093	66,306	56,875	27,680	52,221	72,963	52,924	71,185	21,520	16,973
2013	497,664	18,632	32,186	58,301	59,338	55,304	27,876	40,842	60,170	48,106	61,876	21,520	13,513
2012	474,269	16,064	29,154	60,302	55,706	49,879	33,555	34,660	58,687	44,505	55,107	22,921	13,729

Source: SIU Student Center, Fiscal Year begins on July 1 of the previous calendar year

Table 30. Saluki Express Total Vehicle Hours of Service

Fiscal Yr	Total	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	Мау	Jun
2014	19,436	2,031	1,488	1,880	1,934	1,726	985	1,429	1,876	1,576	2,046	868	1,597
2013	19,048	2,046	1,351	1,823	1,934	1,766	1,080	1,344	1,852	1,577	2,020	928	1,327
2012	19,275	1,507	1,171	2,030	1,898	1,752	1,297	1,279	2,035	1,626	2,048	1,059	1,573

Source: SIU Student Center, Fiscal Year begins on July 1 of the previous calendar year

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. Cape Air operates the service, with as many as five flights per day.

Marion to St. Louis

Departure	Arrival	Flight #	Freq.
6:00 AM	6:50 AM	1100	Monday - Friday
7:00 AM	7:50 AM	1102	Saturday
8:50 AM	9:40 AM	1104	Monday - Friday
8:55 AM	9:45 AM	1106	Sunday
11:50 AM	12:40 PM	1108	Monday - Saturday
2:20 PM	3:10 PM	1110	Sunday - Friday
2:48 PM	3:38 PM	1112	Saturday
4:55 PM	5:45 PM	1114	Monday - Friday
5:15PM	6:05PM	1116	Sunday
8:00 PM	8:50 PM	1118	Monday - Friday

St. Louis to Marion

Departure	Arrival	Flight #	Freq.
7:15 AM	8:04 AM	1101	Monday - Friday
10:40 AM	11:29 AM	1103	Monday - Saturday
1:10 PM	1:59 PM	1105	Sunday - Friday
1:35 PM	2:24 PM	1107	Saturday
3:40 PM	4.26 PM	1109	Monday - Friday
4:05 PM	4:54 PM	1111	Sunday
5:45 PM	6:34 PM	1113	Saturday
6:50 PM	7:39 PM	1115	Monday - Friday
8:50 PM	9:35 PM	1117	Sunday
9:15 PM	10:04 PM	1117	Monday - Friday

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. Illinois Service Chicago to Carbondale
- 2. Saluki Chicago to Carbondale

3. City of New Orleans - Chicago to New Orleans, with stops in Champaign, Carbondale, and Memphis, among others.

Ridership data for the most recent seven years available is shown in Figure 9.



Figure 9. 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.

Figure 8. Cape Air Schedule for Williamson County Regional Airport

Proposed/Planned Multi-Modal Centers

As previously noted, RIDES is in the process of 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 and a commuter park-and-ride.

Additionally, the City of Carbondale is also in the planning stages of creating their own multi-modal center in the heart of downtown. Planned to be constructed near the current Amtrak station, this facility will enable transfers between Jackson County Mass Transit District (JMTD) buses, Saluki Express 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 new integration between the various public transit systems in the area.

By creating strong multi-modal nodes on both the east and west sides of the SIMPO region, a new level of usability and intuitiveness can be achieved for transit. These facilities would form a strong base for expanding future transit service on the Route 13 corridor. Combining access to local, regional and national transit options in the same locations as well as providing high-quality bicycle and pedestrian accommodations will help reduce dependence on automobiles and provide viable transportation options for low-income families, elderly residents and students.







FREIGHT MOVEMENT

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

Williamson County

REGIONAL AIRPORT

MAP-21 and National Freight Planning

A major characteristic of the MAP-21 bill is the attempt to improve the condition and performance of the national freight network, which has resulted in a national freight planning effort. Strategies include developing a national freight strategic plan, moving towards a performance-based approach, and modifying certain eligibility criteria for various funding programs. The primary goal of these strategies to ensure the national freight network can compete in a global economy.

Air, Rail, and Truck Network

Air

There are two airports serving the MPA, Williamson County Regional Airport and Southern Illinois Regional Airport. Statistics for each airport are given in Table 31.

Table 31. Regional Airport Operations

Williamson County Regional Airport

Aircraft based on the field:	46
Single engine airplanes:	43
Multi engine airplanes:	3
Aircraft operations:	89/day
local general aviation	78%
air taxi	19%
transient general aviation	2%
military	2%
commercial	<1%

Southern Illinois Regional Airport

Aircraft based on the field:				80	
Single engine	airplan	es:		69	
Multi engine a	irplane	s:		7	
Jet airplanes				1	
Helicopters				2	
Ultralights				1	
Aircraft operations:				250/day	
	ocal ge	nera	al aviation	<mark>65%</mark>	
trans	ient ge	nera	al aviation	<mark>3</mark> 4%	
			air taxi	<mark><</mark> 1%	
			military	<mark><</mark> 1%	
		со	mmercial	<1%	

Source: www.airnav.com, for the 12-month period ending 31 December 2013

Rail

There are three national operators that run through the MPA: Union Pacific, Canadian Pacific, and BNSF. A regional rail operator, Crab Orchard and Egyptian Railroad, 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, but also need to be taken into consideration during bicycle and pedestrian corridor planning. A high percentage of trucks can also affect traffic operations.

The three 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
- Class III state highways that have lane widths of less than 11 feet

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.



Freight Tonnage Projections

As part of the national efforts for improving freight management, new data resources have been made available by the FHWA called the Freight Analysis Framework (FAF). This data projects the change in movement of goods into and out of certain regions and large metropolitan areas.

While Jackson and Williamson Counties are lumped into the larger "Southern Illinois" region, it is possible to disaggregate the regional data based on the magnitude and type of employment in those specific Counties. The results of those freight projections are given in the following four tables. It is important to note that these values are for freight tonnage *into* and *out of* the two-county region, and do not account for the movement of good *through* the region.

A notable trend within this data is the increase in freight tonnage being transported by multiple modes, with a projected increase of +345% coming out of the two-county region. While there appears to be a decrease in truck freight, the reality is that overall truck activity will increase, with more of that activity relying on multiple modes of transport. It will be important to ensure that these multiple modes are easily connected with air, rail, and truck networks seamlessly working together to create an efficient multi-modal freight network.

