2045 Long Range Transportation Plan

May 13, 2020

KATS

Kankakee Area Transportation Study

Metropolitan Planning Organization

Kankakee Area Transportation Study

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Adopted by KATS Policy Committee on May 13, 2020

Funding provided in whole or in part by Illinois Department of Transportation to produce this document.

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Chapter 1: Long Range Transportation Planning Process

1.1. Overview/Introduction

1.1.1. About KATS

The Kankakee Area Transportation Study (KATS) is the designated transportation planning agency for the Kankakee Urbanized Area. By federal law, when an urbanized area reaches a population of more than 50,000 individuals, as determined by the U.S. Census Bureau, a metropolitan planning organization is required to be established. KATS has been fulfilling federal metropolitan transportation planning requirements since the 1980s.

The results of the 1980 decennial census determined the Kankakee Urbanized Area had surpassed the requirement of 50,000 people. In accordance with federal legislation, a policy board known as a metropolitan planning organization (MPO) was created to manage the required transportation planning process. The staff that accomplishes the tasks necessary to carry out the planning process are housed within the Kankakee County Planning Department.

The Unified Work Program, which outlines the work to be accomplished for the year is created and approved annually by the KATS Technical Advisory Committee and the Policy Committee. Other documents that are reviewed, modified or amended, and approved on a regular basis are the transportation improvement program, the annual list of federally obligated projects, and the long-range transportation plan. The federal performance measures of the Fixing America's Surface Transportation Act (FAST Act) are also being reviewed and adopted as required. The materials KATS produces are forwarded to the Federal Highway Administration (FHWA) and Illinois Department of Transportation (IDOT) for review and on file with state and local agencies as MPO approved documents.

As an MPO, KATS receives federal funding to carry out transportation planning and programming processes. KATS planning activities are funded through annual federal and state funding allocations, with a local match of 20 percent. The lead agency for KATS is Kankakee County through its Planning Department. Historically, Kankakee County has provided the local match. More recently, KATS has been utilizing State Metro Planning funds, made available by IDOT, as the local match. This includes the development of a metropolitan transportation plan, commonly referred to as a long-range transportation plan (LRTP). The LRTP must cover a minimum 20-year planning horizon and be updated every five years, which is the required update cycle for MPOs, such as KATS, that are categorized as an air quality attainment area. The last LRTP was adopted on May 6, 2015. This plan was adopted on May 13, 2020.

1.2. Long Range Transportation Planning

1.2.1. Federal Surface Transportation Programs

Fixing America's Surface Transportation Act (FAST Act) is the current federal surface transportation legislation. The law continues the cooperative, continuous, and comprehensive (3-C) planning process and is the framework for metropolitan transportation planning. The FAST Act carries forward a number of key provisions from the previous highway bill, Moving Ahead for Progress in the 21st Century Act (MAP-21), including performance-based planning requirements, fiscal constraint, and public involvement. MAP-21 marked a significant change by establishing a performance-based policy and programming framework for the federal-aid program that focuses on infrastructure condition and the use of performance measures and targets to guide transportation system decisions and monitoring system performance. **Chapter 3** – Goals, Objectives, and Performance Measures provides a detailed overview of the FAST Act performance-based planning process.

The FAST Act was signed into law on December 4, 2015, and is the first federal law in over a decade to contain long term funding for surface transportation. The FAST Act authorized $305 billion over five years (federal fiscal years 2016 through 2020) to assist in funding the nation's highways, bridges, transit, and rail systems. Most programs under the FAST Act are funded by the Highway Trust Fund, which receives the majority of revenue from the motor fuel tax. In order to ensure solvency of the Highway Trust fund, transfers from the general fund are necessary. The FAST Act authorizes funds to be obligated through September 30, 2020. Obligated funds may be liquidated through September 30, 2022.

The FAST Act added some additional requirements to the planning process, such as the inclusion of intercity transportation facilities and the resilience and reliability of the transportation system, stormwater mitigation, and enhancement of tourism. Public ports and private transportation providers are also required to be included in the planning process and other planning officials are encouraged to be consulted with.

1.2.2 Fiscal Constraint

A requirement of the transportation planning process is the development of a fiscally constrained set of projects. The financial plan is used to demonstrate how the KATS LRTP can be implemented (see **Chapter 13**). The financial plan identifies the costs and the revenue sources that are reasonably expected to be available to support the projects programmed in the TIP. An overview of the key elements of the financial plan are the following:

- The financial plan shall contain system-level estimates of costs and revenue sources that are reasonably expected to be available to adequately operate and maintain federal-aid highways.
- The MPO, public transportation operator(s), and the state department(s) of transportation shall cooperatively develop estimates of funds that will be available to support the LRTP.
- All necessary financial resources from public and private sources that are reasonably expected to be made available to carry out the transportation plan shall be identified.
- New funding sources not currently in place, but which are "reasonably expected to be available," can be included. The financial plan shall include recommendations on any additional financing strategies to fund projects and programs included in the LRTP. Strategies for ensuring their availability shall be identified.

1.2.3 Federally Funded Projects in the KATS Urbanized Area

To illustrate the importance of federal funding for transportation improvements in the Kankakee Urbanized Area, **Table 1-1** summarizes transportation projects that have used federal funding since the Kankakee area became eligible to receive federal transportation funding. By and large, these projects have helped upgrade east-west access between U.S. 45/52 and Illinois Route 50, which are two critical north-south state roadways in the region.

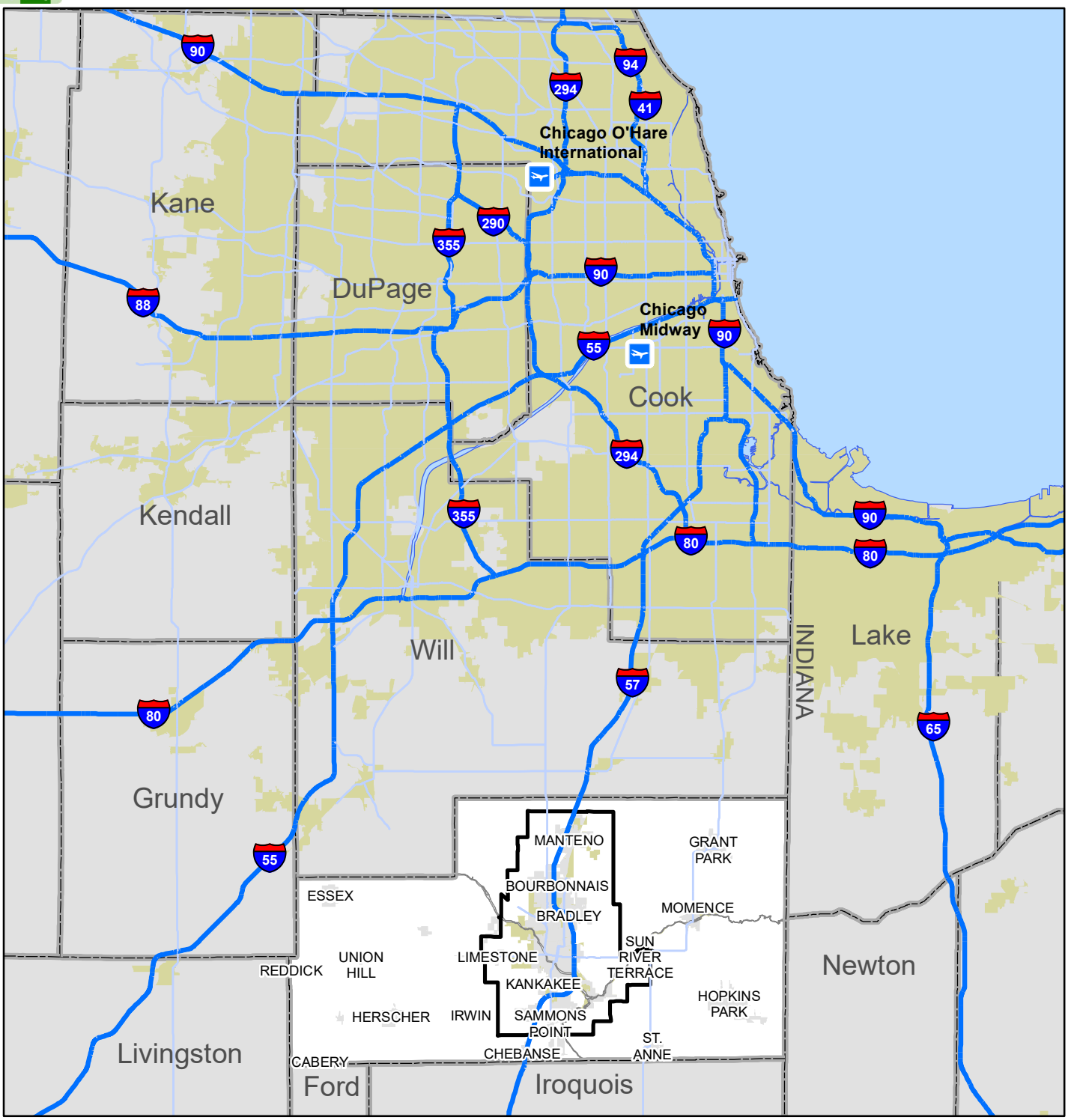
Table 1-1: Surface Transportation Program Projects in the KATS Urbanized Area

Project	Jurisdiction	Federal Funds Spent	Year
Brookmont Boulevard (Phase 1)	Kankakee	$ 860,252	1975
Latham Drive	Bourbonnais	$1,070,774	1979
North Street (Phase 1)	Bradley	$ 735,733	1979
Third Street & Bridge Street	Aroma Park	$ 388,086	1983
North Street (Phase 2)	Bradley	$1,275,330	1985
Brookmont Boulevard (Phase 2)	Kankakee	$1,275,280	1997
River Road	Kankakee County	$ 814,000	2001
Lowe Road	Kankakee County & Aroma Park	$2,477,000	2007
Cardinal Drive	Bradley	$1,696,041	2009
Burns Road (Phase 1)	Bourbonnais	$2,111,599	2010
Burns Road (Phase 2)	Bourbonnais	$1,761,979	2013
Maple Street	Manteno	$ 117,626	2014
Hobbie Avenue (Programmed)	Kankakee	$5,440,000 (Est.)	2022 (Est.)

Figure 1-1 and **Figure 1-2** display the metropolitan planning area (MPA) which is the geographic area the metropolitan planning process must be carried out. The MPA encompasses the Kankakee Urbanized Area and the contiguous geographic areas likely to become urbanized within the next 20 years. The MPO includes the following communities: City of Kankakee, Village of Aroma Park, Village of Bourbonnais, Village of Bradley, Village of Manteno, Village of Sun River Terrace, and portions of unincorporated Kankakee County adjacent to these municipalities.

The closure of St. George Road during the bridge replacement over Interstate 57.

Figure 1-1: Regional Map - Kankakee County



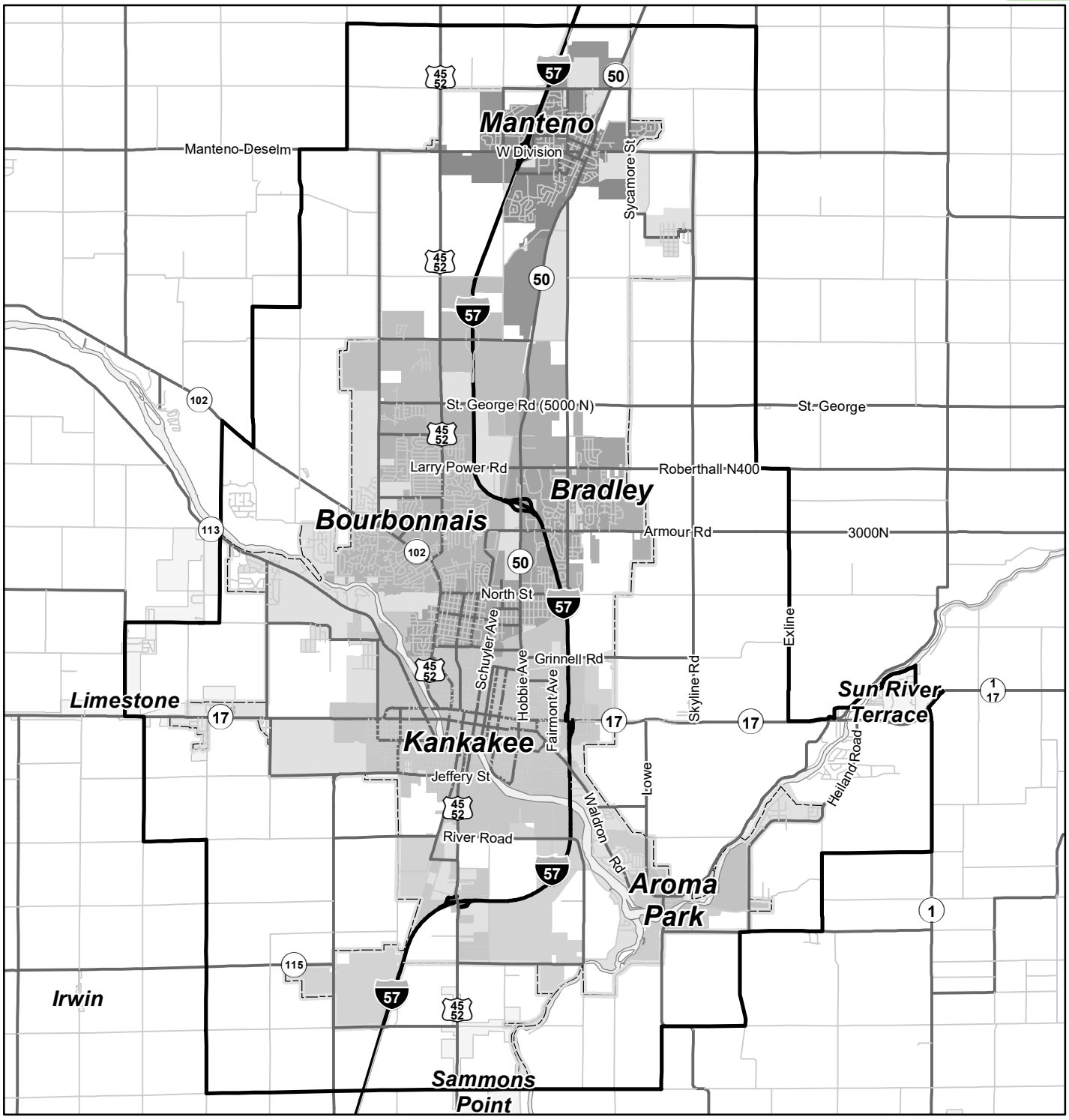
MPO Boundary
Kankakee County
Interstate
Other-Highways
Airport

N

0 2½ 5 10 15 20 25 Miles

Data Sources: Street Centerlines (2018), Illinois Department of Transportation, Cenus Urbanized Area, U.S. Census Bureau, Other data - Kankakee County, U.S. Geological Survey.
Disclaimer: This map is for reference only. Data provided are derived from multiple sources with varying levels of accuracy. Kankakee Area Transportation Study disclaims all responsibility for the accuracy or completeness of the data shown.

Figure 1-2: Kankakaee Area Transportation Study Metropolitan Planning Area



Data Sources: Street Centerlines (2018), Illinois Department of Transportation, Census Urbanized Area, U.S. Census Bureau, Other data - Kankakee County.
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1.2.4 Regional Influences

The KATS MPO is in close proximity to the Chicago metropolitan planning region. One mile north of the KATS northern boundary is the planning boundary of the Chicago Metropolitan Agency for Planning (CMAP). The decisions made in the Chicago region, by public and private entities can have large transportation and economic effects on the Kankakee region.

The Chicago region is one of the nation's largest freight hubs and Will County, the adjacent county north of Kankakee County, is one of the fastest growing areas in the region for intermodal traffic, where goods transfer between trains, barges, and trucks. This freight traffic has a large impact on the KATS regional transportation network and continued growth in southern Will County could significantly alter the future transportation needs within Kankakee County.

Two regionally significant projects have been proposed just a short distance north of Kankakee County. The Illiana Expressway was a project that had been debated for several years and had an environmental impact statement completed for the project. The project was placed on hold in January 2015 and there have been no updates since.

The South Suburban Airport (SSA) is another project that has been planned for southeast Will County. The airport could have substantial transportation and economic effects on the KATS MPA. The State of Illinois has primary control over the development of the SSA, which has the potential to be the largest single contributor of construction jobs for residents of Kankakee County with the potential to accommodate the air travel demand for Kankakee County for years to come. The complexity and uncertain status of these projects makes it difficult to fully evaluate the transportation impacts on the KATS MPA.

In addition to these two projects, the State of Illinois has jurisdiction and maintains the roadways system that carries the bulk of traffic within and through the KATS MPA. The decisions made about this system by the Illinois Department of Transportation (IDOT) have a direct impact on the local transportation system. The State of Illinois and the federal government also provide the majority of funding for transit projects throughout Illinois. Decisions regarding state funding directly affect the scope and levels of transit service in the KATS region.

Traffic crossing Kankakee County's border with the State of Indiana consists of a noticeable amount of truck traffic. Concern over a lack of east-west roadways to accommodate heavy commercial vehicles in the area is an issue that the State of Indiana, State of Illinois, and Kankakee County must address. The establishment of an east-west express corridor would have great benefits by enhancing those freight movements. These projects and their potential impacts are discussed further throughout this plan.

1.3 LRTP Development and Outreach

1.3.1 MPO Committees

The KATS MPO consists of local and state officials that meet on a regular basis through an established committee structure. A Policy Committee, which is composed of elected or appointed officials makes decisions and sets policies for the KATS MPA. Each Policy Committee member appoints a technical staff member to a Technical Advisory Committee. The Technical Advisory Committee reviews MPO subject matter and offers recommendations to the Policy Committee. **Table 1-2** shows the structure of the Policy Committee and **Table 1-3** shows the structure of the Technical Advisory Committee.

Table 1-2: MPO Policy Committee Membership

President	Village of Aroma Park	Elected	Voting member
President	Village of Bourbonnais		
President	Village of Bradley		
Mayor	City of Kankakee		
Chairman	Kankakee County		
President	Village of Manteno		
Chairman	River Valley METRO	Appointed	
Chairman	Kankakee Valley Airport Authority		
Regional Engineer	Illinois Dept. of Transportation Region 2		
Metropolitan Planning Manager	IDOT Office of Planning and Programming		Non-Voting Member
Division Administrator	Federal Highway Administration		
Regional Administrator	Federal Transit Administration		

Table 1-3: MPO Technical Advisory Committee Membership

Village Engineer	Village of Aroma Park	Voting member
Village Engineer	Village of Bourbonnais	
Village Engineer	Village of Bradley	
City Engineer	City of Kankakee	
County Engineer	Kankakee County	
Village Engineer	Village of Manteno	
Engineer	River Valley METRO	
Manager	Kankakee Valley Airport Authority	
Urban Planner	IDOT District 3	
Metropolitan Planning Manager	IDOT Office of Planning and Programming	Non-Voting Member
Metropolitan Planning Specialist	Federal Highway Administration	
Community Planner	Federal Transit Administration	

1.3.2 Kankakee County Regional Planning Commission

The Kankakee County Regional Planning Commission (RPC) is a long-established commission made up of 17 members, of which two are members of the Kankakee County Board and the other fifteen are members of the general public who have been appointed by the Kankakee County Board. The RPC reviews, discusses, and offers recommendations to the Kankakee County Board on matters related to planning and zoning. The RPC met on a regular basis as part of the LRTP development and was used as a public outreach component of the planning process. The RPC also conducted a public hearing on February 27, 2020.

1.3.3 KATS Safety Committee

The KATS Safety Committee was established by the Policy Committee in 2013 with the goal of identifying opportunities to improve traffic safety within the region. The committee is focused on providing guidance to create the safest countywide transportation system in Illinois for users of all ages, abilities, and modes. The Committee includes professionals from the areas of engineering, law enforcement, emergency

response, and education in a cooperative effort to address the issue of traffic safety. The KATS Safety Committee is working toward proactively addressing multimodal transportation safety issues with the goal of reducing crashes, fatalities, and serious injuries within Kankakee County. Committee professionals work together to analyze safety data, trends, and policies toward the common purpose of enhancing safety for all transportation users, increasing the efficiency of the transportation system, and enhancing the quality of life for the area.

1.3.4 River Valley METRO Mass Transit District

As a part of the LRTP development, KATS staff met with River Valley METRO staff to discuss current needs and future expectations and planning needs of urban public transportation in the KATS MPA.

1.3.5 Public Outreach

Public input from the community was solicited by conducting two public opinion surveys and an open house. The information was used to ensure that the LRTP took into consideration local priorities and issues as part of the planning process. The first public opinion survey was available from February 28, 2019, through May 4, 2019 (65 days). There was a total of 152 completed responses. The first survey asked participants to rank the seven national goals of the FAST Act in order of importance. The second survey was available from September 9, 2019, through December 8, 2019 (90 days) and received 163 responses. The second survey asked participants to provide information on vehicle ownership, travel mode preferences, transportation system deficiencies, and preferences for making improvements to the transportation system. More information on the public opinion surveys can be found in **Chapter 12**.

A public open house was held on February 27, 2020, to provide the public with an opportunity to comment on the draft plan and provide input regarding the LRTP initiatives. This open house and public hearing were part of the Kankakee County Regional Planning Commission's meeting. Informational boards and a formal presentation of the LRTP given by KATS Staff gave information about the LRTP planning process, current trends in transportation, and regional priorities. A draft of the LRTP was made available on the KATS website for a 45-day public review, beginning March 26, 2020. Comments were accepted through May 11, 2020. **Table 1-4** summarizes the meetings conducted during the LRTP process that included the opportunity for public comments and questions on the plan.

Table 1-4: Involvement Meetings

Meeting	Date
KATS MPO Technical Advisory Committee and Policy Committee *Policy Committee Only	A) February 28, 2019 B) March 27, 2019 C) May 8, 2019 D) June 26, 2019 E) August 28, 2019 F) September 25, 2019* G) October 30, 2019 H) January 29, 2020 I) March 25, 2020 J) May 13, 2020
Kankakee County Regional Planning Commission	A) January 17, 2019 B) March 18, 2019 C) June 5, 2019 D) August 15, 2019 E) January 23, 2020 F) February 27, 2020 (Public Hearing)
KATS Safety Committee	A) November 6, 2019
River Valley METRO Mass Transit District	A) August 30, 2019
Surveys	A) February 28, 2019 through May 4, 2019 B) September 9, 2019 through December 8, 2019

1.4 LRTP Content

The KATS 2045 LRTP is a minor update of the 2040 KATS Long Range Transportation Plan (May 2015, amended 2017), which was built on previous planning efforts within Kankakee County and the region. Some of the key components included in "Development and content of the metropolitan transportation plan" of 23 CFR 450.324, are listed below. One big change in the LRTP requirements was establishing a performance-based planning approach, which includes performance-based goals and targets:

- The transportation plan shall have at least a 20-year planning horizon and include both long-range and short-range strategies/actions that provide for the development of an integrated multimodal transportation system (including accessible pedestrian walkways and bicycle transportation facilities) to facilitate the safe and efficient movement of people and goods in addressing current and future transportation demand.
- Existing and proposed transportation facilities (including major roadways, public transportation facilities, intercity bus facilities, multimodal and intermodal facilities, nonmotorized transportation facilities, and intermodal connectors) that should function as an integrated metropolitan transportation system, giving emphasis to those facilities that serve important national and regional transportation functions over the period of the transportation plan.
- Operational and management strategies to improve the performance of existing transportation facilities to relieve vehicular congestion and maximize the safety and mobility of people and goods.
- Assessment of capital investment and other strategies to preserve the existing and projected future metropolitan transportation infrastructure, provide for multimodal capacity increases

based on regional priorities and needs, and reduce the vulnerability of the existing transportation infrastructure to natural disasters.

- A description of the performance measures and performance targets used in assessing the performance of the transportation system, as well as a system performance report.
- A safety component that integrates the priorities, goals, countermeasures, strategies, or projects for the metropolitan planning area contained in the state HSIP.
- A financial plan that demonstrates how the adopted transportation plan can be implemented.

1.4.1 LRTP Organization

This long-range transportation plan is organized into fourteen chapters. The following provides a brief summary of each chapter. Supporting documentation is available in separate appendices.

Chapter 1: Long Range Transportation Planning Process. This chapter provides an overview of KATS, the metropolitan planning area, and the metropolitan planning process.

Chapter 2: Regional Demographics and Land Use. This chapter describes the population and demographic characteristics of the MPA. A summary of major planned improvements and recent studies and the emerging trends and issues that impact transportation in the MPA are also included.

Chapter 3: Goals, Objectives, and Performance Measures. This chapter summarizes the LRTP goals and objectives and lays out the strategic direction to address FAST Act performance measures.

Chapter 4: Performance Targets. This chapter provides a current report on performance measure targets in the KATS planning area.

Chapter 5: Roadways. This chapter summarized the existing and future roadway conditions and issues in the MPA.

Chapter 6: Public Transportation. This chapter summarizes the existing and future conditions and issues for public transportation in the MPA.

Chapter 7: Non-Motorized Transportation. This chapter summarizes the existing and future conditions and issues for non-motorized transportation in the MPA.

Chapter 8: Freight and Intermodal Connectivity. This chapter summarizes the existing and future conditions and issues for freight and intermodal connectivity in the MPA.

Chapter 9: Passenger Rail. This chapter summarizes the existing and future conditions and issues of passenger rail in the MPA.

Chapter 10: Aviation. The chapter summarizes the existing and future conditions and issues of aviation in the MPA.

Chapter 11: Transportation Security and Resiliency. This chapter discusses potential transportation security related issues. Included is a discussion of Kankakee County's natural hazards mitigation plan that provides an organized approach for reducing the impacts of natural hazards on people and property.

Chapter 12: Project selection. This chapter provides an overview of the project selection process used to identify tiered roadway improvements.

Chapter 13: Recommended Plan and Implementation. This chapter summarizes the 2045 LRTP recommendations. The chapter includes an environmental justice analysis and environmental mitigation analysis. Implementation strategies are also discussed.

Chapter 14: Next Steps…Plan Implementation. This chapter includes information regarding plan amendments and next plan deadlines.

Kankakee County Administration Building, Kankakee, Illinois.

Chapter 2: Regional Demographics and Land Use

2.1 Population

Population and demographics are an important part of planning for the future and this chapter provides some information on those topics. During the first decade of the millennium, Kankakee County experienced population growth of about 9 percent. The 2000 Census counted 103,833 people living in the county and the 2010 Census counted 113,449 people. Since 2010, this trend has changed. According to multiple U.S. Census Bureau products, the total population of Kankakee County in 2017 was less than it was in 2010[1]. Due to the availability of data from the U.S. Census Bureau, population data is provided at two geographic levels: county-level and 2010 census urbanized area-level.

2.1.1 Population Change

The Kankakee Urbanized Area population has decreased at a higher rate than Kankakee County between 2010 and 2017. The population for the State of Illinois increased slightly during that period. Based on 2013-2017 5-year American Community Survey (ACS) data, created by the U.S. Census Bureau, the Kankakee Urbanized Area had a total population of 79,592, compared to 81,926 recorded in the 2010 census, representing a 2.85% decrease over that period. **Table 2-1** shows the changes in total population from the decennial censuses conducted in 2000 and 2010 and the 2013-2017 5-Year ACS Total Population Estimates. It's important to note a significant portion of the population increase in the Kankakee Urbanized Area between 2000 and 2010 was due to the change in geographic boundary, which added the Village of Manteno. The U.S. Census Bureau establishes urbanized area boundaries and reevaluates them after each decennial census. New urbanized area boundaries will be created after the 2020 Census.

Table 2-1: Population Changes since 2000 in the Nation, State of Illinois, and Kankakee County

Location	2000	2010	2013-2017	Percent Change 2000 to 2010	Percent Change 2010 to 2013-2017
United States	281,421,906	308,745,538	321,004,407	9.7%	4.0%
Illinois	12,419,293	12,830,632	12,854,526	3.3%	0.2%
Kankakee County	103,833	113,449	110,801	9.3%	-2.3%
Kankakee Urbanized Area*	65,073*	81,926	79,592	25.9%*	-2.8%
Kankakee City	27,491	27,537	26,036	0.2%	-5.5%
Bourbonnais	15,256	18,631	18,532	22.1%	-0.5%
Bradley	12,784	15,895	15,515	24.3%	-2.4%
Manteno	6,414	9,204	8,800	43.5%	-4.4%
Aroma Park	821	743	751	-9.5%	1.1%
Unincorporated Urbanized Area	8,721	9,916	9,958	13.7%	0.4%

*Note: 2000 Census Urbanized Area did not include Manteno. Sun River Terrace was included in the 2000 Census Urbanized Area and not in the 2010 Census Urbanized Area.

Source: U.S. Census Bureau 2000 and 2010 Decennial Census, 2013-2017 5-Year ACS.

[1] Annual Estimates of the Resident Population: April 1, 2010 to July 1, 2018; 2017 ACS 1-Year Estimates; and 2013-2017 ACS 5-Year Estimates support this trend.

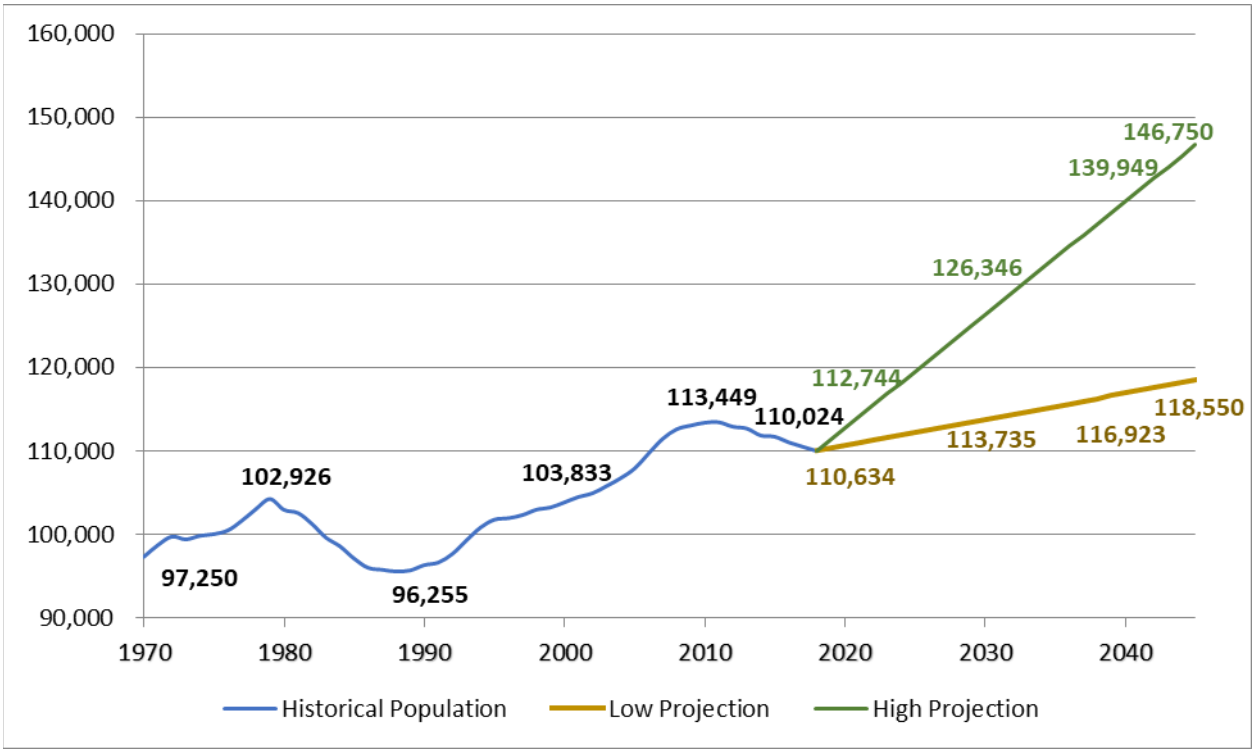
2.1.2 Population Distribution and Projected Estimates

The most recent population projections available for the Kankakee Region were those created for the previous KATS 2040 Long Range Transportation Plan, adopted in May 2015. Those population estimates were based on a previous forecast used in the Kankakee County 2030 Comprehensive Plan, adopted in November 2005, and additional historical data. They also took into consideration the possibility of large future developments. It is important to note that there is a level of uncertainty associated when extrapolating past trends to predict future conditions. Due to this uncertainty, a high and a low scenario were developed for the previous KATS 2040 Long Range Transportation Plan. **Figure 2-1** shows historical population of Kankakee County and the high and low projected scenarios.

The population projections in this plan continue the use of a high and a low scenario. The low scenario was established by analyzing past historical population data for Kankakee County going back to 1970. This scenario projects a population increase of 8.19 percent by 2045 and does not reflect the possible growth associated with potential future developments. However, any development that occurred during the analyzed, historical period that affected population growth would be reflected in the population data and therefore reflected in the forecast.

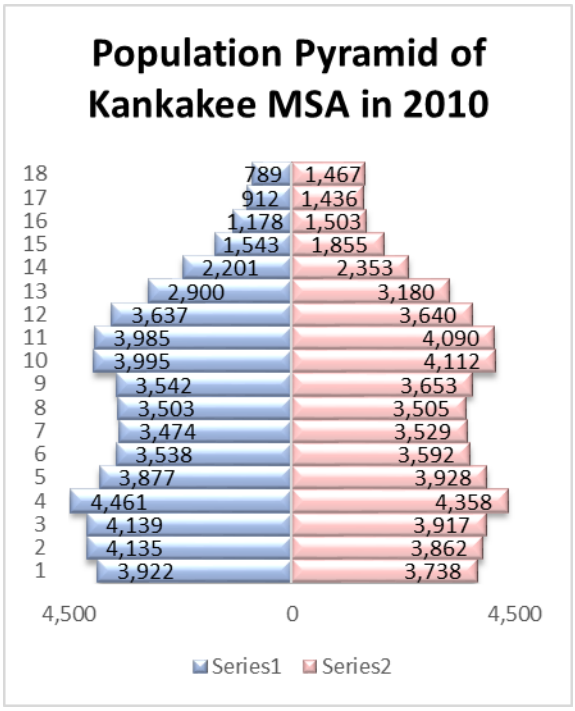
The 2013-2017 5-Year ACS Total Population Estimates for Kankakee County are well below the population projections of the previous long-range transportation plan. As a result, the low scenario from the previous plan was used as the high scenario in this plan. The development of the projections from the previous plan took into consideration the construction of the South Suburban Airport (SSA) and the Illiana Expressway. Both projects have been proposed in Will County, and if built, would have significant impacts on population and employment in Kankakee County.

Figure 2-1: Kankakee County Population Projections to 2045 Based on Historical Trends.

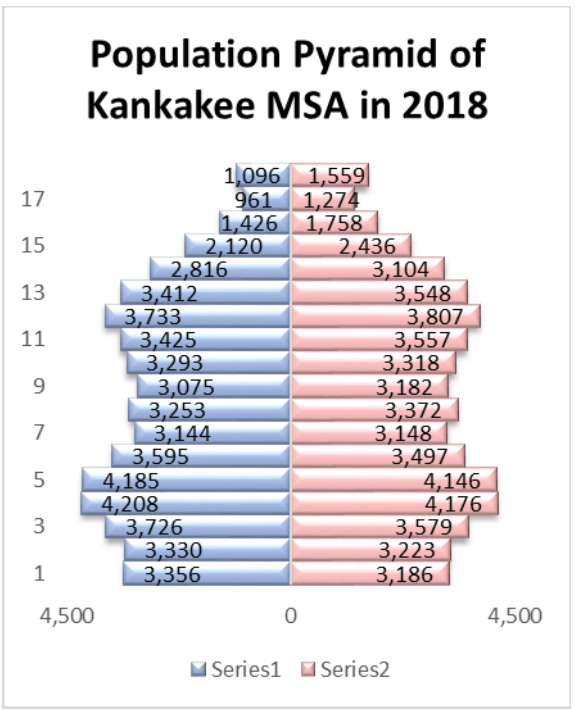


To illustrate the distribution of population by gender and age in 2010 (2010 Census SF1, U.S. Census Bureau) and 2018 (2018 Population Estimates Program, U.S. Census Bureau) population pyramids are shown in **Figure 2-2.** Also shown in **Figure 2-2** is the percent of change for each age cohort between the two periods. The comparison of population data indicates a general overall trend that there were more older adults in 2018 than in 2010 and there were fewer younger adults and children in 2018 than in 2010.

Figure 2-2: Population Distribution in Kankakee County in 2010 and 2018.

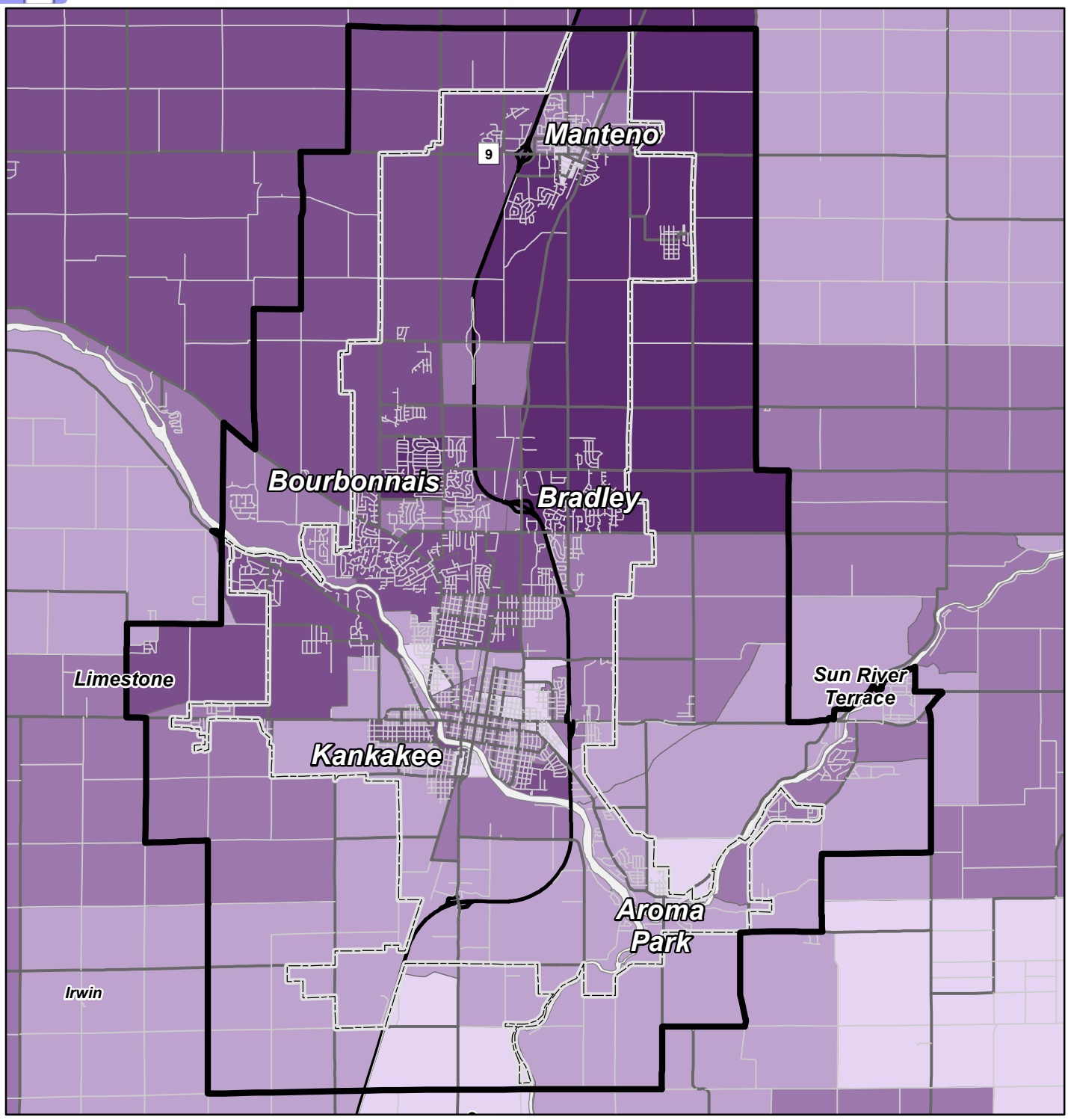


Age Cohort	% change
Total	-3.0%
85+	17.7%
80-84	-4.8%
75-79	18.8%
70-74	34.1%
65-69	30.0%
60-64	14.5%
55-59	-13.5%
50-54	-18.5%
45-49	-13.0%
40-44	-5.5%
35-39	-10.2%
30-34	-0.5%
25-29	6.7%
20-24	-4.9%
15-19	-9.3%
10-14	-18.1%
5-9	3.6%
0-4	-14.6%



Figures 2-3 through 2-6 illustrate the most up to date population distribution and density within the KATS MPA and Kankakee County.

Figure 2-3: Population Distribution by Census Block Group in the KATS MPA



Total Population

- 360 - 700
- 700 - 1,100
- 1,100 - 1,700
- 1,700 - 2,500
- 2,500 - 6,057

- Corporate Limits
- Census Urbanized Area (UZA)
- Adjusted Urbanized Area (UAB)
- Metropolitan Planning Area (MPA)

N

0 ½ 1 2 3 4 5 Miles

Data Sources: Street Centerlines (2018), Illinois Department of Transportation, Census Urbanized Area and 2013-2017 5-Year ACS Population Data, U.S. Census Bureau, Other data - Kankakee County.
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Figure 2-4: Population Distribution by Census Block Group in Kankakee County

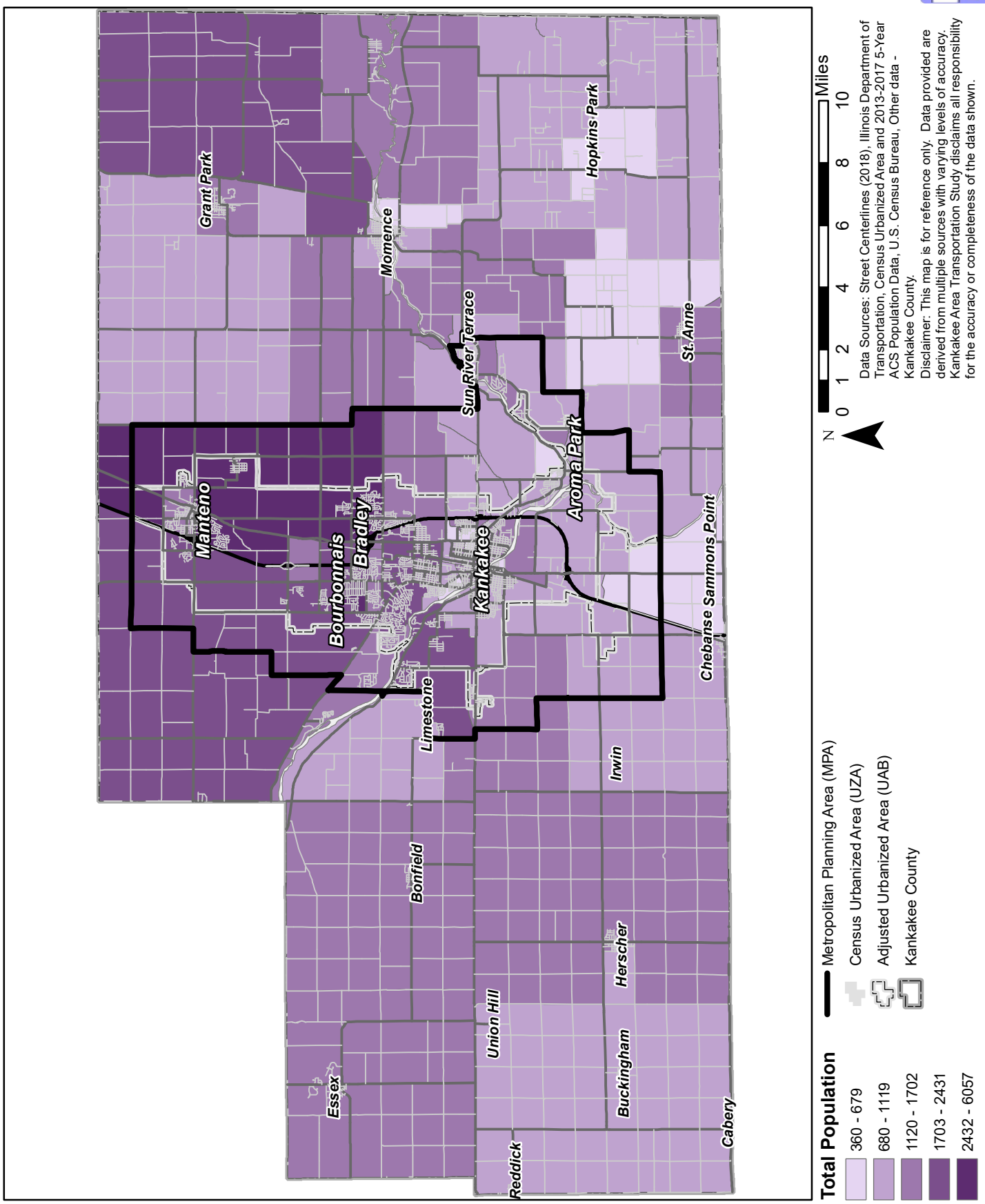
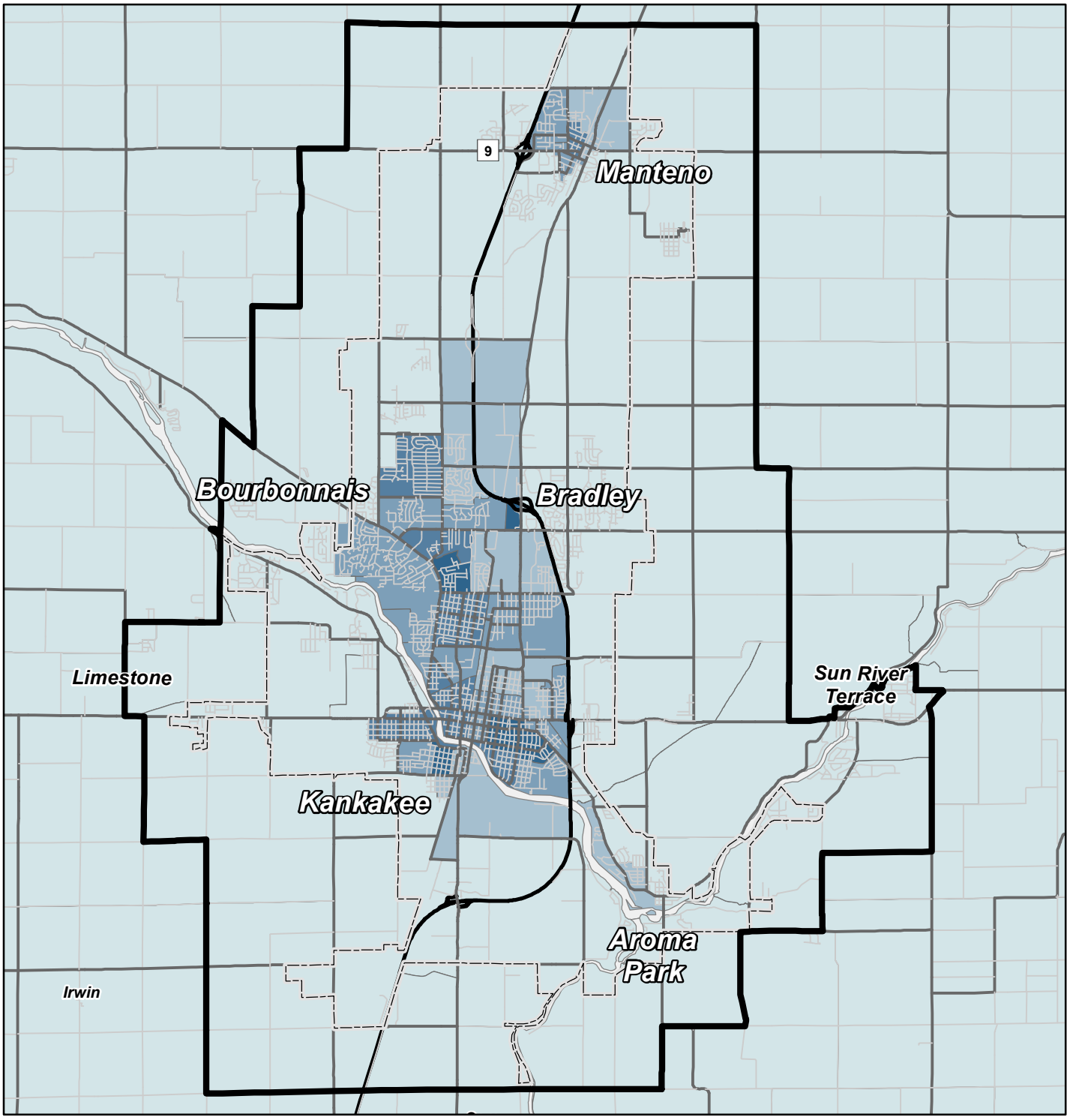


Figure 2-5: Population Density by Block Group in the KATS MPA



Population per Acre

- 0.03511 - 1.057
- 1.058 - 2.550
- 2.551 - 5.802
- 5.803 - 9.545
- 9.546 - 19.23

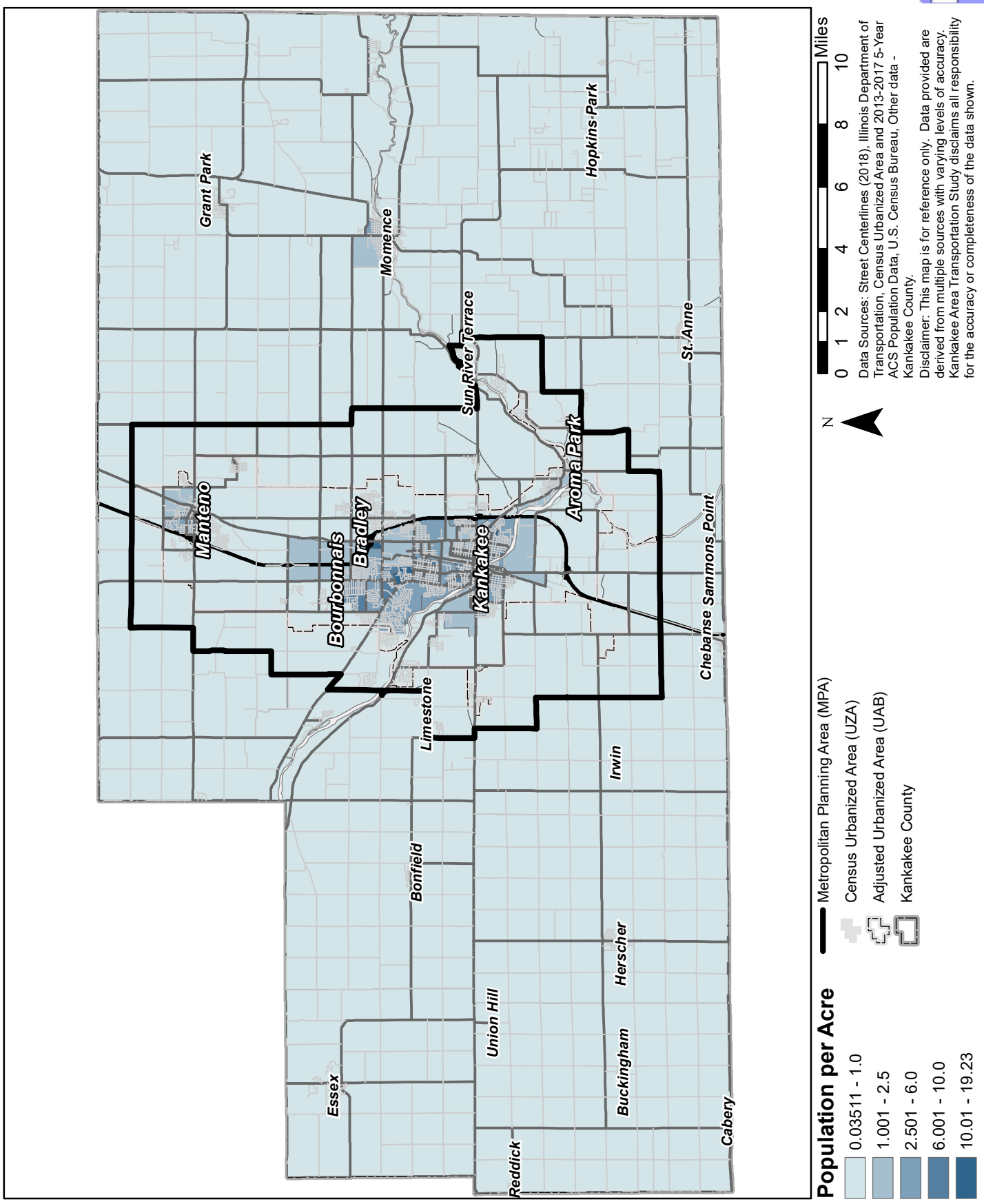
- Corporate Limits
- Census Urbanized Area (UZA)
- Adjusted Urbanized Area (UAB)
- Metropolitan Planning Area (MPA)

N

0 ½ 1 2 3 4 5 Miles

Data Sources: Street Centerlines (2018), Illinois Department of Transportation, Census Urbanized Area and 2013-2017 5-Year ACS Population Data, U.S. Census Bureau, Other data - Kankakee County.
Disclaimer: This map is for reference only. Data provided are derived from multiple sources with varying levels of accuracy. Kankakee Area Transportation Study disclaims all responsibility for the accuracy or completeness of the data shown.

Figure 2-6: Population Density by Census Block Group in Kankakee County



2.2 Population and Demographic Characteristics

Data created and published by the U.S. Census Bureau, such as the decennial census and American Community Survey (ACS), are essential describing and analyzing population. The most recent decennial census data at the time this plan was adopted was from 2010. Due to the age of that dataset, 2013-2017 5-Year ACS data is referenced in this plan to provide updated information on the characteristics of the population in the Kankakee Urbanized Area.

A population comparison between the 2010 Census and 2013-2017 ACS 5-Year Population Estimates indicates the total population of the Kankakee Urbanized Area, the City of Kankakee, and the Villages of Bourbonnais, Bradley, and Manteno all decreased during that period. The unincorporated areas of the Kankakee Urbanized Area and the Village of Aroma Park increased in population.

Intersection of Schuyler Avenue and Merchant Street in Kankakee.

Table 2-2 shows population estimates from the 2013-2017 5-Year ACS and selected demographic groups. The table also shows the estimated number of total households and zero-vehicle households in 2013-2017.

Table 2-2: Demographic Profiles of the United States, Illinois, and Kankakee County by Number (2013-2017)

	United States	Illinois	Kankakee County	Kankakee Urbanized Area	Kankakee City	Bourbonnais	Bradley	Manteno	Aroma Park	Unincorporated Urbanized Area
Total Population	321,004,407	12,854,526	110,801	79,592	26,036	18,532	15,515	8,800	751	9,958
Ages 0-17	73,601,279	2,958,997	26,446	19,428	6,803	4,198	3,978	2,034	143	2,272
Ages 18-64	199,670,739	8,047,597	67,207	48,353	15,612	11,925	9,564	5,144	495	5,613
Ages 65 and Older	47,732,389	1,847,932	17,148	11,811	3,621	2,409	1,973	1,622	113	2,073
White	234,370,202	9,236,701	88,468	61,416	13,927	15,430	13,752	8,340	684	9,283
Black or African American (Alone)	40,610,815	183,3501	16,836	13,736	10,248	1,955	1,075	139	38	281
Hispanic	56,510,571	2,162,070	11,142	8,984	4,775	1,588	1,624	353	93	551
Persons with a Disability	39,792,082	1,388,827	16,971	12,230	5,331	1,783	2,270	1,265	92	1,489
Below Poverty Level	45,650,345	1,698,613	16,059	13,026	8,024	1,651	1,257	733	91	1,270
Total Households	118,825,921	4,818,452	40,239	28,458	9,045	6,198	5,756	3,448	266	3,745
Zero-Vehicle Households	10,468,418	519,591	3,196	2,562	1,555	306	233	173	28	267

Source: 2013-2017 5-Year ACS Estimates.

Table 2-3 contains the percentages for demographic groups contained in **Table 2-2** to provide a more in-depth view for each municipality in the Kankakee Urbanized Area. Percentages are also shown for the United States and the State of Illinois for additional comparison.

Table 2-3: Demographic Profiles of the United States, Illinois, and Kankakee County by Percent (2013-2017)

	United States	Illinois	Kankakee County	Kankakee Urbanized Area	Kankakee City	Bourbonnais	Bradley	Manteno	Aroma Park	Unincorporated Urbanized Area
Total Population	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Ages 0-17	22.9%	23.0%	23.9%	24.4%	26.1%	22.7%	25.6%	23.1%	19.0%	22.8%
Ages 18-64	62.2%	62.6%	60.7%	60.8%	60.0%	64.3%	61.6%	58.5%	65.9%	56.4%
Ages 65 and Older	14.9%	14.4%	15.5%	14.8%	13.9%	13.0%	12.7%	18.4%	15.0%	20.8%
White	73.0%	71.9%	79.8%	77.2%	53.5%	83.3%	88.6%	94.8%	91.1%	93.2%
Black or African American (Alone)	12.7%	14.3%	15.2%	17.3%	39.4%	10.5%	6.9%	1.6%	5.1%	2.8%
Hispanic	17.6%	16.8%	10.1%	11.3%	18.3%	8.6%	10.5%	4.0%	12.4%	5.5%
Persons with a Disability	12.4%	10.8%	15.3%	15.4%	20.5%	9.6%	14.6%	14.4%	12.3%	15.0%
Below Poverty Level	14.2%	13.2%	14.5%	16.4%	30.8%	8.9%	8.1%	8.3%	12.1%	12.8%
Total Households	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Zero-Vehicle Households	8.8%	10.8%	7.9%	9.0%	17.2%	4.9%	4.0%	5.0%	10.5%	7.1%

Source: 2013-2017 5-Year ACS Estimates.

The table below shows a breakdown of the population categories within the Kankakee Urbanized Area. **Table 2-4** shows the percentage of each population groups in relation to the total population of the Kankakee Urbanized Area. For example, individuals residing in Kankakee that are between the ages of zero and seventeen comprise 8.5 percent of the total Kankakee Urbanized Area population.

Table 2-4: Distribution of Kankakee Urbanized Area Residents as a Percent of Total Urban Population (2013-2017)

	Kankakee Urbanized Area	Kankakee City	Bourbonnais	Bradley	Manteno	Aroma Park	Unincorporated Urbanized Area
Total Population	100.0%	32.7%	23.3%	19.5%	11.1%	0.9%	12.5%
Ages 0-17	24.4%	8.5%	5.3%	5.0%	2.6%	0.2%	2.9%
Ages 18-64	60.8%	19.6%	15.0%	12.0%	6.5%	0.6%	7.1%
Ages 65 and Older	14.8%	4.5%	3.0%	2.5%	2.0%	0.1%	2.6%
White	77.2%	17.5%	19.4%	17.3%	10.5%	0.9%	11.7%
Black or African American (Alone)	17.3%	12.9%	2.5%	1.4%	0.2%	0.0%	0.4%
Hispanic	11.3%	6.0%	2.0%	2.0%	0.4%	0.1%	0.7%
Persons with a Disability	15.4%	6.7%	2.2%	2.9%	1.6%	0.1%	1.9%
Below Poverty Level	16.4%	10.1%	2.1%	1.6%	0.9%	0.1%	1.6%
Total Households	100.0%	31.8%	21.8%	20.2%	12.1%	0.9%	13.2%
Zero-Vehicle Households	9.0%	5.5%	1.1%	0.8%	0.6%	0.1%	0.9%

Source: 2013-2017 5-Year ACS Estimates.

2.2.1. Age

Based on 2013-2017 5-year ACS data, the Kankakee Urbanized Area's population is comprised of nearly 20 percent (11,811) older adults (age 65 and older) and 24 percent (19,428) youth (under 18). A comparison of data between the 2010 Census and the 2013-2017 5-year ACS indicated the following trends during the period. By percent, the Kankakee Urbanized Area experienced a larger decrease in youth and adults and a slightly less increase in older adults than the rest of Kankakee County. This trend of the Kankakee Urbanized Area is consistent in a comparison with the percent of change of the State of Illinois and the United States. **Table 2-5** shows the percent of change of age groups between the 2010 (decennial census) and 2013-2017 (5-year ACS).

Table 2-5: Percent of Change Between 2010 and 2013-2017 of Age Group

	Ages 0-17	Ages 18-64	Ages 65 and older
United States	-0.8%	2.8%	18.5%
Illinois	-5.4%	-0.6%	14.8%
Kankakee County	-8.0%	-3.2%	12.5%
Kankakee Urbanized Area	-8.9%	-3.5%	12.4%
Kankakee County Outside Urbanized Area	-5.5%	-2.7%	12.9%

Source: 2010 Census, 2013-2017 5-year ACS Estimates.

2.2.2. Race & Ethnicity

Based on 2013-2017 ACS data, the population of the Kankakee Urbanized Area is comprised of about 77 percent (61,416) White, 17 percent (13,736) Black of African American, 6 percent (6,776) all other races. The percent of population that is Hispanic is approximately 11 percent (8,984). Between 1990 and 2017, African Americans represented the largest minority group in the urbanized area (primarily concentrated in the City of Kankakee), but Hispanics are the fastest growing and most dispersed minority group in the urbanized area.

2.2.3. Households

According to the 2013-2017 ACS data, the overall percentage of zero vehicle households in the Kankakee Urbanized Area is higher than Kankakee County, but lower than the national and the State of Illinois percentages. The same data show 2,562 of the urbanized area's 28,458 total households did not have a personal vehicle. This represents 8.8 percent of households. For the same period, Kankakee County and the State of Illinois were comprised of 7.8 percent and 10.9 percent zero vehicle households respectively. The data indicated that the City of Kankakee had the highest percent of zero vehicle households with 17.2 percent of households. A comparison between the 2008-2012 5-year ACS and 2013-2017 5-Year ACS suggested there was a 6.6 percent increase in zero vehicle households.

2.2.4. Persons with Disabilities

Based on 2013-2017 ACS data, there were 12,230 (15.4 percent) persons with disabilities (non-institutionalized) in the Kankakee Urbanized Area, which is 72 percent of Kankakee County's total. The Kankakee Urbanized Area has a greater percent of persons with disabilities than the Kankakee County, the State of Illinois, and the nation.

2.2.5. Poverty

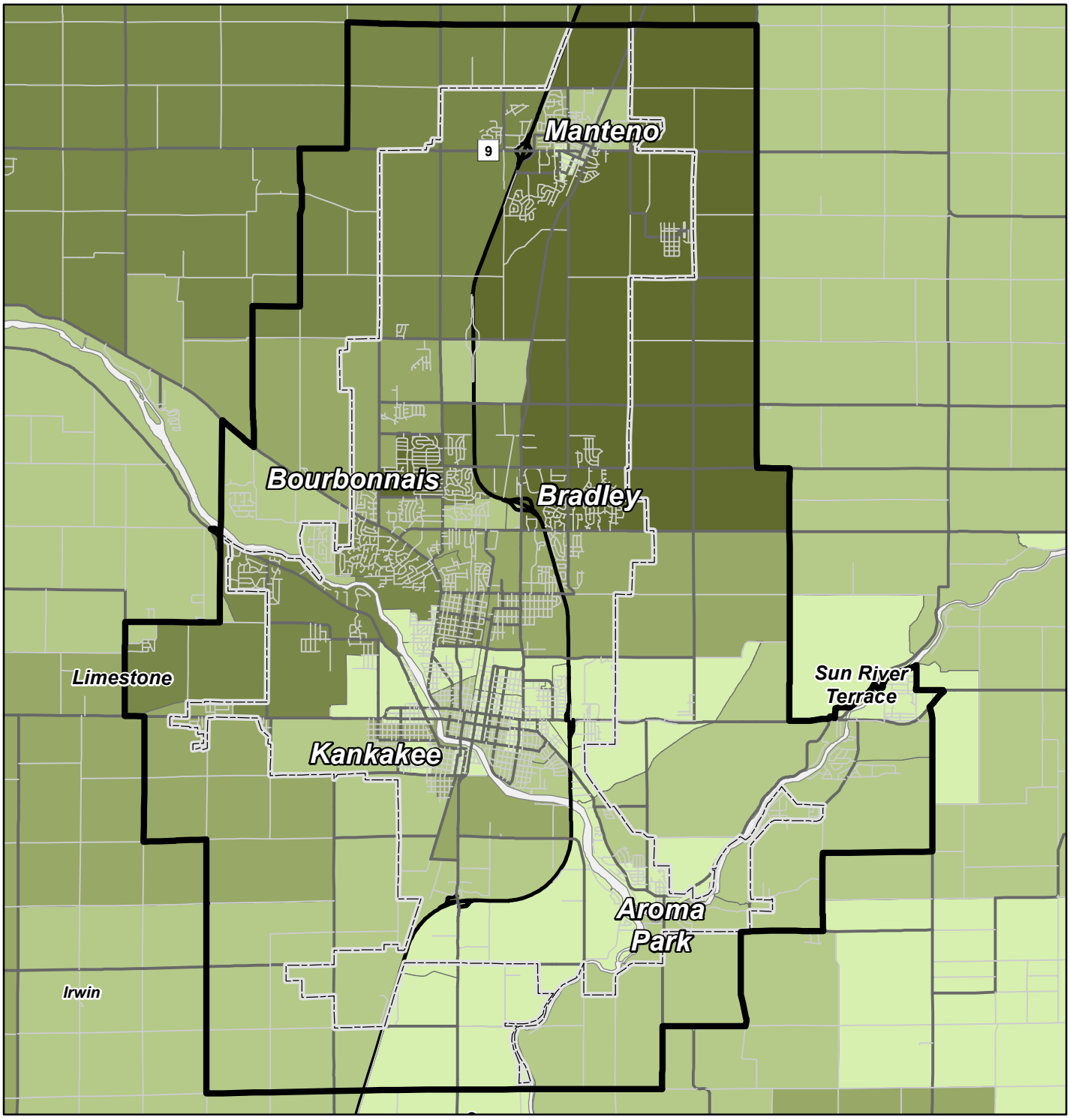
Poverty rates are higher in the Kankakee Urbanized Area when compared to Kankakee County, the State of Illinois, and the nation. According to 2013-2017 5-Year ACS data, 16.4 percent (13,026) of the urbanized population are living below the poverty level, compared to 14.5 percent, 13.2 percent, and 14.2 percent for Kankakee County, the State of Illinois, and the nation respectively. The Kankakee urbanized area experienced a decrease of 1.2 percent from 17.1 percent (2008-2012 5-Year ACS) of the number of individuals living below the poverty line. Since 1990, the distribution of poverty within the urbanized area has been concentrated in the City of Kankakee.

2.2.6 Employment

According to the 2013-2017 ACS, Kankakee County's civilian labor force is 53,839. Of this total, there were 49,811 individuals employed and 4,028 individuals unemployed. This equates to an unemployment rate of 7.5 percent within Kankakee County's labor force. This is an improvement from 11.5 percent unemployment rate in Kankakee County recorded by the ACS 2009-2013. Across the State of Illinois, the unemployment rate was 7.4 percent for the same period of 2013-2017.

Figures 2-7 through 2-10 illustrate employment distribution and employment density in the KATS MPA and Kankakee County.

Figure 2-7: Employment Distribution by Census Block Group in the KATS MPA



Total Employers

- 83 - 366
- 367 - 626
- 627 - 948
- 949 - 1330
- 1331 - 2399

- Corporate Limits
- Census Urbanized Area (UZA)
- Adjusted Urbanized Area (UAB)
- Metropolitan Planning Area (MPA)

N

Miles
0 ½ 1 2 3 4 5

Data Sources: Street Centerlines (2018), Illinois Department of Transportation, Census Urbanized Area and 2013-2017 5-Year ACS Worker Data, U.S. Census Bureau, Other data - Kankakee County.

Disclaimer: This map is for reference only. Data provided are derived from multiple sources with varying levels of accuracy. Kankakee Area Transportation Study disclaims all responsibility for the accuracy or completeness of the data shown.

Figure 2-8: Employment Distribution by Census Block Group in Kankakee County

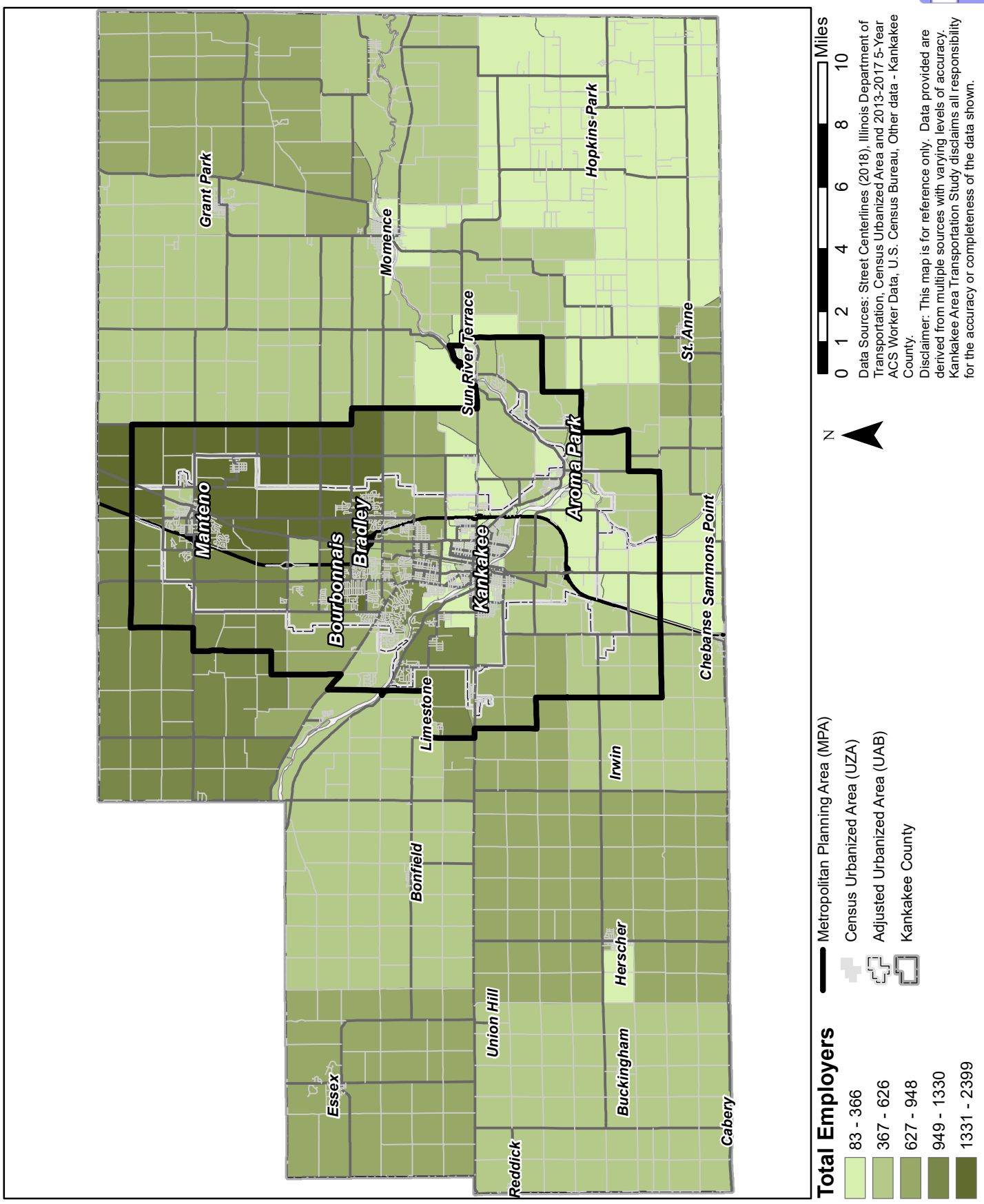
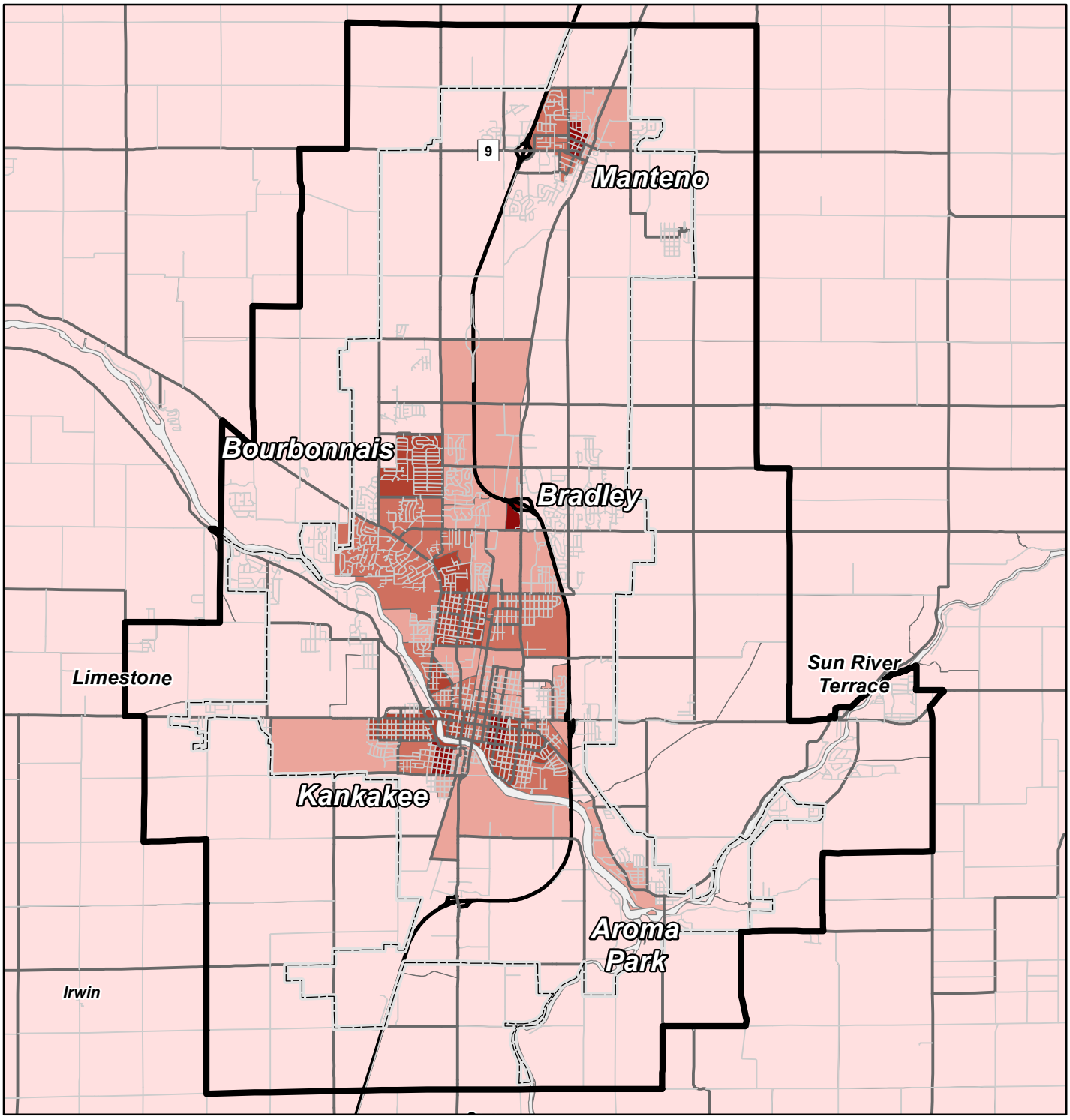
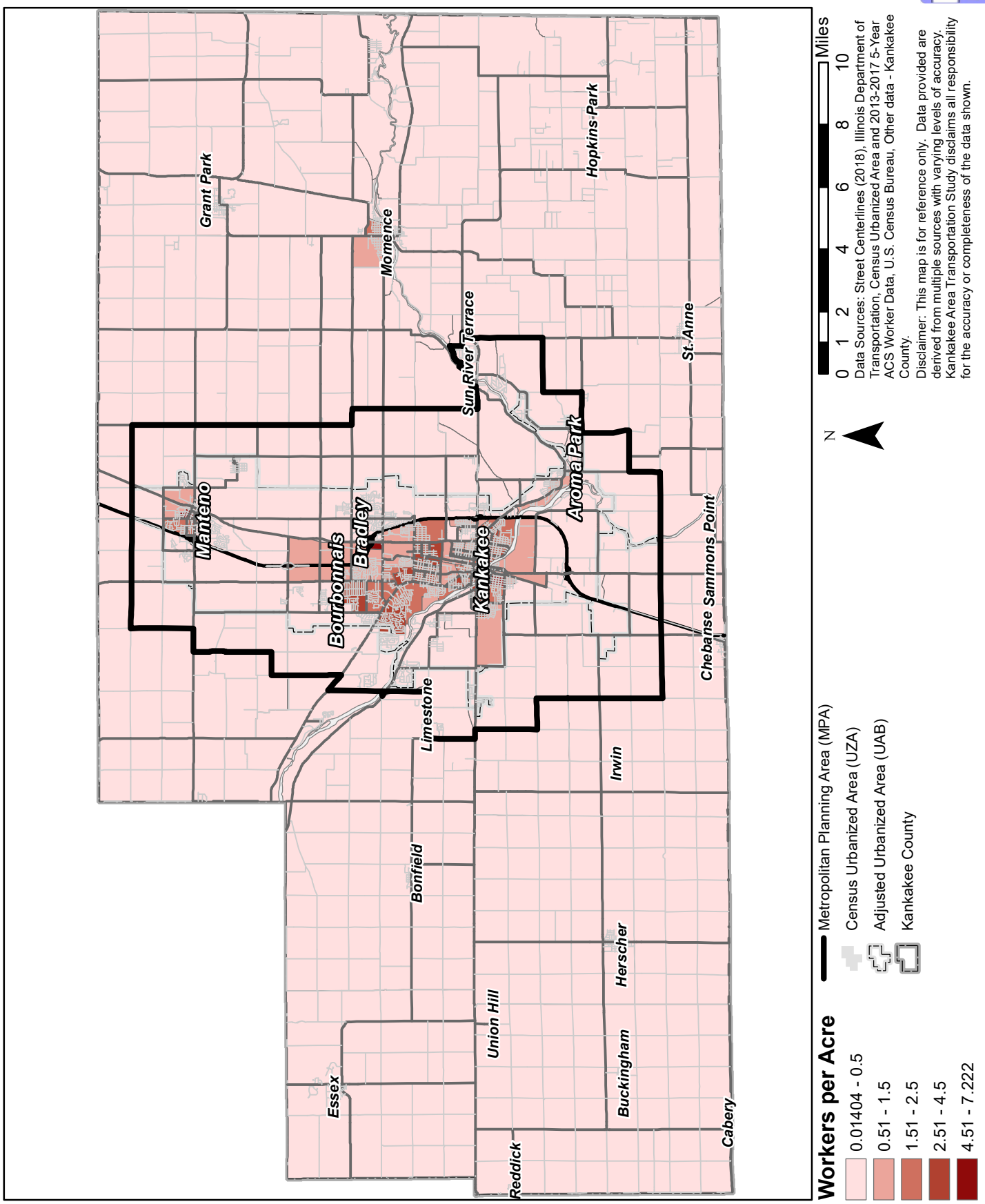


Figure 2-9: Employment Density by Census Block Group in the KATS MPA



Data Sources: Street Centerlines (2018), Illinois Department of Transportation, Census Urbanized Area and 2013-2017 5-Year ACS Worker Data, U.S. Census Bureau, Other data - Kankakee County.
Disclaimer: This map is for reference only. Data provided are derived from multiple sources with varying levels of accuracy. Kankakee Area Transportation Study disclaims all responsibility for the accuracy or completeness of the data shown.

Figure 2-10: Employment Density by Census Block Group in Kankakee County



2.3. Major Employers

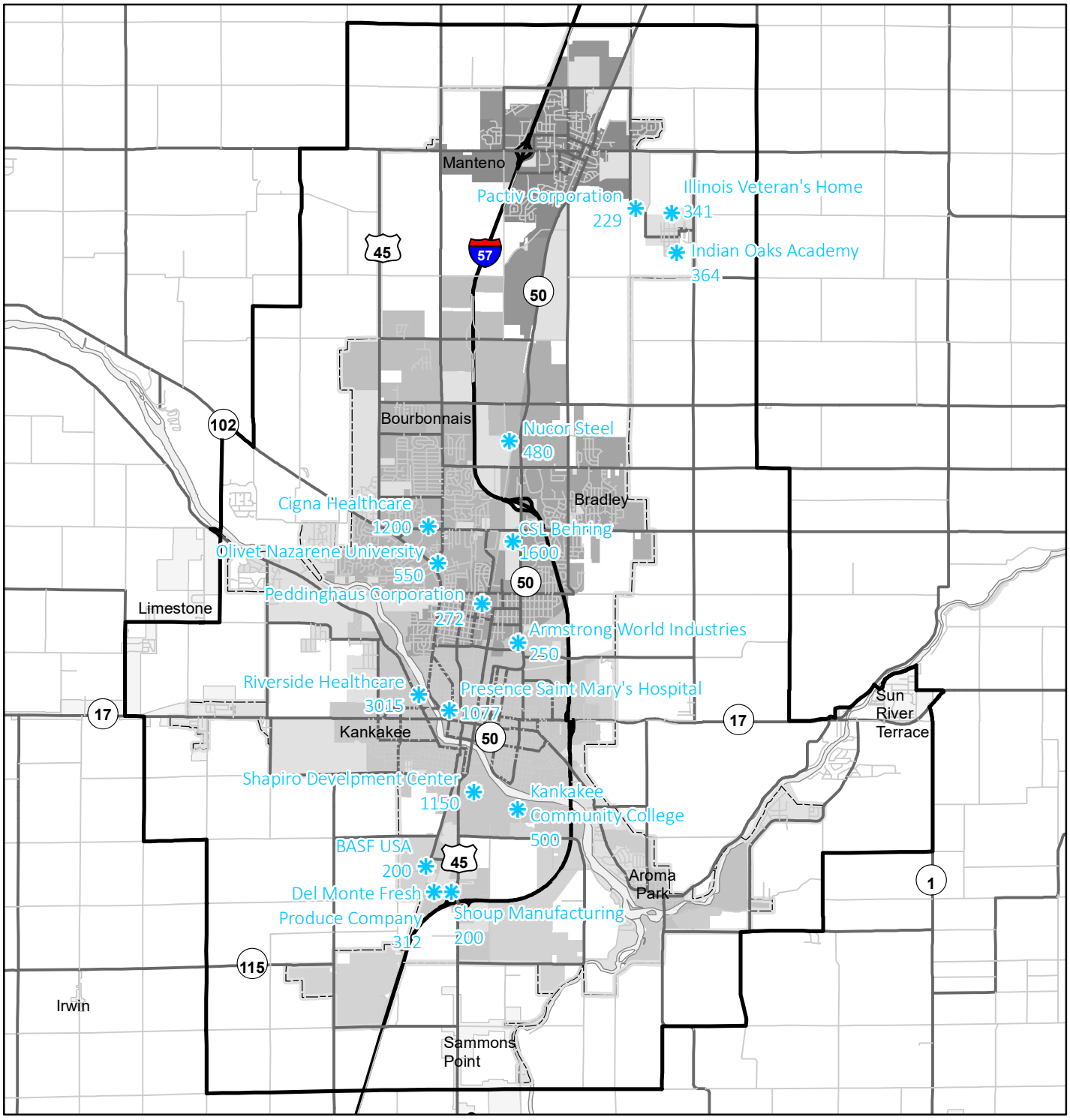
The locations of major employers are an important factor in where economic activity is focused within the KATS MPA. Employers with 200 or more employees in the KATS MPA reveal where it is most crucial to appropriately allocate transportation resources. Access to efficient arterial roadways and public transit routes is vital to the functionality of the local economy. Without proper transportation resources, traffic congestion can increase delivery and shipment times and employees may experience longer commute times going to and from their places of work.

