



2045 Long Range Transportation Plan

DRAFT for Public Review (8-30-2021)

[UPDATE] Scheduled to be Adopted October 4, 2021

SLATS 2045 Long Range Transportation Plan

Prepared for:

Stateline Area Transportation Study

Prepared by:

AECOM

303 East Wacker Drive, Suite 1400

Chicago, IL 60601

aecom.com

Final Report submitted:

October 2021

DRAFT REPORT

[Update accordingly following public review period] The SLATS Technical Advisory Committee and Policy Board adopted the 2045 LRTP at the October 4, 2021 MPO meeting. According to current law, the next required update of this LRTP should be completed by October 4, 2026.

Statement on COVID-19

The COVID-19 pandemic has created many challenges for the transportation industry, resulting in a host of uncertainties. The long-term impacts of the pandemic on travel demand, commute patterns, residential development, and economic activity were not clear at that time of this study. As such, the evaluation of current conditions, for the most part represent pre-pandemic conditions. Furthermore, due to safety/health concerns, the pandemic prevented the ability to conduct in-person MPO and public outreach meetings during the development of this LRTP. SLATS, along with the project team, conducted an extensive online outreach effort to reach a diverse group of stakeholders and the general public.

About SLATS

The Stateline Area Transportation Study (SLATS) established in 1974, is the federally designated Metropolitan Planning Organization (MPO) for the Beloit urbanized area (as defined by the US Census Bureau). The SLATS MPO is directed and governed by a Policy Board that includes chief elected officials or duly appointed representatives from the City of Beloit, Town of Beloit, Town of Turtle and Rock County in Wisconsin, and the City of South Beloit, Village of Rockton, Rockton Township, and Winnebago County in Illinois. Representation on the Policy Board also includes the Wisconsin Department of Transportation (WisDOT) and the Illinois Department of Transportation (IDOT).

A Technical Advisory Committee (TAC) that includes public works officials, engineers, planners and administrators from the member municipalities and counties, as well as local public transit representatives (Beloit Transit System and Stateline Mass Transit District) advise the Policy Board on regional transportation issues. Additional non-voting members include Federal Highway Administration (FHWA), Federal Transit Administration (FTA), WisDOT, IDOT, adjacent MPOs (Janesville and Rockford) and non-member municipalities with lands included in the SLATS Metropolitan Planning Area (MPA). The TAC reviews and recommends policies, proposals, and documents to the Policy Board. Final authority for approval lies with the Policy Board. **Table 1** and **Table 2** summarize the Policy Board and TAC representatives.

The City of Beloit is the lead agency for SLATS and the City of Beloit Engineering Division provides staff support for the administration of the MPO. SLATS is funded by annual grants or awards from FHWA, FTA, States of Wisconsin and Illinois and from most of the local governments represented on the Policy Board.

TABLE 1. SLATS POLICY BOARD

Wisconsin Members	Illinois Members
<ul style="list-style-type: none"> • City of Beloit Council President • City of South Beloit Mayor • Village of Rockton President • Town of Beloit Chair • Town of Turtle Chair 	<ul style="list-style-type: none"> • Rockton Township Chair • Rock County Board Chair • Winnebago County Board Chair • Southwest Region Planning Chief (WisDOT) • Region 2 Engineer (IDOT)

TABLE 2. SLATS TECHNICAL ADVISORY COMMITTEE

Voting Members	Other Members (Non-Voting)
<ul style="list-style-type: none"> • City of Beloit Public Works Department • City of Beloit Engineering Division • City of Beloit Community Development Dept. • Winnebago County Planning Department • Winnebago County Highway Department • Rock County Planning Department • Rock County Highway Department • Town of Beloit* • Town of Turtle* • Village of Rockton* • City of South Beloit* • Beloit Transit System (BTS) • Stateline Mass Transit District (SMTD) 	<ul style="list-style-type: none"> • Southwest Region Representative (WisDOT) • District 2 Designated Representative (IDOT) • FHWA, Wisconsin Representative • FHWA, Illinois Representative • FTA Region 5, Chicago Representative • Central Planning Office (WisDOT) • Bureau of Urban Program Planning (IDOT) • Janesville Area Metropolitan Planning Organization • Region 1 Planning Council (Rockford MPO) • Village of Roscoe • Roscoe Township • Town of Rock

*May include a designated public works, engineering, highway, planning or similar representative.

Acronyms

AADT	Average Annual Daily Traffic
ACS	Census American Community Survey
ADA	Americans with Disabilities Act
BEB	Battery Electric Bus
BTS	Beloit Transit System
CN	Canadian National Railway
CP	Canadian Pacific Railway
CCCR	Chicago & Chemung Connecting Railroad
CHGL	Chemung & Geneva Lake Railway
CMAA	Chicago Metropolitan Agency for Planning
CMStP&P	Chicago, Milwaukee, St. Paul & Pacific Railroad Company
C&NW	Chicago & NorthWestern Railway Company
CTPP	Census Transportation Planning Products
DDI	Diverging Diamond Interchange
FHWA	Federal Highway Administration
FRA	Federal Railroad Administration
FTA	Federal Transit Administration
GIS	Geographic Information Systems
IC	Illinois Central Railroad
IDOT	Illinois Department of Transportation
IR	Illinois Railway, Inc.
L RTP	Long Range Transportation Plan
LODES	Longitudinal Origin-Destination Employment Statistics
MPA	Metropolitan Planning Area
MPO	Metropolitan Planning Organization
MDN	Metra Milwaukee District North Line
MDW	Metra Milwaukee District West Line
NTD	FTA's National Transit Database
NICRI	Northern Illinois Commuter Rail Initiative
O-D	origin-destination
RMTD	Rockford Mass Transit District
SLATS	Stateline Area Transportation Study
SMTD	Stateline Mass Transit District
TAC	Technical Advisory Committee
TAZ	Traffic Analysis Zone
UP	Union Pacific Railroad
UP-NW	Metra Union Pacific Northwest Line
VPD	Vehicles Per Day
WisDOT	Wisconsin Department of Transportation
ZEB	Zero Emission Bus

Table of Contents

About SLATS	ii
Acronyms	iii
Chapter 1. Overview	1
SLATS Metropolitan Planning Area.....	1
Chapter 2. Public and Stakeholder Outreach	3
Public Engagement Plan.....	3
Virtual Room Open House.....	4
Community Survey #1.....	4
Needs/Issues Mapping.....	4
Community Survey #2.....	6
Stakeholder Outreach.....	6
SLATS MPO Meetings / Workshop.....	7
Public Review and Comment.....	7
Public Open House.....	8
Chapter 3. Goals and Objectives	9
Development of Goals and Objectives.....	9
SLATS 2045 LRTP Goals and Objectives.....	13
Chapter 4. Demographic Trends	14
Population.....	14
Demographic Facts.....	16
Employment.....	18
Year 2045 Projections Summarized.....	19
Chapter 5. Current and Future Year Needs	21
Growth and Development.....	21
Roadways / Freight.....	25
Public Transportation.....	36
Bicycle and Pedestrian.....	41
Aviation.....	45
Emerging Technology.....	46
Chapter 6. Project Identification Framework	48
Key Themes / Guiding Principles.....	48
Identifying Potential Transportation Projects.....	55

Chapter 7. Recommended Plan..... 58

Future Growth and Development Considerations..... 58

Priority Roadway/Freight Investments 62

Priority Public Transportation Investments 69

Priority Non-Motorized Investments 73

Conclusion..... 76

List of Figures

Figure 1. SLATS MPA – Regional Context.....2

Figure 2. SLATS MPA – Municipalities / Jurisdictions2

Figure 3. SLATS 2045 LRTP Virtual Room4

Figure 4. SLATS 2045 LRTP Online Issues Mapping5

Figure 5. SLATS 2045 LRTP Online Issues Mapping Results5

Figure 6. Stakeholder Zoom Meetings.....6

Figure 7. Federal Metropolitan Transportation Planning Requirements..... 10

Figure 8. Key Themes of the SLATS 2045 LRTP Vision 12

Figure 9. Words Used to Describe Elements of a High-Quality Transportation System..... 12

Figure 10. Population Distribution within the SLATS MPA..... 15

Figure 11. Population Density within the SLATS MPA..... 15

Figure 12. Comparative Diversity Metrics..... 16

Figure 13. Minority Population..... 17

Figure 14. Low Income Areas 17

Figure 15. Employment Density (Where Workers Live) within the SLATS MPA..... 18

Figure 16. Unemployment..... 19

Figure 17. 2020 – 2045 Projected Growth..... 19

Figure 18. Population Change (Percent Change, 2020 – 2045)..... 20

Figure 19. Employment Change (Percent Change, 2020 – 2045) 20

Figure 20. Major Employers within the SLATS MPA..... 22

Figure 21. Rendering of the Ho-Chunk Nation Casino Complex..... 23

Figure 22. Rendering of the ABC Supply Stadium..... 23

Figure 23. SLATS MPA Commuters by Direction..... 25

Figure 24. Inbound and Outbound Commuter Flows (MPA to/from Adjacent Counties)..... 26

Figure 25. I-39/90 and I-43/WIS 81 Diverging Diamond Interchange..... 27

Figure 26. Average Annual Daily Traffic (AADT) Volumes..... 28

Figure 27. Average Daily Truck Volumes 28

Figure 28. Projected Year 2050 Traffic Congestion 29

Figure 29. Gardner Street Bottleneck, in South Beloit..... 30

Figure 30. Perceived Traffic Congestion (by time of day) 32

Figure 31. High Crash Locations..... 33

Figure 32. Fatal and Serious Injury Crash Locations 34

Figure 33. Driving/Roadway Concerns (As Identified by the Public) 36

Figure 34. Beloit Transit Service (Fixed-Route Service) 38

Figure 35. Regional Transit Service 38

Figure 36. Passenger Rail Alignments To Advance for Further Study 40

Figure 37. Public Transportation Concerns (As Identified by the Public) 41

Figure 38. SLATS Existing and Planned Bicycle Network 42

Figure 39. Bicycle Concerns (As Identified by the Public) 44

Figure 40. Pedestrian Concerns (As Identified by the Public) 45

Figure 41. Support for Complete Streets 50

Figure 42. Support for Emerging Mobility 51

Figure 43. Support for Transportation Equity 52

Figure 44. Support for Transit Options 53

Figure 45. Support for Development 54

Figure 46. Potential Roadway/Freight Projects 55

Figure 47. Project Funding Priorities 57

Figure 48. SLATS MPA in Relationship to Surrounding MPOs 58

Figure 49. Example Mobility Hub Concept (Dallas Metro Area) 60

Figure 50. Fiscally Constrained Projects 64

Figure 51. Fiscally Constrained and Illustrative Projects 66

Figure 52. Priority Bicycle Improvements 74

List of Tables

Table 1. SLATS Policy Board ii

Table 2. SLATS Technical Advisory Committee ii

Table 3. WisDOT and IDOT Statewide LRTP Goals 11

Table 4. 2045 LRTP Goals and Objectives 13

Table 5. Total Population Growth (2000 – 2019) 14

Table 6. Cross-Cutting Themes Contained in SLATS Area Comprehensive Plans 24

Table 7. Total Crashes, by Severity (2017 to 2019) 32

Table 8. High Crash Locations (2017 to 2019) 33

Table 9. SLATS 2045 LRTP Fiscally Constrained Projects (including program FY, and project phasing) 64

Table 10. Project Evaluation Matrix 68

Chapter 1. Overview

Metropolitan Planning Organizations (MPOs) serve as regional transportation planning organizations in urbanized areas with a population of 50,000 or more. SLATS is the federally designated MPO for the Beloit urbanized area and is tasked with providing a continuous, cooperative, and comprehensive planning process that includes all modes of surface transportation (i.e., vehicles, walking, biking, public transit, freight, and passenger rail).

The update of the Long Range Transportation Plan (LRTP) is one of the core responsibilities of SLATS. Every five years, SLATS must facilitate the process of evaluating existing and future year conditions, making financial projections, and working through a project prioritization process to identify the region's vision and priorities over the next twenty years. The SLATS 2045 LRTP is the guiding planning document for the future of the region's multimodal transportation system and provides a blueprint for how the region can achieve its goals in the decades to come. The 2045 LRTP builds on previous as well as ongoing initiatives and plans, current transportation investments throughout the region, and public input.

The LRTP must comply with Federal regulations and planning requirements contained in the Fixing America's Surface Transportation (FAST) Act. The FAST Act sets the course for transportation investment with an emphasis on improving mobility on America's highways, creating jobs, and supporting economic growth, accelerating project delivery, and promoting innovation. By fulfilling these requirements, transportation projects within the SLATS MPA are eligible to receive federal funding.

SLATS Metropolitan Planning Area

SLATS spans the state line and includes portions of Wisconsin and Illinois. **Figure 1** provides a visual illustration of the SLATS Metropolitan Planning Area (MPA), with the Janesville, WI MPA to the north and the Rockford, IL MPA to the south. The Madison, WI MPA is located approximately 50 miles northwest of the SLATS MPA. The Milwaukee, WI MPA and Chicago, IL MPA are located to the east. As a bi-state planning area, the SLATS MPA includes portions of Rock County, WI and Winnebago County, IL.

The SLATS MPA encompasses all or parts of several local general-purpose units of government. In Wisconsin, these include the City of Beloit and all parts of the Towns of Beloit, Turtle, and a small portion of the Town of Rock; in Illinois, it includes all of, or parts of, the City of South Beloit, the Village of Rockton and Roscoe, and the Townships of Rockton and Roscoe. Only a small portion of the Village of Roscoe is included within the SLATS MPA as most of this area is included in the Rockford urbanized area. **Figure 2** provides an overview of the municipalities/jurisdictions that fall within the SLATS MPA.

FIGURE 1. SLATS MPA – REGIONAL CONTEXT

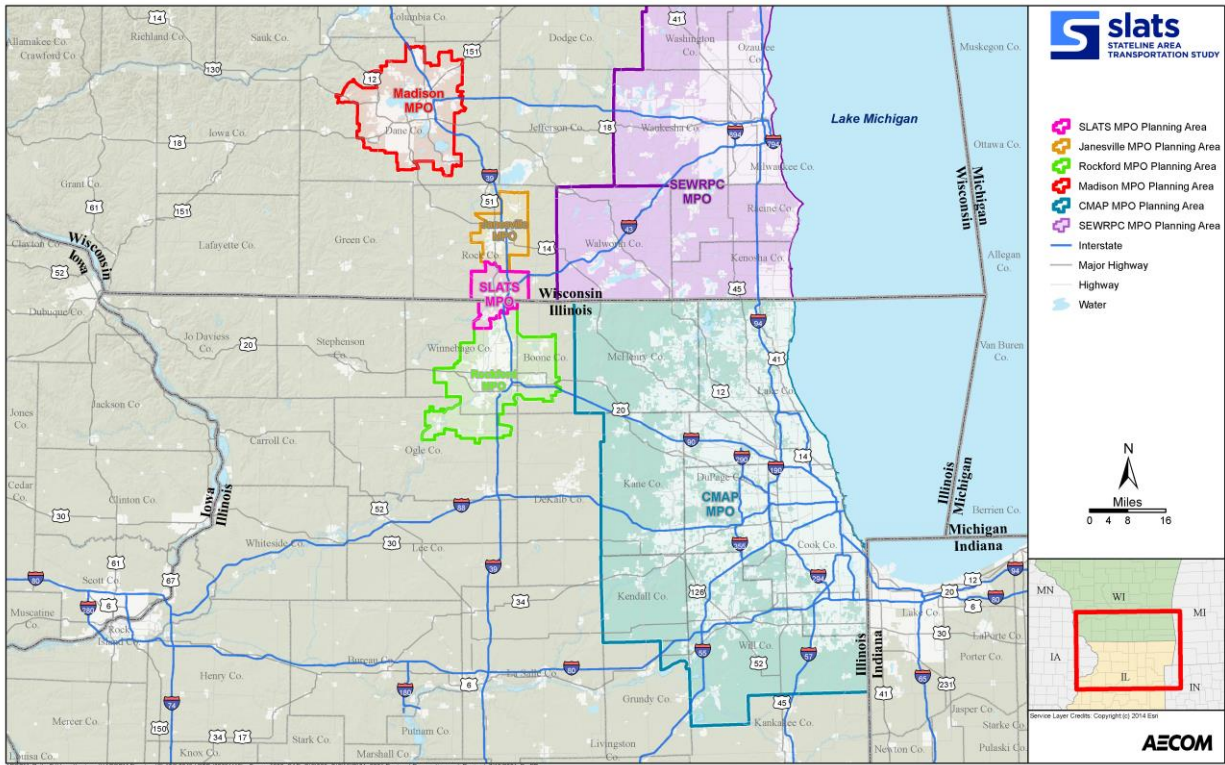
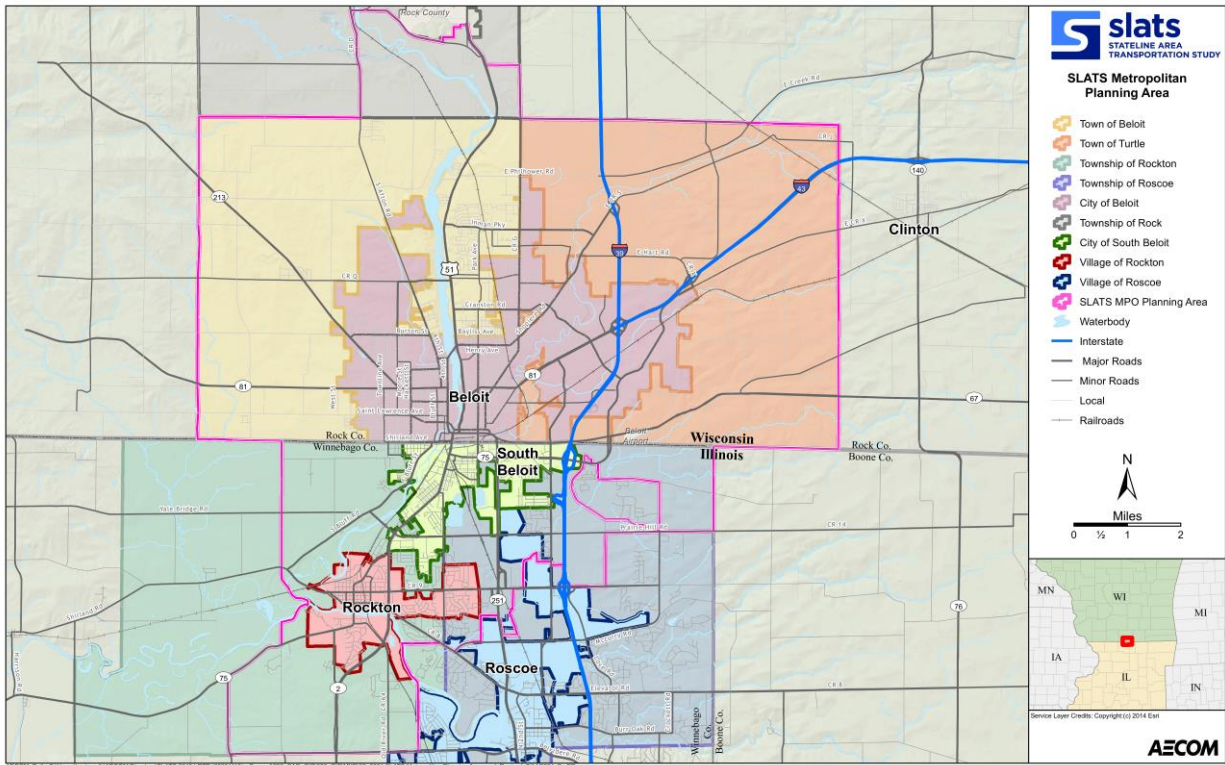