Table 32. Freight Tonnage OUT of Jackson and Williamson Counties by Commodity

Commodity	Tons 2012	Tons 2040	% Change
Agriculture, Food, & Forestry	7,534,101	6,353,629	-32%
Natural Materials & Minerals	2,497,799	5,988,857	+278%
Fossil Fuels & Petroleum	1,903,211	4,512,447	+272%
Chemicals, Pharmaceuticals, & Polymers	145,142	68,931	-102%
Pulp & Textiles	77,241	49,876	-70%
Manufactured Goods	339,971	381,268	+31%
Transportation Equipment	29,086	21,392	-49%
Miscellaneous	424,095	353,230	-32%
Total	12,950,646	17,729,629	+37%

Source: Federal Highway Administration's Freight Analysis Framework, Lochmueller Group

Table 34. Freight Tonnage OUT of Jackson and Williamson Counties by Mode

Mode	Tons 2012	Tons 2040	% Change
Air	182	333	+175%
Multi-Mode/Mail	1,538,720	4,214,663	+345%
Pipeline	247,962	180,162	-55%
Rail	1,370,110	4,112,164	+397%
Truck	8,305,517	7,399,116	-23%
Water	1,488,155	1,823,191	+44%
Total	12,950,646	17,729,629	+37%

Source: Federal Highway Administration's Freight Analysis Framework, Lochmueller Group

Table 33. Freight Tonnage IN to Jackson and Williamson Counties by Commodity

Commodity	Tons 2012	Tons 2040	% Change
Agriculture, Food, & Forestry	3,518,218	4,104,479	+33%
Natural Materials & Minerals	1,159,675	1,236,334	+13%
Fossil Fuels & Petroleum	1,752,207	1,083,569	-76%
Chemicals, Pharmaceuticals, & Polymers	302,490	257,645	-30%
Pulp & Textiles	167,547	160,612	-9%
Manufactured Goods	563,189	746,675	+64%
Transportation Equipment	32,296	34,818	+17%
Miscellaneous	440,629	425,967	-5%
Total	7,936,251	8,050,100	+1%

Source: Federal Highway Administration's Freight Analysis Framework, Lochmueller Group

Table 35. Freight Tonnage IN to Jackson and Williamson Counties by Mode

Mode	Tons 2012	Tons 2040	% Change
Air	159	1,343	+1498%
Multi-Mode/Mail	187,765	229,739	+44%
Pipeline	133,034	120,212	-19%
Rail	1,537,804	1,081,054	-58%
Truck	5,911,332	6,401,218	+16%
Water	166,157	216,534	+60%
Total	7,936,251	8,050,100	+1%

Source: Federal Highway Administration's Freight Analysis Framework, Lochmueller Group

Truck Volume Projections

Truck volume projections for major truck routes are also provided by FHWA through the year 2040. 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 2040. 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.





VALUES, OBJECTIVES, AND PERFORMANCE

MEASURES

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



Values, Objectives, Performance Measures, and Strategies

In order to link the intangible core values of the region to actionable transportation initiatives, the following performance-based planning structure was selected. The values help guide the decision making process, while the objectives, performance measures, and strategies help define how projects can fulfill those values.



Performance-based Transportation Systems

MAP-21 has 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.

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.

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.

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

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 Implement 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

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

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

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 area, 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

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 36. 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 Provide alternative routes into major retail centers
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 Guidelines1.3b 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 freight1.4b Coordinate bicycle and pedestrian facility planning with truck route planning
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	Change in acreage of agriculture and open land within the MPA	1.7a Develop a comprehensive land-use plan for the entire MPA

Table 37. 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 a 50/50 payment program MPO-wide for sidewalk construction or repair 2.1e Develop pedestrian safety programs with healthcare and education advocates
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 plan2.2b Incorporate bikeable shoulders into rural roadway projects2.3c Develop complete streets plans for commercial districts
2.3 Increase transit usage	Transit ridership goals based on peer system comparisons	2.3a Improve scheduling and dispatching2.3b 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 and JMTD2.4b Implement a coordinated fare and pass policy throughout the MPA
2.5 Improve roadway system reliability	-	2.5a Provide direct roadway routes for major origins and destinations2.5b 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 38. 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 Produce a biennial evaluation of safety on the roadway system 3.1d Develop a traffic safety education program with health and education advocates
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 Produce a biennial evaluation of safety on the roadway system 3.2d Develop a traffic safety education program with health and education advocates
3.3 Improve safety on pedestrian facilities	Number of pedestrian crashes	3.3a Expand the sidewalk network3.3b Provide pedestrian crossing facilities at major intersections3.3c 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 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 feasible3.5b 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 areas3.6b 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 vehicles3.7b Provide alternative routes for at-grade rail crossings3.7c Provide regional and local connections directly to healthcare providers

Table 39. 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 programs4.1b 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 inventory4.2b Coordinate with local and county agencies4.2c 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 sidewalks4.3b Develop a 50/50 payment program MPO-wide for sidewalk repair
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 40. 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	Number of public meetings held by SIMPO annually	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 portal5.5b Facilitate transit trip planning throughout the MPA5.5c Coordinate transit fare and pass policy throughout the MPA

Southern Illinois Metropolitan Planning Organization

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, and most recently MAP-21 (Moving Ahead for Progress in the 21st Century) adopted in 2012, 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, MAP-21 consolidated several programs from SAFETEA-LU into the following major funding programs:

- National Highway Performance Program (NHPP)
- Surface Transportation Program (STP) STP-U(Urban) & STP-R(Rural)
- Highway Safety Improvement Program (HSIP)
- Congestion Mitigation and Air Quality Improvement Program (CMAQ)
- Transportation Alternatives Program (TAP)
- Metropolitan Planning Program (MPP)

In previous transportation bills, each apportioned program had its own formula for distribution. MAP-21 instead provides a total apportionment for each state and then divides that state's amount among individual apportioned programs. In Fiscal Year 2014, the states received a total apportionment share equal to the state's share of FY 2012 formula funds. The resulting total apportionment was adjusted, if necessary, to ensure that the state receives 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 2015.