The locations of large employers in the KATS MPA can be seen in **Figure 2-11**. Currently, the KATS MPA has a concentration of major employers in southwest City of Kankakee and other major employers distributed around the county. The five largest employers in order of largest to smallest are Riverside Medical Center, CSL Behring, Cigna Healthcare, Shapiro Developmental Center, and Amita Health St. Mary's Hospital, which comprise almost 7,900 employees. Transit routes and major roadways connect each of the 200-plus employers in the urbanized area to help get workers to their jobs which also helps reduce potential traffic congestion. As economic patterns change, it is important for the region to continually adjust its transportation resources to accommodate both current and future development within the region.

Between 2008-2012 and 2013-2017 there was not a significant increase in the labor force of the Kankakee Urbanized Area. According to the U.S. Census Bureau's ACS, number of workers increased slightly from 62,021 to 62,210. More importantly, the unemployment rate decreased from 11.5% to 8.0%. Along with an increase in employment, the per capita personal income has increased by an average of 2.62 percent annually from 2001 ($26,381) to 2017 ($39,862) according to the Bureau of Economic Analysis midyear estimates.

IL-50 before construction to provide new access to CSL Behring.

Figure 2-11: Major Employers in the KATS MPA



Data Sources: Street Centerlines (2018), Illinois Department of Transportation, Employer Data, Kankakee County Economic Alliance, UZA, U.S. Census Bureau, Other data - Kankakee County.
Disclaimer: This map is for reference only. Data provided are derived from multiple sources with varying levels of accuracy. Kankakee Area Transportation Study disclaims all responsibility for the accuracy or completeness of the data shown.

Chapter 2 Resources

The following sources of population and economic data were used in this chapter:

2010 Census data

- Total Population – SF1-P1
- Population by Age and Sex – SF1-P12
- Population by Race – SF1-P3
- Population by Hispanic or Latino Origin – SF1-P4
- Total Households – SF1-H1
- Households by Size – SF1-H13

2008-2012 5-Year American Community Survey (ACS) Data

- Households by Size and Vehicles Available – B08201
- Poverty Status in the Past 12 Months – S1701
- Disability Characteristics – S1810
- Employment Status – S2301

2013-2017 5-Year ACS Data

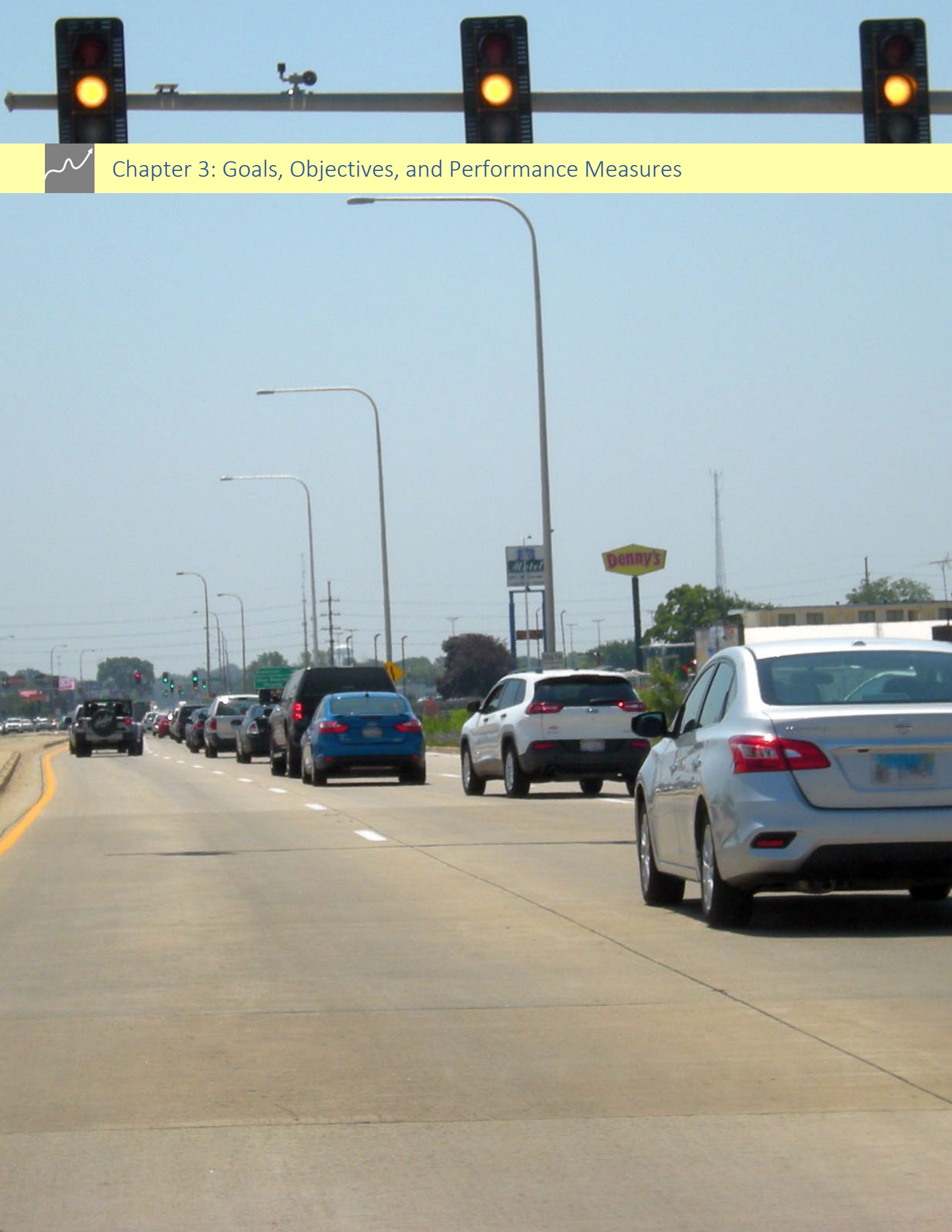
- Population by Age and Sex – S0101
- Population by Race – B02001
- Population by Hispanic or Latino Origin – B03003
- Poverty Status in the Past 12 Months – S1701
- Disability Characteristics – S1810
- Employment Status – S2301
- Household Size by Vehicles Available – B08201

2018 Population Estimates Program (PEP)

- Population by Age and Sex – PEPAGESEX

List of 200+ Employers, Kankakee County Economic Alliance

Chapter 3: Goals, Objectives, and Performance Measures



3.1 Goals, Objectives, and Performance Measures

This chapter sets forth the KATS goals, objectives, and performance measures that guide the development of the 2045 LRTP and help develop future transportation priorities and investments within the MPA. This is the first KATS LRTP after all federal regulations have been established and guidance on the performance measures has been released. KATS staff intended to develop goals, objectives, performances measures, and targets that are compliant with requirements of the FAST Act. For the purposes of performance-based planning, **Table 3-1** includes definitions, established by FHWA, that will be used to ensure a common comprehension of terminology.

Table 3-1: Definitions of performance-based planning

Term	Definition
Goal	A broad statement that describes a desired end state.
Objective	A specific, measurable statement that supports achievement of a goal.
Performance measure	A metric used to assess progress toward meeting an objective.
Target	A specific level of performance that is desired to be achieved within a certain timeframe.

FHWA Performance-based Planning and Programming Guidebook[1]

Transportation performance management (TPM) is part of the new performance-based process and it established a systematic process that is used to make investment and policy decisions to achieve transportation performance goals. **Figure 3-1** illustrates the list of elements and the flow of TPM.

Figure 3-1: Transportation performance management elements.

The first element of TPM is **national goals** which are included in the FAST Act and provides a direction that transportation projects should work toward improving. The second element, **measures**, is specified by federal regulations and prescribes what specific metrics must be addressed. The third step, **targets**, are to be set by DOTs and MPOs.

Step four is the creation of **plans** that are based on the set targets and will provide a detailed description of what actions will be implemented to achieve the targets. After the performance period has ended, step five of TPM is **reporting** about whether the actions outlined in step four were successful for not and what can be improved for the next set of targets and implementation.

Step six is about **accountability and transparency**. The accountability aspect of this step is the determination by FHWA or FTA on whether DOTs have met or made significant progress toward achieving

[1] FHWA, Performance Based Planning and Programming Guidebook, (Washington D.C., FHWA, 2013), 12.

their goals. MPOs are held accountable through the statewide and MPO planning process. The transparency aspect is publishing the reports to elected officials and the public. After step six, the TPM cycle repeats and should include the knowledge gained from the previous cycle.

3.2 FAST Act Performance-based Planning Framework

Performance-based planning refers to the application of performance management, "a strategic approach that uses performance data to support decisions to help achieve desired performance outcomes."[2] Performance-based planning occurs within the context of established transportation planning and programming processes used by agencies to deliver a multi-modal transportation system. Carrying forward performance-based planning and programming is meant to be an ongoing process, informed by quality data and public involvement throughout. **Figure 3-2** illustrates this process, which should also reflect local needs and priorities.

The KATS performance-based planning framework is shown in **Table 3-2**, which has been developed through an iterative process that included coordination and consultation with IDOT and transit providers in the region to develop targets.

Eastbound traffic on Armour Road, west of Arthur Burch Dr., backed up to the bridge over the Canadian National (ICG) Railroad.

[2] Ibid., iii.

Figure 3-2: Performance based planning framework

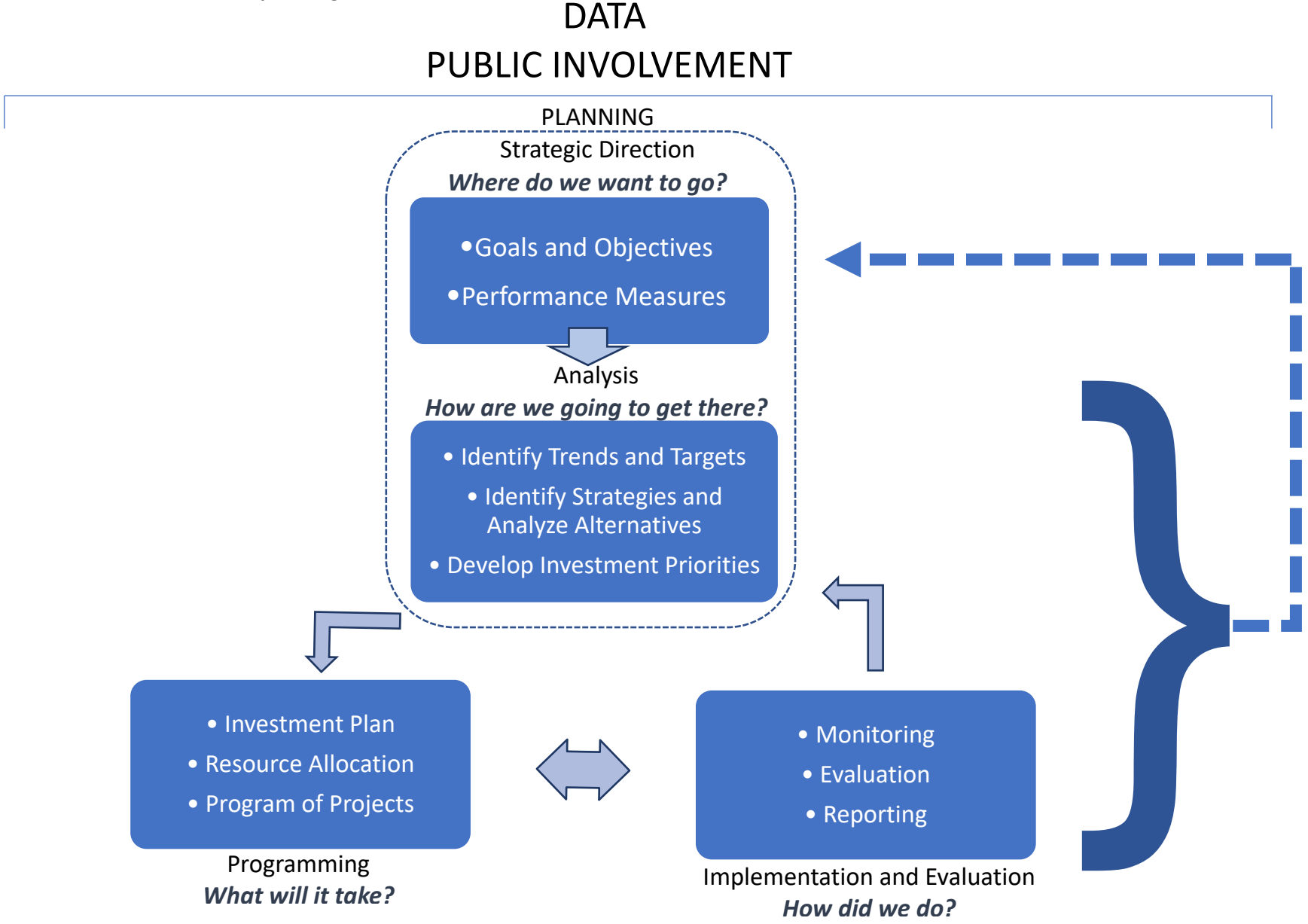


Table 3-2: KATS 2045 Goals, Objectives, and Strategies

Goals	Objectives	Strategies
1) **Safety:** The Kankakee region will prioritize the safety of the traveling public (all transportation modes) in order to develop a safe, well connected local and regional system that reduces crash exposure and advances the state's long-term goal of achieving zero deaths and serious injuries.	**a)** Reduce the number of fatalities and serious injuries.	Utilize the MPO Safety Committee to proactively analyze crash trends and address safety concerns within the County.
	b) Reduce the rate of fatalities and serious injuries per VMT.	Promote the 4 safety "E's" by working with IDOT and local resources (law enforcement, emergency response, media, etc.) to educate the public regarding safety issues.
	c) Reduce the total number of bicycle and pedestrian related crashes.	Develop a countywide bicycle network consisting of regional trails and on-street facilities that help reduce bicycle related crash exposure.
		Better accommodate heavy truck traffic on regional and local roadways to maintain the roadway infrastructure in a good, safe condition.
2) Economic Development: The Kankakee region will leverage existing and planned transportation infrastructure improvements (local and regional) to foster economic development opportunities throughout County.	**a)** Target interchange improvements along the I-57 corridor to help facilitate growth within the urbanized area.	Utilize the Bourbonnais Parkway (6000 N Interchange) to spur new development opportunities and improve east-west connectively within the region.
	b) Improve east-west connectivity through the region by strengthening the functional classification system.	Support the construction of the Illiana Expressway with a focus on relieving heavy truck traffic using Kankakee County roadways for local trip purposes only.
	c) Support the proposed Aviation Support Facility and Readiness Center at the Greater Kankakee Airport.	Support the construction of the South Suburban Airport (SSA) and the opportunities for regional travel connections, including public transportation service to the SSA.
	d) Support projects that enhance freight and passenger rail operations with the region.	Enhance the functional classification roadway network to adequately accommodate future truck traffic.
		Explore the feasibility of a new river crossing.
3) Increase Accessibility and Mobility: The Kankakee region will expand the existing multimodal transportation network to increase accessibility and mobility for the traveling public and enhance the movement of freight along designated transportation corridors.	**a)** Reduce travel times during a.m. and p.m. peak periods along major thoroughfares within the MPA.	Upgrade existing traffic signals and utilize ITS enhancements to enhance traffic flow, reduce travel delay, and improve safety within the region.
	b) Decrease the amount of freight truck traffic traveling through downtown Kankakee to improve overall traffic flow, increase safety and security, and enhance the quality of life.	Identify a long-term plan to better accommodate truck traffic within Kankakee County. Consider a detailed countywide study to identify appropriate truck corridors and to capitalize on new opportunities created by the Illiana Expressway and SSA.
	c) Identify a second river crossing location to strengthen roadway connectivity, enhance regional freight movements, and establish a secondary emergency route.	Prioritize Transportation System Management (TSM) and Transportation Demand Management (TDM) improvements to address existing capacity deficiencies.

	d) Enhance rail operations within the region by improving or eliminating at-grade rail crossings.	Improve the Brookmont Boulevard underpass to improve rail operations, enhance traffic flow, improve safety, and improve security for the general public.
	e) Utilize technology to improve travel flow and traffic safety.	
4) Alternative Transportation: The Kankakee region will continue to support the development of alternative transportation modes including public transportation, bicycling, and walking.	**a)** Develop a comprehensive regional non-motorized plan that links local communities within Kankakee County and extends the system beyond the County.	Work with local and regional partners to secure funding to complete the Riverfront Trail.
	b) Increase the number of on-street bicycle facilities within the urbanized area.	Work with local agencies to identify key bicycle segments, including those to increase access to fixed-route transit.
	c) Construct new ADA compliant sidewalks, or replace existing sidewalks.	Incorporate sidewalk improvements into reconstruction and new construction to support the use of alternative modes. Prioritize improvements that enhance connections to fixed-route transit.
	d) Increase transit ridership within the region.	
5) Preserve Existing Environment: The Kankakee region will support transportation improvements that preserve the existing transportation infrastructure, enhance the quality of life, and protect the environment.	**a)** Maintain and improve pavement condition within the MPA.	Continue to monitor truck traffic throughout the county with particular attention given to activity in eastern Kankakee County.
	b) Maintain and improve bridge/structures within the MPA.	Preserve existing roadway infrastructure by shifting truck traffic to roadways designed to accommodate heavy truck traffic.
	c) Preserve agricultural, parks, and forested areas by minimizing transportation related impacts.	Continue to support agribusiness and farming.
6) Enhance Transportation Choice: The Kankakee region will support transportation investments that enhance transportation choice for minority populations, low-income, older adults, persons with disabilities.	**a)** Increase the percentage of the Kankakee County population that is served by transit.	Consider the impact on low income and minority population served as part of the Environmental Justice process.

3.2.1 Performance-based Planning Progression

In recent years, more and more public agencies initiated the use of performance measurements to track their progress of defined goals and objectives and are reporting the results to both internal and external partners and stakeholders. The FAST Act carries forward the performance-based federal program that was established under MAP-21, reflecting a national movement toward transportation management that promotes performance-based planning practices and data-driven decision-making for both state departments of transportation (DOTs) and MPOs. Congress identified seven national goals for DOTs, MPOS, public transit agencies, and other planning agencies to address. These seven **national goals** establish the categories of the required performance-based planning and programming process for federal surface transportation programs. **Table 3-3** lists the seven national goals set forth under MAP-21 and continued in the FAST Act, 23 U.S.C. § 150 (2015).

Table 3-3: The Seven National Goals of the FAST Act

Safety	To achieve a significant reduction in traffic fatalities and serious injuries on all public roads.
Infrastructure Condition	To maintain the highway infrastructure asset system in a state of good repair.
Congestion Reduction	To achieve a significant reduction in congestion on the National Highway System.
System Reliability	To improve the efficiency of the surface transportation system.
Freight Movement and Economic Vitality	To improve the National Highway Freight Network, strengthen the ability of rural communities to access national and international trade markets, and support regional economic development.
Environmental Sustainability	To enhance the performance of the transportation system while protecting and enhancing the natural environment.
Reduced Project Delivery Delays	To reduce project costs, promote jobs and the economy, and expedite the movement of people and goods by accelerating project completion through eliminating delays in the project development and delivery process, including reducing regulatory burdens and improving agencies' work practices.

A **performance measure** is a metric used to measure progress toward achieving a goal. Five of the national goals have performance measures established by FHWA. Two of the national goals also have performance measures established by FTA. The two national goals that do not have performance measures are environmental sustainability, which was repealed in May 2018, and reduced project delivery delays. **Performance targets** are required to be established, which specify a desired level of performance within a defined timeframe. **Performance plans** are created to explain how the targets are expected to be achieved. After the timeframe for reaching the target has concluded, DOTs and MPOs must issue reports on the status of their performance measures and if the targets were achieved. The **Performance reports** should provide an updated current conditions assessment and an evaluation of the implementation of the performance plan and explain which areas worked and which areas may need improvement. MPOs are required to submit reports to their DOT and each DOT is required to submit reports to FHWA and FTA, and they will then submit reports to Congress. The entire performance-based process is cyclical and uses the performance reports from the previous cycle to be incorporated into the subsequent rounds of targets.

3.2.2 Performance-based Planning Implementation

The final rulemakings for the implementation of performance measures include dates of when targets must be established. Safety was the first goal to have a target deadline, followed by pavement and bridge conditions, and congestion reduction. The safety performance measure targets are unique because they must be set every year, whereas the other targets must be set in two-year or four-year intervals. The FAST Act gives MPOs 180 days after their respective DOT sets statewide targets to either support the state targets or establish targets for the MPO. KATS has elected to accept and support each of the targets established by IDOT.

3.3 Performance Measures

As previously mentioned, a performance measure is a metric used to measure progress toward achieving a goal. The following section will describe each of the performance measures for transportation safety, infrastructure condition, system reliability, and congestion reduction. Performance measures, established by FHWA, were rolled out in three sets. The first set, PM1, addressed transportation safety. The second set, PM2, focused on pavement and bridge conditions of the National Highway System (NHS). The third set, PM3, addressed transportation system performance on the NHS, freight movement on the interstate, and Congestion Mitigation and Air Quality.

3.3.1 Safety Performance Measures

Transportation safety was the first emphasis area to receive guidance, which reviews traffic fatalities and serious injuries. State DOTs are required to establish safety performance measures by August 31 of each year. IDOT most recently set targets on July 19, 2019. IDOT has set a two percent reduction for all five performance measures, which are documented in the Illinois Highway Safety Plan. The KATS Policy Committee has continued to elect to support all statewide targets set by IDOT, most recently on January 29, 2020.

Safety performance measures do not have the same defined performance period like the other performance measures. Instead, they have a performance year (PY), which is the year that targets are being set for. The performance year at the time of adoption of this plan is PY 2019. The base year is the year of data that is the most recently available, which is 2017. For transportation safety, performance measures are set every year. The performance measures for traffic safety are a five-year rolling average of each of the following:

- Total Fatalities.
- Total Serious Injuries.
- Rate of Fatalities per hundred-million vehicle miles traveled.
- Rate of Serious Injuries per hundred-million vehicle miles traveled.
- Combined total of non-motorized fatalities and serious injuries.

The current conditions and targets for each of the transportation safety performance measures are discussed in **Chapter 4**.

3.3.2 Infrastructure Condition Performance Measures

Unlike the safety performance measures, which address all public roads, the performance measures of PM2 address pavement and bridge condition and are only applicable to the NHS. **Figure 3-3** shows the roads in the KATS MPA that are part of the NHS. The following segments of road are on the NHS:

- I-57 through the entire KATS MPA.
- IL-1 from 2200S Road to just east of Sun River Terrace.
- IL-17 from Kennedy Drive in Kankakee to the eastern MPA boundary.
- IL-50 from its junction with U.S. 45/52 in Kankakee to the I-57 Exit-315 interchange in Bradley.
- U.S. 45/52 from Court Street in Kankakee to the northern KATS Boundary (11000N Road).
- County Highway 9 (9000N Road) from I-57 in Manteno to U.S. 45/52.

The following performance measures are used for pavement condition and bridge condition; four are for pavement and two are for bridges.

- Percent of interstate pavement in good condition.
- Percent of interstate pavement in poor condition.
- Percent of non-interstate NHS pavement in good condition.
- Percent of non-interstate NHS pavement in poor condition.
- Percent of NHS bridges classified as in good condition.
- Percent of NHS bridges classified as in poor condition.

On October 24, 2018, the KATS Policy Committee elected to support all statewide performance measures and targets for infrastructure condition. Current conditions and targets for each of the performance measures for pavement and bridge condition are discussed in **Chapter 4.**

3.3.3 System Performance and Freight Performance Measures

The performance measures of PM3 have two general types of measures. This section describes the first set, which is directed at system performance on the NHS and freight movement on the interstate. The following three performance measures are for system performance:

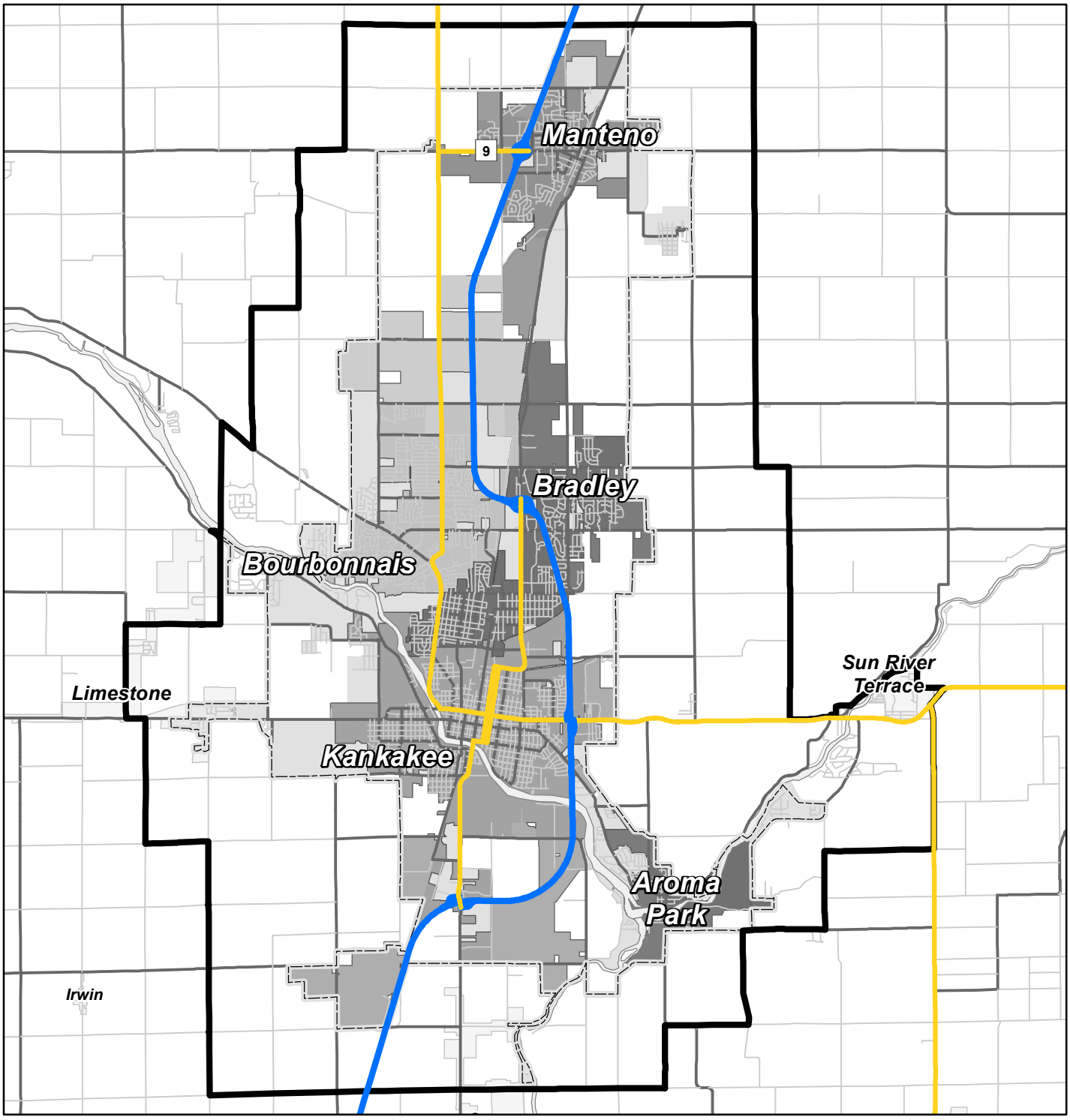
- Percent of person-miles traveled on the interstate that are reliable.
- Percent of person-miles traveled on the non-interstate NHS that are reliable.
- Truck travel time reliability index.

The percent of reliable person-miles traveled performance measure provides information on traffic consistency or dependability for the interstate and the non-interstate NHS. Travel time consistency can help travelers determine how long a given trip should be expected to take. If a trip were 100 percent reliable, it would always take the same amount of time. This would make it easy for someone to estimate how much time it would take to get from point A to point B. Alternatively, if a segment of road were 50 percent reliable, a traveler may want to allow more time for a trip because of the uncertainty of what traffic conditions may be like 50 percent of the time.

The truck travel time reliability index (TTRI) applies to the interstate system and monitors freight movements to assesses how consistent or dependable the interstate system is for freight. The reliability index evaluates data from five different travel periods, A.M. peak, mid-day, P.M. peak, overnight, and weekend to provide a comprehensive metric.

On October 24, 2018, the KATS Policy Committee elected to support all statewide performance measures and targets for system performance and freight movement. Current conditions and targets for each of the performance measures for system performance and freight movement are discussed in **Chapter 4.**

Figure 3-3: National Highway System Roads in the KATS MPA



NHS Roads

- Interstate
- Principal

- Corporate Limits
- Census Urbanized Area (UZA)
- Adjusted Urbanized Area (UAB)
- Metropolitan Planning Area (MPA)

N

Miles
0 ½ 1 2 3 4 5

Data Sources: Street Centerlines (2018), Illinois Department of Transportation, Census Urbanized Area, U.S. Census Bureau, Other data - Kankakee County.
Disclaimer: This map is for reference only. Data provided are derived from multiple sources with varying levels of accuracy. Kankakee Area Transportation Study disclaims all responsibility for the accuracy or completeness of the data shown.

3.3.4 Congestion Mitigation and Air Quality Performance Measures

The other performance measures that were released as part of PM3 pertain to Congestion Mitigation and Air Quality (CMAQ) improvements. The three performance measures for CMAQ are the following:

- Annual hours of peak hour excessive delay per capita.
- Percent of non-single occupancy vehicle travel.
- Total emission reductions.

The purpose of the CMAQ program is to fund projects and programs that help reduce traffic-caused air pollutants in areas that are not meeting the National Ambient Air Quality Standards (NAAQS). The performance measure for annual hours of peak hour excessive delay was created to measure the extra amount of time spent in congested traffic conditions when traffic is moving slower than what would be considered normal delay. The performance measure related to non-single occupancy vehicle (SOV) travel monitors the percentage of traffic that has at least two occupants in each vehicle

The performance measure for total emissions reduction only applies areas designated as nonattainment or maintenance for ozone (O^3), carbon monoxide (CO), or particulate matter (PM_{10} and $PM_{2.5}$). The goal is to monitor and assess pollutants that are expected to be reduced from implementing projects funded by the CMAQ program. These performance measures are applicable to urbanized areas with over one million population for the first PY and 200,000 population starting with the second PY. Current conditions and targets for CMAQ are discussed in **Chapter 4**.

3.3.5 Transit Asset Management

The FAST Act also includes performance measures for the Federal Transit Administration (FTA) to implement. The first performance measures and targets for public transit providers to establish and implement is in a transit asset management plan. The plan includes targets and strategies on how to achieve them. There are two main categories of performance measures for transit asset management: rolling stock and facilities. Rolling stock performance measures are separated into revenue vehicles and non-revenue vehicles. Performance measures for facilities are separated into administration/ maintenance facilities and passenger/parking facilities.

Under the federal regulations, there are two types of public transit providers, based on the size of the operator. Larger service providers are classified as Tier 1 Transit Providers, which are large system operators with 100+ vehicles in service during peak periods and are a direct recipient of FTA. Tier 1 agencies are required to have an individual agency transit asset management plan (TAM plan). Smaller transit providers are classified as Tier 2 Transit Providers. They are smaller system operators with less than 100 vehicles in service during peak periods and may receive FTA funds through their respective state. Tier 1 providers are permitted to create a group transit asset management plan of Tier 2 providers. The Illinois Statewide TAM Plan was created by Illinois Rural Transit Assistance Center which provides transit technical assistance for IDOT. METRO and Kankakee County both joined IDOT's statewide group TAM Plan.

3.3.6 Air Quality Performance Measures

MPOs categorized as air quality non-attainment areas are required to set targets for air quality improvement. A non-attainment area is an area that does not meet the required level of greenhouse gas emissions. In non-attainment areas, ozone (O_3), carbon monoxide (CO), and particulate matter (PM_{10} or

PM_2) may be exceeding permitted air quality levels. There are only two MPOs that are classified as non-attainment areas in Illinois, which are the Chicago and St. Louis metropolitan areas. KATS is an air quality attainment area and therefore air quality improvement targets do not apply.

3.3.7 Performance Measure Timeframe and Schedule

A key component of performance targets is the specification of a timeframe to define the performance period. Safety performance measures (PM1) are unique in that targets are set annually to a performance year. State DOTs set targets by August 31 of each year and MPOs have 180 days to accept and support those targets or develop MPO-area targets.

Besides the exceptions described below, the other performance measures (for PM2 and PM3) have 4-year performance periods that began on January 1, 2018, and will end on December 31, 2021. The only performance measure on a different schedule is for the air quality emissions reduction. Additionally, the first baseline performance report for all measures for State DOTs was due on October 1, 2018. There is also a mid-performance period report, marking the half-way point of the four-year period, which is due by October 1, 2020. For all performance measures that apply to an MPO, the MPO has 180 days to accept and support statewide targets or develop MPO-area targets.

State DOTs were only required to submit 2-year and 4-year targets for the percent of person-miles traveled on the interstate that are reliable, along with the baseline data reported by October 1, 2018. For the non-interstate, NHS performance measure, only a 4-year target is required and the submission of baseline data was not required. State DOTs may adjust the non-interstate, NHS targets when the mid-performance period report that is submitted on October 1, 2020. **Table 3-4** includes a timeline of when performance measures were adopted by IDOT and the KATS Policy Committee.

Transit asset management plans are required to be updated on a 4-year cycle, due on October 1, starting in 2018. The targets within the plan are required to be reported on and updated annually. As previously mentioned, both METRO and Kankakee County have opted into the Illinois Statewide Transit Asset Management Plan. MPOs are also required to establish or support statewide targets within 180 days of the state's target setting. The KATS Policy Committee decided to support the Statewide Tier 2 Group Transit Asset Management Plan.

For the CMAQ performance measures related to peak hour excessive delay and non-SOV travel, the first performance period is only applicable urbanized areas with a population over 1 million that do not meet the attainment levels for ozone (O^3), carbon monoxide (CO), or particulate matter (PM_{10} and $PM_{2.5}$). Starting with the second performance period, urban areas with a population of over 200,000 will be included. According to FHWA's frequently asked questions for PM2 and PM3 from June 2017, these performance measures will not apply to urbanized areas with a population under 200,000. The CMAQ performance measure for total emission reductions has a different 4-year performance period. The first performance period for this particular measure began on October 1, 2017, and ends September 30, 2021.

Table 3-4: Dates of adoption of performance measure targets by IDOT and KATS Policy Committee.

Performance Measure Category	IDOT Adoption Date	KATS Approval Date
Safety (2017)	August 31, 2017	February 6, 2018
Pavement and Bridges	May 18, 2018	October 24, 2018
System Performance	May 18, 2018	October 24, 2018
Transit Asset Management Plan	October 1, 2018	February 28, 2019
Safety (2018)	August 31, 2018	February 28, 2019
Safety (2019)	July 19, 2019	January 29, 2020

Chapter 4: Performance Targets

4.1 Overview of Performance Measure Targets

In 2012, the Moving Ahead for Progress in the 21st Century (MAP-21) Act was signed into law. Although intended to be a short-term bill, MAP-21 introduced a new method of funding surface transportation projects through a performance-based planning process. In December 2015, the Fixing America's Surface Transportation (FAST) Act was signed into law, which continued the performance-based process.

A key component of the performance-based planning process is the requirement of establishing performance measures and targets. A target is a specific level of performance that is desired to be achieved within a certain timeframe. While a target serves as a goal for its given performance measure, targets also act as benchmarks that can be used to show changes over time.

Once targets are set, plans can be created. The targets are short-term with a one to four-year timeframe and the process of reviewing and adopting targets is a continual cycle. While a long-range transportation plan is required to have a 20-year minimum planning horizon, targets will be reviewed and modified several times before the realization of this plan's term has ended. The performance-based planning process will also become more robust over time after it goes through its cycle a few times.

The main transportation corridors in the KATS MPA are highways that are owned and maintained by IDOT, including local highway bridges over I-57. As a result, many of the highway projects programmed in the region are IDOT projects along state roads. KATS receives federal surface transportation block grant (STBG) funds (previously called surface transportation program (STP) funds), which the KATS Policy Committee uses to program locally sponsored projects on the federal-aid highway system. KATS member agencies also regularly apply for other funding programs to support other local projects.

The KATS Policy Committee has elected to support all of IDOT's statewide performance targets, with the exception of CMAQ targets, which are not applicable to KATS. The targets outlined in this chapter will show what IDOT's statewide targets are and what they would equate to when applied to the KATS MPA. Because the Policy Committee's decision places an effort on transportation improvements helping IDOT achieve statewide targets, when the performance reporting data becomes available, it will be presented in a manner that indicates whether KATS has been a positive or negative contributor to statewide targets. KATS also has a Safety Committee to address highway safety issues in the region. The following tables and charts show the current statewide targets for performance measures and how the KATS MPA relates to them.

4.2 Safety Targets

The first set of performance measures rolled out were for traffic safety. Data for traffic fatalities and serious injuries are made available by IDOT and the most recent year of data is for 2017. The safety performance measures use a 5-year rolling average to help balance annual variability of fatalities and serious injuries. This is particularly important for areas with relatively low numbers because an individual fatality or serious injury makes up a larger percentage of the whole. This variability can be seen in **Table 4-1**, which shows the most recent data available for safety performance measures.

Table 4-1: Number of fatalities, serious injuries, & non-motorized in the KATS MPA

	2009	2010	2011	2012	2013	2014	2015	2016	2017	Total
Fatalities	7	5	8	6	7	8	6	15	11	73
Serious Injuries	114	110	108	135	83	106	126	129	133	1,044
Fatality Rate	0.91	0.66	1.07	0.82	0.97	1.12	0.86	2.11	1.60	-
Serious Injury Rate	14.82	14.53	14.49	18.39	11.48	14.89	17.98	18.11	19.31	-
Non-Motorized	6	7	12	9	9	5	8	4	9	69

Source: IDOT crash data, 2009-2017.

There are five performance measures for safety. Two of them are five-year rolling averages for the number of fatalities and serious injuries as a result of a crash. Another is the combined number of fatalities and serious injuries for pedestrians and bicyclists, also referred to as non-motorized. **Table 4-2** shows the rolling averages for all five performance measures.

August 31, 2018: IDOT set a 2% reduction for all five traffic safety targets.

While the standalone numbers of fatalities and serious injuries are important, it is also important to establish the frequency that they are occurring at. Because of this importance, rates were also included as part of the federal requirements. A rate is simple a way of measuring the number of fatalities and serious injuries relative to the amount of traffic. A rate allows for comparisons between years because it takes into account any increases or decreases in traffic. A rate can also be used to compare geographic areas, such as dense urban areas and spread out rural areas or similar area types of different regions.

The other two safety performance targets are the rates of fatalities and serious injuries per hundred-million vehicle miles traveled (HMVMT). **Table 4-2** includes the five-year rolling averages for these rates.

The rate is calculated is by multiplying the annual number of fatalities or serious injuries by 100,000,000 and then dividing by the vehicles miles traveled (VMT) for the year. VMT data is provided by IDOT in the annual publication of statewide travel statistics, which includes VMT at the MPO geographic level. Reported VMT tables are listed in **Chapter 5**. Below is the equation to calculate the fatality rate. The rate for serious injuries is identical, but uses the number of serious injuries instead of fatalities.

***PY Annual Fatality Rate** = # of Fatalities x 100,000,000 ÷ Annual Vehicle Miles Traveled*

***5-Year Rolling Average** = (PY1 Rate + PY2 Rate + PY3 Rate + PY4 Rate + PY5 Rate) ÷ 5*

Table 4-2: Safety Performance Measure 5-year rolling averages

	5-Year Rolling Averages					2% Reduction	
	2013	2014	2015	2016	2017	2018	2019
Fatalities	6.6	6.8	7.0	8.4	9.4	9.212	9.03
Serious Injuries	110	108.4	111.6	115.8	115.4	113.1	110.8
Fatality Rate	0.89	0.93	0.97	1.17	1.33	1.30	1.28
Serious Injury Rate	14.74	14.76	15.45	16.17	16.36	16.03	15.71
Non-Motorized	8.6	8.4	8.6	7	7	6.9	6.7

Source: IDOT crash data, 2009-2017.

It's important to understand that even if the number of crashes is the same between two years, the rate of fatalities and serious injuries can increase or decrease if the VMT changes. Due to the relationship between the number of fatalities or serious injuries and the total VMT, it may be appropriate to adjust the actual target for the total number of fatalities or serious injuries in order to meet the target for a rate. This means that in order to achieve a target that is a 2 percent decrease in rate, both the number of fatalities or serious injuries and how many VMT are estimated for the year should be considered.

Non-motorized modes of transportation also have safety targets assigned to them. **Table 4-2** shows the 2 percent reduction of the combined non-motorized fatalities and serious injuries annually.

The penalty for a state DOT not meeting targets or making significant progress is to be required to obligate HSIP funds on projects that improve traffic safety.

METRO Bus with "Drop it and Drive" safety campaign ad.

4.3 Bridge and Pavement Condition Targets

The second set of performance measures (PM2) is for pavement and bridge conditions. There is a total of six performance measures between the two categories. These performance measures only apply to roads and bridges that are a part of the National Highway System (NHS). IDOT set pavement and bridge condition targets on May 18, 2018. The performance period is for four years and they can be adjusted halfway through. IDOT has provided pavement and bridge condition data to KATS.

The pavement and bridge data were prepared by IDOT staff. As prescribed by 23 CFR 490, the criteria and condition thresholds for good, fair, or poor were followed. The factors used to determine pavement condition are the international roughness index (IRI) (inches per mile), rutting (inches), faulting (inches), and cracking (percent). The performance measures for pavement condition specify segments of road to be analyzed in lengths of 1/10th of a mile. The data on pavement and bridge conditions are the actual condition and not a weighted average. The most current data is the 2016-2017 dataset.

Below are the performance measures for pavement condition. For the Interstate, IDOT set targets of 65 percent of pavement to be in *good* condition and less than 5 percent to be in *poor* condition. The baseline data in 2017 showed the statewide percentage of interstate pavement in *good* condition to be 65.96 percent and 0.27 percent to be in poor condition.

KATS staff reviewed projects in the KATS TIP from various years to establish construction that occurred after the base-year data was collected and future projects currently programmed. The lane miles of TIP projects on the NHS were used to adjust the base data to create future pavement condition projections. Staff further projected future pavement condition by estimating which segments would degrade from *good* to *fair* and *fair* to *poor* condition for base-year data that were categorized slightly above *poor* or *fair* condition. **Table 4-3** shows a summary of the base-year pavement and bridge condition, statewide targets, and the future estimated condition in the KATS MPA. **Figure 4-1** shows the base-year pavement and bridge conditions. **Figure 4-2** shows the projected pavement and bridge condition at the end of the performance period.

Penalties for pavement condition may be imposed on a state DOT by FHWA if the statewide percent of lane-miles on the interstate rated in *poor* condition exceeds 5.0 percent. In this event, the state DOT would be required to obligate formulated amounts of NHPP and STP funds for the purpose of improving condition and resuming compliance.

IL-17 Bridges over Baker Creek were in poor condition prior to replacement work in 2019/2020.

Penalties for bridge condition may be imposed on a state DOT by FHWA if it is determined that more than 10.0 percent of the total deck area of bridges in the state on the NHS is

located on bridges that have been classified as structurally deficient. In this event, the state DOT would be required to obligate formulated amounts of NHPP and STBG funds for the purpose of correcting non-compliance.

4.3.1 Interstate Pavement Condition Performance Measures

The first pair of performance measures for infrastructure condition is the percent of lanes miles on the interstate that are in *good* and *poor* condition. The KATS MPA base year data for 2016-2017 indicated that nearly 47 percent of the Interstate lane miles is in *good* condition. The base-year data also indicated the KATS MPA is currently meeting the statewide target for Interstate pavement in *poor* condition at 2 percent. Based on construction projects that have occurred after the base-year data was collected and projects included in the KATS TIP, it is estimated that 88 percent of the interstate will be in *good* condition and no pavement will be in *poor* condition by 2022, which means KATS is expected to be a positive contributor to both statewide targets.

4.3.2 NHS Non-Interstate Pavement Condition Performance Measures

The second set of performance measures for infrastructure condition are the percent of lane miles on the NHS non-interstate in *good* and *poor* condition. IDOT statewide targets are 27 percent of NHS non-interstate lane miles in *good* condition and no more than 6 percent in *poor* condition in 2022. Within the KATS MPA, the base-year data, provided by IDOT, indicates about 29 percent of the NHS non-interstate was in *good* condition and 14 percent was in *poor* condition. Based on construction projects that have occurred after the base-year data was collected and projects included in the KATS TIP were considered, it is estimated that approximately 52 percent of NHS non-interstate lane miles will be in *good* condition in 2022 and slightly over 6 percent will be in *poor* condition, which means KATS is expected to be a positive contributor toward statewide pavement in *good* condition, but a slightly negative contributor toward statewide pavement in *poor* condition.

4.3.3 National Highway System Bridge Condition Performance Measures

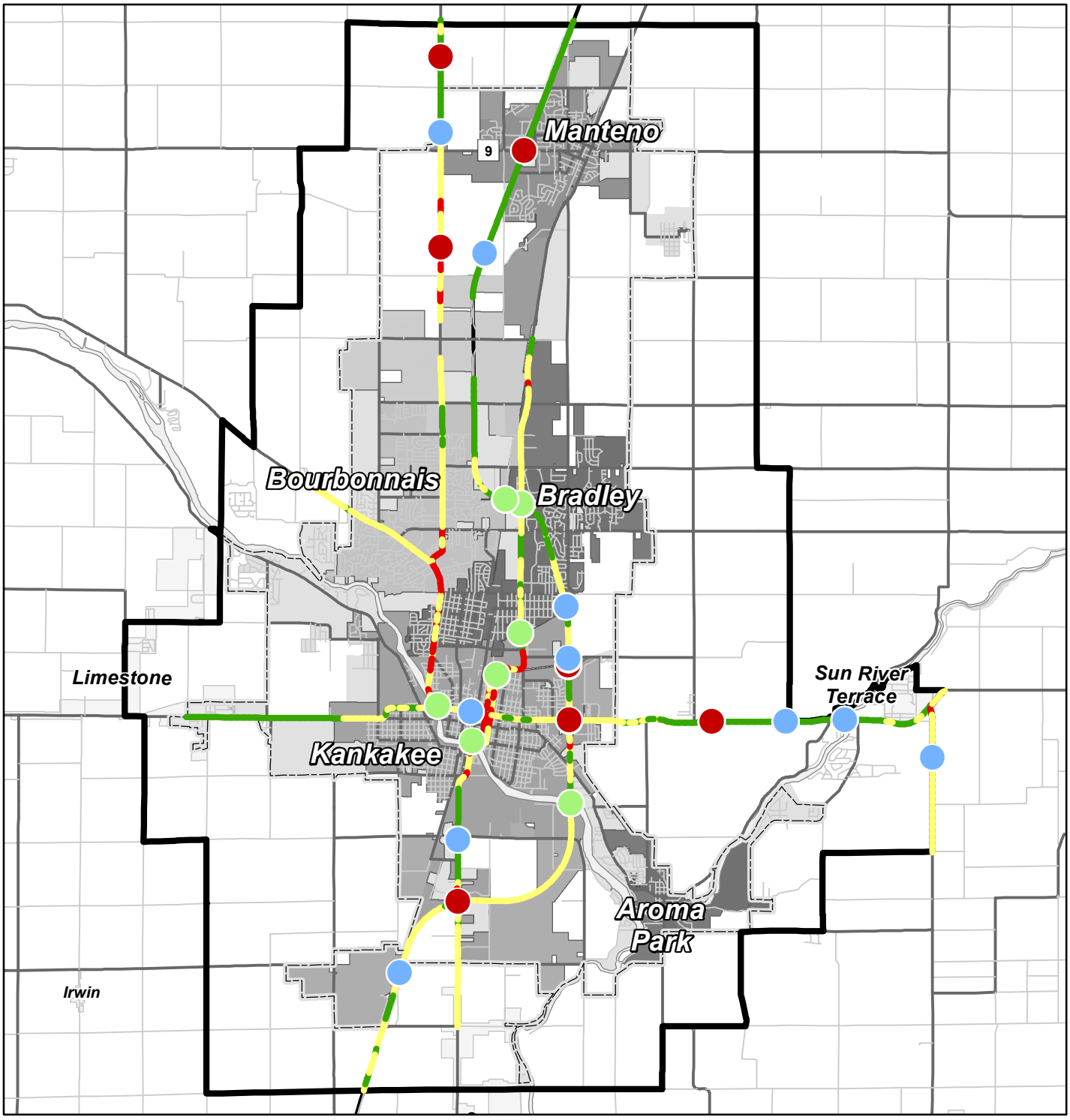
The third pair of performance measures for infrastructure condition is the percent of bridges on the NHS that are categorized as in *good* condition and *poor* condition. The statewide targets are 27 percent to be in *good* condition and no more than 14 percent in *poor* condition in 2022. Within the KATS MPA, the base-year data, provided by IDOT, indicate that almost 56 percent of the NHS Bridges were in *good* condition and slightly more than 23 percent were in *poor* condition. Based on construction projects that have occurred after the base-year data was collected and projects included in the KATS TIP, it is estimated that about 35 percent of NHS bridges will be in *good* condition and almost 19 percent will be in *poor* condition in 2022, which means KATS is expected to be a positive contributor toward statewide targets for *good* bridge condition and a negative contributor toward statewide targets for *poor* bridge condition.

Table 4-3: Pavement and Bridge Condition Performance Measures and Targets

Metric	Illinois 2017 Base-Year	IDOT 2020 Target	IDOT 2022 Target	KATS 2017 Base-Year	KATS 2022 Projection
Percent of interstate pavement in *good* condition	65.96%	65.00%	65.00%	46.73%	87.94%
Percent of interstate pavement in *poor* condition	0.27%	<5.00%	<5.00%	2.01%	0.00%
Percent of NHS non-interstate pavement in *good* condition	27.71%	27.00%	27.00%	28.94%	49.28%
Percent of NHS non-Interstate pavement in *poor* condition	4.94%	6.00%	6.00%	14.03%	6.74%
Percent of NHS bridges classified as in *good* condition	29.40%	28.00%	27.00%	55.92%	35.07%
Percent of NHS bridges classified as in *poor* condition	11.60%	13.00%	14.00%	23.42%	18.79%

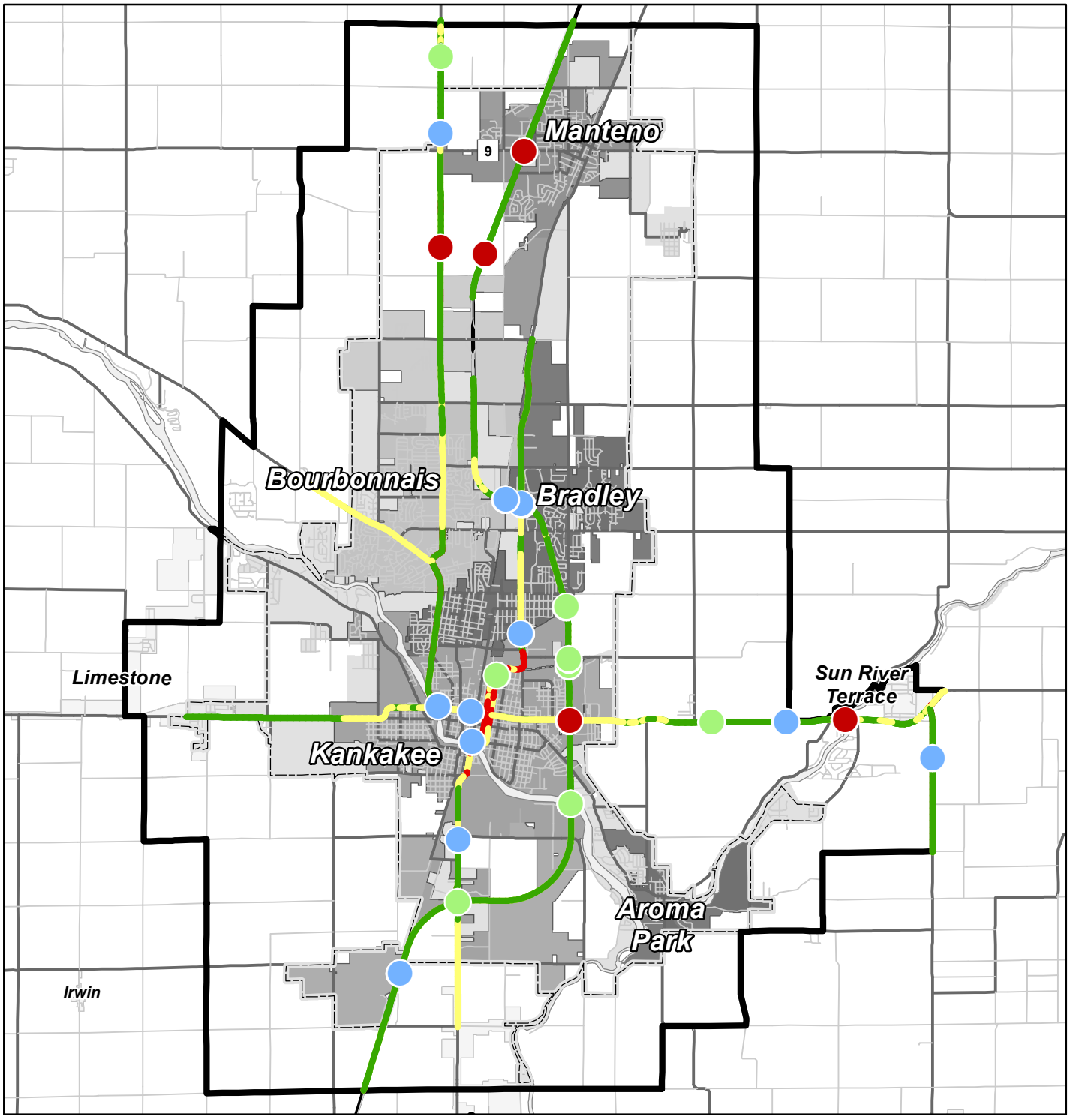
Source: IDOT pavement and bridge condition data, 2016.

Figure 4-1: NHS Pavement and Bridge Condition (2016) in the KATS MPA



Data Sources: Street Centerlines (2018) and Pavement Data (2016), Illinois Department of Transportation, UZA, U.S. Census Bureau, Other data - Kankakee County.
Disclaimer: This map is for reference only. Data provided are derived from multiple sources with varying levels of accuracy. Kankakee Area Transportation Study disclaims all responsibility for the accuracy or completeness of the data shown.

Figure 4-2: Estimated Future NHS Pavement and Bridge Condition in the KATS MPA



Data Sources: Street Centerlines (2018) and Pavement Data (2016), Illinois Department of Transportation, UZA, U.S. Census Bureau, Other data - Kankakee County.
Disclaimer: This map is for reference only. Data provided are derived from multiple sources with varying levels of accuracy. Kankakee Area Transportation Study disclaims all responsibility for the accuracy or completeness of the data shown.

4.4 System Performance and Freight Performance Measure Targets

The system performance and freight performance measures monitor traffic conditions by assessing the reliability of the transportation system of the interstate and non-interstate NHS. Both are a part of the third set of performance measures (PM3). System performance measures apply to the NHS and the freight measure is only for the interstate. There is a total of three performance measures, two for system performance and one for freight, which are listed below.

- Percent of person-miles traveled on the interstate that are reliable
- Percent of person-miles traveled on the non-interstate NHS that are reliable
- Freight travel time reliability index on the interstate

The percent of person-miles traveled on the interstate that are reliable has 2-year targets and 4-year targets. Both the percent of person-miles traveled on the non-interstate NHS that are reliable and the freight travel time reliability index have only a 4-year target.

For calculating travel time reliability, several datasets are needed. These include NHS travel time and segment data, annual average daily traffic (AADT), annual volume (AADT x 365), and occupancy factors. The baseline conditions for the MPO are derived using data provided by the National Performance Management Research Data Set (NPMRDS), the Highway Performance Monitoring System (HPMS), and FHWA. Data that is collected for the NPMRDS is continuously collected throughout the year and the data is separated into various travel time periods. The performance measure periods for Monday through Friday are 6 AM to 10 AM, 10 AM to 4 PM, and 4 PM to 8 PM. For Saturday and Sunday, the time period is 6 AM to 8 PM. Traffic congestion is measured by the annual hours of peak hour excessive delay (PHED) per capita on the NHS. Excessive delay will be based on travel time at 20 miles per hour or 60 percent of the posted speed limit travel time, whichever is greater, in 15-minute intervals per vehicle.

There have been no projections created by NPMRDS for the 2020 target year, however the baseline data indicates KATS is a positive contributor toward statewide targets. There are no financial penalties for these targets, but there could be a requirement for more reporting in the future.

4.4.1 Non-Freight Travel Time Reliability Targets

The reliability of the interstate is measured as a percent of person-miles travel on the Interstate that is considered reliable with the goal of being able to estimate how often a person can expect to have a consistent travel time between their origin and destination. Reliability is measured by using an index called the Level of Travel Time Reliability (LOTTR), which is the ratio of the 80th percentile travel time of a reporting segment to a “normal” travel time (50th percentile). If reliable, the segment being reported will have an index value of less than 1.50. A value of 1.50 would indicate that eight out of ten times a traveler could expect to have the same travel time between their origin and destination.

The statewide targets set by IDOT for interstate reliability are 79 percent reliability by 2020 and 77 percent reliability by 2022. The 2017 baseline data for the Kankakee MPA Interstate was 100% reliability. The statewide targets for non-interstate NHS are 85.3 percent reliability by 2020 and 83.3 percent reliability by 2022. The 2017 baseline data for the interstate within the KATS MPA was 89.7 percent reliable. Each year the target is lowered due to the expectation that reliability conditions will degrade. **Table 4-4** summarizes the non-freight travel time reliability targets.

Table 4-4: Non-Freight Travel Time Reliability Targets

Metric	IL 2017 Baseline	IDOT 2020 Target	IDOT 2022 Target	KATS 2017 Baseline
Percent of person-miles traveled on the interstate that are reliable	80.8%	79.0%	77.0%	100%
Percent of person-miles traveled on the non-interstate NHS that are reliable	87.3%	85.3%	83.3%	89.7%

Source: IDOT statewide performance targets, NPMRDS, RITIS.

4.4.2 Freight Travel Time Reliability Targets

Freight is a separate measure from passenger vehicles, but data is collected from similar sources, but also includes and the addition of the overnight period for Saturday and Sunday from 8:00 PM to 6:00 AM. Freight movement is assessed by the Truck Travel Time Reliability (TTTR) Index. The TTTR Index is calculated by starting with determining the TTTR Ratio (dividing the 95th percentile time by the normal time (50th percentile)) and multiplying it by its length. This is done for each road segment for each travel time period. Then the sum of each maximum TTTR ratio for each interstate segment is divided by the total Interstate system miles. A value closer to 1.00 indicates greater travel time reliability. The following formulas are used:

$$Truck\ Travel\ Time\ Reliability\ Ratio = \frac{Longer\ Truck\ Travel\ Time\ (95th)}{Normal\ Truck\ Travel\ Time\ (50th)} = \frac{\#\ Seconds}{\#\ Seconds}$$

$$Truck\ Travel\ Time\ Reliability\ Index = \frac{Sum\ of\ Each\ Maxium\ TTTR\ Ratio\ x\ Segment\ Length}{Total\ Interstate\ System\ Miles}$$

The statewide targets set by IDOT are a TTTR Index value of 1.34 by 2020 and 1.37 by 2022. The 2017 base year data for the Kankakee MPA indicated the target was being met, with a TTTR Index value of 1.12.

Table 4-5: Freight Travel Time Reliability Index Targets

Metric	IL 2017 Baseline	IDOT 2020 Target	IDOT 2022 Target	KATS 2017 Baseline
Truck Travel Time Reliability Index	1.30	1.34	1.37	1.12

Source: IDOT statewide performance targets, NPMRDS, RITIS.

4.4.3 Congestion Mitigation and Air Quality Targets

The performance measures included in PM3 are for monitoring air quality. While KATS is an air-quality attainment area, this section is being included for informational purposes. Two performance measures are used to address traffic congestion and air quality issues for nonattainment areas. The first is the annual hours of peak hour excessive delay (PHED) per capita. The second measure is the percent of non-single occupancy vehicle (SOV) travel. For regions that are a nonattainment area, additional criteria must be met in order to be required to be subject to these measures. The area must be a designated urbanized area, the area must contain NHS mileage, and the area must have a population over 200,000. MPOs may use volume counts for each mode to determine the percent non-SOV travel and will be encouraged to report any additional data to FHWA. This will recognize funding used for investments in non-automobile transportation.

4.4.4 Transit Asset Management Targets

The KATS Policy Committee elected to support the Statewide Tier 2 Group Transit Asset Management Plan and the performance targets contained in the plan. Below are the targets that were included in the Statewide Tier 2 Transit Asset Management Plan. The targets for vehicles are based on the state of good repair and the useful service life of vehicles. Facility targets are based on the state of good repair on a scale of zero (worst condition) to five (best condition). **Table 4-6** outlines the IDOT Tier 2 Group Statewide TAM Plan targets.

Table 4-6: IDOT Tier 2 Group Statewide Transit Asset Management Plan

Revenue Vehicles Buses: 30% at or beyond useful vehicle service life Mini-buses: 48% at or beyond useful vehicle service life Minivans: 67% at or beyond useful vehicle service life Vans: 52% at or beyond useful vehicle service life
Non-Revenue Vehicles Automobiles: 46% at or beyond useful vehicle service life Minivans: 56% at or beyond useful vehicle service life Vans: 0% at or beyond useful vehicle service life Other rubber tire vehicles: 100% at or beyond useful service life
Facilities Admin & Maintenance: 17% rated below 3.0 Passenger & Parking: 11% rated below 3.0

Source: IDOT Statewide Tier 2 Transit Asset Management Plan.

4.5 Targets – Going Forward

The federal requirements of performance-based planning and programming have provided a framework for establishing and monitoring performance measures and targets. The cyclical process of monitoring traffic data and determining performance targets can lead to measurable improvements in the transportation system as projects are identified and implemented. KATS will continue to monitor and report on all federally required performance measures in accordance with federal laws and regulations. These reports will be able to illustrate changes in the transportation system and may be used to identify future needs and make better investment decisions. As the performance periods end and the data for each becomes available, KATS will create reports as required by federal law and regulations and with the guidance of its federal and state partners.

Warner Bridge over the Kankakee River.


Bourbonnais
Parkway
EXIT
318

5.1 Overview

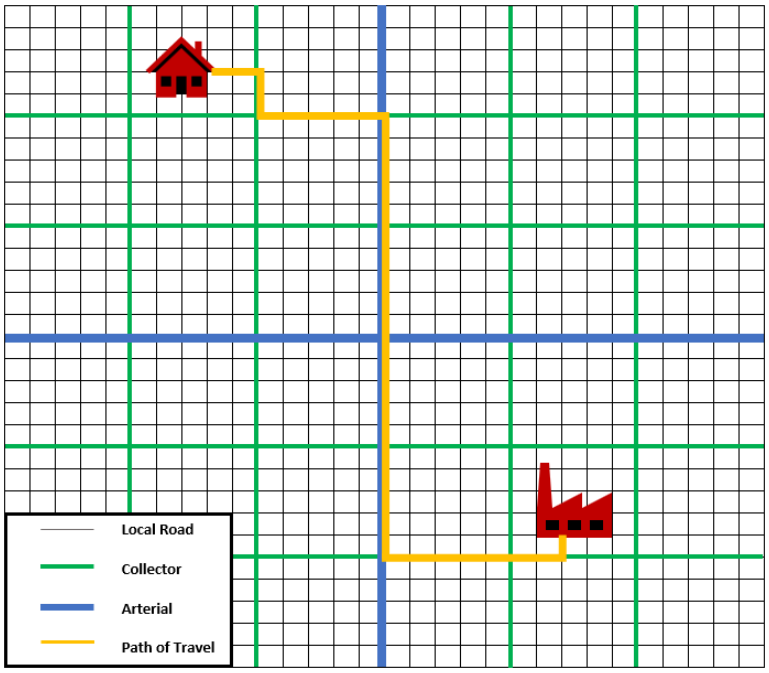
The KATS region has an extensive roadway network that provides service to the KATS MPA. Interstate 57, U.S. 45/52, and IL-50 all continue north to Will County and the Chicago region. The system serves a number of users, including a large percentage of truck traffic that moves goods within and through the region.

5.2 Functional Classification

Roadway functional classification is a system that groups streets and highways into similar classes based on how they function in serving traffic relative to the rest of the highway network. According to the Federal Highway Administration's publication "Highway Functional Classification Concepts, Criteria and Procedures" (2013), the total mileage of roadways by functional classification becomes less as the category ascends the hierarchy.

Typically, there are the fewest miles of arterial roads, including interstates and principal and minor arterials. However, they provide the greatest distance of a vehicle trip. The total mileage of collector roadways is more than arterials and less that local roads; they provide a mid-level distance of travel per trip. Local roads comprise the majority of roadways in the transportation network because they are often the first and last segment to connect travelers to their origin and destination. **Figure 5-1** Illustrates the typical trip pattern. As a result, local roads typically make up the smallest segments for a trip. **Table 5-1** shows the mileage of each roadway classification in the KATS MPA.

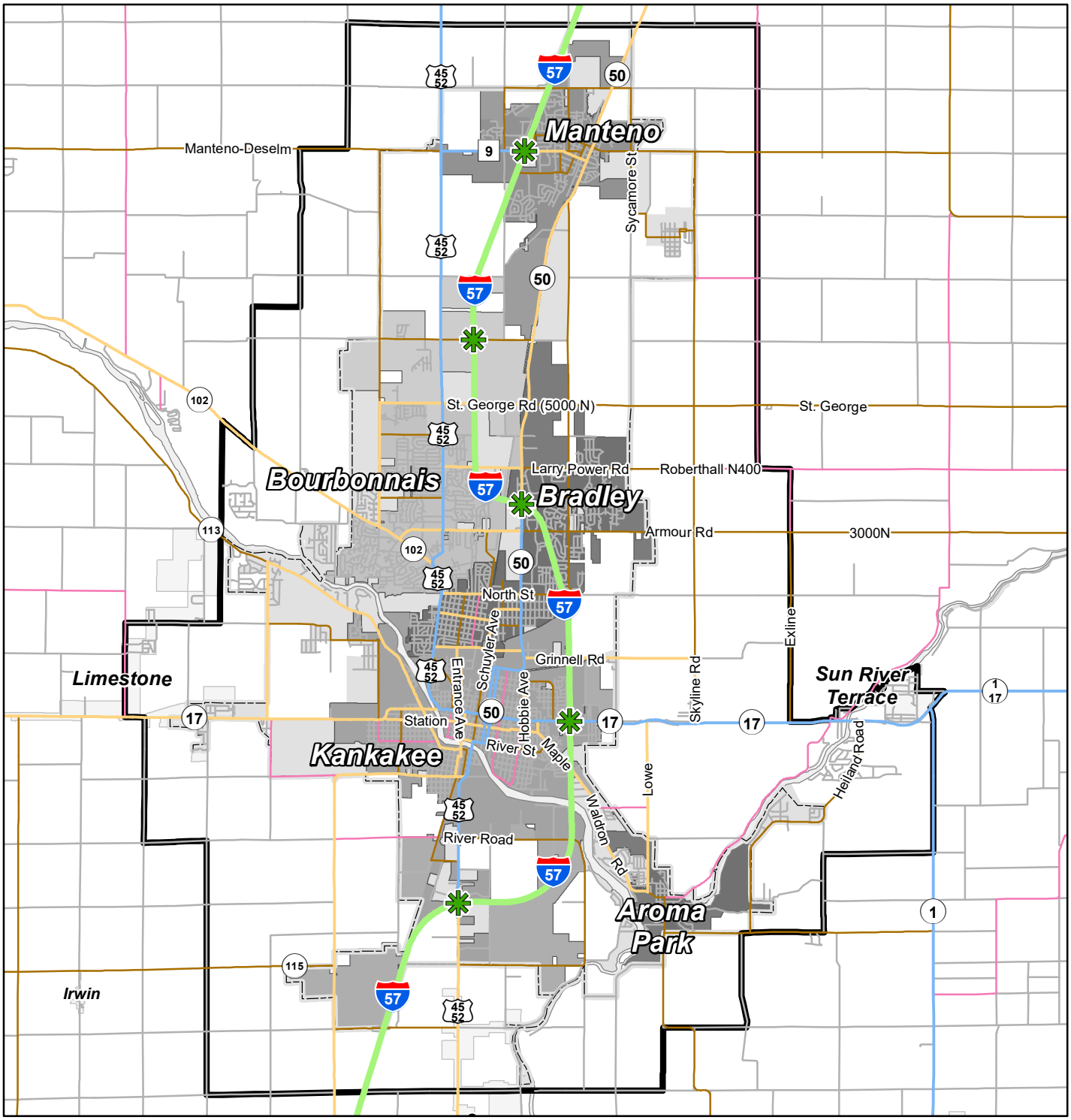
Figure 5-1 – Typical Functional Classification Path of Travel



The lack of contiguous east-west transportation routes in the KATS MPA remains a challenge for both personal and freight movements. Many of the existing east-west routes are not adequately designed to serve freight, yet trucks regularly use roadways that were not intended, or constructed, to carry them. The Eastern Kankakee County Truck Study (2012) showed that some rural roads carry as much as 50 percent truck traffic.

The existing functional classification of roadways in the KATS MPA is shown in **Figure 5-2**. The functional classification includes collector roadways and higher classifications. The system consists of a number of important routes, including I-57, which has a continuous alignment in the north-south direction, and IL-17, which has a continuous east-west alignment. U.S. 45/52 is a north-south roadway that traverses the KATS MPA. A number of other roadways intersect the KATS MPA, including Illinois Routes 1, 50, 102, 113, and 115.

Figure 5-2: Federal Functional Classification of Roads in the KATS MPA



Federal Functional Classification

- Interstate
- Other Principal Arterial
- Minor Arterial
- Major Collector
- Minor Collector
- Local Road

- I-57 Interchange
- Corporate Limits
- Census Urbanized Area (UZA)
- Adjusted Urbanized Area (UAB)
- Metropolitan Planning Area (MPA)

N

Miles
0 ½ 1 2 3 4 5

Data Sources: Street Centerlines (2018), Illinois Department of Transportation, UZA, U.S. Census Bureau, Other data - Kankakee County.
Disclaimer: This map is for reference only. Data provided are derived from multiple sources with varying levels of accuracy. Kankakee Area Transportation Study disclaims all responsibility for the accuracy or completeness of the data shown.

Table 5-1: Mileage of Road by Federal Functional Classification in the KATS MPA

Classification Name	Classification #	Centerline Miles	Percent
Interstate	1	19.8 (excl. ramps)	3%
Other Freeway & Expressway	2	0.00	0%
Other Principal Arterial	3	31.7	5%
Minor Arterial	4	62.8	9%
Major Collector	5	88.5	13%
Minor Collector	6	27.3	4%
Local Road	7	451.1	66%
Total	-	681.1	100%

Source: IDOT T2 GIS 2018 Highway Shapefile.

5.3 Number of Lanes

The number of lanes a road has can be important in determining the amount of traffic and congestion an area may experience. Within the KATS MPA, two-lane and four-lane roads make up over 99 percent of roads. Some roads include a center bi-directional turn lane to increase road efficiency by reducing delays for vehicles making left turns. Rural roadways, except for state marked routes that traverse the region, are primarily two lanes. I-57, U.S. 45/52, and IL-50 are four lanes that provide regional north-south connectivity. IL-17 is four lanes from west Kankakee to the eastern MPA boundary and provides regional east-west connectivity. Within the KATS urban area, some local roadways are four lanes, including Armour Road, North Street, and Wm. Latham Sr. Drive. The short segment of IL-50 north and south of I-57, in Bradley, has six lanes to accommodate the increased amount of traffic in the area. **Table 5-2** shows the mileage of road by number of lanes and percent of the roadway system. **Figure 5-3** illustrates the locations of roads in the KATS MPA by number of lanes.

In fall 2018, the construction project of adding a new interchange at I-57 and Bourbonnais Parkway was completed and opened to traffic. Bourbonnais Parkway was widened from two lanes to four lanes to address future traffic demand as the land around the interchanges becomes developed.

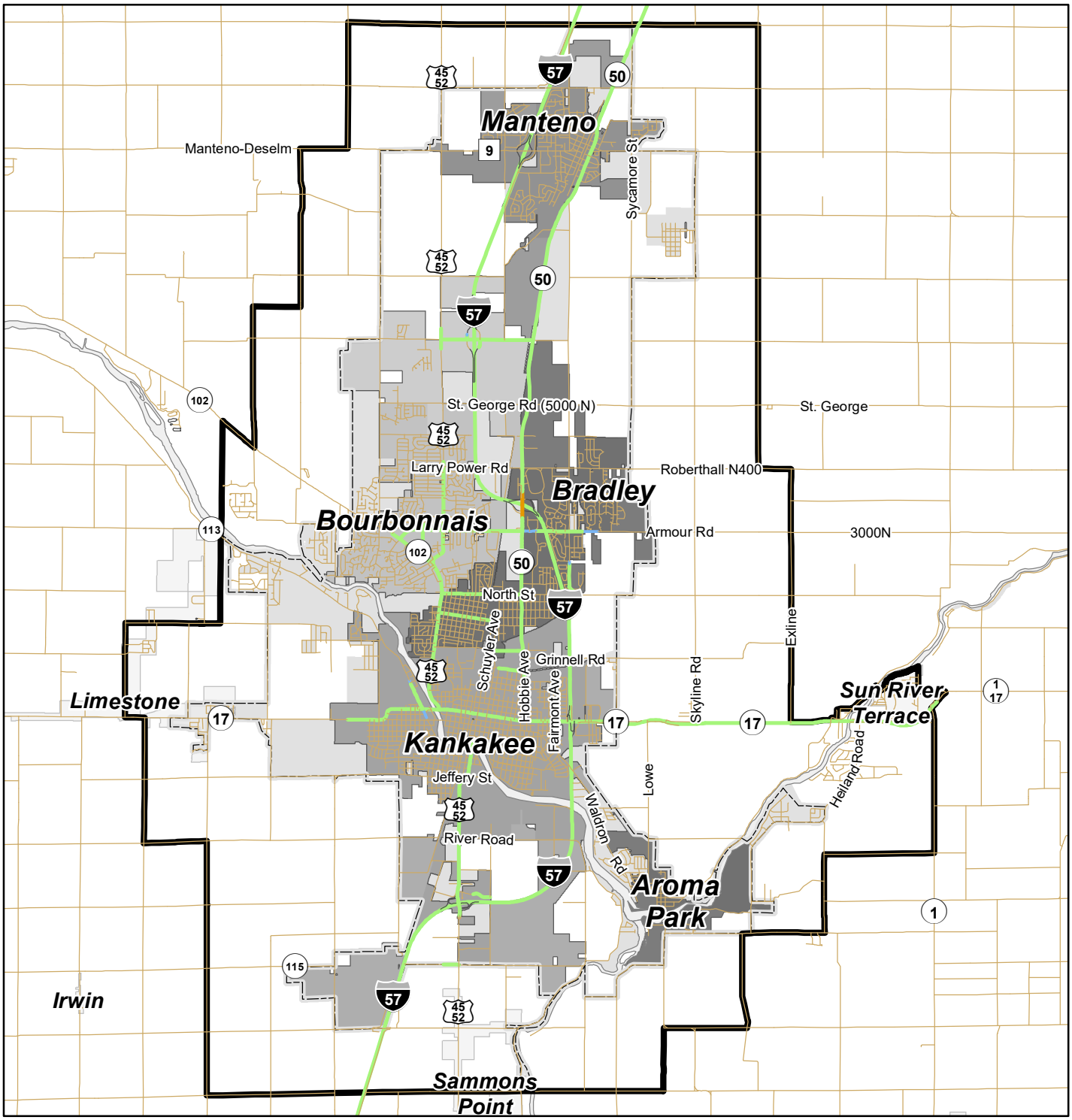
In summer 2019, the North Street bridge over I-57 was completed. The project widened the bridge from two lanes to four lanes to improve traffic flow. In addition to the new lanes, and a sidewalk and lighting were added to the north side of the bridge to provide a safer facility for non-motorized users. St. George Road over I-57 was also replaced in late 2019 and early 2020, which will be able to accommodate more lanes of traffic in the future.

Table 5-2: Mileage of Road by Number of Lanes in the KATS MPA

Number of Lanes (Excl. Ramps)	Centerline Miles	Percent
6	0.4	0.06%
5	0	0%
4	57.6	8.45%
3	0.7	0.11%
2	621.7	91.28%
1	0.7	0.1%
Total	681.1	100%

Source: Based on IDOT T2 GIS 2018 Highway Shapefile, adjusted by KATS staff.

Figure 5-3: Number of Lanes in the KATS MPA



Data Sources: Street Centerlines and Lane Data (2018), Illinois Department of Transportation, UZA, U.S. Census Bureau, Other data - Kankakee County.
Disclaimer: This map is for reference only. Data provided are derived from multiple sources with varying levels of accuracy. Kankakee Area Transportation Study disclaims all responsibility for the accuracy or completeness of the data shown.

5.4 Commute Flows

Commute flows pertain to generalized traffic flows based on where workers live and where they work. A county-by-county comparison of commute flows to, from, and within Kankakee County helps analyze how travel patterns may impact the roadway network. For the time period of 2011-2015, the U.S. Census Bureau estimated there were 48,659 workers (16 years and over) that lived in Kankakee County and 45,084 workers (16 years and over) that worked in Kankakee County. Of those workers, 36,887 both lived and worked in Kankakee County.

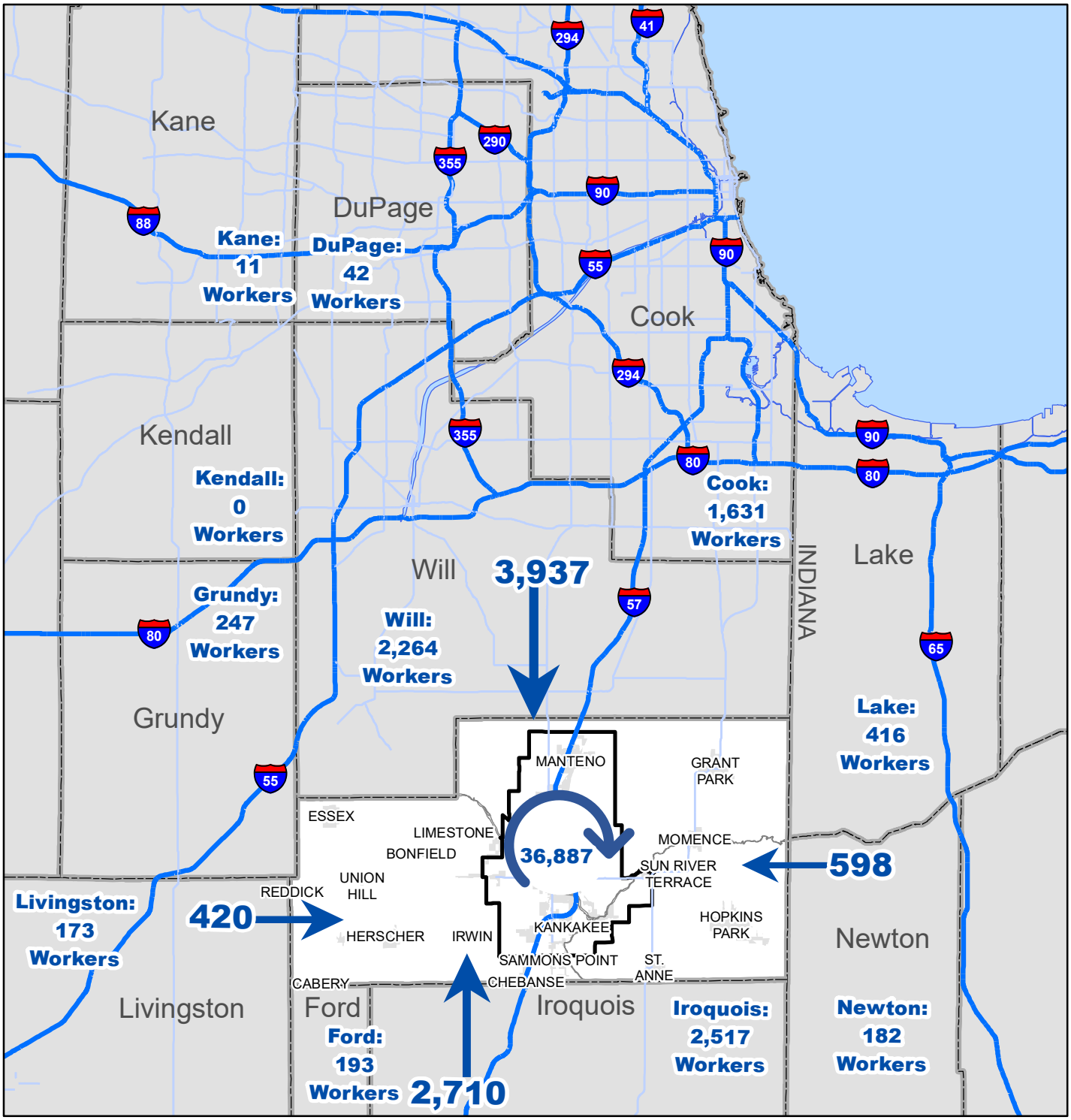
The relationship between place of work and place of residence shows Kankakee County's out-of-county commuting trips have increased in the past decade. The 1990 U.S. Census shows 82 percent of workers lived and worked in Kankakee County and 88 percent of the jobs in Kankakee County were associated with Kankakee County residents. The 2000 U.S. Census shows 78 percent of workers lived and worked in Kankakee County and 83 percent of the jobs in Kankakee County were associated with Kankakee County Residents. The 2011-2015 census commute flow data indicate nearly 76 percent of workers lived and worked in Kankakee County and nearly 82 percent of Kankakee County jobs were associated with Kankakee County residents.

The most work trips that originated outside and traveled to Kankakee County came from counties to the north, which includes Cook County with 1631 workers (3.6 percent) and Will County with 2,264 workers (5.0 percent). These counties represent approximately 8.6 percent of the total home to work trips with an endpoint in Kankakee County. To the south, Iroquois County accounted for 2,517 (5.6 percent) of total commuters working in Kankakee County. Counties to the east and west of Kankakee County accounted for approximately 1,000 (2.3 percent) commute flows.