FIGURE 2. SLATS MPA – MUNICIPALITIES / JURISDICTIONS



Chapter 2. Public and Stakeholder Outreach

Public input is integral to conducting a continuing, comprehensive, and cooperative (3-C) transportation planning process. SLATS conducts a continuing and on-going outreach effort to provide opportunities for public participation that is consistent with Title VI, Executive Order 12898, and Americans with Disabilities Act (ADA) requirements, and that supports the SLATS' overall goal of maximizing awareness about transportation and mobility needs within the SLATS MPA. Obtaining input from residents, employers, stakeholders, and the general public is especially important to complement the technical analysis completed during the development of the 2045 LRTP. A wide range of public outreach activities were conducted as part of the transportation planning process an outreach summary is available in **Appendix A**.

Public Engagement Plan

SLATS is responsible for providing a forum for regional coordination among local entities, as well as state and federal partners, key stakeholders, and residents. The Public Engagement Plan (PEP) was developed at the beginning of the SLATS 2045 LRTP development process and is a useful tool for managing communications between SLATS and these groups. The PEP outlines a technically and culturally appropriate approach to consultation and communications. The goal of the PEP is to improve and facilitate decision-making and foster an atmosphere of understanding that actively involves stakeholders in a timely manner, as well as provide these groups sufficient opportunity to voice their opinions and concerns so that they may influence project decisions.

SLATS has defined overall objectives for the agency's public engagement activities in its 2012 Public Involvement Plan. In addition to those overarching goals, the key objectives of the PEP can be summarized as follows:

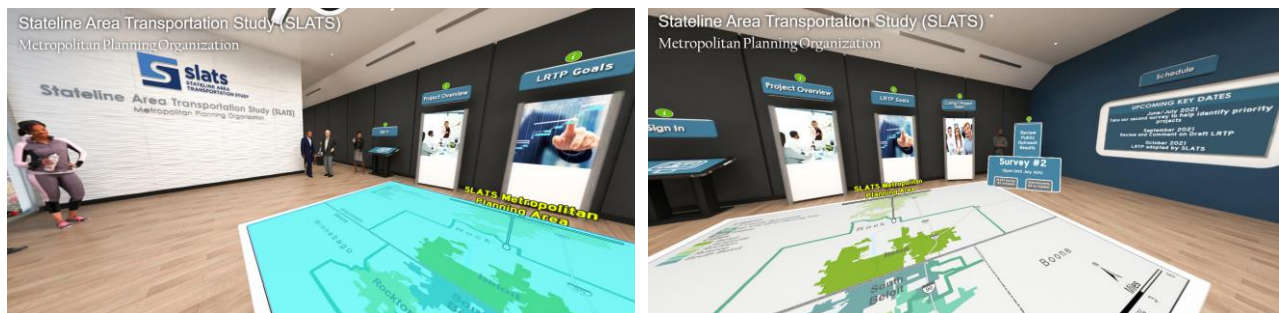
- Provide guidance for stakeholder engagement such that it incorporates best practices as well as meets SLATS requirements;
- Identify key stakeholders that are affected by or able to influence the plan;
- Identify the most effective methods and structures through which to disseminate study information and accomplish regular, accessible, transparent and appropriate consultation that provides stakeholders with an opportunity to contribute to plan outcomes;
- Define reporting and monitoring measures to ensure the effectiveness of the PEP and periodic reviews of the PEP based on findings and;
- Establish formal concern/resolution mechanisms and outline methods to incorporate input into the planning process and report back to stakeholders regarding the use of their input.

The PEP was developed in March 2021, and revised in July 2021 to reflect refinements to the SLATS outreach process based on an evaluation of engagement results.

Virtual Room Open House

COVID-19 presented significant challenges to conducting in-person public and stakeholder outreach during the development of the 2045 LRTP. As such, the project team utilized a Virtual Room (www.SLATS2045LRTP.com) to host an on-going “Open House” containing LRTP-related materials. The Virtual Room included information regarding the overall study, survey links, on-line needs/issues mapping, goals and objectives, survey results, and opportunities to contact the project team. **Figure 3** displays screenshots of the SLATS LRTP Virtual Room. The project Virtual Room received approximately [update after plan adoption] visits during the project planning period.

FIGURE 3. SLATS 2045 LRTP VIRTUAL ROOM



Community Survey #1

The first community survey was conducted in March/April 2021. The survey was available via the SLATS LRTP Virtual Room and was available in both English and Spanish. In addition, the survey was directly emailed to SLATS partners, agencies, stakeholders, and other contacts for distribution to their networks. In total, approximately 100 surveys were completed. It should be noted that it is difficult to estimate total number of participants as not everyone answered every question.

The survey was conducted to gain insight into existing transportation conditions and to help inform the development of the goals and objectives. Additional survey results, as appropriate, are incorporated in the following chapters. A summary of the survey results, including responses to open-ended questions, is available in **Appendix A**.

Needs/Issues Mapping

Transportation studies benefit from capturing local knowledge about travel behavior, transportation system conditions and issues, and opportunities for improvement. To engage stakeholders visually and to capture spatial data, an online mapping tool was deployed to allow individuals to comment on regional multimodal transportation needs and issues. The mapping component was accessible through the SLATS LRTP Virtual Room and invited the public to identify and discuss existing conditions or areas needing improvement. Participants were asked to select from a dropdown menu a general category that described their issue, concern, or potential project. Furthermore, participants could provide optional, opened-ended comments. Comments from the issues mapping activity were grouped into the following categories:

- Driving
- Public Transportation
- Bicycling
- Walking
- Other (such as development related issues, land use, etc.)

In total, 205 markers were identified as part of the issues mapping activity and were used to support the LRTP technical analysis. **Figure 4** displays the online mapping tool that was hosted in the SLATS LRTP Virtual Room. **Figure 5** displays the location of markers, grouped by mode. **Appendix A** provides a detailed summary of the online mapping comments, including specific comments that correspond to the marker locations (assuming an open-ended comment was left).

FIGURE 4. SLATS 2045 LRTP ONLINE ISSUES MAPPING

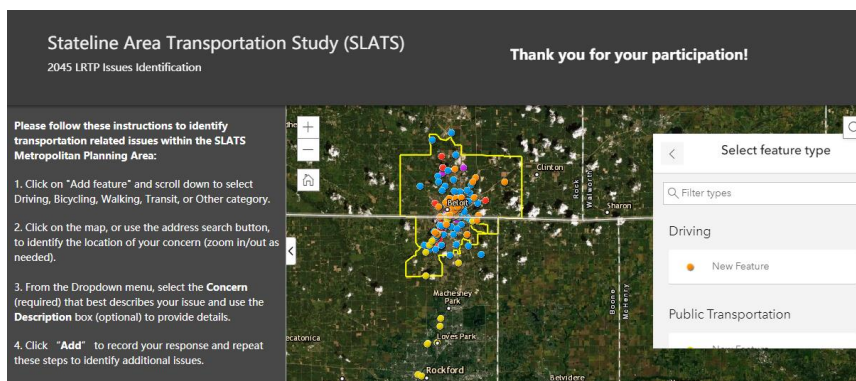
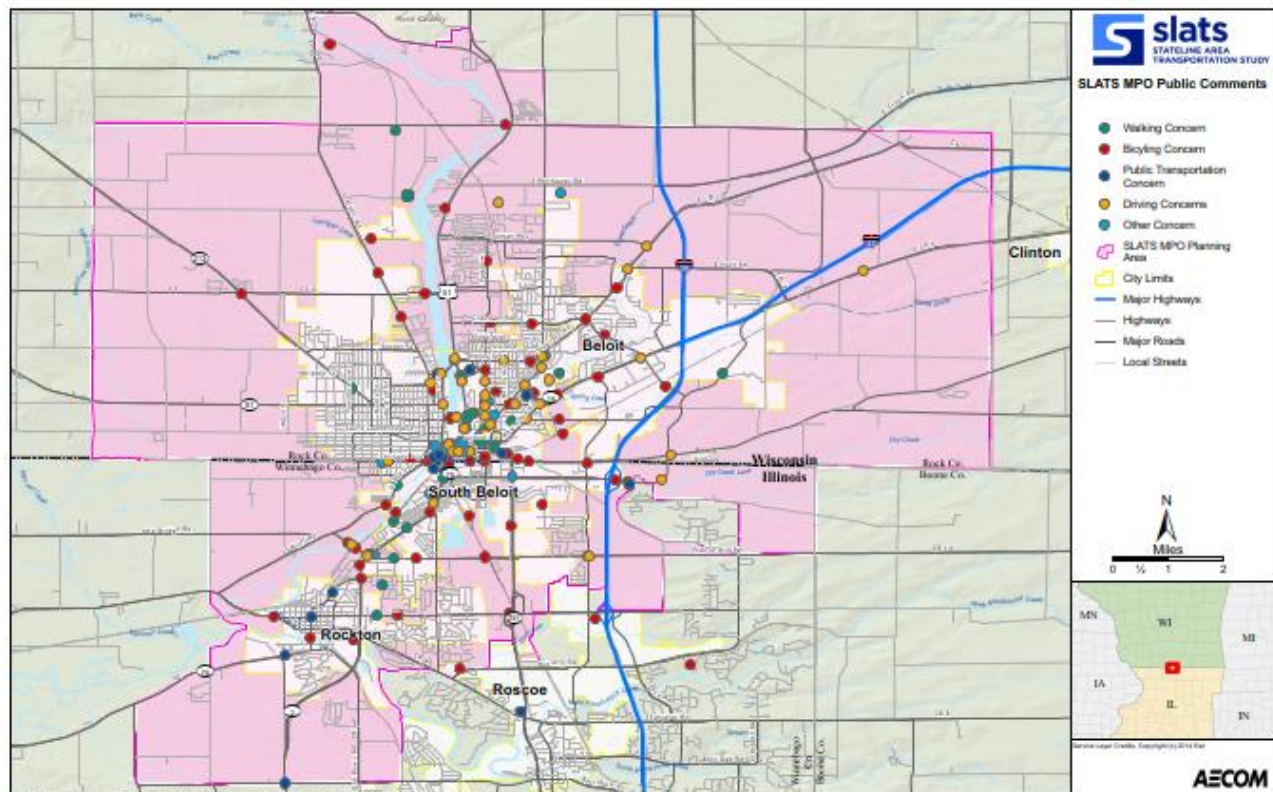


FIGURE 5. SLATS 2045 LRTP ONLINE ISSUES MAPPING RESULTS



Community Survey #2

The second community survey was conducted in June/July 2021. The survey was available via the SLATS LRTP Virtual Room and was available in both English and in Spanish. In addition, the survey was directly emailed to SLATS partners, agencies, stakeholders, and other contacts for distribution to their networks. In total, 92 surveys were completed.

The survey was conducted to help confirm/refine the key LRTP themes, to identify stakeholder values for the transportation system, and to better understand how area residents prioritize transportation funding between varying modes. Survey findings, as relevant, are incorporated in the following chapters. A summary of the second online survey results, including responses to open-ended questions, is available in **Appendix A**.

Stakeholder Outreach

Four stakeholder meetings were conducted in April 2021. These meetings were conducted to develop an understanding of the transportation issues and opportunities identified by key stakeholders in the MPA. The four stakeholder sessions were organized around the following topic areas:

- Safety
- Healthy Communities
- Regional Mobility
- Equity

Some of the main themes that emerged as part of the initial round of stakeholder outreach included a desire for the SLATS area transportation system to support strong neighborhoods and public health, better communications around public transit for non-native speakers of English, and improving connections to regional parks and locations perceived as exhibiting serious safety issues. **Appendix A** includes full summaries of these stakeholder meetings, and relevant findings are incorporated into the following chapters. **Figure 6** displays a screenshot of one of the initial stakeholder Zoom meetings.

FIGURE 6. STAKEHOLDER ZOOM MEETINGS



An additional fifth stakeholder meeting was conducted in May 21, 2021. This meeting was with school officials from Beloit. A sixth stakeholder meeting was conducted on August 24, 2021. This meeting had two purposes. First, to report back to the stakeholders regarding how their information was used to inform development of the 2045 LRTP, and next to present the draft LRTP recommendations, including identified projects, and provide a forum for discussion. Additional information regarding these stakeholder meetings is included in **Appendix A**.

SLATS MPO Meetings / Workshop

Beginning in February 2021, the project team presented six times to the SLATS Policy Board and TAC – five joint meetings and one workshop. The final LRTP was presented to the Policy Board and TAC on October 4, 2021, at which time the SLATS 2045 LRTP was approved. The meeting dates, along with the LRTP related topics, are summarized below. Presentations for the respective meetings are included in **Appendix A**.

- **February 22, 2021**
 - Presentation of the SLATS 2020 Rail Study findings
 - Introduction/Kick-off of the SLATS 2045 LRTP Update
- **March 29, 2021**
 - Review/Confirmation of Goals and Objectives
 - Review of Needs Analysis (including summary of survey #1 results received to date)
 - Discussion of Potential Projects / Introduction of Potential Project Scoring Process
- **May 27, 2021 (Workshop)**
 - Discussion of the Key LRTP Themes
 - Discussion of LRTP outcomes and planning framework
 - Brainstorming regarding potential mobility solutions
- **June 21, 2021**
 - Presentation of Planning and Evaluation Matrix
 - Review/Confirmation of LRTP Projects for modeling
- **August 16, 2021**
 - Comprehensive Overview of 2045 LRTP Development Process
 - Presentation of Community Survey #2 Results
 - Review/Confirmation of Fiscal Constraint Projects
 - Preparation of Draft LRTP for 30-Day Public Review
- **October 4, 2021**
 - [update accordingly based on public review and input/feedback]
 - Review/address Public Comments Received on the Draft LRTP
 - Formal vote, and adoption of the SLATS 2045 LRTP

Public Review and Comment

A draft of the 2045 LRTP was available for public review and comment between August 30, 2021 and September 28, 2021. Stakeholders were alerted to the availability of the document and asked to share it with their networks. [List other efforts at notifying the public]

There were xx comments received from the public. Comments were addressed by the project team and presented to the Technical Committee and Policy Board for consideration in advance of the October 4,

2021 meeting. [update this section to summarize the comments and discuss how comments were addressed].