Table 41. Federal Funding Apportionment at State Level

Commodity	Apportionment Formula	Illinois FY 2015 Apportionment
Cong. Mit. % Air Quality Imp. Program (CMAQ)	% of State's FY09 CMAQ \$	\$73,226,750
Metropolitan Planning Program (MPP)	% of State's FY09 Metro Planning \$	\$11,010,147
National Hwy. Performance Planning Program (NHPP)	63.7% to NHPP	\$528,283,749
Surface Transportation Program (STP)	29.3% to STP	\$242,993,938
Highway Safety Improvement Program (HSIP)	7.0% to HSIP	\$51,166,086
Railway Highway Crossings (RHS)	Funded from HSIP	\$6,887,073
Transportation Alternatives Program (TAP)	2% set aside from NHPP, STP, HSIP, CMAQ & MPP	-
Total		\$913,567,743

Figure 10. The Federal-Aid highway program apportionment percentages for the State of Illinois beginning on October 1st 2014, and ending on May 31st 2015



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. Federal-Aid bridges that were previously part of HBRRP but are not on the NHS can no longer be funded through NHPP.

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% nonfederal match for most interstate projects and 20% for other NHPP projects. States are required to develop a riskbased asset management plan for the National Highway System to improve or preserve asset condition and system performance. The penalty for failure to implement this requirement is a reduced federal share for NHPP projects in that year; 65% instead of 80%.

Surface Transportation Programs (STP)

The Surface Transportation Program is the most flexible Federal-Aid highway program providing financial support to state and local agencies for construction, reconstruction, rehabilitation, resurfacing, operational improvements to Federal-Aid highways, transit capital projects, 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.

Two percent of the STP funding is to be set aside for State Planning and Research (SPR) funds. For off-system bridges, an amount not less than 15% of the state's FY 2009 Highway Bridge Program apportionment is set aside. 50% of Illinois' STP apportionment (STU) is distributed to urbanized areas based on population and the other 50% may be used in any area of the state. The STP grant covers 80% of the total cost of a project, with the rest covered by state, local or other funding sources.

Congestion Mitigation and Air Quality (CMAQ)

The CMAQ program provides funding for projects aimed at relieving congestion and reducing air pollution levels to satisfy the federal air quality standards. The funding is available for areas that do not meet the National Ambient Air Quality Standards (nonattainment areas) and for former nonattainment areas that are now in compliance (maintenance areas). CMAQ funded projects include diesel retrofits, signal retiming, travel demand management, Intelligent Transportation Systems (ITS), transit capital projects, and projects aimed at reducing travel by single-occupancy vehicles. States without a non-attainment or maintenance area have the flexibility of using the CMAQ funds for STP projects. However, the program cannot be used to fund projects that increase vehicular travel, such as expansion/ construction of new travel lanes. CMAQ funding requires a 20% local match. As of 2015, SIMPO continues to be an air quality attainment area and is not expected to reach nonattainment status in the near future.

Highway Safety Improvement Program (HSIP)

HSIP funds are intended to significantly reduce traffic fatalities and serious injuries on regional roadways as well as publicly owned bicycle and pedestrian pathways or trails. MAP-21 emphasizes a data-driven, strategic approach to improving highway safety on all public roads and requires states to develop a State Strategic Highway Safety Plan (SHSP). As part of the SHSP, states need to perform problem identification and countermeasure analysis, adopt strategic and performance-based goals, and establish priorities to mitigate the identified safety problems.

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%.

Transportation Alternatives Program (TAP)

MAP-21 combines the Transportation Enhancements (TE), Safe Routes to School (SRTS) and Recreational Trails (Rec Trails) programs from SAFETEA-LU to create the Transportation Alternatives Program. Two percent of all four core highway programs from the Highway Trust Fund is reserved for TAP. An amount equal to the state's FY 2009 Recreational Trails Program (RTP) apportionment is to be set aside from the state's TAP funds for the RTP, unless opted out of by the state in advance.

After deducting the set-aside for RTP, 50% of the TAP funds are allocated by the state to MPOs based on their relative share of total state population. Local agencies compete for the other 50% of the grant money to fund a wide range of projects aimed at increasing transportation options and improving bike and pedestrian safety. A state may transfer up to 50% of its TAP funds to NHPP, STP, HSIP, CMAQ, and/or Metropolitan Planning. TAP requires a 20% local/ state match with the exception of SRTS projects, which receive 100% federal funding.

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.

The Illinois State Capital Plan, known as "Illinois Jobs Now!" implemented in 2009 has been funding transportation infrastructure programs that support economic development in local communities. "Illinois Jobs Now!" has been estimated to create approximately 439,000 jobs over a six-year period. The bill is expected to end in fiscal year 2015 unless reappropriated.

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 Federal Transit Administration (FTA) is the primary federal funding source for public transportation. FTA programs are established, modified or eliminated through periodic re-authorization legislation passed by Congress. MAP-21 legislation authorizes up to \$10.7 billion annually for various public transit programs. 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)

Several programs that previously provided funds directly to small urbanized areas were repealed in MAP-21. The Job Access and Reverse Commute Program (Section 5316) and the New Freedom Programs (Section 5317) were repealed. Projects previously funded under these two programs are technically eligible for continued funding under the Urban or Rural Formula Programs (for Section 5316 projects) or the Enhanced Mobility Program for Seniors and Individuals with Disabilities (for Section 5317 projects).

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 permitted to be used for operations. Certain types of capital improvements may be eligible for higher reimbursement rates.

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.

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

This program addresses the special transit needs of elderly individuals and individuals with disabilities. Traditionally, Section 5310 funds were only allocated to the states; MAP-21 changed the distribution formula so that 60% of funds were allocated to large urbanized areas; 20% to small urbanized areas; and 20% to the states for distribution in nonurbanized areas. The small urbanized area apportionment is provided to the state for distribution to eligible recipients. The Division of Intermodal and Public Transportation is responsible for administration of these funds.

At least 55% of Section 5310 funds must be spent on "traditional" projects, or capital projects. These projects are defined as those transportation capital projects planned, designed and carried out to meet the special needs of seniors and individuals with disabilities when public transportation is insufficient, unavailable or inappropriate. The other 45% of an area's apportionment may be utilized for additional public transportation projects that:

- · Exceed the ADA minimum requirements,
- Improve access to fixed-route service and decrease reliance by individuals with disabilities on ADAcomplementary paratransit service, or
- Provide alternatives to public transportation that assist seniors and individuals with disabilities with transportation.