The majority of workers that resided in Kankakee County and commuted to a job outside the county, traveled to Cook County (4,620, 9.5 percent) and Will County (4,424, 9.1 percent). There were 1,551 (3.2 percent) commuters that traveled to neighboring counties to the east, south, or west.

Over the last few years, the number of commuters living and working in Kankakee County has increased and the number of commuters coming from neighboring counties to the north has decreased. Commute flows to and from the south and east have remained steady and commute flows from the west have decreased. **Figure 5-4** displays commute flows originating in surrounding counties. **Figure 5-5** displays commute flows originating in Kankakee County.

Figure 5-4: Regional Map - Commute In-Flow by County 2011-2015



Data Sources: Street Centerlines (2018), Illinois Department of Transportation, 2011-2015 Commute Flow Data, U.S. Census Bureau, Other data - Kankakee County.
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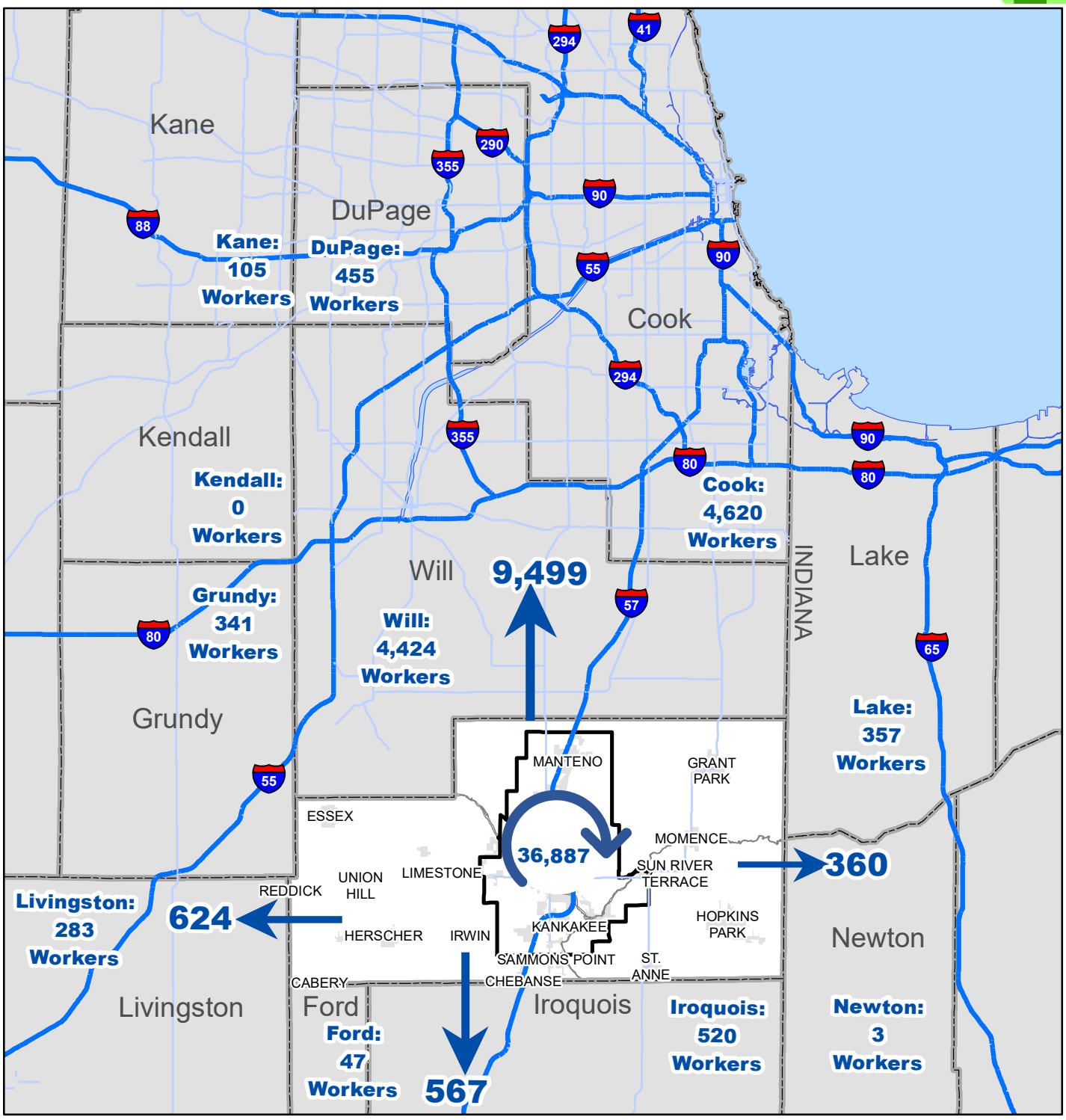
Figure 5-5: Regional Map - Commute Out-Flow by County 2011-2015



Data Sources: Street Centerlines (2018), Illinois Department of Transportation, 2011-2015 Commute Flow Data, U.S. Census Bureau, Other data - Kankakee County.
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5.5 Transportation Modes and Travel Times

According to the 2013-2017 American Community Survey (ACS), 90 percent of all workers (16 years of age and older) in the Kankakee Urbanized Area drove to work by car, truck, or van and 83 percent of all workers drove alone and 8 percent carpooled. Approximately 2 percent of workers commuted to work by public transit and 3 percent of workers walked. Less than 1 percent of workers bicycled to work. About 3 percent of workers worked from home.

Figure 5-6 Means of transportation to work (16 years of age and older)

Means of transportation to work (16 years of age and older)							
Drove Alone	Carpooled	Walked	Public Transit	Biked	Other	Worked from Home	Total
28,925	2,713	909	739	80	648	979	34,993

*Percentages of drove alone and carpooled are of all workers.
Source: 2013-2017 ACS (S0802).

5.6 Traffic Volumes

Annual average daily traffic (AADT) is an estimated daily volume of how much traffic passes past a specific point or along a segment of a road. Traffic volumes are very important because they provide valuable information to assist in determining where to invest future infrastructure resources. IDOT traffic volume data from 2018 provide the most recent information for Kankakee County.

As expected, traffic within the MPA was noticeably higher than in rural areas of the county. Interstate 57 provides north-south travel for the motoring public, which has a range of 35,200 AADT north of Exit 322 in Manteno to 20,000 AADT south of Exit 308 in Kankakee. Besides I-57, state-maintained roads function as the backbone of the transportation network in the KATS metropolitan area, mainly U.S. 45/52 and IL-50. Both of these state routes are parallel to I-57 and connect the largest municipalities in the area. Traffic data reflects the heavy use of these roads, which show the highest areas of traffic volume ranging between 20,900 to 29,200 AADT.

Beyond the metropolitan area of Kankakee County, state and county highways provide regional access to outlying municipalities. Illinois Routes 1, 17, and 114 range from 2,100 to 11,100 AADT depending on connectivity to rural municipalities. Rural local roads often carry less than 1,000 AADT, with the exceptions of 3500S Road, 3000N Road, 4000N Road, 5000N Road, and 9000N Road/8000N Road (CH-9).

As expected, traffic volumes fluctuate according to the MPA population and job locations. Denser housing and employment areas generate higher amounts of traffic. An example of this is IL-17 (14,500-17,600 AADT) and U.S. 45/52 (20,900 to 29,200 AADT). **Figure 5-7** shows traffic volumes along major roadways within the KATS MPA. **Figure 5-8** shows the locations of the top 10 road segments and intersections by AADT in the KATS MPA. Most of the top 10 road segments are sections of U.S. 45/52 between IL-17 and

IL-102. In 2018, the highest volume segment was U.S. 45/52 between North Street and IL-102. The other top 10 segments are section of IL-50 near Armour Road and I-57. The top 10 intersections are along IL-50, U.S. 45/52, and IL-17. In 2018, the highest volume intersection was at IL-50 and Armour Road, followed by the intersection of U.S. 45/52 and Armour Road.

During the last few years, there has been a decrease in vehicle miles traveled (VMT) in the KATS MPA and Kankakee County. **Table 5-3** shows the annual VMT published by IDOT in the IDOT annual travel statistics reports.

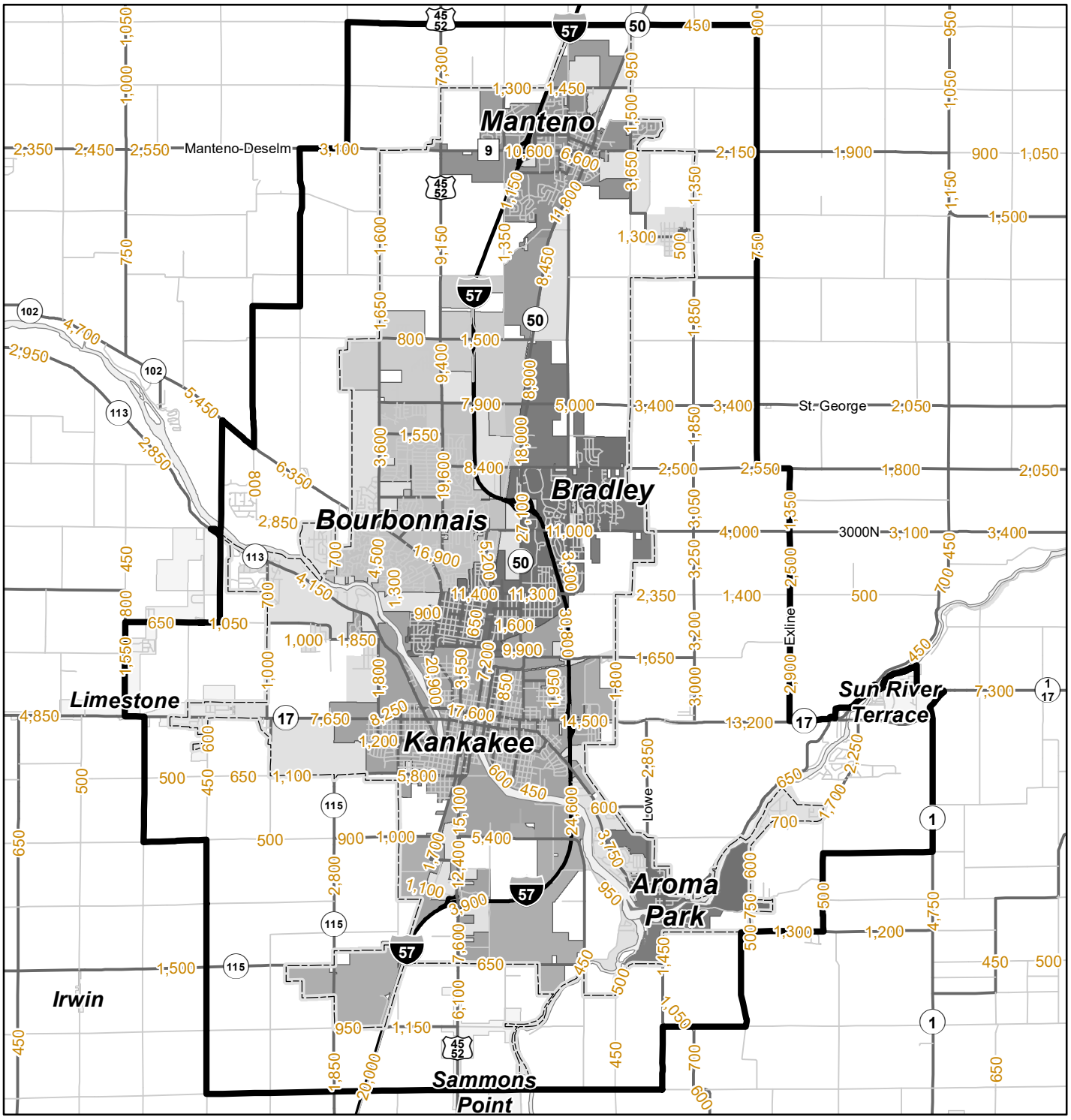
Table 5-3: Annual VMT in the KATS MPA

	2014	2015	2016	2017	2018
KATS MPA	711,680,285	700,724,445	712,235,085	688,856,470	687,910,390
% Change	N/A*	-1.56%	1.62%	-3.39%	-0.14%
Kankakee County	979,813,223	977,973,696	994,550,358	959,063,696	956,301,595
% Change	1.28%	-0.19%	1.67%	-3.70%	-0.29%

Source: IDOT Travel Statistics, years 2014 – 2018. *Travel statistics at MPO geographic boundaries began in 2014.

Southbound traffic on Illinois Route 50 approaching Armour Road.

Figure 5-7: Annual Average Daily Traffic (AADT) in the KATS MPA



Data Sources: Street Centerlines and Traffic Count Data (2018), Illinois Department of Transportation, UZA, U.S. Census Bureau, Other data - Kankakee County.
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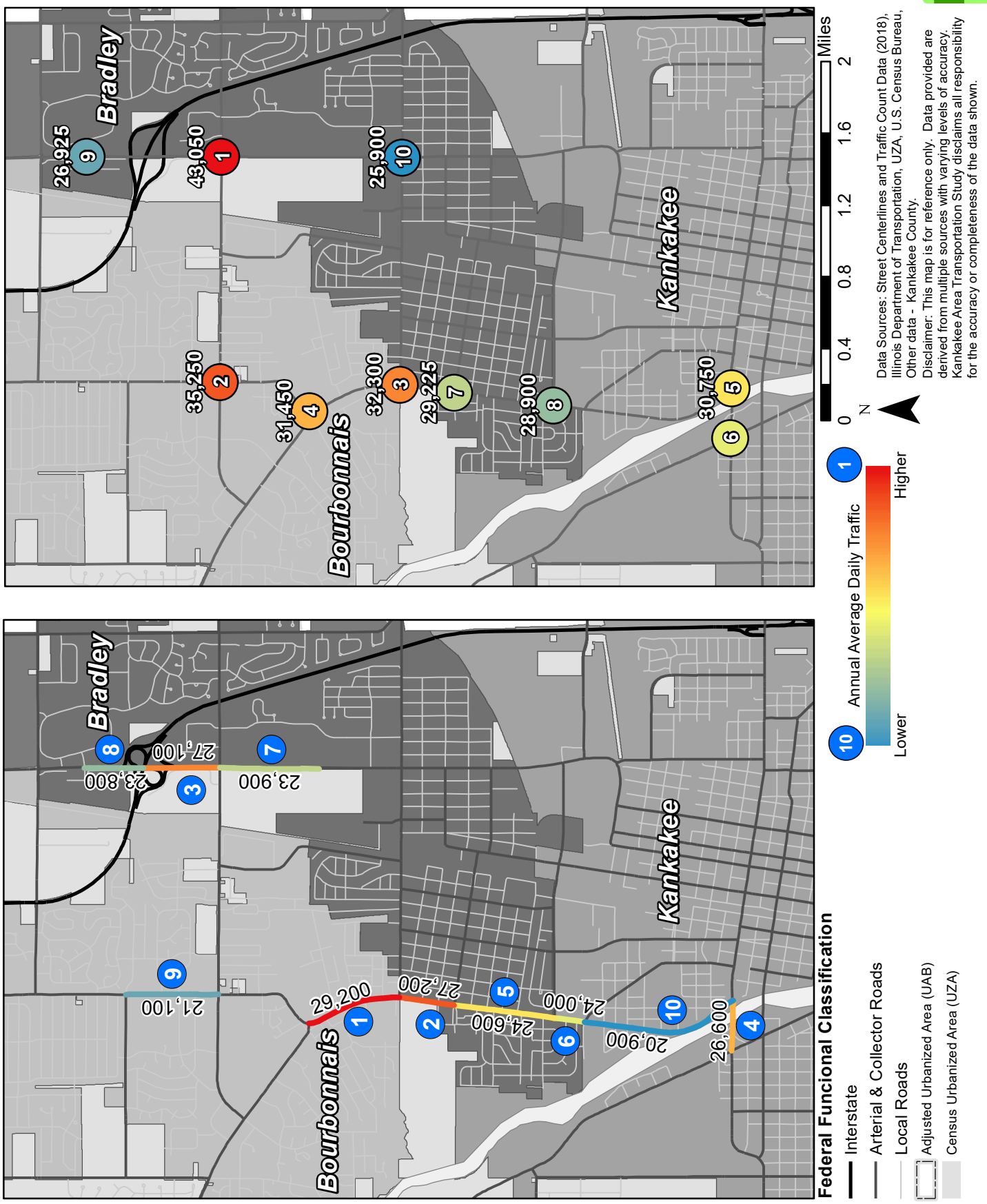
Figure 5-8: Top 10 Non-Interstate Road Segments and Intersection by AADT in the KATS MPA



5.7 Travel Time Analysis

KATS began collecting travel time data on major corridors in the MPA in fall 2014 and has continued to collect data every six months. Measuring the delay on specific corridors within the MPA provides quantitative data to illustrate changes in traffic and support whether specific streets or intersections demonstrate a need for improvements. As this data becomes more robust, it can be useful in helping local agencies understand changing travel patterns and priority locations for improvements. The corridors chosen for data collection are those with higher traffic volumes and provide meaningful connections to travelers. The travel time collection start times were identified using the peak travel periods from IDOT traffic data.

Initially, KATS staff conducted the travel time survey in the spring and fall and recorded data three times per day (one round trip for each peak period) for each corridor. With several travel time surveys completed, the collection method was modified starting with the fall 2018 travel time survey to collect a more thorough dataset each time a survey is conducted. The survey corridors were placed into two groups and while each group is only surveyed once per year, data is collected for three round-trips, during each peak period instead of only one, which offers more reliable data. Additionally, each of the three round-trips is started at a different time during the peak period to better capture peak period travel conditions.

Table 5-4 shows changes in travel conditions in the KATS MPA. The base data is an average from two travel time surveys from spring and fall of 2015. The most recent data is from fall 2018 and spring 2019. The morning, mid-day, and afternoon peak periods are shown. Also included are the changes in the average travel time. The change, shown as a percent, in the amount of time stopped for each corridor is included in the table, too.

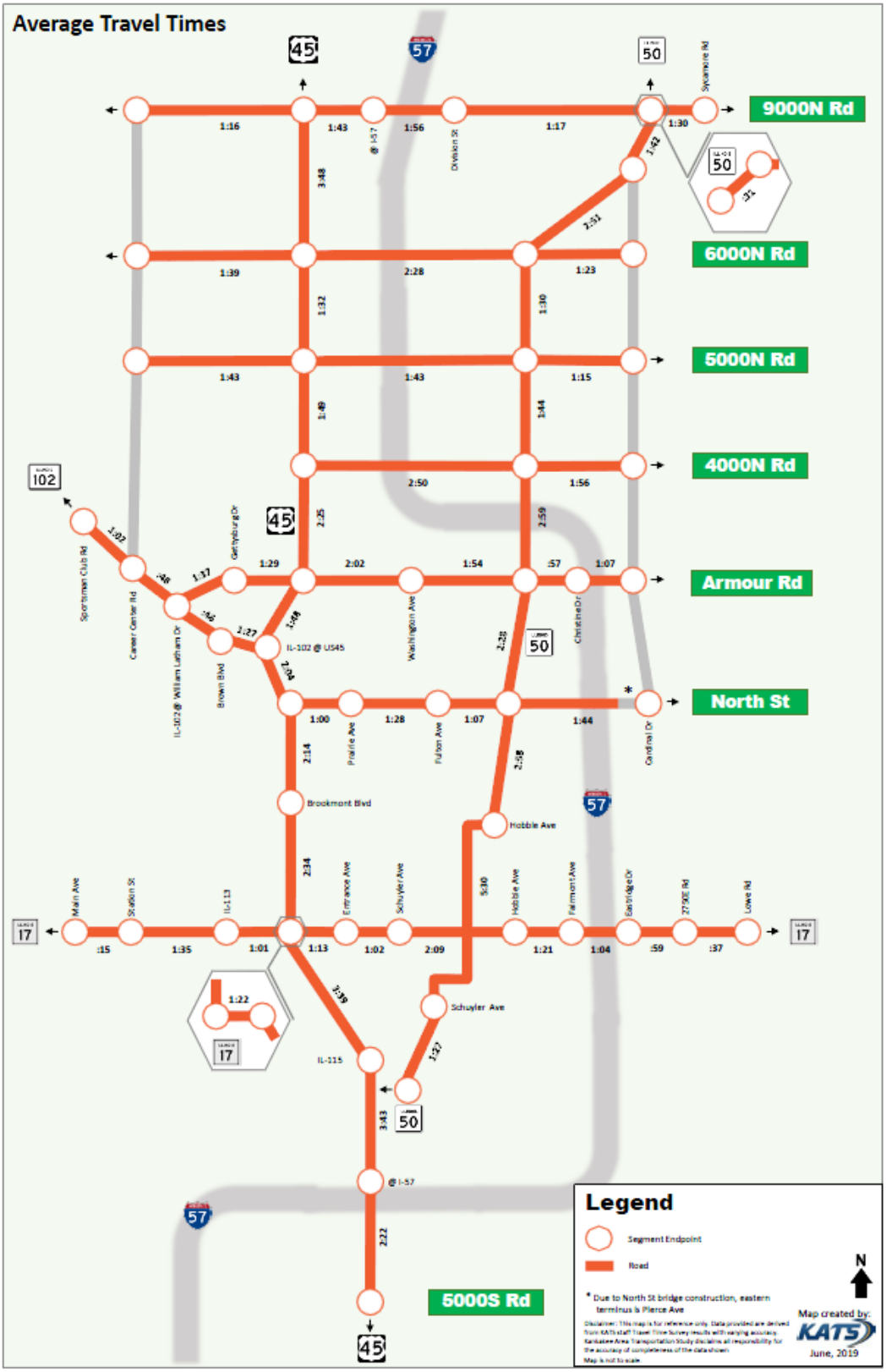
Figure 5-9 illustrates the combined peak-period average (morning, mid-day, and afternoon) corridor travel times. The data collected for these averages is from fall 2018 and spring 2019.

Traffic on Interstate 57 during the reconstruction of Bourbonnais Parkway.

Table 5-4: Average travel times along major corridors in the KATS MPA (Fall 2018/Spring 2019)

		Corridor Summary				Change (2018/2019 minus 2015)	
		2015		2018 / 2019			
Corridor	Time	Travel Time (Min)	Time Stopped (Min)	Travel Time (Min)	Time Stopped (Min)	Travel Time Difference (Sec)	Time Stopped Percent Change
North Street	AM	05:57	01:25	05:53	01:33	-4	8%
	MM	05:05	00:45	04:48	00:44	-17	-2%
	PM	05:59	00:52	05:47	01:29	-13	42%
Armour Rd/ Latham Dr	AM	08:59	03:46	07:53	02:21	-66	-60%
	MM	07:36	02:36	08:19	02:43	43	4%
	PM	08:09	02:02	09:41	03:54	92	48%
Larry Power Road	AM	04:27	00:34	04:37	00:39	10	12%
	MM	05:29	01:20	04:39	00:39	-50	-105%
	PM	04:49	01:20	05:06	01:13	17	-9%
St. George Rd	AM	05:29	01:00	05:35	00:50	6	-19%
	MM	05:50	03:24	05:55	00:59	5	-246%
	PM	05:24	07:09	05:56	01:13	32	-488%
Bourbonnais Pkwy	AM	05:01	00:27	05:25	00:44	24	39%
	MM	04:57	00:58	05:51	01:00	54	5%
	PM	05:21	00:52	05:15	00:43	-7	-19%
Division St	AM	07:59	01:04	08:45	01:28	46	27%
	MM	07:54	01:20	08:06	00:54	12	-49%
	PM	08:43	02:00	08:26	01:21	-16	-48%
IL-102	AM	03:05	00:23	04:18	01:09	73	67%
	MM	03:48	01:41	03:47	00:41	-1	-144%
	PM	03:19	01:09	04:05	00:57	46	-22%
IL-17	AM	10:36	02:00	11:20	02:29	44	19%
	MM	11:09	03:06	10:47	02:07	-22	-46%
	PM	11:43	03:35	11:41	02:51	-1	-26%
IL-50	AM	21:57	03:47	21:22	02:34	-36	-47%
	MM	22:39	03:37	23:31	04:13	52	14%
	PM	24:05	02:55	23:54	04:41	-11	38%
US 45/52	AM	29:30	06:02	27:56	03:37	-93	-66%
	MM	28:30	06:20	28:25	03:36	-4	-76%
	PM	31:38	08:12	31:49	06:40	11	-23%

Figure 5-9: Average travel times along major corridors in the KATS MPA (Fall 2018/Spring 2019).



5.8 Bridge Conditions

The Kankakee area has many bridges and culverts that carry traffic over streams flowing to the Kankakee River. Over the last few years, several bridges that carry high volumes of traffic have been replaced. I-57 has had new bridges that that include spans over Kankakee River in Kankakee and over IL-50 in Bradley. Other newly replaced bridges that carry traffic over I-57 include Bourbonnais Parkway, North Street, and St. George Road. U.S. 45/52 over I-57, in Kankakee, was recently resurfaced. IL-17 over Baker Creek has new bridges, too. IL-115 over Gar Creek was recently replaced, as well as 4000N Road over Soldier Creek. Additional bridges that have been programmed in the KATS TIP are Waldron Road and Larry Power Road over I-57; I-57 over the Norfolk Southern Railroad and Grinnell Road; and Armour Road over the Canadian National Railroad. The engineering phases of new bridges also take into consideration the needs for non-motorized modes of transportation. Examples of this would include the new North Street Bridge and St. George Road Bridge, which did not previously have non-motorized amenities.

The FAST Act has continued to fund the bridges under the National Highway Performance Program (NHPP), which was added under MAP-21. Previously, bridges were funded under the Highway Bridge Program (HBP). While the NHPP is often used to fund projects on the national highway system, it may be used for non-NHS bridges on the federal-aid highway system as long as the Interstate System and NHS bridge condition requirements are satisfied.

IDOT allows its allocation of STBG funds to be used on any bridge on any public road. Funds are distributed to counties, townships, and municipalities based on the deficient square footage of the bridge area. The Illinois STP-Bridge funds provide up to 80 percent funding for improvements.

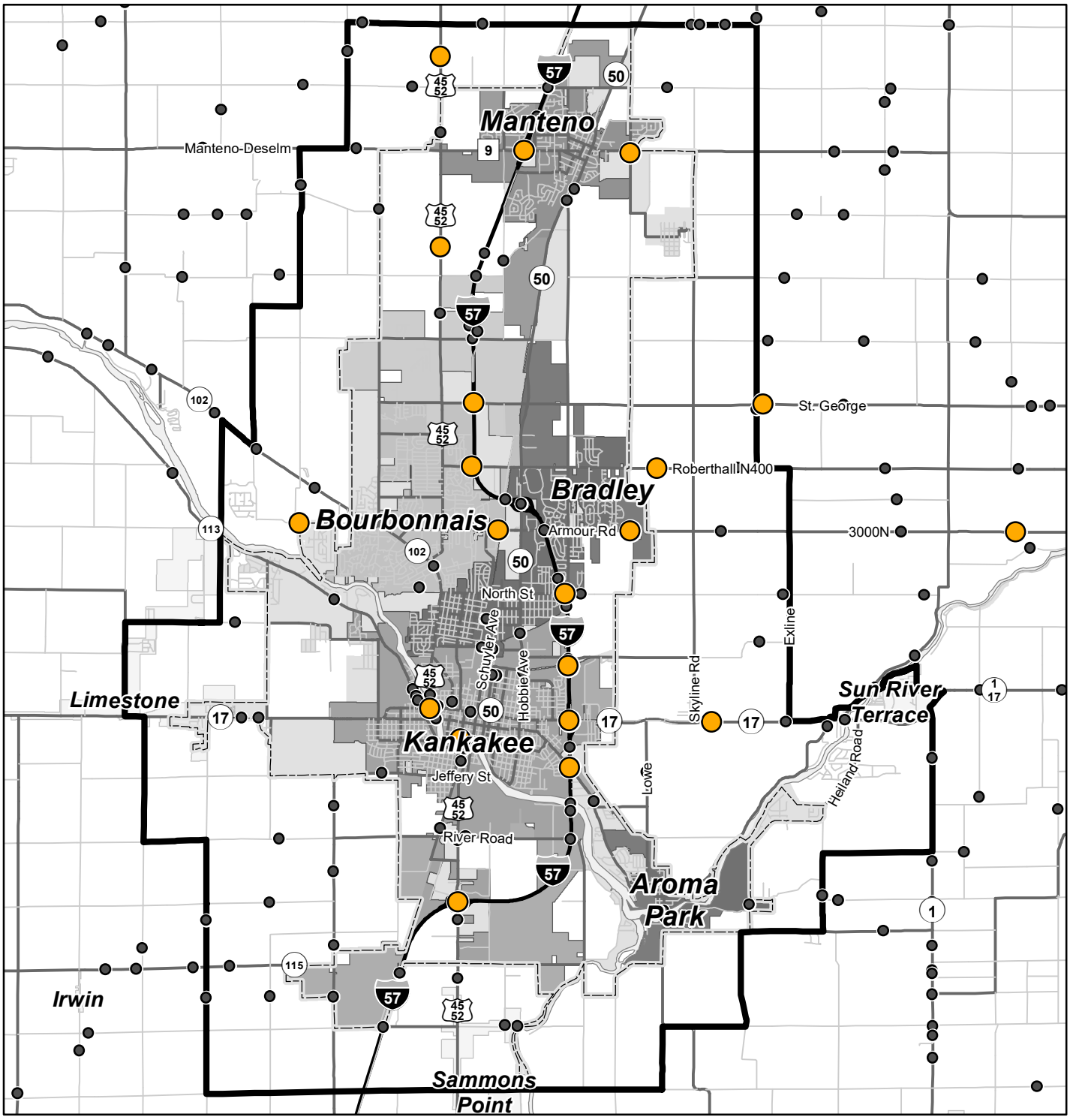
IDOT has continued the Illinois Special Bridge Program (formerly Major Bridge Program). In order for a project to be eligible, the bridge must be existing, deficient, and eligible for STP-Bridge funding. It's important to note that the structure must carry a highway and the total project cost cannot be less than $1 million. Unlike previous years, a deck overlay is no longer considered rehabilitation and is no longer an eligible project. IDOT will give priority to structurally deficient NHS structures to reduce the number of structures in the category that is reported to FHWA.

Figure 5-10 shows roadway structures and HBP eligible structures in the KATS MPA.

Figure 5-11 shows roadway structures and HBP eligible structures in Kankakee County.

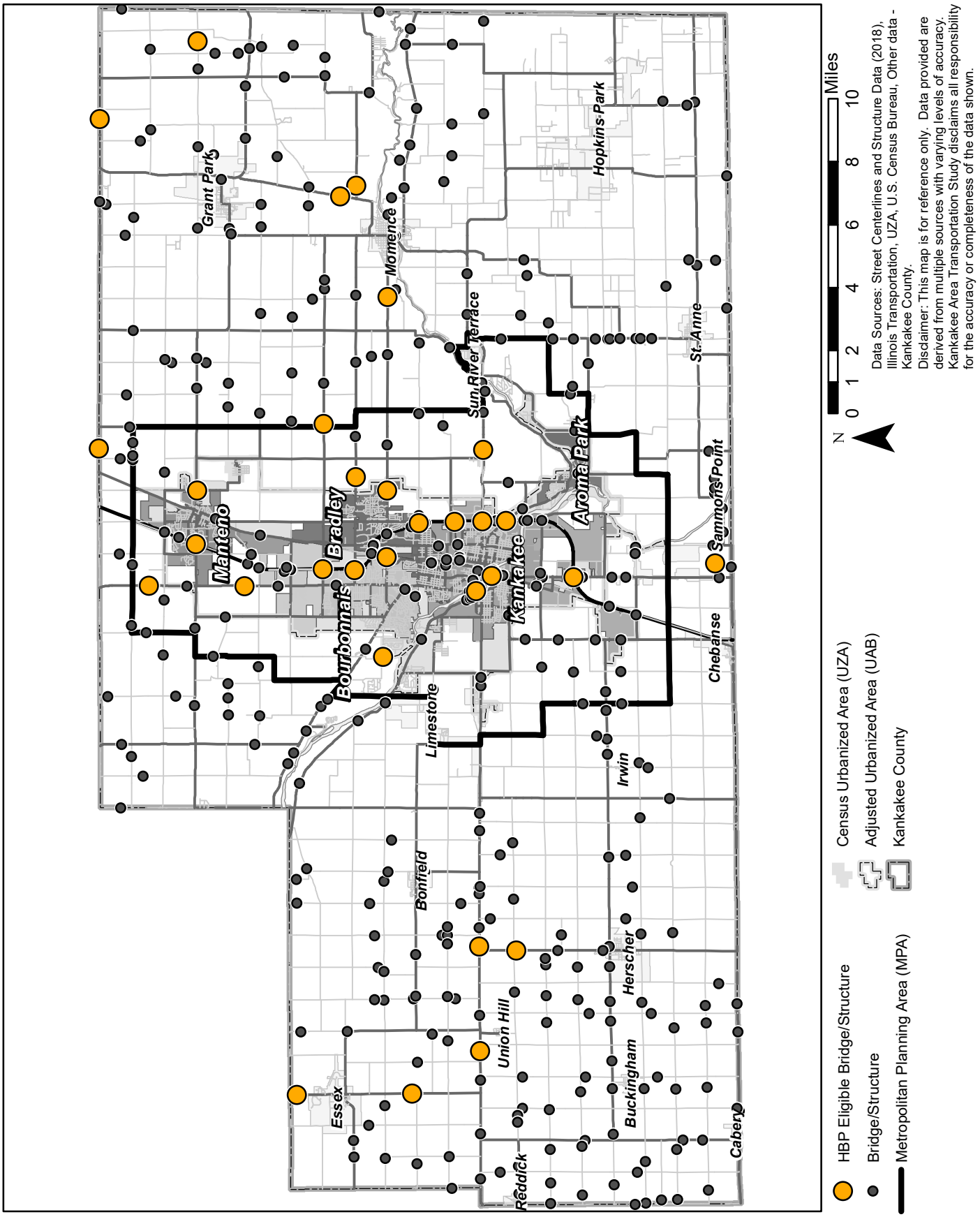
4000N Road over Solder Creek.

Figure 5-10: Bridge and Structure Locations in the KATS MPA



Data Sources: Street Centerlines and Structure Data (2018), Illinois Department of Transportation, UZA, U.S. Census Bureau, Other data - Kankakee County.
Disclaimer: This map is for reference only. Data provided are derived from multiple sources with varying levels of accuracy. Kankakee Area Transportation Study disclaims all responsibility for the accuracy or completeness of the data shown.

Figure 5-11: Bridge and Structure Locations in Kankakee County



5.9 Intelligent Transportation Systems

Intelligent Transportation Systems (ITS) are the use of various technologies to make traveling smarter, more efficient, and safer. Some of the main goals of ITS are to reduce time spent at red lights, providing travelers with the ability to make informed choices about travel routes by providing information about current travel conditions, and reducing delay when a roadway incident occurs.

Some examples of ITS deployment include smart work zones, which collect real-time traffic information and alert drivers of slow or stopped traffic ahead. With the increased deployment of autonomous vehicle features, in the event of a crash, an equipped vehicle can automatically alert a nearby 9-1-1 call center, which can dispatch emergency services as well as communicate to dynamic message signs to inform drivers of blocked lanes and possible delays ahead.

During the last couple of years, IDOT has been updating the Illinois Statewide Intelligent Transportation System Architecture. One of the outputs of the update was a regional ITS architecture for the Kankakee Metropolitan Area. As ITS projects are incorporated into plans, become programmed, and finally deployed, they will be added to the regional architecture and regularly updated. The ITS architecture for the KATS region identifies current deployments of ITS and projects in planning and programming phases. The ITS Architecture also includes numerous stakeholders that rely on the transportation network as well as agencies that maintain roads and respond to incidents.

5.9.1 ITS Infrastructure

While the Kankakee Regional ITS Architecture was updated as part of IDOT's statewide ITS Architecture update in 2019. The Kankakee Regional ITS Architecture will continue to be updated as needed. The current deployment of ITS includes the dynamic message signs on I-57 located north and south of the KATS MPA. Located in the southbound direction of I-57 is a speed feedback sign to inform drivers of their speed before they reach the curve as they approach Exit 315. IDOT also has continuous traffic counters in various locations within Kankakee County.

Some of the planned ITS projects included in the list of potential projects in this plan are for traffic signal synchronization for both U.S. 45/52 and IL-50 from River Street in Kankakee to Bourbonnais Parkway and IL-17 from Station Street to Eastgate Parkway.

Dynamic message signs are a common form of ITS infrastructure.

5.10 Highway Safety

Highway safety has long been an area of focus in federal surface transportation bills. The importance of highway safety was further reinforced with the safety performance measures included in MAP-21 and continued in the FAST Act. KATS and other local agencies place a high priority on providing safe, multi-modal roadways and facilities and for all travelers.

5.10.1 Fatal and Serious Injury Crashes

A major component of the FAST Act is the focus on reducing traffic-related fatalities and serious injuries. Data collection on crashes is essential for understanding and identifying causes of crashes and working toward improving traffic safety. KATS began developing a crash database in 2008. KATS has continued to update the database regularly and while this data is unofficial, preliminary, and not finalized, it may be able to provide relatively current trends in traffic safety. The data collected has been limited to crashes along public roads that involved a fatality or an injury of an incapacitating nature. This helps provide updates to the KATS Safety Committee. Official data, provided by IDOT, are used for reviewing performance measures and covers all crashes along public roadways.

Table 5-5 shows the number of traffic-related fatalities and serious injuries. It's important to note that in accordance with the FAST Act performance measures, the non-motorized category is also included in the total number of fatalities and serious injuries. For the five-year period of 2013-2017, there were a total of 460 traffic related crashes that resulted in 47 fatalities and 577 serious injuries within the KATS MPA. Of those incidents, three of the fatalities were crashes that involved a pedestrian and 32 of the serious injuries involved either a bicyclist or pedestrian.

Table 5-5: Number of traffic-related fatalities and serious injuries in the KATS MPA (2013-2017).

	2013	2014	2015	2016	2017	Total
Number of Fatalities	7	8	6	15	11	47
Number of Serious Injuries	83	106	126	129	133	577
Non-Motorized Fatalities	1	0	1	1	0	3
Non-Motorized Serious Injuries	8	5	7	3	9	32

Source: Illinois Dept. of Transportation.

Table 5-6 provides a summary of annual fatalities and serious injuries from 2013 through 2017 with crash characteristics. The data reveal several important trends regarding these crashes:

- Nearly 60 percent of traffic-related fatalities and serious injuries occurred during daylight hours with clear weather conditions.
- Almost 23 percent of traffic-related fatalities and serious injuries happened in an intersection and just over 23 percent were related to a vehicle traveling off the road.

An overhead dynamic message sign encouraging driver safety.

Table 5-6: Crash Characteristics in the KATS MPA with a Fatality of Serious Injury (2013-2017)

		2013	2014	2015	2016	2017	Total
Collision	Pedestrian	5	3	4	3	6	21
	Overturned	8	19	`6	10	10	63
	Fixed Object	19	16	22	22	24	103
	Other Object	2	1	2	0	2	7
	Other Non-Collision	0	1	3	1	0	5
	Turning	23	28	27	42	20	140
	Read End	9	10	23	17	42	101
	Sideswipe, Same Direction	2	1	2	3	9	17
	Sideswipe, Opposite Direction	2	1	1	1	0	5
	Head On	5	3	4	11	6	29
	Angle	7	23	23	29	18	100
	Pedal-cyclist	4	2	4	1	3	14
	Animal	2	0	0	1	1	4
	Parked Motor Vehicle	1	6	1	3	3	14
	Train	1	0	0	0	0	1

		2013	2014	2015	2016	2017	Total
Location	On Pavement (Roadway)	46	45	54	82	80	307
	Off Pavement - Left	18	14	11	8	16	67
	Off Pavement - Right	7	19	21	19	14	80
	Intersection	16	32	35	31	29	143
	Other	3	3	8	4	4	22
	Unknown	0	1	3	0	1	5

		2013	2014	2015	2016	2017	Total
Weather	Clear	73	97	115	128	126	539
	Rain	4	9	6	9	11	39
	Snow	7	4	6	2	2	21
	Fog/Smoke/Haze	0	0	3	0	0	3
	Severe Cross Wind	1	1	0	0	0	2
	Sleet/Hail	3	1	1	0	0	5
	Cloudy/Overcast	2	1	0	5	5	13
	Other	0	0	1	0	0	1
	Unknown	0	1	0	0	0	1

		2013	2014	2015	2016	2017	Total
Lighting	Daylight	52	62	97	106	99	416
	Darkness	11	26	13	23	12	106
	Darkness, Lighted Road	85	25	21	19	12	85
	Dawn	0	3	2	3	1	9
	Dusk	2	1	1	0	3	7
	Unknown	1	0	0	0	0	1

Table 5-7 ranks counties in Illinois with the highest number of crashes that involved fatalities and serious (A-type) injuries. Kankakee County is ranked 14th among all counties in Illinois for the total combined number of fatal and serious injury crashes. According to the U.S. Census Bureau's population estimate program for 2017, Kankakee County was the 18th most populous county in Illinois.

Table 5-7: Illinois Counties Ranked by *Number of Crashes* with a Fatality or Serious Injury (2013-2017)

Number	County	Fatal Crashes	A-Injury Crashes	Total
1	Cook	1,183	17,144	18,327
2	DuPage	153	2,582	2,735
3	Will	230	2,132	2,362
4	Lake	189	1,856	2,045
5	Kane	139	1,904	2,043
6	Mason	152	1,259	1,411
7	Saline	170	1,217	1,387
8	Schuyler	86	1,117	1,203
9	Macoupin	99	872	971
10	Winnebago	139	792	931
11	Champaign	81	724	805
12	LaSalle	84	688	772
13	Madison	65	646	711
14	**Kankakee**	**72**	**626**	**698**
15	Peoria	78	600	678
16	Tazewell	46	617	663
17	Marion	61	567	628
18	Rock Island	41	500	541
19	Williamson	45	446	491
20	DeKalb	42	390	432
21	Vermilion	50	377	427
22	Jackson	41	379	420
23	Jefferson	35	354	389
24	Franklin	39	331	370
25	Kendall	40	316	356
26	Whiteside	29	313	342
27	Effingham	32	282	314
28	Grundy	34	265	299
29	Boone	30	244	274
30	Adams	32	226	258

Source: Illinois Department of Transportation Annual Crash Statistics 2013-2017.

5.10.2 Statewide Emphasis Areas

IDOT established 14 emphasis areas, which are included in the Illinois Strategic Highway Safety Plan (2017) (ILSHSP). These emphasis areas were identified to further reduce and eventually eliminate all fatalities and serious injuries from roadways statewide. They are organized into three groups by priority but are not ranked beyond that. **Table 5-8** lists the 14 emphasis areas. **Figure 5-12** shows the combined total of emphasis area crashes that have occurred in the KATS MPA.

Table 5-8: Illinois Statewide Traffic Safety Emphasis Areas

Priority 1	Roadway Departure
	Impaired Driver
	Unrestrained Occupants
	Intersection Related
Priority 2	Speeding/Aggressive Driver
	Older Driver
	Young Driver
	Motorcycle
	Heavy Vehicle
	Pedestrian
Priority 3	Pedal-cyclist
	Work Zone
	Distracted/Fatigued/Drowsy Driver
	Highway-Railroad Grade Crossings

Roadway departure crashes

During the five-year period of 2013-2017, roadway departure crashes associated with a combined total of 147 fatalities and serious injuries in the KATS MPA. Strategies to reduce this type of crash include sign improvements, advanced warning signs of the road curving ahead, rumble strips to warn drivers of their lane position, and high-tension cable (HTC) median barriers.

Impaired driving Crashes

Although Illinois has reduced the number of impaired driving fatalities in recent years, the issue continues. This includes alcohol related impairments, as well as drug use and medication related impairments. During the five-year period of 2013-2017, impaired driving was associated with a combined total of 46 fatalities and serious injuries in the KATS MPA. Many approaches have been taken to prevent this type of crash from happening including greater media attention, enforcement saturation patrols and DUI checkpoints, more control over alcohol sales, highly supervised DUI courts, and mandatory ignition interlock devices and continued screenings for all convicted DUI offenders.

Unrestrained occupants Crashes

IDOT categorizes unrestrained occupant crashes where an individual vehicle occupant had no safety equipment present, no safety equipment used, or improperly used child restraints. In Illinois, there was an 86% compliance rate for seatbelt use reported by the 2005 Seat Belt Observational Survey. In Kankakee County during the five-year period of 2013-2017, 80.76% of occupants involved in a crash used a safety belt. During the five-year period of 2013-2017 there was a combined total of 101 fatalities and serious injuries in the KATS MPA associated with vehicle occupants considered “unrestrained”. Strategies for

preventing this type of crash include the "Click it or Ticket" campaign, providing more information on proper child safety restraint use, increasing enforcement of seatbelt laws, and targeting education towards population groups with lower-than-average safety restraint use rates.

Intersection-related crashes

During the five-year period of 2013-2017, there was a combined total of 297 fatalities and serious injuries in the KATS MPA that were associated with being intersection-related.

Speeding and aggressive related crashes

Speeding or aggressive driving related crashes are included in the second priority level. This includes crashes occurring at speeds above the authorized speed limit, exceeding a safe speed for conditions, failing to reduce speed to avoid a crash, or operating a vehicle in an erratic, reckless, careless, negligent, or aggressive manner. As speeds increase, the severity of crashes can also increase. During the five-year period of 2013-2017, there was a combined total of 228 fatalities and serious injuries in the KATS MPA associated with speeding and aggressive driving. Strategies used to minimize speeding include traffic calming design implementation, increased fines for speeding in work zones, photo speed enforcement, and speed feedback signs to increase driver awareness. Reducing driver stress and aggressive behavior is helped by removing congestion and improving the flow of traffic and reducing the impact that nonrecurring delays have on drivers by providing them with more information and advanced warning of delays with ITS dynamic message signs.

Older driver and younger driver related crashes

Two emphasis areas pertain to the age of drivers involved in crashes. Two groups at higher risk of being involved in a fatal or serious injury crash are older drivers, age 65 over, and younger drivers, age 20 or less. During the five-year period of 2013-2017, there were combined totals of 51 fatalities and serious injuries in the KATS MPA associated with 55 and older and associated with younger drivers. As people age, vision impairment and hearing impairment may increase, reaction time and perception may decrease, there may be an increased potential to become confused, and bodies become more fragile which can increase the possibility of injury. For younger drivers, lack of experience driving in different conditions paired with increased risky driving behavior like speeding, night-driving, or distractions like electronics-use and more passengers can contribute to a greater risk of crashing. Strategies to improve the safety of young drivers include improved graduated driver licensing (GDL) programs with increased licensing requirements, hand-held electronic communication bans for all drivers, several ad campaigns and other types of increased safety education. Reducing the risk of a crash for older drivers includes improvements to sign visibility by using better retroreflective sheeting that can be viewed clearly at a greater distance, improved pavement marking visibility, expanding on the requirements for driver's license renewal beginning at age 69, and offering specialized door-to-door senior transportation service.

Motorcycle related crashes

Motorcycles have more potential threats than a typical passenger vehicle due to increased exposure of occupants. During the five-year period of 2013-2017, there was a combined total of 19 fatalities and serious injuries in the KATS MPA associated with motorcycles. To decrease motorcycle crashes, Illinois has created free motorcycle training courses for beginner, intermediate, and advanced riders, outreach campaigns focused on motorcycle awareness for the public, and the improvement of road surface irregularities.

Heavy vehicle related crashes

Heavy vehicles include buses with up to 15 passengers, buses with more than 15 passengers, single-unit trucks (box truck, pickup or RV), tractor with semi-trailers (semi-truck pulling a trailer), and tractors without semi-trailers (semi-truck with no trailer attached). During the five-year period of 2013-2017, there was a combined total of 20 fatalities and serious injuries in the KATS MPA that were associated with heavy vehicles. To prevent future crashes, strategies include improving enforcement by educating law enforcement officers about heavy vehicle requirements and licensing and educating the public on how to behave around heavy vehicles through campaigns.

Pedestrian related crashes

During the five-year period of 2013-2017, there was a combined total of 23 fatalities and serious injuries in the KATS MPA that were associated with pedestrians. Strategies to reduce these crashes include curb bump outs, pedestrian islands, improved crosswalk striping, improved pedestrian signage and pavement markings, wider sidewalks, and speed reduction policies. Additionally, the Safe Routes to School Program includes "walking school buses" which encourages students to walk to school with supervision for safety. The program also helps fund infrastructure improvements with grants that help safety, this includes better sidewalks and flashing pedestrian beacons on the roads. In Kankakee, a $200,000 Safe Routes to School grant was awarded to improve a school pedestrian crossing along IL-17.

Pedal-cyclist related crashes

During the five-year period of 2013-2017, there was a combined total of 14 fatalities and serious injuries in the KATS MPA that were associated with pedal-cyclists.

Work zone related crashes

During the five-year period of 2013-2017, there was a combined total of 2 fatalities and serious injuries in the KATS MPA that were associated with work zones.

Distracted, fatigued, and drowsy related crashes

During the five-year period of 2013-2017, there was a combined total of 44 fatalities and serious injuries in the KATS MPA that were associated with distraction, fatigue, or drowsiness. Distractions can be caused by something inside or outside the vehicle or using any electronic device or cell phone. Strategies to stop these crashes include improving the driver education curriculum to provide an understanding of the implications of these actions, greater enforcement of distracted driving, and roadway improvements like rumble strips and signage to reduce the likelihood and severity of crashes.

Highway-railroad grade crossing related crashes

According to the Federal Rail Administration, highway-railroad grade crossing related crashes are "any impact between on-track railroad equipment and a highway user at a highway-rail grade crossing" (IDOT Strategic Highway Safety Plan, 2017). During the five-year period of 2013-2017, there was 1 incident that resulted in a fatality or serious injury associated with trains. To reduce the risk at highway-rail grade crossing crashes, improvements continue to be made to traffic control devices, warning signs, and roadway geometry. Also, the reduction of at-grade crossings by upgrading intersections to grade separated crossings or by consolidating multiple crossings down to one crossing are solutions for some at-grade crossings.

Figure 5-12: Number of Statewide Traffic Safety Emphasis Area Fatalities and Serious Injuries in the KATS MPA (2013-2017)

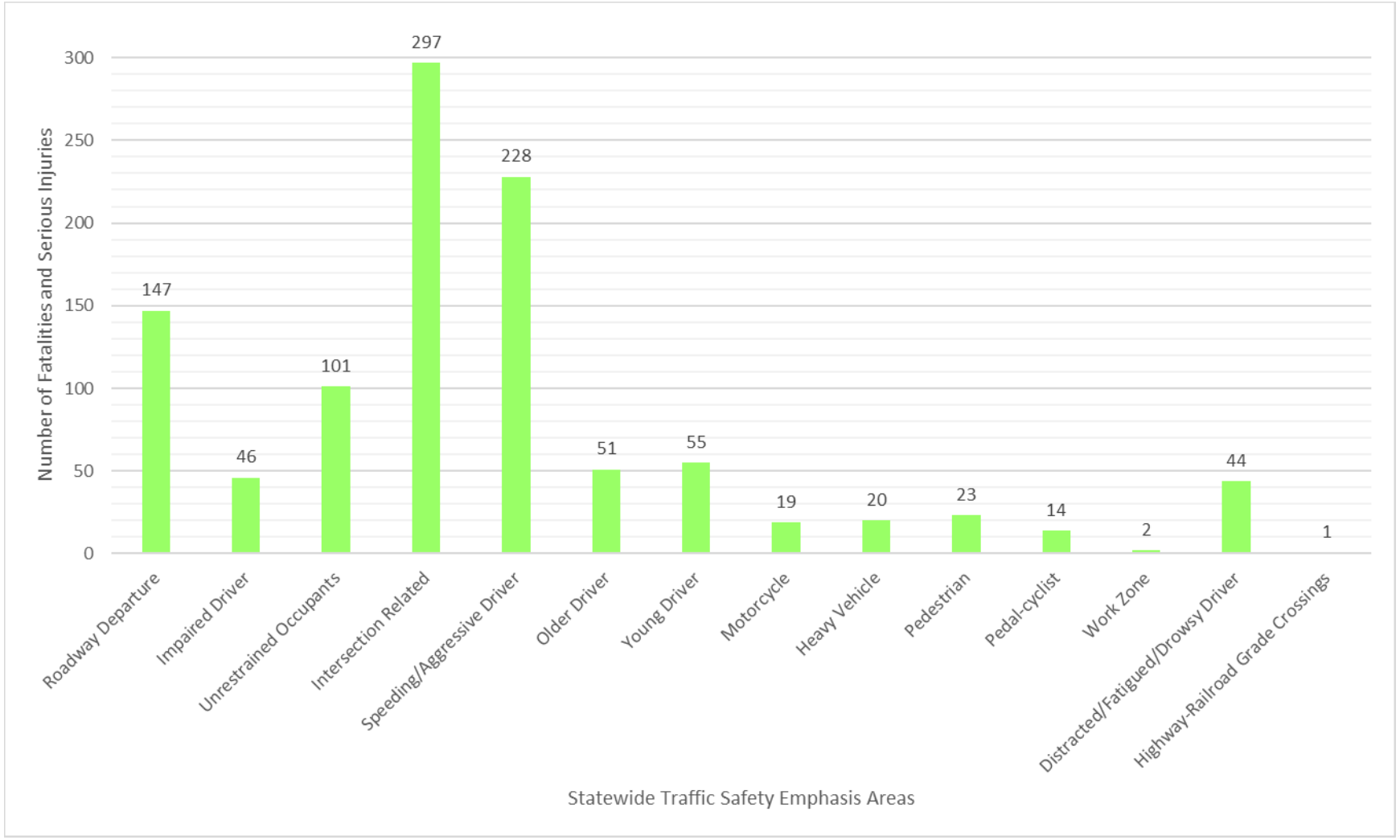
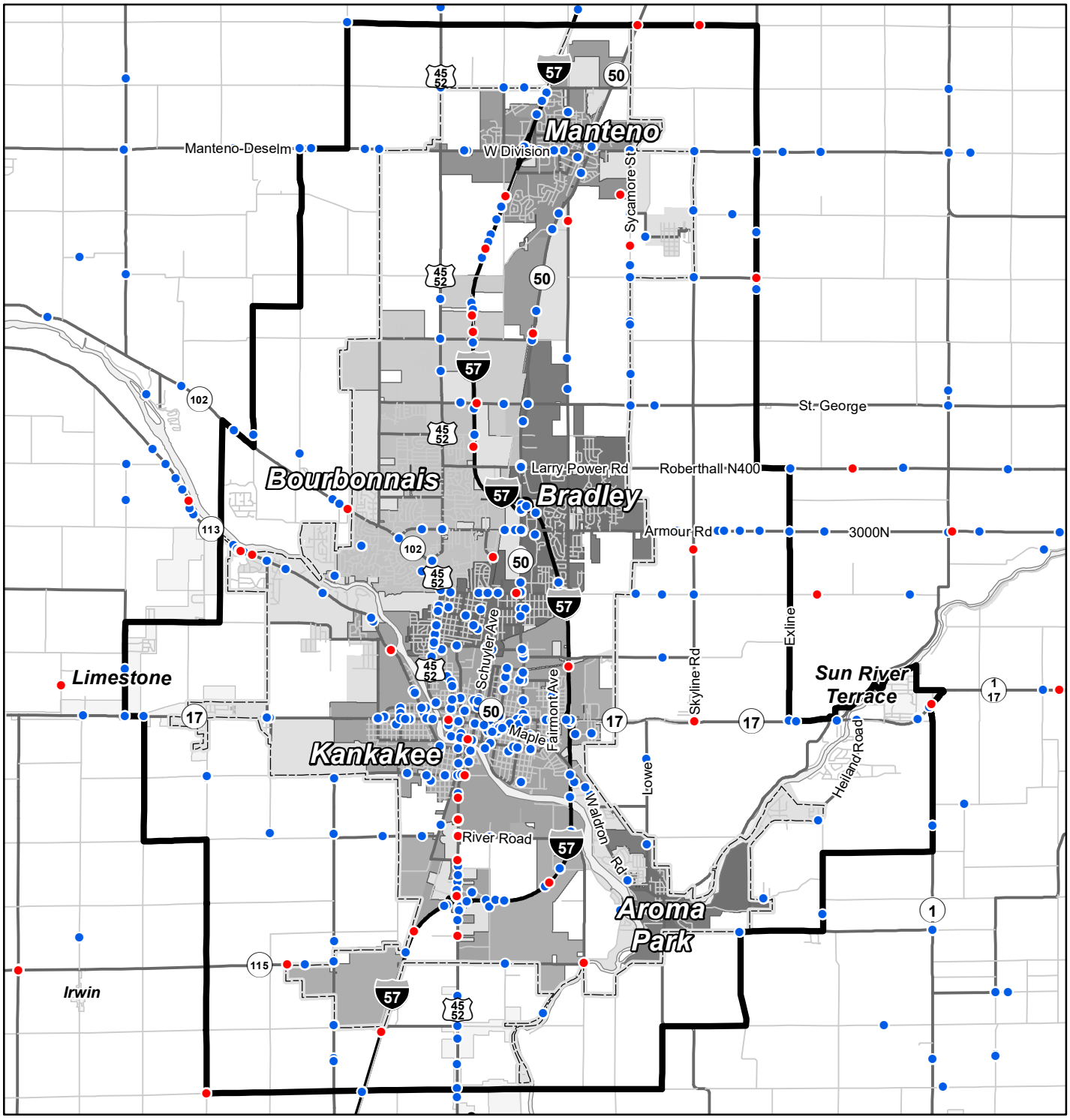


Figure 5-13 shows the locations of crashes in the KATS MPA that involved a fatality or serious injury during the five-year period of 2013-2017. There was a total of 460 crashes that accounted for 47 fatalities in the KATS MPA and a total of 577 serious injuries during the five-year period of 2013-2017.

Figure 5-14 shows the locations of crashes in Kankakee County that involved a fatality or serious injury during the five-year period of 2013-2017. There was a total of 698 crashes that accounted for 78 fatalities in Kankakee County and a total of 878 serious injuries during the five-year period of 2013-2017. It's important to note that crashes that occur on the county boundary may be considered a crash of the adjoining county based on a number of considerations. As a result, some county boundary crashes may not be included in the crash data presented in this plan.

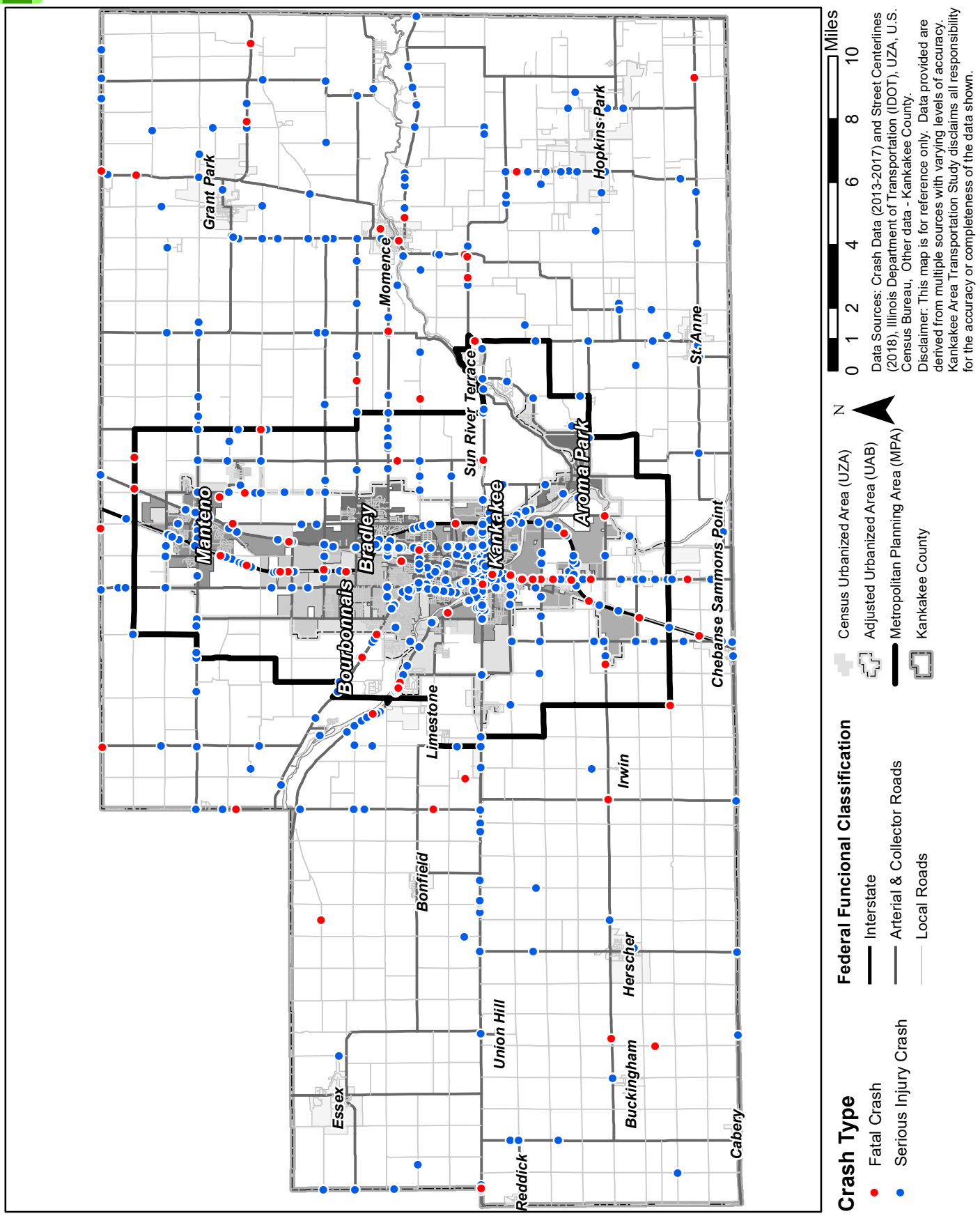
At-grade highway–railroad crossing.

Figure 5-13: Fatal and Serious Injury Crash Locations in the KATS MPA (2013-2017)



Data Sources: Crash Data (2013-2017) and Street Centerlines (2018), Illinois Department of Transportation (IDOT), UZA, U.S. Census Bureau, Other data - Kankakee County.
Disclaimer: This map is for reference only. Data provided are derived from multiple sources with varying levels of accuracy. Kankakee Area Transportation Study disclaims all responsibility for the accuracy or completeness of the data shown.

Figure 5-14: Fatal and Serious Injury Crash Locations in Kankakee County (2013-2017)



5.10.3 KATS Safety Committee

KATS has long considered addressing traffic safety important and this priority is reflected in the action by the KATS Policy Committee to form a Safety Committee in 2013. The KATS Safety Committee adopted a vision and mission statement at the August 13, 2014, Safety Committee meeting.

Vision Statement

Partnering to create the safest countywide transportation system in Illinois for users of all ages, abilities, and modes.

Mission Statement

The KATS Safety Committee is committed to proactively addressing multimodal transportation safety issues with the goal of reducing crashes, fatalities, and serious injuries within Kankakee County. The committee consists of professionals in the fields of engineering, law enforcement, emergency response, and education that work together to analyze safety data, trends, and policies toward the common purpose of:

- Enhancing safety for all transportation users.
- Increasing the efficiency of the transportation system.
- Enhancing quality of life for area residents.

The committee will accomplish its mission through a collaborative process that combines sound technical analysis with aggressive public engagement to raise awareness, educate, and identify solutions

5.10.4 Highway Safety Plan

The KATS Policy Committee approved the creation of a Kankakee County Highway Safety Plan at their meeting on October 24, 2018. The development of the plan will require crash data to be collected and analyzed with the goal of being able to identify similarities and patterns between crashes and suggest possible recommendations to improve traffic safety.

A speed feedback sign for southbound traffic on Interstate 57 approaching Exit 315.

5.11 Electric Vehicles

Over the last several years, electric vehicles have become more common. It is anticipated that the use of electric vehicles (EVs) in the Kankakee region will continue to rise. To meet consumer demands, automakers are expanding their fleets to include a greater number of EVs. To prepare for additional EVs, the MPO can support the establishment of new public EV charging stations, help the creation of local policies aimed at promoting EVs, and back strategies for incorporating EV investment locally.

Five public electric vehicle charging stations for powering electric vehicle are located in Kankakee County, all located within the MPO. Although listed as public and supplying electricity, they are all operated by private businesses and not defined as public utility. The installation of at-home chargers is also an option. Private and public entities in Illinois can receive incentives including financial and technical support for work done to modernize the state's electric grid and support the development of smart grid infrastructure. Both IDOT and Illinois State Toll Highway Authority (ISTHA) have been permitted to build Electric Vehicle Supply Equipment (EVSE) along Illinois highways. Illinois Department of Commerce and Economic Opportunity (DCEO) provides rebates of 50% of material and labor costs from $3,000 up to a maximum of $50,000 for the installation of EVSE. Government entities, private businesses, educational institutions, non-profit organizations, and individual residents of Illinois are all eligible for the EVSE rebates.

Starting in 2020 the Illinois vehicle registration fee for EVs increased to $248 and the registration fee for internal-combustion engine vehicles increased to $148. A portion of the additional $100 paid contributes to the Illinois Road Fund. The reduction in federal EV tax credits is also making the purchase of EVs more expensive. Beginning in 2020, the tax credit amount decreased from $7,500 to $3,750. On July 1, 2020, the credit decreased to $1,875 and in 2021, the federal incentive program will end. Currently in Illinois, there are not any rebates in addition to those offered by the federal government for purchasing an EV.

As EVs become more common, the Kankakee region will need to be ready to meet the new demand created for electric power stations. Equipping locations in the county with the ability to power these vehicles will require some infrastructure investment. However, the community will also receive benefits in the form of the relocation of vehicle emissions to power plants instead of roadways, overall lower carbon footprint for EV users, the convenience of at-home charging, and many other advantages.

Information about electric vehicles for this section came from https://afdc.energy.gov/laws/all?state=IL and https://www.energysage.com/electric-vehicles/costs-and-benefits-evs/ev-tax-credits/.

5.12 Connected and Autonomous Vehicles

Connected and autonomous vehicles (CAVs) are vehicles that have been created with the newest advancements in automotive technology that can allow a vehicle to automatically control certain aspects of driving, such as automatic braking. The deployment of CAVs has started in Kankakee County and will continue to be an expanding component of future transportation in the county. Examples of CAV technology range from blind spot detection and lane-keeping assistance all the way to fully-autonomous self-driving cars that can communicate with the other CAVs and other infrastructure surrounding it. CAV technology holds the potential to reshape the entire transportation network and offer new mobility

options with potential benefits to safety, congestion, travel times, energy consumption, air quality, freight movement efficiency, and accessibility.

In *Preparing for the Future of Transportation: Automated Vehicles 3.0*, the United States Department of Transportation (USDOT) laid out six principles for the establishment of future CAV policies. Their principles are the prioritization of safety, to remain technology neutral, modernization of regulations, encouraging a consistent regulatory and operational environment, proactive preparation for automation, and protect and enhance individuals' freedom. Safety can be drastically improved by automation. Technology in vehicles can increase the risk of roadway users by creating distractions. Technology use can also save the lives of passengers in the vehicle, passengers in other vehicles, pedestrians, bicyclists, and other road users. By remaining neutral to technologies, the government allows the consumer to choose what solutions they want in their vehicles, and promote competition among companies creating new CAV technology. Modernizing regulation intends to remove regulations that impede the progression of CAVs. Consistent laws between the different levels of government will help ensure there is less confusion and less barriers of the entrance of CAV integration.

In Illinois, CAV technology is being developed, tested, and deployed. IDOT has identified five areas of focus regarding CAVs, they are: maintaining Illinois' status as a major part of America's freight network, exploring and anticipating what changes CAVs will bring to insurance, both the maintenance of existing physical infrastructure and deployment of new technology, preparing for a transitioning workforce shaped by CAVs, and the attraction of businesses working on CAVs to the State.

It is unknown how long it will be before fully-autonomous self-driving vehicles will be on the streets in the Kankakee Region. The technologies are advancing quickly and the best thing for MPOs to do is to be prepared and active in responding to this change towards more CAV technology use.

Information about connected and autonomous vehicle for this section came from:

https://www.transportation.gov/av/3/preparing-future-transportation-automated-vehicles-3
https://rosap.ntl.bts.gov/view/dot/31396
http://www.idot.illinois.gov/Assets/uploads/files/autonomous_illinois/AI_Vision_Plan.pdf

5.13 Future Roadway Conditions

KATS has continued to stay apprised of traffic conditions in the KATS MPA and has participated in the planning efforts with federal, state, and local partners. The implementation of performance-based planning and programming requirements will have an impact on the development of the regional roadway network, along with recommendations from future studies for years to come. The following discusses the potential future condition.

5.13.1 2045 Traffic Volumes and Congestion

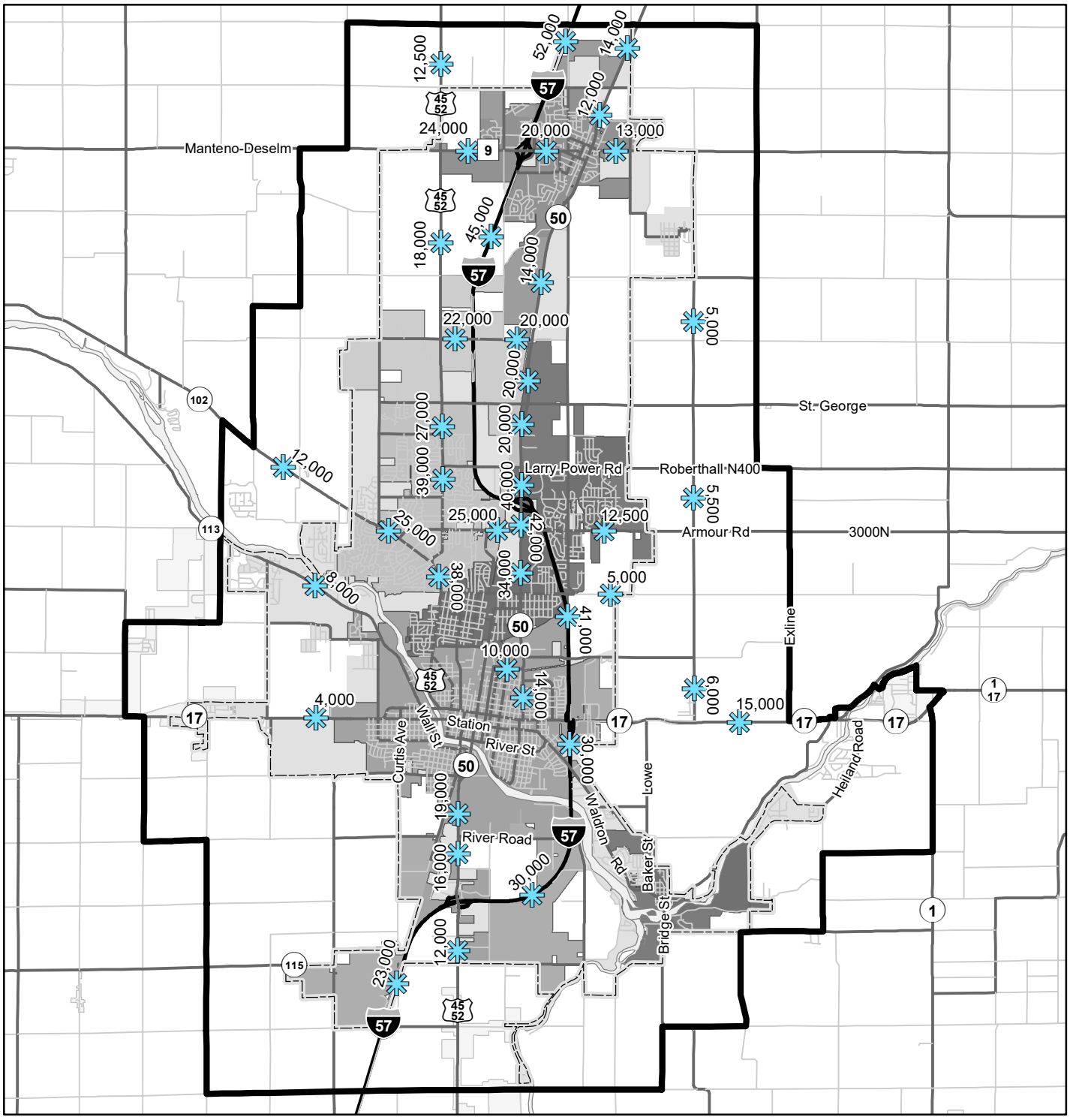
The number of vehicle miles traveled (VMT) during the last couple of years has decreased, however that is expected to start increasing again. One expected contribution to increases in traffic volumes is the continuing consumer demand for fast delivery times from online retailers as well as the increasing number of grocery stores and restaurants that offer delivery services. Future increases in population and employment can also contribute to increases traffic volumes.

Due to the recent decrease in VMT and the lack of a travel demand model to assist in projecting future traffic, the projections created for the 2040 LRTP have remained unchanged. KATS staff is in the process of developing a travel demand model and will provide updated projections when the information becomes available. Because the projected future development was unchanged, future congestion concerns were unchanged, with one exception. It is expected that congestion on 9000N Road will be relieved due to the opening of the new I-57 interchange at Bourbonnais Parkway. The initial list of congestion concerns was based on technical analysis and input from local stakeholders.

Residential and business development are a driving force in projecting traffic and congestion. Most recently, high-growth areas are geographically located between Kankakee and Manteno. Recent development in Bourbonnais and Bradley suggest traffic volumes will rise at a higher rate there than other areas on the MPA, particularly since the new I-57 interchange at Bourbonnais Parkway has opened. Continued growth in neighboring Will County, including the proposed South Suburban Airport and a future east-west express corridor, could have significant impacts on future traffic and congestion projections in the northern section of the KATS MPA.

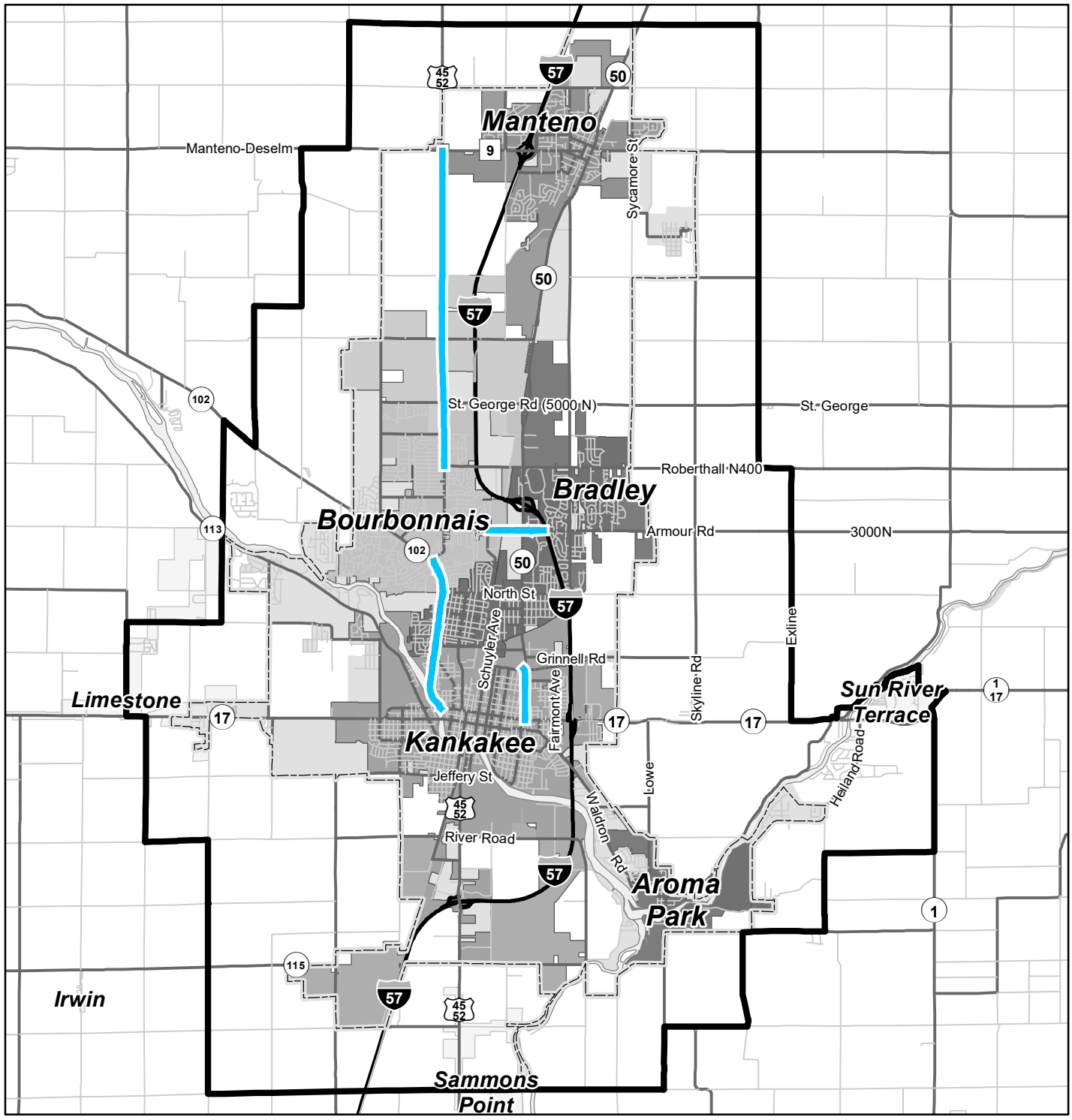
Figure 5-15 displays projected 2045 daily traffic volumes along major roadways within the KATS MPA. **Figure 5-16** shows projected 2045 capacity issues within the KATS MPA. Using planning-level analysis, traffic congestion was determined by leveraging factors such as the number of lanes and future traffic volumes to the planning horizon year of 2045.

Figure 5-15: 2045 Projected Daily Traffic Volumes in the KATS MPA



Data Sources: Street Centerlines and Annual Average Daily Traffic (2018), Illinois Department of Transportation, UZA, U.S. Census Bureau, Other data - Kankakee County.
Disclaimer: This map is for reference only. Data provided are derived from multiple sources with varying levels of accuracy. Kankakee Area Transportation Study disclaims all responsibility for the accuracy or completeness of the data shown.

Figure 5-16: 2045 Areas of Potential Traffic Congestion in the KATS MPA



5.13.2 Future Network Connectivity

- **Bourbonnais Parkway (I-57 interchange)**
  The construction of a new interchange at Bourbonnais Parkway and I-57 (Exit 318) was completed in November 2018. The project is located 3.1 miles north of the Illinois State Route 50 interchange (Exit 315). The project included widening the road from two lanes to four lanes with center turn lanes, replaced the bridge over I-57, and redesigned the intersections at U.S. 45/52 and IL-50.
- **Brookmont Boulevard**
  The Brookmont Boulevard Viaduct project, under the Canadian National Railroad in Kankakee, includes reconstructing the viaduct and expanding the number of lanes from two to four. This segment of highway is regularly used for traveling between IL-50 and U.S. 45/52. Preliminary engineering phase 2 and right-of-way acquisition began in 2019.
- **Hobbie Avenue**
  Reconstruction of Hobbie Avenue includes the addition of a center, bi-directional, left-turn lane, and bike lanes. The project was programmed by the KATS Policy Committee in 2015. Preliminary engineering phase 1 began in 2019.

5.13.3 Regional Traffic Impact Studies

- **East-west Express Corridor**
  The Illiana Expressway was a leading project that was proposed in order to connect Interstate 65 in Indiana to Interstate 55 in Illinois without having to travel as far north as Interstate 80. In early 2015, the Illiana Expressway project was placed on hold and no further progress has been made. Truck traffic regularly travels across Kankakee County to get to and from destinations and KATS recognizes the need for a corridor that can allow an efficient flow of travel for these east-west trips, rather than using local roads.
- **South Suburban Airport**
  While the South Suburban Airport (SSA) is not a roadway improvement, it would have a significant impact on Kankakee County and the KATS MPA. The SSA would provide significant economic value and contribute heavily to the number of jobs in the region. The location of the SSA, in southeast Will County, would increase traffic in the area. North-south roads, providing access in and out of Kankakee County, would become very importation in accommodating future travel patterns for both the general public and the movement of freight.
- **River Crossing**
  The possibility of a new river crossing in Kankakee County has been discussed for many years. During the winter of 2013/2014, Warner Bridge (7000W Road) over the Kankakee River was closed due to an ice jam. This closing restarted discussions about the possible long-term need to identify a new river crossing. The 2040 KATS LRTP (2015) indicated that a future crossing, if built, would likely be constructed outside of the KATS MPA, but would still have a significant impact on travel patterns.

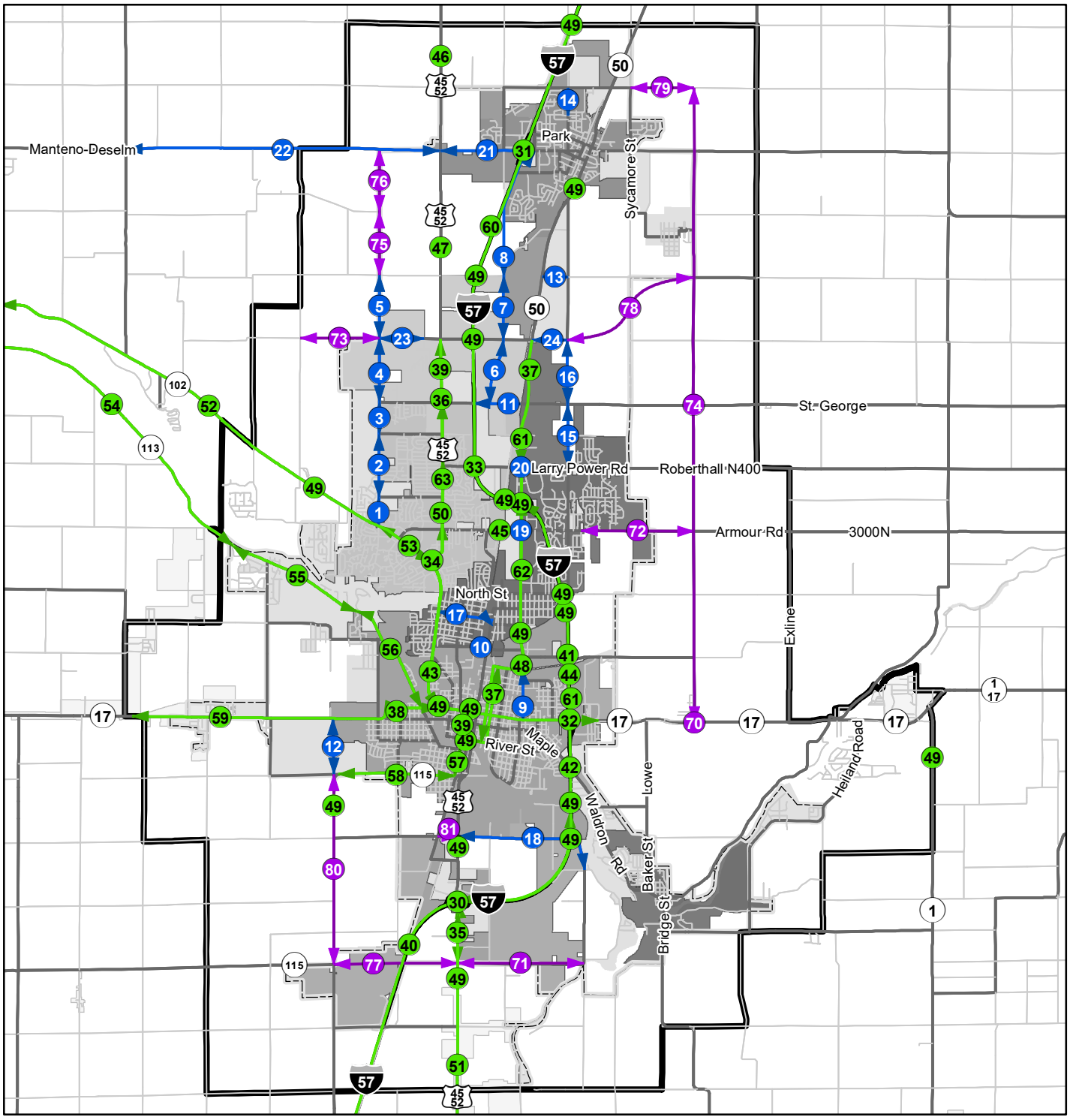
5.14 Future Roadway Improvements

Potential projects in the KATS MPA were developed by reviewing projects in the KATS 2040 LRTP and using input from KATS committee members, the Kankakee County Regional Planning Commission, and supported by technical analysis. Projects included in the KATS Transportation Improvement Program and the IDOT Multi-year Program were also included. Projects were identified as local, state, and unsponsored projects that primarily address infrastructure, capacity, and safety issues as they relate to each corridor's assessment. In total, there are 24 local, 34 state, and 12 unsponsored projects.