Public Open House

A public open house was held during the public review and comment period. The open house was held on September [update], 2021. INSERT ADDITIONAL TEXT....

Chapter 3. Goals and Objectives

The LRTP development process provides an opportunity to map out a vision for the region's transportation future. The framework for this vision is the SLATS LRTP goals and objectives, which are used to guide future transportation investments within the SLATS MPA. The 2045 LRTP goals and objectives frame the comprehensive, coordinated, and continuing transportation planning process that is critical to the SLATS region.

SLATS places high importance on the input obtained through the LRTP public outreach effort to not only inform the goals and objectives, but to directly impact the project evaluation methodology to ensure the LRTP projects truly address and reflect the region's long-term vision. **Appendix A** includes additional information on LRTP public outreach activities conducted as part of the 2045 LRTP development. **Appendix B** provides additional details regarding the development to the SLATS 2045 LRTP goals and objectives.

Development of Goals and Objectives

Goals define a desired end state or outcome, while objectives provide additional detail regarding how the respective goals will be achieved. The following factors were considered in developing the SLATS 2045 LRTP goals and objectives:

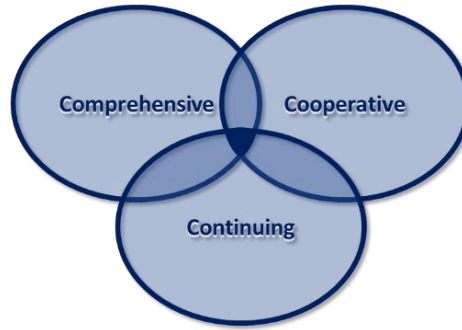
- Federal Planning Requirements
- Consistency with Statewide (WisDOT and IDOT) LRTP Goals and Objectives
- Public Input
- SLATS Technical Advisory Committee (TAC) and Policy Board Review

Federal Planning Requirements

Federal transportation is funded through multi-year funding bills and the current law is entitled Fixing America's Surface Transportation Act (FAST Act). FAST Act sets the course for surface transportation investments across the United States and emphasizes improving mobility on America's highways, creating jobs, supporting economic growth, and accelerating project delivery and innovation.

Administered by the Federal Highway Administration (FHWA), FAST Act identifies ten planning requirements for the metropolitan transportation planning process. These planning requirements play a prominent role in the development of the SLATS 2045 LRTP as they support a continuing, comprehensive, and cooperative (3-C) transportation planning process. This process provides for the consideration and implementation of projects, strategies, and services throughout the SLATS MPA. **Figure 7** summarizes the metropolitan transportation planning requirements.

FIGURE 7. FEDERAL METROPOLITAN TRANSPORTATION PLANNING REQUIREMENTS



“The metropolitan planning process for metropolitan planning area...shall provide for consideration of projects and strategies that will...”

- Economic Vitality** ...support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency;
- Safety** increase the safety of the transportation system for motorized and nonmotorized users;
- Security** increase the security of the transportation system for motorized and nonmotorized users;
- Accessibility and Mobility** increase the accessibility and mobility of people and for freight;
- Environment** protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns;
- Integration and Connectivity** enhance the integration and connectivity of the transportation system, across and between modes, for people and freight;
- System Efficiency** promote efficient system management and operation;
- Preservation** emphasize the preservation of the existing transportation system;
- Resiliency and Reliability** improve the resiliency and reliability of the transportation system and reduce or mitigate stormwater impacts of surface transportation; and,
- Travel and Tourism** enhance travel and tourism.

Source: 23 U.S. Code § 134 [(h) (1) (A - J)] – Metropolitan Transportation Planning.



Emphasis on Equity

In developing the SLATS 2045 LRTP, a new emphasis was to review the Environmental Justice process and identify opportunities to better address equity. The LRTP planning process is an important vehicle by which to identify strategies that transportation agencies and planning partners can take to increase access to alternative transportation modes, improve safety, improve air quality, and improve connectivity – all of which can support and enhance equity if improvements are targeted in low-income and minority communities. Recognizing the critical importance of equity, the SLATS TAC and Policy Board added an equity goal and supporting objectives to the 2045 LRTP. Furthermore, the LRTP recommendations (Chapter 10) include the development of a project evaluation matrix that incorporates an equity measure when analyzing potential future year projects.

Consistency with Statewide (WisDOT and IDOT) LRTP Goals and Objectives

The SLATS 2045 LRTP goals and objectives are consistent with, and reflect, WisDOT and IDOT statewide LRTP goals and objectives. In turn, the statewide LRTPs also address the FAST Act planning factors, in addition to other federal requirements. **Table 3** summarizes the respective WisDOT and IDOT goals.

TABLE 3. WISDOT AND IDOT STATEWIDE LRTP GOALS

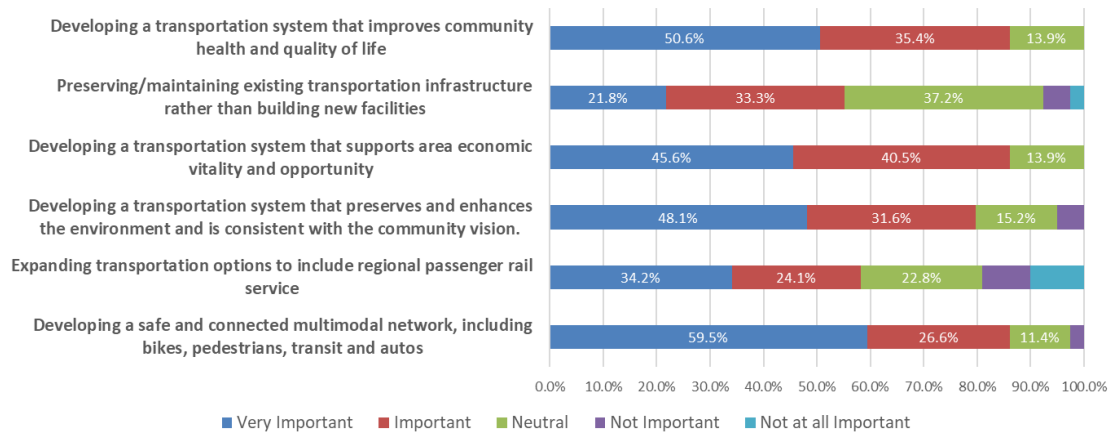
 <p>Wisconsin Department of Transportation</p>	 <p>Illinois Department of Transportation</p>
<ul style="list-style-type: none"> • Economic Vitality: Maintain and improve the state’s transportation system so it is responsive to global and regional economic needs and changing conditions. • Safety and Security: Create a system that is safe for all users, and agile in preventing, preparing for, and coordinating responses to any incident, whether natural or the result of human activity. • Quality of Life and Natural Environment: Implement and manage a system that balances transportation needs with the natural environment and resource conservation. • System Integration and Connectivity: Bring modes of transportation together to provide a properly integrated system. • System Management: Utilize cost-effective preservation and maintenance techniques to maximize transportation investments. 	<ul style="list-style-type: none"> • Economy: Improve Illinois’ economy by providing transportation infrastructure that supports the efficient movement of people and goods. • Livability: Enhance the quality of life across the state by ensuring that transportation investments advance local goals, provide multimodal options, and preserve the environment. • Mobility: Support all modes of transportation to improve Accessibility and safety by improving connections between all modes of transportation. • Resiliency: proactively assess, plan and invest in the state’s transportation system to ensure that our infrastructure is prepared to sustain and recover from extreme events and other disruptions. • Stewardship: Safeguard existing funding and increase revenues to support system maintenance, modernization, and strategic growth of Illinois’ transportation system.

Source: WisDOT Statewide LRTP, <https://connect2050.wisconsin.gov/>
 IDOT Statewide LRTP, <https://idot.illinois.gov/transportation-system/transportation-management/planning/lrtp/index>
 NOTE: Links current as of July 9, 2021.

Public Input

Figure 8 summarizes the survey results focused on LRTP themes. Overall, survey respondents provided favorable ratings to all of the themes by indicating that a respective theme was ‘very important’ or ‘important’ to developing a regional transportation system. Safety scored highest, with sixty percent of respondents indicating that developing a safe and connected multimodal network is ‘very important’ for the long-term vision of the region. An additional 27 percent of respondents indicated it was ‘important,’ resulting in combined favorable rating of 87 percent. Close behind, with a combined rating of 86 percent, were developing a transportation system that improves community health and quality of life, and developing a system that supports economic vitality and opportunity.

FIGURE 8. KEY THEMES OF THE SLATS 2045 LRTP VISION



Source: SLATS 2045 LRTP Survey #1 – March/April 2021.

Survey respondents were also asked to describe a “high-quality” transportation system. **Figure 9** provides a word cloud of the open-ended results, which identifies those words that are most often used and serves as a proxy for their importance. Generally speaking, the descriptions reflected similar issues as the key themes. References to ‘safety,’ or maintaining a safe transportation system, were most popular. Other responses included a desire for reliable and accessible transportation options, mainly expanded bicycle facilities, and enhanced transit service. Some responses discussed the importance of connecting to communities outside the SLATS MPA. A complete list of the open-ended survey responses to this particular question are included in **Appendix A**.

FIGURE 9. WORDS USED TO DESCRIBE ELEMENTS OF A HIGH-QUALITY TRANSPORTATION SYSTEM



SLATS 2045 LRTP Goals and Objectives

Throughout the development of the SLATS 2045 LRTP, project updates were presented to the SLATS TAC and Policy Board at regularly scheduled MPO meetings, as well as at a LRTP workshop. The proposed goals and objectives, including edits and a new equity goal and its related objectives, were presented the SLATS TAC and Policy Board members at the March 29, 2021 MPO meeting. The members agreed with the proposed changes and there were no additional edits or modifications requested. **Table 4** provides the final SLATS 2045 LRTP goals and objectives.

TABLE 4. 2045 LRTP GOALS AND OBJECTIVES

Goals	Objectives
1. Economic Vitality – Prioritize transportation investments that foster regional economic development opportunities.	<ul style="list-style-type: none"> a. Coordinate transportation, land use, and economic development planning across the state line. b. Develop a transportation system to enhance access to local and regional employment centers. c. Maintain and improve existing transportation links to central business districts within the MPA. d. Improve access to major tourist destinations, including roadways, bicycling, and public transportation.
2. System Preservation – Strategically support and strengthen existing local and regional transportation assets.	<ul style="list-style-type: none"> a. Strive for sufficient budgetary resources to maintain the existing transportation infrastructure. b. Where possible, enhance the system efficiency of existing travel corridors as opposed to adding new roadway capacity. c. Utilize emerging technology to increase the efficiency of the existing regional transportation system. d. Improve the resilience of the regional transportation system to minimize service disruptions and to quickly recover when they occur.
3. Mobility and Accessibility – Develop a comprehensive, multimodal system that enhances mobility and accessibility for all transportation users.	<ul style="list-style-type: none"> a. Enhance connectivity and access in the regional roadway network to facilitate reliable travel conditions. b. Enhance transit connectivity and accessibility within the Staterline Area. c. Expand the bicycle and pedestrian system to improve regional connectivity with a particular focus on enhancements to the multi-use trail system. d. Support the development of complete streets which incorporate appropriate transit, bicycle and pedestrian accommodations into roadway improvements. e. Advance regional transit planning, including passenger rail service, to identify opportunities to connect to Rockford, Janesville, Madison, Chicago and Milwaukee.
4. Safety and Security – Improve transportation safety and security throughout the region.	<ul style="list-style-type: none"> a. Minimize crash exposure within the Staterline Area with an emphasis on reducing fatalities and serious injuries. b. Consider all system users (cyclists, transit users, pedestrians, motorists, freight carriers) when planning, designing and constructing transportation facilities. c. Support public education to promote safe transportation behavior.
5. Environmentally Friendly – Promote transportation investments that preserve and protect the environment.	<ul style="list-style-type: none"> a. Support transportation system investments that preserve open space and natural amenities, adequately accommodate stormwater runoff, and enhance connections to these regional assets. b. Proactively evaluate, and minimize, the environmental impacts of proposed transportation improvements within the region. c. Identify and expand transportation options that reduce automobile travel and/or promote energy conservation.
6. Healthy Neighborhoods – Provide well-connected, sustainable neighborhoods that enhance quality of life.	<ul style="list-style-type: none"> a. Facilitate the efficient, effective movement of freight through the region to minimize the negative impacts on residential neighborhoods. b. Support mixed-use, transit-oriented developments that encourage walkable, connected neighborhoods that provide an alternative to driving.
7. Land Use Integration – Strengthen the integration between land use and transportation initiatives to promote transportation system efficiency.	<ul style="list-style-type: none"> a. Coordinate transportation planning with regional land use plans. b. When appropriate, identify and plan for corridor preservation to accommodate future year capacity needs. c. Plan the transportation system to encourage contiguous development consistent with smart growth principles.
8. Environmental Justice and Equity in Transportation System Development – Prioritize transportation investments that support and improve mobility and access for traditionally underserved residents, workers, business owners, and visitors.	<ul style="list-style-type: none"> a. Actively engage people of color, low income and transient populations, and people with limited English proficiency in transportation system planning and development. b. Prioritize multimodal transportation investments that enhance access to jobs, healthcare, education and other essential destinations for traditionally underserved residents.

Chapter 4. Demographic Trends

Analyzing the changing or emerging demographic characteristics within the MPA helps to inform transportation infrastructure needs and mobility services. Moreover, understanding the distribution and composition of population changes further enables the ability to plan for appropriate transportation infrastructure and services. **Appendix C** provides a detailed summary regarding the existing regional profile, including demographic characteristics (e.g., migration, vehicle availability, age, race, income, education, language proficiency, and household resources.) as well as employment information (e.g., occupation, employment level, and major employers). The following highlights the existing (year 2020) and projected (year 2045) population and employment within the SLATS MPA.

Population

The SLATS MPA is home to nearly 73,000 people (2020) and is projected to increase 15 percent to nearly 84,000 by 2045.¹ Population figures from 2000 to 2019 for the United States, Wisconsin, Illinois, Rock County, Winnebago County, and select municipalities² are displayed in **Table 5**. According to the most recent 2019 US Census American Community Survey (ACS), the most populated municipality located in the MPA is the City of Beloit (36,836). The population in Beloit has remained steady since 2000, while the municipalities in Winnebago County saw significant growth between 2000 and 2010 before leveling off between 2010 and 2019.

TABLE 5. TOTAL POPULATION GROWTH (2000 – 2019)

	2000	2010	2019	Change 2000-2010	Change 2010-2019
United States	281,421,906	308,745,712	324,697,795	9.7%	5.2%
Wisconsin	5,363,675	5,686,986	5,790,716	6.0%	1.8%
Rock County	152,307	160,331	162,152	5.3%	1.1%
Beloit city	35,828	36,966	36,836	3.2%	-0.4%
Illinois	12,419,293	12,830,632	12,770,631	3.3%	-0.5%
Winnebago County	278,418	295,266	284,819	6.1%	-3.5%
South Beloit city	5,441	7,892	7,900	45.0%	0.1%
Roscoe village	6,350	10,785	10,757	69.8%	-0.3%
Rockton village	5,469	7,685	7,638	40.5%	-0.6%

Source: US Census 2000 – 2010, ACS 2019 (5-year estimates).

NOTE: No MPA total is provided because MPA boundaries differ from Census-designated geographies. A MPA total is estimated using the regional travel demand forecasting model socioeconomic data. Municipality totals provided in this table include areas outside the MPA.

Figure 10 displays the population distribution within the SLATS MPA. **Figure 11** displays the population density within the SLATS MPA.

¹ Based on an analysis of the regional travel demand forecasting model socioeconomic data.

² MPA boundaries do not align with Census-designated geographies. For this reason, an MPA total is not provided when citing Census data. A range of geographic subdivisions are provided to illustrate relevant demographic trends for the MPA municipalities and comparison regions (i.e., county, state, nation).