Like the Section 5339 program, Section 5310 funds are allocated to the states for distribution to small urbanized areas; therefore, the MPO must compete with other small urbanized areas (UZAs) for these funds.

State Funding Sources

Forty-six states and the District of Columbia provide funding to support public transportation. Illinois ranks 7th in the provision of state funding for public transportation, based on the latest available comprehensive analysis (approximately \$854,683,301 in FY 2013).¹ 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 Assisstance 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 taxed collected by the Department of Revenue and distributed to the Mass Transit fund each year.² 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.

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

² 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 87 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, fareboxes, 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

Projecting the availability of federal revenues has become difficult as Congress has not adopted a multi-year highway and transit authorization bill since 2005. MAP-21, the current authorizing legislation, spanned less than two years. Both FTA and the Federal Highway Administration (FHWA) have been operating on extensions to MAP-21 that are set to expire in mid-2015. Given Congressional issues, it is unlikely that a five-year reauthorization bill will occur prior to the next presidential election in 2016. As rebuilding infrastructure is a major issue for both parties, it is likely that any major reauthorization (done on a 5-year time frame) will include increases in appropriations.

Another issue is the motor fuel tax which provides most of the funding at the local, state and federal level. 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.

Various alternatives have been proposed to replace the motor fuel tax (such as a mileage-based user fee), or supplement MFT with other revenue sources such as local sales taxes, public-private partnerships, and federal discretionary grants. While these alternatives are being considered, it is unknown if and when these additional/ alternate revenue sources will be implemented.

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 complex and 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 2016-2019 Transportation Improvement Plan (TIP). The revenue projections for the other 21 years of the plan would ideally be estimated based on the funding received historically. However, since SIMPO is a newly designated MPO, there is insufficient data to develop a five-year trend line. Additionally, the amount of non STP-U federal funding received by SIMPO in the first few years since inception is not expected to be sustained over the 25-year planning period.

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 three years. The information was obtained from the implementation year of the last three available TIPs (FY 2013-2016 through FY 2015-2018).

		Funding (1,000's)				
Funding Source	2013	2014	2015	3-Year Average		
Federal						
STP-U	\$1,400	\$496	\$196	-		
STP-R	\$0	\$616	\$0	\$206		
STP-Other	\$30,125	\$0	\$266	\$10,131		
NHPP	\$11,340	\$1,840	\$18,964	\$10,715		
BRP	\$0	\$776	\$0	\$259		
HRRRP	\$555	\$0	\$0	\$185		
HSIP	\$882	\$5,826	\$2,063	\$2,924		
RR Safety	\$0	\$200	\$0	\$67		
TAP	\$0	\$330	\$680	\$337		
SRTS	\$107	\$0	\$160	\$89		
US Fish & Wildlife	\$0	\$0	\$900	-		
State						
IJN!	\$7,200	\$0	\$100	-		
NHPP Related	\$1,260	\$460	\$2,108	\$1,276		
STP Related	\$350	\$594	\$108	\$351		
HSIP Related	\$98	\$240	\$171	\$170		
State-Federal Agreemen	t \$0	\$0	\$500	-		
Other	\$1,800	\$0	\$0	-		
Local						
	\$331	\$1,206	\$259	\$599		
Total	\$55,448	\$12,584	\$26,475	\$31,503		

Table 42. Historical SIMPO Funding Source and Amount

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:

MAP-21 is set to expire in mid-2015. It is unknown when a new transportation bill will be passed and how it will impact future federal revenue sources, programs and apportionments. For the purposes of this financial plan, the federal funding is divided into two main revenue sources: STP-U and non STP-U. STP-U is guaranteed and is administered to the MPO by IDOT based on population. Non STP-U funding includes all other federal revenue (STP-R, STP-Other, NHPP, HSIP and TAP) and varies substantially every year.

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

- The FY 2016-2019 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 2016-2019 is \$12,052,000.
- SIMPO's allotment of STP-U funding for FY2016 is \$666,573. Assuming the same funding for the first four TIP years and accounting for the funding allocated to the projects programmed in FY 2016-2019 TIP, a total of \$507,187 remains at the end of FY 2019. The STP-U funding for the next 21 years was calculated using the FY 2016 apportionment with an annual inflation rate of 3%. The STP-U funding for the remaining 21-year period is calculated to be \$19,688,441.

 The non STP-U funding includes all the other sources of federal revenue available to the MPO. SIMPO was recently created in 2013 and has received a large amount of transportation infrastructure funding in the initial years of inception (primarily related to upgrades to Illinois Route 13 and its interchange with Interstate 57). This initial level of STP-Other and NHPP funding for the SIMPO region is not expected to be sustained in future years.

As a conservative estimate, the non STP-U funding is estimated based on the three-year average of STP-R, HSIP (includes HRRRP and RR Safety) and TAP (includes SRTS) funding only. In addition to the non STP-U funding already allocated in the TIP, the total amount of non STP-U funding for the next 21 years assuming 3% annual inflation is estimated to be \$112,476,059.

The total federal funding for all programs over the 25year planning period based on the above assumptions and recognizing the funding issues at the federal level is anticipated to be approximately \$144,723,687.

State Funding:

Illinois Jobs Now! (IJN) was a temporary funding program which started in 2009 and is expected to end in FY 2015. This program is therefore not included in future revenue projections. IDNR grants are another potential source of state funding that could be available in the future. This funding is grant-based and thus not included in future revenue projections. The state funding for the long range plan period is estimated using the following assumptions:

• The FY2016-2019 TIP was used to calculate state funding for the first four fiscal years of the plan period. The total state funding allotted in FY 2016-2019 is \$1,620,000. Assuming a conservation approach, an average of state funding received for only the STP and HSIP projects over the past three years was used to estimate the state funding for the remaining plan period. The 21-year future state funding assuming 3% annual inflation is estimated to be \$15,367,986.

A conservative total state funding projection over the 25year plan period is anticipated to be \$16,987,986.

Local Funding:

Local agencies are expected to contribute the required local share 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, special assessments, etc.