Figure 5-17 displays the jurisdiction and location of potential future roadway projects within the KATS MPA. **Table 5-9** describes the general location of the roadway or intersection. **Chapter 12** provides additional detail regarding the project selection process and **Chapter 13** outlines the fiscally constrained roadway improvements that are part of this plan.

Traffic on Illinois Route 50.

Figure 5-17: Potential Future Roadway Projects in the KATS MPA



Potential Project Sponsor

- Local
- State
- Unsponsored
- Metropolitan Planning Area (MPA)

- Corporate Limits
- Census Urbanized Area (UZA)
- Adjusted Urbanized Area (UAB)

N

Miles
0 ½ 1 2 3 4 5

Data Sources: Street Centerlines (2018), Illinois Department of Transportation, UZA, U.S. Census Bureau, Other data - Kankakee County.
Disclaimer: This map is for reference only. Data provided are derived from multiple sources with varying levels of accuracy. Kankakee Area Transportation Study disclaims all responsibility for the accuracy or completeness of the data shown.

Note: The project numbers are for identifiacation and do not reflect any priority.

Table 5-9: Potential Future Roadway Projects in the KATS MPA by Project Sponsor Type

Local Projects

ID No.	Project	Starting Terminus	Ending Terminus
1	Career Center Rd	Main St NW	Bethel Dr
2	Career Center Rd	Bethel Dr	Burns Rd
3	Career Center Rd	Burns Rd	Indian Oaks Rd
4	Career Center Rd	Indian Oaks Rd	Bourbonnais Pkwy
5	Career Center Rd	Bourbonnais Pkwy	7000N Rd
6	1000E Rd	5000N Rd	6000N Rd
7	1000E Rd	6000N Rd	7000N Rd
8	1000E Rd	7000N Rd	9000N Rd
9	Hobbie Ave	IL-17	Fair St
10	Brookmont Boulevard	Canadian National RR Bridge	
11	5000N Rd	I-57	IL-50
12	2000W Rd	IL-17	IL-115
13	7000N Rd	IL-50	2000E Rd
14	Maple St	7th St	10000N Rd
15	2000E Rd	Larry Power Rd	5000N Rd
16	2000E Rd	5000N Rd	6000N Rd
17	Broadway St	US 45/52	Schuyler Ave and Liberty St
18	River Rd	US 45/52	S 2000E Road
19	Intersection	IL-50	Armour Rd
20	Intersection	IL-50	Larry Power Rd
21	9000N Rd	I-57	US 45/52
22	9000N Rd	US 45/52	5000W Rd
23	Bourbonnais Pkwy	Stonebridge Blvd	Career Center
24	Bourbonnais Pkwy	IL-50	2000E Rd

State Projects

ID No.	Project	Starting Terminus	Ending Terminus
30	Intersection (Overpass)	US 45/52	I-57
31	Interchange	I-57	9000N Rd
32	Interchange	I-57	IL-17
33	Intersection (Overpass)	I-57	Larry Power Rd
34	Intersection	US 45/52	IL-102
35	US 45/52	I-57	Airport Rd
36	US 45/52	Kathy Dr	Bourbonnais Pkwy
37	IL-50	River St	Bourbonnais Pkwy
38	IL-17	Station St	Eastgate Pkwy
39	US 45/52	River St	Bourbonnais Pkwy
40	I-57	0.7 mi. north of Iroquois Co. Line	0.4 mi. north of Kankakee River Bridge
41	Intersection (Overpass)	I-57	Norfolk Southern Railroad
42	Intersection (Overpass)	I-57	Waldron Road
43	US 45/52	0.1 mi. north of Armour Rd.	IL-17
44	I-57	0.7 mi. north of IL-17	0.8 mi south of North St.
45	Intersection (Overpass)	Armour Road	Illinois Central RR (CN)
46	Intersection (Overpass)	US 45/52	Rock Creek (1.5 mi. north of Manteno Rd)
47	Intersection (Overpass)	US 45/52	South Branch of Rock Creek (0.5 mi. north of 7000N Rd.)
48	IL-50	Brookmont Blvd	US 45/52
49	Kankakee County/MPA	HIL-20-001	Bridge Deck Sealing
50	US 45/52	Indian Oaks Rd	River St.
51	US 45/52	0.2 mi south of I-57	IL-49 (4.5 mi. west of Ashkum)
52	IL-102	Will County Line	US 45/52
53	IL-102	Briarcliff Ln	US 45/52
54	IL-113	Will County Line	Edgewater Dr
55	IL-113	Edgewater Dr	Indian Trail
56	IL-113	Indian Trail	IL-17
57	IL-115	US 45/52	Jeffery St.
58	IL-115	S Washington Ave	1 mi. west of Curtis Ave

59	IL-17	Norfolk Southern RR	U.S. 45/52
60	I-57	IL-50	Will County Line
61	I-57	US 45/52	IL-50
62	IL-50	Grinnell Rd	St. George Rd (CH 8)
63	US 45/52	IL-17	Kathy Dr

Unsponsored Projects

ID No.	Project	Starting Terminus	Ending Terminus
70	Intersection	IL-17	4000E Rd
71	Airport Rd	US 45/52	River Rd
72	Armour Rd (CH 44)	George Ln	4000E Rd
73	Bourbonnais Pkwy	Career Center Rd	2250W Rd
74	4000E Rd	IL-17	Manteno Rd
75	Career Center Rd	7000N Rd	8000N Rd
76	Career Center Rd	8000N Rd	9000N Rd
77	4000S Rd	IL-115	US 45/52
78	6000N Rd / 7000N Rd	2000E Rd	4000E Rd
79	10000N Rd	3000E Rd	4000E Rd
80	IL-115	Jeffery St	4000S Rd
81	River Rd	CH 4 (Kensington Ave)	US 45/52

Brookmont Boulevard Viaduct (10) is a Tier 1 project.

5.14.1 Local Roadway Projects

Career Center Rd (1-5, 75-76): This combination of segments makes up a north-south improvement that will extend from Main Street NW (IL-102) to 9000N Rd, one mile west of U.S. 45/52. Development has occurred near the southern portion of this roadway and future development will make this an important future corridor. This project is also an important regional north-south connection now that the Bourbonnais Parkway widening project and I-57 interchange have been constructed.

1000E Rd (6-8): The improvements to 1000E Rd will provide an alternative to I-57 for north-south travel between 5000N Rd and 9000N Rd. East-west freight traffic between U.S. 45/52 and IL-50 need local access to the new interchange.

Hobbie Ave (9): Hobbie Ave is a north-south truck-friendly corridor that connects IL-17 to IL-50. This project was identified in the previous LRTP as a priority and is part of the fiscally constrained plan. This project would see Hobbie Ave become a three-lane road with bike lanes and would benefit the movement of freight and enhance safety.

Brookmont Boulevard (10): Brookmont Boulevard has seen the expenditure of federal transportation funding twice in the history of the MPO. This roadway has been improved with the exception between Washington Ave and Schuyler Ave, where a two-lane railroad underpass requires reconstruction. The project lies within the City of Kankakee.

5000N Rd (11): The 5000N Rd (St. George Rd) project will expand the road from a 2-lane road to a 3-lane road, it will also include drainage improvements along the shoulder. The at-grade rail crossing would also be improved with signals and gates.

2000W Rd (12): This north-south corridor will connect 1000S Rd to IL-17. The project also would link up with Project 77 and 80 to the south to provide a southwestern bypass to the City of Kankakee to support the efficient movement of freight both locally and regionally.

7000N Rd (13): This new roadway construction provides increased access to IL-50. As development continues east of IL-50, 7000N Rd will become increasingly more important for businesses and residents in the area.

Maple St (14): Maple St from 7th St to 10000N Rd in Manteno, the project will widen the road from 2 lanes to 3 lanes and improve drainage in the area.

2000E Rd (15-16): For these two projects, 2000E Rd will be improved for two stretches; 1) from Larry Power Rd to 5000N Rd and, 2) from 5000N Rd to 6000N Rd. For these two road segments, the road will be widened from 2 lanes to 3 lanes and intersection improvements will be made.

Broadway St (17): Broadway St from U.S. 45/52 to Schuyler Ave and Liberty St, the project will resurface the existing road maintaining the existing 3 lanes. The project will include stormwater improvements and upgrade the existing on-street bike lanes to grade-separated, off-street bike lanes.

River Rd (18): River Rd from U.S. 45/52 to S 2000E Rd, the project will widen the existing road to 3 lanes adding a center bi-directional turn lane.

Intersection (19): At the intersection of IL-50 and Armour Rd, the plan is to expand the existing lanes, to add traffic signals to the west, and to widen from 4 to 5 lanes with turn lanes to the east.

Intersection (20): At the intersection of IL-50 and Larry Power Rd, the plan is to optimize the traffic signals, make turn lane safety improvements, and improve safety for pedestrians.

9000N Rd (21): 9000N Rd from I-57 to U.S. 45/52, the project will improve the road to 3 lanes with shoulder and intersection improvements, also it will improve the guard rail at the approach of I-57.

9000N Rd (22): 9000N Rd from U.S. 45/52 to 5000W Rd, the project is a milling and resurfacing of the existing road.

Bourbonnais Pkwy (23): Bourbonnais Pkwy from Stonebridge Blvd to Career Center Rd, the project will expand the existing road to 3 lanes, with 4 to 5 lanes at major intersections, and make controlled intersection improvements.

Bourbonnais Pkwy (24): Bourbonnais Pkwy from IL-50 to 2000E Rd, the project will expand the existing road to 3 lanes, with 4 to 5 lanes at major intersections, and make controlled intersection improvements.

5.14.2 State Roadway Projects

Intersection (Overpass) (30): The bridge replacement of U.S. 45/52 over I-57 project would enhance regional and local connections and improve access to the Greater Kankakee Regional Airport.

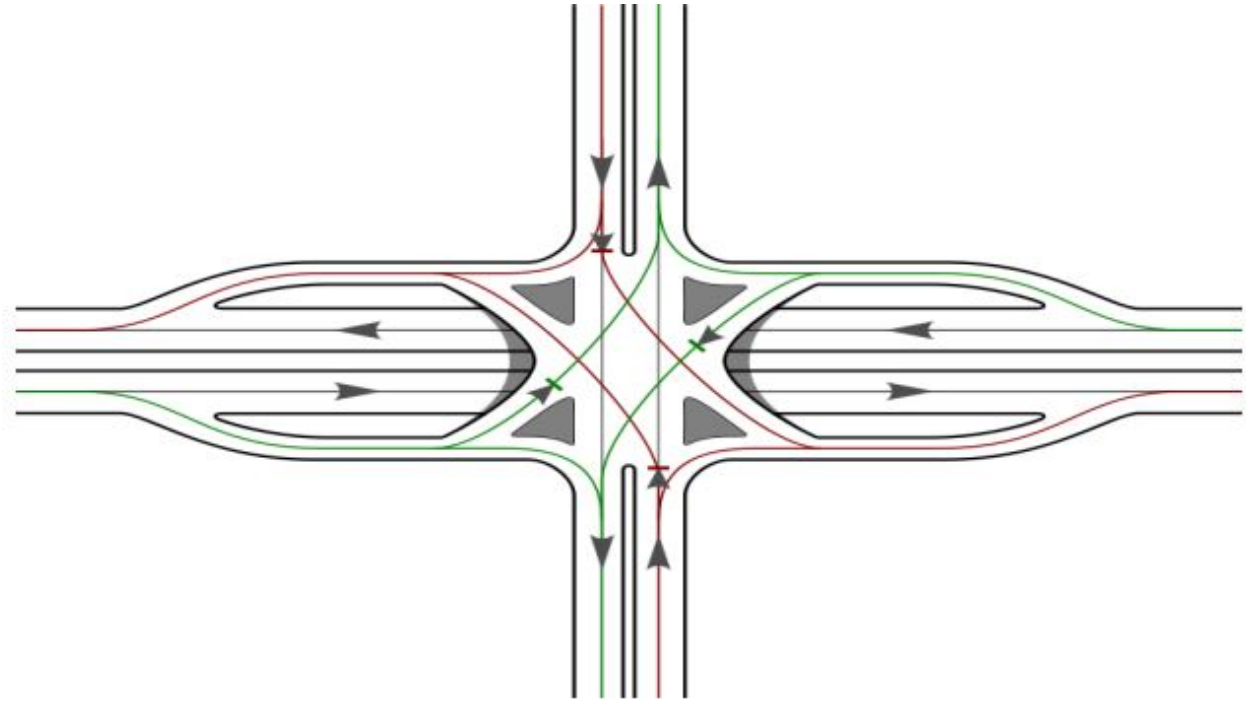
Interchange (31): The interchange at I-57 and 9000N Rd (Division St) or exit 322 is a project that has arisen as a result of continued growth in the northern portion of Kankakee County. Interchange improvements would result in capacity improvements that help alleviate traffic and congestion and improve safety. There would also be an addition of sidewalk where none currently exists.

Interchange (32): Interchange improvements at I-57 and IL-17 are currently being developed. Current plans call for the reconstruction and enhancement of ramps at this interchange as a single point urban in addition to mainline improvements to I-57. **Figure 5-18** shows what a single-point urban interchange looks like. This project would improve traffic flow, reduce travel delays, and improve traffic safety.

Intersection (Overpass) (33): At Larry Power Rd over I-57, the bridge will be replaced to provide safety and enhance connectivity within the system.

Intersection (34): One of the highest volume intersections in Kankakee County, U.S. 45/52 and IL-102 has the second largest volume of cars in the region every day. Intersection improvements to enhance safety and improve traffic flow are needed.

Figure 5-18: Illustration of the single-point urban interchange configuration



Source: https://upload.wikimedia.org/wikipedia/commons/b/b1/Spui-schematic.svg.

U.S. 45/52 (35): U.S. 45/52 from I-57 to Airport Rd, the project would expand the road from 2 lanes to 3 lanes. Also, intersection improvements would be made, all leading to improved access to the Greater Kankakee Regional Airport.

U.S. 45/52 (36): U.S. 45/52 from Kathy Dr to Bourbonnais Pkwy, the project plans to expand the road to 4/5 lanes, improve the intersections, and pour heavy concrete which would improve truck accessibility.

IL-50 (37): IL-50 from River St to Bourbonnais Pkwy the project would improve traffic flow through the use of an Intelligent Transportation System (ITS) upgrade and synchronize traffic lights.

IL-17 (38): IL-17 from Station St to Eastgate Pkwy the project would improve traffic flow through the use of an Intelligent Transportation System (ITS) upgrade and synchronize traffic lights.

U.S. 45/52 (39): U.S. 45/52 from River St to Bourbonnais Pkwy the project would improve traffic flow through the use of an Intelligent Transportation System (ITS) upgrade and synchronize traffic lights.

I-57 (40): Improvements on I-57 from 0.7 mi. north of the Iroquois County border with Kankakee County to 0.4 mi. north of where the Kankakee River Bridge ends would include resurfacing of the road, and repairs to the existing bridges and culverts.

Intersection (Overpass) (41): This project would replace the bridge for I-57 going over the Norfolk Southern Railroad.

Intersection (Overpass) (42): This project would replace the bridge for I-57 going over Waldron Rd.

U.S. 45/52 (43): U.S. 45/52 from 0.1 mi. north of Armour Rd to IL-17, project will be milling and resurfacing work and ADA improvements made.

I-57 (44): This project would reconstruct the road on I-57 from 0.7 mi. north of IL-17 to 0.8 mi. south of North St.

Intersection (Overpass) (45): This project would replace the bridge for I-57 going over the Illinois Central Railroad (CN).

Intersection (Overpass) (46): This project would replace the overpass from US 45/52 to Rock Creek (1.5 mi north of Manteno Rd) improving the road.

Intersection (Overpass) (47): This project would replace the bridge overpass of the South Branch of Rock Creek (0.5 mi. north of 7000N Rd) on US 45/52.

IL-50 (48): IL-50 between Brookmont Blvd and US 45/52 there will be milling and resurfacing work and ADA improvements made.

Kankakee County/MPA (49): Throughout Kankakee County at various locations there will be bridge deck sealing happening. For further detail see the TIP for FY 2020, project HIL-20-001.

U.S. 45/52 (50): U.S. 45/52 from Indian Oaks Rd to River St, ADA improvements will be made so all users are able to navigate through the space safely.

U.S. 45/52 (51): U.S. 45/52 from 0.2 mi. south of I-57 to IL-49 (4.5 mi. west of Ashkum) the project is a designed overlay of the road.

IL-102 (52): IL-102 from the Will County border with Kankakee County to U.S. 45/52, the project is a designed overlay of the road and ADA improvements.

IL-102 (53): IL-102 from U.S. 45/52 to Briarcliff Ln, the project will make ADA improvements.

IL-113 (54): IL-113 from the Will County border with Kankakee County to Edgewater Dr, the project is a designed overlay of the road.

IL-113 (55): IL-113 from Edgewater Dr to Indian Trail, the project is a reconstruction of the road.

IL-113 (56): IL-113 from Indian Trail to IL-17, the project is a designed overlay of the road and ADA improvements.

IL-115 (57): The project will reconstruct the road on IL-115 from U.S. 45/52 to Jeffery St.

IL-115 (58): The project will be a designed overlay of the road and ADA improvements on IL-115 from U.S. 45/52 to Jeffery St.

IL-17 (59): IL-17 from Norfolk Southern Railroad to U.S. 45/52, the project will preserve pavement by performing crack and joint sealing.

I-57 (60): I-57 from IL-50 to the Will County border with Kankakee County, the project will include a reconstruction of the road, an addition of lanes, and bridge replacements and repairs.

I-57 (61): I-57 from US 45/52 to IL-50, the project will include a reconstruction of the road, an addition of lanes, and bridge replacements and repairs.

IL-50 (62): IL-50 between Grinnell Rd and St. George Rd (CH 8), the project plans to reconstruct the road and add lanes.

U.S. 45/52 (63): U.S. 45/52 between IL-17 and Kathy Dr, the project plans to reconstruct the road and add lanes.

5.14.3 Unsponsored Roadway Projects

Unsponsored projects were identified through the planning process and are also identified as Tier 3 Projects. These projects are primarily conceptual in nature and require further study to identify the project details. These projects are likely long-term projects and they do not currently have a sponsoring agency.

Intersection (70): At the intersection of IL-17 and 4000E, the project will add dedicated turning lanes for all approaches.

Airport Rd (71): This improvement would enhance east-west access to and from the Greater Kankakee Regional Airport, expanding Airport Rd to 3 lanes between US 45/52 and River Rd, add dedicated turn lanes at the intersection with U.S. 45/52, and make shoulder-drainage improvements.

Armour Rd (CH 44) (72): On Armour Rd from George Ln to 4000E Rd, the project plans to widen the road to 3 lanes.

Bourbonnais Pkwy (73): This project plans to expand Bourbonnais Pkwy to 4 lanes with shoulder-drainage improvements and heavy concrete for heavy trucks from Career Center Rd to 2250W Rd.

4000E Rd (74): 4000E Rd from IL-17 to Manteno Rd, the project plans to make the road 3 lanes with shoulder-drainage improvements, heavy concrete for heavy trucks, and new signals at major intersections.

Career Center Rd (75-76): Career Center Rd, the two segments of road from 7000N Rd to 9000N Rd will be expanded to 3 lanes, improvements will be made to storm drainage, and the controlled intersections will be improved.

4000S Rd (77): 4000S Rd from IL-115 to U.S. 45/52, the project plans to construct a new 3 lane road with shoulder-drainage improvements, heavy concrete for heavy trucks.

6000N Rd / 7000N Rd (78): This project would be a new construction road that connects 2000E Rd at 6000N Rd to 4000E Rd at 7000N Rd. The road would help provide trucks access to the new 6000N Rd interchange and would be made with heavy concrete for trucks.

10000N Rd (89): 10000N Rd from 3000E Rd to 4000E Rd, the project will expand the road to 3 lanes, provide access for heavy trucks, and have shoulder-drainage improvements.

IL-115 (80): IL-115 from Jeffery St to 4000S Rd, the project will expand the road to 3 lanes and add concrete allowing for heavy truck access.

River Rd (81): This project would be a new construction that would include a new, 2 lane extension of river road from U.S. 45/52 across the railroad and connect to CH 4 (Kensington Ave).

Milling and Resurfacing at the junction of Illinois State Routes 1 and 17.


1904
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River Valley
METRO

6.1 Overview

Public transportation is an important mode of transportation in Kankakee County. Public transportation is able to provide a low-cost transportation option to the public. The KATS MPA has two providers of public transportation. River Valley METRO Mass Transit District offers urban public transportation in the metropolitan area and SHOW BUS NFP, through Kankakee County, provides rural public transportation service in Kankakee County. Together, these two agencies provide transit service for residents and employees throughout the region.

6.2 Existing Transit Service

6.2.1 Urban Transit Service

Public transportation service in the Kankakee Urbanized Area is provided by River Valley METRO Mass Transit District, commonly referred to as METRO, which was established in September 1998. METRO provides service to the municipalities of Aroma Park, Bourbonnais, Bradley, Kankakee, Manteno, and Manteno Township, as well as some areas of unincorporated Kankakee County.

METRO operates fixed-route bus service seven days a week with headways of thirty minutes or one hour with an ADA/paratransit service called METRO Plus. This service runs on the same schedules as the fixed-route service, but requires advanced registration by 4:00 PM the day before, with a 24-hour notice recommended. METRO also runs commuter service to the University Park Metra Train Station and to Midway Airport. In winter 2016-2017 METRO had a comprehensive operations analysis performed to review their service. The analysis recommended changes to service in order to better serve riders, which went into effect in July 2017. Fares are $1.00 for regular service and $2.00 for commuter service with discounts available to young children, senior citizens, and individuals with disabilities.

6.2.2 Rural Transit Service

The rural public transportation service in Kankakee County is provided by SHOW BUS Public Transportation, which is a pass-through transit provider of Kankakee County. SHOW BUS has been the county's rural transit provider since 1999 and has offered rural transit services to central Illinois counties since 1979. SHOW BUS currently has service in the rural areas of DeWitt, Ford, Iroquois, Logan, Macon, Mason, and McLean counties. Service is made possible by funding from FTA, IDOT, and local governments. Besides program administration and oversight, technical support for SHOW BUS is provided by Kankakee, Logan, and McLean Counties.

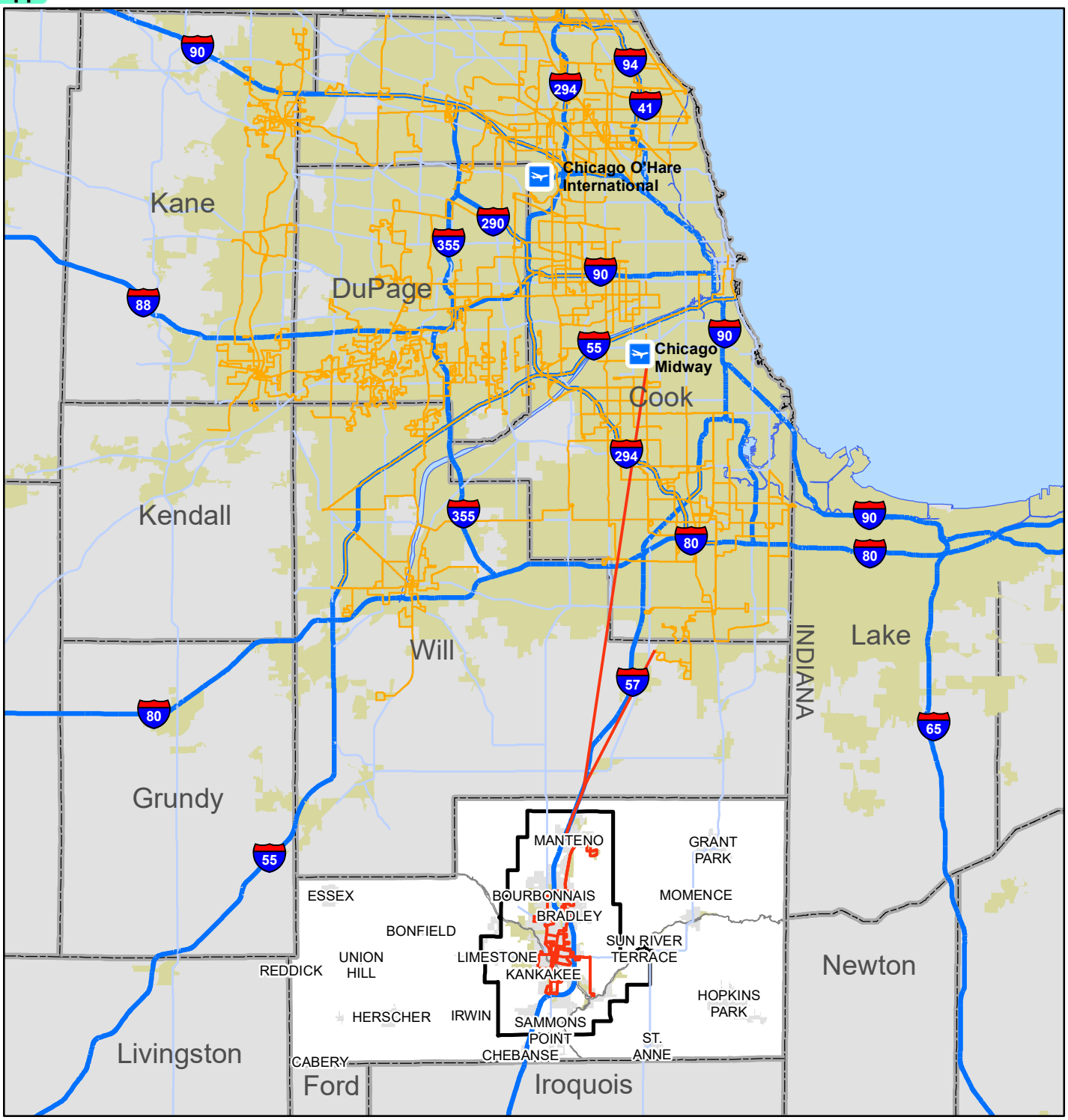
SHOW BUS operates demand response service and the Momence deviated-fixed-route service within Kankakee County on weekdays. The demand response service has different routes that serve different areas of the county depending on the day of the week. Due to the high demand for service in Pembroke Township, in southeast Kankakee County, service is provided each weekday. Fares for the demand response service are $4.00. The deviated-fixed-route service, often referred to as the "Momence Commuter" links downtown Kankakee, Sun River Terrace, and Momence. In order to accommodate the needs of employees going to work, the service leaves downtown Kankakee at 4:00 AM Monday through Friday and then each hour afterward. The scheduled route takes about seventy-five minutes to complete. The last bus leaves Kankakee at 5:00 PM and returns at 6:15 PM. The fare for the Momence Commuter service is $2.00 round trip.

6.2.3 Intercity Transit Service

In Kankakee County, there is one Greyhound bus station located at 2155 South Schuyler Ave (US 45/52). The bus station is open 24 hours a day, 7 days a week and on holidays. The ticketing office and package express are open from 9:00 AM to 7:00 PM daily. The Economy Inn Hotel is also located at the bus station. River Valley METRO has a stop at this location allowing riders of METRO's system to be able to access the international Greyhound system. The rural transit system is also developing an extension of its deviated fixed route service that would connect riders to Greyhound. Kankakee is included on the Greyhound Express line. This route stops in Kankakee and Markham on its trip between Chicago and Champaign. From Chicago or Champaign, riders can access more routes including the Greyhound Lines, Inc. and other partner carriers.

METRO heavy duty bus.

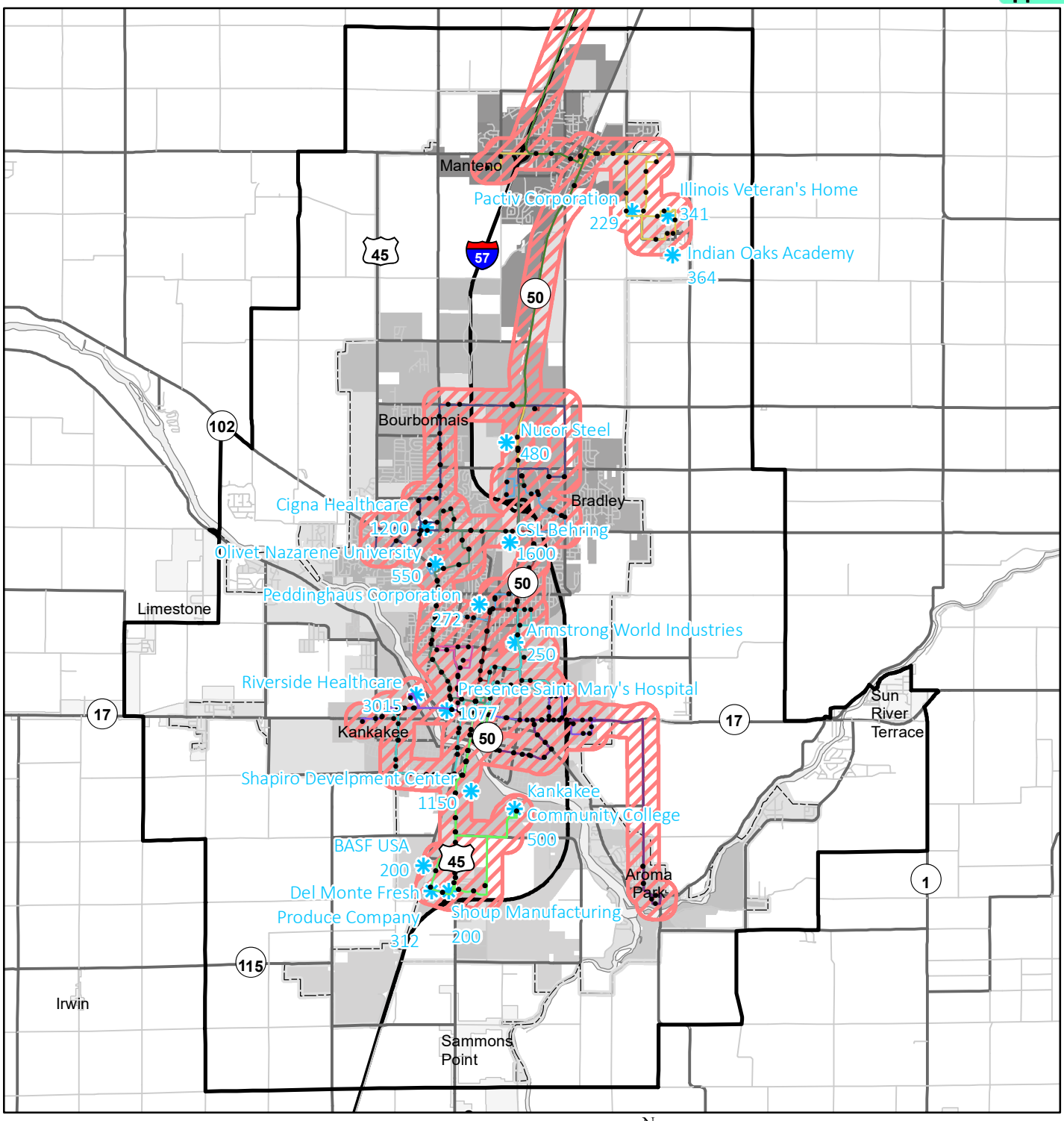
Figure 6-1: Regional Map - Public Transportation



Data Sources: Street Centerlines (2018) and Pavement Data (2016), Illinois Department of Transportation, Metro Routes (2019), METRO, PACE Routes (2019), and MetraRR, City of Chicago Data Portal, UZA, U.S.Census Bureau, Other data - Kankakee County.

Disclaimer: This map is for reference only. Data provided are derived from multiple sources with varying levels of accuracy. Kankakee Area Transportation Study disclaims all responsibility for the accuracy or completeness of the data shown.

Figure 6-2: METRO Transit Service in the KATS MPA



Data Sources: Street Centerlines (2018), Illinois Department of Transportation, Metro Routes (2019), METRO, Employer Data, Kankakee County Economic Alliance, UZA, U.S. Census Bureau, Other data - Kankakee County.
Disclaimer: This map is for reference only. Data provided are derived from multiple sources with varying levels of accuracy. Kankakee Area Transportation Study disclaims all responsibility for the accuracy or completeness of the data shown.

6.3 Transit Service

Service coverage area and bus stop locations are intended to maximize access to and from residential areas and employment centers within the KATS MPA. Forecasting future housing and employment trends is important to ensure an appropriate level of service. The service area is planned to maximize potential ridership. **Figure 6-1** illustrates public transportation within a regional context. **Figure 6-2** includes the largest area employers in relation to METRO service.

METRO provides a total of 12 fixed-route bus services. **Table 6-1** lists METRO's fixed-routes, route service area, headways, number of stops, scheduled time-points, and total route running time for each route. Headways are the scheduled time interval between any two revenue vehicles operating in the same direction. Running time is the amount of time assigned for the movement of a revenue vehicle over a route on a route segment basis. **Table 6-2** lists METRO's commuter service routes. **Table 6-3** lists major destinations associated with each METRO Route.

Table 6-1: METRO's Fixed-Route Service (2019)

Route Number	Route Name	Service Area	Headway (minutes)	Bus Stops	Scheduled Timepoints	Running Time (Minutes)
1	Meadowview	Kankakee	30	14	5	30
2	Bradley/Meijer/Target	Bradley/Bourbonnais	55	41	9	55
3	Schuyler/Meijer/Walmart	Kankakee	60	32	8	60
4	Court Street	Kankakee	60	38	9	30
4p	Court Street	Kankakee	30	38	9	30
5	Aroma Park	Kankakee/Aroma Park	30	40	7	30
6	Indiana/Harrison/Del Monte	Kankakee	30	25	4	30
7	Walmart/KCC/Del Monte	Kankakee	60	31	7	60
7p	Walmart/KCC/Del Monte	Kankakee	30	20	5	30
8	East Kankakee/High School	Kankakee	60	44	11	60
9	Manteno	Manteno	60	31	7	60
10	Bourbonnais/VA	Bourbonnais	60	34	11	60
11	Kennedy Dr/ONU	Bourbonnais	60	37	7	30

Table 6-2: METRO's Commuter Routes (2019)

Route Name	Service Area	Headway (Minutes)	Bus Stops	Scheduled Time Points	Running Time (Min)
Midway Airport Commuter	Bourbonnais, Manteno, Midway Airport	(Varies)	3	3	75 *
University Park Metra Train Station	Bourbonnais, Manteno, University Park	(Varies)	3	3	45 *

Table 6-3: METRO's Transit Routes and Major Destinations

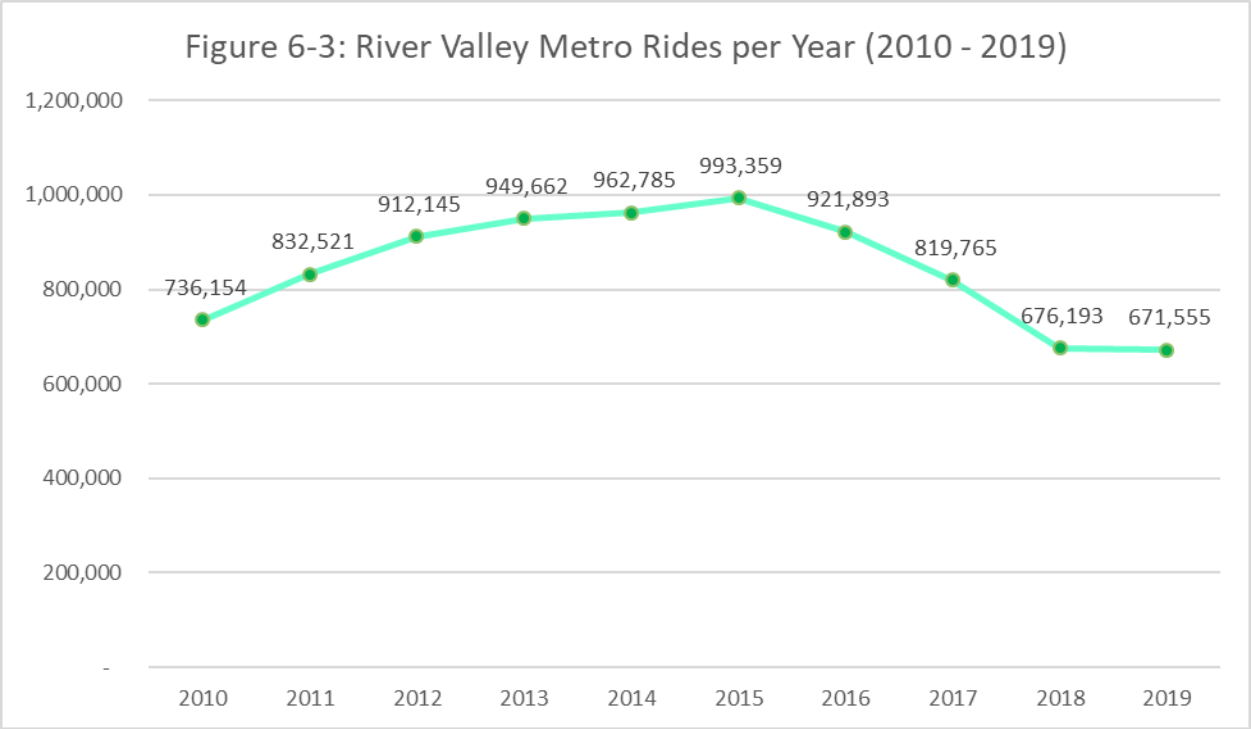
Meadowview- Route 1	Meadowview Shopping Center, Family Dollar, Azzarelli Apartments, Kankakee Commons, Walgreens on W. Court St., and other locations.
Bradley/Meijer/Target- Route 2	Northfield Square Mall, Target, Meijer, Lowes, Village Square, Bradley Library, Bradley Village Hall, Perry Farm, BBCHS, ONU, the VA Clinic, and other locations.
Schuyler/Meijer/Walmart- Route 3	Walmart, Northfield Square Mall, Meijer, Lowe's, KCC, KCTC, Chestnut & Schuyler Transfer Center, Menard's
Court Street- Route 4	Paramount Theater, County Courthouse, Salvation Army, King Middle School, River Valley Supportive Living, East Court Village, Mark Twain School, Kankakee Junior High, Kankakee County Health Dept., St Mary's Hospital, Riverside Medical Center
Aroma Park- Route 5	Grace Baptist School, Aroma Park Village Hall, Aroma Park Grade School, Dollar General, King Middle School, Amtrak, Chestnut & Schuyler Transfer Center
Indiana/Harrison/Del Monte- Route 6	Paramount Theater, Amtrak, Kankakee City Hall, Shapiro, Ace Hardware, Prairieview Estates, Economy Inn and Greyhound Station, Aldi, Hilton Garden Inn, Wal-Mart, GAR Creek Trail and Prairie, Del Monte
Walmart/KCC/Del Monte- Route 7	Paramount Theater, Library, Amtrak, Jewel, Kennedy Middle School, Kankakee High School, Taft Elementary School, Shapiro, Ace Hardware, Prairieview Homes, Economy Inn and Greyhound Station, Aldi, Del Monte, Walmart, Fairview Courts, KCC
East Kankakee/High School- Route 8	Presence St. Mary's Hospital, Amtrak, County Courthouse, Library, Paramount Theater, Jewel, CVS, Model Motel, Casey's, Kankakee High School, Berkot's
Manteno- Route 9	Oak St. Shelter, Village Hall, Oakridge Manufactured Homes, Kmart Distribution, METRO Center Transfer Station, Manteno Veterans Home, Heritage Woods, Indian Oaks, Farm & Fleet, Northfield Square Mall
Bourbonnais/VA- Route 10	Bourbonnais Upper Grade Center, Library, VA Clinic, Kroger, Walmart, METRO Center Transfer Station, Cigna, Riverside Fitness, Riverside Medical Plaza, Presence St. Mary's, Bourbonnais Village Hall, Jewel, VA Clinic, Northfield Square Mall
Kennedy Dr/ONU- Route 11	Northfield Square Mall, Kroger, Bourbonnais Village Hall, Olivet Nazarene University, Chicago Dough, Perry Farm, Big Lots, Walgreens, McDonalds, Chestnut & Schuyler Transfer Center

6.4 Transit Ridership

Since METRO's inception, ridership increased each year until it peaked in 2015. Ridership decreased since 2016. **Figure 6-3** shows the annual ridership of the METRO system between 2010 and 2019. Ridership data is quantified on METRO's fiscal year, which is from July 1 through June 30 of the following calendar year. In late 2016 and early 2017, METRO had a comprehensive operations analysis prepared, which reviewed their existing service and recommended potential service improvements. METRO initiated several recommendations beginning in 2017. As a result of the comprehensive operations analysis, some

of the routes were modified to reduce running time for some routes and the number of transfers. Because ridership is based on the number of individuals boarding transit vehicles, a reduction in transfers could result in an apparent decrease in ridership.

Figure 6-3: River Valley METRO Riders per (Fiscal) Year (2010-2019)



Source: River Valley METRO MTD.

Figure 6-4 shows ridership by route from FY 2010 to FY 2019. Route 1 (Meadowview) had the highest ridership until FY 2018 when system-wide service improvements and route modifications were initiated. Since 2018, Routes 10 and 11 (Bourbonnais) have had the highest ridership. The Court Street route was modified to have a peak and off-peak period based on daily ridership demand. As a result, Route 4 (Court Street) appears to have decreased in ridership, but when combining with the Route 4 Peak Period, ridership has actually increased.

In 2014, METRO began daily service to Midway Airport, which has experienced growing ridership each year. Between 2014 and 2015, ridership on the Midway route more than doubled. While riders use the route to travel from Kankakee County to Midway Airport, there has been a growing trend in utilizing the Midway route to then board the CTA Orange Line, which connects Midway Airport and downtown Chicago. In the past, Metra was the primary transit method of traveling between Kankakee County and Chicago. During the last few years, ridership on the University Park route, which connects with the Metra station, has decreased.

Figure 6-4: River Valley METRO Ridership by Route (2010-2019)

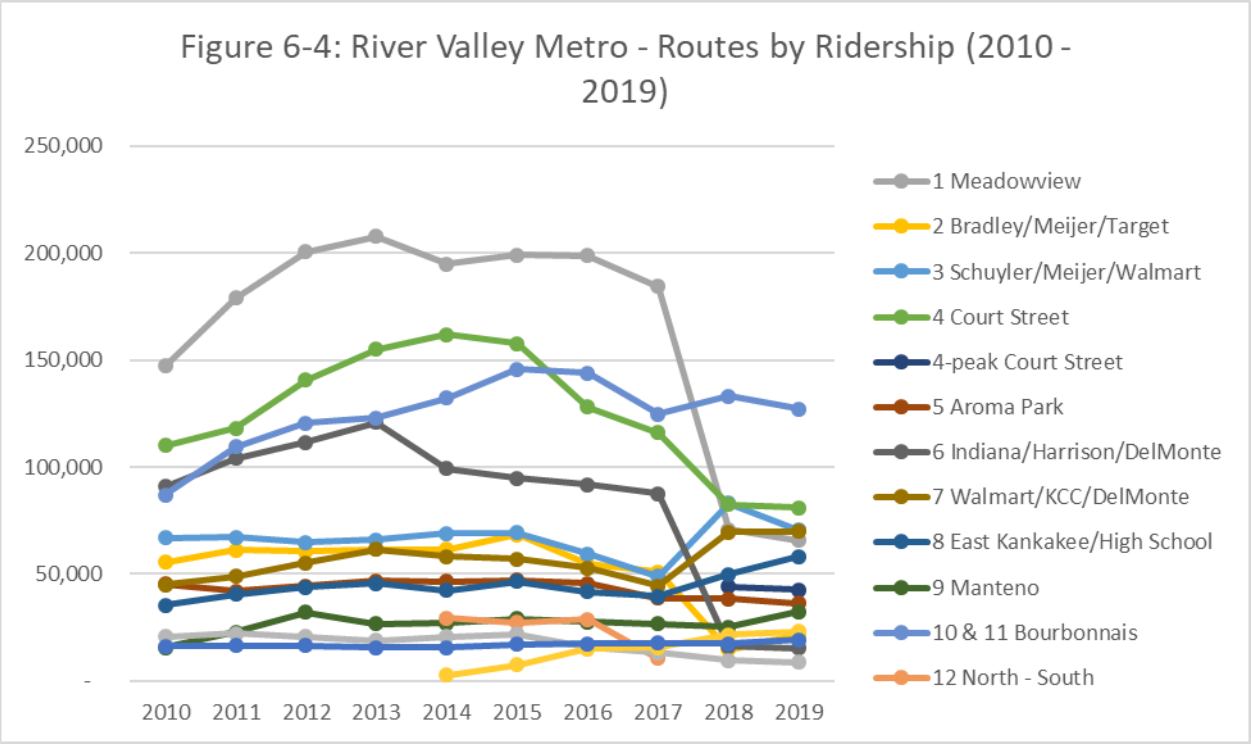
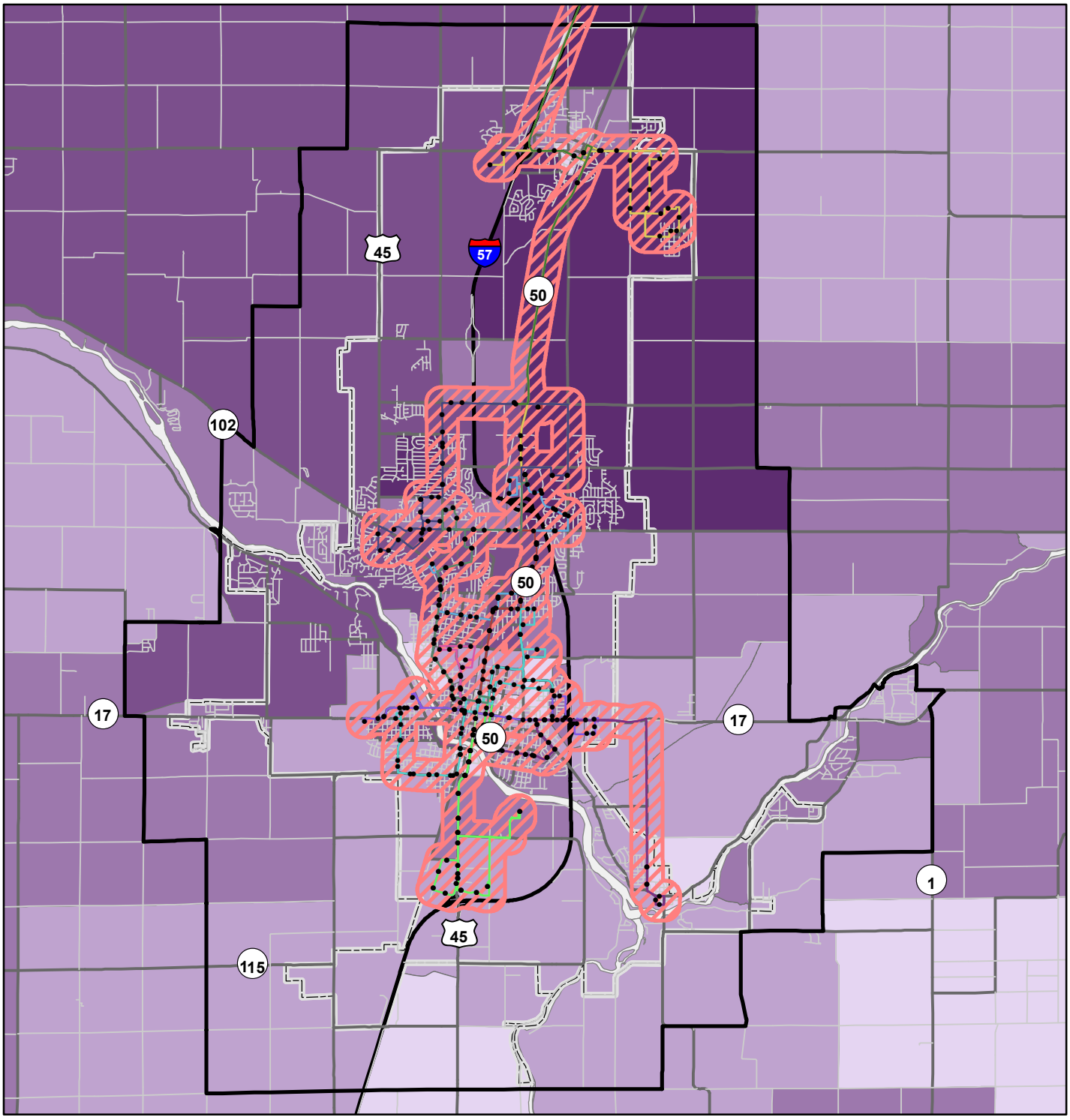


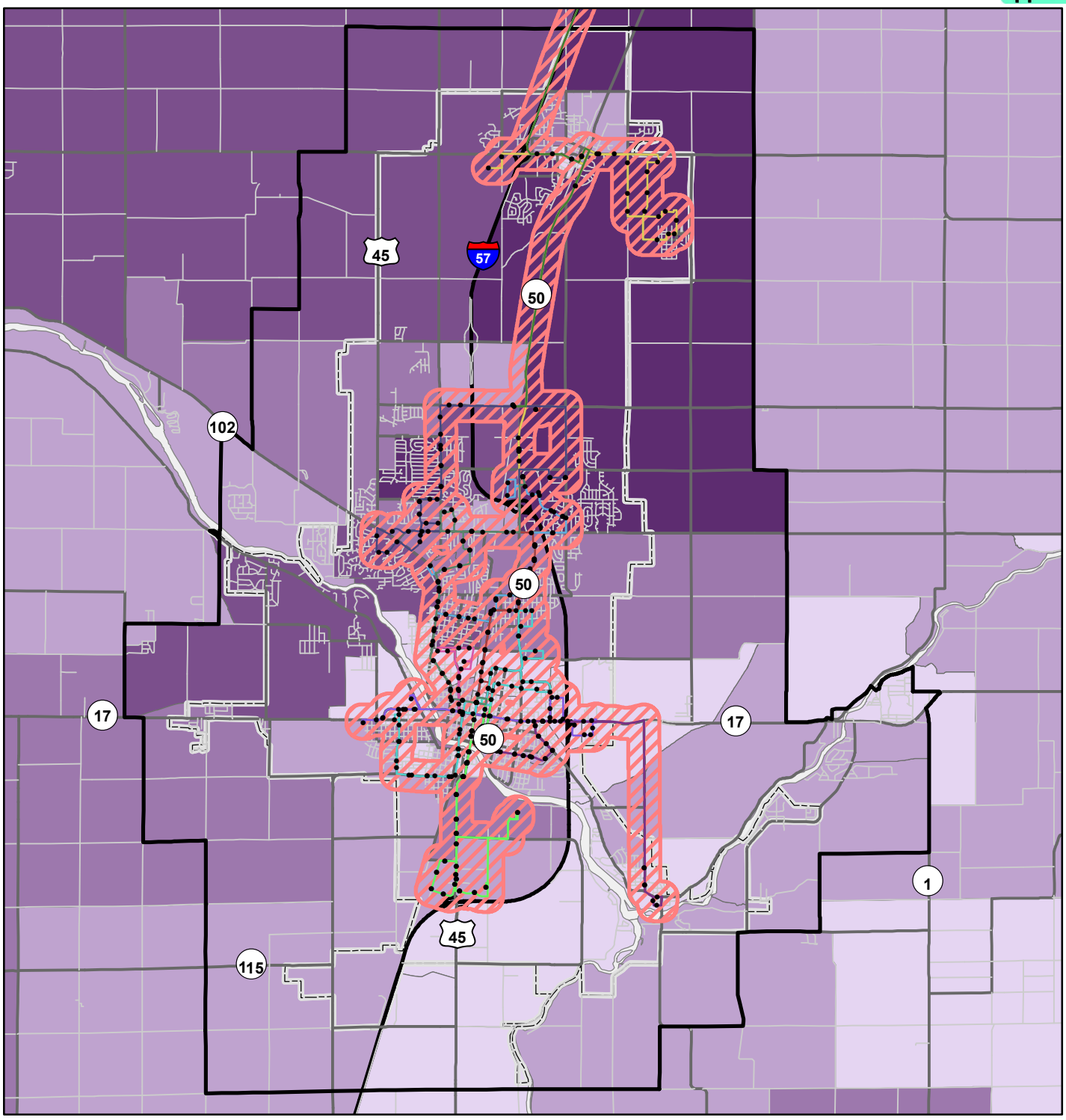
Figure 6-5 shows METRO's fixed-routes and adjacent ¼-mile buffer in relation to population density. **Figure 6-6** shows METRO's fixed-routes and adjacent ¼-mile buffer in relation to the density of workers.

Figure 6-5: Population within 1/4 mi METRO Transit Service in the KATS MPA



Data Sources: Street Centerlines (2018), Illinois Department of Transportation, Metro Routes (2019), METRO, UZA and 2013-2017 5-Year ACS Population Block Group Data, U.S. Census Bureau, Other data - Kankakee County.
Disclaimer: This map is for reference only. Data provided are derived from multiple sources with varying levels of accuracy. Kankakee Area Transportation Study disclaims all responsibility for the accuracy or completeness of the data shown.

Figure 6-6: Employment within 1/4 mi METRO Transit Service in the KATS MPA



Data Sources: Street Centerlines (2018), Illinois Department of Transportation, Metro Routes (2019), METRO, Employer Data, Kankakee County Economic Alliance, UZA and 2013-2017 5-Year ACS Block Group Worker Data, U.S. Census Bureau, Other data - Kankakee County.
Disclaimer: This map is for reference only. Data provided are derived from multiple sources with varying levels of accuracy. Kankakee Area Transportation Study disclaims all responsibility for the accuracy or completeness of the data shown.

6.5 Peer Evaluation

Transit performance metrics can be a key indicator of how a transit system is operating. The following performance metrics provide a comparison between METRO and other Illinois public transit operators. While comparing various benchmarks among transit operators can provide some context, it's important to note that each transit system is unique. **Figures 6-7** to **6-11** illustrate METRO's transit service in relation to other transit operators in Illinois.

- **Operating expense per unlinked passenger trip (2013, 2017)**
  In 2013, METRO had the fifth lowest operating expense per unlinked passenger trip. Carbondale had the highest at $15.56 and Champaign had the lowest at $2.57. In 2013, the average operating expense per unlinked passenger trip was $6.50. Between 2012 and 2017, each transit operator experienced an increase in cost per unlinked passenger trip. In 2017, METRO had the sixth lowest operating expense per unlinked passenger trip at $8.11. Carbondale remained at the highest at $19.36 and Champaign remained the lowest at $2.67. The average operating expense per unlinked passenger trip in 2017 was $7.90. The average increase in operating expense per unlinked passenger trip between 2013 and 2017 was 17.8 percent.
- **Operating expense per revenue hour (2017)**
  In 2017 METRO had the fourth lowest operating expense per revenue hour at $91.46. Danville had the lowest operating expense per revenue hour at $86.55. Peoria had the highest operating expense per revenue hour at $118.51. The average expense among the peers included in the evaluation was $96.82.
- **Operating expense per revenue mile (2017)**
  In 2017, METRO had the third lowest operating expense per revenue mile at $5.18. Carbondale had the lowest at $3.43 and Champaign had the highest at $9.34. The average expense among the peers included in the evaluation was $6.62.
- **Unlinked passenger trips per revenue hour (2017)**
  In 2017, METRO had the second lowest number of unlinked passenger trips per vehicle revenue hour at 11.28. Carbondale had the lowest at 3.4 and Champaign had the highest at 38.95. The average number among the peers included in the evaluation was 16.04
- **Unlinked passenger trips per revenue mile (2017)**
  In 2017, METRO had the second lowest number of unlinked passenger trips per vehicle revenue mile at 0.64. Carbondale had the lowest at 0.18 and Champaign had the highest at 3.49. The average number among the peers included in the evaluation was 1.14

Figure 6-7: Operating Expense per Unlinked Passenger Trip (2013, 2017)

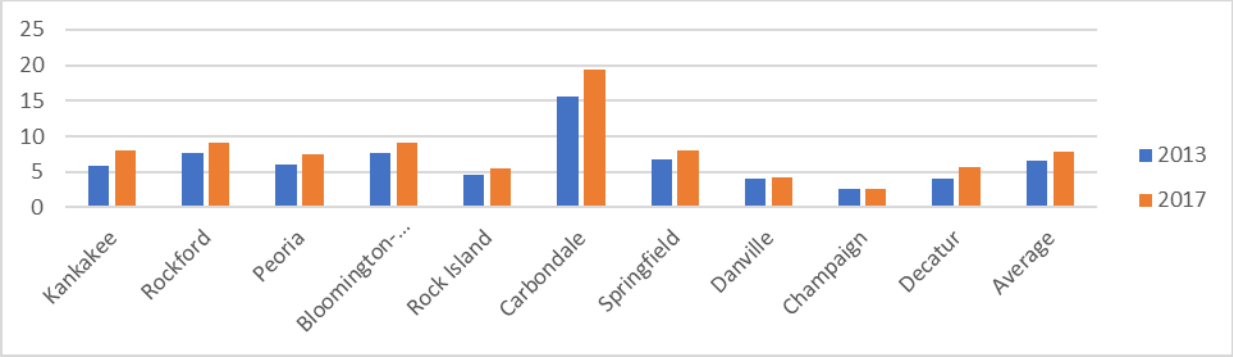


Figure 6-8: Operating Expense per Revenue Hour (2017)

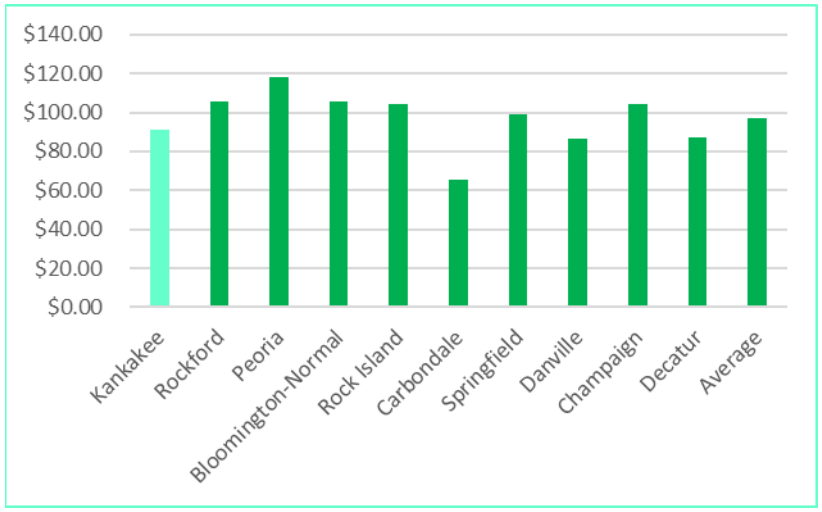


Figure 6-9: Operating Expense per Revenue Mile (2017)

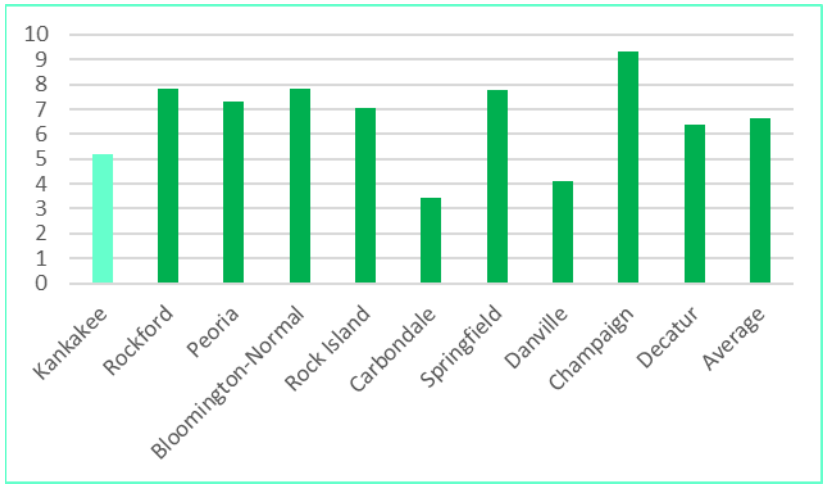


Figure 6-10: Unlinked Passenger Trips per Vehicle Revenue Hour (2017)

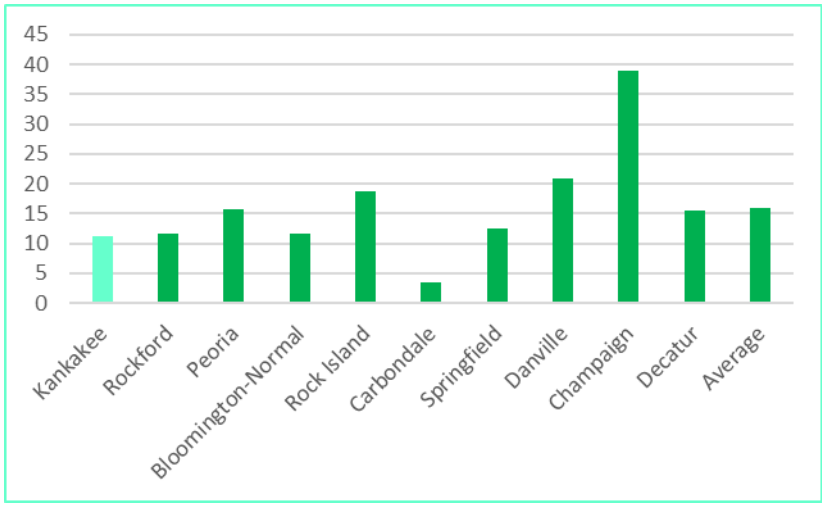
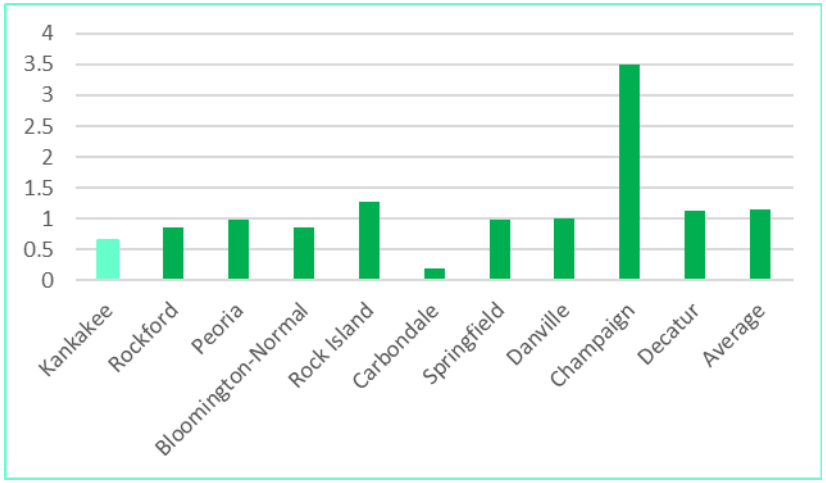


Figure 6-11: Unlinked Passenger Trips per Vehicle Revenue Mile (2017)



6.6 Fares

METRO provides two options for paying transit fares - one way/per ride and monthly passes. The agency offers discounts to children under 6 years old, students, older adults, and individuals with disabilities. Free transfers are provided within one-half hour of each other, up to a maximum of three transfers, for one-way trips. Regular fixed-route and commuter services have different fare structures. **Table 6-4** summarizes METRO's fare structure.

Table 6-4: METRO's Fare Structure (2019)

Passenger Type	Fixed-Route Fare Price	Commuter Route Fare Price
Regular Rider (6+ Years of Age)	$1.00	$2.00
Children Under 5 Years	Free	Free
Benefit Access Program	Free	$1.00
Disabled and Elderly	$0.50	$1.00

6.7 Transit Fleet

METRO operates a transit fleet of 25 vehicles with 5 other vehicles for service, maintenance, and customer care purposes. The 25-vehicle fleet is comprised of seven heavy duty buses, fourteen super-medium duty buses, and four medium duty buses. The heavy-duty buses are 30-35 feet long and accommodate accessibility issues by lowering the front entrance and extending a ramp. Heavy duty buses are used for fixed-route service. Super-medium duty buses are designed to have 26 seats and include a wheelchair accessible lift and are also used for fixed-route service. Medium duty buses are designed to have 14 seats, which also have a wheelchair accessible lift, are used for paratransit service.

The older portion of the heavy-duty vehicles are from 2004 and have between 830,000 and 920,000 miles. In 2019, METRO took delivery of four new heavy-duty vehicles that now have between 44,000 and 52,000 miles that replaced older buses. Most of the super-medium duty vehicles are from 2018 and have between 34,000 and 71,000 miles. Two medium-duty buses are from 2011 and have approximately 240,000 miles and two are from 2018 and have approximately 55,000 miles. The average vehicle mileage of the fleet is 167,274 miles, but if the oldest five vehicles are excluded the average mileage is 52,804. The average age of the fleet is about four years old and if the oldest five vehicles are excluded, the average age is about two years old.

There are several vehicles planned for procurement and delivery in 2021, which include three heavy-duty buses, six super-medium duty buses, one service vehicle, and two support vehicles. Eleven super-medium duty buses are planned for procurement and delivery in 2022. **Table 6-5** shows the existing and planned METRO fleet.

Table 6-5: River Valley METRO's Existing and Planned Fleet.

Existing Fleet			
Manufacture Date	Vehicle Type	Mileage	IDOT Replacement Funds
7/15/2011	Medium Duty 14 Paratransit Vehicle	240,373	No
7/15/2011	Medium Duty 14 Paratransit Vehicle	244,994	No
7/15/2018	Medium Duty 14 Paratransit Vehicle	56,340	No
7/15/2018	Medium Duty 14 Paratransit Vehicle	53,606	No
9/15/2018	Super-Medium Duty Paratransit Vehicle w/ Lift	34,961	No
9/15/2018	Super-Medium Duty Paratransit Vehicle w/ Lift	34,544	No
9/15/2018	Super-Medium Duty Paratransit Vehicle w/ Lift	34,997	No
9/15/2018	Super-Medium Duty Paratransit Vehicle w/ Lift	33,724	No
9/15/2018	Super-Medium Duty Paratransit Vehicle w/ Lift	23,575	No
9/15/2018	Super-Medium Duty Paratransit Vehicle w/ Lift	31,630	No
9/15/2018	Super-Medium Duty Paratransit Vehicle w/ Lift	34,765	No
9/15/2018	Super-Medium Duty Paratransit Vehicle w/ Lift	32,635	No
9/15/2018	Super-Medium Duty Paratransit Vehicle w/ Lift	30,814	No
9/15/2018	Super-Medium Duty Paratransit Vehicle w/ Lift	69,406	No
9/15/2018	Super-Medium Duty Paratransit Vehicle w/ Lift	71,143	No
9/15/2018	Super-Medium Duty Paratransit Vehicle w/ Lift	65,439	No
9/15/2018	Super-Medium Duty Paratransit Vehicle w/ Lift	68,013	No
7/15/2016	Super-Medium Duty Paratransit Vehicle w/ Lift	184,096	No
9/1/2004	Heavy Duty	921,232	No
9/1/2004	Heavy Duty	831,330	No
9/1/2004	Heavy Duty	887,842	No
12/1/2018	Heavy Duty	44,165	No
1/15/2019	Heavy Duty	51,123	No
1/15/2019	Heavy Duty	52,369	No
1/15/2019	Heavy Duty	48,732	No
6/1/2007	Service Vehicle	89,001	No
7/15/2008	Car	145,922	No
7/15/2018	Other	65,825	No
7/15/2010	Other	62,869	No
6/15/2019	Other	400	No
7/15/2014	Other	50,295	No
Planned Fleet			
Planned Delivery Date	Vehicle Type	Quantity	Funding Committed
7/15/2021	Heavy Duty	3	No
7/15/2021	Super-Medium Duty Paratransit Vehicle w/ Lift	6	No
7/15/2021	Service Vehicle	1	No
7/15/2021	Support Vehicles	2	No
7/15/2022	Super-Medium Duty Paratransit Vehicle w/ Lift	11	No

Source: METRO.

6.8 Coordinated Human Services Transportation Plan

The Kankakee Urbanized Area Human Services Transportation Plan (HSTP) was developed partly in response to the passage of MAP-21 and according to the HSTP, which was adopted in January 2014, it is intended to:

> "Bring service providers, transportation funders, clients, customers, and the community to a realization of improved efficiency and the equality of transportation throughout the Kankakee urban area and significantly reduce obstacles to citizens with special needs, particularly low-income persons, persons with disabilities, persons in zero vehicle households, older adults, and youth. The aim is to improve accessibility and mobility and minimize gaps and duplication in service."

Regarding public transit, the plan details not only services provided by METRO and SHOWBUS, but also 11 other human service agency transportation providers. Most of the providers are privately-operated seniors and veterans' homes but also include private medical care providers (dialysis treatment) and religious organizations. The plan mentions there is Greyhound, Amtrak, and limited taxi services provided in the Kankakee Urbanized Area.

The plan explains that travel times for transit users are roughly twice the duration of private vehicles. City of Kankakee users have the lowest average travel times at 41 minutes (compared to 20 minutes for private vehicles). Manteno and Bourbonnais had the longest travel times at 82 and 78 minutes respectively, compared with 32 and 21 minutes for private automobiles. Bradley also experienced long commute times of 72 minutes via transit and 23 minutes via private automobiles. With the exception of City of Kankakee, each town experienced significantly higher transit travel times than the Illinois average of 49 minutes and U.S. average of 48 minutes (28 minutes and 26 minutes for private automobiles respectively).

With respect to major trip generators, nearly all are located in the Kankakee Urbanized Area. These include schools, shopping centers, medical facilities, public service centers, major employers, and others. Four of the top twenty major employers are located in Momence, outside of the urban area, employing more than 1,500 workers.

The plan provides details on unmet transportation needs within the urbanized area. An emphasis on the conditions for disadvantaged populations details the lack of fixed-route service to link neighborhoods in the eastern and central areas of Kankakee to major destinations. These areas contain the highest concentrations of low-income, disabled, youth populations, and zero-car households.

An important note on accessibility is the sidewalk conditions in many different locations of the urbanized area make access to transit particularly difficult.

6.8.1 Americans With Disabilities (ADA)

The Section 5310 Enhanced Mobility of Seniors and Individuals with Disabilities Program, funded by the FTA, is a program designed to improve mobility for seniors and individuals with disabilities by removing transportation barriers and providing transportation services and expanding available mobility options.

Eligible projects include those that are planned, designed, and carried out to meet the special needs of seniors and individuals with disabilities when public transportation is insufficient, inappropriate, or unavailable. It may also be used for public transportation projects that exceed the requirements of the

Americans with Disabilities Act of 1990, as amended, that improve access to fixed-route service. It can also be used to decrease reliance by individuals with disabilities on complementary paratransit and provide alternatives to public transportation that assist seniors and individuals with disabilities. For a project to be considered eligible for FAST Act Section 5310 funding, it must be derived, as defined by FTA, from a locally developed, coordinated public transit-human services transportation plan. In accordance with the eligibility requirements described, River Valley METRO is eligible and able to pursue Section 5310 funding.

6.9 Future Transit Scenarios

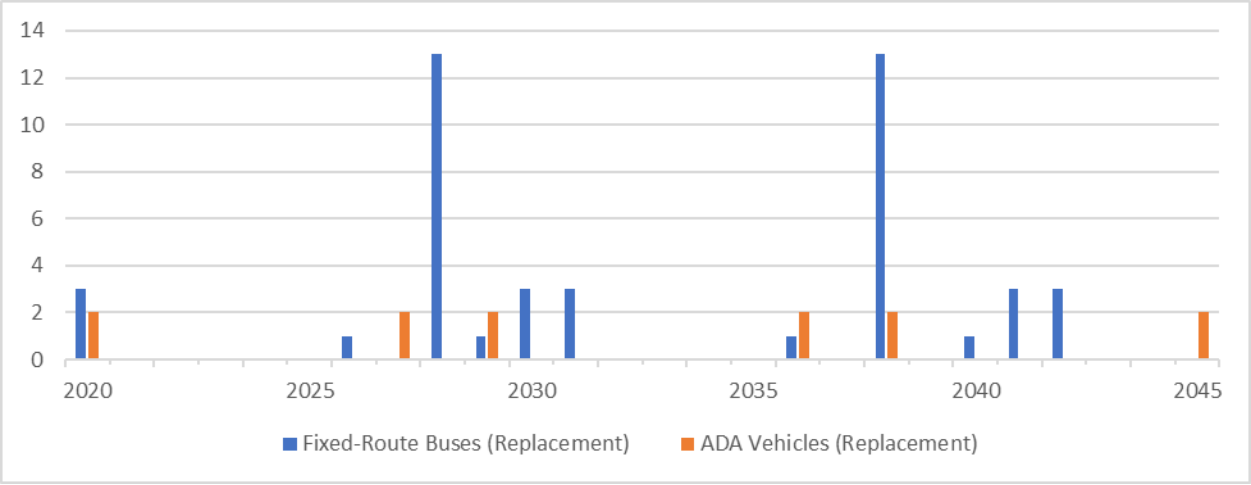
The concept of future transit scenarios for the Kankakee Urbanized Area was first created in the 2040 LRTP (2015, amended 2017). The concept led to the inclusion of three potential future scenarios, which have been updated for this plan. This section provides a general overview of those possibilities.

6.9.1 Future Transit Scenario #1 – Maintain Current Level of Service

Scenario #1 is based on maintaining the current level of public transit service, also referred to as the baseline scenario. The baseline scenario assumes the existing 2020 level of service will continue through 2045. It is currently METRO's policy to be proactive and strategically identify short-term and long-term transit improvements. This process includes annually reviewing existing services and routes to ensure adequate coverage and sufficient headways. This scenario would do little to grow the local transit services to accommodate the future mobility needs of the region.

Another important aspect of evaluating future transit scenarios is identifying capital needs. One of the largest capital needs for a transit operator is the regular replacement of vehicles. **Figure 6-12** identifies the projected replacement schedule of fixed-route and ADA vehicles in the KATS MPA.

Figure 6-12: Vehicle Replacement Schedule (Transit Scenario #1)



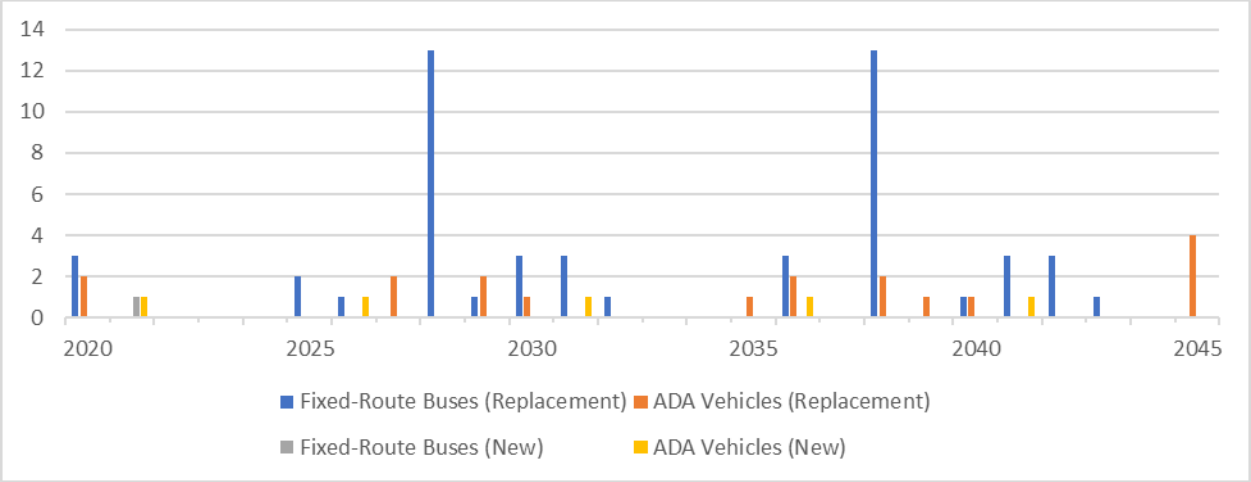
6.9.2 Future Transit Scenario #2 – Strategic Investment to Meet Future Demand

Scenario #2 represents a strategic investment approach to address future travel demand and mobility needs. This scenario reflects an approach where METRO would identify opportunities to implement targeted investments to meet future travel needs. This scenario assumes additional service is added to meet projected demand and changing mobility needs, which could potentially include the following:

- One new ADA vehicle and route added every five years (2020)
- Additional Midway Airport Route (2021)
- New route serving regional airport (2025)
- New route serving Will County (2025)
- Additional transit officer (2026)
- Additional mechanic (2026)
- Kankakee Transfer Center Construction (2021)
- Assumes 7% increase in federal formula funds based LRTP population (2032, 2042)

In terms of capital costs, the scenario would require the purchase of new vehicles, in addition to maintaining and replacing the existing transit fleet. **Figure 6-13** identifies the projected replacement schedule of both fixed-route and ADA vehicles and the purchase of new vehicles.

Figure 6-13: Vehicle Replacement Schedule (Transit Scenario #2)



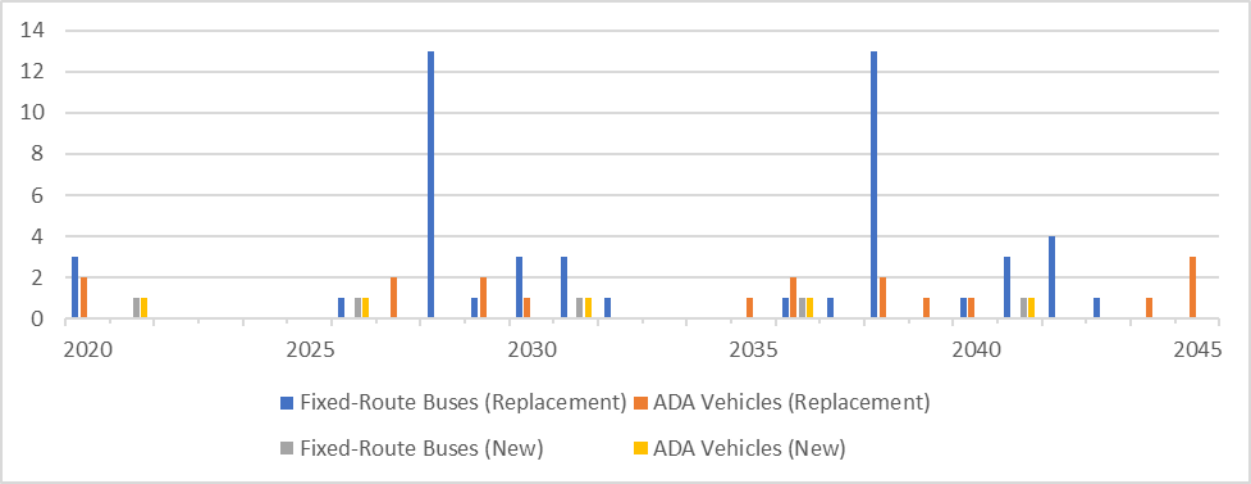
6.9.3 Future Transit Scenario #3 – 30 Minute Headways for the Entire System

Scenario #3 represents a concept that has been identified in previous LRTPs. This concept calls for the implementation of 30-minute headways on all fixed-routes. Currently, eight routes do not operate on a 30-minute headway. However, two of those routes do have a 30-minute running time. The following assumptions were made regarding this scenario:

- One route increased to 30-minute headway every five years beginning in 2021
- One additional ADA vehicle/route every five years (beginning in 2021)
- One additional mechanic (2031)
- Assumes loss of two productivity categories for Small Transit Intensive Cities (STIC)
- Assumes 7% increase in federal formula funds based on LRTP population (2032, 2042)

In terms of capital costs, this scenario would require the purchase of new vehicles, in addition to maintaining and replacing the existing transit fleet. **Figure 6-14** identifies the projected replacement schedule of both fixed-route and ADA service vehicles and the purchase of new vehicles.

Figure 6-14: Vehicle Replacement Schedule (Transit Scenario #3)



6.9.4 Vehicle Replacement Scenarios

The following table represents the estimated capital costs associated with the three scenarios. Finding sufficient funds to replace old vehicles has been and will continue to be a challenge. Scenarios 2 and 3 would require new vehicles to be added to the fleet. These new vehicles would require additional replacement vehicles that would require additional funds. **Table 6-6** displays the vehicle replacement schedule for each scenario.