FIGURE 10. POPULATION DISTRIBUTION WITHIN THE SLATS MPA

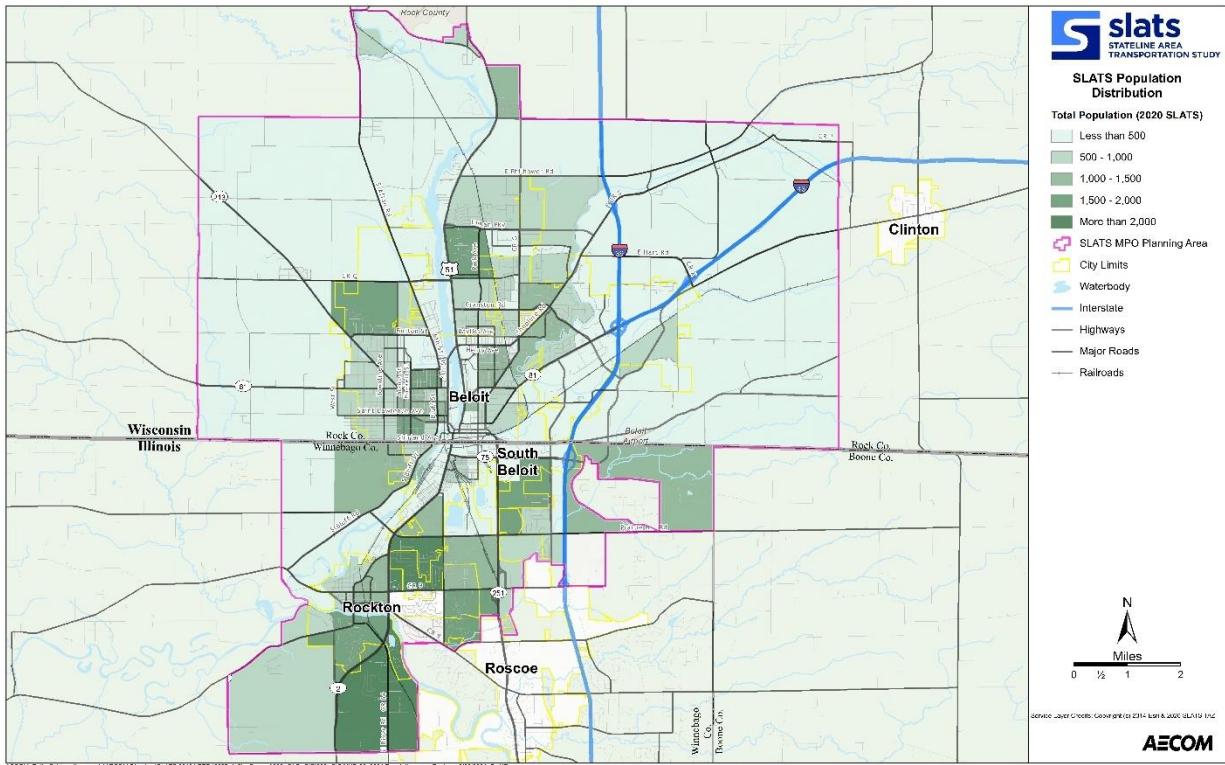
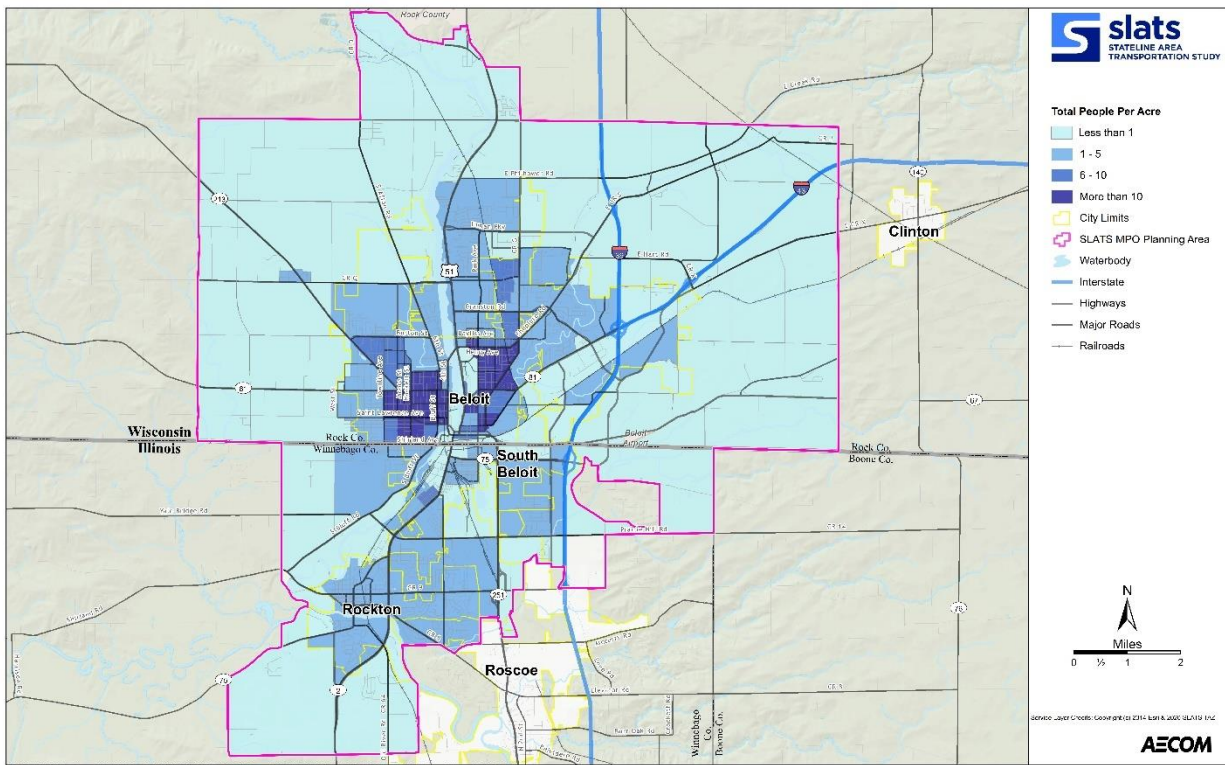


FIGURE 11. POPULATION DENSITY WITHIN THE SLATS MPA



Demographic Facts

Race

The composition of the area is predominantly White, with 70 percent of the population in the Beloit Urbanized Area identifying as non-Hispanic White and 30 percent as persons of color (i.e., any other race and/or Hispanic ethnicity). Minority populations reside throughout the planning area but tend to be concentrated in the central parts of the City of Beloit. The City of Beloit minority status is 39 percent, which is the same as the national average and higher than less densely developed locations in the MPA. Approximately 15 percent of the Beloit Urbanized Area identify as Hispanic or Latino, nine percent identify as Black or African American, and a combined 14 percent identify as other races (see **Figure 13**).

Income

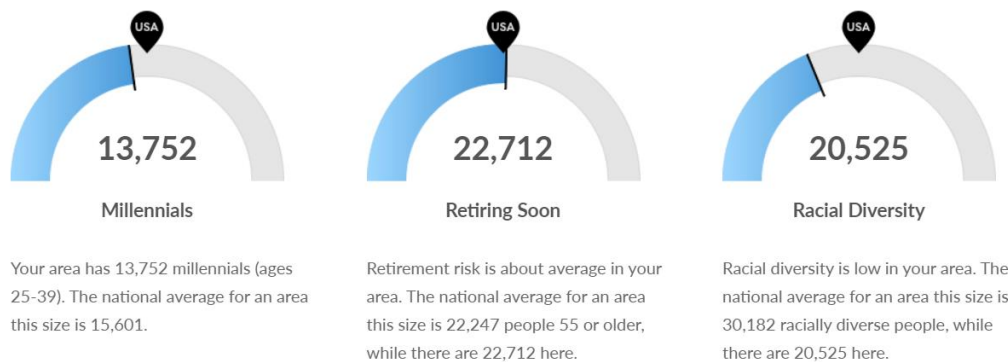
Eighteen percent of planning area residents live in poverty, with rates as high as 23% in the City of Beloit and 21% in the Town of Rock. As with minority populations, persons living in poverty are concentrated in the central parts of the City of Beloit, with a notable concentration also located near the City of Janesville in the northern area of the SLATS MPA (see **Figure 14**).

Miscellaneous Facts

- The average household size for the Beloit Urbanized Area is 2.5 and the majority of households are located in the City of Beloit.
- Five percent of households in the Beloit Urbanized Area do not have access to a vehicle, 35% have access to one vehicle, 41% have access to two vehicles, and 18% have access to three or more.
- The share of older adults in the MPA is increasing and the share of youth is decreasing, with 14 percent of adults age 65 and older and 25 percent of youth age 17 and younger.
- The median household income in the Beloit Urbanized Area is below the state and national averages, and many of the municipal/governmental units within the MPA have high levels of poverty.

A high-level index of age and race diversity metrics for the four primary ZIP codes in the MPA is provided in **Figure 12**. These indices illustrate how the SLATS MPA compares to similar regions across the U.S. in the share of population within the millennial cohort (slightly below average), share of workforce retiring soon (about average), and racial diversity (below average)

FIGURE 12. COMPARATIVE DIVERSITY METRICS



Source: Emsi data for primary ZIP codes in the MPA: 53511, 53525, 61080, 61072.

FIGURE 13. MINORITY POPULATION

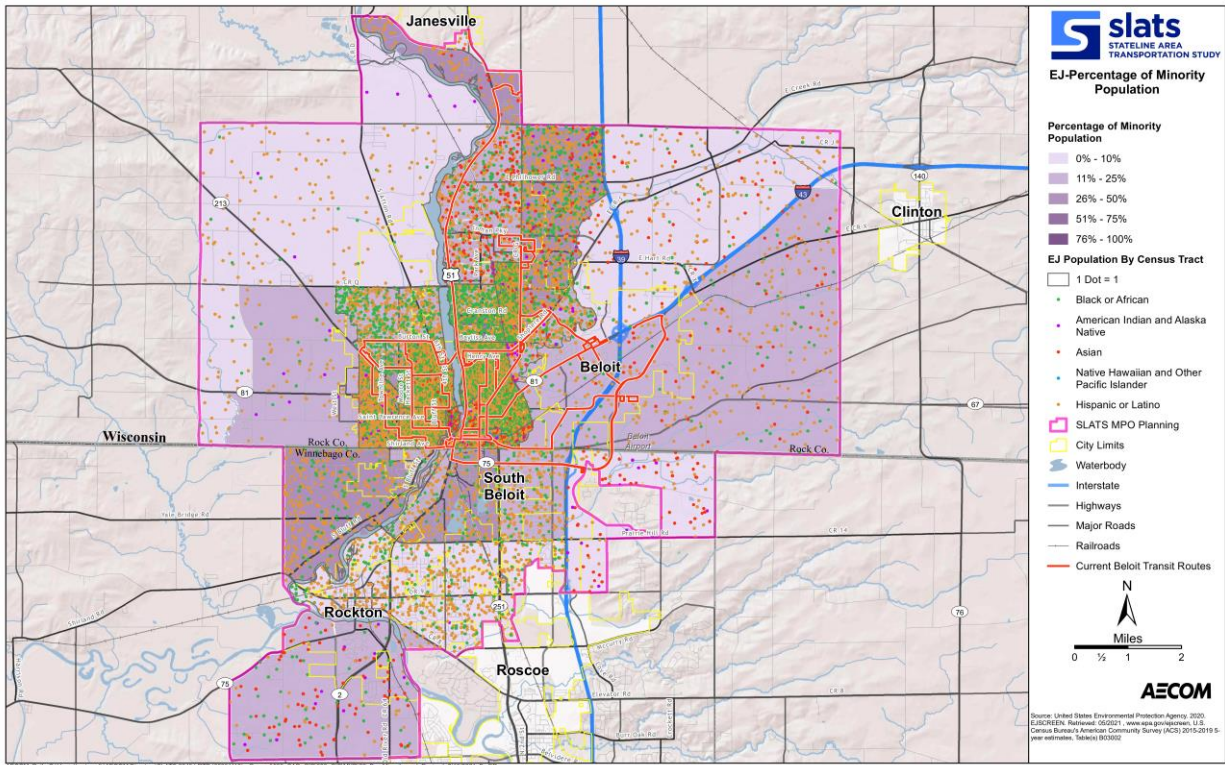
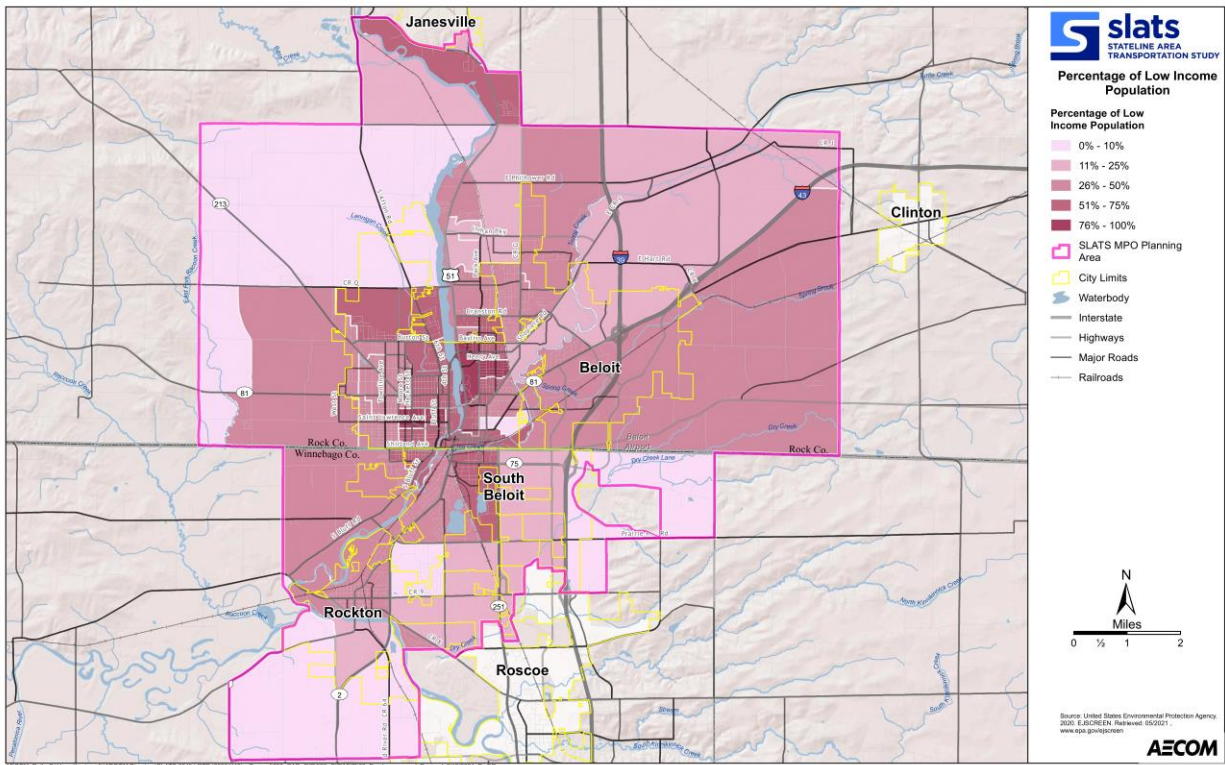


FIGURE 14. LOW INCOME AREAS



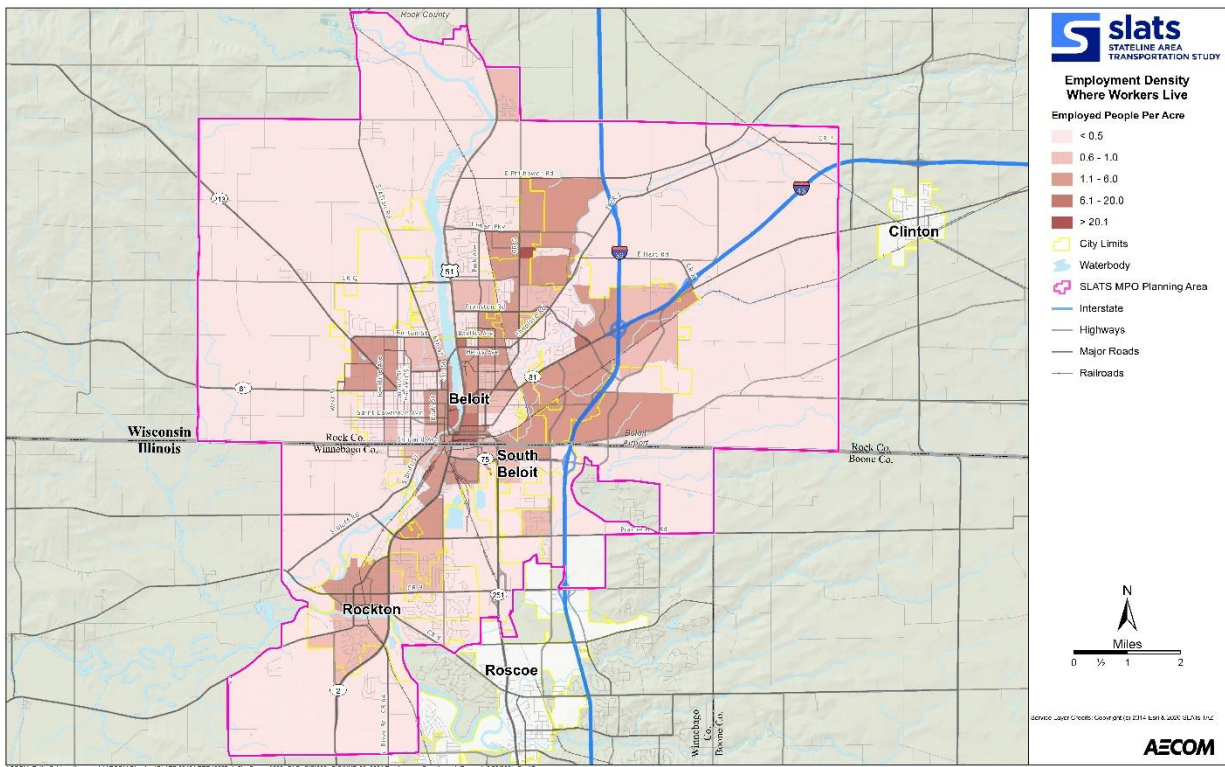
Employment

Jobs in the SLATS MPA total approximately nearly 27,000 (2020), with job growth projected to increase 40 percent to about 38,000 by 2045.³ Manufacturing is the dominant industry in the region, with much of the workforce employed by this sector. Employment related characteristics of workers and industries within the MPA are summarized below, with more detail provided in **Appendix C**.