Local agencies continue to seek private financial participation where transportation impacts from private development necessitate improvements. For the financial plan, the first four years of local funding allocated for transportation projects is calculated from the FY 2016-2019 TIP to be \$1,699,500. Assuming a conservative approach, the local funding over the next 21 years of the planning period is assumed to be equal to a 20% share of the federal STP-U during the same period, i.e. \$4,039,125.

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 \$167,450,300.

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 2015, the operating costs for Jackson County Mass Transit District (JCMTD) and RIDES Transit District (MTD) were approximately \$2,956,000. The federal share of the operating cost was 42%, or \$1,241,000. IDOT (through the DOAP) allocated \$ 1,641,000 (55%) and the local agency funding for RIDES MTD was \$74,000. 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) have been 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.

According to a review of recent appropriations, the urbanized area receives an average annual apportionment of Urban Formula funds in the amount of \$850,893 and Rural Formula funds in the amount of \$357,100. This amount is allocated by the MPO between the two public transit service providers in the SIMPO planning area (JCMTD and RIDES MTD).

Table 43 and Table 44 show the revenue estimated to be available for transit capital and operations projects during the FY 2016-2019. With designation as an urbanized area, the Rural Program funds are no longer eligible to support transit of persons whose origins and destinations lie strictly within the urbanized boundary. This typically will result in a reduction of IDOT's allocation of Section 5311 funds to the area. This change in federal and state funding level of Urban and Rural Formula funds can be recognized in FY 2018 and FY 2019 of the TIP.

Assuming the same level of federal and state funding will continue to be available for public transit in the region, the average federal funding for operations allotted in FY 2018 and 2019 was used to estimate the federal funding for the remaining 21-year period at a 3% annual inflation. Other capital funding from sources such as Section 5310 (The Elderly Individuals and Individuals with Disabilities Program) and Downstate Transit Improvement fund is (DTIF) are grant based and difficult to predict.

The total federal revenue for public transit operations within the SIMPO region for the 25-year planning period is estimated to be \$51,752,579.

State Funding:

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 2015 JCMTD and RIDES MTD were allotted state funding of about \$537,000 and \$1,104,000, 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 2016-2019 TIP to be \$7,092,100. Based on the state appropriations for transit operations in FY 2018 and FY 2019, the remaining 21 years of state transit funding assuming 3% annual inflation is estimated to be \$55,405,092.

The total share of state funding for public transit in the SIMPO planning region for the 25-year planning period is estimated to be \$62,497,192.

There is a current proposal to reduce the amounts of monies that are allocated under the Downstate Public Transportation Act. It has been proposed that the current allocation of 80% of 3/32 of the various sales taxes be reduced to 80% of 2/32 of the sales tax. Additionally, the proposed level of participation in total operating expenses would be reduced to 55% from the current rate of 65%. The adoption of this proposal would reduce the state funding available in the future.

Local Funding:

Major sources of local funding for transit agencies include fare revenue and transfers from the general fund. In FY 2015, RIDES MTD allocated \$ 74,000 towards operational costs. The local agency cost for RIDES MTD over the 25year planning period is estimated to be \$3,226,067.



Table 43. Programmed Levels of Transit Funding FY 2016 - FY 2019, Jackson County MTD

Budget Item	FY 2016	FY 2017	FY 2018	FY 2019
Jackson County MTD		,		
Operating - Rural				
Federal	\$184,500	\$190,000	\$170,000	\$170,000
State	\$184,500	\$190,000	\$111,000	\$111,000
Local	\$0	\$0	\$0	\$0
Subtotal	\$369,000	\$380,000	\$281,000	\$281,000
Operating - Urban				
Federal	\$369,000	\$380,000	\$600,000	\$618,000
State	\$369,000	\$380,000	\$600,000	\$618,000
Local	\$0	\$0	\$0	\$0
Subtotal	\$738,000	\$760,000	\$1,200,000	\$1,236,000
Capital				
Federal	\$76,000	\$124,000	\$228,000	\$228,000
State	\$19,000	\$31,000	\$57,000	\$57,000
Local	\$0	\$0	\$0	\$0
Subtotal	\$95,000	\$155,000	\$285,000	\$285,000
Total - JCMTD	\$1,202,000	\$1,295,000	\$1,766,000	\$1,802,000

Budget Item	FY 2016 FY 2017		FY 2018	FY 2019
RIDES MTD				
Operating - Rural				
Federal	\$194,500	\$200,300	\$206,000	\$212,000
State	\$437,000	\$438,000	\$439,000	\$448,000
Local	\$70,000	\$75,000	\$80,000	\$86,000
Subtotal	\$701,500	\$713,300	\$725,000	\$746,000
Operating - Urban				
Federal	\$531,000	\$546,900	\$562,300	\$579,100
State	\$670,000	\$672,000	\$701,600	\$723,000
Local	\$10,000	\$12,000	\$14,000	\$14,000
Subtotal	\$1,211,000	\$1,230,900	\$1,277,900	\$1,316,100
Capital				
Federal	\$76,000	\$76,000	\$52,000	\$0
State	\$19,000	\$19,000	\$13,000	\$0
Local	\$0	\$0	\$0	\$0
Subtotal	\$95,000	\$95,000	\$65,000	\$0
Total - RIDES	\$2,007,500	\$2,039,200	\$2,067,900	\$2,062,100

Table 44. Programmed Levels ofTransit 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. In FY 2015, JCMTD and RIDES MTD spent an average of \$2,956,000 to operate and maintain the transit system.

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 next section). A brief description of the projects, preliminary estimated costs (in 2015 dollars), and their primary pertinence with regards to regional values and objectives are summarized below. Illinois Route 13 - Division Street to Giant City Road (Carterville to Carbondale)

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 a large magnitude of cost that could likely only be funded through special funding opportunities.

It should be noted that IDOT is currently performing a Phase I study to better define the specific needs of this project. That study is expected to be complete by the fall of 2015.

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

Project Length: ~ 6.5 miles

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

Cost Estimate: \$46,500,000

SIMPO 2040 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: \$1,700,000 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 Park Avenue (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 leftturn lane down the center, 16 points of access in a ¼-mile stretch, a speed limit of 35 mph, and an AADT of 19,400.