Table 6-6: Estimated Replacement Vehicles and Cost

	Scenario 1	Scenario 2	Scenario 3
Fixed Route Buses (Replacement)	45	46	49
Fixed Route Buses (New)	0	3	5
ADA Vehicles (Replacement)	12	21	18
ADA Vehicles (New)	0	5	5
Total Vehicles	**57**	**75**	**77**

	Scenario 1	Scenario 2	Scenario 3
Fixed Route Buses (Replacement)	$15,030,265	$17,838,988	$17,991,792
Fixed Route Buses (New)	$0	$1,423,133	$3,006,147
ADA Vehicles (Replacement)	$1,125,881	$ 1,796,772	$1,792,930
ADA Vehicles (New)	$0	$445,617	$445,617
Total Vehicles	**$16,156,146**	**$21,504,510**	**$23,236,486**

6.9.5 Summary

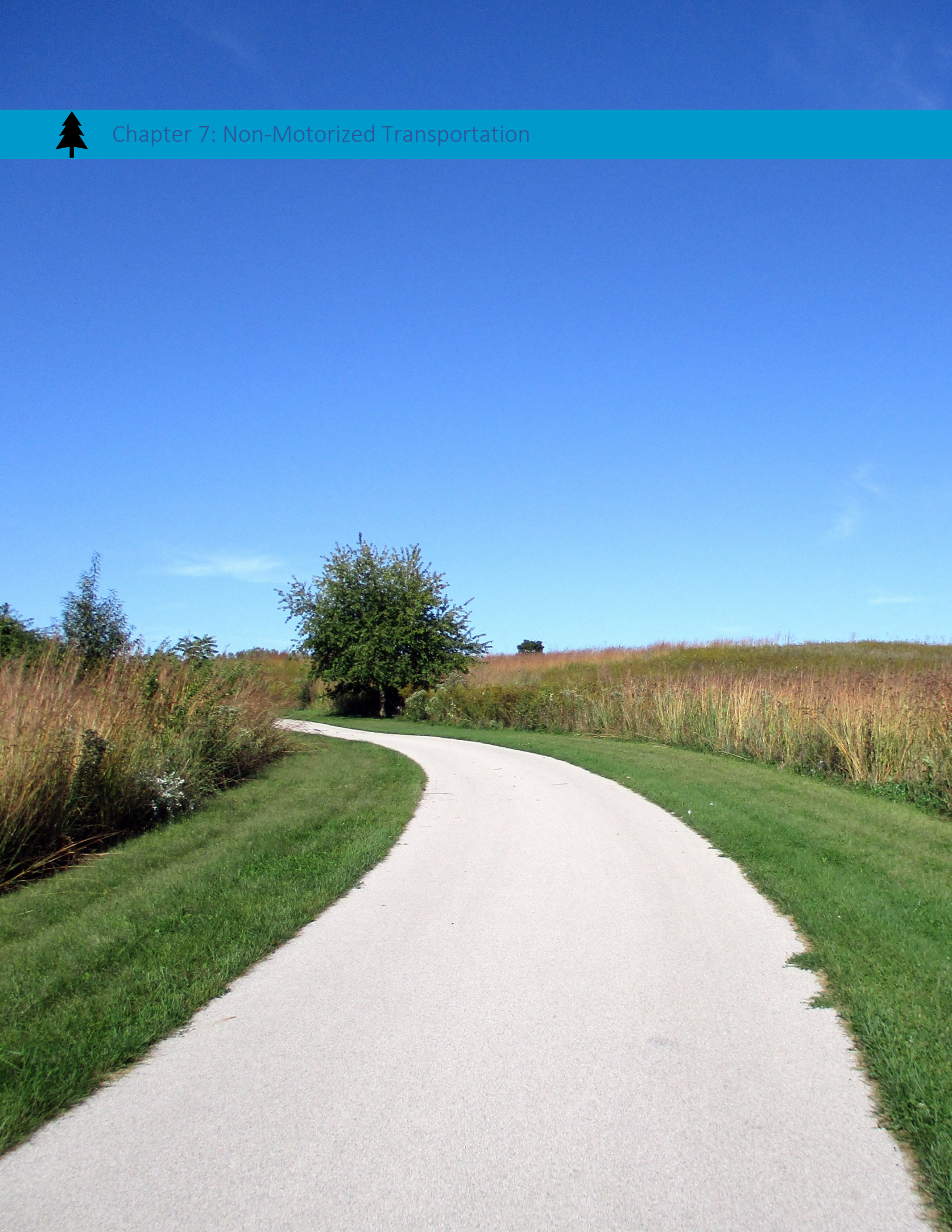
The three alternative future scenarios were evaluated to identify potential financial capacity to implement different services. The findings to the alternative scenario analyses support that the capital needs for all three scenarios are substantial. METRO, like most transit providers across the country, struggles to obtain sufficient funding to regularly replace vehicles that have exceeded their useful service life. This situation by itself makes it difficult to implement extensive service enhancements.

METRO's current funding condition is heavily dependent on operational performance. For several years, METRO has received funding from the small transit intensive cities (STIC) (10% of income) which rewards smaller transit agencies with funding if certain performance measures are comparable or exceed the performance levels of larger transit systems. If METRO were to implement service expansion, such as those discussed in scenarios 2 and 3, there is the possibility that the agency might not be able to maintain the same level of performance and could result in a loss of STIC funds. If this were to occur, additional local funding would need to be identified to fill in the funding gap and avoid potential service reductions.

Another funding mechanism that may be worth exploring is the availability of Section 5310 Enhanced Mobility of Seniors and Individuals with Disabilities Program funds. ADA bus replacement through the urban HSTP process is a significant funding mechanism worth pursuing and can improve anticipated funding gaps.

The recommended approach for future transit investment is for METRO to continue with a strategic review of planning needs. This investment strategy could include some new service or the possibility of increasing specific routes to 30-minute headways. The actual investment will be decided based on need and travel demand.

METRO buses lined up at the transfer center in Kankakee.



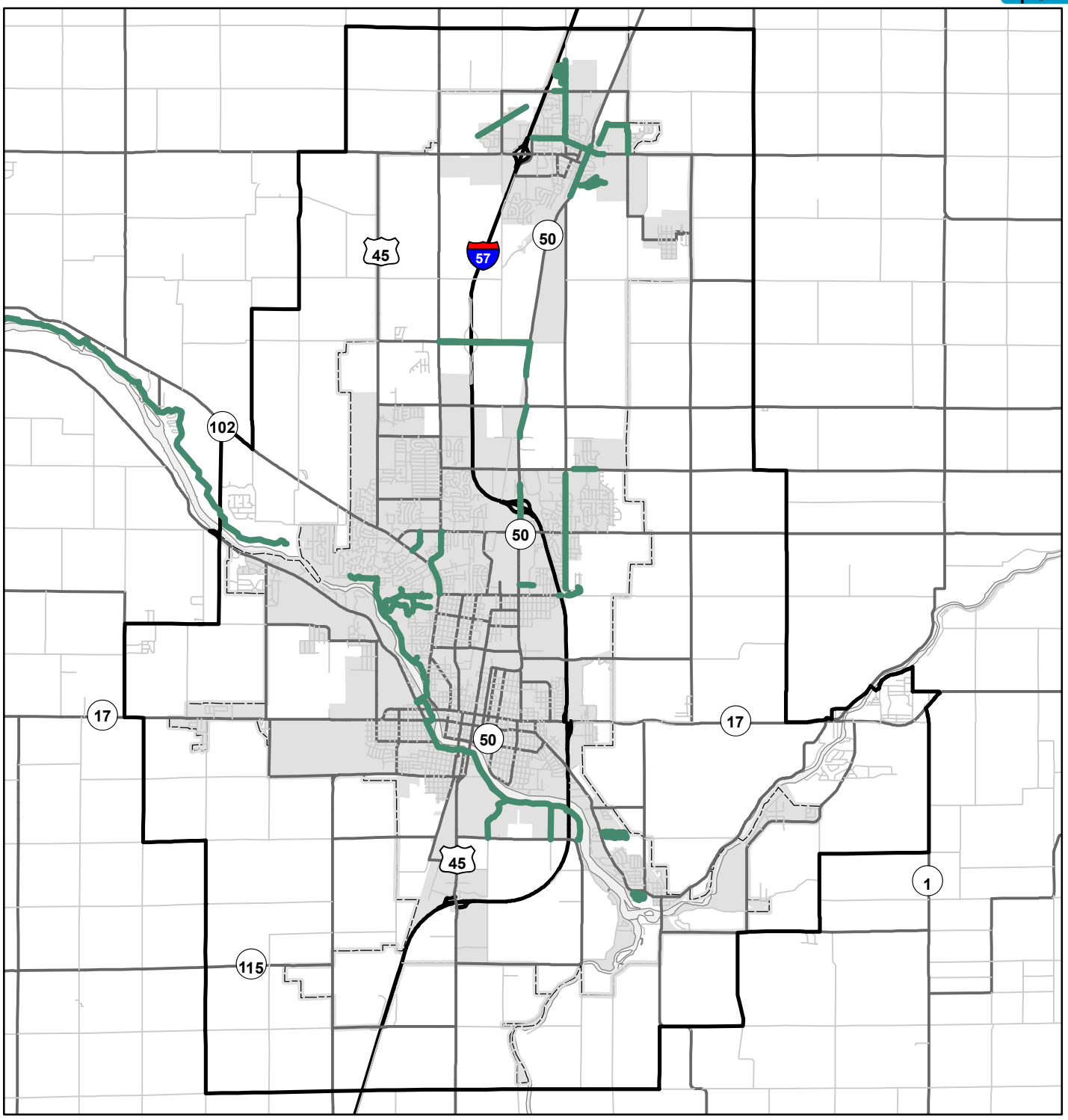
7.1 Overview

This chapter provides an overview of the non-motorized transportation network for the KATS MPA. The KATS region consists of a well-established parkway and urban trail system within Kankakee County and the KATS MPA. There is also the potential to expand non-motorized connections throughout the KATS MPA through new trail connections as well as additional on-street facilities.

Figure 7-1 displays existing trails within the KATS MPA. **Figure 7-2** depicts the existing land use for the KATS MPA and Kankakee County. **Figure 7-3** depicts the anticipated land use patterns for 2040. To understand opportunities for future growth, the figure illustrates where growth is most likely to occur.

Riverfront Bike Trail in Kankakee.

Figure 7-1: Existing Greenways and Trails Map in the KATS MPA



Data Sources: Street Centerlines (2018) and Pavement Data (2016), Illinois Department of Transportation, UZA, U.S. Census Buruea, Other data - Kankakee County.
Disclaimer: This map is for reference only. Data provided are derived from multiple sources with varying levels of accuracy. Kankakee Area Transportation Study disclaims all responsibility for the accuracy or completeness of the data shown.

Figure 7-2: Existing Land Use in Kankakee County

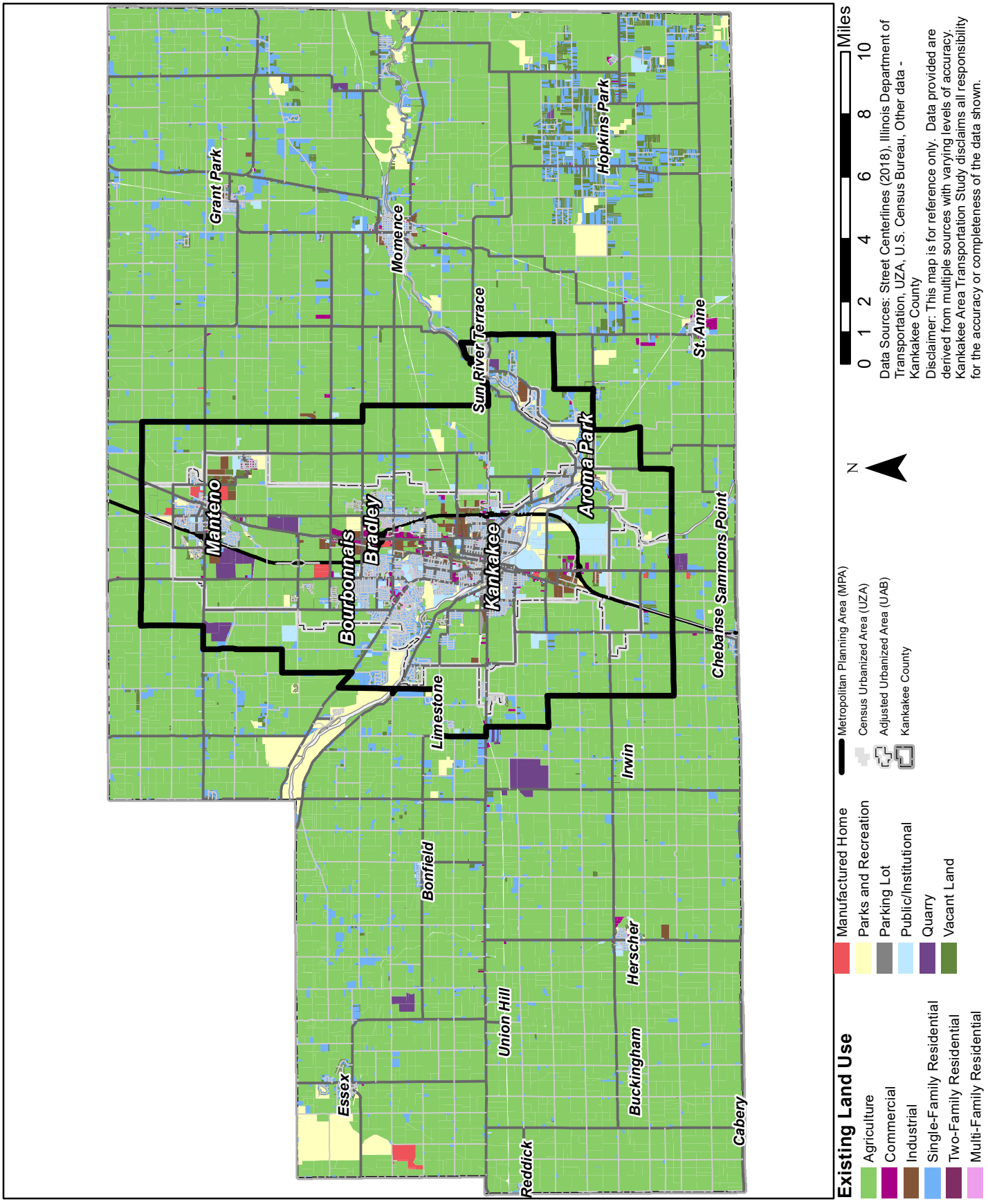
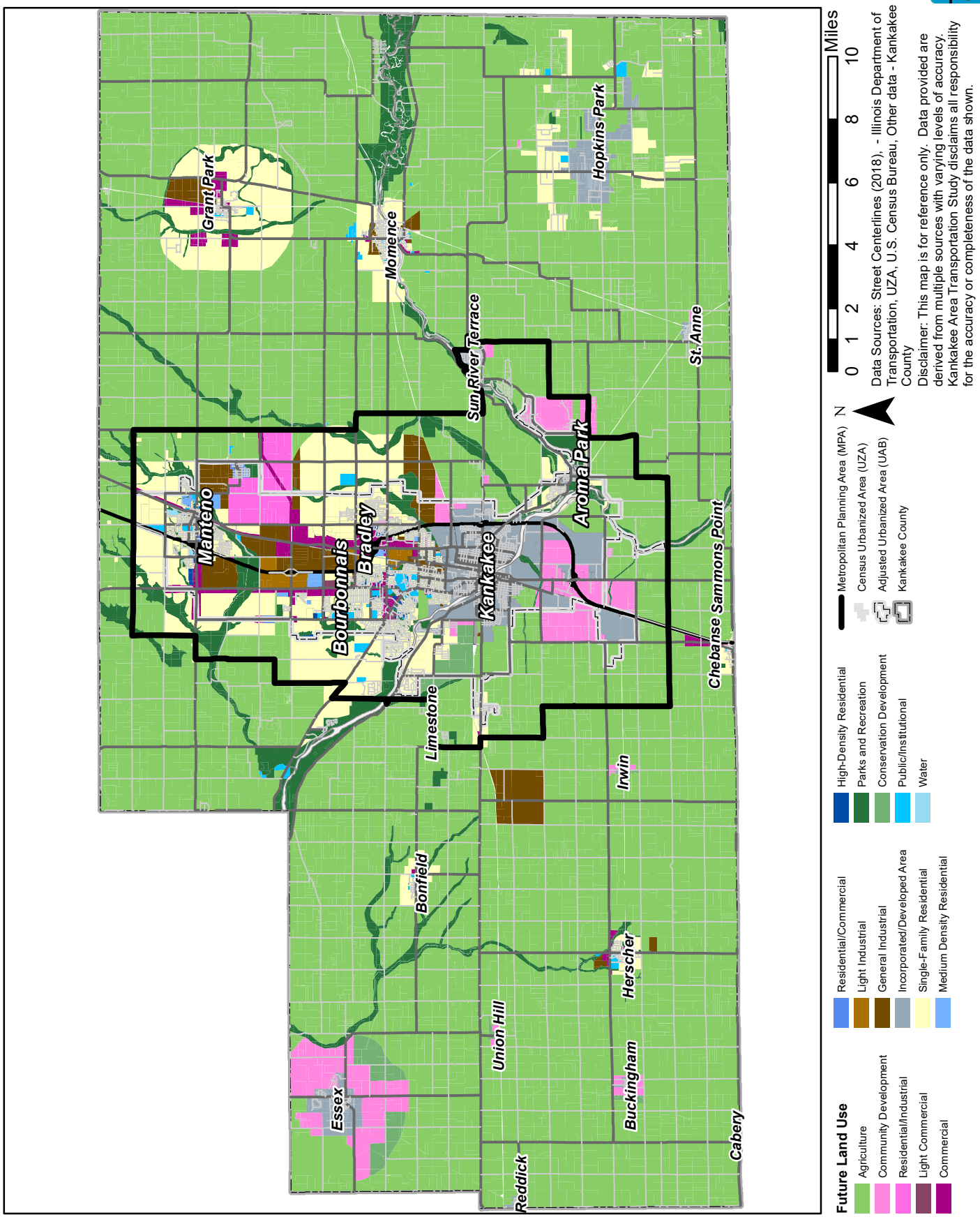


Figure 7-3: 2045 Future Land Use in Kankakee County



7.2 Complete Streets – Standards for Design and Development

Complete Streets policies are intended to create a safe, convenient, and comfortable roadway system for a spectrum of roadway users, including cars, pedestrians, bicyclists, and public transportation. In recent years, agencies from all levels of government have developed policy and planning tools to ensure road project designs accommodate those who walk or bike. In 2010, IDOT adopted design policy changes to implement the Complete Streets Law for Illinois roadways and the U.S. Department of Transportation (USDOT) issued a policy statement accommodating Complete Streets with bicycle and pedestrian support.

- Local Maintained Roads
    - The implementation of Complete Streets to accommodate local road design standards will likely be modified. For example, to incorporate bike lanes and shared lane markings onto roadways will be based on road type (arterial, local residential, minor collector, etc.), parking or no parking, traffic volumes, speed limit, etc. Road design standards that accommodate bicycles should be properly and adequately developed and implemented to those non-motorized users.
- Development Ordinances
    - Guidelines to assist new development in a municipality to become more pedestrian and bicycle friendly. Topics, though not all-inclusive to increase more bicycle and pedestrian friendly facilities include:
    - Consider bicycle and pedestrian traffic and facilities during the traffic impact analysis process.
    - Install bikeways as part of any required roadway improvements, and consult existing plans for bikeway improvements.
    - Install sidewalks (minimum preferred width of 5 ft.) according to FHWA New Sidewalk installation guidelines.
    - Consider bicycle and pedestrian access within the development as connections to adjacent properties.
    - Build out bicycle and pedestrian facilities concurrent with road construction to prevent gaps due to undeveloped parcels.

New bike lanes along Schuyler Avenue in Kankakee.

7.2.1 Bikeway Type Design Standards

Expanding a bicycle network beyond off-road and sidepath systems requires the determination of appropriate bikeway choices based on the context of the use and roadway geometry. The following summaries include bikeway types, existing and proposed.

- Bike Lanes
  Bike Lanes are typically between five and six feet wide (including gutter) on one or each side of the roadway buffered by striping, signage (Bike Route, No Parking) and pavement markings. Roadways that have parking and bike lanes should be striped on either side of the parking space and travel lanes. Parking is not permitted in designated bike lanes.
- Combined Bike/Parking Lanes (CBPL)
  CBPL are typical on residential collector streets with wide lanes to allow parking; generally, fewer than five percent parking occupancy. In this scenario, either side of the roadway is striped seven to eight feet from the gutter to allow parking and bicycle use. The roadway should provide signage indicating a "Bike Route," but will not include designated bike lane signage or pavement markings.
- Sidepaths
  Sidepaths are trails running parallel to a roadway and can best be described as a widened sidewalk. Compared to trail systems that have their own right-of-way, most sidepaths have a greater percentage of use (bicyclist and pedestrian use).
- Shared Lane Markings/Sharrows
  Shared lane markings (SLMs), or sharrows, guide bicyclists for lane positioning. SLM positioning on roadways should be positioned on roadways with speed limits of 35 mph or lower and be positioned to avoid conflicts with vehicles at intersections and potential car doors opening into traffic. SLMs are generally supplemented with wayfinding signage.
- Signed Bike Routes
  Signed shared roadways are generally applied where there is not enough room and/or less of a need for dedicated bike lanes. A road does not require a specific geometry to be signed as a bike route, providing flexibility. Additionally, a bike route may be a striped or unstriped street with paved shoulders.
- Trails
  Multi-use trails are physically separated from motor vehicle traffic on easements and/or their own right-of-way. Multi-use trails, as the name implies, accommodate a variety of users including pedestrians, bicyclists, and joggers.

When considering different types of bicycle-friendly facilities, it's important to consider information from the Bicycle Level of Service (BLOS). The BLOS quantifies the "bike friendliness" of a roadway designed to remove the high level of subjectivity that goes along with determining a useful bike network. The BLOS specifies the adult bicyclist comfort level for specific roadway geometries and traffic conditions. Roadways with a lower score are more appealing and usually safer for cyclists. Kankakee Bicycle Master Plan used the BLOS in the to measure existing and future conditions, to set standards for the bikeway network, and to justify recommendations.

The following are some considerations for non-motorized transportation enhancements:

- Consider both on- and off-road improvements.
- Where on-road bikeways are recommended, it is encouraged to achieve a BLOS rating C (marginal), B (ideal), or better for designation in the bike network.
- For on-road segments within the bike network, increase the priority of filling in sidewalk or sidepath gaps on at least one side of the road.
- Where sidepaths are recommended, use design techniques to reduce risks at intersections.
- Taking into account there is sufficient width and length, speeds are moderate to low, and striping should be incorporated to improve the comfort level of on-road cyclists. Depending on available width and parking occupancy, the striping may be in the form of either dedicated bike lanes or combined bike/parking lanes (CBPL). Where roadways have insufficient width for striping, shared lane markings (SLMs) or bike route wayfinding signs are recommended, depending on parking occupancy, and assuming an on-road comfort level meeting the target BLOS.
- Utilize SLMs and bike signal actuation pavement markings to indicate proper on-road bicycle position. SLMs should be used in straight ahead lanes, intersections where turn lanes require the interruption of striped bike lanes and CBPL.

Table 7-1: Bikeway Costs Estimates

Bikeway Type	Cost Estimate	Notes
Trail or Sidepath	$125,000/mile for a soft surface trail. $2,000,000/mile (or more) in an urban area for paved trail.	Cost varies according to land development costs, new structures, type of trail surface, width of trail, facilities provided for trail users.
Bike Lane	$28,000/mile – Lanes on both sides of the road, where two stripes are needed. $48,000/mile – Four stripes are required due to adjacent parking.	Costs include stripe painting, bike lane pavement markings, and bike lane signage. Cost does not include removal of existing striping, and is most cost effective to create bike lanes during reconstruction or resurfacing.
Combined Bike/Parking Lanes	$25,000/mile.	Includes two stripes and no markings, and CBPL on both sides of the roadway.
Signed Bike Routes	$200/installation. $2,500/mile for both sides of the road.	Signs can be installed at any time.
Shared Lane Markings (Sharrows)	$4,500/mile.	Includes pavement markings every 250 feet plus wayfinding signage at decision points. Shared lane markings can be done with other roadwork.
Paved Shoulders	$140,000/mile.	Paving four feet of existing aggregate shoulders on each side of the road assuming no grading or other major changes.
Maintenance	Varies.	Programmed and ongoing.

Source: City of Kankakee Bicycle Master Plan, 2015.

7.3 Local Non-Motorized Plans

The municipalities within the KATS MPA have various levels of non-motorized transportation plans. Most of the jurisdictions include greenways, trails, etc. in their comprehensive plan. The City of Kankakee has been the only KATS municipality to create a citywide bicycle master plan. Kankakee County has a greenways and trails plan that includes transportation enhancements for the entire county.

7.3.1 City of Kankakee Bicycle Master Plan

The City of Kankakee has had a Complete Streets ordinance since 2012, which directs relevant city departments to incorporate Complete Streets practices in route operations and transportation projects and programs. One component was to establish a non-motorized plan. On April 6, 2015, the City of Kankakee officially adopted its Bicycle Master Plan, which drew heavily from AASHTO, the MUTCD, and NACTO.

The Kankakee Bicycle Master Plan considered a network of bikeways that will direct bicyclists to favorable routes, especially for mid- and long-distance trips. The Kankakee Bicycle Master Plan bike network established priority improvements to provide bike lanes, sidepaths, striping for bike lanes, etc.

The following Guiding Principles served as the foundation in the development and implementation of the Kankakee bicycle network:

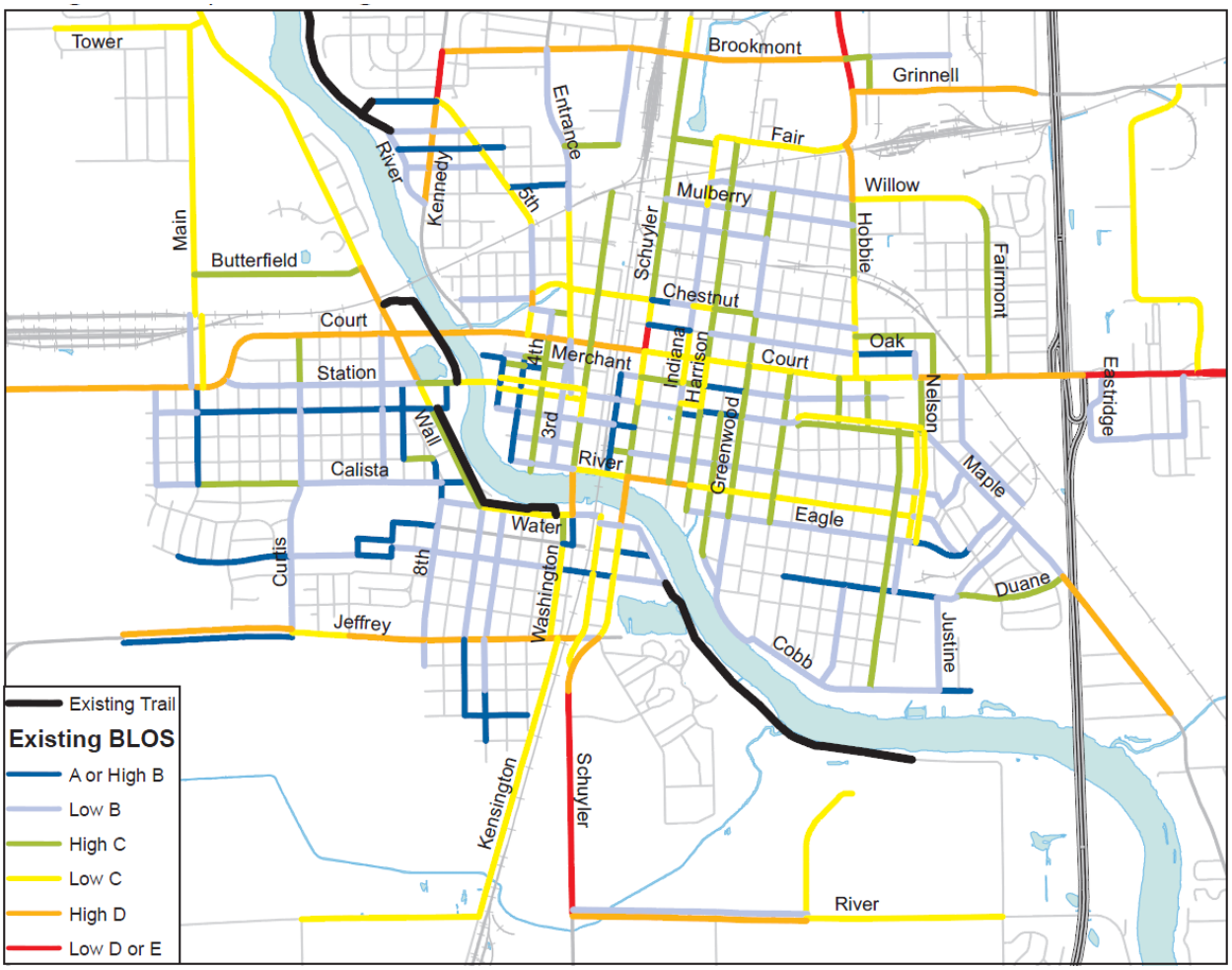
- Plan for a target audience of casual adult cyclists. At the same time, address the needs of those who are more advanced and those who are less traffic-tolerant, including children.
- Strive for a network that is continuous, forming a grid of target spacing of ½ to 1 mile to facilitate bicycle transportation throughout the city.
- Whenever possible, choose direct routes with lower traffic volumes, ample width, stoplights for crossing busy roads, and some level of traffic control priority (minor collectors or higher classification) so that cyclists do not encounter stop signs at every street.
- Look for spot improvements, short links, and other small projects that make an impact.
- Be opportunistic, implementing improvements during other projects and development.

Bikeway Network Recommendations

The following provides a summary of expanding the network of bicycle routes within and beyond the City of Kankakee. The Kankakee Bicycle Master Plan's maps (**Figures 6-4 through 6-7**) provide an overview of needs and recommendations.

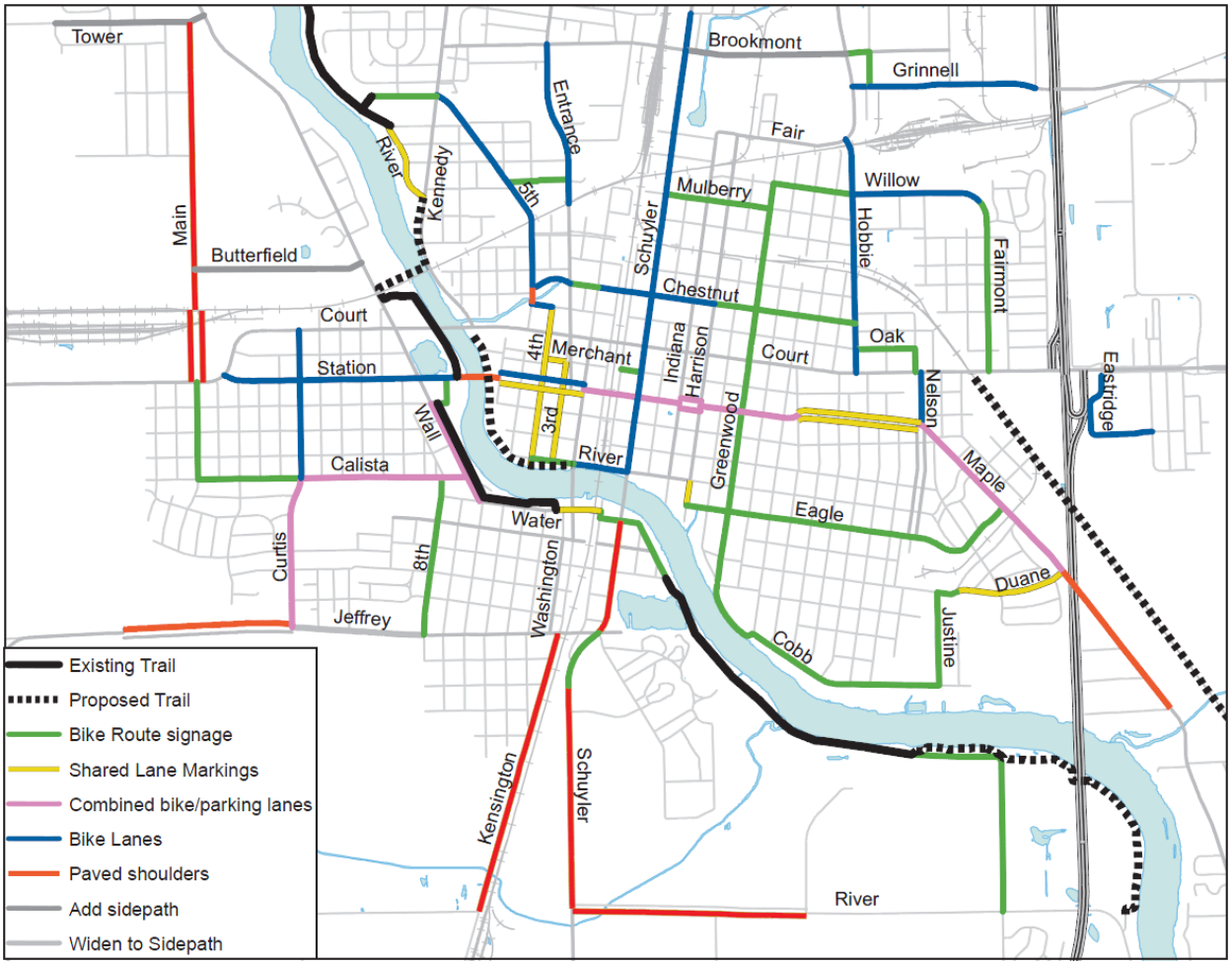
- **Figure 7-4: Existing Conditions – Trails and On-Road Comfort Level:** Depicts existing on-road trail and sidepath conditions for bicyclists on studied routes for the bike network.
- **Figure 7-5: All Existing and Recommended Bikeways:** Depicts recommended on- and off-road bike facilities, including long-term future projects as well as low priority projects resulting in only minor improvements.
- **Figure 7-6: Existing High/Medium Priority Recommended Bikeways:** Depicts a subset of the previous figure without the long-term and low priority projects.
- **Figure 7-7: Future Conditions – Trails and On-Road Comfort Level:** Depicts how the on-road BLOS and off-road trail system will look in the event recommended projects are implemented.

Figure 7-4: Existing Conditions – Trails and On-Road Comfort Level



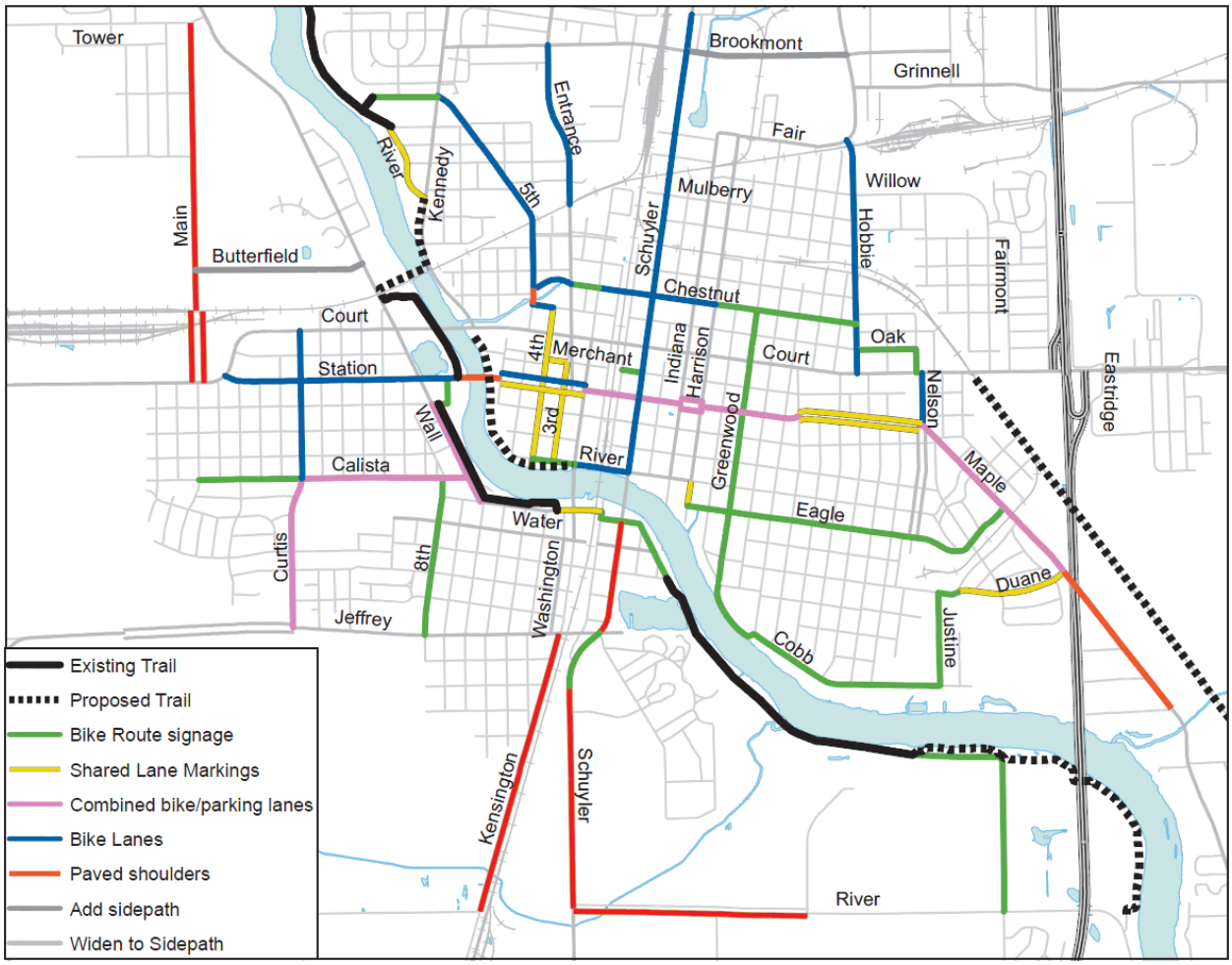
Source: City of Kankakee Bicycle Master Plan, 2015.

Figure 7-5: All Existing and Recommended Bikeways



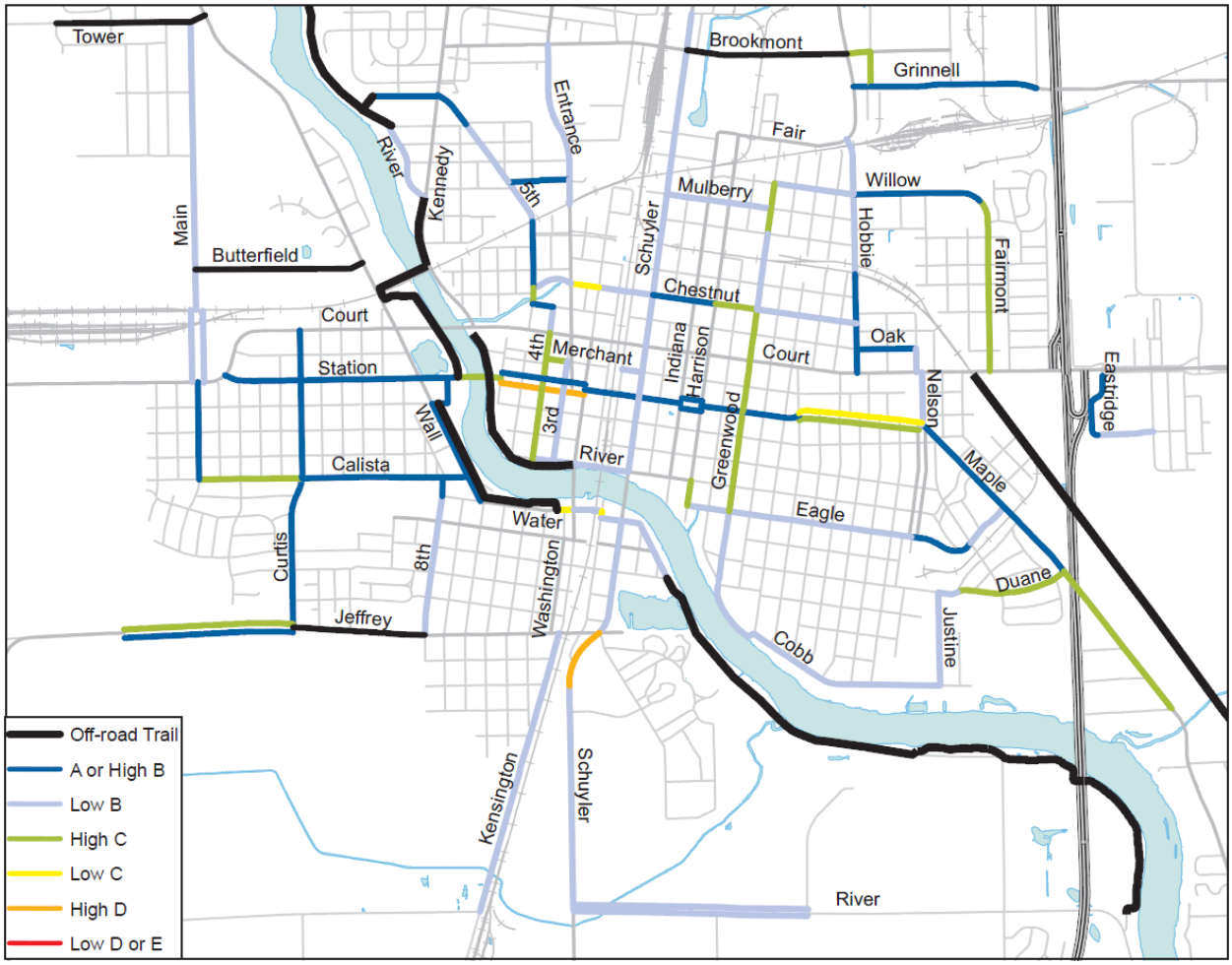
Source: City of Kankakee Bicycle Master Plan, 2015.

Figure 7-6 Existing High/Medium Priority Recommended Bikeways



Source: City of Kankakee Bicycle Master Plan, 2015.

Figure 7-7: Trails and On-Road Comfort Level



Source: City of Kankakee Bicycle Master Plan, 2015.

Implementation

Implementation of the Kankakee Bicycle Master Plan is a process of cooperation and collaboration of city staff, outside agencies, and stakeholders, that will require time and financial commitments over several years. The following are recommendations identified in the Kankakee Bicycle Master Plan.

- **Bicycle/Pedestrian Coordinator and Advisory Commission**
  Dedicating a portion of an existing city staff member's time to fill the role of Bicycle and Pedestrian Coordinator, responsibilities would include moving forward with implementing the plan and collaborate with other city staff and relevant agencies to ensure policies and projects are in accordance with the bicycle master plan.

  The bicycle master plan also recommends establishing the Kankakee Bicycle and Pedestrian Advisory Commission (BPAC). The BPAC would report to the Planning Board and/or directly to the City Administrator/Mayor's Office. BPAC members would comprise no more than eight individuals of bicyclists, interested citizens, city staff, and stakeholders (bike clubs, running clubs, etc.). The BPAC should be involved and given the opportunity to provide input for:

  - Capital Improvement Program – Incorporation of bicycle and pedestrian facilities with development and roadway projects. Provide input into a standalone bicycle and pedestrian projects for incorporation into CIP.
  - Site design and other development review – Provide perspective from bicyclists and pedestrians to the Planning Board's review of new development or redevelopment projects.
  - Maintenance – The BPAC should periodically review conditions of the city's bikeway system and determine priority maintenance recommendations.

- **Multi-Year Work Plan**
  Review the listed recommendations and draft a five-year work plan. Projects identified might be those that are components of larger projects in the CIP. Other projects may be standalone retrofit efforts. Projects not completed in a particular year move forward into the work plan of the following year. This type of work plan provides an implementation process over a span of years and is typically more manageable, especially from a funding standpoint.

- **Implementation Funding**
  Implementation of bikeway projects ranges from low-cost improvements to major capital investments. It is generally advantageous, from a cost-effective approach, to address bicycling improvements as part of larger projects (roadway projects, residential/business development projects). Cost estimates for bikeway types are noted in **Table 7-1.**

7.3.2 Kankakee County Greenways and Trails Plan, 2009

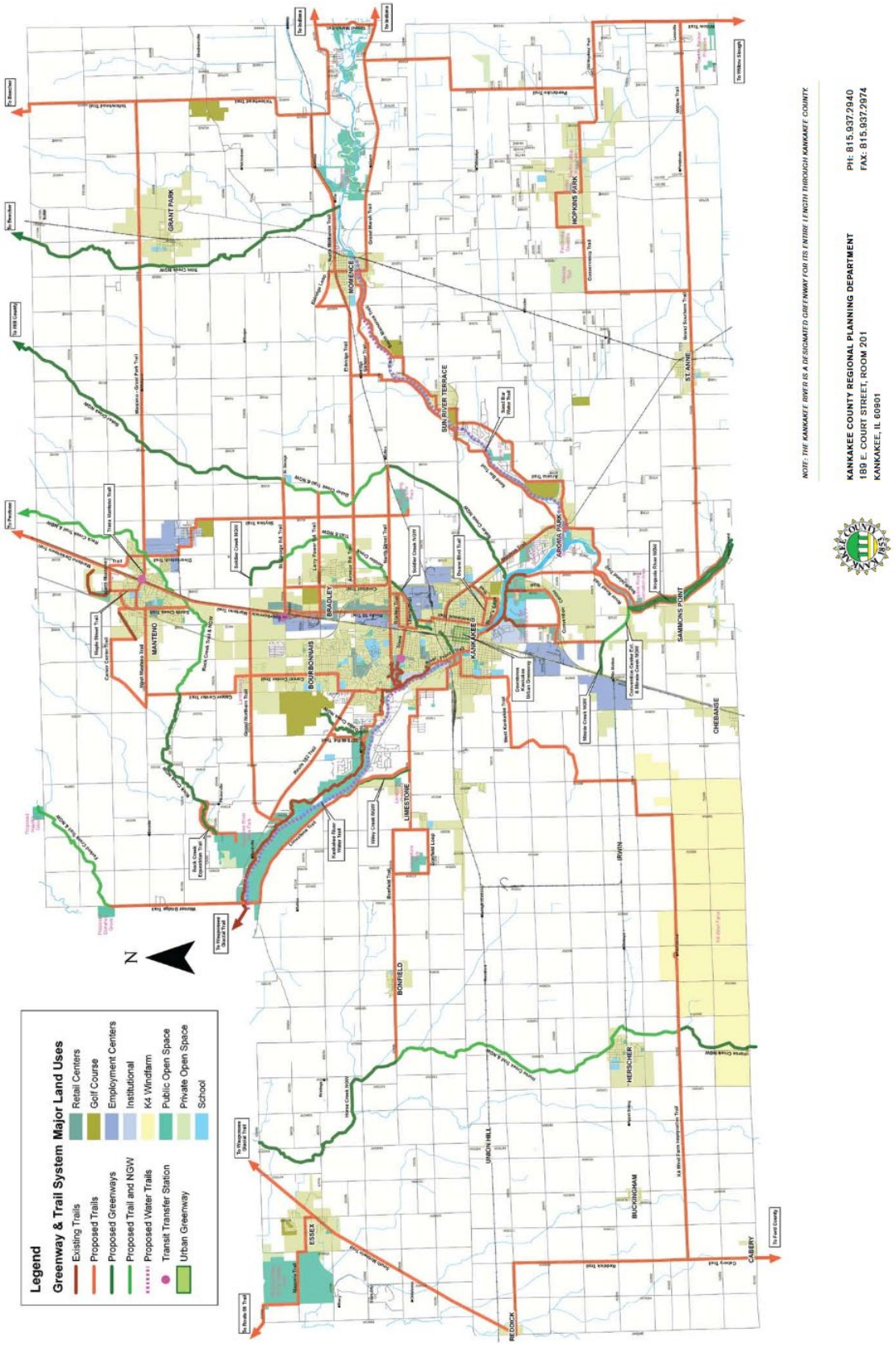
In 2009, the Kankakee County Planning Department updated its Greenways and Trails Plan. The plan update included input from the Kankakee County Regional Planning Commission (KCRPC), which is comprised of local residents. The KCRPC reviewed the 1999 Plan accomplishments and the new trail technologies, new construction techniques, and new development practices. This information was then used to examine each of the proposed greenways and trails to determine if modifications were appropriate. The KCRPC also looked at the continuity of the system to determine if the proposed greenways and trails were still viable and if additional routes were necessary. After completion of this review, the KCRPC formulated the 2009 Greenways and Trails Plan which was adopted by the Kankakee County Board on August 11, 2009.

- **Goals**
  As part of the updated Greenways and Trails Plan, the committee reviewed the Goals of the Plan and adopted the following new/updated goals:
  - Create a network of greenways to provide an alternative to motorized transportation.
  - Create recreational opportunities.
  - Preserve the natural and unique features of the county's landscape.
  - Protect the county's natural environment.
  - Improve wildlife habitat.
  - Create partnerships with other governmental bodies, citizen groups, and organizations.

- **Plan Summary**
  The planning process provided Kankakee County with 60 proposed trails. These trails represent 324.75 miles of new multipurpose trails for the county. See **Figure 7-8**, Greenway & Trail System Major Land Uses. The trails serve destinations throughout Kankakee County and its municipalities while providing both transportation and recreational opportunities. They link the county's parks with commercial districts, schools, neighborhoods, and public facilities.

- Twelve natural greenways and one urban greenway have also been identified in the plan. The twelve natural greenways follow watercourses and protect them from the encroachment of development, protect their water quality, provide stormwater retention, and provide habitat for wildlife. An area of downtown Kankakee has been designated as an urban greenway. While this urban greenway is not necessarily a physical location on the ground as a traditional greenway would be, it is an area in an urban setting where green technologies and infrastructure will be utilized and encouraged. This may include the use of green roofs, permeable surfaces, the addition of amenities such as park benches and planters, energy efficient buildings, alternative energy sources, or the inclusion of additional open space in development projects. All of the greenways and trails identified in the plan were evaluated and each was ranked based on a set of criteria to determine the priority for their construction. This priority system will assist decision makers in deciding which greenways and trails to construct and in which order.

Figure 7-8: Kankakee County Greenways and Trails System Major Land Uses



7.3.3 Riverfront Trail Initiative (2009)

Perhaps the greatest natural asset in Kankakee County is the Kankakee River, which is a focal point for development, recreation, and transportation, but also an attractive scenic amenity that is best experienced by boat, bike, or foot. The genesis of a formalized trail along the Kankakee River came from the Kankakee County Greenways and Trails Plan adopted in 1999 (updated 2009), which sought to link together the various parks and existing trails that stretch from the border with Iroquois County to the south and to the border of Will County to the west. This northwest to southeast orientated corridor formed the study area of the *Riverfront Trail Initiative.*

Besides identifying the main route that this trail would take along the river, this plan provides connections to other trail systems including the Kankakee River State Park system, and the American Discovery Trail which provides a national, coast-to-coast route. The trail itself is envisioned mostly as a Class III trail which is characterized by at least four feet of paved surface directly adjacent to both sides of an existing roadway and separated by striping. However, certain sections of the trail are designated as Class I which is completely separated by roadways and is 8 feet or greater in width.

7.3.4 2030 Kankakee County Comprehensive Plan (2005)

The 2030 Kankakee County Comprehensive Plan was adopted by the Kankakee County Board on November 8, 2005. The 2030 Comprehensive Plan is Kankakee County's official policy guide to future land use, development, and conservation through 2030. The plan addresses county needs and opportunities while placing an emphasis on physical development, transportation, and services and facilities for the county and municipalities. It is geographically comprehensive in coverage by applying to all unincorporated areas of the county. It is long term in scope and intended to express general goals, policies, and implementation actions. The Comprehensive Plan is also specific enough to guide day-to-day land use and development activities in the county.

Kankakee County performed an update of the Comprehensive Plan for the county from 2003-2005, culminating in adoption by the Kankakee County Board in November of 2005. Demographics and land use have changed since then. The plan upholds three main planning policies designed to generate new development while revitalizing established communities. The plan focuses on supporting and fostering the start-up and operation of local main street revitalization programs through the use of several key public outreach and consensus-building efforts. Incentives are also in place to foster urban infill and assist municipalities in reusing vacant properties.

The plan also calls for providing technical assistance and support for the creation of tax-increment financing (TIF) districts as well as devising strategies to reduce the amount of unincorporated land currently zoned for commercial use which may be drawing new businesses away from the downtowns of local municipalities rather than reinvesting in them.

The Kankakee County 2030 Comprehensive Plan includes an element known as the Land Use Plan that builds upon current major land use patterns of the county. Because the county is vastly agricultural in character, a key element of the Land Use Plan is agricultural conservation and protection. While the Kankakee County planning program allows for limited development to support agricultural services, the county seeks to direct new development to existing communities. Further, the Land Use Plan emphasizes the need to provide adequate services and facilities with new development and encourages community annexation and infill development.

7.3.5 Village of Bradley Comprehensive Plan (2007)

The 2020 Comprehensive Plan explains pedestrian and bicycle focus should be on safe access for all age groups to schools, institutions, parks, and major commercial destinations. The plan identifies the need to expand sidewalks, street crossings, and bicycle networks that will better connect the Village of Bradley and adjoining municipalities.

7.4 Non-Motorized Conditions

7.4.1 City of Kankakee

The City of Kankakee, with the help of a coalition of local governments and citizens, has made significant progress in the planning and construction of the Riverfront Trail project. According to the Community Foundation of Kankakee River Valley, Phase I of the Kankakee Riverfront Trail has begun. This 6.5-mile trail will enhance local access to the Kankakee River and connect the City of Kankakee with Kankakee River State Park.

Once the entire project is completed, the Riverfront Trail will provide continuous, non-motorized vehicle transportation routes from River Road in Kankakee to the trail system in the Kankakee River State Park. This connection, coupled with future extensions to the Wauponsee Glacial Trail in Will County, will connect the citizens of Kankakee County with access to an extensive network of trails in Will County. Trail development is a collaborative effort by the City of Kankakee and County of Kankakee working with community stakeholders

7.4.2 Village of Bradley

The Village of Bradley has taken positive steps to create trail segments to serve the community:

- The most significant trail is the Riverfront Trail extending through Helgeson Park along the Kankakee River to Perry Farm.
- Cardinal Drive – 10-foot concrete multi-use trail from Larry Power Road to Meadows Road.
- Soldier Creek – North Street to about one-half mile north to the end of Edge Brook Subdivision.
- A Pedestrian connection is planned to link Olivet Nazarene University to West Broadway St.

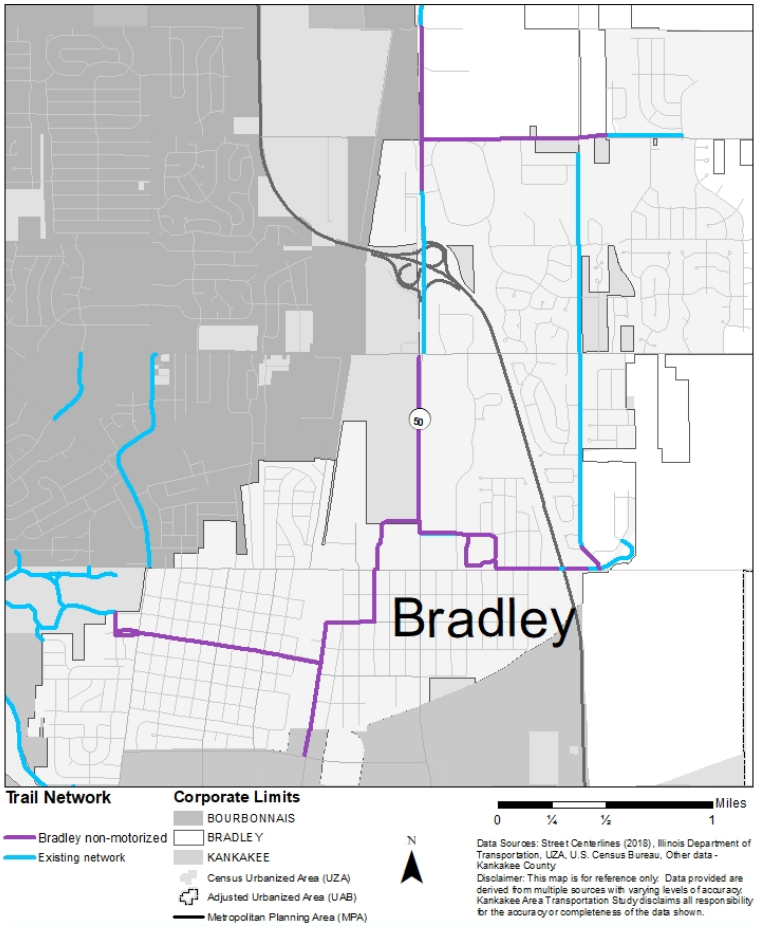
The shared use path along Illinois Route 50 connects Armour Road to the mall.

The key planned bicycle and pedestrian improvements are along IL-50. The state constructed a multi-use path on the east side of IL-50. The Village of Bradley had an Illinois Transportation Enhancement Program (ITEP) grant to extend that path south to Armour Road and north to the shopping mall entrance. The next phase, currently programmed is to continue the path to Larry Power Rd. The Village of Bradley is currently working with the Economic Alliance to propose a similar path on the west side of IL-50 from Armour Road to North Street.

Bike lanes or multi-use paths on or along the grid system network within the village are planned. Past preference has been dedicated paths adjacent to the roadway but striped lanes are a possibility.

Figure 7-9 provides a non-motorized overview of the Village of Bradley's comprehensive plan.

Figure 7-9: Village of Bradley Non-Motorized Plan



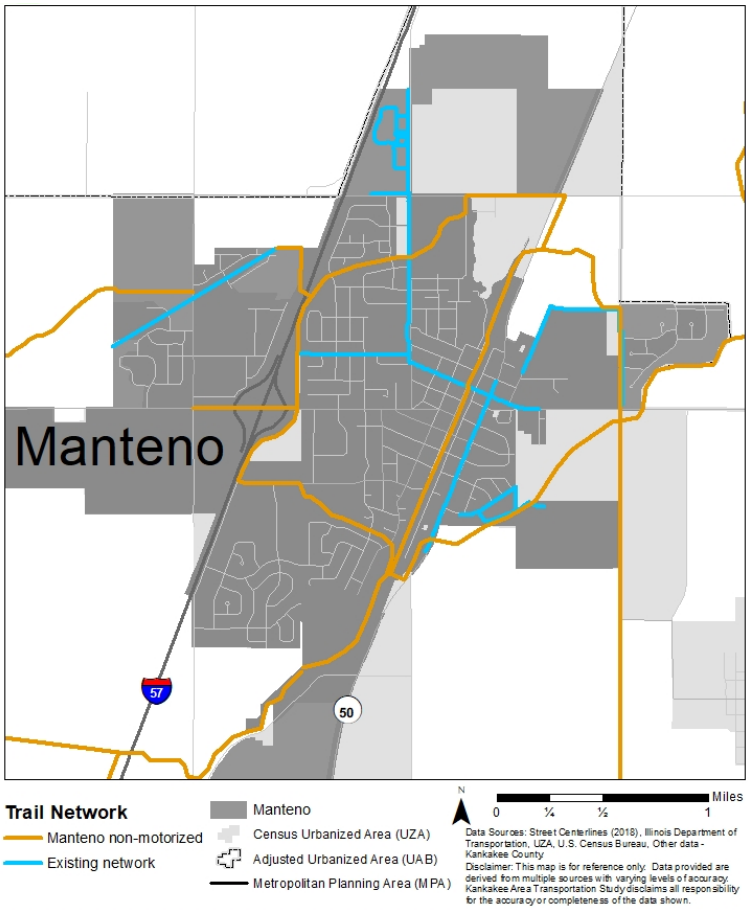
7.4.3 Village of Manteno

The Village of Manteno has created one trail and is in the planning process of several others. The Village has established a trail network in Heritage Park located in South Creek Subdivision. In the future, the village intends to extend this trail along the drainage way to the park area along the Canadian National Railroad. In addition, a path and bridge are slated for construction over Rock Creek near the Oak Ridge Mobile Home Park to provide residents with access to downtown Manteno with the assistance of a $400,000 grant from the Illinois Department of Natural Resources.

The Village of Manteno is also creating a park, approximately 60 acres, located at the intersection of I-57 and Lake Road that will have an entire trail network within its boundaries. This trail is planned to extend into a private development just east of the park and will eventually terminate near the Canadian National Railroad just north of Lake Road. Another trail that has been constructed by the Village of Manteno is located in the Eagles Landing and Wind Field Estate Subdivisions on the west side of the village. This trail is approximately half a mile in length and travels in a northeast - southwest direction. The Greenways and Trails Plan intends to use this segment of trail as part of the Career Center Trail.

Figure 7-10 provides a non-motorized overview of the Village of Manteno's comprehensive plan.

Figure 7-10: Village of Manteno Non-Motorized Plan



7.4.4 Village of Bourbonnais

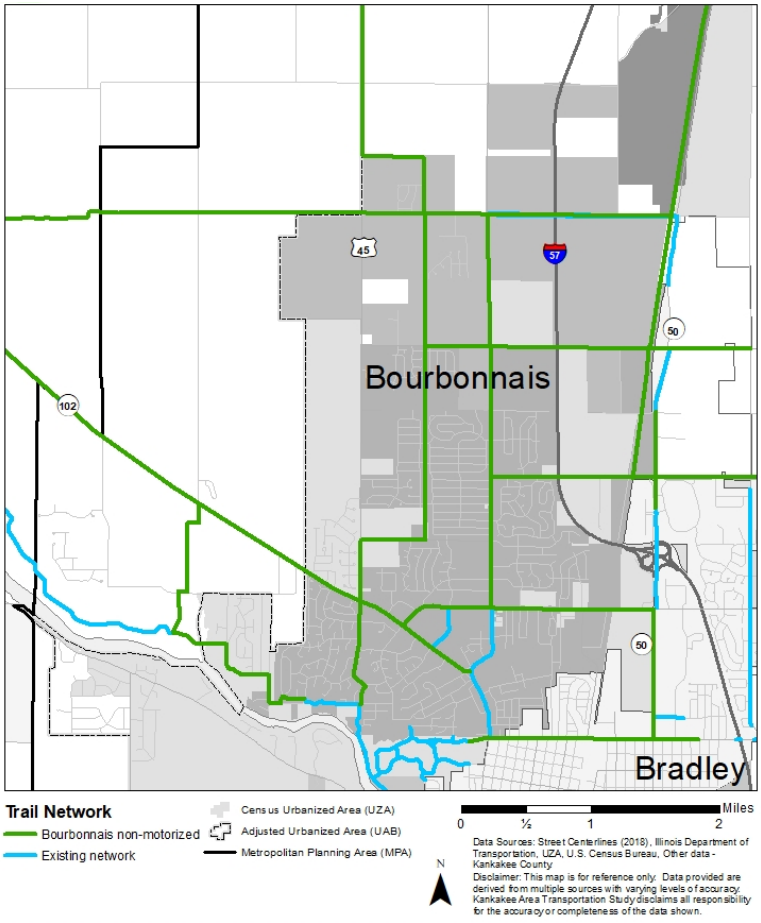
The Village of Bourbonnais has obtained right-of-way from developers for segments of the Career Center Trail that travels along the electric utility's lines on the east side of Career Center Road. These segments will eventually be turned into a trail once all of the pieces have been acquired.

The Village of Bourbonnais has also added trails through Cavalier De LaSalle Park and Riverfront Park. These new trails were built with Open Space Land Acquisition and Development (OSLAD) Grants and are part of the Riverfront Trail's Phase 3.

The Bourbonnais Township Park District has extended the trail system within the Perry Farm Park northward to connect to Cavalier De LaSalle Park. This extension is part of the Riverfront Trail's Phase 3.

Figure 7-11 provides a non-motorized overview of the Village of Bourbonnais' comprehensive plan.

Figure 7-11: Village of Bourbonnais Transportation Plan

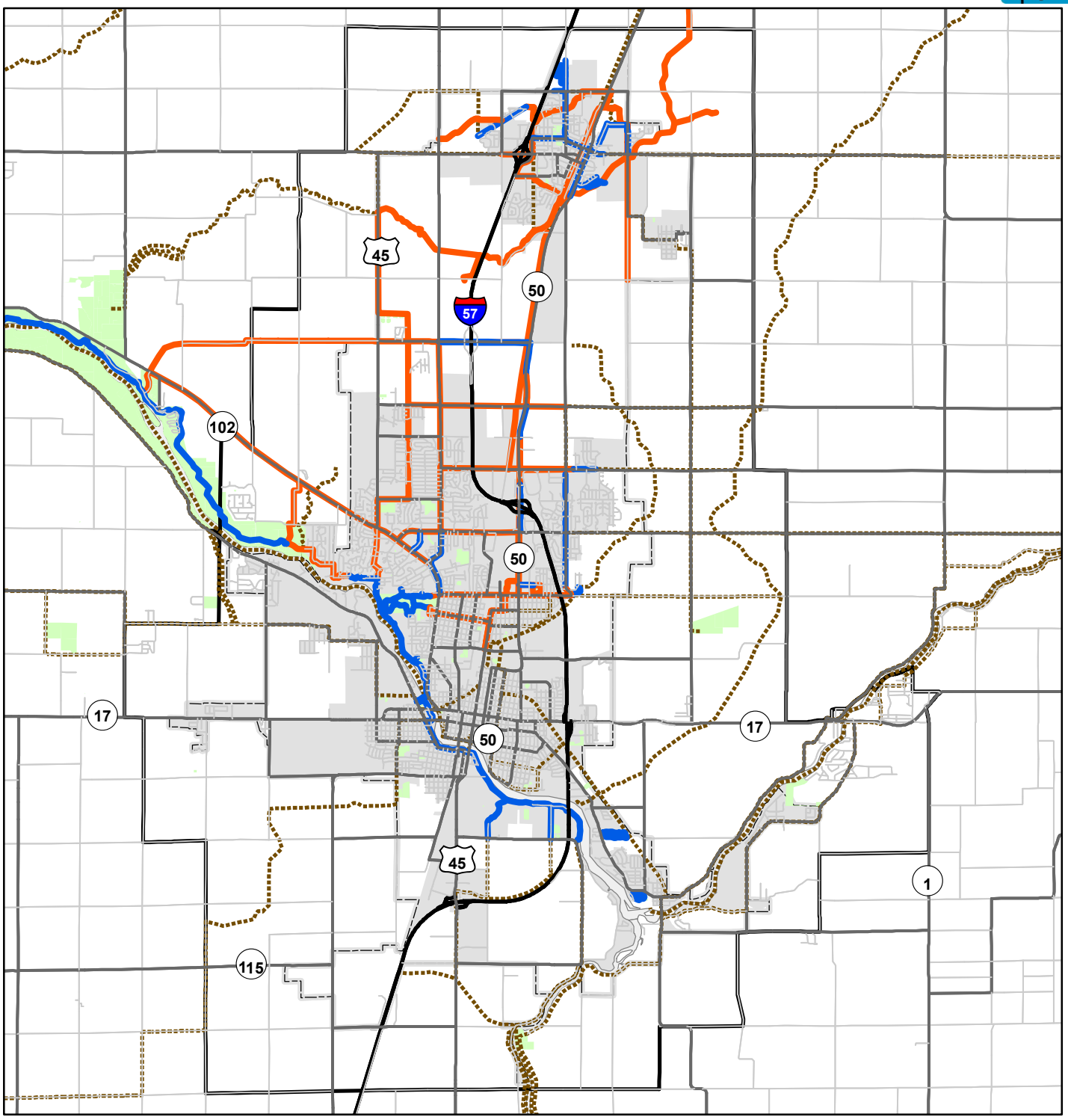


7.5 Future Greenways and Trail Networks and Connections

Kankakee County, through its Greenways and Trails Plan created in 1999, updated in 2009, has made significant progress in planning, designing, and constructing networks and connections of greenways and trails countywide, and within the KATS MPA. However, many components of the network and connections of the greenways and trails within the KATS MPA and the county are slow to advance. As noted in the following sub-sections, opportunities to expand the greenways and trail network and connections may be limited due to a lack of municipal regulations that do not address greenways and trail development, as well as the absence of a countywide entity capable of developing greenways and trails.

Figure 7-12 displays existing and proposed trails within the MPA.

Figure 7-12: Existing and Proposed Trails and Urban Greenways in the KATS MPA



Trails

- Existing
- Proposed
- Proposed - Greenways and Trails Plan

- Corporate Limits
- Census Urbanized Area (UZA)
- Adjusted Urbanized Area (UAB)
- Metropolitan Planning Area (MPA)
- Public Land

N

0 ½ 1 2 3 4 5 Miles

Data Sources: Street Centerlines (2018), Illinois Department of Transportation, UZA, U.S. Census Bureau, Other data - Kankakee County.
Disclaimer: This map is for reference only. Data provided are derived from multiple sources with varying levels of accuracy. Kankakee Area Transportation Study disclaims all responsibility for the accuracy or completeness of the data shown.

As part of the implementation of the Kankakee County Greenways and Trails Plan, a list of guidelines or criteria based on a "Priority Ranking System" was developed. Greenways are ranked one (1) to eight (8), with 1 being a low priority and 8 the highest priority. Criteria included for the Greenway priority rankings:

1 *Benefits Multiple Communities* – Directly benefits multiple communities or a large segment of population. The greenway will serve more than one community or neighborhood.
2 *Completes Existing Greenway* – Segment completes an existing greenway.
3 *Creates New Connections* – Creates a new connection between greenways and/or trails.
4 *Assists Wildlife* – Provides habitat and migration paths for wildlife especially threatened or endangered species.
5 *Preserves Water Quality* – Has an ecological function such as floodplain (water storage/recharge) or filter strip.
6 *Prevents Flood Damage* – Protects developed areas threatened by flood damage.
7 *Buffers Existing Preserves* – Provides a natural extension of an existing park, preserve, or currently protected area.
8 *Scenic or Historic Areas* – Protects important scenic or historic areas from development.

Trails are ranked in a similar manner with rankings on a scale of one (1) to nine (9) based on criteria noted below:

1 *Benefits Multiple Communities* – Directly benefits multiple communities or a large segment of population. The trail will serve more than one community or neighborhood.
2 *Completes Existing Trail* – Segment completes an existing trail.
3 *Creates New Connections* – Creates a new connection between greenways and/or trails.
4 *Provides Trail Opportunities* – Suitable for trail development with few conflicts, such as ownership issues or major design problems.
5 *Provides Access to Schools* – Provides trail access to within a few blocks of a school. Consideration should be given if the trail is within five (5) blocks of a school and the remaining distance to the school is covered by residential streets.
6 *Connects Multiple Public Facilities* – Connects more than one park, preserve, library, school, or public facility.
7 *Reasonable Length* – The trail is short enough in length to make it reasonably affordable.
8 *Provides Travel Alternative* – The trail is designated for transportation purposes rather than recreational purposes, although either purpose could most likely be enjoyed.
9 *Major Structures and Facilities* – A trail that crosses or utilizes a major structure or facility such as a major bridge, ramp, overpass, viaduct, railroad crossing, or an interchange. Also included are trails that are adjacent to high traffic roadways.

7.5.1 Proposed Greenways and Trails – KATS MPO

The Kankakee County 2009 Greenways and Trails Plan identified 60 proposed trails in Kankakee County. Thirty-five of those trails cross the KATS MPA. **Table 7-2** provides a summary of the proposed greenway system. **Table 7-3** provides a summary of the proposed trail system.

Table 7-2: Proposed KATS MPO Greenways-Ranking

Trail Name	Length (Miles)	1	2	3	4	5	6	7	8	Rank
Baker Creek NGW	14.50					•	•			2
Davis Creek NGW	1.50				•	•	•	•	•	4
Iroquois River NGW	6.00	•			•	•	•	•	•	6
Kankakee River NGW	33.0	•			•	•	•	•	•	6
Rock Creek NGW	12.50				•	•	•	•	•	5
Soldier Creek NGW	9.00	•		•		•	•	•		5

Source: 2009 Kankakee County Greenways and Trails Plan.
Note: Highest ranking greenways are shaded.
NGW is an abbreviation for natural greenway.

The Kankakee Riverfront Trail Bridge was completed in 2017.

Table 7-3: Proposed KATS MPO Trails-Ranking

Trail Name	Length (Miles)	1	2	3	4	5	6	7	8	9	Rank
3270 W. Road Trail	1.00							•			1
Armour Road Trail	2.50							•	•	•	3
Aroma Trail	7.50	•					•			•	3
Baker Creek Trail	3.50							•		•	2
Bonfield Trail	13.00	•			•	•	•			•	5
Bourbonnais-Manteno Trail	3.50	•						•	•	•	4
Cardinal Drive Trail	3.00			•				•	•	•	4
Career Center Trail	12.50	•				•	•		•		4
Convention Center Trail	4.25	•		•		•	•			•	5
Diversatech Trail	1.50							•	•		2
Duane Blvd. Trail	1.50				•			•	•		3
Eldridge Trail	8.50								•	•	2
Grand Northern Trail	6.00				•				•	•	3
Greenwood Trail	2.00				•	•		•	•	•	5
K4 Wind Farm Trail	16.25				•					•	2
Larry Power Road Trail	3.75		•			•		•	•	•	5
Liberty Trail	1.50				•	•	•		•		4
Limestone Trail	5.75						•			•	2
Manteno Downtown Trail	3.50						•	•	•		3
Manteno-Grant Park Trail	13.00	•							•	•	3
Maple Street Trail	0.50				•	•	•	•	•		5
North Manteno Trail	2.75					•		•	•	•	4
North Street Trail	6.00			•		•	•		•	•	5
Riverfront Trail	13.00	•	•	•	•		•		•	•	7
River Road Trail	7.00	•	•								2
River's Edge Trail	2.00				•		•	•	•		4
Route 50 Trail	3.00							•	•	•	3
Sandbar Trail	7.50	•			•					•	3
Skyline Trail	6.00						•		•	•	3
Soldier Trail	3.50		•			•	•	•			4
South Creek Trail	1.00					•		•			2
St. George Road Trail	4.00							•	•	•	3
Sugar Island Road Trail	7.00	•								•	2
Trans Bradley Trail	3.00					•	•	•	•	•	5
Trans Manteno Trail	2.00					•	•	•	•	•	5
Waldron Trail	5.00	•					•	•	•	•	5
West Kankakee Trail	6.50					•	•		•	•	4
West Manteno Trail	3.00							•	•	•	3

Source: 2009 Kankakee County Greenways and Trails Plan; Note: Highest ranking trails are shaded.

7.6 Additional Non-Motorized Considerations

7.6.1 Bike Share

A growing number of regions across the country have been creating bike share programs as a mode of transportation. Regions with existing bike share programs continue to add to their fleets. The bike share program in the KATS MPA launched in July of 2018 and is called "Bike 609" and operated by Zagster. According to Zagster, there were originally 50 bikes at 10 dock locations. They have since added an eleventh location at the Kankakee River State Park near Rock Creek. As bike sharing grows as a mode of transportation, the number of dock locations likely need to increase to enhance the convenience of using the program and the availability of overall bikes. Locations include two in the City of Kankakee (YMCA and Farmers Market), two in Bourbonnais (downtown and Olivet Nazarene University), three in Bradley (KCC North Extension, Helgeson Park, and downtown), two in Manteno (Visitor Center and downtown), one at Perry Farm Park, and one at the Kankakee River State Park.

With the wrap-up of 2018, Zagster reported 564 members and 1,003 total trips. After the second year of the program, membership was up 160% and trips were up 253%. Bicycles as a mode of transportation in the Kankakee region is trending upwards. An increase in bicycle use benefits the whole community, not just those riding. **Figure 7-13** shows the locations of bike share docks in the KATS MPA.

Pricing options consist of pay-as-you-go, an annual membership, and a reduced annual membership for students. For pay-as-you-go, the cost is $1 every 30 minutes up to $16. The annual membership costs $25 and covers all trips under 2 hours and begins to charge you $1 every 30 minutes after that. The student membership is organized the same way as the annual membership but is $15 annually.

Since launching in summer of 2018, Bike 609 has gained 1,464 users that completed 3,543 trips and the median trip length was 40 minutes. The gender of users is notable. Females made up 62% of users while 38% were male. In 2018, the distribution of trips by station was Perry Farm (57% of total trips), Olivet Nazarene University (13%), Kankakee Farmers Market (8%), Visitor Center (7%), Downtown Bourbonnais (5%), Downtown Manteno (4%), Bird Park (3%), Bradley Hotel Campus (1%), Downtown Bradley (1%), and KCC (1%). Most trips were taken near popular recreational areas, Zagster plans to relocate the lowest utilized stations to more recreation-based locations in the future. Although trips occur more frequently at recreation locations, a majority of trips happen during weekdays (67.4%).

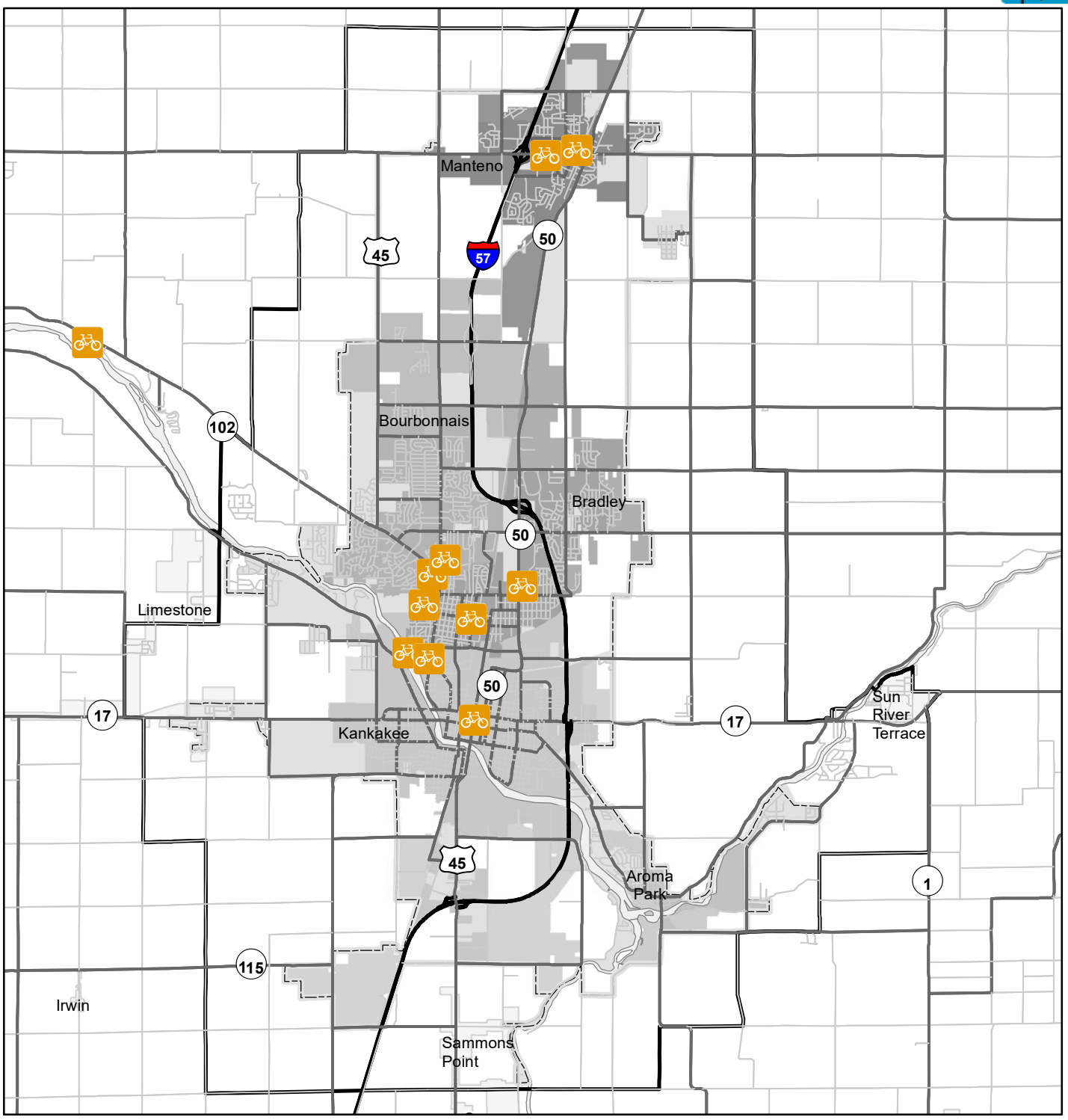
7.6.2 Bicycle Friendly Community Designation

A goal of plan implementation should be an official designation as a "Bicycle Friendly Community" (BFC). This national League of American Bicyclists award program has Honorable Mention, Bronze, Silver, Gold, Platinum, and Diamond gradations. The program comprehensively assesses a community based on engineering, education, enforcement, encouragement, and evaluation. The items listed below contribute to BFC designations.

- Adoption of a non-motorized master plan, officially naming a Bicycle/Pedestrian Coordinator, and creating a Bicycle (or Bicycle/Pedestrian) Advisory Commission.
- Providing clarity to the Complete Streets Policy by adopting bicycle and pedestrian friendly road design standards.
- Adopting a bike parking ordinance.
- Implementing several more high-priority segments along on-road bikeways, especially bike lane sections.
- Implementing at least two of the education recommendations from the non-motorized master plan.
- Implementing at least one of the enforcement recommendations from the non-motorized master plan.
- Proclaiming Bike to Work Day, Week, or Month, with some accompanying public educational outreach.

Dedicated bike lanes were recently added to Schuyler Ave.

Figure 7-13: Bike Share Dock Locations in the KATS MPA



Data Sources: Bike Share Locations, Zagster, Street Centerlines (2018), Illinois Department of Transportation, UZA, U.S. Census Bureau, Other data - Kankakee County.
Disclaimer: This map is for reference only. Data provided are derived from multiple sources with varying levels of accuracy. Kankakee Area Transportation Study disclaims all responsibility for the accuracy or completeness of the data shown.

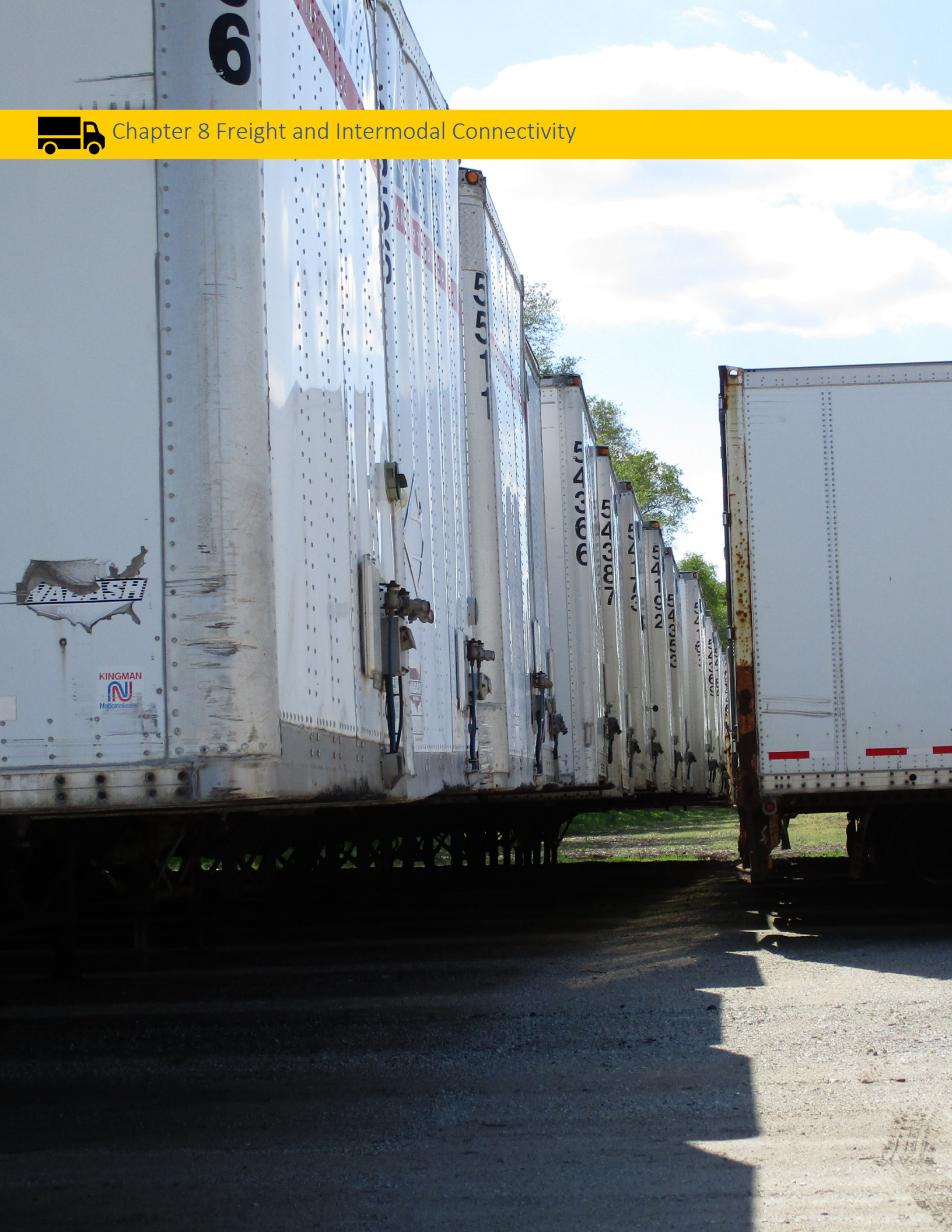
7.6.3 Non-Motorized Resources

To better enhance non-motorized improvements, it's helpful to have access to up-to-date resources. The resources below may provide additional information for non-motorized transportation enhancements:

- *AASHTO Guide for the Development of Bicycle Facilities*, 4th Edition, 2012. Available at www.transportation.org.
- *Bicycle Parking Guidelines, 2nd Edition: A Set of Recommendations from the Association of Pedestrian and Bicycle Professionals***,** 2010, available at www.apbp.org.
- *NACTO Urban Bikeway Design Guide.* Online at www.nacto.org.
- *Manual on Uniform Traffic Control Devices.* Online at mutcd.fhwa.dot.gov.
- The Pedestrian and Bicycle Information Center: Offers a wealth of information on engineering, encouragement, education, and enforcement, including archived webinars and quarterly newsletters: www.pedbikeinfo.org.
- The Association of Pedestrian and Bicycle Professionals: provides continuing education, technical resources, and an online forum for exchanging questions and ideas. www.apbp.org.
- League of Illinois Bicyclists: A planning and advocacy resource with many on-line materials focused on best practices (nationally as well as issues unique to Illinois): www.rideillinois.org.