- Unemployment in the Beloit Urbanized Area is higher than the state and national averages, with the City of Beloit and Town of Rock having the highest rates of unemployment rates.
- Unemployment is most pronounced in urban areas compared to less dense rural areas
- The Beloit Urbanized Area has a much higher than average share of production, transportation, and material moving workers and a lower-than-average shares of workers in management, business, science, and arts occupations.
- Employment density is concentrated in Downtown Beloit, but also emanates in the northeastern portion of MPA taking advantage of the convenient I-39/90 access.

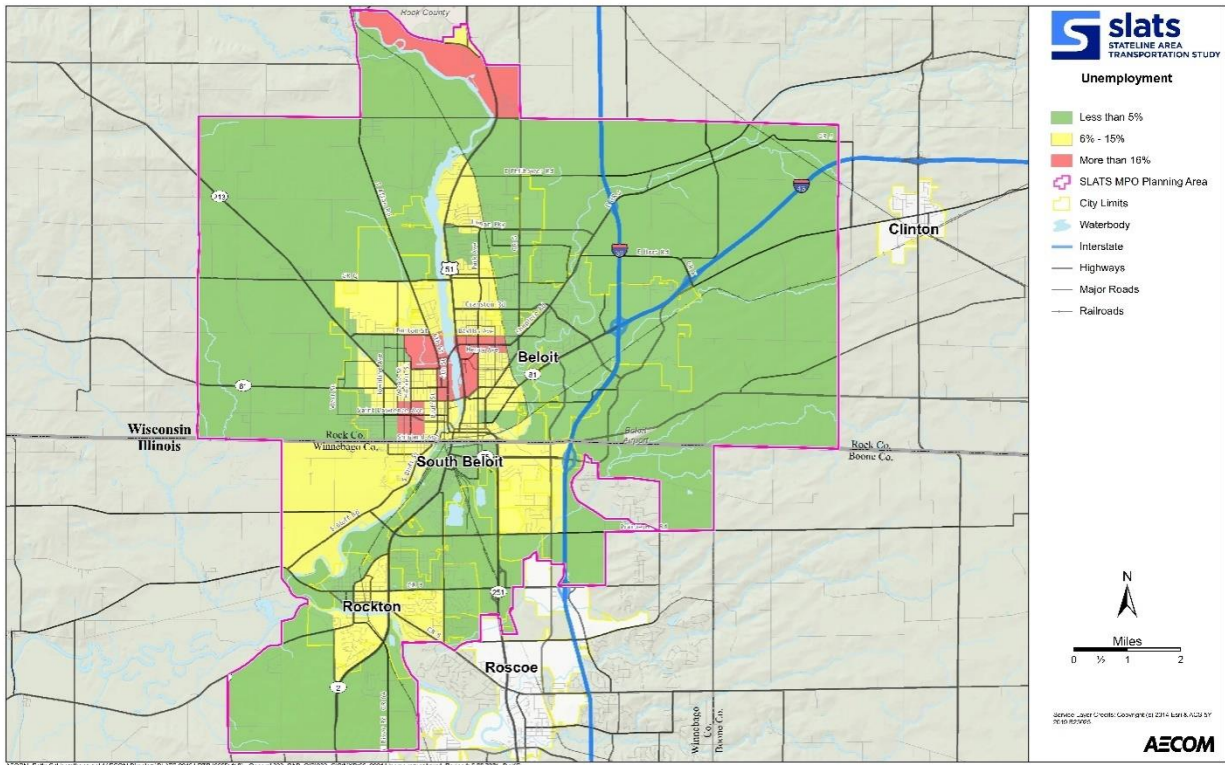
Figure 15 displays the MPA employment density within the SLATS MPA; **Figure 16** shows the distribution of unemployed populations in the region.

FIGURE 15. EMPLOYMENT DENSITY (WHERE WORKERS LIVE) WITHIN THE SLATS MPA



³ Based on an analysis of the regional travel demand forecasting model socioeconomic data.

FIGURE 16. UNEMPLOYMENT



Year 2045 Projections Summarized

As part of the *SLATS Passenger Rail Study*, completed in February 2021, SLATS reviewed the regional travel demand model socioeconomic data and updated the population and employment data. This updated socioeconomic data was also used for the SLATS 2045 LRTP. **Figure 17** summarizes the projected population and employment growth between 2020 and 2045. **Figure 18** and **Figure 19** illustrate the projected percent change in population and jobs within the SLATS MPA. As new U.S. Census data is expected out in late 2021, or early 2022, SLATS intends to complete a comprehensive review and update of the socioeconomic data as part of the next LRTP update.

FIGURE 17. 2020 – 2045 PROJECTED GROWTH

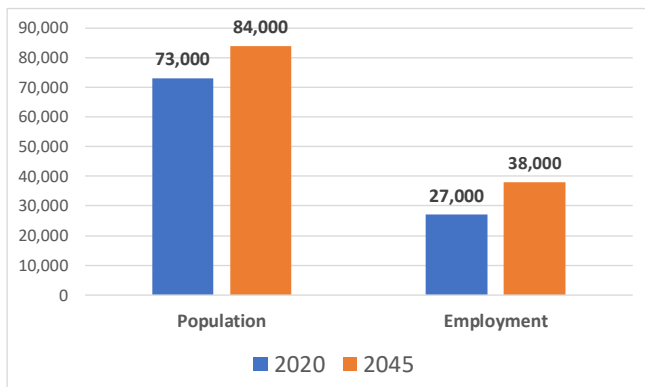


FIGURE 18. POPULATION CHANGE (PERCENT CHANGE, 2020 – 2045)

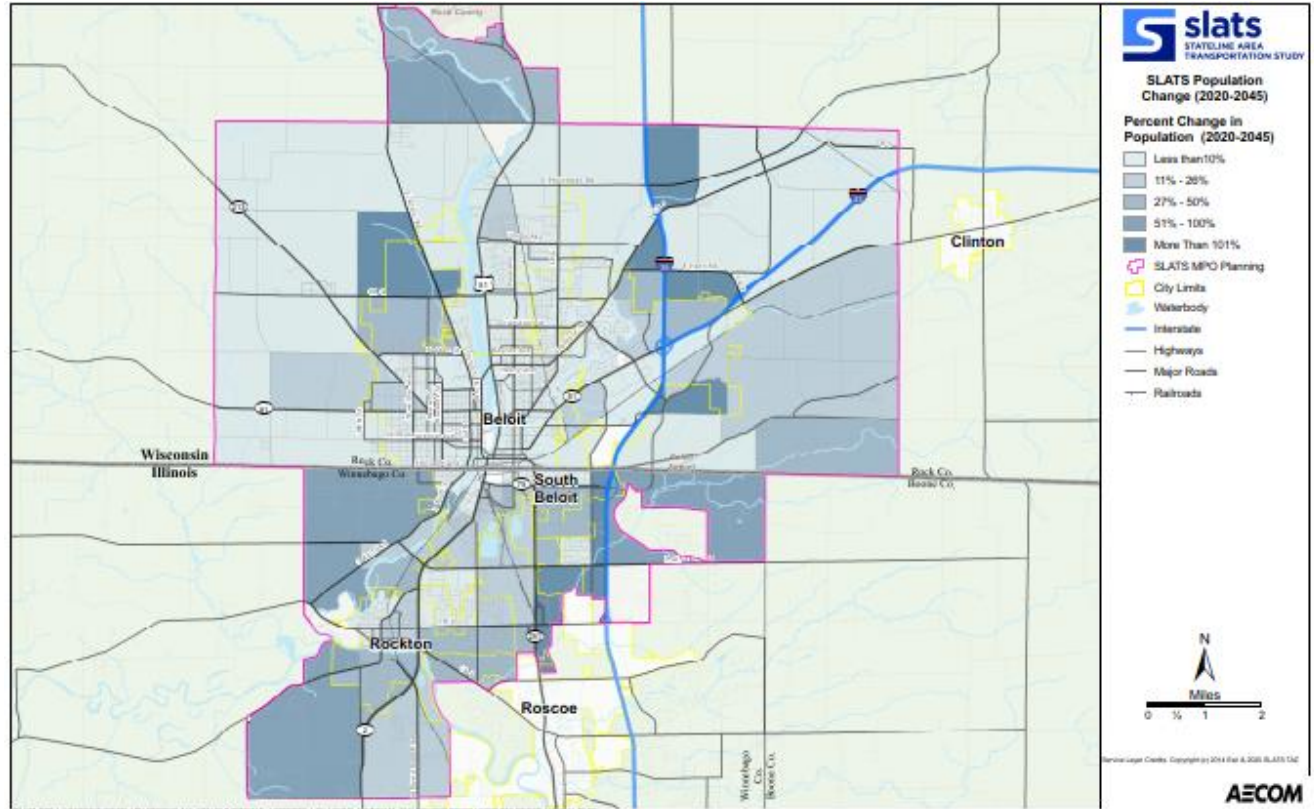
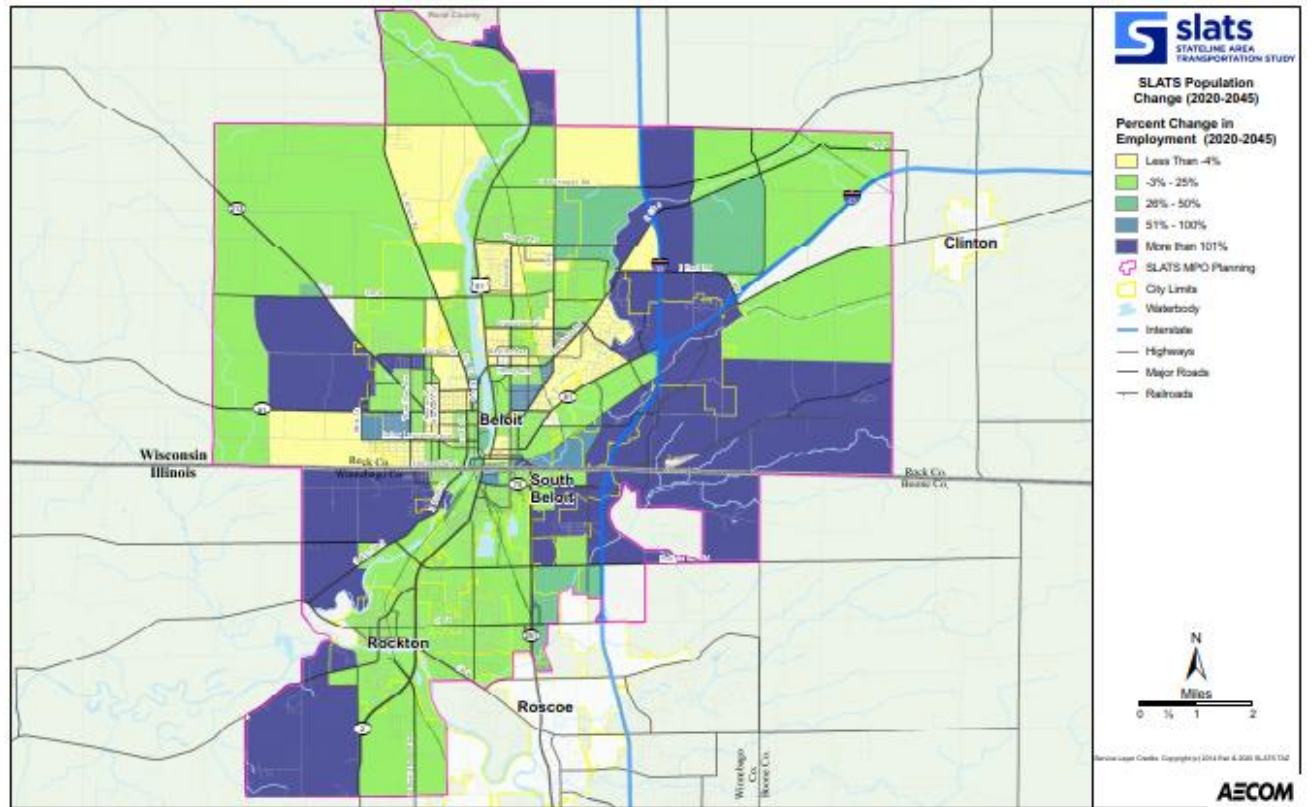


FIGURE 19. EMPLOYMENT CHANGE (PERCENT CHANGE, 2020 – 2045)



Chapter 5. Current and Future Year Needs

A review of existing conditions provides a foundation for identifying current transportation and mobility challenges facing the SLATS MPA. Given that the 2045 LRTP was developed during the COVID-19 pandemic, the evaluation of current conditions primarily reflects pre-pandemic conditions. This chapter highlights the key findings, including a discussion of challenges and opportunities, with a more detailed discussion of existing conditions provided in **Appendix D**.

Another important component of the LRTP is to analyze future year needs and opportunities. The future year analysis considers the potential transportation and mobility impacts resulting from the projected growth that is anticipated to occur through the year 2045 (see Chapter 4 for year 2020 and year 2045 population and employment totals/projections). The evaluation incorporates technical analysis, primarily through the use of the WisDOT travel demand forecasting model that covers the SLATS MPA, along with input from local agencies, stakeholders, and the general public regarding future residential growth and economic development activities. The future year conditions also consider recent and on-going planning studies that could impact future transportation decision making and investments. **Appendix D** includes additional information regarding future year conditions.

To support both the existing conditions and future year analysis, a review of current Comprehensive Plans, prepared by agencies that fall within the SLATS MPA, was conducted. This review helps identify current transportation and land use issues and challenges, general policies relating to transportation and mobility issues, and potential future year transportation investments. **Appendix E** provides a summary of the Comprehensive Plans review process.

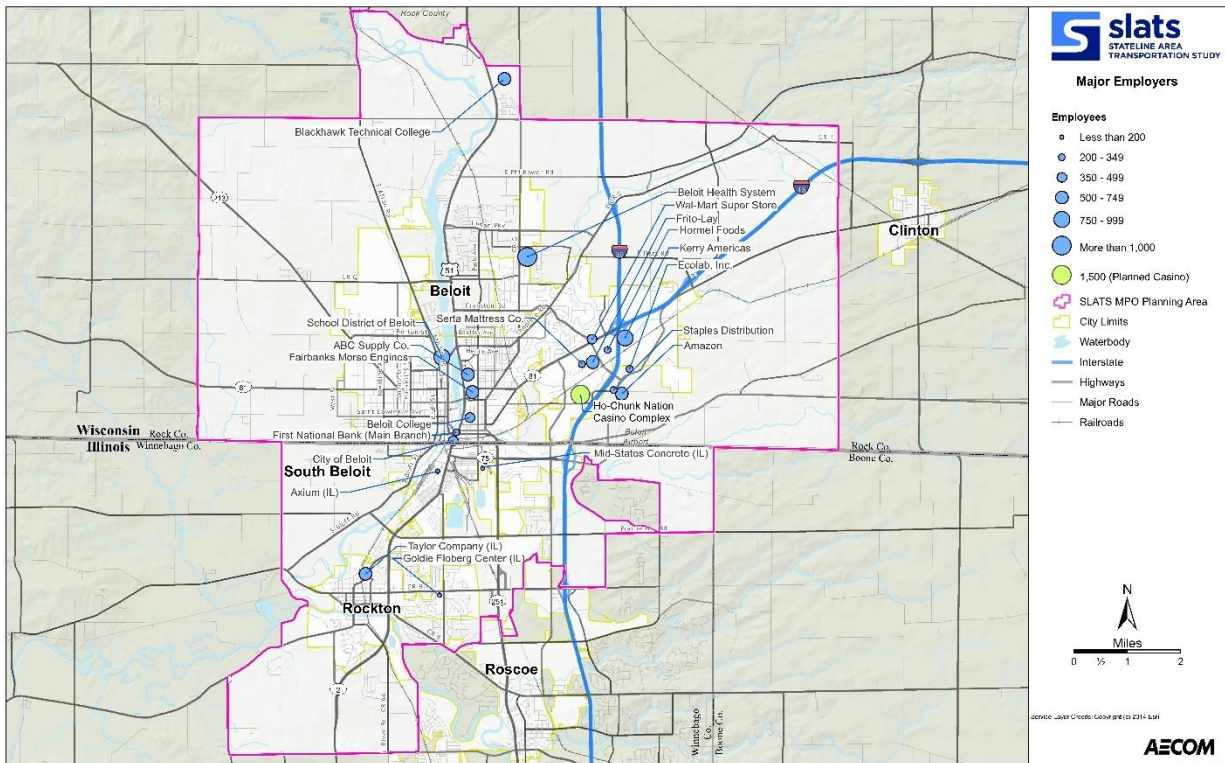
Growth and Development

Recent improvements to the I-39/90 corridor, including mainline capacity improvements, and completion of the I-39/90 and I-43 interchange in 2021, provides an ideal transportation corridor to support established businesses, and attract new economic development activity within the region. The Gateway Business Park, and areas along Gateway Boulevard, is one area that is expected to experience continued growth and the addition of a one million square foot Amazon distribution facility is just one example of a business recognizing the strategic advantage of locating in the SLATS MPA. The entire Gateway Business Park is either owned by the City of Beloit or the Greater Beloit Economic Development Corporation and is home to globally and nationally recognized companies. **Figure 20** highlights a few of the major employers located within Gateway Business Park, as well as other areas of the SLATS MPA.