The intersection of Park Avenue and Brewster Road is an IDOT State 5% intersection and the segment of Park Avenue just south of Clark Trail is an IDOT State 5% segment and has the highest Potential for Safety Improvement (PSI) value in the entire MPO at 91.69. There is a lack of pedestrian facilities for both crossing and walking along Park Avenue.

*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: Increase safety and operational efficiency. Provide pedestrian facilities Project Length: ~ 0.3 miles Potential Funding Sources: STU, HSIP, NHPP, MFT Cost Estimate: \$4,400,000* 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

Carbondale Multi-Modal Transfer Station

Carbondale has been in the planning stages for a new multi-modal transfer station in downtown. This would provide a valuable asset that interconnects transit, intercity bus, and train services. It would connect roadway, bicycle, and pedestrian facilities to those services and present an opportunity for a prominent community structure in downtown, while serving the heavy SIU student demand for regional transportation services. This multi-modal center would complement the funded transfer center planned in Marion and facilitate the expansion of transit services along the Route 13 corridor.

Proposed Improvement: Construct new multi-modal transfer station.

Potential Funding Sources: TIGER Grant, STU, Transit Funds, TAP (Enhancements), CDBG

Cost Estimate: \$10,000,000

SIMPO 2040 LRTP Objectives: 1.7 Encourage development in areas with existing infrastructure; 2.3 Increase transit usage; 2.6 Maximize the performance of the existing system for motorized vehicles New Multi-Use Trail in Herrin - Herrin CUSD 4 Sports Complex to Herrin City Park

Taking advantage of Herrin's quality green spaces, this project proposed a new multi-use trail that connects the Herrin CUSD 4 sports complex with Herrin City Park, the high school, and the surrounding residential communities. A new multi-use trail in this area has the potential to increase safety for bicyclists and pedestrians, encourage the use of the City's green spaces, and allow people to get from place to place without the use of automobile.

Proposed Improvement: Multi-use Trail Extension Project Length: ~ 1.5 miles Potential Funding Sources: TAP (Safe Routes to School and Enhancements)

Cost Estimate: \$1,100,000

SIMPO 2040 LRTP Objectives: 2.1 Expand and improve the pedestrian facility network; 2.2 Expand and improve the bicycle facility network; 3.3 Improve safety on pedestrian facilities; 3.4 Improve safety on bicycle facilities; 3.6 Improve safety within the vicinity of schools.

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Multi-Use Trail in Carbondale - Existing Trail to Lewis Elementary School

Leveraging the existing off-street trail just east of Wall Street, this project includes an east-west extension connecting to Lewis Lane and Lewis Elementary School. While a major extension to the trail network (parallel to Illinois Avenue) has already been funded, other relatively low cost trail extensions and upgrades are encouraged to continue towards a robust trail network.

Proposed Improvement: Multi-use Trail Extension Project Length: ~ 1.0 mile

Potential Funding Sources: TAP (Safe Routes to School and Enhancements)

Cost Estimate: \$700,000

SIMPO 2040 LRTP Objectives: 2.1 Expand and improve the pedestrian facility network; 2.2 Expand and improve the bicycle facility network; 3.3 Improve safety on pedestrian facilities; 3.4 Improve safety on bicycle facilities; 3.6 Improve safety within the vicinity of schools. Illinois Route 13 and Main Street/Norman Road in Marion

Route 13 and Main Street is an unsignalized intersection on the east side of Marion. At this location, Route 13 is a divided highway with two lanes in each direction and leftturn lanes. It carries 13,400 vehicles per day through the intersection. On the south leg of the intersection, Main Street has a shared left/thru lane and a channelized rightturn lane. On the north leg, Norman Road is a narrow two– lane road with no shoulders and a shared left/thru/right lane.

The alignment of the left-turn lanes on Route 13 and the large width of the street create sight-distance issues. This is the first major intersection for vehicles coming into Marion, so it is expected that vehicles will be traveling at high speeds. Also, during certain times of year, the sun poses issues because of the low terrain. All these factors contribute to this being an IDOT State 5% intersection and several stakeholders mentioning it as a problem location. Possible crash mitigation efforts include realignment ("burying") of the Route 13 left-turn lanes to create a better sight angle across the intersection and re-striping to create a designated staging area for vehicles crossing over Route 13.

Proposed Improvement: Intersection Safety Potential Funding Sources: HSIP, STU, MFT Cost Estimate: \$1,100,000 SIMPO 2040 LRTP Objectives: 2.6 Maximize the performance of the existing system for motorized vehicles; 3.1 Reduce the number of crashes. Illinois Route 13 in Carbondale - Giant City Road to Lewis Lane

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: \$10,000,000*

SIMPO 2040 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 Cambia 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. New north-south route in Carterville - Carterville school complex to Illinois Route 13

To alleviate some of the congestion issues along Grand Avenue to the east of the school complex that occur during the brief, but heavy school peaks, Carterville has explored the possibility of a new north-south connection from the school complex south to Route 13, likely utilizing Shawnee Trail. This would provide a direct connection to Route 13 and allow vehicles to avoid Cambria Road, but it would also send more vehicles to an unsignalized intersection on Route 13. Also, it is uncertain how this connection with Route 13 would operate if this section is upgrade to six lanes, so coordination with IDOT's planning efforts for Route 13 is critical. Bicycles and pedestrian considerations would be important with such close proximity to the school.

Proposed Improvement: Construct New Road Project Length: ~ 1.0 mile Potential Funding Sources: STU, MFT Cost Estimate: \$6,600,000 SIMPO 2040 LRTP Objectives: 1.1 Reduce congestion at the crossroads of commuter routes and retail centers; 1.5 Support environmentally sustainable transportation system expansion; 3.6 Improve safety within the vicinity of schools. Cambria Road/Sycamore Road in Cambria; Mayor Caliper/ Herrin Road in Colp

Providing low cost advanced warning devices for the intersection of Cambria Road and Sycamore Road would help enhance this stop-controlled intersection, which is the first intersection prior to entering Cambria from Route 13. The stakeholder suggestion of providing flashing LED stop-signs for Mayor Caliper Road and Herrin Road, the only stop sign along Herrin Road between Route 148 and Cambria Road, would also be appropriate.