A bike share dock is located on Schuyler Avenue in Kankakee.

Chapter 8 Freight and Intermodal Connectivity



8.1 Overview

This chapter summarizes freight activity statewide and within the KATS region. Kankakee County as a whole is traversed regularly by large numbers of truck and rail freight movements. Within the KATS region, highways, primarily Interstate 57, traverse the KATS region in a north-south direction with limited east and west connections. Rail lines cross the KATS region in the four cardinal directions. The Greater Kankakee Regional Airport is an additional asset to the region that provides important transportation (see **Chapter 10**). KATS is committed to developing a transportation network that supports the movement of goods and enhances economic development opportunities within the region.

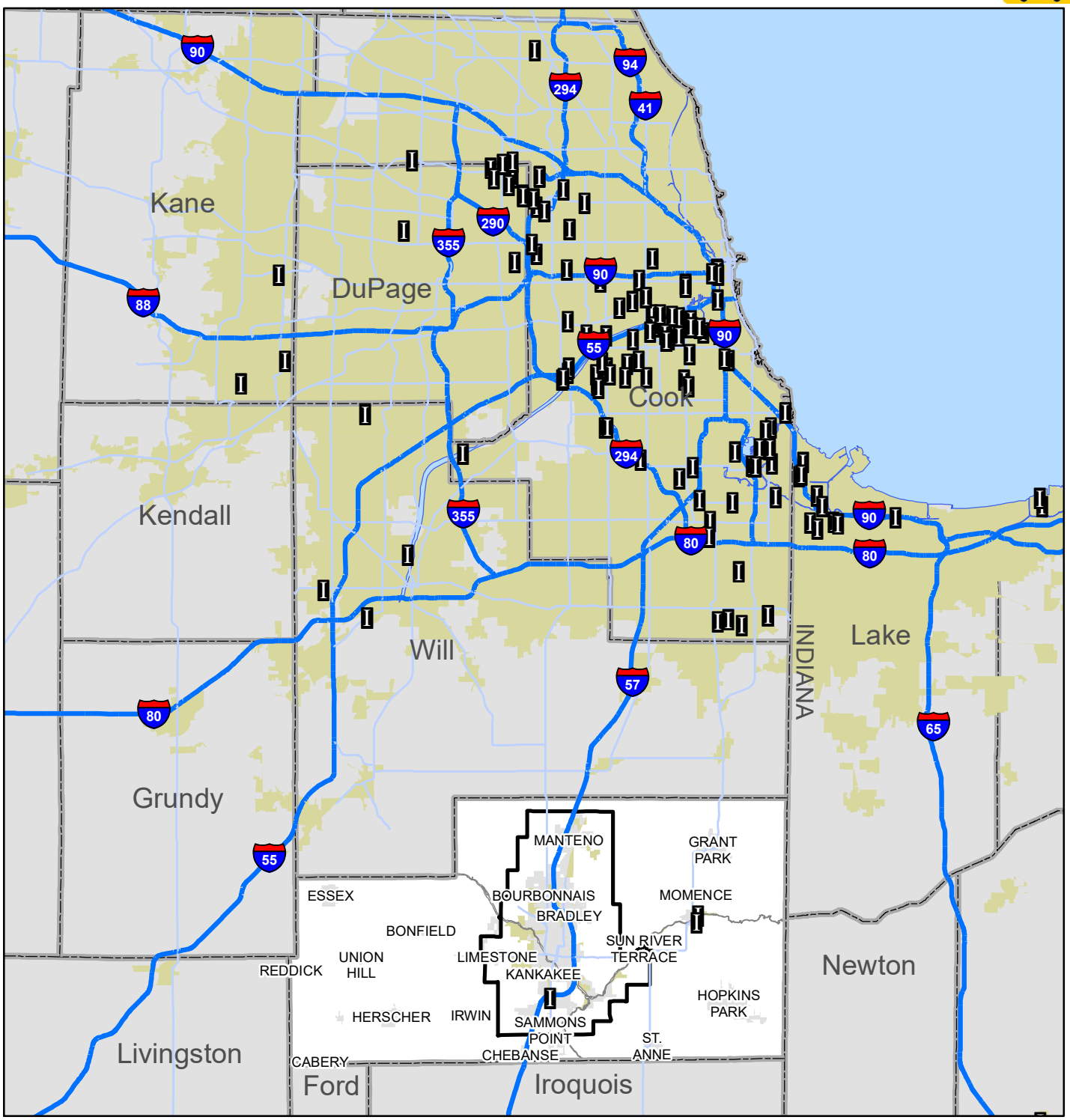
Truck freight issues in the Kankakee Urbanized Area require regional solutions. Within the past fifteen years, large intermodal facilities in Will County have been constructed north of Kankakee County. Many truck drivers using those facilities seek to avoid the congestion of the Chicago area when their routes require east-west travel. Minimal delays incurred in Kankakee County compared to congested areas to the north are worth the additional mileage to most truck drivers. However, since east-west truck freight has limited options in Kankakee County, these vehicles typically make no stops within the county. Truckers typically have to choose between U.S. 30 and Interstate 80 to the north and Interstate 74 to the south. The distance between these four-lane, north and south options is about 100 miles and limits east-west freight movement.

Kankakee County has also experienced problems with truck and automobile traffic mixing. The deficiency of local truck routes and access points has significantly increased the rate of roadway infrastructure deterioration. This problem must be examined further to preserve local roadway infrastructure.

The following sections detail these and other important issues relating to the freight movements of both trucks and trains. **Figure 8-1** displays the existing Regional Freight Transportation and Intermodal Facilities.

Truck Traffic on Illinois Route 114 its junction with Illinois Route 1/17

Figure 8-1: Regional Map - Freight Transportation and Intermodal Facilities



Intermodal Freight Facilities

KATS MPO Boundary

Census Urbanized Area (UZA)

Interstate

Other-Highways

N

Miles

0 2½ 5 10 15 20 25

Data Sources: Street Centerlines (2018), Illinois Department of Transportation, Intermodal Facility Locations, U.S. Department of Transportation, Census Urbanized Areas, U.S. Census Bureau, Other data - Kankakee County.

Disclaimer: This map is for reference only. Data provided are derived from multiple sources with varying levels of accuracy. Kankakee Area Transportation Study disclaims all responsibility for the accuracy or completeness of the data shown.

8.2 Freight Plans/Studies

The FAST Act required state DOTs to establish freight advisory committees consisting of public and private freight stakeholders. State DOTs are also encouraged to develop comprehensive plans for freight related planning and investment. Illinois has completed statewide freight studies. The following summarizes the state plans as they relate to the KATS region.

8.2.1 State Modal Freight Plan (2012)

- **Freight Traffic**
  Freight movement is a key industry in Illinois. According to the U.S. Bureau of Transportation Statistics (BTS), in 2017 the volume of freight by tonnage and by the value of goods, Illinois was ranked the third highest in the United States, behind Texas and California. This makes Illinois the highest of all inland states. Illinois also has the second highest mileage of railroad tracks in the nation.

  Illinois is served by seven Class I railroads, which include the leading railroad serving Mexico and two of the leading railroads serving Canada. Illinois' proximity to the Ohio and Mississippi River Systems (via the Illinois River), provides freight connections between the Great Lakes and the Atlantic Ocean. Chicago's O'Hare International Airport is a global air hub, offering cargo in passenger aircraft to carry freight worldwide.

- **Freight Tonnage by Mode**
  The Illinois Freight Plan, published by IDOT reported a total of 1.227 billion tons moved from, to, and within Illinois via its roads, railroads, waterways, and airfreight facilities in 2014. Truck freight carried 54 percent, rail carried 37 percent (8.6 percent by rail intermodal and 28.4 by rail carload), waterways carried 8.8 percent, and air accounted for 0.2 percent. Illinois-based volumes were forecasted to total 1.72 billion tons by 2045, a 40 percent increase from 2014 Illinois-based freight traffic by mode. See **Table 8-1** for more detailed information on freight tonnage.

Traffic backed up on Interstate 57 due to road construction.

Table 8-1: Illinois-Based Freight Traffic by Mode and Value – 2014

	Inbound		Outbound		Within		Total	
	Tons 2014 (M)	Value 2014 (B)	Tons 2014 (M)	Value 2014 (B)	Tons 2014 (M)	Value 2014 (B)	Tons 2014 (M)	Value 2014 (B)
Truck	129.1	$296.3	133.8	$415.2	401.4	$360.8	664.2	$1,072.3
Rail-Intermodal	48.8	$647.3	56.2	$662.4	0.1	$3.9	105.1	$1,313.6
Rail Carload	195.2	$198.1	129.5	$161.9	24.2	$11.1	348.9	$371.2
Water	21.2	$10.6	80.0	$19.7	6.5	$1.2	107.8	$31.5
Air	1.0	$97.7	0.9	$87.0	-	$0.7	1.9	$185.4
Total	**395.3**	**$1,250.0**	**400.4**	**$1,346.2**	**432.3**	**$377.7**	**1,227.9**	**$2,974.0**
Truck	32.7%%	23.7%	33.4%	30.8%	92.9%	95.5%	54.1%	36.1%
Rail-Intermodal	12.3%	51.8%	14.0%	49.2%	0.0%	1.0%	8.6%	44.2%
Rail Carload	49.4%	15.8%	32.3%	12.0%	5.6%	2.9%	28.4%	12.5%
Water	5.4%	0.8%	20.0%	1.5%	1.5%	0.3%	8.8%	1.1%
Air	0.3%	7.8%	1.2%	6.5%	0.0%	0.2%	0.2%	6.2%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Source: IDOT State Freight Plan – 2017 (Amended June 5, 2018).

- Truck freight is forecasted to increase the greatest in absolute tonnage and by mode share. Approximately 70 percent of future freight demands are expected to be fulfilled by trucks. Truck freight is forecasted to carry an additional 343 million tons by 2045, which is an average increase of about 1.4 percent per year.
- Rail is projected to increase, with an annual increase of 0.8 percent for both intermodal and carload rail. Intermodal rail is forecasted to increase by an additional 29.4 million tons by 2045. Carload rail is forecasted to increase by an additional 91.7 million tons by 2045.
- Water freight tonnage is projected to add 28.3 million tons by 2045, an annual increase of approximately 0.8 percent.
- Airfreight is anticipated to increase from 1.4 million tons to 4.4 million tons (BTS-2045 FAF 4.5 State Summary). This increase suggests the growing importance of this mode as a backup for just-in-time production systems as the nation's highway network becomes more prone to congestion and delay.

Traffic crossing state lines in 2014 accounted for 795.7 million tons, nearly 65 percent of total freight tonnage. The modal profile of freight entering into or leaving Illinois is diverse: 54 percent rail (13 percent intermodal rail and 41 percent carload rail), 33 percent truck, 13 percent water and air. Intrastate traffic (freight movements beginning and ending in Illinois) amounted to 432.3 million tons or approximately 35 percent of the total. Truck freight accounted for nearly 93 percent of the tonnage, due to shorter distances that generally allow trucking to be more competitive than the other modal options.

- **Freight Commodity**
  Coal (14.9 percent), cereal grains (10.7 percent), and gravel (7.6 percent) were the top three commodities by tonnage transported to, from, or within Illinois. These three commodities accounted for 33.2 percent of total freight tonnage in Illinois during 2014. These shares clearly demonstrate the importance of agriculture and energy supply chains to Illinois' economy. It's worth noting that due to national and global changes in energy resources, coal is expected to decrease over time.

Table 8-2 and **Table 8-3** provide a profile of Illinois commodity groups. Mixed freight and motorized vehicles are the top two products representing 46 percent of the value of Illinois freight traffic. Machinery

and electronics are the next two highest value commodities transported in Illinois, bringing the cumulative total representation to 56 percent. In summary, those commodity groups magnify the state's high-end manufacturing distribution system.

Table 8-2: Illinois Top Fifteen Commodities by Value, 2014

Rank	Commodity Group	Value ($ in millions)	Percent
1	Mixed freight	935,839	33.6%
2	Motorized vehicles	348,952	12.5%
3	Machinery	144,156	5.2%
4	Electronics	136,555	4.9%
5	Chemical prods.	110,440	4.0%
6	Unknown	103,123	3.7%
7	Plastics/rubber	77,670	2.8%
8	Textiles/leather	72,373	2.6%
9	Other foodstuffs	71,661	2.6%
10	Base metals	63,610	2.3%
11	Misc. mfg. prods.	56,849	2.0%
12	Pharmaceuticals	53,791	1.9%
13	Articles-base metal	50,761	1.8%
14	Gasoline	50,760	1.8%
15	Basic chemicals	48,437	1.7%
Sub-Total for Top 15		**2,324,977**	**83.4%**
Other Commodities		649,023	16.6%
Total		**2,974,000**	**100%**

Source: IDOT State Freight Plan – 2017 (Amended June 5, 2018).

Table 8-3: Illinois Top Fifteen Commodities by Tonnage, 2014

Rank	Commodity Group	Tonnage	Percent
1	Coal	183,039,721	14.9%
2	Cereal grains	130,666,745	10.7%
3	Gravel	93,071,532	7.6%
4	Mixed freight	67,928,780	5.5%
5	Other foodstuffs	56,579,401	4.6%
6	Gasoline	55,233,392	4.5%
7	Basic chemicals	49,499,047	4.0%
8	Other ag. prods.	43,848,145	3.6%
9	Chemical prods.	40,854,612	3.3%
10	Nonmetal min. prods.	40,122,015	3.3%
11	Base metals	39,892,128	3.3%
12	Waste/scrap	31,142,798	2.5%
13	Motorized vehicles	30,605,805	2.5%
14	Fuel oils	29,807,733	2.4%
15	Fertilizers	29,586,144	2.4%
Sub-Total for Top 15		**921,877,998**	**75.2%**
Other Commodities		306,022,002	24.8%
Total		**1,227,900,000**	**100%**

Source: IDOT State Freight Plan – 2017 (Amended June 5, 2018).

Outbound commodity flows totaled 400.4 million tons in 2014. Trucks carried 133.8 million tons (33.4 percent), railroads-intermodal carried 56.2 million tons, (14.0 percent) and railroad-carload carried 129.5 million tons (32.3 percent). Water modes on Illinois portions of the Great Lakes and major river systems (Mississippi, Illinois, and Ohio) accounted for 80.0 million tons (20.0 percent). Outbound airfreight accounted for a marginal portion of 900,000 tons (1.2 percent). Major outbound commodity flow from Illinois in 2014 included:

- Coal made up 59.7 million tons of outbound freight.
- Cereal grains made up 41.6 million tons of outbound freight.
- Mixed freight made up 34.5 million tons of outbound freight.

Examples of the largest inbound commodity flows entering Illinois in 2014 included:

- Coal made up 100.5 million tons of inbound freight.
- Mixed freight made up 33.4 million tons of inbound freight.
- Basic chemicals and chemical products, when combined, made up 41.6 million tons of inbound freight
- Cereal grains and other foodstuffs, when combined, made up 33.4 million tons of inbound freight.

Intrastate commerce comprises more tonnage than inbound or outbound commodity flows (individually). Intrastate commodity flows accounted for 432.3 million tons of freight movement in Illinois in 2014. Because truck trips are typically more competitive for trips less than 550 miles, this freight mode was the principal transportation mode used. Of the tonnage originating and ending its movement in Illinois, trucks carried 401.4 million tons (92.9 percent) of the total intrastate volume in 2014. Railroad-carload moved 24.2 million tons (5.6 percent) of intrastate movements by movements in 2014, while water modes carried 6.5 million tons (1.5 percent).

8.2.2 Illinois State Rail Plan (2017)

The 2017 Illinois State Rail Plan covers the entire state of Illinois. Rail services addressed in this plan include rail freight, carrier services, Amtrak services, intercity high-speed rail services, and urban rail commuter services. The plan identified anticipated trends, needs, and issues that will affect rail service and demand over the next two or three decades. The plan provides a long-range investment program framework for meeting the various needs of rail passengers and freight services within the state.

This section provides a summary of the rail services addressed in the 2017 Illinois State Rail Plan at the "high-level" statewide view. Specifics of the rail services that include the Kankakee County and KATS region will be discussed in further detail within the Freight and Passenger Rail chapters.

- **Rail Freight Systems**
  Illinois rail freight systems are comprised of 46 railroads including seven Class I railroads, three regional railroads, 13 short line railroads, and 23 terminal carriers. Classification of the rail freight systems fall into three categories as defined by the Federal Surface Transportation Board:
  - Class I: Having more than $457.9 million of annual carrier operating revenue, Class I rail freight systems primarily operate long-haul service over high-density intercity traffic lanes.
  - Class II and Regional Railroads: Class II and Regional railroads are railroads of similar size with slightly different definitions. Class II railroads are defined by the Surface Transportation Board as having

annual revenue of between $36.6 million and $475.7 million. Regional railroads are generally defined as operating over at least 350 miles of track and/or having revenue of at least $40 million.

- Class III (Short Line Railroads): Class III or short line railroads have annual revenue of less than $36.6 million per year. Terminal, or switching, railroads are a subcategory of Class III railroads that provide pick-up and delivery service within a specified area.

Canadian National (CN), Norfolk Southern (NS) and Union Pacific (UP) are the three Class I railroads, regularly operating through Kankakee County. One short line railroad, Kankakee Beaverville & Southern Railroad (KBSR), provides connecting services to the Class I and short line railroads within the region.

- **Rail Freight Traffic**

According to 2017 data by the American Association of Railroads (AAR), Illinois was a top-ranking state in the nation by various metrics used to describe the size and extent of the rail industry. In 2017, the Illinois rail system was ranked as follows:

- Illinois ranked first in rail carloads carried with 12.7 million carloads.
- Illinois ranked first in both the number of carloads originated (4.03 million) and in carloads terminated (4.07 million).
- Illinois ranked second in tons originated (122.1 million) and second in tons terminated (124.1 million).
- Illinois ranked second in miles of railroad track with 7,151 miles (not including trackage rights).
- Illinois ranked first in tons carried with 483.2 million tons.

- **Rail Freight Commodities**

- **Coal/Energy** - Most of the coal shipped to Illinois is used for power generation. In 2017, the AAR reported there were 57.2 million tons of coal that originated or terminated in by rail in Illinois. Some coal may have remained in Illinois while other loads were transloaded to barge or vessel at one of the Illinois port facilities for delivery elsewhere. According to data from the U.S. Energy Information Administration, Illinois was the fourth largest U.S. coal producer in 2018 with over 49.5 million tons produced. Illinois also has the second largest coal reserves in the nation. According to the Illinois State Freight Plan (2017), coal was transported by barge (18 percent), by rail carload (76.8 percent), and by truck (5.1 percent) in 2014.
- **Agricultural/Food** - Agriculture is also highly dependent upon rail. From the USDA's 2012 Census of Agriculture, Illinois was second, behind Iowa, as the top producing state of corn and soybeans by value. Rail connections are a key component of the success of Illinois agriculture sold both domestically and abroad.
- **Chemical and Other** - Rail is pivotal to the success of the Illinois chemical industry, whose companies must frequently ship heavy, bulky materials great distances. The Illinois chemical industry exported 36.76 million tons of chemical products in 2014. A variety of other industries within Illinois rely on rail as well. These include the steel industry, plastics and rubber, and construction materials such as sands, gravel, and lumber.

- **Directional Rail Flow**

In 2014, Illinois railroads carried a total of 640 million tons and nearly 15 million carloads of freight. The most prevalent directional flow was “Non-Illinois U.S. to Illinois” representing nearly 36 percent by weight, followed by “Illinois to Non-Illinois U.S.” representing 28.5 percent by weight. On a unit

basis, interstate inbound and outbound are relatively balanced with 5.7 million carloads terminating in Illinois and 5.5 million originating in the state. Through-freight often referenced as "Overhead Freight" passes through Illinois for commerce between markets outside of the state. This represents 28 percent of directional flows. Most overhead freight traffic pertains to the import and export of goods that move between Pacific Coast ports and the Ohio Valley or markets further east. The remaining tonnage, 3.8 percent, was intrastate traffic. The directional distribution of carload units follows a similar pattern with interstate flows weighing somewhat more heavily to inbound.

- **Multimodal Transportation**
  Intermodal freight (truck, railroad, air, lake/ocean vessels, etc.) is typically handled in a container or trailer. More than one mode of transportation is required to move freight from the shipper to the receiver of goods.

  Intermodal containers are divided into two categories—domestic and international. Domestic containers are typically 48-feet or 53-feet long; international containers are typically 20-feet or 40-feet long. Domestic trailers also move via intermodal service, which includes motor carrier owned equipment.

8.2.3 Existing Truck Freight Movements and Facilities

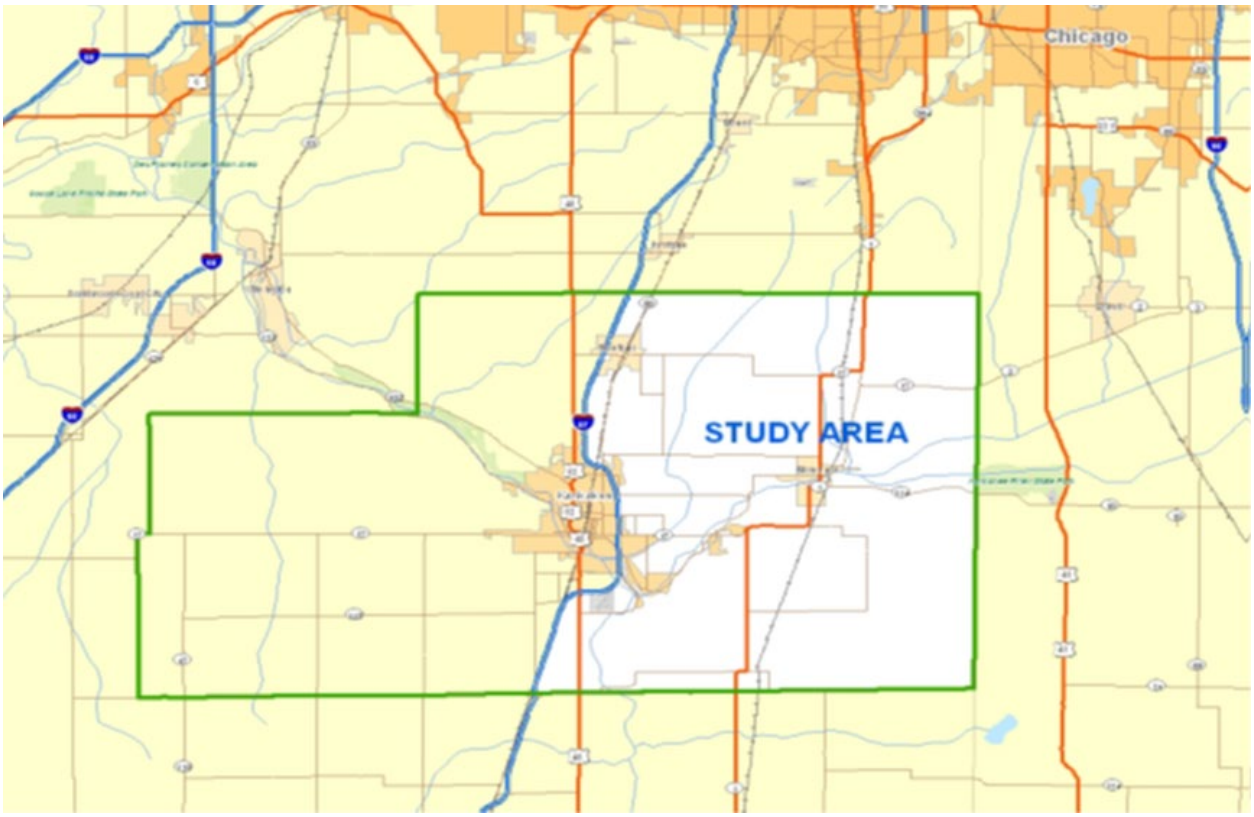
The Kankakee County Planning Department released a report, *Truck Traffic Analysis in Eastern Kankakee County (2012).* The geographic location of the study area includes Kankakee County east of Interstate 57. This area encompasses 347 square miles and comprises urbanized areas, small communities, and agricultural land along the I-57 corridor.

While this study only encompasses a portion of the KATS region, the study underscores the fact that Kankakee County is experiencing significant growth in truck freight movements, particularly in the eastern half of the county. The increase in truck traffic is partially a result of industrial growth within Kankakee County, but more significantly due to the intermodal facilities located outside Kankakee County, such as CenterPoint Intermodal Center in Elwood, Illinois.

At the time of this study, Illinois Route 1/17 between River Street and Second Street in Momence (outside the KATS MPA) was identified as being near total capacity with 91 percent of the 12,000 vehicles per day threshold (According to 2011 traffic counts from IDOT). This segment features a very high proportion of truck traffic within the study area at 25.5 percent. In general, Illinois Routes 1, 17, and 114 feature very high proportions of truck traffic of at least 10 percent, with most segments at 20-30 percent and one segment as high as 43 percent (along IL-114 between 17000E Road and 18000E Road). All segments that run east-west between Illinois and Indiana are over 25 percent truck traffic. Most of these routes converge in or near Momence where between 2,000 and 3,000 trucks drive on local roadways every day.

Besides existing and proposed intermodal facilities in southern Cook and Will Counties, congestion along Interstate 80 and other routes closer to Chicago causes haulers to seek alternative routes. The intersection of I-65 and I-80 in Gary, Indiana is ranked as the 6th most congested bottleneck for trucks in the nation by the FHWA. KATS would like to update the *Truck Traffic Analysis in Eastern Kankakee County (2012)* and by obtaining additional information on truck traffic on non-state roads to learn more about how local roads are being used by trucks. **Figure 8-2** displays the Eastern Kankakee County Study Area.

Figure 8-2: Eastern Kankakee County Truck Study Area



Source: Truck Traffic Analysis in Eastern Kankakee County (2012)

8.2.4 East-West Freight Corridor

Previous studies and plans proposed the Illiana Expressway, which was a leading project until it was suspended in January 2015, as a corridor that could provide an alternate route for traffic traveling between I-65 in Indiana and I-55 in Illinois. Whether the status Illiana Expressway is restored or another alternative is proposed, an east-west corridor that can accommodate the demand for freight traffic is needed. This need could also be significantly increased if the proposed South Suburban Airport were to be constructed, which could create another destination for freight traffic.

Truck Traffic on Illinois Route 1/17.

8.2.5 KATS Regional Truck Traffic

Illinois roadways are required to designate a truck route system within the state on which there is a preference for heavier and larger trucks are to travel on. As of January 1, 2020, the designated truck route system in Illinois was changed by removing Class III truck routes. This leaves only Class I and Class II truck routes.

- **Class I**: Includes roads that are four-lane, divided and fully controlled access highways. Typically including the Interstate system, tollways, and other highways as approved by IDOT.
- **Class II:** Highways that include major arterials, but not built to interstate highway standards and have at least 11-foot lane widths.

Class I and II truck routes serving the KATS region include I-57, U.S.-45/52, IL-50, IL-17, IL-102, IL-113, and IL-115. Local roadway authorities may also designate Class II truck routes. County Highway 9 (9000N Rd) is also a Class II truck route from I-57 to U.S. 45/52.

Figures 8-3 and 8-4 illustrate these truck routes in the KATS MPA and Kankakee County. **Figures 8-5 and 8-6** depict heavy commercial vehicles (HCV) and the percent of annual average daily traffic (AADT) that is made up of HCV.

Truck Traffic on Illinois Route 1.

Figure 8-3: Truck Routes in Kankakee County

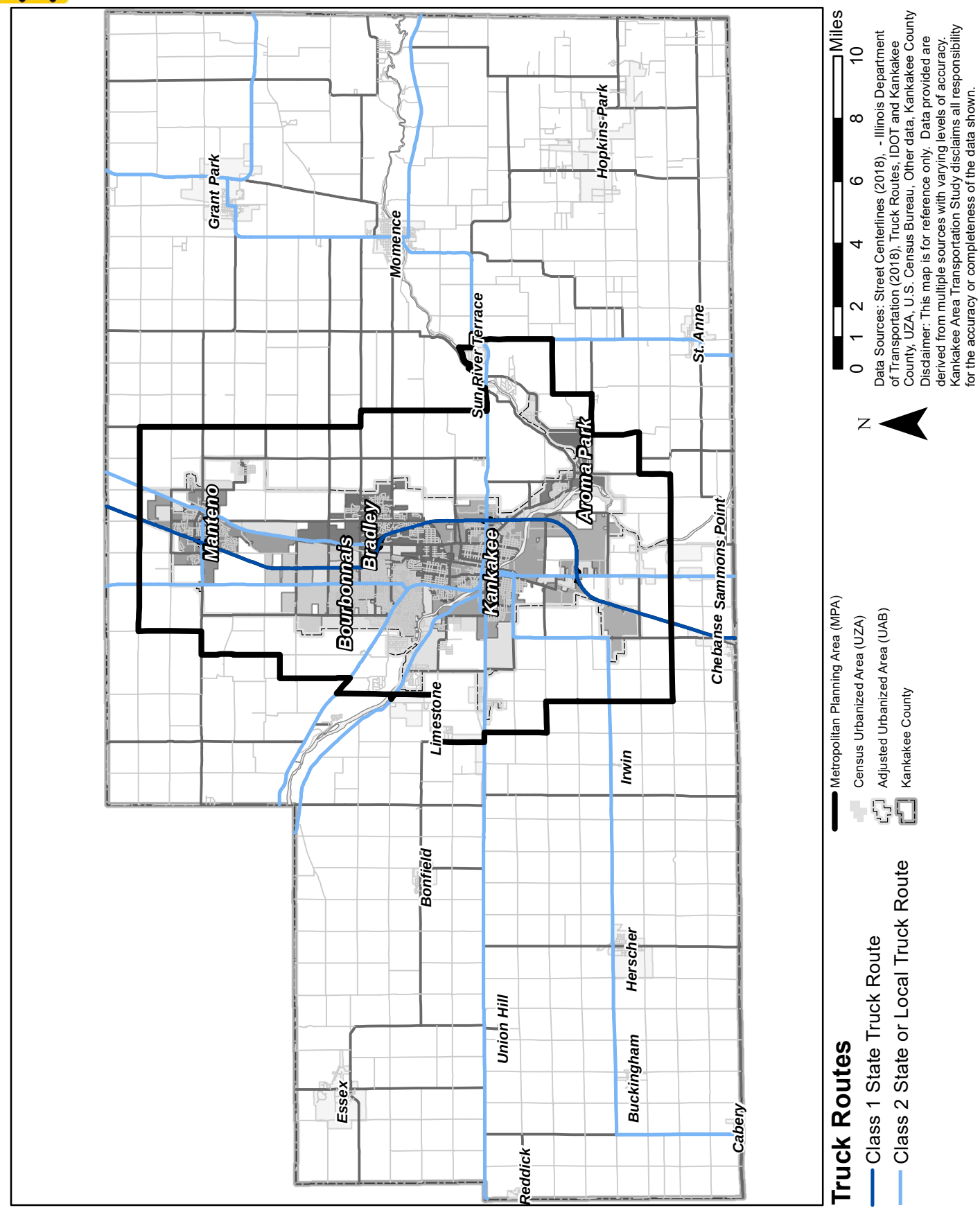
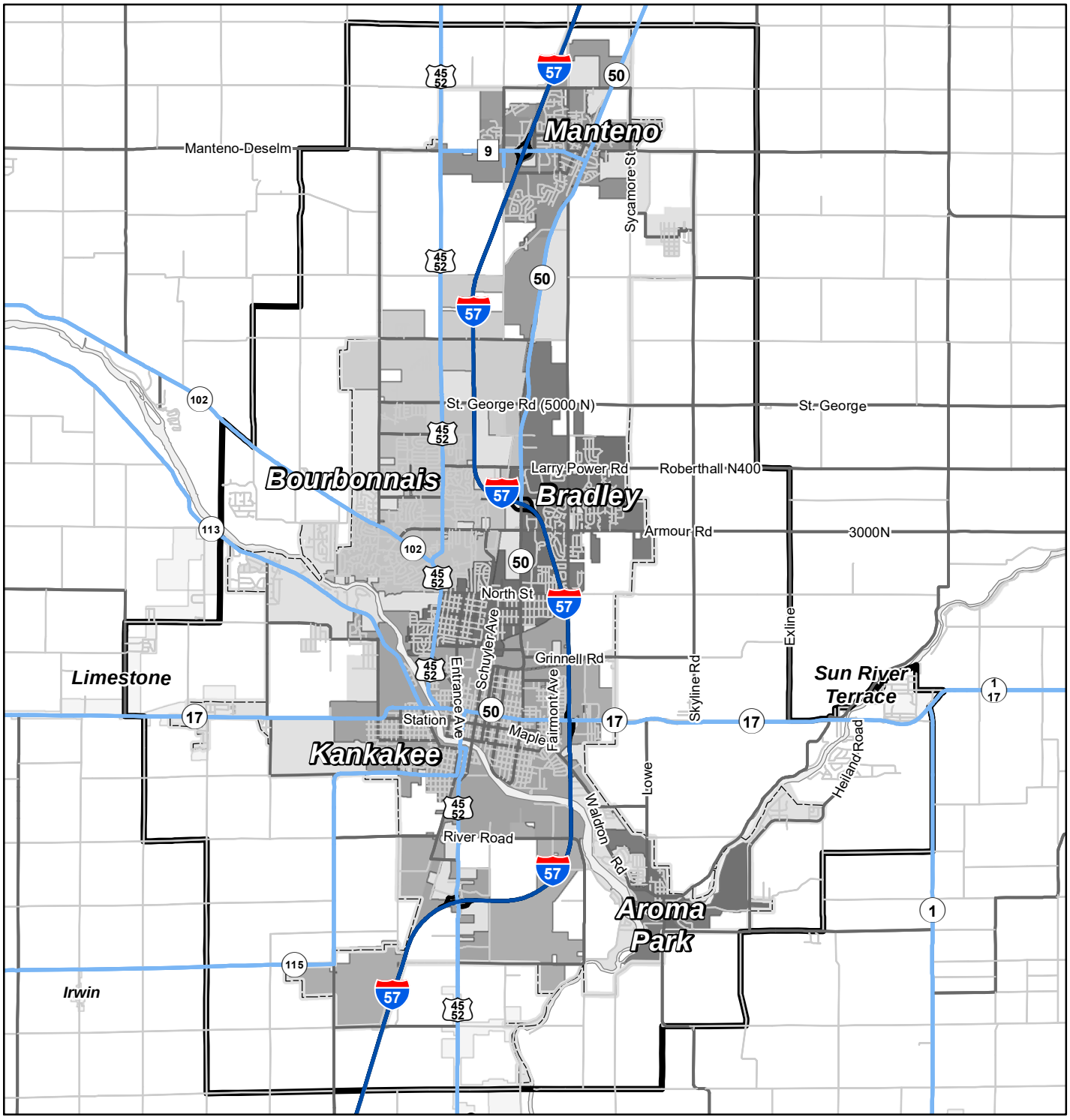


Figure 8-4: Truck Routes in the KATS MPA



Data Sources: Street Centerlines (2018), Illinois Department of Transportation, Truck Routes, IDOT and Kankakee County, UZA, U.S. Census Bureau, Other data - Kankakee County. Disclaimer: This map is for reference only. Data provided are derived from multiple sources with varying levels of accuracy. Kankakee Area Transportation Study disclaims all responsibility for the accuracy or completeness of the data shown.

Figure 8-5: Heavy Commercial Vehicle Traffic in Kankakee County

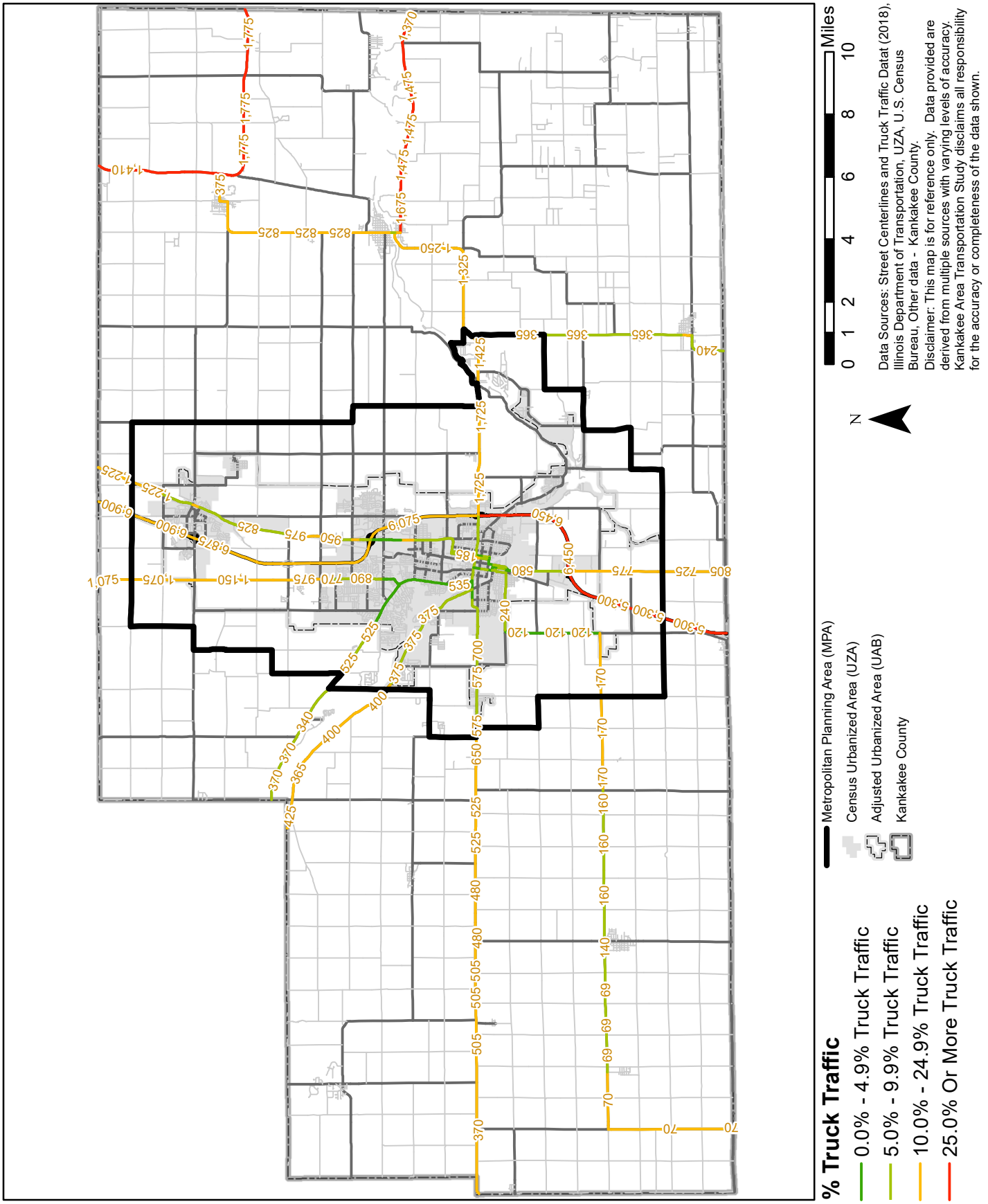
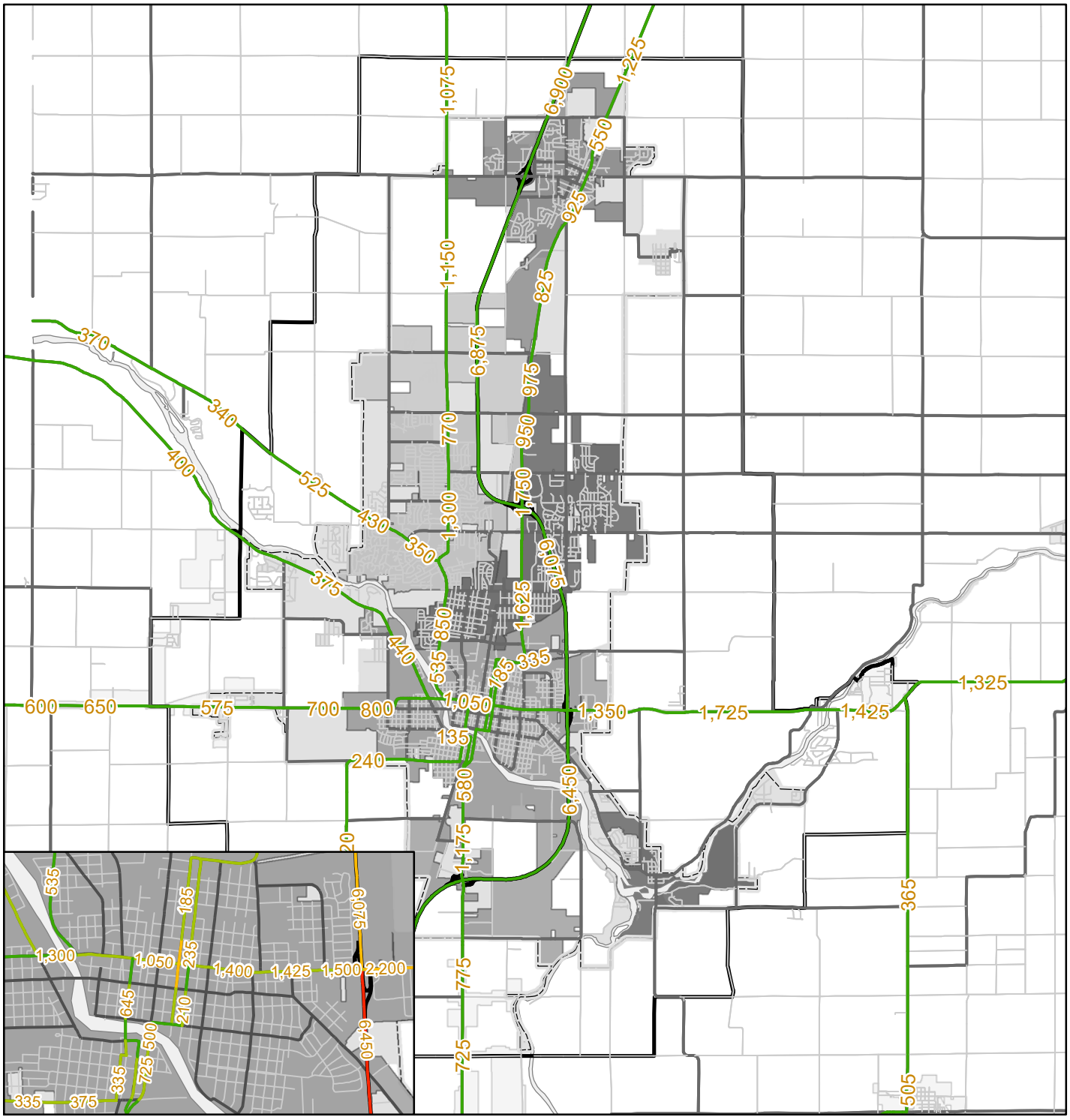


Figure 8-6: Heavy Commercial Vehicle Traffic in the KATS MPA



Percent Truck Traffic

- 0.0 - 4.9% Truck Truck Traffic
- 5.0 - 9.9% Truck Traffic
- 10.0% to 24.9% Truck Traffic
- 25% Or More Truck Traffic

- Corporate Limits
- Census Urbanized Area (UZA)
- Adjusted Urbanized Area (UAB)
- KATS MPO Boundary

N

0 ½ 1 2 3 4 5 Miles

Data Sources: Street Centerlines and Truck Traffic Data (2018), Illinois Department of Transportation, UZA, U.S. Census Bureau, Other data - Kankakee County.
Disclaimer: This map is for reference only. Data provided are derived from multiple sources with varying levels of accuracy. Kankakee Area Transportation Study disclaims all responsibility for the accuracy or completeness of the data shown.

Interstate 57

Interstate 57 is the only Class I truck route in the KATS region that serves as the primary feeder truck route for the Class II roadways. As a Class I roadway, Interstate 57 is designed to handle north-south through-traffic, and in most cases has neither origin nor destination inside Kankakee County. I-57 carries approximately 5,300 to 6,900 (20 to 27 percent of AADT) HCV per day. Heavier HCV volumes, 6,875 to 6,900 (20 to 22 percent of AADT) occur between the northern KATS boundary and IL-50. The Lowest HCV volumes on I-57 occur between U.S. 45/52 and southern KATS border (5,300), although HCV volumes are 27 percent of the overall AADT between U.S. 45/52 and the southern KATS boundary.

See **Table 8-3** for a summary of HCV traffic on I-57.

Table 8-3: HCV Volumes within the KATS Region – Interstate 57

Roadway	Class	Location	AADT	HCV	% HCV
I-57	I	N. KATS boundary & County Hwy. 9 (Manteno)	35,200	6,900	20%
I-57	I	County Hwy. 9 (Manteno) to IL-50	31,800	6,875	22%
I-57	I	IL-50 to IL-17	30,800	6,075	20%
I-57	I	IL-17 to U.S. 45/52	24,600	6,450	26%
I-57	I	U.S. 45/52 to S. KATS boundary	20,000	5,300	27%

Source: Illinois Department of Transportation – 2017 Traffic Counts.

U.S. 45/52

U.S. 45/52 is a designated Class II truck route running north-south through the KATS MPA with HCV volumes ranging from 135 to 2,225 (2 to 23 percent of the overall AADT). Characteristics of U.S. 45/52 HCV traffic in the KATS region include:

- A higher percentage of HCV of the overall AADT occurs in two segments. One is from the northern KATS boundary (E. 11000N Rd.) to Indian Oaks Rd. (E. 5000N Rd.) at 10 to 15 percent (975 to 1,150 HCV per day). The other is from the I-57 interchange in Kankakee to the southern KATS boundary (E. 6000S Rd) at 12 to 18 percent (600 and 1,350 HCV per day). There are also high percentages of HCV in south Kankakee, particularly between I-57 and Peerbotle Ave. ranging from 13 to 23 percent (775 to 2,225 HCV per day).
- The lowest percentage of HCV volumes is in the developed areas (Bourbonnais, Bradley, and Kankakee). There are two general areas where the percent of HCV volumes are low. One area is north of IL-17. In this area, the percent of HCV volumes range from 2 to 7 percent (380 to 1,300 HCV per day). The AADT of all vehicles is extremely high in the KATS MPA, which is one reason why the percent of HCV is low, despite having some relatively high HCV volumes in the area (20,900 to 29,200 AADT). South of IL-17, particularly between IL-17 and Sussex Ln. (north of River Rd.), has a low percentage of HCV volumes ranging from 3 to 7 percent (135 to 580 HCV per day).

See **Table 8-4** for a summary of HCV traffic on U.S. 45/52.

Table 8-4: HCV Volumes within the KATS Region – U.S. 45/52

Roadway	Class	Location	AADT	HCV	% HCV
U.S. 45/52	II	N. KATS boundary to County Hwy. 9 (Manteno)	7,300	1,075	15%
U.S. 45/52	II	County Hwy 9 (Manteno) to E. 6000N Rd.	9,150	1,150	13%
U.S. 45/52	II	E. 6000 Rd. to E. 5000N Rd. (Indian Oaks Rd.)	9,400	975	10%
U.S. 45/52	II	E. 5000N Rd. (Indian Oaks Rd.) to Burns Rd. E. (E. 4500N Rd.).	12,500	770	6%
U.S. 45/52	II	Burns Rd. E. (E. 4500N Rd.) to Larry Power R.	14,900	975	7%
U.S. 45/52	II	Larry Power Rd. to Bethel/E. Bethel Dr.	19,600	890	5%
U.S. 45/52	II	Bethel/E. Bethel Dr. to William Latham Dr./Armour Rd.	21,000	1,300	6%
U.S. 45/52	II	William Latham Dr./Armour Rd. to County Hwy. 102	16,800	380	2%
U.S. 45/52	II	County Hwy. 102 to E. North St.	29,200	660	2%
U.S. 45/52	II	E. North St. to W. Broadway	27,200	1,200	4%
U.S. 45/52	II	W. Broadway to Brookmont Blvd.	24,600	850	3%
U.S. 45/52	II	Brookmont Blvd. to N. Fifth Ave.	24,000	1,125	5%
U.S. 45/52	II	N. Fifth Ave. to IL-17	20,900	535	3%
U.S. 45/52	II	IL-17 to E/W Station St.	8,700	350	4%
U.S. 45/52	II	E/W Station St. to E/W River St.	8,850	645	7%
U.S. 45/52	II	E/W River St. W. to E/W Water St.	8,600	415	5%
U.S. 45/52	II	W. Water St. to E. Hawkins St.	4,200	135	3%
U.S. 45/52	II	E. Hawkins St. to E/W Jeffery St.	3,050	250	8%
U.S. 45/52	II	E/W Jeffery St. & S. Schuyler Ave.	5,500	230	4%
U.S. 45/52	II	S. Schuyler Ave. to Sussex Ln.	15,100	580	4%
U.S. 45/52	II	Sussex Ln. to River Rd.	13,000	1,050	8%
U.S. 45/52	II	River Rd. & I-57	12,400	1,175	9%
U.S. 45/52	II	I-57 to Peerbotle Ave.	9,850	2,225	23%
U.S. 45/52	II	Peerbotle Ave. & Airport Rd.	7,600	1,225	16%
U.S. 45/52	II	Fairgrounds Rd. & S. KATS boundary	6,100	775	13%

Source: Illinois Department of Transportation – 2017 Traffic Counts.

Illinois Route 17

Illinois Route 17 (IL-17) is the primary east-west truck route for the KATS region and provides access to and from I-57. Characteristics of Illinois Route 17 HCV traffic in the KATS region include:

- Illinois Route 17 carries higher HCV volumes from just west of I-57 to the eastern KATS boundary. HCV volumes range 1,500 to 2,200 or 10 to 18 percent of the overall AADT.
- From the west KATS boundary to Main Avenue HCV volumes are 8 to 9 percent (575 to 700 HCV per day) of the overall AADT.
- The stretch of IL-17 in the Kankakee Urbanized Area (Main Avenue to I-57), similar to U.S. 45/52, experiences higher overall AADT versus HCV volumes. HCV volumes range from approximately 5 to 10 percent of overall AADT (725 to 1,425 HCV per day).

See **Table 8-5** for a summary of HCV traffic on IL-17.

Table 8-5: HCV Volumes within the KATS Region – Illinois Route 17

Roadway	Class	Location	AADT	HCV	% HCV
IL-17	II	W. KATS Boundary & N. 5000W Rd.	7,150	575	8%
IL-17	II	N. 5000W Rd. & N. 2750W Rd.	7,650	700	9%
IL-17	II	Main Ave. & S. Curtis Ave.	8,250	800	10%
IL-17	II	S. Curtis Ave. & County Hwy. 113	14,600	725	5%
IL-17	II	County Hwy. 113 & U.S. 45/52	26,600	1,300	5%
IL-17	II	U.S. 45/52 & N/S Fifth Ave.	14,000	1,050	8%
IL-17	II	Fifth Ave. & U.S. 45/62-N. Washington Ave.	19,100	1,175	6%
IL-17	II	N./S. Washington Ave. & Schuyler Ave.	17,600	1,050	6%
IL-17	II	Schuyler Ave. & Indiana Ave.	15,800	1,050	7%
IL-17	II	Indiana Ave. & Harrison Ave.	15,300	975	6%
IL-17	II	Harrison Ave. & Greenwood Ave.	14,900	925	6%
IL-17	II	Greenwood Ave. & Hobbie Ave.	14,600	1,400	10%
IL-17	II	Hobbie Ave. & Nelson Ave.	16,300	1,425	9%
IL-17	II	Nelson Ave. & I-57	15,200	1,500	10%
IL-17	II	I-57 & Eastgate Pkwy.	14,500	2,200	15%
IL-17	II	Eastgate Pkwy. & Splear Rd.	10,800	1,350	13%
IL-17	II	Splear Rd. & County Hwy. 21	13,200	1,725	13%
IL-17	II	County Hwy. 21 & IL-1	10,200	1,425	14%
IL-17	II	IL-1 & E. KATS boundary	7,300	1,325	18%

Source: Illinois Department of Transportation – 2017 Traffic Counts.

Illinois Route 50

Illinois Route 50 is a Class II truck route extending from the northern KATS boundary southward to I-57. Characteristics of HCV traffic on Illinois Route 50 in the KATS MPA include:

- HCV volumes range from 1,225 to 550 (8 to 17 percent of overall AADT) from the northern KATS boundary to Third St. (County Highway 9) in Manteno.
- HCV volumes between Third St. in Manteno to Cedar Ln. in Bradley is fairly consistent, ranging between 925 and 975 HCV per day (7 to 13 percent of total AADT).
- From E. 4000N Rd. to I-57 has the highest number of HCV between 1,325 and 2,125 HCV (7 to 11 percent of total AADT).

See **Table 8-6** for a summary of HCV traffic on IL-50.

Table 8-6: HCV Volumes within the KATS Region – Illinois Route 50

Roadway	Class	Location	AADT	HCV	% HCV
IL-50	II	N. KATS boundary & E. 10000N Rd.	7,350	1,225	17%
IL-50	II	E. 10000N Rd & Third St. (Manteno)	6,850	550	8%
IL-50	II	Third St. (Manteno) & Section Line Rd. (Manteno)	10,700	1,375	13%
IL-50	II	County Hwy. 9 (Manteno) & N. 2000E Rd.	11,800	925	8%
IL-50	II	N. 2000E Rd. & Bourbonnais Pkwy.	8,450	825	10%
IL-50	II	Bourbonnais Pkwy & E. 5000N Rd. (County Hwy. 8)	8,900	975	11%
IL-50	II	E. 5000N Rd. (County Hwy. 8) & E. Cedar Ln.	11,550	950	8%
IL-50	II	Cedar Ln. & E. 4000N Rd.	18,000	1,325	7%
IL-50	II	E. 4000N Rd. & Access drive to Northfield Square Mall	19,400	2,125	11%
IL-50	II	Access drive to Northfield Square Mall & I-57	23,800	1,750	7%

Source: Illinois Department of Transportation – 2017 Traffic Counts.

State Highways – 102, 113, 115

State highways designated as Class II truck routes in the KATS regions include:

- State Highway 102 (W. KATS boundary to U.S. 45/52)
  - Overall AADT ranges from 5,450 to 16,900 increasing in an easterly direction.
  - Overall HCV volumes range from 340 to 675 (2 to 8 percent of AADT).
- State Highway 113 (W. KATS boundary to IL-17)
  - Overall AADT ranges from 2,850 to 13,200 increasing in an easterly direction.
  - Overall HCV volumes range from 375 to 725 (5 to 14 percent of AADT).
- State Highway 115
  - Overall AADT ranges from 1,500 to 5,800 increasing in an easterly direction, highest between 8th Street and Washington Ave. in Kankakee.
  - Overall HCV volumes range from 120 to 375 (6 to 11 percent of AADT).

See **Table 8-7** for a summary of HCV traffic on State Highways.

Table 8-7: HCV Volumes within the KATS Region – State Highways

Roadway	Class	Location	AADT	HCV	% HCV
State Hwy. 102	II	W. KATS boundary & N. 3000W Rd.	5,450	340	6%
State Hwy. 102	II	N. 3000W Rd. & Sportsman Club Rd.	6,350	525	8%
State Hwy. 102	II	Sportsman Club Rd. & Career Center Rd./Briarcliff Ln.	9,600	430	4%
State Hwy. 102	II	Career Center Rd./Briarcliff Ln. & William Latham Dr.	13,700	675	5%
State Hwy. 102	II	William Latham Sr. Dr. & U.S. 45/52	16,900	350	2%
State Hwy 113	II	W. KATS boundary & Edge Water Dr.	2,850	400	14%
State Hwy 113	II	Edge Water Dr. &Tower Rd.	4,150	375	9%
State Hwy 113	II	Tower Rd. & Butterfield Trail	6,100	440	7%
State Hwy 113	II	Butterfield Trail & IL 17	13,200	725	5%
State Hwy 115	II	W. KATS boundary & S. 2000W Rd. (at W. 4000S Rd.)	1,500	170	11%
State Hwy 115	II	W. 4000S Rd. (at S. 2000W Rd.) & W. Jeffery St.	2,800	120	4%
State Hwy 115	II	W. Jeffery St. & S. Curtis Ave.	3,400	240	7%
State Hwy 115	II	S. Curtis Ave. & Wilson Ave.	3,600	275	8%
State Hwy 115	II	Wilson Ave. & S. 8th St.	4,900	335	7%
State Hwy 115	II	S. 8th St. & S. Washington Ave.	5,800	375	6%
State Hwy 115	II	Washington Ave. & Charles St.	3,800	335	9%
State Hwy 115	II	Charles St. & McMullen Dr. & Water St.	3,900	310	8%

Source: Illinois Department of Transportation – 2017 Traffic Counts.

8.3 Freight Rail

Since the mid-19th century, Chicago has been a major hub for passenger and freight trains with a network spanning 2,796 miles. According to the Association of American Railroads, Chicago is the world's third most active rail intermodal hub with 25 percent of the nation's railroad freight traffic and 46 percent of all intermodal traffic begins, ends, or traverses the Chicago Region.

As explained in **Section 8.2.2**, the rail network in Kankakee County creates the rail-freight movement into and out of the Chicago Region. Three Class I railroads, Canadian National (CN), Norfolk Southern (NS), and Union Pacific (UP) operate through Kankakee County. One short line railroad, Kankakee Beaverville & Southern Railroad (KBSR), provides connecting services to the Class I and short line railroads within the region.

Figures 8-7 and **Figure 8-8** displays existing freight rail lines within Kankakee County and the MPA.

Figure 8-7: Heavy Commercial Vehicle Traffic in Kankakee County

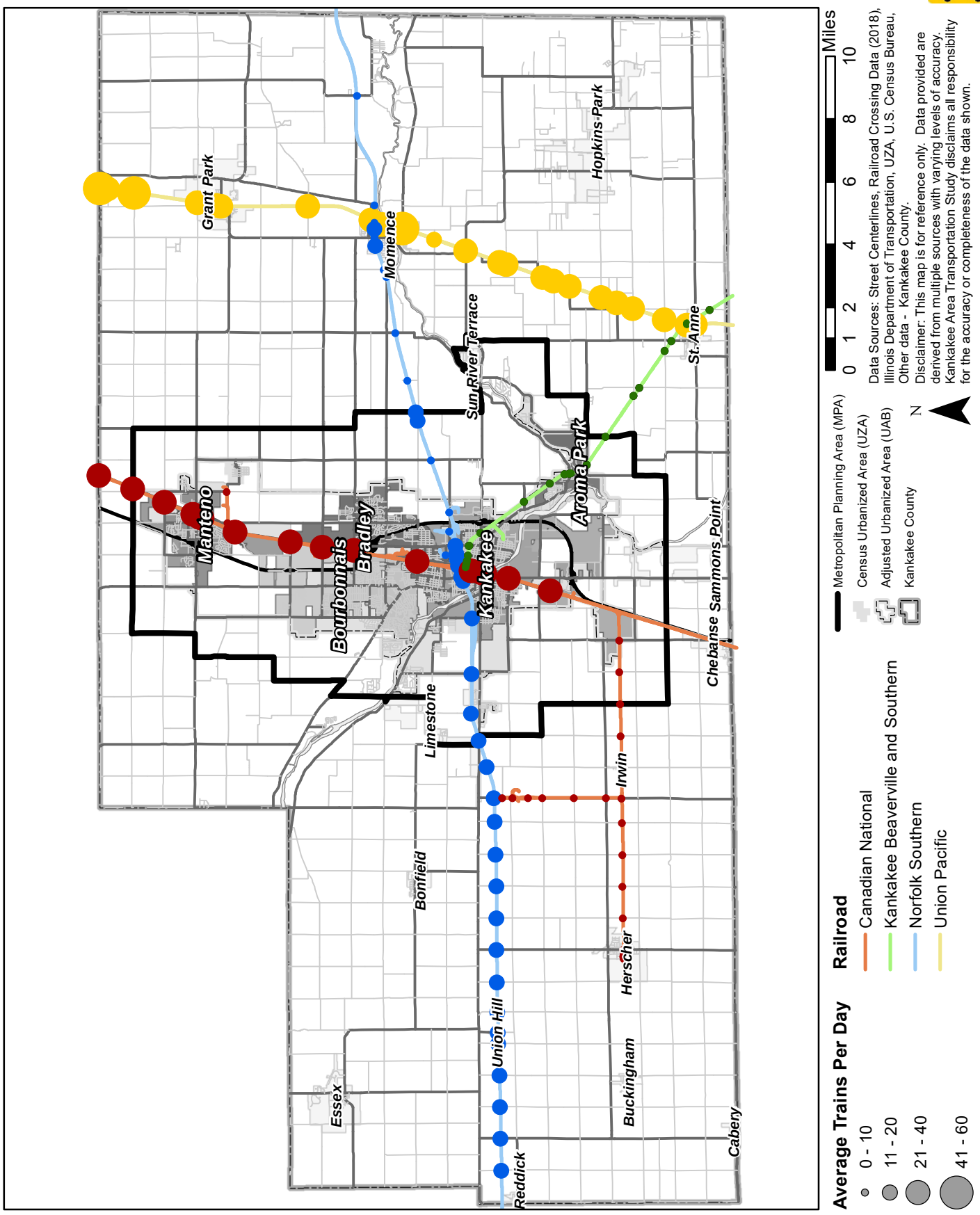
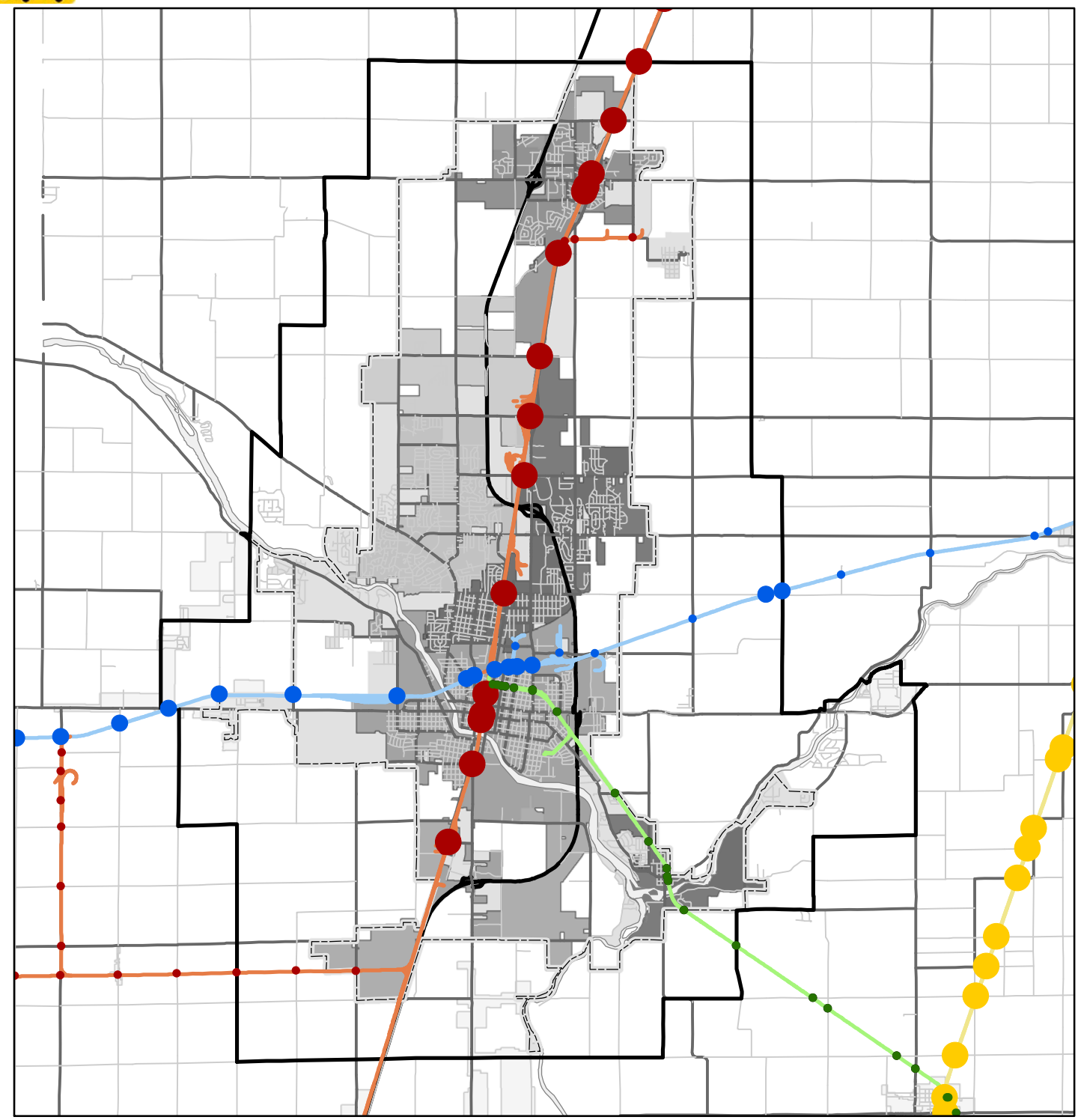


Figure 8-8: Heavy Commercial Vehicle Traffic in the KATS MPA



8.3.1 Class I Railroads

- **Canadian National (CN)** is a transcontinental railway that operates approximately 20,000 route miles of track in the United States and Canada and connects New Orleans, LA and Mobile, AL on the Gulf of Mexico, Halifax, Nova Scotia and St. John, New Brunswick on the Atlantic Coast, and Vancouver and Port Rupert, British Columbia on the Pacific Coast. CN has a major rail yard in Homewood and an intermodal facility in Harvey which originates and terminates trains that operate through Kankakee County. IDOT's 2018 rail crossing data show CN operated between 37 and 40 trains daily through Kankakee County. On the east/west corridor between Sammons Point and Irwin, rail traffic was between 0 and 2 trains daily.

- **Norfolk Southern (NS)** operates about 19,500 route miles in 22 states and the District of Columbia with connections to every major eastern port. NS operates intermodal terminals at 47th Street, 63rd Street/Englewood, Calumet, and Landers in Chicago which originate and terminate trains that operate through Kankakee County. IDOT's 2018 rail crossing data show the NS east-west corridor had approximately 10 to 20 per day.

- **Union Pacific (UP)** operates over 32,100 route miles covering 23 states across the western two-thirds of the United States. UP has intermodal facilities in Chicago (Global I), Northlake (Global II), and Dolton (Yard Center). UP trains that originate and terminate at the Chicago intermodal yard facilities in Chicago and Dolton operate through Kankakee County. IDOT's 2018 rail crossing data show UP typically operated between 35 and 43 trains daily in Kankakee County. The data indicated there were 60 trains per day where it crosses IL-114.

8.3.2 Short Line Railroad

- **Kankakee Beaverville & Southern Railroad (KBSR)** is a short line railroad formed in 1977 and headquartered in Iroquois, Illinois. KBSR originally operated a 25-mile segment of the former New York Central track between Sheldon and Kankakee, Illinois. Reaching 155 miles in 1995, KBSR now provides service between Kankakee and Danville (approximately 57 miles) and Kankakee and Lafayette, Indiana (approximately 75 miles). KBSR interchanges with CSX, CN, NS, UP, with regional carrier Toledo, Peoria & Western Railway (a Genesee & Wyoming property). Currently, KBSR owns 155 miles of railroad and has trackage rights to operate an additional 10 miles on other railroads. The Midwest market served by KBSR is predominantly agricultural with a customer base consisting of grain elevators and agri-chemical distributors. Commodities transported include grains, plastics, birdseed, and agricultural chemicals. KBSR operates daily service on an as-needed basis between Kankakee and Lafayette, IN. IDOT's 2018 rail crossing data show the KBSR operated an average of 0 to 2 trains per day.

8.4 Intermodal Facilities

8.4.1 Statewide Intermodal Facilities

The IDOT Freight Plan (2017) and Illinois State Rail Plan (2017) identify the Chicago region as the state's dominant freight hub for truck and rail freight. The strategic location of rail and intermodal assets in Illinois will remain a national importance. IDOT identified that it is essential to expand its interaction between air, rail, barge, and truck carriers as well as developing working relationships with logistics and terminal operators. As a means of improving these relationships, IDOT established the Illinois State

Freight Advisory Council (ISFAC), which meets regularly for the improvement of freight transportation in the state.

Expanded multimodal freight planning is critical at the state and local level, as well as with expanded coordination with neighboring states. Freight hubs are essential to Illinois' position in the business logistics system. Originally because of its waterways, and then because industry and modal networks developed on similar patterns, Illinois is a national freight crossroads, bearing goods traffic from all directions. In 2014, about 38 percent (10.4 million) of trucks that traveled through Illinois did not have a destination in the state. That is expected to double by 2045. About 30 percent of the rail tonnage touching Illinois also travels through. Because industries in Illinois are not shipping or receiving this through-freight, it can be thought of as a burden rather than a benefit. However, that is misleading, because Illinois' position as a transportation hub provides value-added service.

Cook County and Will County intermodal rail facilities had over 53 million tons of freight originate or terminate in 2014. These volumes represent about 51 percent of the rail intermodal activity in Illinois, which underscores the concentrated nature of the intermodal network, the role of the state as a crossroads for the country, and the crucial contribution to the global intermodal network.

A major issue with Chicago, as well as other major urban areas is roadway congestion and bottlenecks affecting truck freight traffic hauling intermodal goods. The American Transportation Research Institute (ATRI) listed 4 out of 100 national truck bottleneck locations in Chicago, Illinois.

8.4.2 Regional Intermodal Services

Regional studies (by IDOT, MPOs, etc.) address congestion and bottlenecks related to freight movement and embraces the preservation of rail assets for a future when the mode is more time-competitive with a congested roadway system. The system of the future would ideally contain dedicated truck lanes in selected interstate highway corridors, intersection grade separations, and an increased investment in intelligent transportation systems (ITS) and transportation management centers (TMCs).

Another possibility of improving the efficiency of the freight movement network, and hence bolstering the economic competitiveness of the region, are intermodal ports and transfer stations. The impact of these facilities upon load consolidation and separation of local and long-haul loads should be demonstrable in the form of decreased roadway congestion, and sustained use of a rail asset that diverts loads from oversubscribed roadways. Located just south of the Chicago metropolitan area, Will County has considerable intermodal (rail to truck) resources both in existence and in the planning stages. Intermodal facilities have thrived as a result of a well-developed transportation system of roads, rails, rivers, and the proximity to the Chicago metropolitan area. Additionally, the intermodal facilities are coupled with expansive industrial/logistic parks.

- BNSF Logistics Park (CenterPoint Intermodal Center), Elwood, IL: CenterPoint Intermodal is the nation's largest inland port, handling more than one million container lifts per year at the 770-acre BNSF Logistics Park Intermodal Facility.

- Union Pacific Joliet Intermodal Terminal, Joliet, IL: In direct proximity to the nation's largest rail inland port the 550-acre intermodal facility is designed to increase operations and expand the capability to keep pace with continued growth in Joliet, IL. This location has an additional 1,208

acres for transportation expansion for industries looking to locate warehouse and distribution facilities.

- The rail-served Ridge Port Logistics Center is a 14 million square foot facility located on more than 1,500 acres within Will County. This facility is strategically located three miles from the BNSF Logistics Park and Union Pacific-Joliet Intermodal Terminal. This facility, located 40 miles south of Chicago, IL has immediate access to I-55 and is less than 10 miles from the I-55/I-80 interchange.

The northeastern Illinois region (including Chicago) is considering new intermodal facilities including a new airport (South Suburban Airport). The potential freight demands as a result of a new airport would increase freight in the region and may need additional roadway improvements.

Freight train on the Canadian National Railroad

Chapter 9: Passenger Rail

9.1 Regional Passenger Rail

The train station for Amtrak in Kankakee is located at 199 South East Avenue. The original station was constructed as the Illinois Central Railroad Depot in 1853, that building was replaced with the current building in 1898. The building was added to the National Register of Historic Places in 2000. Restored in 1988, the site now continues to function as a train station and the Kankakee Railroad Museum. It is one of the 30 stations operated by Amtrak in Illinois. The station features an accessible passenger waiting room, accessible restrooms, same-day parking, overnight parking, payphones, accessible platforms, and a wheelchair lift. The waiting room is open 24 hours a day, 7 days a week.

Amtrak operates intercity and long-distance passenger rail service for Kankakee. Three trains stop at the station daily, they are; City of New Orleans Service, Saluki Service, and Illini Service. The three routes each give access to and from Kankakee, Chicago, Homewood, Gilman, Rantoul, Champaign-Urbana, Mattoon, Effingham, Centralia, Du Quoin, and Carbondale. Only the City of New Orleans Service continues on to make stops in Kentucky, Tennessee, Mississippi, and eventually terminating in New Orleans, Louisiana. It is a daily service provided by Amtrak, spanning 900 miles and taking 19 hours in its entirety. The shorter Saluki and Illini Services extend between Chicago and Carbondale.

City of New Orleans Service

Chicago to New Orleans; 8:05 PM departure from Chicago-Union Station, 9:23 PM arrival / departure at Kankakee, and 3:47 PM arrival at New Orleans (next day).

New Orleans to Chicago; 1:45 PM departure from New Orleans, 7:18 AM arrival / departure from Kankakee, 9:20 AM arrival at Chicago-Union Station (next day).

Saluki Service

Chicago to Carbondale; 8:15 AM departure from Chicago-Union Station, arrival / departure at Kankakee at 9:22 AM, and 1:45 PM arrival at Carbondale.

Carbondale to Chicago; 7:30 AM departure from Carbondale, 11:15 AM arrival / departure at Kankakee, and 1:00 PM arrival at Chicago-Union Station.

Illini Service

Chicago to Carbondale; 4:05 PM departure from Chicago-Union Station, arrival / departure at Kankakee at 5:12 PM, and arrival at Carbondale at 9:35 PM.

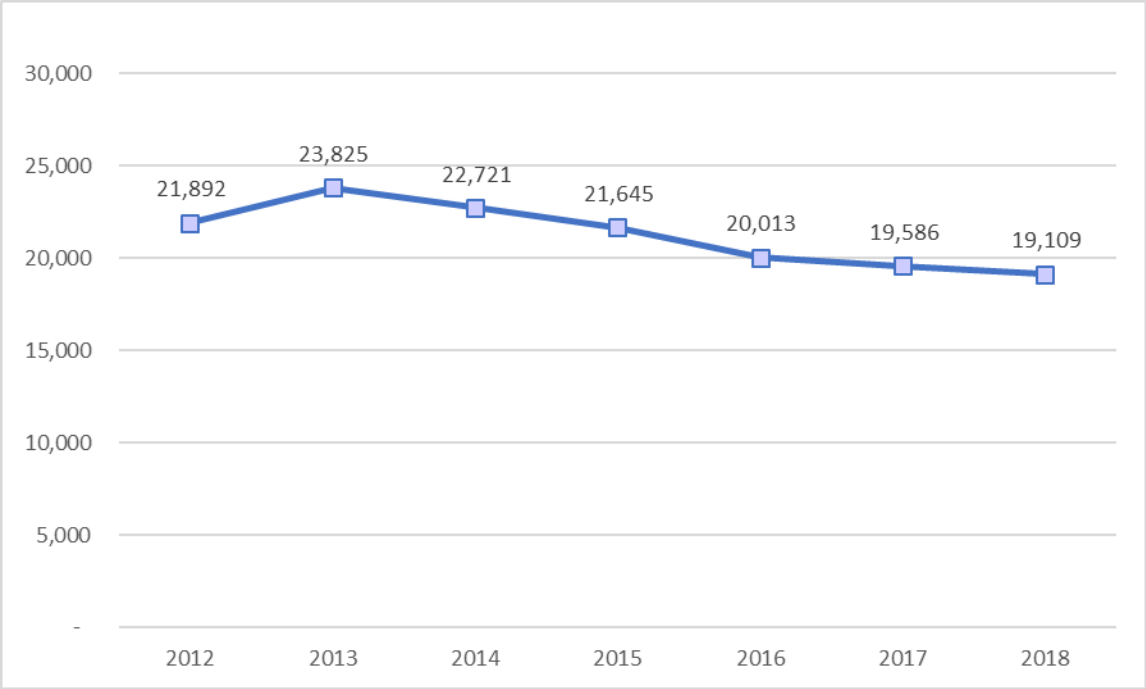
Carbondale to Chicago; 4:15 PM departure from Carbondale, 8:00 PM arrival / departure from Kankakee, and 9:45 PM arrival at Chicago-Union.

From FY 2013 to FY 2018, ridership at the Kankakee Station decreased on average 4.3% annually.

Currently, there is no other passenger rail service for Kankakee County.

Figure 9-1 shows Amtrak ridership for 2012 through 2018. **Table 9-1** shows ridership and average trip information about Amtrak ridership associated with the Kankakee Amtrak Station. **Table 9-2** shows the top ten city-pairs by ridership associated with the Kankakee Amtrak station.

Figure 9-1: Annual Amtrak Passengers at Kankakee Station



Source: Rail Passengers Association (2019).

Table 9-1: Amtrak Passenger Profile (2018)

	Coach/Business	First/Sleeper	Total
Passengers	18,650	459	19,109
Average Trip	136 Miles	667 Miles	149 Miles
Average Fare	$22.00	$177.00	$25.00
Average Yield, per Mile	$0.16	$0.26	$0.17

Source: Rail Passengers Association (2019).

Table 9-2: Amtrak Top City Pairs by Ridership (2018)

Rank	City
1	Chicago, IL
2	Carbondale, IL
3	Champaign, IL
4	Homewood, IL
5	Matoon, IL
6	Memphis, TN
7	Centralia, IL
8	Dy Quoin, IL
9	New Orleans, LA
10	Jackson, MS

Source: Rail Passengers Association (2019).

9.2 Future Passenger Rail

Currently, there is the Metra Electric District which has service between University Park and downtown Chicago. The MPO has recognized a need for an extension further south to Kankakee since 2003, studies have proposed different possibilities to make this a reality, but no action has ever been undertaken. In 2004, the Kankakee County Board identified the extension of commuter rail service into the county as a priority. A task force comprised of local units of government called the Kankakee Area Commuter Transit (KACOT) was formed. KACOT was assisted by IDOT and included:

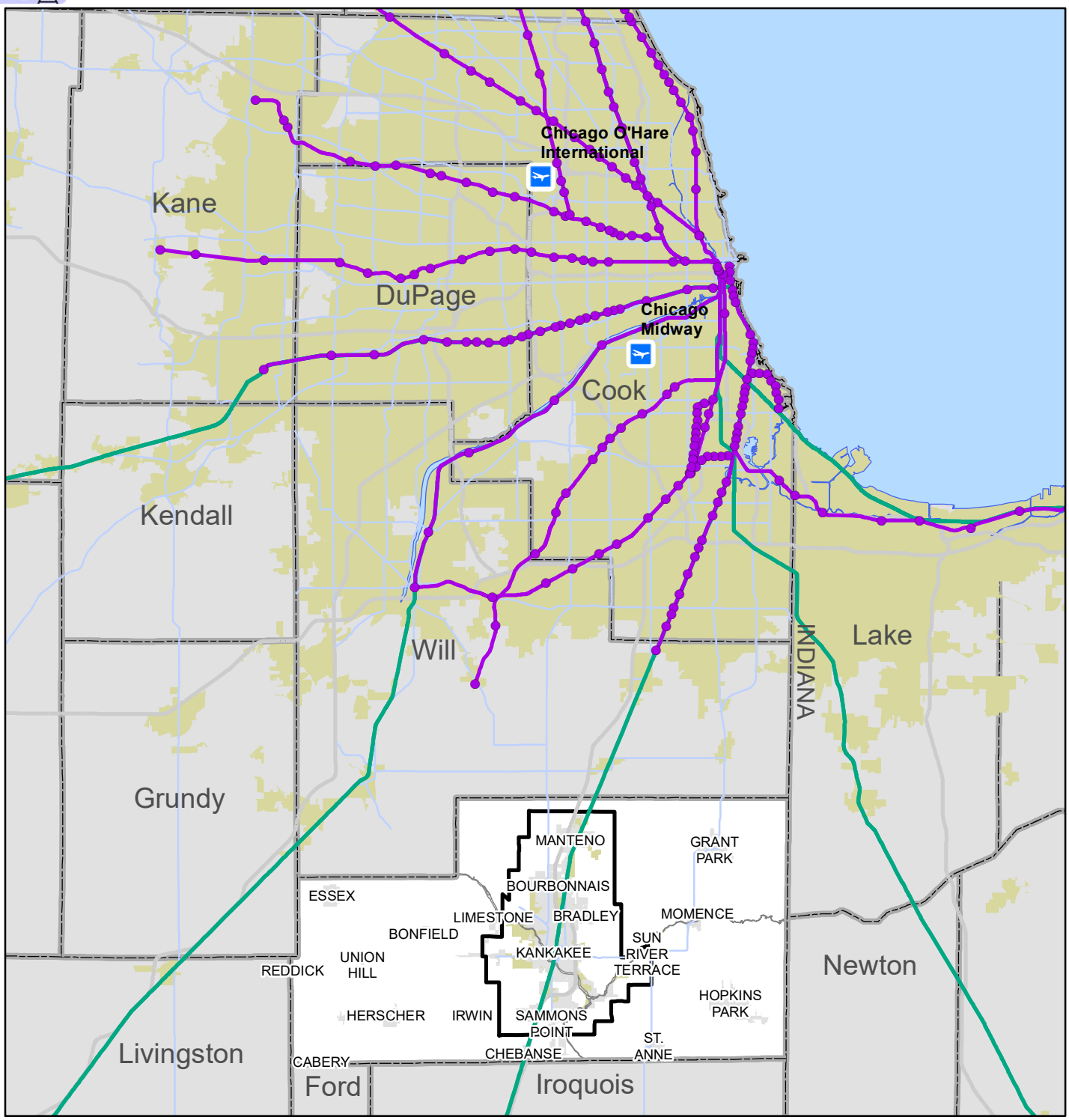
- Aroma Park
- Bourbonnais
- Bradley
- Kankakee
- Kankakee County
- Manteno
- Monee
- Peotone
- Will County

In 2005, the Kankakee County Commuter Rail Feasibility Study Final Report was published. The conclusion of the study was that commuter rail service into Kankakee County was feasible. One outcome of KACOT was the establishment of the River Valley Metro Mass Transit District Commuter Route providing service to the University Park Metra station. Through this service, Kankakee County commuters have a link to downtown Chicago. Recently, River Valley Metro has created an additional commuter service to Midway International Airport. This service gives commuters access to the Chicago Transit Authority's (CTA) Orange Line. The extension of Metra Electric District into Peotone, which was in the Metra long-range plan in the past is not a part of their current strategic plan.