Given the growth occurring along and east of the I-39/90 corridor, past LRTPs have discussed the possibility of extending the SLATS MPA boundary east toward the Rock – Walworth County line. While no action has been taken to date, this topic is one that should be revisited following the release of the 2020 US Census data.

In addition to growth in the Gateway Business Park, the Ho-Chunk Nation were approved (Spring 2021) for a new casino in Beloit. Also, a new downtown minor league baseball stadium, and event center, opened in August 2021 (additional details summarized in the following sections). South Beloit also has a large amount of vacant land available for development, in particular land north of IL 75 between IL 251 and I-39/90. There is also land available along the east side of Willowbrook Road, from approximately IL 75 south toward Rockton Road. Much of this land is planned for regional commercial use, and it is not unreasonable to expect that development could be spurred by the casino, and continued growth in the Greater Beloit region.

FIGURE 20. MAJOR EMPLOYERS WITHIN THE SLATS MPA



Ho-Chunk Nation Casino, Hotel, Water Park and Convention Center

In March 2021, Wisconsin Governor Tony Evers approved the development of a \$405 million Ho-Chunk Nation casino, hotel, water park and convention center in Beloit. The resort complex will be located just north of the Illinois border and immediately west of I-39/90. The planned development involves the transfer of 33 acres of land into trust land status as part of a larger 73.5-acre plot owned by the Ho-Chunk near Willowbrook and Colley roads in Beloit (Source: Beloit Daily News).

The development of this complex is estimated to create more than 1,500 jobs and more than 2,000 construction jobs. The casino resort complex is anticipated to be one of the largest casinos in Wisconsin featuring a 300-room hotel, 45,000 square feet of meeting and convention space and a 40,000-square-foot indoor waterpark. Construction is expected to begin in 2022 and will be completed in phases. **Figure 21** displays a rendering of the Ho-Chunk Nation casino complex.

FIGURE 21. RENDERING OF THE HO-CHUNK NATION CASINO COMPLEX



ABC Supply Stadium and Event Facility

In August 2021, the ABC Supply Stadium and event facility opened. Strategically located along the Rock River, the stadium is an important part of continued economic growth of downtown Beloit, adding another feature destination for tourists and citizens alike.

The multi-use facility hosts Beloit's Minor League Baseball team during the summer and will also be used for youth sports, conventions, concerts, and community events year-round, bringing thousands of customers to downtown Beloit throughout the year. The facility will host approximately 100 full time employees and has a gameday capacity of 3,500. The facility also includes a 5,000 square foot indoor stadium club that will accommodate year-round events. **Figure 22** displays a rendering of the stadium.

FIGURE 22. RENDERING OF THE ABC SUPPLY STADIUM



Review of Comprehensive Plans

An understanding of transportation and land use policies plays an important role in the long-term success of the regional transportation system as local development patterns and decision-making impact mobility, efficiency, and mode choice. For example, compact development typically is supportive of multimodal networks to move people more efficiently over shorter distances, which is why transit is most successful in densely populated areas with a mix of land uses. Improved integration of land use and transportation planning requires regional coordination among local agencies to strengthen this relationship. As such, land use decisions can help (or hinder) options for transportation system users to access employment opportunities, goods, services, medical facilities, and other resources to improve the quality of their lives.

General transportation and land use themes were extrapolated from area Comprehensive Plans and are summarized in **Table 6**. General themes, and relevant transportation improvements, for each Comprehensive Plan follow the summary table.

TABLE 6. CROSS-CUTTING THEMES CONTAINED IN SLATS AREA COMPREHENSIVE PLANS

Transportation System Vision & Goals							
Vision Statement	City of Beloit	City of South Beloit	Town of Beloit	Town of Turtle	Village of Rockton	Rock County, Wisconsin	Winnebago County, Illinois
Balanced, Multimodal, Support Alternative	■	■	■	■	■	■	■
Safe, Efficient	■	■	■				
Support Economic Development / Vitality	■	■	■	■	■		■
Affordable / Fiscally Sound	■						■
Accessible / Multiple Users	■		■			■	■
Attractively Designed Facilities	■		■				■
Provide Bicycle and Pedestrian Facilities			■	■		■	■
Maintain Existing Infrastructure / Facilities		■	■	■			
Address Capacity Needs / Accommodate Growth	■	■	■	■	■	■	■
Joint Cooperation / Agency Coordination	■		■		■	■	■

Land Use / Development-Related Vision & Goals							
Vision Statement	City of Beloit	City of South Beloit	Town of Beloit	Town of Turtle	Village of Rockton	Rock County, Wisconsin	Winnebago County, Illinois
Maintain / Promote Quality of Life	■	■	■		■	■	■
Protect Natural Resources / Environmentally	■	■	■		■	■	
Desire/Protect Rural Character	■	■	■	■	■		■
Desire Suburban Character				■			
Desire Balance of Urban / Rural Amenities	■		■		■	■	■
Desire Sustainable Land Uses (Agricultural, Forestry)	■	■			■		
Create Sense of Place	■		■				
Coordinate Land Use & Transportation	■	■	■	■	■	■	■

Source: AECOM Review of Most Current Comprehensive Plans, 2021.

All of the Comprehensive Plans identify the importance of integrating land use and transportation decisions. In the short term, development near existing city infrastructure, transit service, bicycle and pedestrian accommodations and housing result in lower costs to the community. In the long term, land use decisions can impact future transit opportunities, such as passenger rail service that could connect the SLATS region to Madison, WI, Rockford, IL, and potentially Chicago, IL.

Overall, SLATS area jurisdictions/communities place a high value on developing a multimodal transportation system, recognize the need to accommodate future growth and promote economic development, and acknowledge the need to preserve the region’s extensive rural character and agricultural resources. For example, the Rock County Comprehensive Plan (2035) acknowledges new and improved transportation corridors are likely to change how land is used not only along those corridors, but also throughout the

County. Winnebago County’s 2030 Land Resource Management Plan advocates for a balanced transportation system that is integrated with land use policy to enhance economic development, vitality, and community character.

Moreover, the Comprehensive Plans are consistent with the SLATS 2045 LRTP goals, specifically those of preserving and protecting the environment, providing well-connected and sustainable neighborhoods that enhance quality of life, and strengthening the integration between land use and transportation to promote transportation system efficiency.

Roadways / Freight

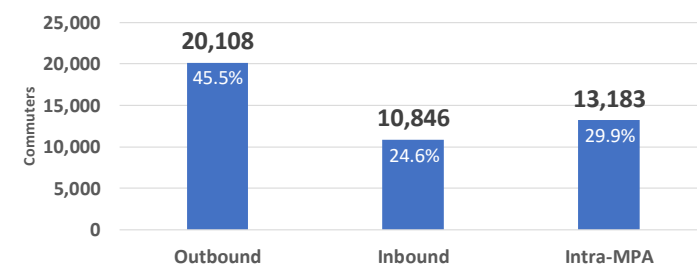
The SLATS region includes an extensive roadway network that provides local and regional connections within and through the MPA. I-39/90 is a major north-south interstate along the eastern portion of the MPA, connecting Rockford to the south and Janesville and Madison to north. I-43 connects to I-39/90 near Milwaukee Road and continues northeast to Milwaukee. The roadway network serves multiple users, including facilitating the movement of heavy truck traffic/freight. The movement of goods and services through the MPA is an integral part of the region’s economic success and is discussed further in this section.

Commute Flows

The predominant mode of travel for SLATS area residents is drive alone. Commute flows in the region provide an indication of where residents of the SLATS MPA travel to for work. A comparison of commute flows originating in or destined for the county subdivisions that overlap the MPA boundary helps better understand how regional travel patterns impact the roadway network. It is important to note that this data reflects pre-pandemic travel patterns.

According to recent Longitudinal Employer-Household Dynamics (LEHD) Origin-Destination Employment Statistics (LODES) data from the US Census, work trips that originate and/or end in the approximate MPA totaled 44,137.⁴ As displayed in **Figure 23**, among these work trips, 25 percent are inbound (i.e., workers residing outside the MPA but working within), 46 percent are outbound, and 30 percent are intra-MPA (i.e., locations where home and work are both inside the approximate MPA boundary).

FIGURE 23. SLATS MPA COMMUTERS BY DIRECTION



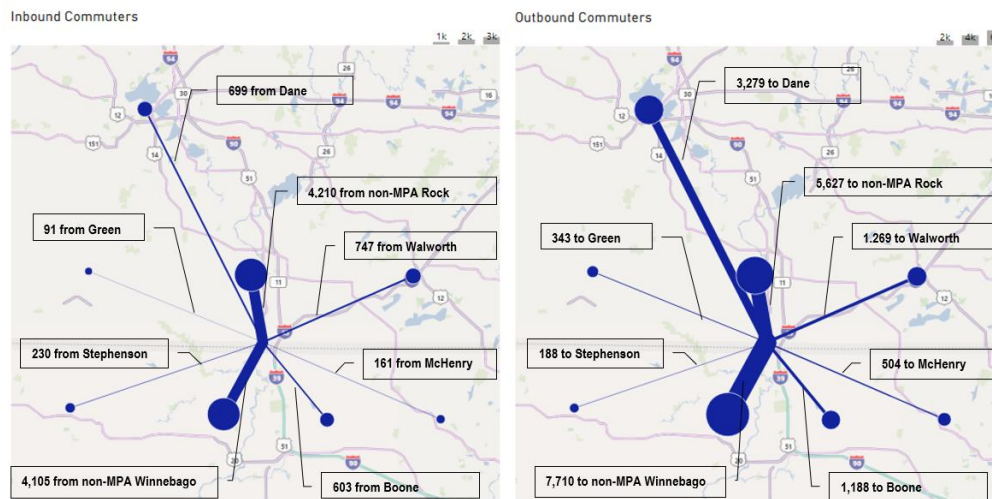
SOURCE: LODES 2018, All Jobs. Estimated MPA includes the following County Subdivisions: Beloit city, Beloit town, Rock town, and Turtle town in Wisconsin; Rockton and Roscoe townships in Illinois.

⁴ Only travel flows with adjacent counties (Rock, Winnebago, Dane, Walworth, McHenry, Boone, Stephenson, Green) are included in these totals.

An illustration of the inbound and outbound commutes is provided in **Figure 24**. The largest share of inbound and outbound commuters travel to/from the areas of Rock and Winnebago Counties that are not within the MPA, such as Janesville and Rockford. The non-MPA areas of Rock County attract/generate about 30 percent to 40 percent of the inbound and outbound commuters. Similarly, the non-MPA areas of Winnebago attract/generate about 40 percent of the inbound and outbound commuters.

The next tier of commute origins includes Walworth, Dane, and Boone Counties, each sending about 600 to 700 commuters to the SLATS MPA. In the opposite direction, the most common outbound commute destination is Dane County (about 3,300 commute trips), followed by Walworth and Boone counties with over 1,000 commute trips.

FIGURE 24. INBOUND AND OUTBOUND COMMUTER FLOWS (MPA TO/FROM ADJACENT COUNTIES)



SOURCE: LODES 2018, All Jobs. Estimated MPA includes the following County Subdivisions: Beloit city, Beloit town, Rock town, and Turtle town in Wisconsin; Rockton and Roscoe townships in Illinois.

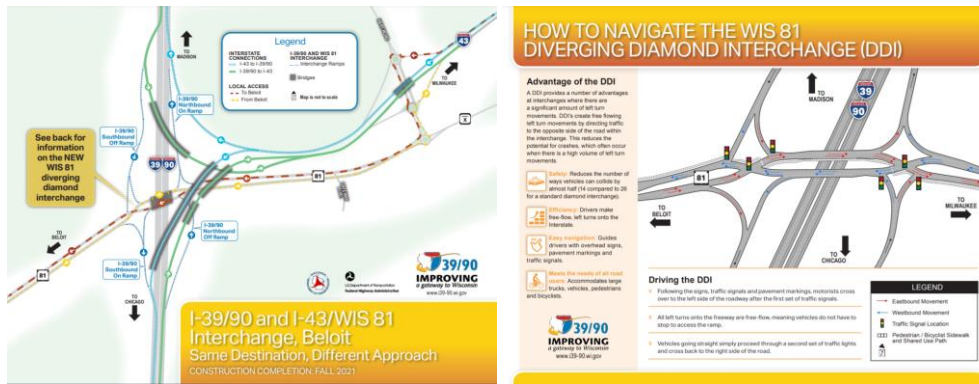
Recent Roadway Improvements

Near the completion of the SLATS 2040 LRTP in Fall 2016, CTH BT, an extension of Inman Parkway, between Prairie Avenue and Shopiere Road, opened to the traveling public. This roadway helped enhance east-west connectivity to support on-going development in the northern portion of the MPA.

During this approximately same time period, the WisDOT was in the process of completing a reconstruction and widening of the I-39/90 mainline through the SLATS MPA. At the time of the SLATS 2045 LRTP development, the WisDOT was in the process of completing the reconstruction of the I-39/90 and I-43/WIS 81 interchange (Exit 185) in Beloit. The interchange will accommodate mainline flyover ramps and a new Diverging Diamond Interchange (DDI). The flyover ramps will provide free-flow, direct access from one Interstate to the other, and the DDI will facilitate the movement of traffic between I-39/90 and WIS 81.

Figure 25 displays the DDI that was anticipated to be completed by Fall 2021.

FIGURE 25. I-39/90 AND I-43/WIS 81 DIVERGING DIAMOND INTERCHANGE



Source: https://projects.511wi.gov/i-39-90/wp-content/uploads/sites/145/I39-90_I43WIS81navigation.pdf

Daily Traffic Volumes

The highest daily traffic volumes, or Average Annual Daily Traffic (AADT), are observed east of the Rock River, and along I-39/90. The highest daily traffic volume in the SLATS MPA is on the Illinois portion of the MPA on I-39/90, between Rockton Road and Gardner Street. This segment has an AADT of 53,100. Daily volumes remain at or over 45,000 AADT for the remaining portions of the I-39/90 corridor within the MPA, including the segment just north of the WIS 81 which has an AADT of approximately 47,500.

Daily traffic volumes drop fairly significantly when looking at non-interstate volumes. The next highest observed daily volume is on I-43, just east of I-39/90. This segment has an AADT of 17,300. WIS 81 (Milwaukee Road) has the next highest volumes ranging between approximately 13,000 AADT and 15,200 AADT. High volumes are also observed on Cranston Road, between WIS 81 and Shopiere Road, with an AADT approaching 13,000. **Figure 26** displays current AADT volumes within the SLATS MPA.

Daily Truck Traffic Volumes

The highest daily truck traffic volumes are on I-39/90, north of the Wisconsin-Illinois state line. Truck volumes on the Wisconsin portion of I-39/90 average 17,300 trucks per day. Truck volumes on I-39/90, just north of WIS 81, represent 36% of the AADT. Closer to the state line, truck volumes on I-39/90 represent 38% of the AADT. On the Illinois side, daily truck volumes on I-39/90 approach 15,900, representing 30% of the AADT. Daily truck volumes on I-43, east of I-39/90, reach 4,100, or nearly 24% of the AADT.