Proposed Improvement: Low Cost Stop-controlled Intersection Safety Improvements Project Length: ~ 1.0 mile Potential Funding Sources: STU, MFT, HSIP Cost Estimates: \$10,000 (\$5,000 per location) SIMPO 2040 LRTP Objectives: 3.1 Reduce the number of crashes; 3.2 Reduce the number of fatal and severe injury crashes. Halfway Road in Marion - Old Illinois Route 13 to Westminster Drive

An extension of Halfway Road from the current southern terminus at Old Route 13 down to Westminster Drive has the potential to connect the major retail district with the high school and residential areas on the south side of Marion. For getting to Route 13, this provides an alternative to Carbon Street and Court Street (which carry 11,000 and 10,000 vehicles per day near Route 13, respectively). Both roadways were cited as being congested during peak travel times, most likely due to the large number of closely spaced cross streets.

The City of Marion has been in the planning process for this extension for some time, experiencing difficulties with rightof-way constraints. Another issue involved with this project is the condition of Westminster Road, which is a narrow twolane roadway with no pavement markings or shoulders; it should be updated as well. Despite these issues, this project has the potential to provide a quality regional connection and alleviate peak hour congestion on existing roadways. Bicycle and pedestrian considerations could also be made for this corridor.

Proposed Improvement: New Roadway Extension Project Length: ~ 0.75 miles Potential Funding Sources: STU, MFT, EDP Cost Estimate: \$6,500,000 SIMPO 2040 LRTP Objectives: 1.1 Reduce congestion at the crossroads of commuter routes and retail centers; 4.2 Maintain satisfactory pavement conditions. Airport Road in Carbondale - U.S. Route 51 to New Era Road

Creating better access to Southern Illinois Regional Airport from Route 51 provides a more robust entrance and has the potential to stimulate economic growth associated with the airport and the surrounding property. SIU has invested heavily into academic facilities at the airport and there is a desire to encourage industrial development in this area. With 10-foot lanes and no paved shoulder, the existing roadway is inadequate for truck traffic and is a poor entrance to a regional transportation service center.

Proposed Improvement: Roadway reconstruction and widening Project Length: ~ 1.35 miles Potential Funding Sources: STU, MFT Cost Estimate: \$6,200,000 SIMPO 2040 LRTP Objectives: 1.5 Support environmentally sustainable transportation system expansion; 1.7 Encourage development in areas with existing infrastructure. Wildcat Road in Marion - Carbon Street to Court Street

New sidewalk along Wildcat Road, from Carbon Street to Court Street in Marion, would provide a critical connection from the high school to Pyramid Park and the residential neighborhoods to the north. The only significant obstacle for this route is the creek on the west side of Pyramid Park (just east of the high school). Safely connecting schools with housing and green space is important in ensuring children and parents alike have the opportunity to travel throughout town without relying on motor vehicles.

Proposed Improvement: New Continuous Sidewalk Project Length: ~ 0.75 miles Potential Funding Sources: STU, TAP (Safe Routes to School), TAP (Enhancements) Cost Estimate: \$500,000 SIMPO 2040 LRTP Objectives: 2.1 Expand and improve the pedestrian facility network; 3.6 Improve safety within the vicinity of schools.



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.

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Routes 13, 51 and 37 throughout the MPA

Install continuous, bikeable shoulders and signing on National Bike Route 76 and Illinois Grand Trail Routes. IDOT recommends a minimum of 4 feet for shoulders and this can implemented with larger roadway projects as they become available.

*It should be noted that further study is required to identify the specific improvements needed to accomplish this project and the cost of installing/improving shoulders would vary widely depending on any associated roadway work that occurs simultaneously. Consequently, the preliminary cost estimate should be considered very preliminary.

Proposed Improvement: Install Bikeable Shoulders Potential Funding Sources: STU, TAP, MFT, NHPP Cost Estimate: \$3,000,000*

SIMPO 2040 LRTP Objectives: 2.2 Expand and improve the bicycle facility network; 3.4 Improve safety on bicycle facilities.

Illinois Route 13 Medical Corridor - Carbondale to Marion

With several medical districts and emergency services along Route 13, improvements could be made to decrease travel times for emergency response vehicles. Two major components of this include emergency pre- emption at traffic signals that allow emergency vehicles to receive a green signal and addressing the way that the Union Pacific railroad cuts off half of Marion from emergency response when trains stop on the tracks.

Proposed Improvement: Improve Traffic Operations for Emergency Response

Potential Funding Sources: STU, Rail-Highway Safety, Health grants and public health funding Cost Estimate: \$200,000 (reflects only signal technology improvements and not the rail crossing)

SIMPO 2040 LRTP Objectives: 1.2 Support easy access to healthcare providers; 3.7 Improve reliability for emergency response vehicles.



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 significantly projects with available funding are programmed in the fiscally constrained regional SIMPO FY 2016-2019 TIP and IDOT's FY 2015-2018 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 shortrange highway projects identified in the SIMPO FY 2016-2019 TIP (Table 45) is approximately \$15,244,000. IDOT's FY 2015-2018 STIP does not include any projects in the SIMPO planning area between FY 2016 and FY 2018.

	Total Project Costs (1,000's)					
Project	Description	Jurisdiction	2016	2017	2018	2019
1. IL 148, N 17th to Herrin St.	Resurfacing	State (Herrin)	\$750			
2. IL 127 over Bridge Muddy River	Bridge Replacement	State (Murphysboro)	\$3,000			
3. New Roadway from Grand Ave.to Rushing Dr.	New Road & Eng.	Herrin	\$1,342			
4. Roundabout at Grand Av. and Lewis Ln. intersection	Roundabout & Eng.	Carbondale	\$370			
5. FAU 9680 (Ava Rd.), Route 127 to McLaughlin Rd.	Resurfacing	Jackson County	\$408			
6. Grand Ave., Tri-C School to Greenbriar Rd.	Widen & Resurface	Carterville		\$745		
7. Giant City Rd. Bridge, 2 miles southeast of Carbondale	Bridge Replacement	Jackson County		\$1,600		
8. TR 557 Bridge Replacement 0.5 miles west of Route 37	Bridge Replacement	Williamson County		\$767		
9. Oakland Ave., Route 13 to Chautauqua St.	ROW & Prelim. Eng.	Carbondale		\$135		
10. North Russell St., Scottsboro Rd. to Morgan Ave.	ROW & Construction	Marion		\$30	\$532	
11. IL 13, IL 148 to Skyline Dr.	Resurfacing	State (Marion)			\$1,300	
12. Giant City Rd., Vercliff to Boskydell	Resurfacing	Jackson County			\$508	
13. IL 37, Stream 1 mile south of Marion	Bridge Replacement	State (Marion)				\$800
14. IL 13, Abandoned ICG RR	Bridge Removal	State				\$1,000
15. IL 149, 22nd St. to IL 13	Resurfacing	State (Murphysboro)				\$450
16. IL 148, Herrin St. to Hemlock St.	Resurfacing	State (Herrin)				\$800
17. Division/Grand and Division/Illinois reconstruction	Construction	Carterville				\$707
Total			\$5,870	\$3,277	\$2,340	\$3,757