The Chicago-St. Louis high speed rail corridor is an existing Amtrak corridor ("Lincoln Service" and "Texas Eagle"). "Lincoln Service" operates four round trips per day, and the "Texas Eagle" operates one round trip per day. At a standard maximum speed of 79 miles per hour, the travel time between Chicago and St. Louis is approximately 5-1/2 hours. This rail corridor is currently under development to enable six of the eight Amtrak "Lincoln Service" trains to increase speeds from 79 to 120 mph. Current upgrades include concrete ties, premium rail, signal equipment, switches and crossing safety improvements with four quadrant gates, pedestrian gates, and fencing. The entire route between Chicago and St. Louis was expected to be completed between 2016 and 2017. Upon completion, expected travel time from Chicago to St. Louis will decrease from 5½ hours to 4½ hours.

Figure 9-2 shows Metra rail service in a regional context.

Figure 9-2: Regional Map - Metra Routes



Data Sources: Street Centerlines (2018) , Illinois Department of Transportation, Metra Routes and Stops, City of Chicago Data Portal, UZA, U.S. Census Bureau, Other data - Kankakee County. U.S. Department of Transportation

Disclaimer: This map is for reference only. Data provided are derived from multiple sources with varying levels of accuracy. Kankakee Area Transportation Study disclaims all responsibility for the accuracy or completeness of the data shown.

Chapter 10: Aviation

10.1. Airport Facilities and Operations

10.1.1 Kankakee Valley Airport Authority (KVAA)

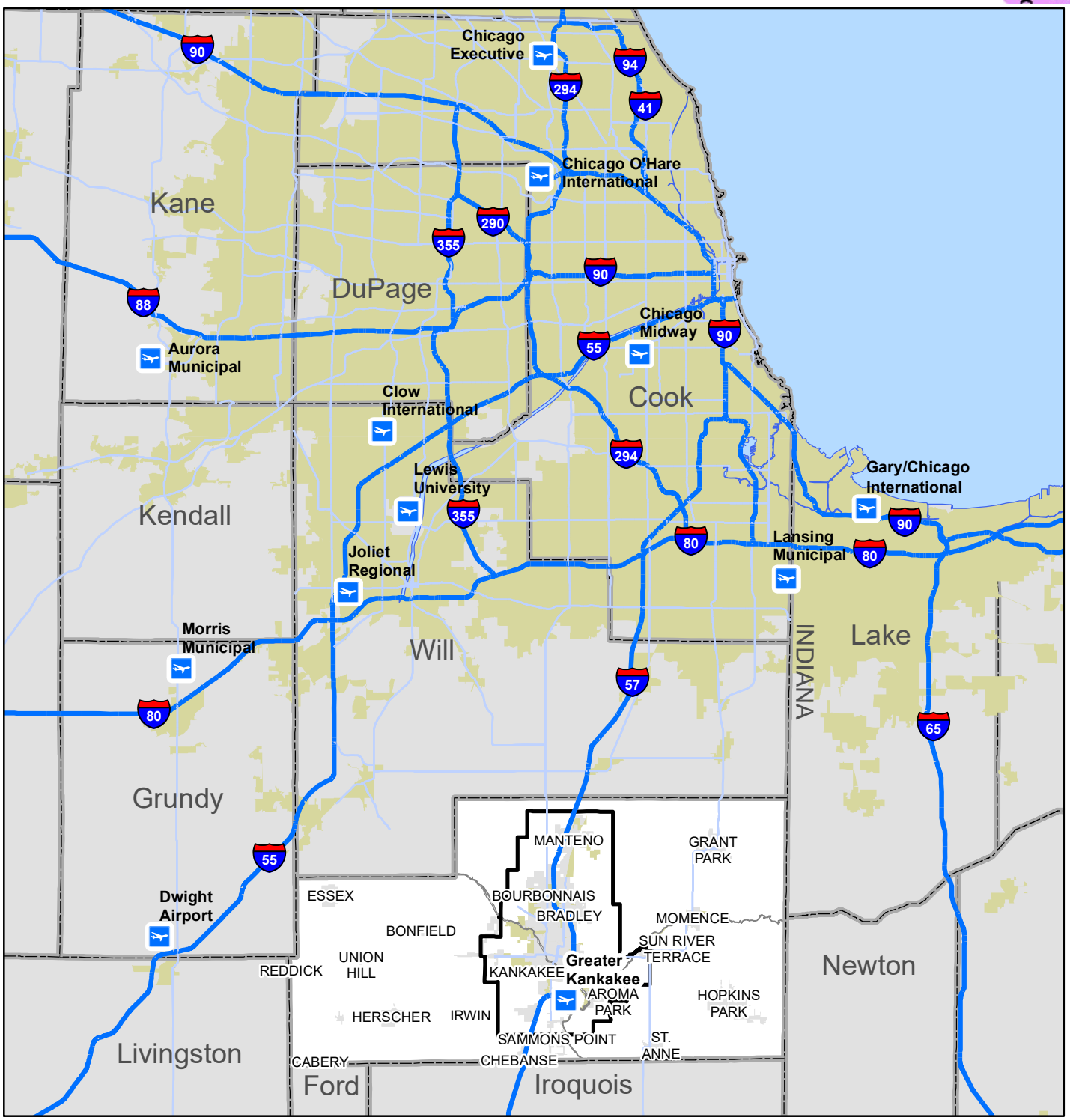
The Greater Kankakee Airport is located in the southern portion of the City of Kankakee, near I-57, and is the largest airport serving the region south of the Chicago urban area. The airport is a major economic asset and has two runways. The longer runway is 6,000 feet and is equipped with an instrumental landing system (ILS). There are over 120 hangers on-site. Access to the airport is off Airport Road (E. 4000S Road/County Hwy 35) via U.S. 45/52.

The Greater Kankakee Airport is not part of the Chicago airspace, which provides an advantage in air traffic congestion. Annual operations are approximately 50,000 arrivals and departures, or an average of 136 flights per day. The airport generates approximately $10 million. The airport serves privately owned aircraft, predominantly from major companies in the area and is an important feature for attracting prospective companies looking to locate in or near Kankakee County.[1]

There are currently no commercial flights available out of the Greater Kankakee Airport. Most of the current airway passengers from the Kankakee area travel to the two major Chicago airports, while some travel to the Bloomington-Normal Airport. **Figure 10-1** shows an overview of regional airports.

[1] Economic Alliance of Kankakee County. Comprehensive Economic Development Strategy:2014-2019, Kankakee County, Illinois. April 2014.

Figure 10-1: Regional Map - Airports



Data Sources: Street Centerlines (2018) , Illinois Department of Transportation, UZA, U.S. Census Bureau, Airport Locations, U.S. Geological Survey, Other data - Kankakee County.
Disclaimer: This map is for reference only. Data provided are derived from multiple sources with varying levels of accuracy. Kankakee Area Transportation Study disclaims all responsibility for the accuracy or completeness of the data shown.

10.1.2 Army Aviation Support Facility (AASF) & Army Aviation Readiness Center

Groundbreaking and construction began in fall 2014, for a 185,200 square-foot AASF and readiness center that includes a helicopter maintenance hangar, a storage hanger, classrooms, fuel distribution systems, and fire suppression system on 46 acres of the Greater Kankakee Airport property. The AASF and Readiness Center are located on the west side of the airport adjacent to S. 500E Road, approximately one mile south of the I-57 and U.S. 45/52 interchange.

The facility was officially opened on November 4, 2017 and has ten Sikorsky UH-60 Black Hawk helicopters on-site. The facility also provides employment to 40 full-time employees from the local community and 200 soldiers. Greater Kankakee Airport released an *"Environmental Assessment: Construction and Operation of the AASF and Readiness Center"* (January 2013), which anticipated an increase of 80 personally owned vehicles (POVs) per weekday, as a result of routine activities. Weekend traffic was anticipated to be as high as 200 POVs per day on two or three weekends per month.

10.2 Future Aviation Needs

10.2.1 Proposed South Suburban Airport in Will County

As the project sponsor, IDOT is moving forward with the planning, environmental review, and the land acquisition process associated with the proposed South Suburban Airport (SSA) project near Peotone, IL. IDOT is focused on the initial establishment of a commercial airport with the capability to expand to accommodate future demand. IDOT is acquiring land to preserve it with the option of developing the airport and has accrued over 3,000 acres.[2] IDOT is currently evaluating various project delivery techniques, including a public-private partnership.

The planned SSA would mark a huge change in the pattern of air travel for residents of Kankakee County. The proposed main terminal is within 25 miles of a large percentage of the population of Kankakee County and would greatly enhance access to scheduled air service for both business and leisure travel purposes.

The State of Illinois is continuing to purchase land from owners within the "initial footprint" of the SSA, which currently consists of more than 2,000 acres and is a direct result of Federal Aviation Administration (FAA) site approval granted in 2002.

If the project makes it through the planning process and is approved, it will be imperative that a multi-modal connectivity plan is produced to accommodate the anticipated increase in trips to and from the airport. Public Transit connections are perhaps the most important consideration in this regard. However, roadway connections to both the east and west entrances of the future airport are also a critical area of consideration. These connections will be key, not only for access for airline passengers, but also for the large number of Kankakee County residents who could potentially become employees at the airport.

10.2.2 Greater Kankakee Airport

The Greater Kankakee Airport serves general aviation from its location in the southeast portion of the Kankakee Urbanized Area. Due to aggressive marketing efforts and the closure of a number of small airports in the region, general aviation traffic has recently increased at the Greater Kankakee Airport.

[2] IDOT. PowerPoint Presentation "South Suburban Airport Project Status Update Meeting for Community Leaders," January 13, 2014.

Currently, Kankakee County has no regularly scheduled commercial airline service. However, there is potential for commercial business and airlines. Most commercial airline travelers from Kankakee County travel to O'Hare and Midway Airports in Chicago.

The Greater Kankakee Airport is exploring the possibility of improvements to Runway 4/22. The improvements would be necessary to accommodate larger aircraft such as the Boeing 737 and McDonnell Douglass MD-80. In order to accommodate this size aircraft, the runway needs to be strengthened to withstand the additional weight. The taxiways will also need to be adjusted and include fillets so those airplanes will be able to make the turns between the terminal and runway. After the improvements are completed, those larger aircraft will be able to readily use the airport.

Other considerations such as noise levels of military aircraft are not anticipated to have a significant to those nearby and are generally considered compatible with surrounding land uses as documented in an "Operational Noise Consultation and Assessment by the Army National Guard (ARNG) (January 2012)."

11.1 Transportation Resiliency Overview

This chapter discusses efforts to improve the resilience of the transportation network to extreme weather events and climate change. It includes an overview of impacts of current weather on transportation, incorporating climate risks in design and asset management, the natural hazard mitigation plan and efforts, and goals and implementation plans for the MPO.

Climate change creates more weather events that increase travel times using more fuel which creates more carbon impact which creates more weather events.

A resilient transportation network must address the effects of extreme weather events and climate change to provide access and mobility now and in the future. FHWA Order 5520 defines resilience or resiliency as, "…the ability to anticipate, prepare for and adapt to changing conditions and withstand, respond to and recover rapidly from disruptions." Weather conditions create a change in driver behavior that affects safety, mobility, and productivity. Inclement weather reduces the average speed between 3% and 40%. This disruption affects all users and climate change has already caused more frequency of storm events.

Weather does not merely affect the users of the transportation infrastructure but the infrastructure itself. Most of the county's roads were designed using standards that do not appropriately account for heavier rain events, an overall increase of annual freeze-thaw cycles, and weather that is generally hotter and wetter due to climate change. The adverse impact is creating a greater gap in the ability to address needs as funding levels are not increasing appropriately. As transportation infrastructure becomes more modernized, it is necessary to address anticipated climate change, which the KATS should implement.

11.2 Impacts of Current Weather on Transportation

Kankakee County is located in climate zone 5A. The average rainfall is slightly above the national average at 39.13 inches per annum. Kankakee receives on average 24 inches of snow annually (average U.S. snowfall 28 inches).

Impacts on Safety

According to FHWA, there is an average of 5,891,000 vehicle crashes each year and approximately 21% or 1,200,000 are directly related to weather. These weather conditions can generally be placed into one of two trenches: adverse weather (rain, sleet, snow, fog, wind, etc.) and pavement condition (wet, snow covered, icy, flooded, degraded, etc.). Slightly more than two-thirds of all weather-related crashes are attributed, at least in part, to wet pavement.

Table 11-1: National Weather-Related Crash Statistics (Annual Averages)

	Weather-Related Crash Statistics	
	10-year Average (2007-2016)	**10-year Percentages**
Weather-Related* Crashes, Injuries, and Fatalities	1,235,145 crashes	21% of vehicle crashes
	418,005 persons injured	19% of crash injuries
	5,376 persons killed	16% of crash fatalities

*** "Weather-Related" crashes are those that occur in the presence of adverse weather and/or slick pavement conditions.**

(Source: Ten-year averages from 2007 to 2016 analyzed by Booz Allen Hamilton, based on NHTSA data).

11.3 Weather Related Impacts on Mobility

Travel mobility is reduced during inclement weather through lane reduction and travel time increases. Standing water from heavy rain events, riverine flooding, and urban storm infrastructure inundation reduces lanes and closes roads affecting access and in rare cases can create events of isolation in certain geographies. In early 2019, a California town was completely isolated due to the flooding of the Russian River. Weather conditions also create obstructions in the form of snow accumulation and wind-blown debris (downed powerlines, tree falls, etc.). Travel times are increased in both arterial roads and freeways due to overall reductions in speed for safety and in disruptions to signal timing due to changes in travel times along routes with signal synchronization.

Table 11-2: National Freeway Traffic Flow Reductions Due to Weather

Weather Conditions	Freeway Traffic Flow Reductions			
	Average Speed	Free-Flow Speed	Volume	Capacity
Light Rain/Snow	3% - 13%	2% - 13%	5% - 10%	4% - 11%
Heavy Rain	3% - 16%	6% - 17%	14%	10% - 30%
Heavy Snow	5% - 40%	5% - 64%	30% - 44%	12% - 27%
Low Visibility	10% - 12%			12%

(Sources: " *Highway Capacity Manual 2000" Chapter 22,* "Temporary Losses of Highway Capacity and Impacts on Performance", " An Investigation into the Impact of Rainfall on Freeway Traffic Flow" and "Analysis of Weather Impacts on Traffic Flow in Metropolitan Washington DC" (PDF 1.4MB)).

11.4 Impacts on Productivity

Extreme weather events increase operational costs of both road authorities and companies. Winter road maintenance accounts for roughly 20 percent of state DOT maintenance budgets. Each year, state and local agencies spend more than 2.3 billion dollars on snow and ice control operations *(Sources: "Highway Statistics Publications, Highway Finance Tables SF-4C and LGF-2," 1997 to 2005,* https://www.fhwa.dot.gov/policy/ohpi/hss/hsspubs.cfm*).* Trucking companies or CVOs lose an estimated 32.6 billion vehicle hours due to weather-related congestion in 281 of the nation's metropolitan areas. Nearly 12 percent of the total estimated truck delay is due to weather in the 20 cities with the greatest volume of truck traffic. The estimated cost of weather-related delay to trucking companies ranges from 2.2 billion dollars to 3.5 billion dollars annually *(Source: " Analysis of Weather Incident Effects on Commercial Vehicle Mobility in Large U.S. Cities," Mitretek Systems).*

11.5 Incorporating Climate Risks in Design and Asset Management

KATS MPO does and will continue to consider climate impacts when planning new assets or rehabilitating existing assets. In accordance with guidance from FHWA project risk-based asset management involves identification of a sequence of actions to manage and preserve assets over the long term, and provides a platform for inventorying assets, evaluating risks to those assets, and prioritizing capital improvements to make them more resilient to future environmental conditions.

Projects are engineered to be more resilient to climate impacts, including consideration of multiple alternatives and cost benefit analysis. Long term flexibilities are designed into projects when possible to reduce future costs created by climate change.

Operations and maintenance best practices are being implemented to reduce climate impacts on transportation. Individual municipalities manage storm infrastructure to reduce the risk of surface flooding due to blockage and inundation.

11.6 Other Planning Efforts

During the creation of the 2045 LRTP, KATS staff met with Kankakee County Planning Department staff to discuss overlap with the Natural Hazards Mitigation Plan (NHMP). Feedback from the planning staff was included in the development of the LRTP. Below is an overview of the NHMP.

Developed under the guidance of a Mitigation Advisory Task Force by the Kankakee County Regional Planning Department in 2019, the NHMP fulfills federal planning requirements for mitigation funding programs and provides Kankakee County and its associated municipalities with an organized approach for reducing the impacts of natural hazards on people and property.

The plan specifically addresses eight major natural hazards, listed below by propensity to cause property damage:

- Overbank flooding
- Local drainage issues
- Tornados
- Earthquakes
- Winter storms
- Thunderstorms
- Drought / heat
- Wildfire

The vulnerability assessment component of the plan discovered that while tornados are the most destructive, winter storms are consistently more disruptive on a regular basis and costly to local governments than the other hazards. The plan also identified the communities of Kankakee, Bradley, and Bourbonnais as being the most affected by overbank flooding, with Aroma Park, Manteno, Momence, and Sun River Terrace being affected to a lesser extent. Repetitive flood losses also occur, but almost exclusively along the Kankakee River.

In terms of how the goals and strategies of this plan affect the transportation system of Kankakee County, emergency response contingency plans play the biggest role. To this end, Kankakee County should factor in considerations such as bridges and roadways within floodplains, as well as evacuation routes in the event of a major disaster.

11.7 Goals and Implementation

Transportation operation and emergency response activities are driven by a continuum of the events for which they need to plan, prepare, respond, and recover from. As planning and preparation are improved, it is the expectation that response and recovery get easier. There will forever be unforeseen obstacles when including a climate change model into planning but below are some goals for the 2045 LRTP.

- Improve the resiliency and reliability of the transportation system.
    - Determine the vulnerability of transportation infrastructure and design to accommodate projected weather during the project's usable life.
    - Update design manuals to ensure appropriate climate data is being considered.
    - Continue efforts to integrate stormwater management with long range planning activities.

- Develop a set of best practices to reduce the vulnerability of the existing transportation infrastructure to natural disasters.
  - Continue to coordinate snow and ice removal efforts.
  - Expand ITS devices to support weather responsive traffic management practices.
- Reduce dependency on carbon creating transportation options.
  - Develop additional non-motorized transportation options.
  - Expand services with River Valley Metro and Kankakee County Rural Transportation.
  - Encourage the inclusion of electric vehicle charging stations in new development.
  - Encourage land use planning to create a more compact development footprint.

11.8 Transportation Related Responses to COVID-19

In most emergencies, the transportation network is affected. The goal of the MPO is to assist in the mitigation of the effects of any crisis. In response to the COVID-19 outbreak, a state of emergency was declared by the state government of Illinois, other state governments, and the federal government. To prevent the spread of COVID-19 all non-essential work was required to stop. The situation was unprecedented, and similar responses have not been used before. The situation was constantly changing, leading to updates in the guidance provided.

With the shutdown of non-essential business and the requirement that trips were made only for necessities, it was expected that traffic would have been drastically affected. Even the roads that were usually the most gridlocked experienced low traffic volumes due to shelter-in-place orders. To assist with the response and relief to COVID-19, with some restrictions, overweight and over-dimension loads not exceeding 14 feet in width and 100 feet in length were authorized to be transported on roadways in Illinois. Trucks which were 10% percent over the legal limit or weighing 88,000 pounds were allowed if they were assisting with the emergency response. By continuing to operate, trucking helped to meet the rising demand for hospital equipment and medical supplies specific to emergencies, like respiratory masks, ventilators, and disinfectants. Despite concerns for the health of the workforce responsible for operating the trucks, there were no major outbreaks of the virus throughout the industry.

A national emergency was also declared by the USDOT's Federal Motor Carrier Safety Administration (FMCSA). The declaration intended to provide nationwide relief by allowing commercial vehicles to increase their operating hours and provide emergency supplies to areas quicker. Delivery items included in the relief effort were medical supplies, testing equipment, facemasks, gloves, sanitation products, food, equipment for temporary housing and quarantine facilities, and other emergency services. Once the driver completed the delivery, they were then required to complete their necessary off-duty hours of rest. Overall, the national truck network likely functioned at an increased efficiency due to the reduced restrictions imposed on them as well as the stay-at-home orders leading to fewer road users.

Road construction projects were on a very regimented schedule and planned for many years. Due to their importance in keeping the supply chain functioning and to national security and resiliency, they were considered essential and most were continued as scheduled.

As conditions changed, updates were made to what was recommended to stop the spread of the virus. Due to the revisions to guidance intended on mitigating the spread of the COVID-19 outbreak, it is difficult to identify a solid mitigation plan. Much has been learned about possible responses to emergencies during the COVID-19 pandemic and in the event of a future catastrophic event that causes the closing of non-essential community functions, all federal, state, and local governments, including the KATS MPO are hopefully better prepared to respond after dealing with the COVID-19 outbreak.


ROAD
CLOSED

12.1 Overview

This chapter summarizes the project selection process to identify the fiscally constrained roadway improvements.

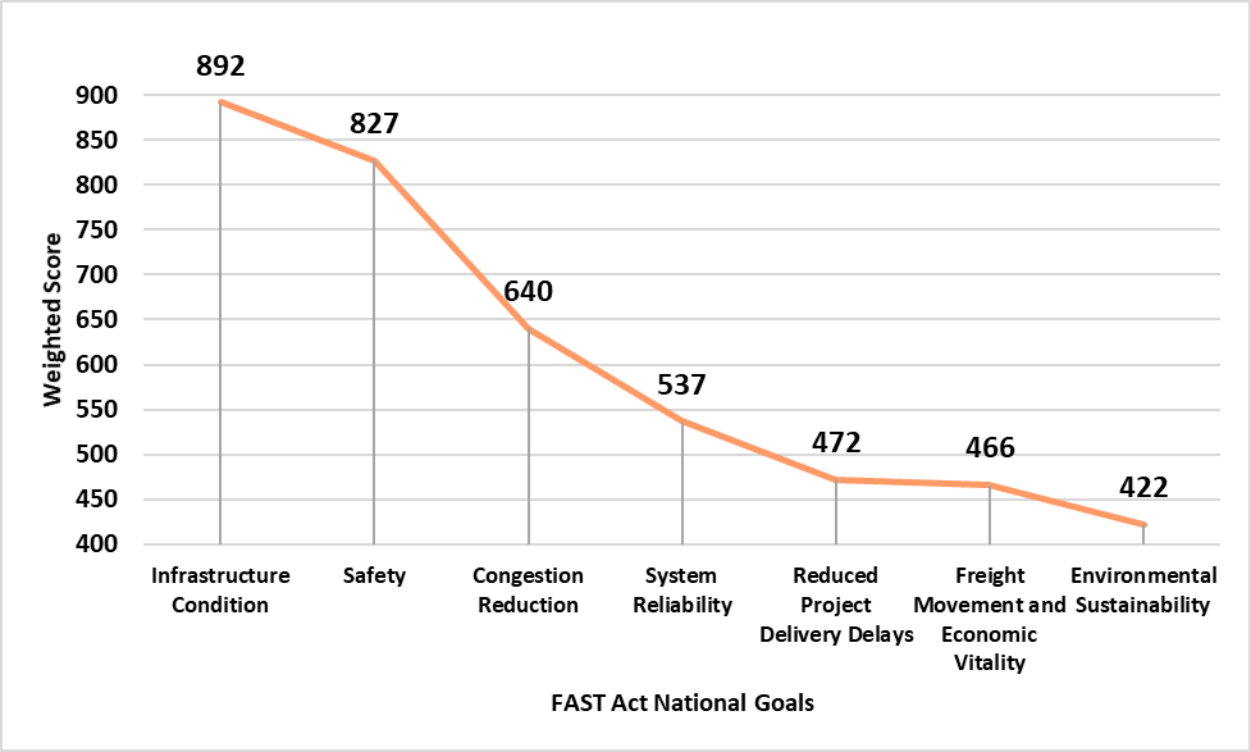
12.2 Kankakee County Regional Planning Commission Planning Session

On August 15, 2019, KATS staff held a planning session at the Kankakee County Regional Planning Commission, in which the public was invited to attend and participate. Those present were placed into three groups and reviewed projects from the previous LRTP, provided comments on those projects, and proposed new projects. The last exercise was to indicate which project each participant thought would be the most important project by the 2045 planning horizon. The input taken from this exercise was taken into consideration for the final list of projects included in this plan.

12.3 Survey Results

Two public opinion surveys were conducted during the development of this plan. The first survey was conducted from February 28, 2019, to May 4, 2019, and was focused on prioritizing the seven national goals of the FAST Act. The survey consisted of a single question and participants were asked to rank the seven national goals from highest to lowest. There were 152 completed responses and the results from this survey were used in creating the evaluation and project prioritization process. The top national goal categories were infrastructure condition, safety, and congestion reduction. **Figure 12-1** shows the results of the first survey.

Figure 12-1: Survey #1 – Prioritization of the Seven National Goals of the FAST Act



A second survey was conducted between September 8, 2019, and December 8, 2019, and there were 163 participants, of which 125 completed the survey. The second survey was thirty-one questions and asked participants about travel preferences and project-type preferences. This information helped convey project recommendations. **Figures 12-2** through **12-12** display results and summarized responses from the survey.

Figure 12-2: Survey #2 – What is Your Most Common Mode of Transportation?

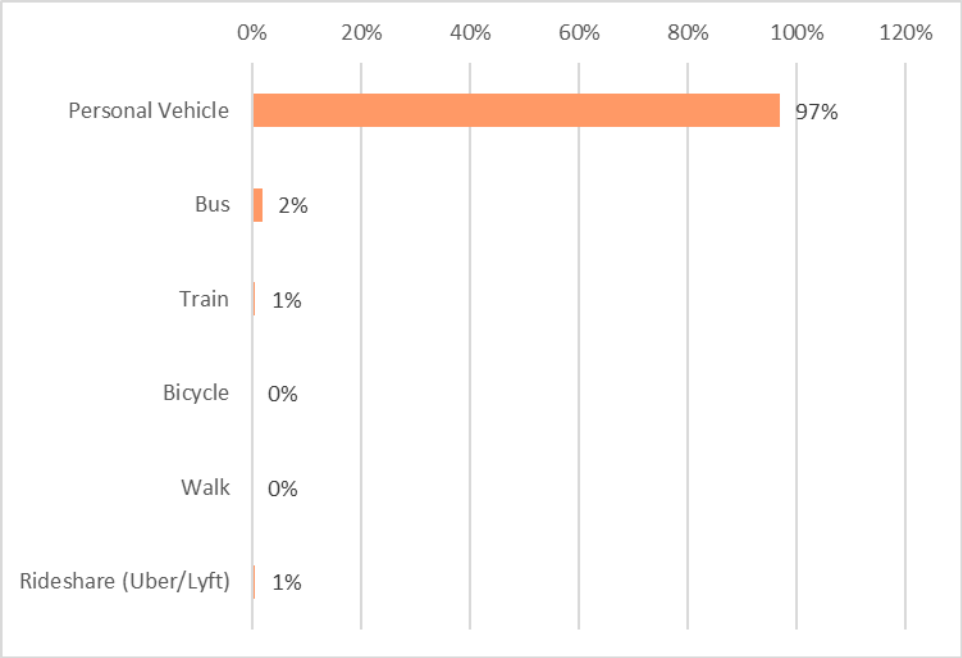


Figure 12-3: Survey #2 – if a personal vehicle wasn't available, what type of transportation would you use most often?

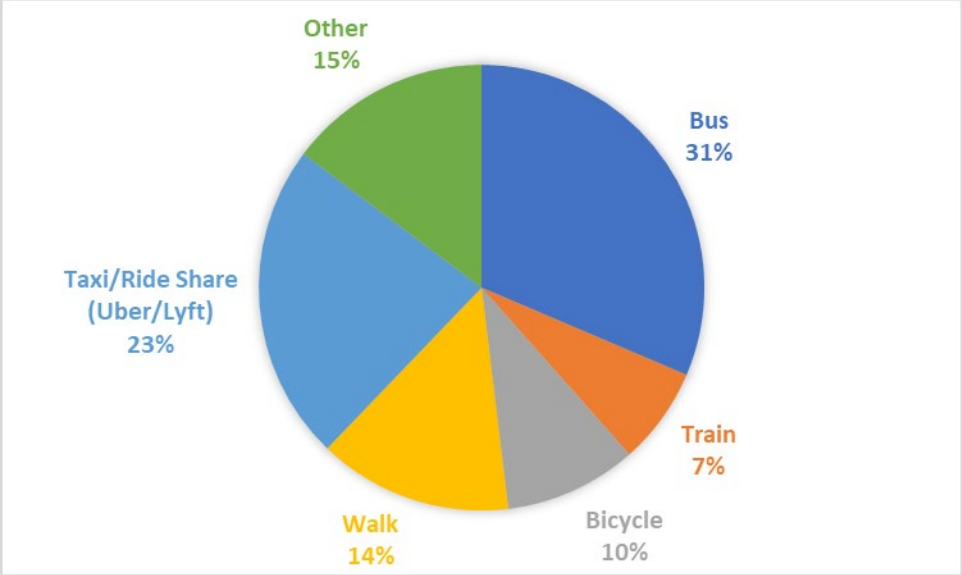


Figure 12-4: Survey #2 – How important do you think it is for roads to be able to accommodate truck traffic?

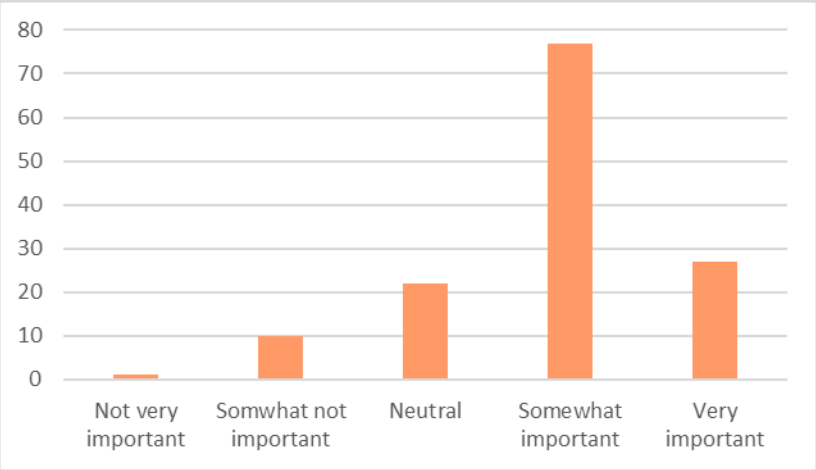


Figure 12-5: Survey #2 – Do you think it is better to improve existing roads or construct new roads?

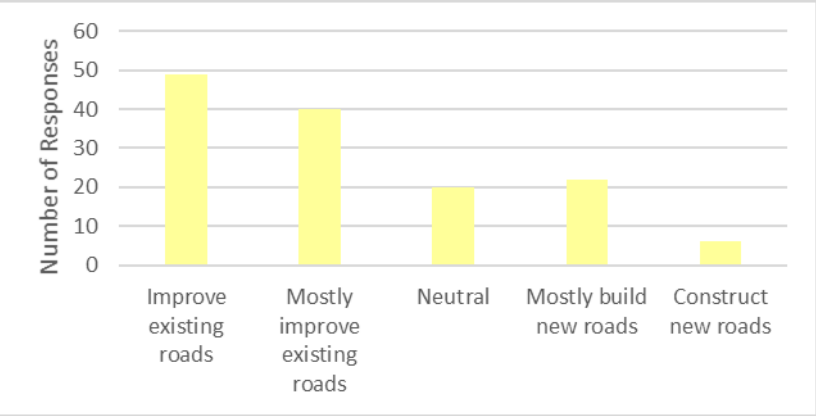


Figure 12-6: Survey #2 – How important do you think it is for bicycle and pedestrian facilities to be included, or at least considered, as part of road improvements?

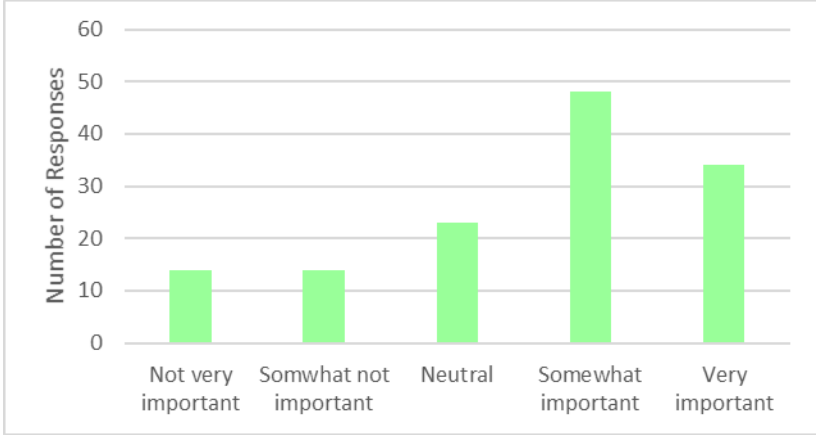


Figure 12-7: Survey #2 – Would you ride a bicycle more often if bicycle paths/lanes, connectivity, or safety were improved?

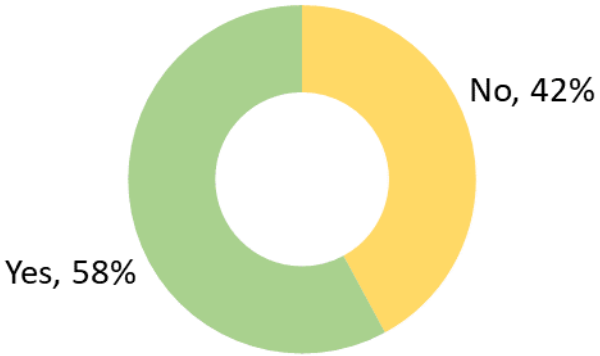


Figure 12-8: Survey #2 – Which 3 transit priorities do you think are most important?

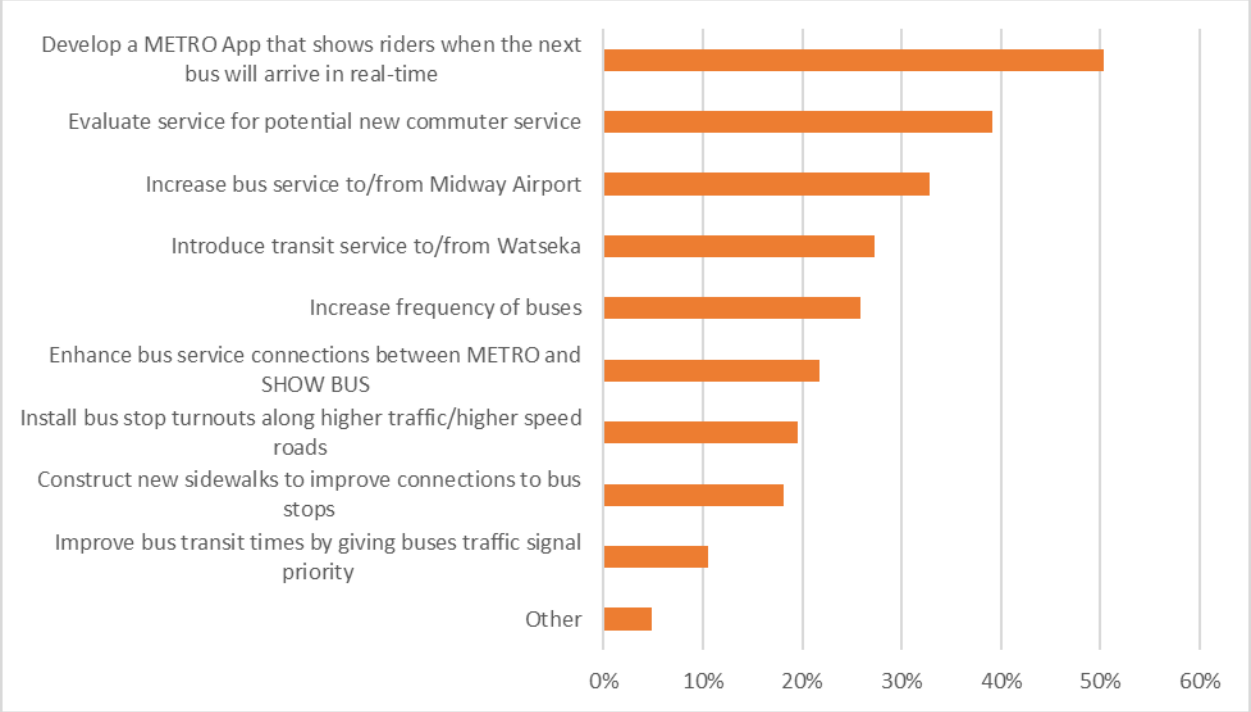


Figure 12-9: Survey #2 – Which 3 road projects do you think are most important?

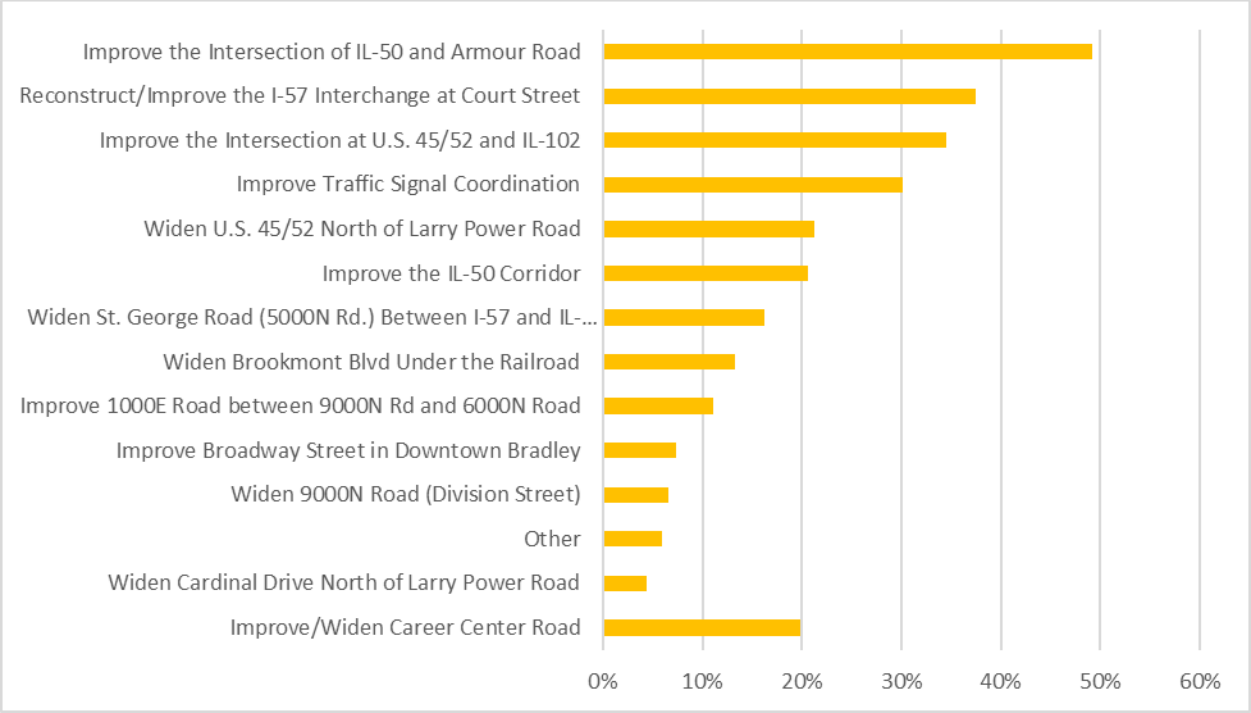


Figure 12-10: Survey #2 – Which 3 bicycle/pedestrian topics do you think should be given the most priority?

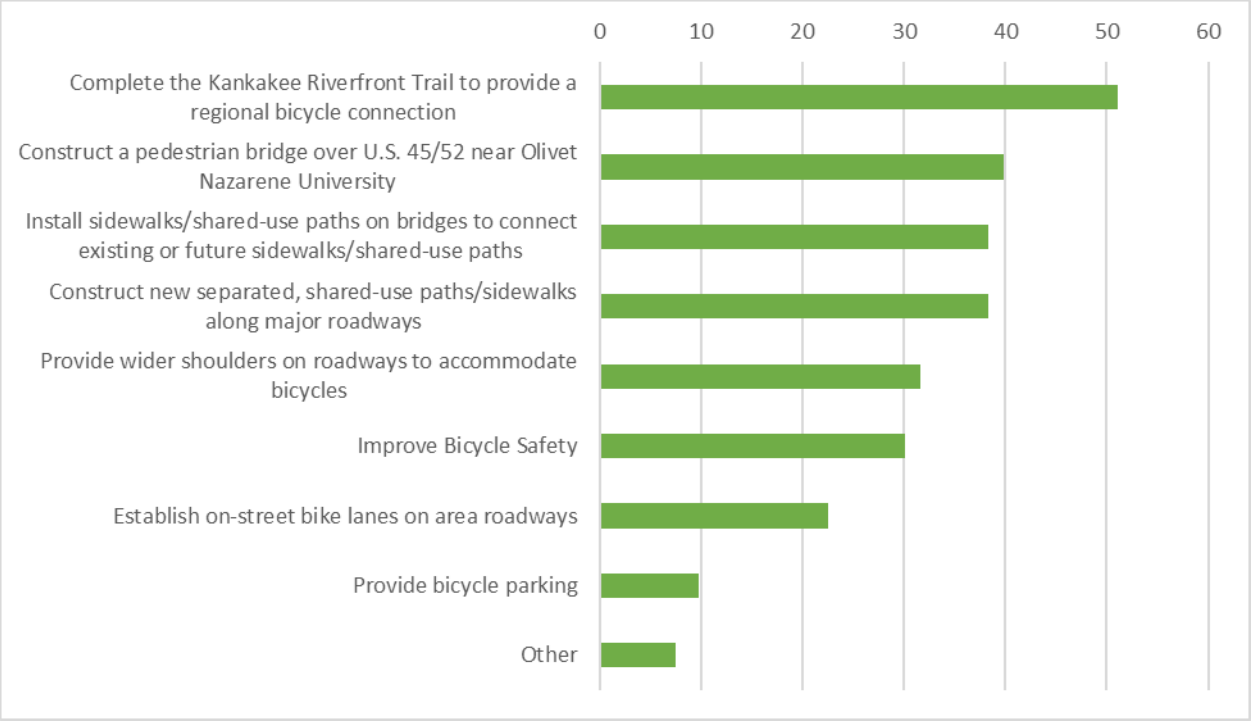


Figure 12-11: Survey #2 – Do you think commuter rail (Metra) should be extended into Kankakee County?

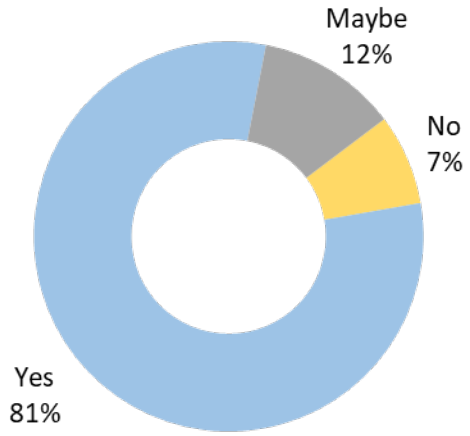
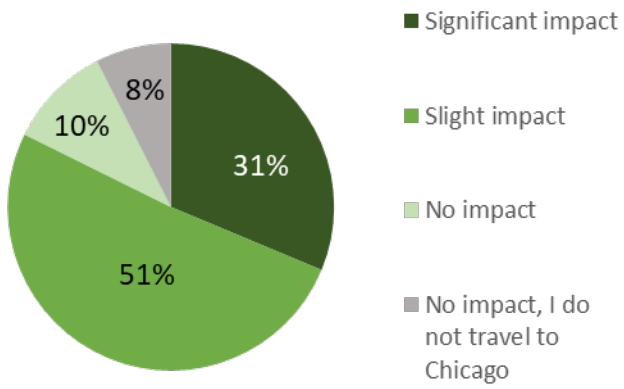


Figure 12-12: Survey #2 – How much of an impact would an extension of commuter rail (Metra) have on you?



12.4 Project Scoring and Evaluation

As part of the LRTP development, KATS staff created a project evaluation tool to help the KATS Policy Committee prioritize transportation improvements. The purpose of this exercise was to apply an objective scoring process to help identify transportation investments that will likely have the greatest potential benefit for the regional transportation system and its users. The results of the scoring process are intended to help inform the KATS Policy Committee in selecting projects that will be included in the LRTP fiscally constrained plan. The scoring results are not intended to be the final ranking, meaning that a project that scores highest, is not necessarily the top priority project. Many factors go into the final decision and this exercise was one tool to assist in the selection process.

The main categories that were included in the scoring criteria were (1) safety, (2) infrastructure condition, (3) environmental and multi-modal, and (4) project planning. Additional categories included project support by multiple KATS agencies and expected benefits to economic development. Each category had a list of individual elements with point values associated with them.

The total number of points for each category was derived from the results of the first survey. The project planning category had the highest number of available points, which was emphasized because of the importance of project planning and the ability for a project to be able to move forward. Infrastructure condition had the second highest number of available points, followed by safety. Environmental and multi-modal criteria and a fifth category, listed as additional considerations, had the fewest available points. "Additional Considerations" criteria were included to provide additional points for projects that had multiple KATS agency sponsorship or support and directly supported economic development.

1) Safety (15 points available)
    - The projects were reviewed for known safety issues that the project would directly improve.
    - The project was reviewed for safety and mobility improvements of pedestrian and bicyclists.
    - The project area had at least one crash that included a fatality or serious injury within the past five years.
2) Infrastructure Condition (25 points)
    - Existing pavement condition of the project area was evaluated; poorer pavement condition received more points.
    - The amount of annual average daily traffic of the project area was evaluated, higher traffic areas received more points.
    - Physical improvements that the project would implement were evaluated, lower construction cost (and future maintenance-type) projects received more points.
3) Environmental and Multi-Modal (10 points available)
    - The level of non-motorized (transportation alternatives) improvements were evaluated with project areas with no sidewalks, bike paths, or transit amenities receiving more points than projects that had existing facilities or were not improving non-motorized or transit facilities.
    - Projects were given a simple review of whether the project would improve the efficiency of the flow of traffic, avoid disparate impacts in low-income or minority populations, and avoid significant impacts on the environment.
4) Project Planning (30 points available)
    - Regional significance and planning consistency for each project were reviewed. Projects that were included in member agencies' plans scored higher. Projects that help reach

FAST Act targets scored higher. Projects that improved regional connectivity and improved truck access received more points.

- Projects that had local match set aside or would not use surface transportation block grant funds for engineering received more points.
- Projects that did not require row-of-way (ROW) acquisition or were expected to use local funds for ROW acquisition received more points.

5) Additional Considerations (10 points available)
    - Project collaboration was reviewed based on multi-jurisdictional support for projects. Projects that had more KATS members directly supporting or sponsoring a project received more points.
    - Projects that were determined to directly support economic development receive more points.

The KATS Policy Committee approved the evaluation criteria and guidelines, which staff presented at the September 25, 2019 meeting. KATS Staff prepared an initial assessment for each project based on the approved criteria. Staff then met with Technical Advisory Committee members to review the initial assessment and create a final score for each project.

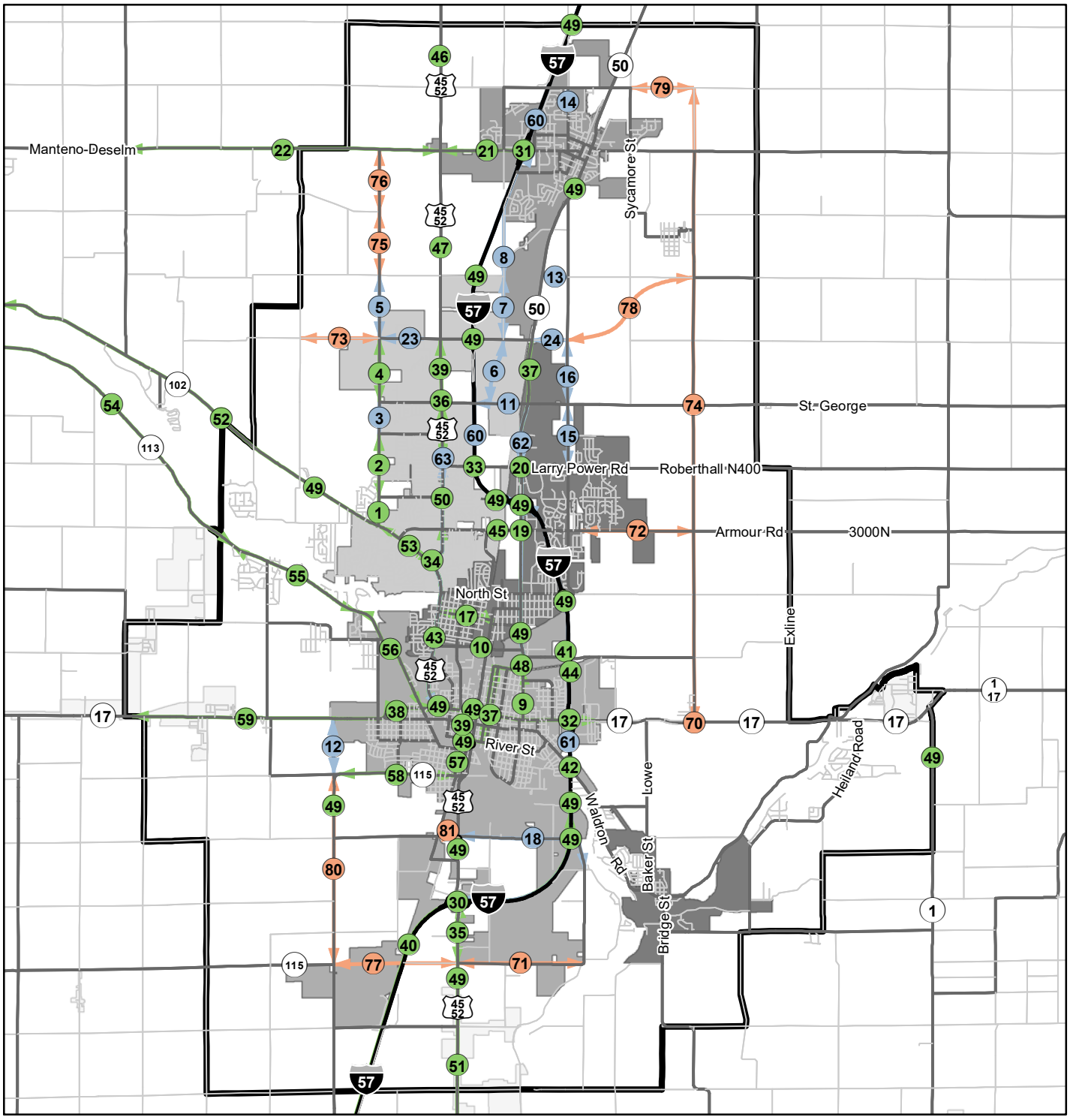
Staff reviewed the final scores for projects and placed each project into one of three tiers based on the final score. The list of projects by tier and their final scores were presented to the KATS Technical Advisory Committee and Policy Committee on October 30, 2019. At that meeting, the Policy Committee approved the three tiers of projects and scores.

12.5 Tiered Projects

The LRTP must include a list of fiscally constrained projects (see **Chapter 13** for the fiscally constrained projects). Based on the scores from project evaluations, each project was placed into one of three groups. Tier 1 projects had the highest scored and were determined to likely be of the highest priority, promote the requirements of the FAST Act, and help achieve performance targets. Tier 2 projects included projects that were evaluated as being important, but not given top priority. Tier 3 projects consisted of the lowest scoring projects, which were considered to be unsponsored by a KATS member and would likely address long-term issues. Community priorities and transportation infrastructure needs will dictate if, and when, these projects move into Tier 1 or Tier 2.

Figure 12-13 displays the tiered project and their locations in the KATS MPA. **Table 12-1** shows the list of projects by each tier and provides general information about the project location, existing condition, and potential improvements.

Figure 12-13: Potential Future Roadway Projects in the KATS MPA



Project Tier

- Tier 1 Projects
- Tier 2 Projects
- Tier 3 Projects

- Corporate Limits
- Census Urbanized Area (UZA)
- Adjusted Urbanized Area (UAB)
- Metropolitan Planning Area (MPA)

N

0 ½ 1 2 3 4 5 Miles

Data Sources: Street Centerlines (2018), Illinois Department of Transportation, UZA, U.S. Census Bureau, Other data - Kankakee County.
Disclaimer: This map is for reference only. Data provided are derived from multiple sources with varying levels of accuracy. Kankakee Area Transportation Study disclaims all responsibility for the accuracy or completeness of the data shown.

Note: The project numbers are for identifiacation and do not reflect any priority.

Table 12-1: Potential Future Roadway Projects

Tier 1

ID No.	Project	Project Type	Starting Terminus	Ending Terminus	Description of Improvements	Project Length (miles)
1	Career Center Rd	Local	Main St NW	Bethel Dr	3 lane urban; drainage improvements; controlled intersection improvements	0.45
2	Career Center Rd	Local	Bethel Dr	Burns Rd	3 lane urban; drainage improvements; controlled intersection improvements	1
4	Career Center Rd	Local	Indian Oaks Rd	Bourbonnais Pkwy	3 lane urban; drainage improvements; controlled intersection improvements	1.02
9	Hobbie Ave	Local	IL-17	Fair St	3 lane road; bike lanes	0.82
10	Brookmont Boulevard	Local	Canadian National RR Bridge		Widen 3/4 lane road; sidewalk and bike connections; clearance to accommodate freight	0.19
17	Broadway St	Local	US 45/52	Schuyler Ave and Liberty St	3 lane urban with off-street bike path and storm water improvements	0.92
19	*Intersection*	Local	IL-50	Armour Rd	Lane Expansion; West: add traffic signal; East: widen 4/5 lanes with turn lanes	
20	*Intersection*	Local	IL-50	Larry Power Rd	Signal optimization; designated turn lane safety improvements; pedestrian friendly infrastructure	
21	9000N Rd	Local	I-57	US 45/52	3 lane urban; shoulder and intersection improvements; improved guard rail approaching I-57; 4/5 lane urban	1.48
22	9000N Rd	Local	US 45/52	5000W Rd	Milling & resurfacing of existing road	5
30	*Intersection (Overpass)*	State	US 45/52	I-57	Bridge Replacement	
31	*Interchange*	State	I-57	9000N Rd	4/5 lane urban road with turn lanes; signal optimization; add shoulders; add sidewalks	
32	*Interchange*	State	I-57	IL-17	4/5 lane urban road with turn lanes; ramp enhancement, KB&S Railway overpass, Waldron Road overpass, land acquisition	
33	*Intersection (Overpass)*	State	I-57	Larry Power Rd	Widen with turn lanes; pedestrian infrastructure; traffic signal upgrade	

34	*Intersection*	State	US 45/52	IL-102	Widen with turn lanes; pedestrian infrastructure; traffic signal upgrade	
35	US 45/52	State	I-57	Airport Rd	Widen 4/5 lane urban road with turn lanes; add shoulders and sidewalks	0.99
36	US 45/52	State	Kathy Dr	Bourbonnais Pkwy	4/5 lane urban; intersection improvements; heavy concrete	1.93
37	IL-50	State	River St	Bourbonnais Pkwy	Traffic signal upgrade	8.39
38	IL-17	State	Station St	Eastgate Pkwy	Traffic signal upgrade	3.52
39	US 45/52	State	River St	Bourbonnais Pkwy	Traffic signal upgrade	6.5
40	I-57	State	0.7 mi. north of Iroquois Co. Line	0.4 mi. north of Kankakee River Bridge	Resurfacing, Bridge & Culvert Repairs	7.68
41	*Intersection (Overpass)*	State	I-57	Norfolk Southern Railroad	Bridge Replacements	
42	*Intersection (Overpass)*	State	I-57	Waldron Road	Bridge Replacements	
43	US 45/52	State	0.1 mi. north of Armour Rd.	IL-17	Milling & Resurfacing / ADA Improvements	3.11
44	I-57	State	0.7 mi. north of IL-17	0.8 mi south of North St.	Reconstruction	0.21
45	*Intersection (Overpass)*	State	Armour Road	Illinois Central RR (CN)	Bridge Replacements	
46	*Intersection (Overpass)*	State	US 45/52	Rock Creek (1.5 mi. north of Manteno Rd)	Bridge Replacements	
47	*Intersection (Overpass)*	State	US 45/52	South Branch of Rock Creek (0.5 mi. north of 7000N Rd.)	Bridge Repairs	
48	IL-50	State	Brookmont Blvd	US 45/52	Milling & Resurfacing / ADA Improvements	1.99
49	*Kankakee County/MPA*	State	HIL-20-001	Bridge Deck Sealing	Bridge Deck Sealing	
50	US 45/52	State	Indian Oaks Rd	River St.	ADA Improvements	5.9
51	US 45/52	State	0.2 mi south of I-57	IL-49 (4.5 mi. west of Ashkum)	Designed Overlay	4.83
52	IL-102	State	Will County Line	US 45/52	Designed Overlay / ADA Improvements	8.13

53	IL-102	State	Briarcliff Ln	US 45/52	ADA Improvements	1.03
54	IL-113	State	Will County Line	Edgewater Dr	Designed Overlay	6.05
55	IL-113	State	Edgewater Dr	Indian Trail	Reconstruction	2.25
56	IL-113	State	Indian Trail	IL-17	Designed Overlay / ADA Improvements	1.92
57	IL-115	State	US 45/52	Jeffery St.	Reconstruction	0.47
58	IL-115	State	S Washington Ave	1 mi. west of Curtis Ave	Designed Overlay / ADA Improvements	1.86
59	IL-17	State	Norfolk Southern RR	U.S. 45/52	Crack and Joint Sealing	4.98

Tier 2

ID No.	Project	Project Type	Starting Terminus	Ending Terminus	Description	Project Length (miles)
3	Career Center Rd	Local	Burns Rd	Indian Oaks Rd	3 lane urban; drainage improvements; controlled intersection improvements	0.51
5	Career Center Rd	Local	Bourbonnais Pkwy	7000N Rd	3 lane urban; drainage improvements; controlled intersection improvements	1
6	1000E Rd	Local	5000N Rd	6000N Rd	3 lane urban; controlled intersection improvements	1.06
7	1000E Rd	Local	6000N Rd	7000N Rd	3 lane urban; controlled intersection improvements	1.01
8	1000E Rd	Local	7000N Rd	9000N Rd	3 lane urban; controlled intersection improvements	2.16
11	5000N Rd	Local	I-57	IL-50	3 lane urban; shoulder-drainage improvements; controlled intersections and rail crossing gates	0.75
12	2000W Rd	Local	IL-17	IL-115	3 lane; concrete for heavy trucks	0.89
13	7000N Rd	Local	IL-50	2000E Rd	3 lane; concrete for heavy trucks	0.42
14	Maple St	Local	7th St	10000N Rd	3 lane urban; drainage; continue sidewalk between Water Tower Rd and 10000N Rd.	0.44
15	2000E Rd	Local	Larry Power Rd	5000N Rd	3 lane urban; controlled intersection improvements	1.01
16	2000E Rd	Local	5000N Rd	6000N Rd	3 lane urban; controlled intersection improvements	1.02
18	River Rd	Local	US 45/52	S 2000E Rd	Widen 3 lanes; add center bi-directional turn lane	2.39
23	Bourbonnais Pkwy	Local	Stonebridge Blvd	Career Center	3 lane urban; controlled intersection improvements; 4/5 lane urban at major intersection	0.71
24	Bourbonnais Pkwy	Local	IL-50	2000E Rd	3 lane urban; controlled intersection improvements; 4/5 lane urban at major intersection	0.56
60	I-57	State	IL-50	Will County Line	Reconstruction / Add Lanes; Bridge Replacements / Repairs	9.51
61	I-57	State	US 45/52	IL-50	Reconstruction / Add Lanes; Bridge Replacements / Repairs	7.86
61	IL-50	State	Grinnell Rd	St. George Rd (CH 8)	Reconstruction / Add Lanes	4.06
63	US 45/52	State	IL-17	Kathy Dr	Reconstruction / Add Lanes	4.11

Tier 3

ID No.	Project	Project Type	Starting Terminus	Ending Terminus	Description	Project Length (Miles)
70	Intersection	Unsponsored	IL-17	4000E Rd	Add turn lanes at all approaches	
71	Airport Rd	Unsponsored	US 45/52	River Rd	3 lane; shoulder-drainage improvements; turn lane onto Hwy 45/52	2.01
72	Armour Rd (CH 44)	Unsponsored	George Ln	4000E Rd	Widen to 3 lanes	1.8
73	Bourbonnais Pkwy	Unsponsored	Career Center Rd	2250W Rd	4 lane; concrete for heavy trucks; shoulder-drainage improvements	1.27
74	4000E Rd	Unsponsored	IL-17	Manteno Rd	3 lane; concrete for heavy trucks; widen shoulders; drainage improvements; signals at major intersections	10.12
75	Career Center Rd	Unsponsored	7000N Rd	8000N Rd	3 lane urban; drainage improvements; controlled intersection improvements	1.01
76	Career Center Rd	Unsponsored	8000N Rd	9000N Rd	3 lane urban; drainage improvements; controlled intersection improvements	1
77	4000S Rd	Unsponsored	IL-115	US 45/52	New construction; 3 lane; concrete for heavy trucks with bridge over I-57	1.98
78	6000N Rd / 7000N Rd	Unsponsored	2000E Rd	4000E Rd	3 lane; concrete for heavy trucks	2.38
79	10000N Rd	Unsponsored	3000E Rd	4000E Rd	3 lane; concrete for heavy trucks; shoulder-drainage improvements	1.01
80	IL-115	Unsponsored	Jeffery St	Airport Rd	3 lane; concrete for heavy trucks	3.03
81	River Rd	Unsponsored	CH 4 (Kensington Ave)	US 45/52	New construction; 2 lane	0.33

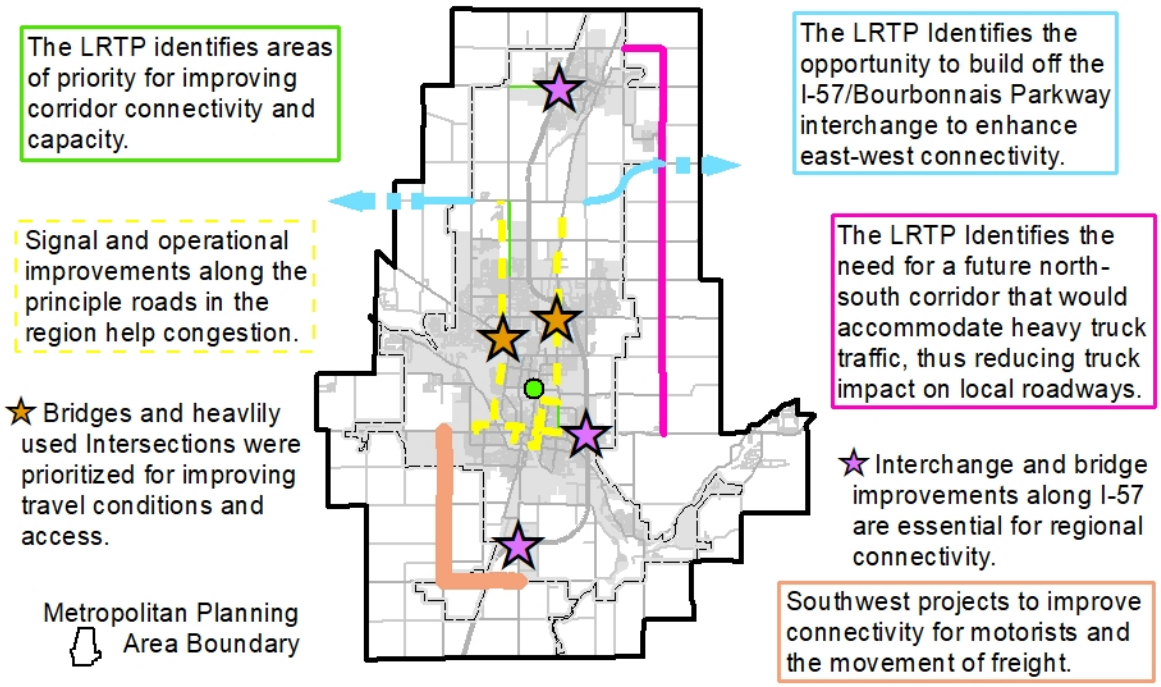
Chapter 13: Recommended Plan and Implementation

13.1 Overview

This chapter outlines the recommended plan and implementation steps as part of the 2045 LRTP. This chapter includes the identification of priority improvements, the fiscally constrained projects, environmental justice analysis, and environmental mitigation analysis.

13.2 Priority Improvements

The graphic below identifies the priority improvements identified in the KATS MPA. The 2045 LRTP recognizes the need to leverage regional assets and opportunities. One such opportunity is the area surrounding the new I-57 interchange at Bourbonnais Parkway. The completion of that project was instrumental in furthering additional east-west roadway connections, in addition to IL-17.



13.3 Financial Analysis

KATS has long emphasized the importance of the need to allocate transportation funding and coordinate project scopes efficiently for optimal results. This efficient approach will need to continue as KATS and local agencies continue to responsibly prioritize and construct future transportation projects identified in the 2045 LRTP. KATS, like many other governmental agencies, faces a recurrent issue of developing stable funding sources to adequately fund projects that address long-term mobility and infrastructure needs. In 2019, the State of Illinois approved an increase of the motor fuel tax, which will be key to funding future transportation improvements.

There is recognition at both the state and federal level that additional funding is needed to meet future transportation needs. Preliminary discussions related to the Federal Surface Transportation Bill that will succeed the FAST Act have continued to include the importance of performance-based planning and programming and the importance of generating revenue for transportation projects. These may include

raising motor fuel tax or possibly charge motorists and freight providers based on vehicle miles traveled. Additional strategies could include spending more on public transportation or non-motorized improvements that enhance mobility. At this time, it is unclear what, if any, additional revenues or different funding priorities, at the federal level, will be established to address the ever-growing transportation infrastructure backlog.

The discussion of a new surface transportation bill may also raise new considerations for how funding is distributed by mode. In recent years, public transportation and non-motorized modes have received more attention for potential increases in funding.

13.4 Fiscally Constrained Requirement

Funding for KATS transportation maintenance and improvement projects comes from a variety of federal, state, local, and private sources. The federal government is the primary source of funding for transportation systems in the United States. These funds come from federally assessed user fees, motor and aviation fuel taxes, and landing fees. They are allocated back to the states on a formula basis. The primary source of revenue at the federal and state levels includes motor fuel taxes, vehicle registration fees, special motor carrier fees, parking fees, and toll fees. Revenue at the county and municipal levels are primarily based on motor fuel taxes, property taxes, sales taxes, and special assessments. Private sector funding comes from developers and business associations through impact fees, right-of-way donations, and cost sharing.

Federal, state and local agencies, along with private developers, have invested hundreds of millions of dollars in the KATS transportation system of the past several decades. In the late 1990s, programs such as TEA-21 and Illinois FIRST significantly increase federal and state funding authorizations above previous levels. However, the cost of maintaining the existing transportation system is continually increasing as the infrastructure ages. At the same time, the limited availability of local funds makes it more difficult to pursue funding for capital improvement projects. KATS faces the challenge of balancing the maintenance of the existing transportation infrastructure while identifying funding to construct the priority projects that will support existing area businesses and create new economic development opportunities within the region.

FAST Act planning regulations require that MPOs consider financial implications of their planning efforts as part of the LRTP. Specific provisions in the law regarding the financial plan state the following requirements:

- Development of a financial plan that demonstrates how the adopted transportation plan can be implemented.
- Development of funding estimates that will be available to support the LRTP implementation, including all necessary financial resources from public and private sources.
- State recommendations on pursuing additional financing strategies to fund projects and programs included in the LRTP.
- Account for all projects and strategies for which federal, state, local, or private funds could be used for financing and use an inflation rate to reflect multi-year costs and revenues.

The LRTP should be fiscally constrained with reasonable funding sources identified for the proposed transportation projects. Projects with no known funding sources may still be included in the LRTP, but only as illustrative projects. The KATS LRTP summarizes the projects that are part of the recommended

fiscally constrained plan and unconstrained vision (illustrative projects). The following sections summarize the fiscal constraint analysis and the recommended projects.

13.5 Fiscally Constrained Projects

The identification of fiscally constrained projects is a requirement of the LRTP planning process. A number of factors were considered in the identification of these projects, which include the scoring process, estimated project cost, and potential impacts. Currently, KATS has approximately $5.4 million for upcoming projects. This total has been growing over the past several years and KATS receives approximately $900,000 in annual allocations. Project cost estimates are typically increasing at a higher annual inflation rate.

Federal and state funding is also available within the KATS MPA. **Table 13-1** shows historical revenue data (state fiscal years 2015-2019) provided by IDOT. The annual average federal and state transportation funds that have been available within the KATS MPA total approximately $12.9 million. This figure excludes the approximately $4 million from 2015 that was programmed for the new I-57 interchange at Bourbonnais Parkway. It should be noted that these funds can vary significantly based on the highway projects that are programmed at the state level for projects like I-57 mainline work and interchange improvements, as well as state infrastructure capital bills. For the purpose of the KATS 2045 LRTP, the $12.9 million figure is used for fiscal constraint analysis.

Table 13-1: Recent Federal and State Transportation Funding in the KATS MPA (2015-2019)

Funding Source	2015	2016	2017	2018	2019
Federal – Streets & Highways	$4,344,192	$2,581,459	$1,494,083	$10,781,949	$19,069,289
State – Streets & Highways	$16,661,900	$1,876,837	$2,679,165	$2,900,096	$3,358,359
Total Transportation Awards	**$21,006,092**	**$4,458,296**	**$4,173,248**	**$13,682,045**	**$22,427,648**

Source: IDOT (2019).

For the purpose of the fiscal constraint, these annual fund estimates were projected through 2045. Applying a three percent annual inflation rate to the average annual state contribution, these funds would total $500,012,363 through 2045.

Operations and Maintenance

Table 13-2 provides a breakdown of typical operations and maintenance expenses IDOT incurred within the KATS MPA. From 2015 through 2019, the average annual maintenance expenses were $1.03 million. The five-year average was used as the estimate for analyzing operations and maintenance costs with an annual three percent inflation rate through 2045. This totals an estimated $39,797,650. While maintenance costs are likely to increase, KATS is committed to focusing on the maintenance of the existing infrastructure.

Table 13-2: Operations and Maintenance Expenses (2015-2019)

Funding Source	2015	2016	2017	2018	2019
Contract Maintenance	$383,810	$1,205,712	$1,209,474	$327,791	$532,064
Non-Contract Maintenance Contracts (Misc. Operations)	$54,944	$230,580	$64,689	$348,971	$350,000
Day Labor Contracts	$185,000	$153,716	$0	$114,664	$0
Total Transportation Awards	**$623,754**	**$1,590,008**	**$1,274,163**	**$791,426**	**$882,064**

Source: IDOT (2019).

Fiscally Constrained Projects

Given the limited funding projected over the next 25 years, KATS must strategically invest in transportation projects that will benefit regional transportation mobility and support KATS' priorities of improving infrastructure condition, safety, reducing congestions, and supporting economic development.

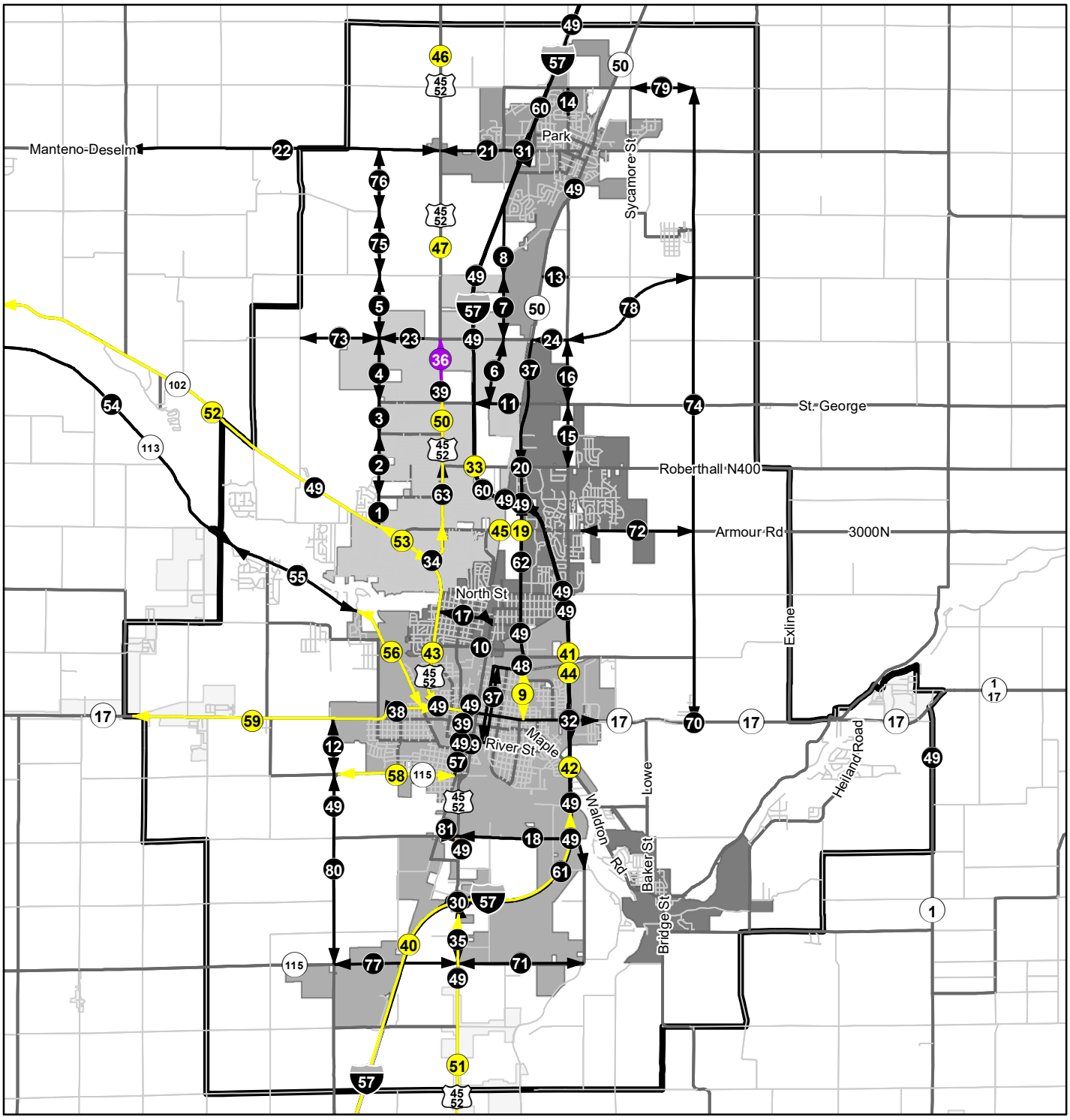
Table 13-3 displays the projected cost of all projects considered in the planning process. The project cost estimates were originally developed in 2015 using IDOT planning level cost estimates and included in the 2040 KATS LRTP (2015), which had projected costs through 2040. These forecasted costs included phase-1, -2, and -3 engineering estimates. The base project costs and rate of inflation were applied to estimate project costs through 2045. It is important to note that these estimates were created as general planning level estimates and more detailed cost estimates will need to be prepared/refined as projects become closer to implementation.

Tier 1 projects, previously discussed in **Chapter 12**, were reviewed to identify potential impacts and year of expenditure costs against anticipated revenues. One group of projects are those that were identified by IDOT in the FY 2020 KATS Transportation Improvement Program (TIP). Those projects primarily consist of projects along state highways. Tier 1 projects sponsored by local KATS members include Hobbie Avenue, which has been identified as fiscally constrained.

Figure 13-1 shows the locations of fiscally constrained projects, sponsored by both IDOT and local agencies in the KATS MPA. **Figure 13-2** shows the locations of all three tiers of projects in the KATS MPA with fiscally constrained projects highlighted. **Table 13-3** lists associated project cost estimates in five-year bands through 2045 for year of expenditure purposes.

Hobbie Aveneue in Kankakee.

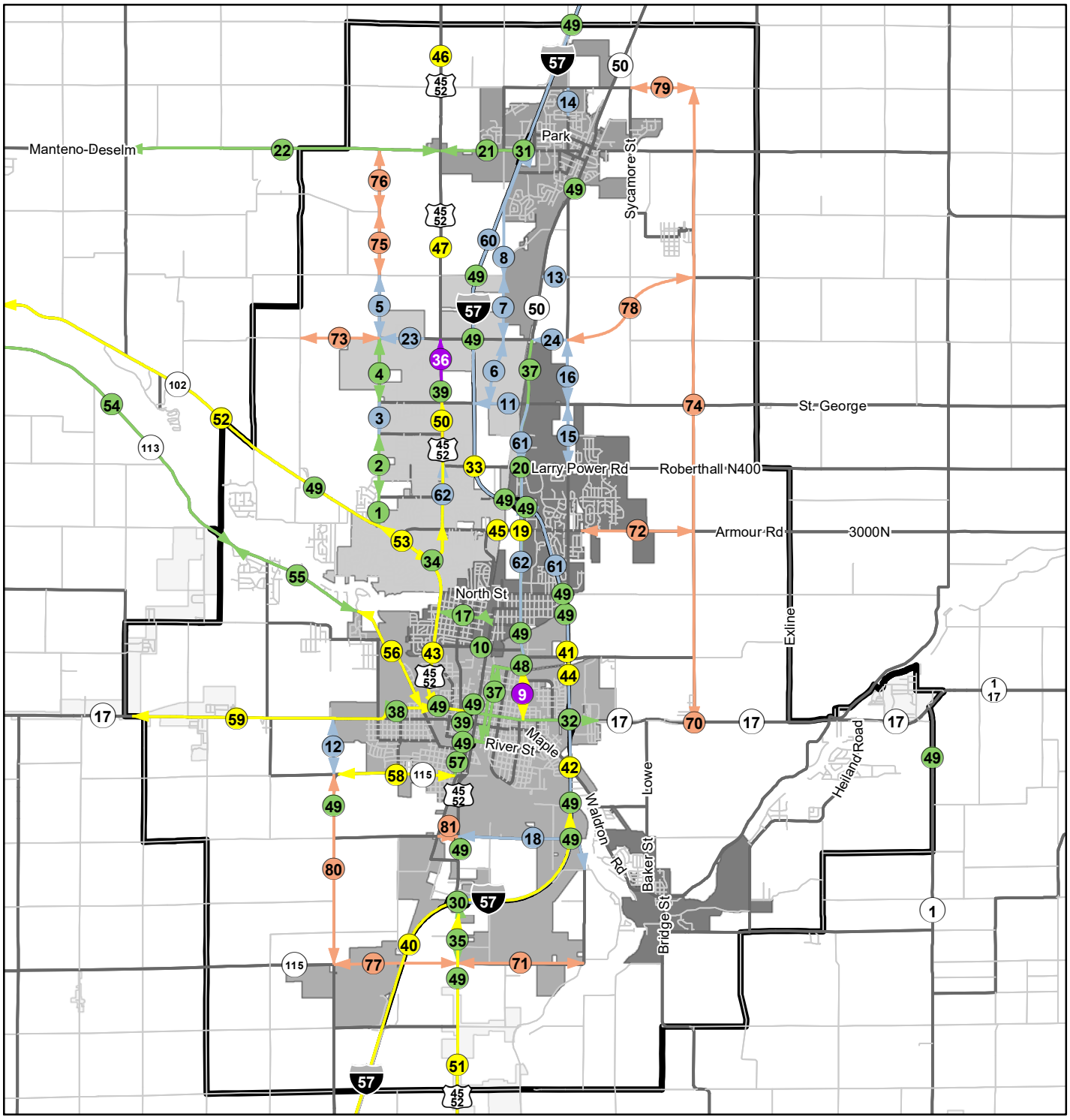
Figure 13-1: Fiscally Constrained Roadway Projects in the KATS MPA



Note: The project numbers are for identifiacation and do not reflect any priority.

Data Sources: Street Centerlines (2018), Illinois Department of Transportation, UZA, U.S. Census Bureau, Other data - Kankakee County.
Disclaimer: This map is for reference only. Data provided are derived from multiple sources with varying levels of accuracy. Kankakee Area Transportation Study disclaims all responsibility for the accuracy or completeness of the data shown.

Figure 13-2: Fiscally Constrained Roadway Projects in the KATS MPA



Data Sources: Street Centerlines (2018), Illinois Department of Transportation, UZA, U.S. Census Bureau, Other data - Kankakee County.
Disclaimer: This map is for reference only. Data provided are derived from multiple sources with varying levels of accuracy. Kankakee Area Transportation Study disclaims all responsibility for the accuracy or completeness of the data shown.

Note: The project numbers are for identifiacation and do not reflect any priority.