The highest non-interstate daily truck volumes are observed along Gardner Street (IL 75). West of I-39/90, daily truck volumes reach 3,700 or nearly 31% of the 12,000 AADT. East of I-39/90, daily truck volumes reach 2,200, or 27% of the 8,150 AADT. Gardner Street is discussed further in the next section.

Limited river crossings in the SLATS MPA result in trucks traveling through the downtown area. The Henry Avenue and Portland Avenue bridges each carry approximately 1,000 trucks per day. WIS 81 (Milwaukee Road) is another heavily traveled corridor with truck volumes ranging between 1,100 and 1,500, from I-39/90 to just west of Willowbrook Road. It should be noted that the completion of the I-39/90 and I-43 interchange may alter truck patterns and could potentially reduce some truck traffic that might temporarily have used alternate routes, including local roadways, during construction. It will be important to monitor truck volumes, and truck patterns, following the completion of the interchange to determine the long-term impacts on the SLATS roadway network. **Figure 27** displays current daily truck volumes in the SLATS MPA.

FIGURE 26. AVERAGE ANNUAL DAILY TRAFFIC (AADT) VOLUMES

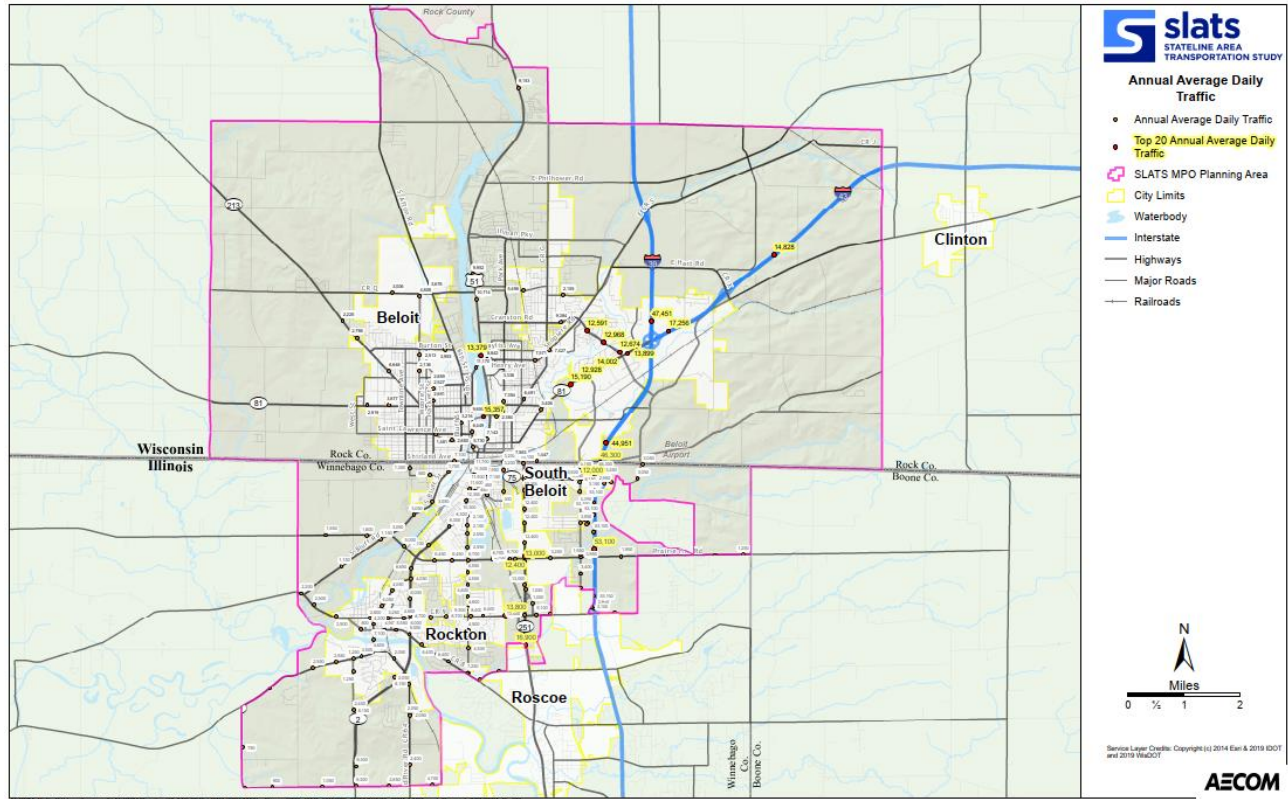
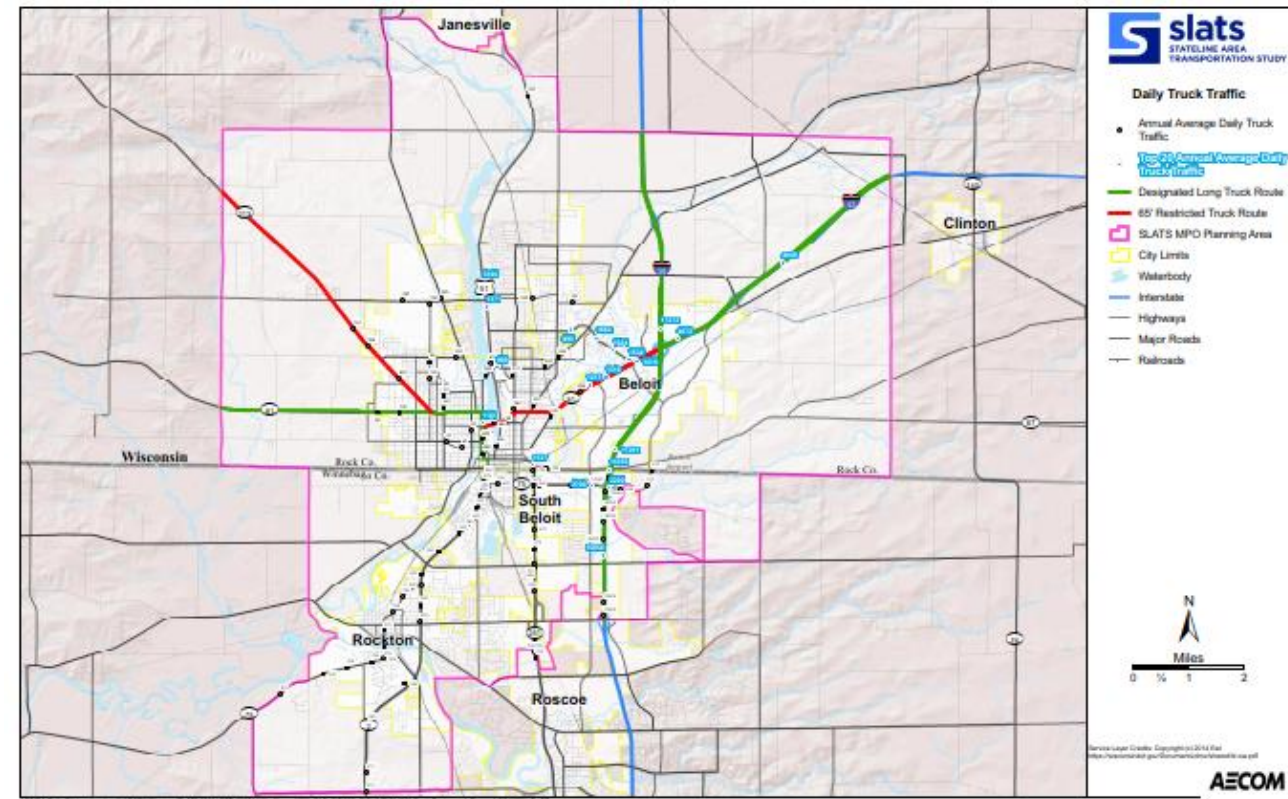


FIGURE 27. AVERAGE DAILY TRUCK VOLUMES



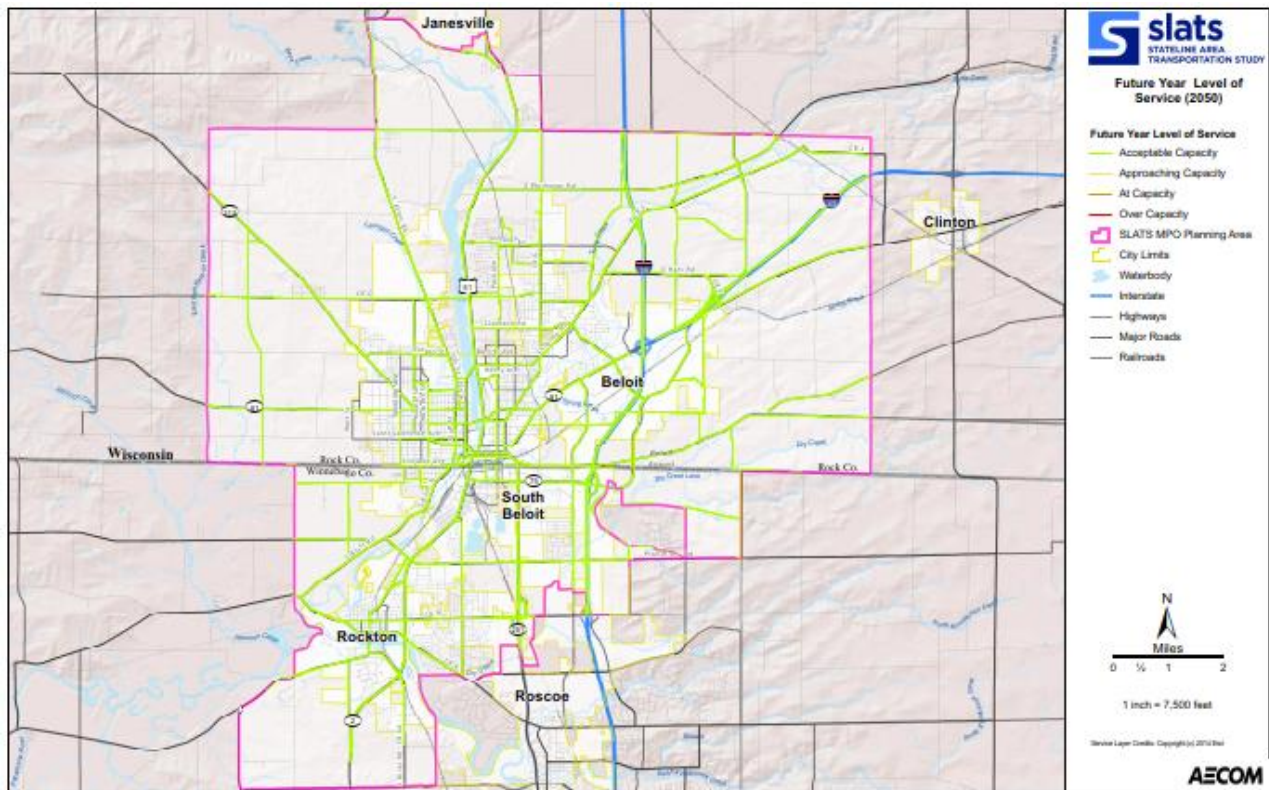
Existing and Future Year Traffic Congestion

SLATS coordinates with the WisDOT traffic modeling staff to analyze existing and future year traffic conditions using the regional travel demand forecasting model that include Rock County, and the Illinois portion of the SLATS MPA. As part of the 2045 LRTP update, WisDOT provided model results for a base year (2020) condition, as well as year 2050 model results for an existing plus committed (E+C) transportation network.⁵ For the purpose of this LRTP update, the year 2050 model results are assumed to reflect year 2045 conditions, the LRTP horizon year. Furthermore, future year conditions were modeled consistent with the projected population and employment growth, as summarized in Chapter 4.

Model Results

The base (2020) and future year (2050) model results show relatively little to no congestion within the MPA. This is not surprising as the daily traffic volumes within the MPA, as previously discussed, are generally below 17,000 vehicles per day. This does not include interstates, but as mentioned, the interstate facilities within the MPA have been recently upgraded and have sufficient capacity to carry the observed daily volumes. Figure 28 displays the results of the 2050 E+C level of service. One area worth noting is that the model appears to be under-assigning traffic a little on White Avenue (Woodward Avenue to Milwaukee Road, mostly east of Prairie Avenue). Based on counts, this corridor is very close to reaching LOS D.

FIGURE 28. PROJECTED YEAR 2050 TRAFFIC CONGESTION



⁵ An existing plus committed, or E+C network, includes projects that the MPO knows will be completed by the horizon year.

Intersection and Traffic Operations

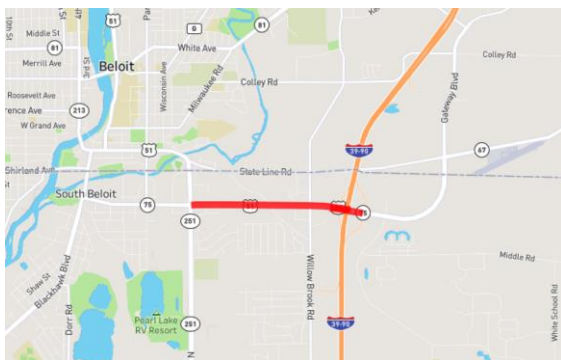
In addition to analyzing the model results, it is also important to consider how well traffic is operating at intersections throughout MPA. Often, traffic congestion is most commonly observed during the a.m. and/or p.m. peak hours when people are traveling to, or returning from, work.⁶ One corridor in particular that has been identified as a potential congestion concern, by stakeholders and the public alike, is Milwaukee Road and White Avenue. This corridor facilitates an important connection between the I-39/90 corridor and downtown Beloit, including the Portland Avenue river crossing. In addition to some of the highest AADT's in the MPA, this corridor also carries a high amount of daily truck traffic. Daily traffic volumes along Milwaukee/White do not currently reach a level that would suggest there is potential traffic congestion; however, as noted in the model discussion, a segment of White Avenue (Woodward Avenue to Milwaukee Road, mostly east of Prairie Avenue) is approaching LOS D. As such, this is an area that should be monitored for potential future year capacity or other operational improvements.

On a related topic, the MPA has limited river crossings which creates challenges from a network connectivity standpoint, and potential capacity concern. While daily bridge volumes do not currently raise capacity concerns, traffic volumes during the peak hours could be considered as heavy. Based on public comments and concerns raised by stakeholders, trucks traveling through the downtown have some difficulty completing left-turns at intersections in the downtown area which could be perceived as a capacity, or congestion, issue. The bridge crossings in particular should continue to be closely monitored for any potential operational issues. Furthermore, it is also important to consider potential impacts on other travel modes, especially pedestrians and bicyclists who could be particularly impacted by high traffic volumes.

Gardner Street Truck Bottleneck

As shown in **Figure 29**, another potential area of traffic congestion concern in the MPA is along Gardner Street (IL 75). As previously mentioned, this corridor carries 3,700 trucks, or nearly 31% of the 12,000 AADT, west of I-39/90. East of I-39/90, daily truck volumes reach 2,200, or 27% of the 8,150 AADT.

FIGURE 29. GARDNER STREET BOTTLENECK, IN SOUTH BELOIT



⁶ It should be noted that COVID-19 altered travel patterns during the pandemic, most significantly resulting in the majority of area residents switching to a work at home situation. While traffic patterns have started to return to pre-pandemic conditions, there are still many long-term impacts that need to be monitored. For example, the number of work from home employees is likely to remain high

The segment between I-39/90 and IL 251 in South Beloit was identified as part of a recent IDOT statewide truck bottleneck study that was intended to identify the most severe freight bottlenecks in the state. The study reviewed approximately 180 locations and identified the top 25 locations in three categories: Urban Chicago, Urban Other, and Rural. Gardner Street, between I-39/90 and IL 251, ranked 17th for the Urban Other category. The study further found this segment to have an 84% unreliability metric, a secondary congestion measure used for the analysis. The average travel speed on the corridor was also calculated at 21.0 mph, compared to the free flow speed which was reported as 40.6 mph.

While this bottleneck does not show up in the travel demand forecasting results as far as a capacity concern, the heavy truck traffic is likely a contributing factor to operational issues, and potentially perceived congestion concerns. A main concern along Gardner Street is the two truck stop generators located at IL 75 and Willowbrook Road. Currently, there are geometric issues with Willowbrook Road from the north truck stop entrance/exit (north side of IL 75) through to the south truck stop entrance/exit (south side of IL 75) spanning the intersection. On the north side of IL 75 in particular, trucks frequently complete their right-turn into the truck stop from the through travel lane, avoiding using the designated right-turn lane, or additional shoulder width that is present. The painted median in this area of Gardner Street is also frequently used by trucks and cars alike to travel south. Furthermore, another operational concern in this area is related to current traffic signal timing, and/or a lack of signal coordination at the exit/entrance ramps to/from IL 75 to I-39/90, and IL 75 and Willowbrook Road. Based on local feedback, it is not unusual for a motorist to experience delays when traveling this corridor, including having to stop at all three intersections.