Table 45. SIMPO TIP FY 2016 - FY 2019 Transportation Improvement Projects (Short-Range)



The mid-range horizon covers projects anticipated from year 2020 up to 2030, while the long-range horizon includes projects planned from year 2031 up to 2040. 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 2020-2030 are presented in Table 46. These mid-range projects are estimated to cost a total of approximately \$20,759,200 during the ten-year period.

The long-range projects anticipated between FY 2031 and FY 2040 are listed in Table 47. These long-range projects are anticipated to cost approximately \$62,363,200 over the ten-year period.

Finally, two 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 Illinois Route 13 between Division Street and Giant City Road as well as the Carbondale Multi-modal transfer station. The estimated combined cost (adjusted to reflect 3% inflation through 2035) of \$99,073,100 is shown in Table 48. It should be noted that Route 13 in the SIMPO region is part of the National Highway System network and is eligible for NHPP funding. Therefore, a potential source of funding for the expansion of Route 13 would be additional federal NHPP funding. However, given the federal revenue projections made in this plan do not include the NHPP funding source (which can be difficult to predict), this project was considered illustrative rather than fiscally-constrained.

		Total Project Costs		
Project	Description	Location	Total Project Costs 2020-2030	
1. 17th St., Halfway Rd. to Civic Circle Blvd.	Widen & Resurface	Marion	\$2,218,100	
2. Park Ave., Clark Trl. to Brewster Rd.	Safety & Operations	Herrin	\$5,741,000*	
3. Multi-use Trail, Herrin CUSD 4 Cplx to Herrin City Park	Non-motorized	Herrin	\$1,435,300	Table 46. SIMPO 2040 LRTP Mid-Range Fiscally
4. Multi-use Trail, Existing Trail to Lewis Elementary School	Non-motorized	Carbondale	\$913,500	Constrained Projects
5. Route 13 & Main St. Intersection	Safety	Marion	\$1,435,300	
6. Grand Avenue, Cambria Rd. to Carterville School Cplx.	Widen & Reconstruct	Carterville	\$3,914,300	
7. Cambria Rd. & Sycamore Rd.	Safety	Cambria	\$6,500	
8. Mayor Caliper & Herrin Rd.	Safety	Colp	\$6,500	
9. Wildcat Rd., Carbon St. to Court St.	New Sidewalk	Marion	\$652,400	
10. Park St., Brush Hill Rd. to Giant City Rd.	Widen & Reconstruct	Carbondale	\$4,175,300	
11. Illinois Route 13 Medical Corridor	Traffic Signal Upgrades	Williamson/Jackson	\$261,000	
Total			\$20,759,200	

		Total Project Costs		
	Project	Description	Location	Total Project Costs 2031-2040
	1. Route 13, Giant City Rd. to Lewis Ln.	Safety	Carbondale	\$19,753,100*
Table 47. SIMPO 2040 LRTP Long-Range Fiscally Constrained Projects	2. New Roadway, Route 13 to Carterville School Cplx.	New Roadway	Carterville	\$11,573,100
	3. Halfway Rd., Old Route 13 to Westminster Dr.	New Road Extension	Marion	\$11,397,800
	4. Airport Rd., U.S. 51 to New Era Rd.	Widen & Resurface	Carbondale	\$10,871,700
	5. Wall St. & Walnut St.	Safety	Carbondale	\$3,507,000*
	6. Route 13, 51 and 37 throughout the MPA	Bikeable Shoulders	Williamson/Jackson	\$5,260,500*
	Total			\$62,363,200

	Total Project Costs		
Project	Description	Location	Total Project Costs 2031-2040
7. Route 13, Division St. to Giant City Rd.	Widen & Resurface	Williamson/Jackson	\$81,538,000
8. Carbondale Multi-modal Transfer Station	Transit	Carbondale	\$17,535,100
Total			\$99,073,100

 Table 48. SIMPO 2040 LRTP Long-Range
 Illustrative Projects


Map 21. Mid-Term TIP Projects



Map 22. Long-Term & Illustrative TIP Projects

The project costs listed in Tables 45, 46 and 47 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 shortterm, 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.

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 midterm 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 49 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 49. TIP FY 2016 - FY 2019 Transit Projects

	Total Costs				
Budget Item	Fund Type	FY 2016	FY 2017	FY 2018	FY 2019
Jackson County MTD					
Operating Assistance	5311	\$369,000	\$380,000	\$281,000	\$281,000
Operating Assistance	5307	\$738,000	\$760,000	\$1,200,000	\$1,263,000
1 SMD Paratransit Bus	5310/CVP	\$95,000	\$95,000	\$285,000	\$285,000
1 Minivan w/ Ramp	5310/CVP		\$60,000		
Total - JCMTD		\$1,202,000	\$1,295,000	\$1,766,000	\$1,802,000
RIDES MTD					
Operating Assistance	5311	\$701,500	\$713,300	\$1,277,900	\$1,316,200
Operating Assistance	5307	\$1,211,500	\$1,230,900	\$725,000	\$746,500
1 SMD Paratransit Bus	5310/CVP	\$95,000	\$95,000	\$65,000	
Marion Park & Ride	IJN/DRA	\$1,900,000			
Total - RIDES MTD		\$3,908,000	\$2,067,200	\$2,067,900	\$2,062,700

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.



Southern Illinois Metropolitan Planning Organization

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 decisionmaking 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
- Conduct a formal public hearing on the Draft LRTP prior to its 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