Table 13-3: Project Cost Estimates (Year of Expenditure Costs)

	ID No.	Roadway	Project Cost (2020 Dollars)	2021-2025	2026-2030	2031-2035	2036-2040	2041-2045
Tier 1 Projects	1	Career Center Rd	$1,800,000	$2,086,693	$2,419,050	$2,804,341	$3,251,000	$3,768,800
	2	Career Center Rd	$3,750,000	$4,347,278	$5,039,687	$5,842,378	$6,772,917	$7,851,667
	4	Career Center Rd	$3,821,147	$4,429,757	$5,135,303	$5,953,223	$6,901,417	$8,000,634
	9	Hobbie Ave	$6,800,000	$7,883,064	$9,138,632	$10,594,178	$12,281,557	$14,237,690
	10	Brookmont Blvd	$24,910,000	$28,877,518	$33,476,959	$38,808,968	$44,990,231	$52,156,009
	17	Broadway St	$5,220,000	$6,051,411	$7,015,244	$8,132,590	$9,427,901	$10,929,521
	19	Intersection	$8,500,000	$9,853,830	$11,423,290	$13,242,723	$15,351,946	$17,797,113
	20	Intersection	-	-	-	-	-	-
	21	9000N Rd	$6,000,000	$6,955,645	$8,063,499	$9,347,805	$10,836,668	$12,562,668
	22	9000N Rd	$1,481,734	$1,717,736	$1,991,327	$2,308,493	$2,676,176	$3,102,422
	30	Intersection (Overpass)	$11,500,000	$13,331,652	$15,455,039	$17,916,625	$20,770,279	$24,078,447
	31	Interchange	$27,450,000	$31,822,074	$36,890,507	$42,766,206	$49,577,754	$57,474,205
	32	Interchange	$40,711,778	$47,196,110	$54,713,229	$63,427,623	$73,530,000	$85,241,423
	33	Intersection	$3,700,000	$4,289,314	$4,972,491	$5,764,479	$6,682,612	$7,746,978
	34	Intersection	$10,000,000	$11,592,741	$13,439,165	$15,579,674	$18,061,113	$20,937,780
	35	US 45/52	$27,000,000	$31,300,401	$36,285,745	$42,065,120	$48,765,004	$56,532,005
	36	US 45/52	$24,195,630	$28,049,368	$32,516,906	$37,696,004	$43,700,000	$50,660,277
	37*	IL-50	-	-	-	-	-	-
	38*	IL-17	-	-	-	-	-	-
	39*	US 45/52	-	-	-	-	-	-
	40	I-57	$20,500,000	$23,765,119	$27,550,288	$31,938,332	$37,025,281	$42,922,448
	41	Intersection (Overpass)	$17,450,000	$20,229,333	$23,451,342	$27,186,532	$31,516,641	$36,536,426
	42	Intersection (Overpass)	$8,550,000	$9,911,794	$11,490,486	$13,320,621	$15,442,251	$17,901,802
	43	US 45/52	$3,200,000	$3,709,677	$4,300,533	$4,985,496	$5,779,556	$6,700,089
	44	I-57	$6,300,000	$7,303,427	$8,466,674	$9,815,195	$11,378,501	$13,190,801
	45	Intersection (Overpass)	$5,680,000	$6,584,677	$7,633,446	$8,849,255	$10,258,712	$11,892,659
	46	Intersection (Overpass)	$1,700,000	$1,970,766	$2,284,658	$2,648,545	$3,070,389	$3,559,423
	47	Intersection (Overpass)	$500,000	$579,637	$671,958	$778,984	$903,056	$1,046,889
	48	IL-50	$20,730,000	$24,031,752	$27,859,388	$32,296,665	$37,440,686	$43,404,017
	49	Kankakee County/MPA	$152,000	$176,210	$204,275	$236,811	$274,529	$318,254
	50	US 45/52	$400,000	$463,710	$537,567	$623,187	$722,445	$837,511
	51	US 45/52	$8,500,000	$9,853,830	$11,423,290	$13,242,723	$15,351,946	$17,797,113
	52	IL-102	$5,500,000	$6,376,008	$7,391,541	$8,568,821	$9,933,612	$11,515,779
	53	IL-102	$100,000	$115,927	$134,392	$155,797	$180,611	$209,378
	54	IL-113	$3,300,000	$3,825,605	$4,434,924	$5,141,292	$5,960,167	$6,909,467
	55	IL-113	$17,600,000	$20,403,224	$23,652,930	$27,420,227	$31,787,558	$36,850,492
	56	IL-113	$2,200,000	$2,550,403	$2,956,616	$3,427,528	$3,973,445	$4,606,312
	57	IL-115	$5,800,000	$6,723,790	$7,794,716	$9,036,211	$10,475,445	$12,143,912
	58	IL-115	$1,481,000	$1,716,885	$1,990,340	$2,307,350	$2,674,851	$3,100,885
	59	IL-17	$120,000	$139,113	$161,270	$186,956	$216,733	$251,253

*Project cost estimates for signal enhancements are dependent on the number of signals and equipment. Detailed costs would need to be developed through additional study.

Note: Highlighted projects are fiscally constrained.

	ID No.	Roadway	Project Cost (2020 Dollars)	2021-2025	2026-2030	2031-2035	2036-2040	2041-2045
Tier 2 Projects	3	Career Center Rd	$1,926,524	$2,233,369	$2,589,087	$3,001,461	$3,479,516	$4,033,713
	5	Career Center Rd	$3,746,546	$4,343,274	$5,035,045	$5,836,997	$6,766,679	$7,844,436
	6	1000E Rd	$3,962,614	$4,593,756	$5,325,423	$6,173,624	$7,156,922	$8,296,835
	7	1000E Rd	$3,796,096	$4,400,716	$5,101,636	$5,914,195	$6,856,172	$7,948,183
	8	1000E Rd	$14,000,000	$16,229,837	$18,814,831	$21,811,544	$25,285,558	$29,312,892
	11	St. George Rd	$8,715,552	$10,103,714	$11,712,974	$13,578,546	$15,741,257	$18,248,431
	12	2000W Rd	$8,932,700	$10,355,448	$12,004,803	$13,916,856	$16,133,450	$18,703,090
	13	7000N Rd	$2,500,000	$2,898,185	$3,359,791	$3,894,919	$4,515,278	$5,234,445
	14	Maple St	$4,500,000	$5,216,733	$6,047,624	$7,010,853	$8,127,501	$9,422,001
	15	Cardinal Dr	$5,700,270	$6,608,175	$7,660,687	$8,880,835	$10,295,322	$11,935,100
	16	Cardinal Dr	$4,853,761	$5,626,839	$6,523,049	$7,562,002	$8,766,432	$10,162,698
	18	River Rd	$14,094,538	$16,339,432	$18,941,881	$21,958,830	$25,456,303	$29,510,832
	23	Bourbonnais Pkwy	$6,027,281	$6,987,271	$8,100,162	$9,390,307	$10,885,940	$12,619,788
	24	6000N Rd	$5,723,238	$6,634,802	$7,691,554	$8,916,618	$10,336,805	$11,983,190
	60	I-57	$160,566	$186,140	$215,787	$250,157	$290,000	$336,189
	61	I-57	$193,787	$224,652	$260,433	$301,913	$350,000	$405,746
	62	IL-50	$83,051	$96,279	$111,614	$129,391	$150,000	$173,891
	63	US 45/52	$76,417	$88,588	$102,698	$119,055	$138,017	$160,000

	ID No.	Roadway	Project Cost (2020 Dollars)	2021-2025	2026-2030	2031-2035	2036-2040	2041-2045
Tier 3 Projects	70	Intersection	$846,510	$981,337	$1,137,639	$1,318,835	$1,528,891	$1,772,404
	71	Airport Road	$9,108,184	$10,558,882	$12,240,638	$14,190,254	$16,450,394	$19,070,515
	72	Armour Rd (CH 44)	$10,615,519	$12,306,297	$14,266,371	$16,538,634	$19,172,809	$22,226,541
	73	Bourbonnais Pkwy	$20,281,239	$23,511,515	$27,256,291	$31,597,510	$36,630,174	$42,464,411
	74	Skyline Rd	$97,579,400	$113,121,272	$131,138,563	$152,025,526	$176,239,252	$204,309,598
	75	Career Center Rd	$10,281,704	$11,919,313	$13,817,751	$16,018,560	$18,569,901	$21,527,605
	76	Career Center Rd	$10,281,704	$11,919,313	$13,817,751	$16,018,560	$18,569,901	$21,527,605
	77	4000S Rd	$19,758,236	$22,905,211	$26,553,418	$30,782,688	$35,685,572	$41,369,359
	78	Bourbonnais Pkwy	$35,492,168	$41,145,151	$47,698,509	$55,295,641	$64,102,804	$74,312,719
	79	10000N Rd	$8,870,855	$10,283,753	$11,921,688	$13,820,503	$16,021,751	$18,573,601
	80	IL-115	$26,547,816	$30,776,196	$35,678,048	$41,360,633	$47,948,310	$55,585,233
	81	River Rd	$3,588,297	$4,159,820	$4,822,372	$5,590,450	$6,480,864	$7,513,098

Table 13-4 displays the categorical cost breakdown for the fiscally constrained projects. Following the table are descriptions of the fiscally constrained projects.

Traffic on Armour Rd. traveling on the Bridge over the ICG/CN Railroad (Project 45).

Table 13-4: Fiscally Constrained Project Cost Estimates

Construction Funds Programmed	Hobbie Avenue
Roadway Reconstruction	$5,500,000
Preliminary Engineering Phase 1	$700,000
Preliminary Engineering Phase 2	$000,000
Construction Engineering (Phase 3)	$600,000
Total	**$6,800,000**

Hobbie Avenue

Hobbie Avenue was identified as the top local project for construction. Based on the financial analysis, Hobbie Avenue has sufficient funds. Hobbie Avenue provides the benefits of supporting truck traffic operations, enhancing economic development, and improving safety. Hobbie Avenue was also identified in the Kankakee Bikeway Master Plan for on-street bike lanes, supporting alternative transportation. These factors and the fact that Hobbie Avenue was identified in the last LRTP as the priority project, make this the top priority for the 2045 LRTP. **Table 13-4** shows estimated cost breakdowns for fiscally constrained projects.

The majority of projects listed in the fiscally constrained list of projects were programmed by IDOT as part of the KATS FY 2020 Transportation Improvement Program (TIP). Over $109 million were programmed for highway projects in the KATS MPA during FY 2020 through FY 2023. **Table 13-5** summarizes the programming of funds by construction types and non-construction project phases.

Table 13-5: Highway Project Funds Programmed by IDOT (KATS FY 2020 TIP - May 2020)

Construction Funds Programmed (FY 2020 - FY 2023)	IDOT	NHPP	STP-Flex	STP-Rural	STP-Urban	TDC	Total
Pavement Preservation (Milling and Resurfacing)	$5,114,000	$21,184,000	$0	$7,528,000	$7,778,000	$71,000	$41,675,000
Bridge & Culvert Preservation	$530,000	$0	$122,000	$0	$0	$0	$652,000
Addition of Lanes	$0	$0	$0	$0	$0	$0	$0
Roadway Reconstruction	$630,000	$5,670,000	$0	$0	$0	$0	$6,300,000
Bridge & Culvert Reconstruction	$4,150,000	$25,930,000	$0	$0	$4,320,000	$0	$34,400,000
Intersection Improvement	$1,500,000	$2,500,000	$0	$0	$3,500,000	$0	$7,500,000
Intersection Reconstruction	$0	$0	$0	$0	$0	$0	$0
ADA Improvements	$100,000	$296,000	$0	$0	$104,000	$0	$500,000
Construction Total	**$12,024,000**	**$55,580,000**	**$122,000**	**$7,528,000**	**$15,702,000**	**$71,000**	**$91,027,000**
Non-Construction Funds Programmed (FY 2020 - FY 2023)	**IDOT**	**NHPP**	**STP-Flex**	**STP-Rural**	**STP-Urban**	**TDC**	**Total**
Phase 1 Engineering	$930,000	$4,300,000	$0	$38,000	$762,000	$0	$6,030,000
Phase 2 Engineering	$925,000	$4,725,000	$0	$38,000	$1,562,000	$0	$7,250,000
Construction Engineering (Phase 3)	$0	$0	$0	$0	$0	$0	$0
Right-of-Way Acquisition	$2,400,000	$0	$0	$0	$0	$0	$2,400,000
Utility Relocation	$900,000	$0	$0	$0	$0	$0	$900,000
Median Crossover	$150,000	$1,350,000	$0	$0	$0	$0	$1,500,000
RR Flagger/Miscellaneous	$450,000	$0	$0	$0	$0	$0	$450,000
Non-Construction Total	**$5,755,000**	**$10,375,000**	**$0**	**$76,000**	**$2,324,000**	**$0**	**$18,530,000**

13.6 Highway Funding Sources

13.6.1 Federal Funding Sources

MAP-21 consolidated dozens of programs into a smaller list of seven core formula programs, listed below:

- National Highway Performance Program (NHPP)
- Surface Transportation Program (STP)
- Highway Safety Improvement Program (HSIP)
- Railway-Highway Crossings (set aside from HSIP)
- Metropolitan Planning (MP)
- Transportation Alternatives (TA)

Previously, KATS received funding from four federal programs organized under SAFETEA-LU, listed below:

- Highway Bridge Program (HBP) - HBP Funds are provided to replace or rehabilitate structurally deficient bridges on the transportation network for the safe and expeditious transportation of the general public. The funds are allotted to IDOT districts based on a formula involving the square footage of eligible bridges. Local governments are required to provide a 20 percent match.
- Surface Transportation Urban (STU) - This category is for transportation needs within urbanized areas with populations less than 200,000 and greater than 5,000. Funding is 80 percent federal and 20 percent state and local. Funds are allocated by Census population and projects are selected by KATS. STU is administered by the State of Illinois for KATS. STU money is allotted to MPOs for transportation projects such as road construction, reconstruction, and bridge rehabilitation. Ten percent of all STU funds must be used for safety projects, which can be used for rail crossing improvements, signals, and other accident-reducing methods of transportation improvements.
- Surface Transportation Rural (STR) - This category is for transportation needs outside urbanized areas with populations less than 200,000 and greater than 5,000. Funding is 80 percent federal and 20 percent state and local. STR money is made available for transportation projects such as road construction, reconstruction, and bridge rehabilitation in rural areas.
- Surface Transportation Enhancements (STE) - Ten percent of STU funding is available for enhancements such as: bike and pedestrian facilities, preservation of historic sites, scenic beautification, and other transportation-related projects. The MPO must submit a letter stating their support of the project, identification of funding, and ensuring the project is consistent with the long-range transportation plan.

Under MAP-21, the HBP was consolidated into NHPP, while the STU, STR, and STE programs are now covered under the new STP program. However, the activities and reserved uses described in the bullet points above are still applicable under the new program structure.

There are several other federal funding sources that KATS may qualify for additional funding based on the specific conditions of individual projects. Moreover, MAP-21 introduced more flexibility for states to allocate more or less funding to any specific program to meet the unique needs of that state's transportation system. Specifically, states can move up to 50 percent of funds between programs (with some restrictions).

The STP and TA programs are particularly flexible with respect to eligible activities and projects. To name a few examples, these funds may be used as capital funding for public transportation capital improvements, carpool and vanpool projects, fringe and corridor parking facilities, bicycle and pedestrian facilities, and intercity or intra-city bus terminals and bus facilities. These funds can also be used for surface transportation planning activities, wetland mitigation, transit research and development, and environmental analysis. Other eligible projects under STP include transit safety improvements and most transportation control measures.

13.6.2 State Funding Sources

State funding is administered by IDOT. The following are among the most common forms of funding:

- Motor Fuel Tax (MFT) - The MFT is collected on each gallon of gas that is purchased. The State of Illinois levies a tax of 38.0 cents per gallon of gasoline and 45.5 cents per gallon of diesel fuel for operating motor vehicles and boats. The tax is included in the selling price so the motor fuel tax is always paid by the purchaser. The tax is collected by the Department of Revenue and distributed to local governments. To qualify for funding municipalities must be incorporated. Municipalities receive their funding based on population. Counties receive their allotment based on total vehicles registered to the county. Townships must levy a 0.08 percent road and bridge tax to be eligible to receive the money. Township allocations are based on total township road mileage.
- Truck Access Routes - Truck access routes have a special funding category available for designated truck routes which may receive up to $30,000 per lane-mile and $15,000 per intersection for the improvement of access.
- Illinois Commerce Commission (ICC) - The ICC provides special funding for rail crossing improvements that are at grade with a street. This funding can be used for new rail crossings or upgrading existing rail crossings.
- Economic Development Funds - Economic Development funds may be used for transportation projects if the new or improved facility will increase employment. This program can be used for industrial, commercial, and recreational projects if the project is necessary.
- Illinois Downstate Public Transportation Fund - The State's Downstate Public Transportation Fund provides reimbursements to transit operators for a percentage of their public transit operating expenses. Eligible participants are defined by the Downstate Public Transportation Act. Currently the funding for transit operations stands at 65 percent reimbursement for eligible transit operating expenses.

Likewise, there are numerous other funding sources that may be available. This LRTP did not take into account those funds which could not be reasonably expected to be available for the general maintenance of existing infrastructure or construction of new roads or trails. The available funding sources also do not take into account all funds that may be received by a particular entity in any given year. For example, some communities use all of the MFT funding for maintenance, while others use it for what they classify as "new construction." This LRTP requires less reliance on funding sources that cannot be reasonably expected to be available. With the passing of MAP-21 and continued with the FAST Act, fiscal constraint and reasonable expectations are mandatory considerations to factor into the transportation planning process.

13.6.3 Local Funding Sources

The basis of local funding for transportation projects in the municipalities and Kankakee County is primarily through federal and state allocations and block grants. However, additional revenues exist which primarily come from property taxes, sales taxes, special assessments, and special tax districts. General funds for roadway maintenance may be obligated from the general property, sales, and other tax proceeds for transportation purposes. While this represents a funding source, the trend in local government is to use general fund property tax proceeds for operation and maintenance. Additional funding includes:

- Township Bridge Program - Township Bridge Program funds are used to construct bridges twenty feet or more in length for the safe transportation of school children, the movement of agriculture equipment and products, rural mail routes, and the traffic needs of the general public. Funds are allocated to each eligible road district based on the total township road mileage. Townships must levy a 0.08 percent road and bridge tax to qualify for the allocation.
- Bonds - Transportation projects may be financed using bonded indebtedness. This method allows a unit of government to raise capital through the sale of public bonds to be repaid with interest using general property tax receipts, motor fuel tax, or revenue from the project after completion. The City of Kankakee has used this financing method to complete several public transportation projects.
- Tax Increment Financing (TIF) - The TIF technique captures all increases in property tax resulting from improvements to a property until such time as allowable project expenses have been paid. Proposed improvements and planned expenditures are defined in a plan and must meet eligibility requirements under the enabling legislation. Local governments define the TIF district and program in consultation with other units of local government impacted by the proposed district.
- Capital Improvement Program (CIP) - Funding for near-term (one to five years) transportation projects identified in the state's multi-year program, a municipalities' capital improvement program (CIP), and Kankakee County's CIP. Estimates of near-term transportation funding is based on appropriated levels of federal funding, cash flows of state funding sources, and city and county bonding programs and general revenue sources.

13.6.4 Private Sector Funding Sources

As a community grows, vacant land or farmland is often converted to urban uses. As part of those changes, land developers pay the cost of infrastructure development including streets. Particularly as it relates to commercial and industrial development, developers pay a large share of arterial and collector street widening, enhancements, or rehabilitation. The continued enforcement and management of growth through subdivision code administration minimizes the cost to the community.

When developing major roadways, units of local government may negotiate with private interests to share the development costs of arterial or collector streets that provide direct benefit to private interests. The amount of money available using this technique is limited only by the degree of commitment and the willingness of the private sector to share in those costs.

Impact fees are costs assigned to new development for the maintenance of existing facilities. Developers pay these fees with costs generally passed on to the eventual owners of the property.

Under Illinois law, special service taxing districts may be established for the purpose of construction and financing public improvements within a defined service area. It could be the practice of local governments in Kankakee County to respond to citizen inquiries requesting that special taxing district(s) is/are created to fully assess interest within the proposed district. Projects that could be considered under this financing method include street lighting, street construction or rehabilitation, and sidewalk construction.

A special assessment district is established under Illinois law for the purpose of financing and providing certain public facilities. A special assessment district is established through a judicial process that attempts to fairly allocate costs between private and public interests. These funds have typically been used for utility projects and not transportation projects.

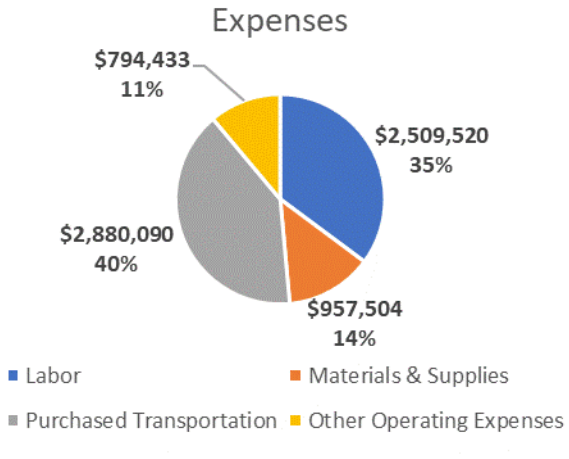
13.7 Public Transportation Funding

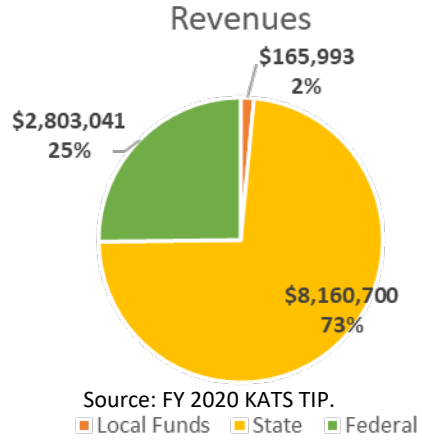
METRO operates a very successful public transportation system that ranks very high compared to its peer systems in Illinois. This plan recommends that METRO continue with a strategic investment approach that responds to current and projected travel demand. **Chapter 5** outlines possible service enhancements that could be evaluated further in the coming years.

Fiscally Constrained Transit Plan

A feasible transit service relies upon secure funding sources and sufficient revenue to support the continuing operation and potential expansion of public transportation services. **Figure 13-3** summarizes current year revenues and expenditures as provided by METRO. Based on current operating practice, METRO is in a solid financial operating situation and will continue to identify opportunities to expand/enhance services as funding allows.

Figure 13-3: Baseline Expenses and Revenues





Source: FY 2020 KATS TIP.

13.7.1 State Funding

The most important aspect of state funding is the reimbursement of 65 percent of eligible transit operating expenses. Illinois does this through the provision of the Downstate Public Transportation Fund, which provides reimbursements to transit operators for a percentage of their public transit operating expenses. Eligible participants are defined by the Downstate Public Transportation Act.

13.7.2 Federal Funding Programs

The FTA administers several funding programs that are applicable to the transit service in the MPA. Applicable funding programs are detailed in the bulleted list below:

- Urbanized Area Formula Program – The FAST Act has maintained the Urbanized Area Formula Program, which provides resources to urbanized areas and to governors for transit capital and operating assistance in urbanized areas and for transportation related planning. An urbanized area is an incorporated area with a population of 50,000 or more that is designated by the U.S. Department of Commerce, Bureau of the Census. For urbanized areas under 200,000 in population, apportionments of these funds are based on population and population density. Eligible purposes for Urban Area Formula funds include:

    - Operating expenses, to offset the operating deficit.
    - Planning, engineering, design, and evaluation of transit projects and other technical transportation-related studies.
    - Capital investments in bus and bus-related activities such as the replacement of buses, overhaul of buses, rebuilding of buses, crime prevention and security equipment, and construction of maintenance and passenger facilities.
    - All preventive maintenance and some Americans with Disabilities Act complementary paratransit service costs are considered capital costs.

- Metropolitan Planning Program - This program provides funding to support the cooperative, continuous, and comprehensive planning program for making transportation investment decisions in metropolitan areas. State DOTs and MPOs may receive funds for purposes that support the economic vitality of the metropolitan area. Funds are apportioned to states using a formula that includes consideration of each state's urbanized area population in proportion to the urbanized area population for the entire nation, as well as other factors.
- Bus and Bus Facilities Formula Program - This program provides capital assistance for new and replacement buses and for bus related facilities. Section 5339 funds, as they relate to the MPA, would be used generally for replacement of buses and improving/maintaining existing transit facilities. Funds are apportioned to states on the basis of population, vehicle revenue miles, and passenger miles. Funds would then be distributed by the state to the urbanized areas.

13.7.3 Special Federal Programs and Grant Funding

- Flexible Funds are certain legislatively specified funds that may be used either for transit or highway purposes. The idea of flexible funds is that a local area can choose to use certain Federal surface transportation funds based on local planning priorities and not on a restrictive definition of program eligibility. Flexible funds include FHWA, STP, and FTA Urban Formula Funds.

- National Highway System (NHS) Program - This program provides funding for a wide range of transportation activities. Eligible transit projects under the NHS program include fringe and corridor parking facilities, bicycle and pedestrian facilities, carpool and vanpool projects, and public transportation facilities in NHS corridors where they would be cost effective and improve the level of service on an NHS limited access facility.

13.7.4 FTA Funding

FTA provides funding for transit projects. FTA funding can be used for a variety of transit improvements such as new fixed guideway projects, bus purchases, construction and rehabilitation of rail stations, maintenance facility construction and renovations, alternative-fueled bus purchases, bus transfer facilities, multimodal transportation centers, and advanced technology fare collection systems. Two specific programs include the following:

- STP-U and STP-Rural Programs - The Surface Transportation Urban (STU) and Rural (STR) programs (described earlier in the Roadway section of this chapter) provide the greatest flexibility in project funding. These funds may be used (as capital funding) for public transportation capital improvements, car and vanpool projects, fringe and corridor parking facilities, bicycle and pedestrian facilities, and inter-city or intra-city bus terminals, and bus facilities. As a funding source for planning, these funds can be used for surface transportation planning activities, wetland mitigation, transit research and development, and environmental analysis. Other eligible projects under STP include transit safety improvements and most transportation control measures.
- Ladders of Opportunities Initiative - This new FTA program is focused on enhancing access to work for disadvantaged communities, supporting economic opportunities, offering transit access to employment centers, and providing for educational and training opportunities. Recipients are able to use the funds towards the modernization of vehicle fleets and transit-related facilities.

13.8 Non-Motorized Funding Sources

13.8.1 Non-Motorized Funding Sources

- Illinois Transportation Enhancement Program (ITEP) - The ITEP program provides financial assistance and funding for projects that provide alternative modes of transportation. It is also designed to support enhancements that improve cultural, historic, aesthetic, and environmental aspects of the transportation system. But the main focus of the program is on non-motorized travel. Any governing agency with taxing authority is eligible to apply for funding from ITEP. Funding awards are contingent on the availability of matching local funds, as well as the initiation of a project within three years of award notice.
- Illinois Bicycle Path Grant Program - The Illinois Bicycle Path Grant Program was created in 1990. Its purpose is to provide financial assistance to eligible units of government for acquiring, constructing, and rehabilitating publicly-used, non-motorized bicycle and pedestrian paths and directly related support facilities. Project applications are limited to land acquisition or trail development along a single trail corridor. Bicycle routes sharing existing roadway surfaces are not eligible for funding consideration under this program. Agencies eligible for assistance under this program are any unit of local government with statutory authority to provide lands for public bicycle path purposes. This includes, but is not limited to; counties, townships, municipalities, park districts, and conservation and forest preserve districts. Federally funded projects in Phase I or Phase II engineering are not eligible

for Bicycle Path funding consideration. The Bicycle Path grant program provides up to a maximum of 50% funding assistance on approved local project costs. The maximum grant assistance for construction projects is limited to $200,000 per annual request. There is no maximum grant amount limit for acquisition projects other than the established annual state appropriation level for the program. Revenue for the program comes from a percentage of vehicle title fees collected pursuant to Section 3-821(f) of the Illinois vehicle code.

- Recreational Trails Program (RTP) - The Federal RTP was created through the National Recreational Trail Fund Act (NRTFA) enacted as part of MAP-21. This program is being funded as a set-aside from the Transportation Alternatives Program. The RTP provides funding assistance for acquisition, development, rehabilitation and maintenance of both motorized and non-motorized recreation trails. By law, 30 percent of RTP funding allocated to each state must be targeted for motorized trail projects, with another 30 percent reserved for non-motorized trail projects, and the remaining 40 percent used for multi-use motorized or non-motorized trails or a combination thereof. In Illinois, RTP funds are administered by the Illinois Department of Natural Resources (IDNR) in cooperation with IDOT and FHWA. The Illinois Greenways & Trails Council serves as the official "State Trails Advisory Board" as required by NRTFA. Eligible applicants include federal, state, local government agencies, and not-for-profit organizations. The RTP provides up to 80 percent federal funding on approved projects and requires a minimum 20 percent non-federal funding match. Eligible projects include:

    - Trail construction and rehabilitation.
    - Restoration of areas adjacent to trails damaged by unauthorized trail use.
    - Construction of trail-related support facilities and amenities such as trail head parking, restrooms, rest areas, signage, etc.
    - Acquisition from willing sellers of trail corridors through easements or fee simple title.

- Community Development Block Grant (CDBG) Funds - CDBG funds are allocated to metropolitan areas by the federal government on a formula basis. These funds must be used to principally benefit low and moderate-income persons and must be an eligible activity as defined by program regulations. Historically, these funds have been used in the MPA to help with the replacement of sidewalks of eligible low and moderate-income neighborhoods.
- Other Grants - Other grants to assist in motorized recreational trails include the Local Government Snowmobile Program, the Snowmobile Trail Establishment Fund, and the Off-Highway Vehicle (OHV) Recreation Trails Program. Additional information on these programs is available from IDOT.

13.9 Freight Funding Sources

Funding for the maintenance of rail freight facilities comes primarily from private sources. Some economic development grants could be used to plan intermodal facilities or other projects that would attract or create jobs. With the growing emphasis on freight movement and the coordination of rail and highway transportation, more attention will be given to this transportation sector in the future. The responsibility of the MPO is to provide the requisite planning for the infrastructure needs to support intermodal or other new rail facilities. The initial planning will have to quickly transition to design and construction as the new facilities will stress the existing infrastructure, once the facility is completed.

13.10 Title VI Non-Discrimination and Environmental Justice

13.10.1 Overview

The Federal Highway Administration (FHWA) and the Federal Transit Authority (FTA) have set forth requirements for compliance with Title VI provisions of the Civil Rights Act of 1964. The purpose is to provide recipients of federal funding with guidance and instructions necessary to carry out U.S. Department of Transportation (USDOT) Title VI regulations (49 CFR part 21) and to integrate into their programs and activities with considerations expressed in the USDOT's "Policy Guidance Concerning Recipient's Responsibilities to Limited English Proficient ("LEP") Persons (70FR 74087, December 14, 2005)."

FHWA and FTA require environmental justice considerations in compliance with Title VI of the Civil Rights Act (42 U.S.C. 2000-1) states that

> "No person in the United States shall, on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program, or activity receiving Federal financial assistance."

The Executive Order on Environmental Justice further amplifies Title VI by providing that "each Federal agency shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations." Information and statistics about the demographics of the KATS MPA are discussed in **Chapter 2**.

FHWA and FTA establish policy guidelines that focus on the following:

- Inclusion - Ensure that all communities that could potentially be affected by the transportation decision making process have the opportunity to participate and be represented.
- Guarantee of Benefits - Prevent the denial, reduction, or significant delay of the receipt of benefits to minority and low-income populations.

13.10.2 Environmental Justice Analysis

The Environmental Justice (EJ) analysis evaluates the location of the recommended transportation improvements in relation to EJ populations. EJ populations, including minority, low-income, and limited English proficiency populations, are defined within the KATS MPA by using 2010 U.S. Census tract data.

13.10.3 Minority Population

Minority population is defined as any identifiable group of minority persons who live in geographic proximity. Additionally, minority populations can include geographically dispersed or transient persons who would be similarly affected by a proposed transportation improvement. Minority persons include those who are American Indian, Alaska Native, Asian, Black or African American, Hispanic or Latino, and Native Hawaiian and Other Pacific Islander. For the purpose of the EJ analysis, a census tract having a minority population of 50% or greater is defined as an EJ area. The data used for this analysis is 2013-2017 five-year ACS at the census tract level.

13.10.4 Low-Income Population

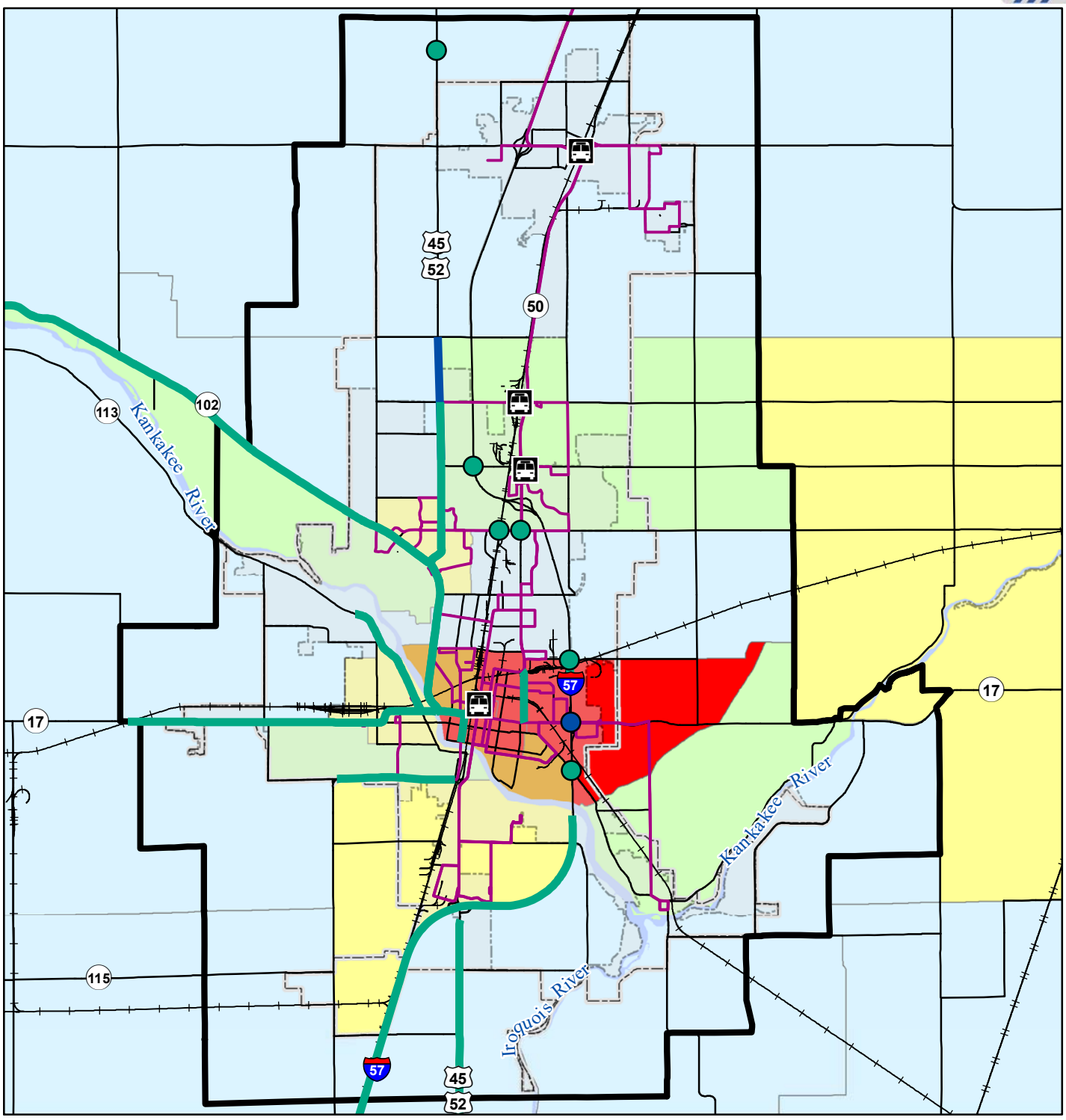
Low-income populations were defined by the median household income. For the purpose of this analysis, census tracts having households below the poverty level at 35-percent or greater is defined as an EJ area. The data used for this analysis is 2013-2017 five-year ACS at the census tract level. Identifying areas of poverty can assist in identifying potential areas which might by adversely affected by the transportation improvements. The low-income population of the MPA has the highest concentration in central and southern portions of Kankakee. Some low-income areas share the same geographic boundaries described in the minority population section.

13.10.5 Limited English Proficiency Population

Limited English Proficiency (LEP) populations, defined by the U.S. Census Bureau as individuals over age five that identify as being able to "speak English less than very well". For the purpose of this analysis, census tracts having an LEP population of 11-percent or greater is defined as an LEP area. The highest census tract, in western Bradley, had 12.1 percent of LEP individuals. The data used for this analysis is 2013-2017 five-year ACS at the census tract level. Identifying LEP areas can assist in identifying potential areas which might by adversely affected by the transportation improvements.

Figure 13-4 displays the percentage of minority population by census tract within the KATS MPA. **Figure 13-5** illustrates the percentage of households below poverty the poverty level by census tract within the KATS MPA. **Figure 13-6** shows the percentage of population over the age of five that "Speaks English less than very well" by census tract within the KATS MPA. **Figure 13-7** displays an overall view of environmental justice areas used for the EJ analysis.

Figure 13-4: Percent Minority Popuation by Census Tract



Percent Minority Population

- 0% - 9.9%
- 10% - 19.9%
- 20% - 29.9%
- 30% - 49.9%
- 50% - 84.3%

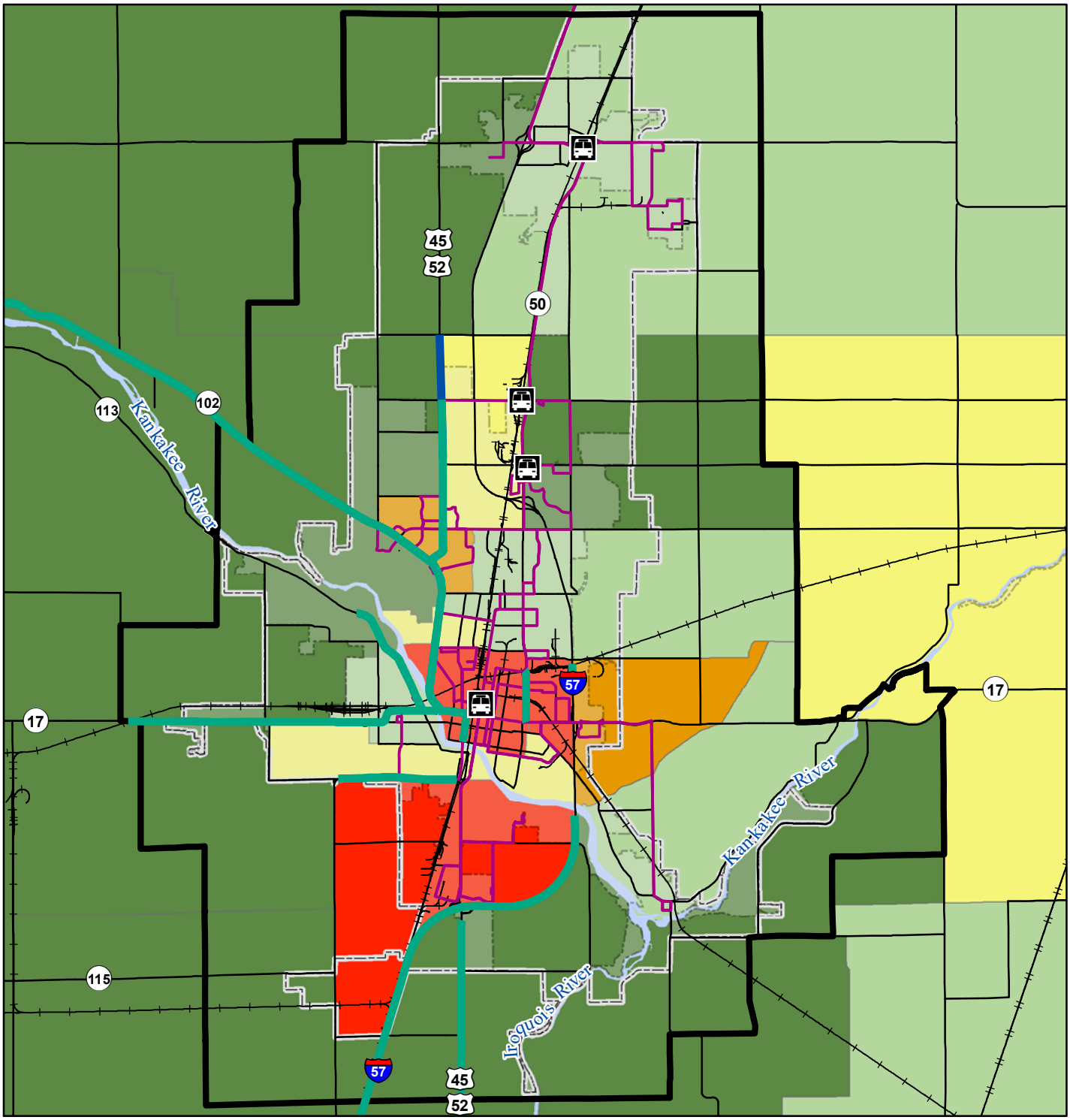
- Tier 1 (TIP Fiscally Contrained)
- Tier 1 (Fiscally Constrained)
- Transfer Stations
- River Valley Metro Routes
- Census Urbanized Area (UZA)
- Adjusted Urbanized Area (UAB)
- Metropolitan Planning Area (MPA)

N

Miles
0 ½ 1 2 3 4 5

Data Sources: Street Centerlines (2018), Illinois Department of Transportation, 2013-2017 5-year ACS Minority Population Data and UZA, U.S. Census Bureau, METRO Routes (2019), METRO, Other data - Kankakee County.
Disclaimer: This map is for reference only. Data provided are derived from multiple sources with varying levels of accuracy. Kankakee Area Transportation Study disclaims all responsibility for the accuracy or completeness of the data shown.

Figure 13-5: Percent Below Poverty Level by Census Tract in the KATS MPA



Percent Below Poverty Level

- 0% - 6.9%
- 7% - 12.9%
- 13% - 21.9%
- 22% - 34.9%
- 35% - 46.3%
- Tier 1 (TIP Fiscally Contrained)
- Tier 1 (Fiscally Constrained)

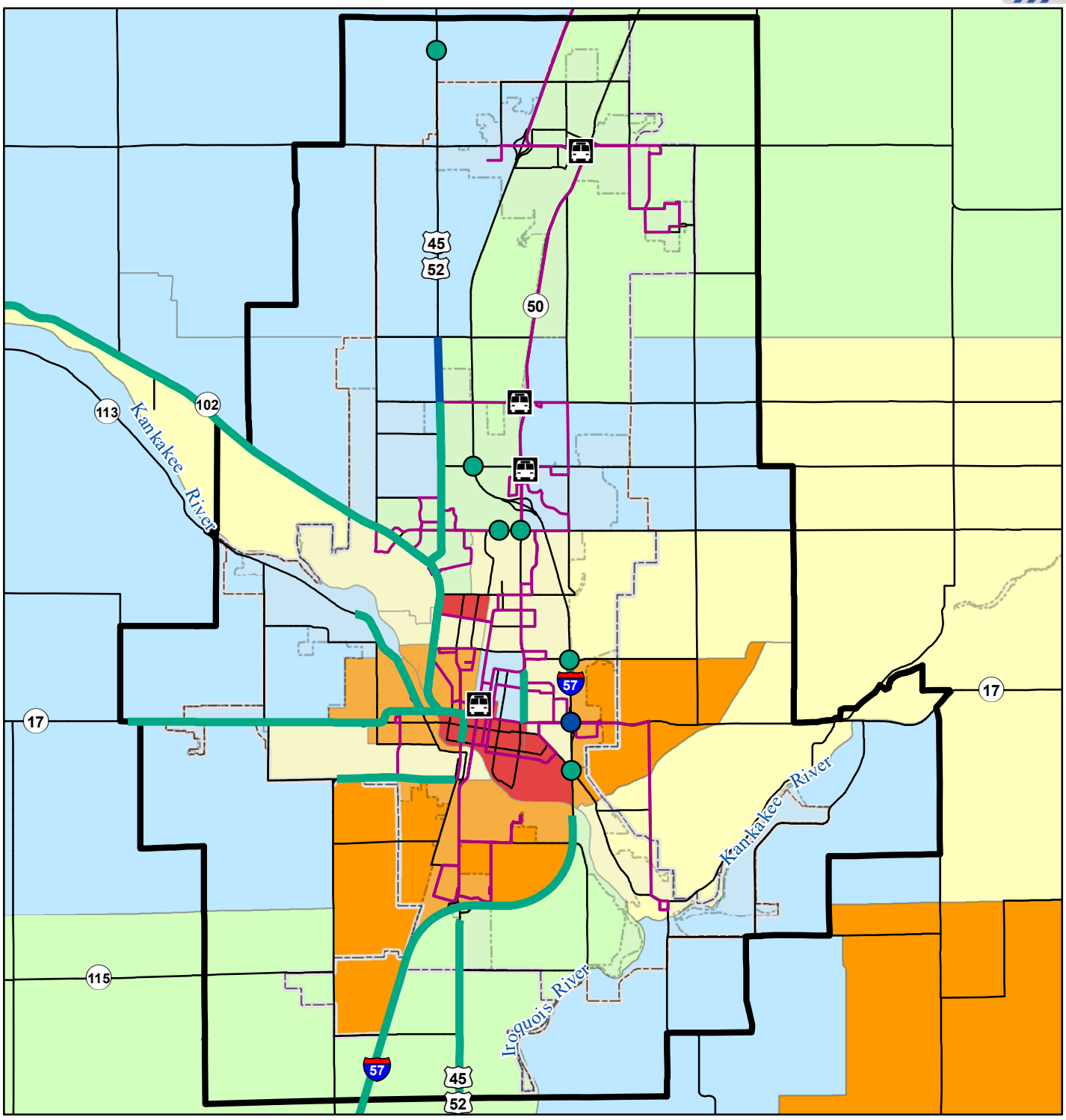
- Transfer Stations
- River Valley Metro Routes
- Census Urbanized Area (UZA)
- Adjusted Urbanized Area (UAB)
- Metropolitan Planning Area (MPA)

N

Miles
0 ½ 1 2 3 4 5

Data Sources: Street Centerlines (2018), Illinois Department of Transportation, 2013-2017 5-year ACS Poverty Level Data and UZA, U.S. Census Bureau,METRO Routes (2019), METRO, Other data - Kankakee County.
Disclaimer: This map is for reference only. Data provided are derived from multiple sources with varying levels of accuracy. Kankakee Area Transportation Study disclaims all responsibility for the accuracy or completeness of the data shown.

Figure 13-6: Percent "Speak English Less Than Very Well" Popuation by Census Tract in the KATS MPA



Percent "Speak English Less Than Very Well"

- Less than 1%
- 1% - 1.49%
- 1.5% - 4.49%
- 4.5% - 10.9%
- 11% - 12.1%

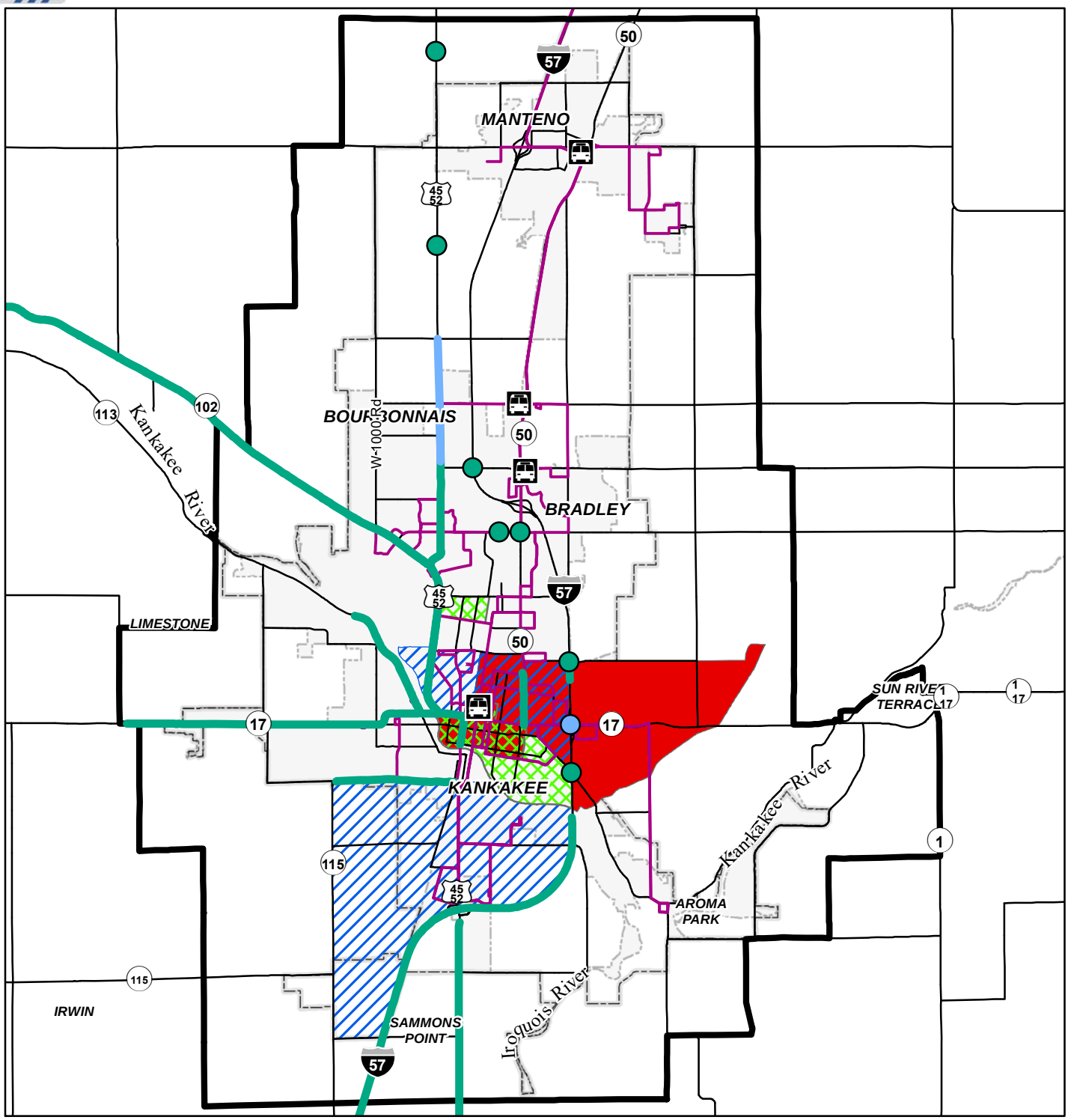
- Tier 1 (TIP Fiscally Contrained)
- Tier 1 (Fiscally Constrained)
- Transfer Stations
- River Valley Metro Routes
- Census Urbanized Area
- Adjusted Urbanized Area
- Metropolitan Planning Area

N

Miles
0 ½ 1 2 3 4 5

Data Sources: Street Centerlines (2018), Illinois Department of Transportation, 2013-2017 5-year ACS Ability to "Speak English Less Than Very Well" Data and UZA, U.S. Census Bureau 2017 METRO Routes (2019), METRO, Other data - Kankakee County. Disclaimer: This map is for reference only. Data provided are derived from multiple sources with varying levels of accuracy. Kankakee Area Transportation Study disclaims all responsibility for the accuracy or completeness of the data shown.

Figure 13-7: Environmental Justice by Census Tract in the KATS MPA



Data Sources: Street Centerlines (2018), Illinois Department of Transportation, Minority Population, 2013-2017 5-year ACS Ability to "Speak English Less than Very Well", and Population Below Poverty Level Data, U.S. Census Bureau, METRO Routes (2019), METRO, Other data - Kankakee County. Disclaimer: This map is for reference only. Data provided are derived from multiple sources with varying levels of accuracy. Kankakee Area Transportation Study disclaims all responsibility for the accuracy or completeness of the data shown.

13.11 Environmental Mitigation

The federal government, through MAP-21 and continued with the FAST Act, the mandates of various departments and bureaus, requires that environmental impacts and mitigation be an integral part of the planning processes, which includes those of the LRTP.

IDOT administers all projects receiving federal funds, whether under state or local jurisdiction and ensures that projects adhere to all applicable state and federal environmental laws. Since most transportation projects require a plan to address environmental impacts, IDOT and KATS will continue to incorporate environmental mitigation policies and strategies while making transportation improvements. KATS continues to foster positive relationships with environmental groups, government agencies and the public at large when discussing infrastructure projects and has worked to make it part of the transportation planning process.

13.11.1 Environmental Objectives

KATS is committed to wise stewardship of transportation planning dollars and effective decision making, including project selection, which will be integrated and coordinated with land use, water, and natural resource planning and management. The KATS plan encourages the establishment of environmental suitability as a key limiting factor in determining the nature and location of future development. This principle of environmental sensitivity applies to transportation planning, and by extension major modification of the transportation system. The identification of a full range of environmental concerns will occur early during the transportation planning and project development process.

KATS has developed the objectives listed below to aid in the incorporation of environmental planning:

- Maintain and support the transportation system with improvements that are environmentally responsible and support conservation of the regions natural, cultural, historic, and aesthetic resources.
- Ensure that social, environmental, energy, regional and community, and other non-transportation goals, plans, and programs affecting transportation are considered in all phases of the transportation planning process.
- Identify, implement, or support public investment in transportation facilities and services that effectively address social, environmental, and energy goals of the community;
- Evaluate innovative methods for mitigating the environmental impacts of transportation facilities and improvements.
- Encourage a shift of new developments that are typically scattered and are primarily private vehicle oriented to areas that are transit and pedestrian-oriented and that have existing transportation infrastructure in place and use conservation design techniques.

13.11.2 IDOT Environmental Mitigation Strategies and Procedures

The National Environmental Policy Act (NEPA) requires full disclosure of the impacts that federally funded transportation projects would cause to the surrounding environment. NEPA also requires that impacts to resources be avoided altogether if possible. If impacts cannot be avoided, measures must be taken to minimize those impacts by compensation or mitigation.

Based on IDOT's mission, the provisions of state and federal environmental laws make every attempt to minimize negative environmental impacts of projects it funds and directs both during construction and after completion. IDOT policies, strategies, and procedures are specifically designed to identify potential environmental impacts and to proactively take all reasonable steps to ensure minimal environmental disruption or other negative consequences. There are several key areas in which environmental mitigation activities are focused. The following are the most commonly identified areas:

- Section 4(f) Lands
- Section 6(f) Land Conversions
- Cultural Resources (Historic Properties and Archaeological Sites)
- Threatened and Endangered Species (State and Federal) and Natural Areas
- Farmlands
- Wetlands
- Floodplains
- Noise Abatement
- Air Quality

13.11.3 Section 4(f) Lands

Section 4(f) of the USDOT Act of 1966 applies to any USDOT funded project which involves the use of any significant public park, recreation area, or wildlife and waterfowl refuge and any land from a historic site of national, state, or local significance. Special environmental analyses are required to determine if there is a feasible or prudent alternative to taking the proposed action involving the use of the 4(f) property. In addition, the project sponsor must demonstrate that all possible planning to minimize harm has occurred. These measures to minimize harm, which include mitigation, will be documented in the 4(f) evaluation. IDOT, as part of its Bureau of Design and Environment (BDE) manual has procedures in place for completing 4(f) evaluations that document these findings.

13.11.4 Section 6(f) Land Conversion

Section 6(f) of the Land and Water Conservation Fund Act of 1965 applies to any USDOT funded projects which involve the use of lands that have Land and Water Conservation (LAWCON) or Open Space Land Acquisition and Development (OSLAD) funds involved in their purchase or development. IDOT, as part of its BDE manual, has procedures in place for handling 6(f) lands when developing highway projects. These procedures focus on early and on-going coordination with local officials as well as the Illinois Department of Natural Resources.

13.11.5 Cultural Resources (Historic Properties and Archaeological Sites)

When IDOT develops a federally funded or regulated project, appropriate measures are taken to avoid and minimize impacts on properties that are included in or eligible for the National Register of Historic Places. Where such properties will be affected, the Advisory Council on Historic Preservation shall be afforded a reasonable opportunity to comment prior to project approval. Special efforts shall be made to minimize harm to any national historic landmark. The BDE manual contains specific procedures for minimizing harm to historic resources in cooperation with the Advisory Council on Historic Preservation and the State Historic Preservation Officer.

13.11.6 Threatened and Endangered Species and Natural Areas

During the development of a project, special studies and coordination are required when the action may affect federally-listed threatened and endangered species. Studies and coordination are also required for actions that may adversely impact state-listed species. IDOT also conducts studies and coordination activities on actions that may adversely impact areas included in/or are eligible for the Illinois Natural Areas Inventory. It is IDOT's policy that during the development of a project, an assessment shall be made of the likely impacts on species of plants or animals listed at the federal or state level as threatened or endangered or on state-designated natural areas. Every effort is made to minimize the likelihood of jeopardizing the continued existence of listed threatened or endangered species or the destruction or adverse modification of a natural area. Efforts are also made to avoid negative impacts on areas of habitat designated as critical habitat or essential habitat. The BDE manual specifies procedures for avoiding or mitigating impacts on endangered or threatened species and natural areas including consultation with the U.S. Fish and Wildlife Service and the Illinois Department of Natural Resources.

13.11.7 Farmlands

In the development of a project, consideration is given to the impacts that the action will cause the conversion of farmland to non-farm uses. Under certain circumstances, coordination must be initiated with the U.S. Department of Agriculture, Natural Resources Conservation Service and/or the Illinois Department of Agriculture to evaluate the impacts on farmland and obtain the views of those agencies on alternatives to the proposed action. Proposed actions will be developed to be compatible with state, local government, and private programs and policies to protect farmland. The BDE manual outlines coordination procedures and defines those lands subject to these provisions.

13.11.8 Wetlands Preservation

The protection and preservation of wetlands is an important environmental goal of IDOT. In this area, mitigation efforts are coordinated with other state and federal agencies and are clearly defined in both policy and procedures.

The Illinois Interagency Wetland Policy Act of 1989 (IWPA) includes the identification and delineation of jurisdictional wetlands. The Wetlands Group within the Illinois Natural History Survey performs this work under a statewide contract with IDOT. Under the Clean Water Act (CWA) and IWPA, IDOT must demonstrate that all measures were taken to first avoid and then minimize impacts to wetlands to the fullest extent practicable. Unavoidable impacts are mitigated by way of wetland compensation through either restoration or creation of wetlands. Methods used by IDOT to restore or create wetlands follow the Illinois Wetland Restoration and Creation Guide. In addition to the INHS Wetlands Group the Wetland's Geology Section at the Illinois State Geological Survey provides technical assistance to IDOT in locating, evaluating, and monitoring compensatory wetlands. All IDOT wetland compensation plans include a commitment to monitor planned wetlands for the attainment of performance standards. Departmental procedures for ensuring compliance with the CWA and IWPA are detailed in IDOT Wetlands Action Plan.

13.11.9 Wetland Mitigation Bank Sites

IDOT has also worked closely with IDNR to establish two wetland mitigation bank sites, including the 830-acre Morris site located in north-central Grundy County and the 1640-acre LaGrange site located in extreme northeastern Brown County. At these sites, wetlands will be restored in advance of unavoidable

losses from highway projects. Impacts within the bank's approved service area may be mitigated at the bank. Instruments for both bank sites were prepared in accordance with the "Federal Guidance for the Establishment, Use and Operation of Mitigation Banks." Other agencies involved in the development of these sites included the U.S. Fish and Wildlife Service, the U.S. Army Corps of Engineers, and the U.S. Environmental Protection Agency.

13.11.10 Floodplains

In the development of a federally funded project, special requirements are imposed by Executive Order 11988 when the project will entail a significant floodplain encroachment. These requirements are in addition to floodplain permit requirements and the special hydraulic analyses associated with determining bridge and culvert heights and widths for projects located in floodplains. A project that will result in significant floodplain encroachment will require the preparation of an Environmental Assessment or Environmental Impact Statement. Both the BDE manual and the IDOT Water Quality Manual provide additional information and procedures for projects involving floodplains.

13.11.11 Noise Abatement

Federal laws and regulations require that it is necessary to undertake special technical analyses to identify and evaluate the potential noise impacts a project will involve. Once a noise impact is identified, IDOT will evaluate feasible and reasonable noise abatement methods to reduce traffic noise impacts. Traffic noise can potentially be reduced by addressing the noise source, noise path, or noise receiver. The BDE manual includes specific guidance and procedures for determining the need for noise abatement evaluations and the types of mitigation strategies that are appropriate for a variety of situations. The manual also specifies coordination requirements with local government and public participation procedures.

13.11.12 Air Quality

All transportation plans, programs, and projects which are funded or approved under Title 23 U.S.C. must be determined to conform to state or federal air implementation plans as required by the Clean Air Amendments of 1990 and subsequent federal regulations. Such implementation plans describe how air quality standards will be achieved in those areas of a state in which standards are being exceeded. This requirement helps regulate projects and guarantees that any new projects may not cause or contribute to new violations of air quality standards, exacerbate existing violations, or interfere with the timely reduction of emissions as reflected in the State Implementation Plan.

Illinois has areas in which standards are being exceeded for one or more criteria pollutants. Transportation-related criteria pollutants include ozone, carbon monoxide, nitrogen dioxide as well as both particulates and fine particulates (Particulate Matter: 10 and Particulate Matter: 2.5). These pollutants are modeled in non-attainment areas in order to determine the required conformity with air quality requirements. The KATS MPA is an attainment area and is in compliance with air quality standards and within the parameters of transportation-related pollutants.

13.11.13 Environmental Mitigation Analysis

KATS maintains a comprehensive series of GIS layers and associated databases pertaining to environmentally sensitive and geographically significant areas. The layers include floodplains, soils including those which are highly erodible, wetlands, oil and coal fields, conservation and recreation areas,

greenways and brownfield/gray field site maps. The available layers and associated attribute tables continue to increase and grow as more inclusive and accurate information becomes available.

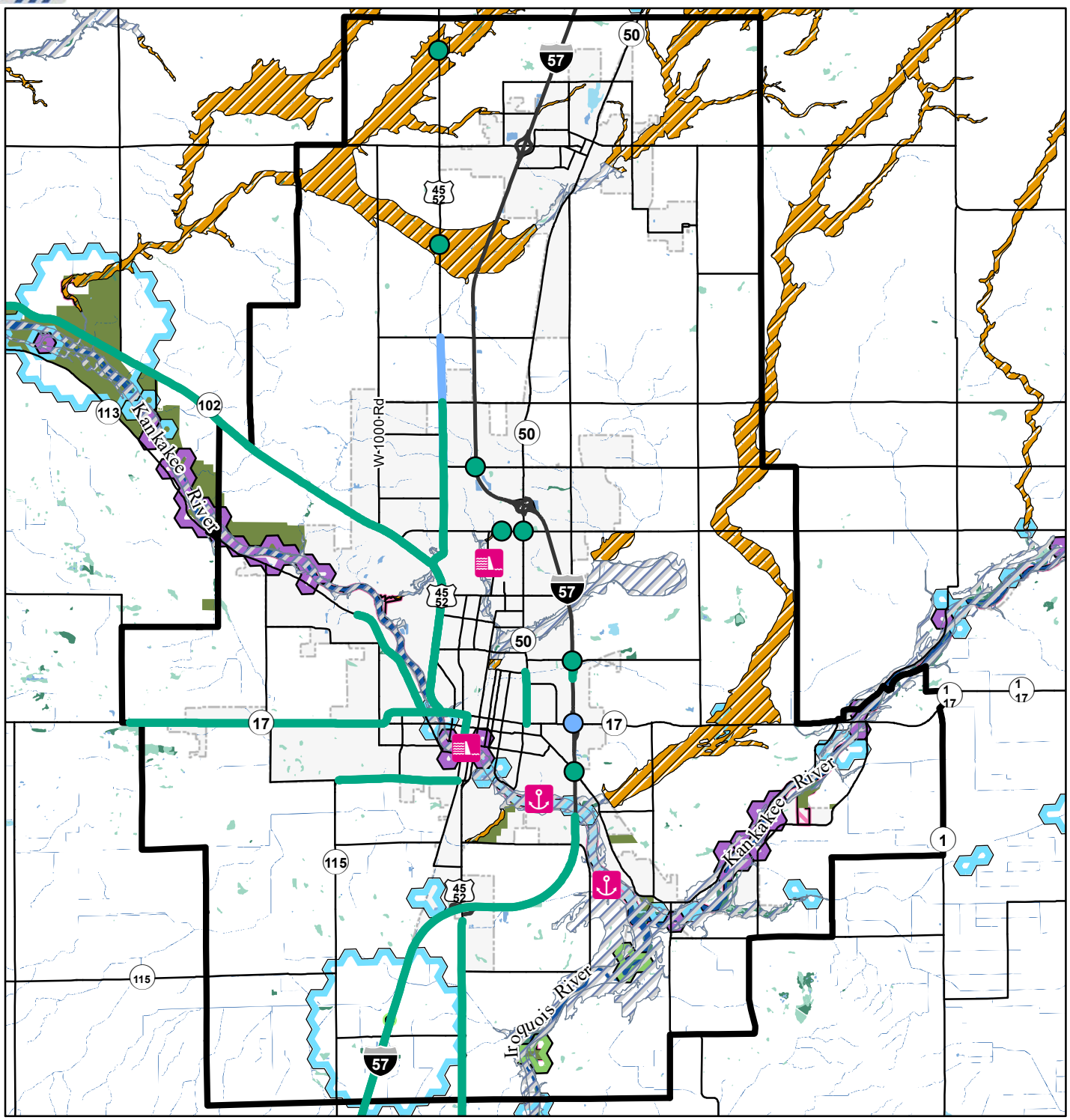
By comparing the environmental and transportation data layers, areas of critical concern or environmental incompatibility can be visually compared. For example, if a proposed road is on an alignment that would cross an environmentally sensitive area or a floodplain, KATS would be able to identify this in advance of a detailed study or engineering effort.

KATS will continue to cooperate and coordinate planning activities with all applicable local, state, federal, and quasi-public environmental resource agencies. KATS cooperatively maintains a timely, state of the art aerial mapping series of at least six-inch resolution, presented in full color and orthographically rectified.

Figure 13-8 depicts environmental assets with the fiscally constrained projects in the MPA.

Kankakee River near Davis Creek.

Figure 13-8: Environmental Assets with Fiscally Constrained Projects in the KATS MPA



Dam
Marina
Metropolitan Planning Area (MPA)

FEMA Flood Zones
100-Year Flood w/o BFE
100-Year Flood with BFE
Managed Lands
BFE = Base Flood Elevation

Wetland
Freshwater Emergent Wetland
Freshwater Forested/Shrub Wetland
Freshwater Pond
Lake
Riverine
Specially Designated Area
Environmentally Senstive Area

Sensitive Species
Aquatic Communities
TE Multiple Species Groupings
Terrestrial Natural Communities

Constrained Projects
Fiscally Consrained Projects
TIP Fiscally Constrained

N

Miles
0 ½ 1 2 3 4 5

Data Sources: Street Centerlines (2018), Illinois Department of Transportation, Flood Zones (2019), FEMA, Wetland Data, U.S. Fish and Wildlife Service, Sensitive Species and Habitat Data U.S. EPA and Illinois EPA, UZA, U.S. Census Bureau. Other data - Kankakee County.
Disclaimer: This map is for reference only. Data provided are derived from multiple sources with varying levels of accuracy. Kankakee Area Transportation Study disclaims all responsibility for the accuracy or completeness of the data shown.

13.12 Implementation Strategies

13.12.1 Future Functional Classification

Functional classification is a requirement for roadways to be eligible for federal funding. Road projects that are on non-classified roads, which are typically classified as local roads, are not eligible for the use of federal funds.

These road segments are not currently on the classified network but are projects identified in the Long-Range Plan:

- Tier 1 Projects
  - Cardinal Drive (1 mile) from 5000N Road to 6000N Road
  - 6000N Road (0.55 miles) from Illinois Route 50 to Cardinal Drive
  - Industrial Drive (~0.5 miles) from Industrial Drive dead end to Illinois Route 50 – New Construction
- Tier 2 Projects
  - Career Center Road (3 miles) from Bourbonnais Parkway (6000N Road) to 9000N Road
  - 1000E Road (2 miles) from Division Street (9000N Road) to 7000N Road
  - 1000E Road (3 miles) from 7000N Road to Larry Power Road (4000N Road) – New Construction
  - 2000W Road (1 mile) from Station Street to 1000S Road – New Construction
  - 1000W Road (Curtis Avenue) (1 mile) from Jeffery Street to 2000S Road – New Construction
  - 7000N Road (1/2 mile) from Route 50 to Cardinal Drive – New Construction
- Tier 3 Projects
  - Skyline Road (4000E Road) (6 miles) from 1000N Road to 7000N Road
  - Skyline Road (4000E Road) (1 mile) from 9000N Road to 10000N Road
  - 10000N Road (1 mile) from 3000E Road to Skyline Road (4000E Road)
  - 6000N Road (2 miles) from Career Center Road (1000W Road) to 3000W Road
  - 6000N Road (~2.5 miles) from the intersection of 6000N Road and Cardinal Drive to the intersection of 7000N Road and Skyline Road (4000E Road) – New Construction
  - Skyline Road (4000E Road) (1 mile) from 10000N Road to 11000N Road – New Construction
  - 3000S Road (~2.5 miles) from about 2500 S. 2000W Road to Interstate 57 – New Construction

For these roads to become part of the classified system, the Technical Advisory Committee will need to make a recommendation to the Policy Committee for approval. IDOT will also have to consent to the classification changes. FHWA makes the final approval of functional classification changes and requires involvement.

13.12.2 Corridor Preservation

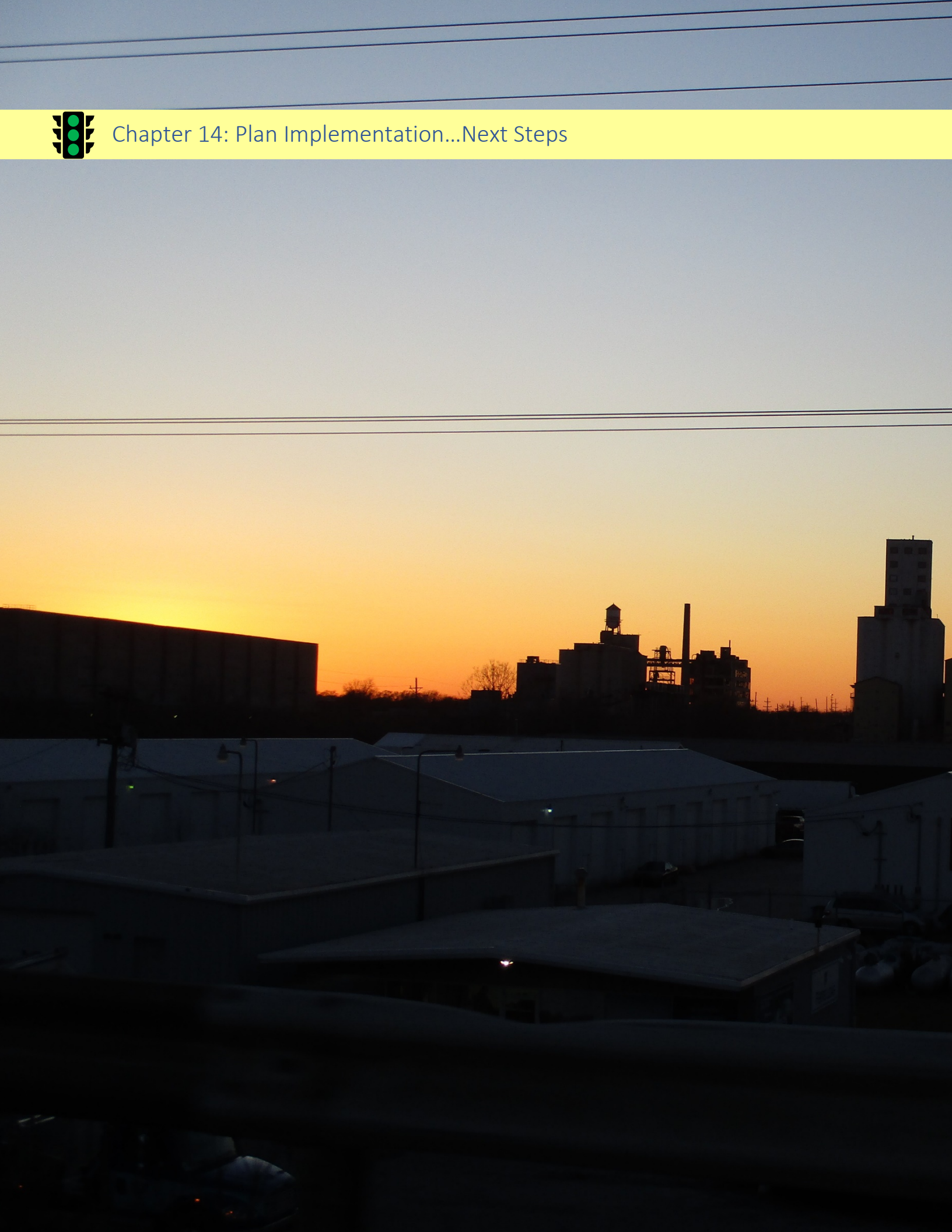
In 2003, Kankakee County developed a corridor preservation concept through the 2040 LRTP. The corridor preservation concept ranks roadways into four "tiers" to preserve right-of-way (ROW) for each of those "tiers" so that it is protected in the future according to its design character. These four levels and their associated ROW is shown in **Table 13-6.**

Table 13-6: Corridor Preservation Concept Tiers and ROW

Tiers	ROW Preservation
Tier 1 – Urban traffic with volumes where six lanes are being considered.	138 feet
Tier 2 – Traffic bordering on urban levels with traffic volumes at levels where four lanes are being considered.	110 feet
Tier 3 – Typical rural traffic with mid-level traffic volumes.	96 feet
Tier 4 – Rural traffic with lowest projected traffic volumes.	70 feet.

Interstate 57.

Chapter 14: Plan Implementation…Next Steps



The KATS 2045 LRTP is intended to be a guiding tool used by the KATS MPO committees, representative agencies, and communities to guide future transportation investments within the MPA. This plan plots the next 25 years of state and federal transportation system needs and investments within the region. The overall goal is to develop and support a transportation system that enhances accessibility to all users regardless of income, race, age, or physical ability. The LRTP is also an important document that supports economic development opportunities within the region. This plan reflects current and projected land uses, socioeconomic data, economic conditions, traffic conditions, and project priorities. Because there are five years until the next LRTP is adopted, the MPO has the ability to modify the plan if changes are needed. This section summarizes the LRTP amendment process and the next steps to consider.

When is the next LRTP update?

The KATS 2045 LRTP was adopted by the KATS Policy Committee on May 13, 2020. Current federal regulations require an MPO in an air quality attainment area to update their plan every five years (see additional information below). Assuming the Kankakee area continues to be designated as an attainment area, the next LRTP update will need to be completed and adopted by the MPO Policy Committee by May 13, 2025.

23 FR §450.324, Development and content of the metropolitan transportation plan.

a) The metropolitan transportation planning process shall include the development of a transportation plan addressing no less than a 20-year planning horizon as of the effective date. In nonattainment and maintenance areas, the effective date of the transportation plan shall be the date of a conformity determination issued by the FHWA and the FTA. In attainment areas, the effective date of the transportation plan shall be its date of adoption by the MPO.

b) The transportation plan shall include both long-range and short-range strategies/actions that lead to the development of an integrated multimodal transportation system to facilitate the safe and efficient movement of people and goods in addressing current and future transportation demand.

c) The MPO shall review and update the transportation plan at least every four years in air quality nonattainment and maintenance areas and at least every five years in attainment areas to confirm the transportation plan's validity and consistency with current and forecasted transportation and land use conditions and trends and to extend the forecast period to at least a 20-year planning horizon. The MPO may also revise the transportation plan at any time using the procedures in this section without a requirement to extend the horizon year. The transportation plan (and any revisions) shall be approved by the MPO and submitted for information purposes to the Governor. Copies of any updated or revised transportation plans must be provided to FHWA and the FTA.

Is it possible to amend the plan before the next LRTP update?

Yes, the KATS 2045 LRTP provides a snapshot of current conditions and projected future transportation needs within the MPA and the region. The LRTP reflects the best estimate at the time of adoption of what is projected to occur within the region through the year 2045. However, in many cases, new developments or other circumstances may create a situation where it is necessary to refine LRTP recommendations.

Transportation planning is a dynamic process that will require additional studies to refine general concepts, develop detailed cost estimates, and advance projects to construction or implementation. As this process occurs, it is not unusual for priorities to change or for new projects to be identified. LRTP amendments are not unusual and can be made through the appropriate process.

Adding projects to the LRTP, more specifically the fiscally constrained project list, will require MPO Policy Committee approval. If a project is being added to the fiscally constrained list, the MPO staff will need to demonstrate that the project costs (estimated planning level cost, or cost developed through the preliminary engineering stage) are reasonably expected to be covered by projected transportation revenues. Relatively low-cost projects may simply need to be added to the fiscally constrained project list so they can eventually be programmed in the TIP. More extensive projects, with more significant costs, may require additional analysis to demonstrate that the project is fiscally constrained. Project costs could warrant the MPO to adjust the fiscally constrained list. If this were to occur, the MPO Policy committee will want to carefully weigh the benefits of the impacted projects to be sure that the overall goals and objectives, and ultimately the transportation needs of the region, are being addressed.

Is it possible to move a project from a lower tier to the fiscally constrained list?

Yes, it is possible to move a project from a lower tier to the fiscally constrained list. It is also possible that a new project, not currently included in the LRTP, could be added to the fiscally constrained list of projects. The LRTP is intended to be a guiding document for achieving regional mobility goals and objectives. If new projects identified address the LRTP vision better, then it is appropriate to review and update the LRTP projects accordingly. The previous section on amending the plan provides additional information to consider.

What would be an appropriate reason to amend the LRTP?

There are no specific guidelines that warrant an LRTP amendment. Typically, plan amendments are triggered by detailed studies that identify a specific project, or an immediate infrastructure need that requires the LRTP to be modified. In other cases, planned land use changes or new development might necessitate the need to amend the LRTP to include the appropriate infrastructure. Furthermore, projects that are planned for improvement may need to be added to the functional classification system which could require extensive review by IDOT and FHWA. In the end, the MPO Policy Committee will need to discuss the reason for a potential LRTP amendment and will determine the appropriate action.

What can be done to ensure the LRTP remains relevant?

As previously stated, the LRTP is a guiding document that helps the MPO implement infrastructure improvements to meet regional transportation and mobility goals. The MPO committees and sub-committees should reference this document when looking at future development and infrastructure investments. Local communities and area transportation providers should also use the LRTP to enhance coordination and ensure consistency between local and regional needs and plans. If desired, the MPO Policy committee could decide to revisit the LRTP projects and priorities on an annual basis. This review could simply be a quick review to reaffirm the plan priorities or could involve a detailed assessment of the plan recommendations to see if projects still address major issues or concerns.

Illinois Route 17 junction with U.S. 45/52 in Kankakee.

Appendix

List of Acronyms

AADT	Annual Average Daily Traffic
AAR	American Association of Railroads
AASF	Army Aviation Support Facility
AASHTO	American Association of State Highway and Transportation Officials
ACS	American Community Survey
ADA	Americans with Disabilities Act
ARNG	Army National Guard
ATRI	American Transportation Research Institute
BDE	Bureau of Design and Environment
BFC	Bicycle Friendly Community
BLOS	Bicycle Level of Service
BNSF	Burlington Northern Santa Fe
BPAC	Bicycle and Pedestrian Advisory Commission
BTS	Bureau of Transportation Statistics
CAV	Connected and Autonomous Vehicles
CBPL	Combined Bike/Parking Lane
CDBG	Community Development Block Grant
CFR	Code of Federal Regulations
CH	County Highway
CIP	Capital Improvement Program
CMAP	Chicago Metropolitan Agency for Planning
CMAQ	Congestion Mitigation and Air Quality,
CN	Canadian National Railroad
CTA	Chicago Transit Authority
CWA	Clean Water Act
DCEO	Department of Commerce and Economic Opportunity
DNR	Department of Natural Resources
DOT	Department of Transportation
DUI	Driving Under the Influence
EJ	Environmental Justice

EVSE	Electric Vehicle Supply Equipment
EV	Electric Vehicle
FAA	Federal Aviation Administration
FAST	Act Fixing Americas Transportation Act
FHWA	Federal Highway Administration
FMCSA	Federal Motor Carrier Safety Administration
FTA	Federal Transit Administration
FY	Fiscal Year
GDL	Graduated Driver Licensing
GIS	Geographic Information System
HBP	Highway Bridge Program
HBP	Highway Bridge Program
HCV	Heavy Commercial Vehicles
HMVMT	Hundred-million vehicle miles traveled
HPMS	Highway Performance Monitoring System
HSIP	Highway Safety Improvement Program
HSTP	Human Services Transportation Plan
HTC	High-tension Cable
ICC	Illinois Commerce Commission
IDOT	Illinois Department of Transportation
ILSHIP	Illinois Strategic Highway Safety Plan
ISFAC	Illinois State Freight Advisory Council
ISTHA	Illinois State Toll Highway Authority
ITEP	Illinois Transportation Enhancement Program
ITS	Intelligent Transportation System
IWPA	Illinois Interagency Wetland Policy Art
KACOT	Kankakee Area Commuter Transit
KATS	Kankakee Area Transportation Study
KBSR	Kankakee, Beaverville & Southern Railroad
KCC	Kankakee Community College
KCRPC	Kankakee County Regional Planning Commission
KVAA	Kankakee Valley Airport Authority
LAWCON	Land and Water Conservation

LEP	Limited English Proficiency
LOTTR	Level of Travel Time Reliability
LRTP	Long Range Transportation Plan
MAP-21	Moving Ahead for Progress in the 21st Century Act
MFT	Motor Fuel Tax
MPA	Metropolitan Planning Area
MPO	Metropolitan Planning Organization
MP	Metropolitan Planning
MSA	Metropolitan Statistical Area
MUTCD	Manual on Uniform Traffic Control Devices
NAAQS	National Ambient Air Quality Standards
NACTO	National Association of City Transportation Officials
NEPA	National Environmental Policy Act
NGW	Natural Greenway
NHMP	National Highways & Motorway Police
NHPP	National Highway Performance Program
NHS	National Highway System
NHTSA	National Highway Traffic Safety Administration
NPMRDS	National Performance Management Research Data Set
NRTFA	National Recreational Trail Fund Act
NS	Norfolk Southern Railroad
OHV	Off-Highway Vehicle
ONU	Olivet Nazarene University
OSLAD	Open Space Land Acquisition and Development
PEP	Population Estimates Program
PHED	Peak Hour Excessive Delay
PY	Performance Year
ROW	Right-of-way
RPC	Regional Planning Committee
RR	Railroad
RTP	Recreational Trails Program
SAFETEA-LU	Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users
SLM	Shared Lane Markings/Sharrows

SOV	Single Occupancy Vehicle
SSA	South Suburban Airport
STBG	Surface Transportation Block Grant
STE	Surface Transportation Enhancements
STIC	Small Transit Intensive City
STP-R	Surface Transportation Program Rural
STP-U	Surface Transportation Program Urban
STP	Surface Transportation Program
TAC	Technical Advisory Committee
TAM	Transit Asset Management
TA	Transportation Alternatives
TEA-21	Transportation Equity Act for the 21st Century
TIF	Tax Increment Financing
TIP	Transportation Improvement Program
TPM	Transportation Performance Management
TSM	Transportation System Management
TTTRI	Truck Travel Time Reliability Index
UP	Union Pacific Railroad
USDOT	United States Department of Transportation
VMT	Vehicle Miles Traveled

List of Maps

Appendix