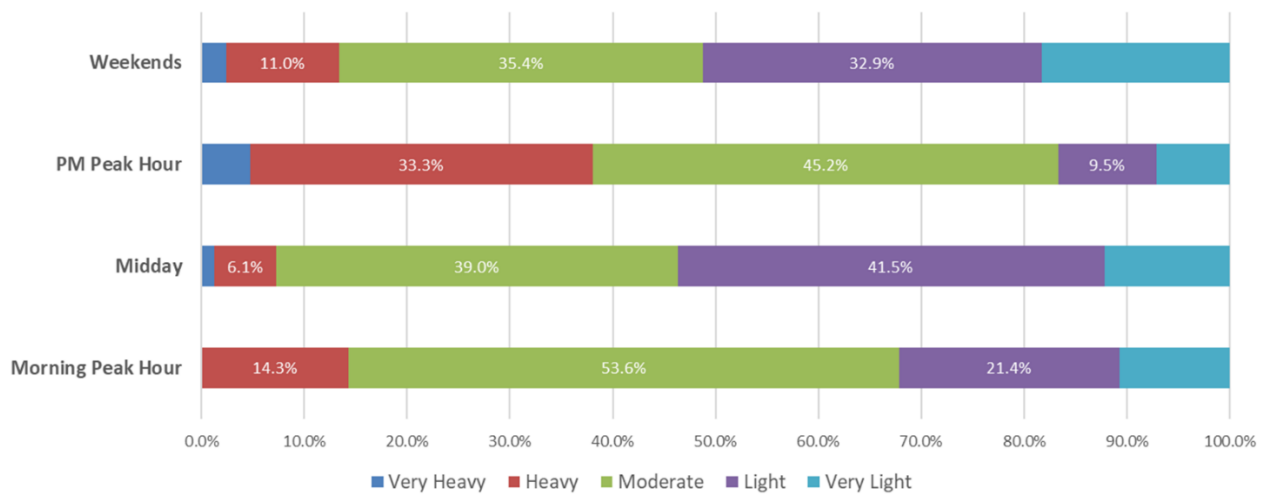
A few additional items worth noting as it relates to the Gardner Street truck bottleneck. First, there is a precast concrete manufacturer located west of IL 251 which could be a contributing factor, particularly when traveling eastbound toward I-39/90. Additionally, the City of South Beloit has previously noted that truck traffic is evident along the entire IL 75 corridor through town so the potential bottleneck, or perceived congestion and/or operational concerns, may extend further west toward Blackhawk Boulevard.

Stakeholder and Public Perception

Another way to analyze traffic congestion is to take the pulse of stakeholders and the general public. The SLATS 2045 LRTP community survey #1 asked respondents to indicate their perception of traffic congestion within the MPA. Based on approximately 100 survey responses, traffic congestion does not appear to be a significant concern to area residents. This is further supported by stakeholder outreach efforts that highlighted concerns related to high travel speeds, and reckless driving as opposed to any significant concerns related to traffic congestion.

With regard to the survey responses, the pm peak hour was one time period where approximately 33% of respondents indicate that congestion is “heavy.” Overall fewer than five percent of survey respondents indicated that traffic congestion in the SLATS MPA is “very heavy,” which would likely correspond to reoccurring traffic congestion, or better described as stop-and-go traffic conditions. It is also worth noting that the 2045 LRTP results reflect similar responses recorded in the 2040 LRTP. The one area of concern during the 2040 LRTP that was identified was congestion along the I-39/90 corridor; however, that issue has been addressed by recent interstate capacity and interchange improvements. **Figure 30** displays the perceived level of traffic congestion within the MPA.

FIGURE 30. PERCEIVED TRAFFIC CONGESTION (BY TIME OF DAY)



Source: SLATS 2045 LRTP Survey #1 – March/April 2021.

Roadway Safety

SLATS places great importance on providing a safe roadway network that accommodates the traveling public and facilitates the efficient movement of goods. This is reflected in the SLATS 2045 LRTP goals and objectives which emphasize the need for roadways to be safe and accessible for all transportation users. Furthermore, SLATS supports the efforts of WisDOT and IDOT to specifically reduce crashes that result in fatalities and serious injuries. This is consistent with target setting as part of FAST Act performance measures, and in efforts to reduce crashes as included in the respective state Highway Safety Improvement Programs (HSIP). **Table 7** summarizes recent crash data for the SLATS MPA. Data for 2020 was not included as a complete dataset was not available, and to avoid any significant changes due to the COVID-19 impact on travel patterns.

TABLE 7. TOTAL CRASHES, BY SEVERITY (2017 TO 2019)

	MPO Area	Fatalities (K)	Serious Injury (A)	Minor Injury (B)	Possible Injury(C)	PDO	Total
2017	Wisconsin	2	30	141	216	919	1,308
	Illinois	1	8	34	34	200	277
	Subtotal	3	38	175	250	1,119	1,585
2018	Wisconsin	8	40	187	184	1,007	1,426
	Illinois	2	19	33	41	224	319
	Subtotal	10	59	220	225	1,231	1,745
2019	Wisconsin	5	33	168	156	965	1,327
	Illinois	1	8	37	25	211	282
	Subtotal	6	41	205	181	1,176	1,609
2017 to 2019	Wisconsin	15	103	496	556	2,891	4,061
	Illinois	4	35	104	100	635	878
	Total	19	138	600	656	3,526	4,939

Source: WisDOT and IDOT Crash Data, 2017 to 2019.

Approximately 82% of crashes occur within the Wisconsin portion of the SLATS MPA. In total, there were 19 fatalities during this three-year period, and 138 serious injuries. These crash types combined represent approximately 3% of all crashes within the MPA. **Figure 31** displays high crash location within the SLATS MPA. **Table 8** summarizes the crash severity for the high crash locations.

FIGURE 31. HIGH CRASH LOCATIONS

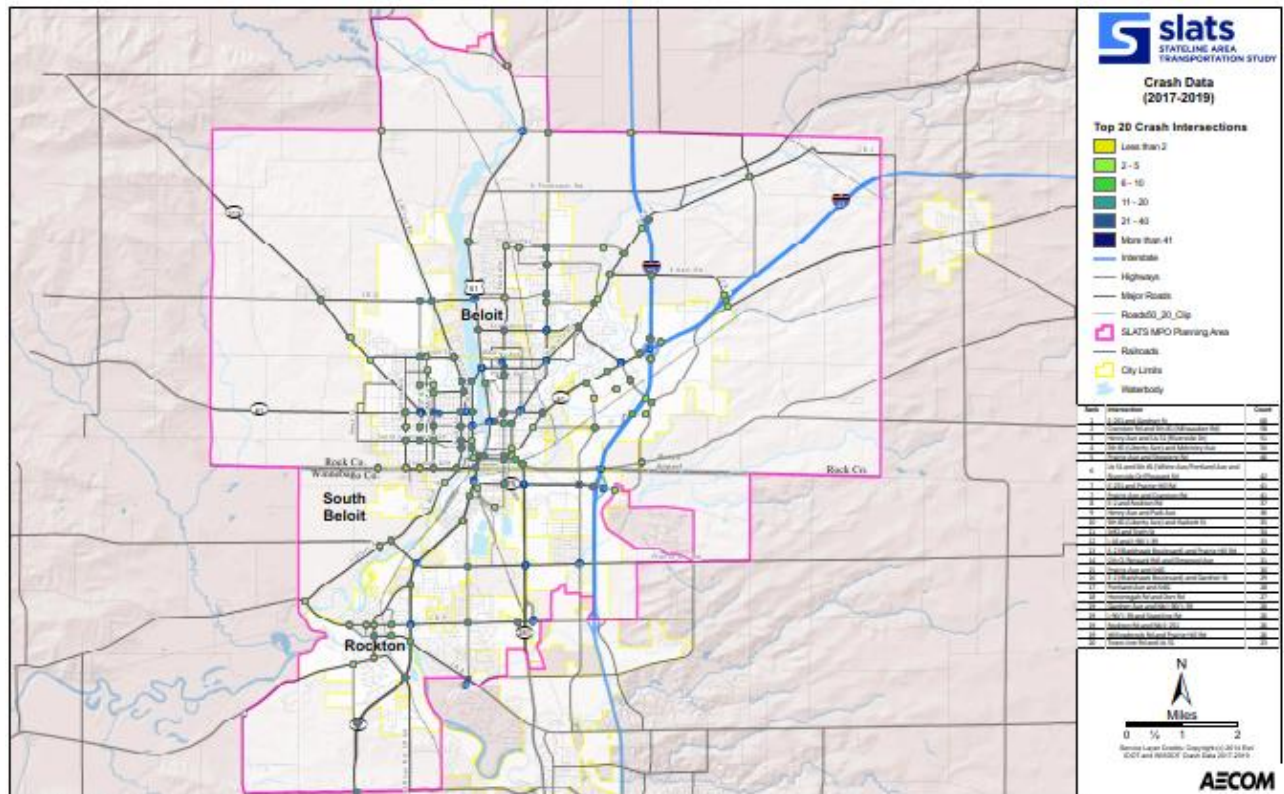


TABLE 8. HIGH CRASH LOCATIONS (2017 TO 2019)

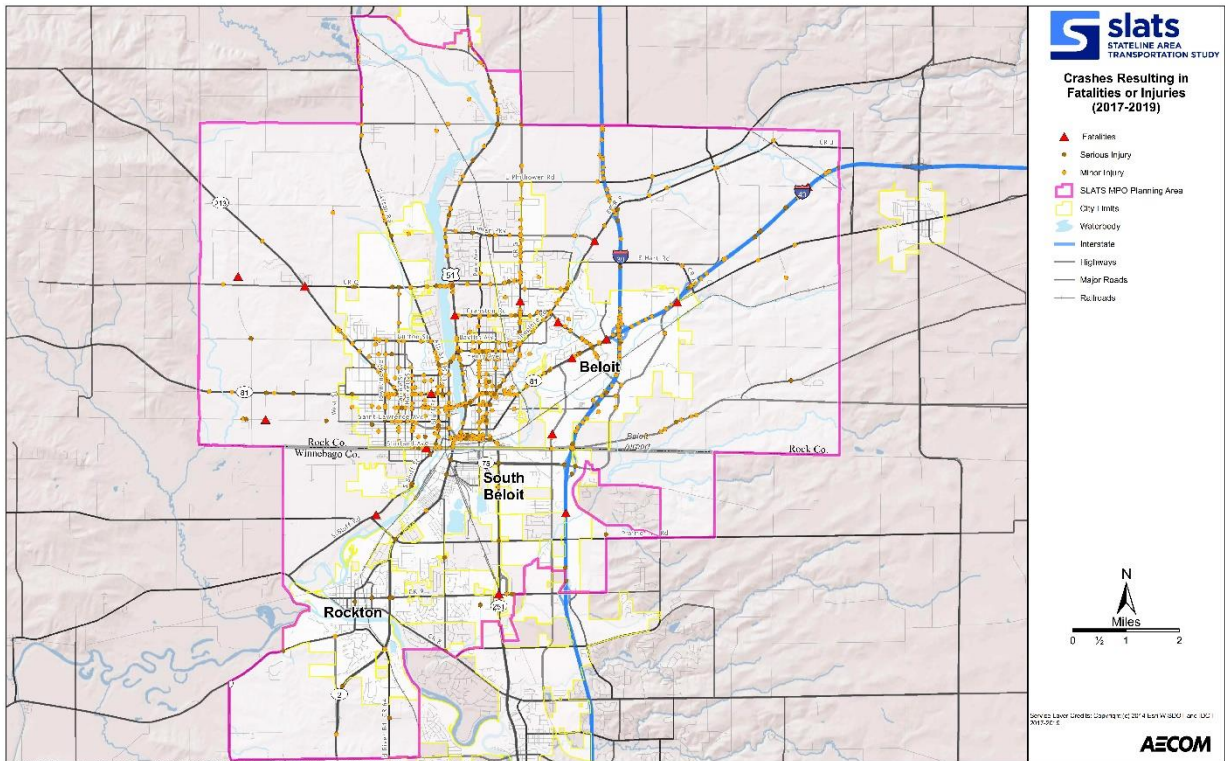
Rank	Intersection	Total Crashes	Fatalities	Serious Injury	Minor Injury	PDO
1	IL-251 and Gardner St	68	0	4	37	45
2	Cranston Rd and Sth 81 (Milwaukee Rd)	58	0	1	11	49
3	Henry Ave and US 51 (Riverside Dr)	51	0	1	23	40
4	STH 81 (Liberty Ave) and Mckinley Ave	50	0	1	16	36
5	Prairie Ave and Shopiere Rd	46	0	0	22	31
6	US 51 and STH 81 (White/Portland and Riverside / Pleasant)	42	0	1	8	33
7	IL-251 and Prairie Hill Rd	41	0	2	9	32
7	Prairie Ave and Cranston Rd	41	0	0	13	30
8	IL-2 and Rockton Rd	37	0	4	12	25
9	Henry Ave and Park Ave	36	0	0	22	20
10	Sth 81 (Liberty Ave) and Hackett St	35	0	0	14	24
11	SR 81 and Sixth St	34	0	1	6	29
12	I-43 and I-90/ I-39	33	0	0	7	27
13	IL-2 (Blackhawk Boulevard) and Prairie Hill Rd	32	0	2	16	20
14	Cth Q (Newark Rd) and Elmwood Ave	31	0	1	11	22
15	Prairie Ave and Sr81	30	0	1	3	27
16	IL-2 (Blackhawk Boulevard) and Gardner St	29	0	1	9	21
17	Portland Ave and Sr81	28	0	0	15	18
18	Hononegah Rd and Dorr Rd	27	0	1	4	22
19	Gardner Ave and Nb I-90/ I-39	26	0	4	8	20
19	I-90/ I-39 and Stateline Rd	26	0	0	9	18
19	Rockton Rd and Nb IL-251	26	0	0	8	20
19	Willowbrook Rd and Prairie Hill Rd	26	0	0	14	13
20	Town Line Rd and Us 51	23	0	2	13	13

Source: WisDOT and IDOT Crash Data, 2017 to 2019.

NOTE: GIS analysis used a 300-foot buffer around intersections to identify high crash locations.

As mentioned, FAST Act places particular emphasis on reducing crashes that result in fatalities and serious injuries. **Figure 32** identifies the location of fatal and serious injury crashes that occurred within the SLATS MPA between 2017 and 2019. This figure also displays the location of minor injuries. These crashes are provided to help analysis crash trends and to potentially address areas of concern before crashes increase, or crash severity becomes worse.

FIGURE 32. FATAL AND SERIOUS INJURY CRASH LOCATIONS



Fatalities

When reviewing the location of fatalities, the following was observed.

- There were three fatalities scattered in the western portion of the MPA, outside of the urbanized area.
- Three fatalities were observed in the vicinity of the I-39/90 and I-43 interchange, including two on WIS 81. Two fatalities were observed along segments of Cranston Road, with another fatality on Prairie just north of Cranston.
- There was a fatality that occurred on Willowbrook Road, just north of the state line. There was also a minor injury crash that occurred near at the state line. It is worth noting these two incidents as Willowbrook Road will become the primary corridor to access the future casino (plans to improve this corridor have been identified but they should be a high priority, on both the Wisconsin and Illinois sides of the MPA).

Serious and Minor Injuries

When reviewing the location of serious and minor injuries, the following was observed.

- There was a high concentration of crashes, resulting in serious and minor injuries, near all of the river crossings in the Wisconsin portion of the MPA.

- Broad Street, and Grand Avenue, between the river and Park Avenue, have a high concentration of crashes resulting in serious and minor injuries.
- White Avenue, and transitioning across the river along Portland Avenue, has a high concentration of crashes resulting in serious and minor injuries. There were four serious injuries observed between Prairie Avenue and Pleasant Street (US 51).
- Liberty Avenue (WIS 81), between 4th Street, and Townline Avenue, has a high concentration of crashes resulting in minor injuries. There was one serious injury observed near the intersection of 5th Street. There was also a fatality observed just west of 6th Street. This location is of particular note given the proximity to Beloit Memorial High School.

As a final observation, the project team was somewhat surprised to see the high concentration of serious injuries, and minor injuries, occurring near downtown Beloit. Generally speaking, given the nature of a downtown area, it was initially thought that there would be slower travel speeds and fewer serious and minor injury crashes. The project team used this information to help inform on-going discussions with area stakeholders, in particular the safety stakeholder group. The results of this stakeholder meeting confirmed that the data was accurate, and several stakeholders identified traveling at high rates of speed and reckless driving as particular concerns that contribute to the high concentration of crashes. Results from the online issues mapping also highlighted some potential contributing factors. For example, there were some comments regarding the difficulty of making turning movements the intersection of Broad Street and Park Avenue. Other comments referenced the high travel speeds, which supported information provided by local law enforcement officials.

Issues Identified by the Public

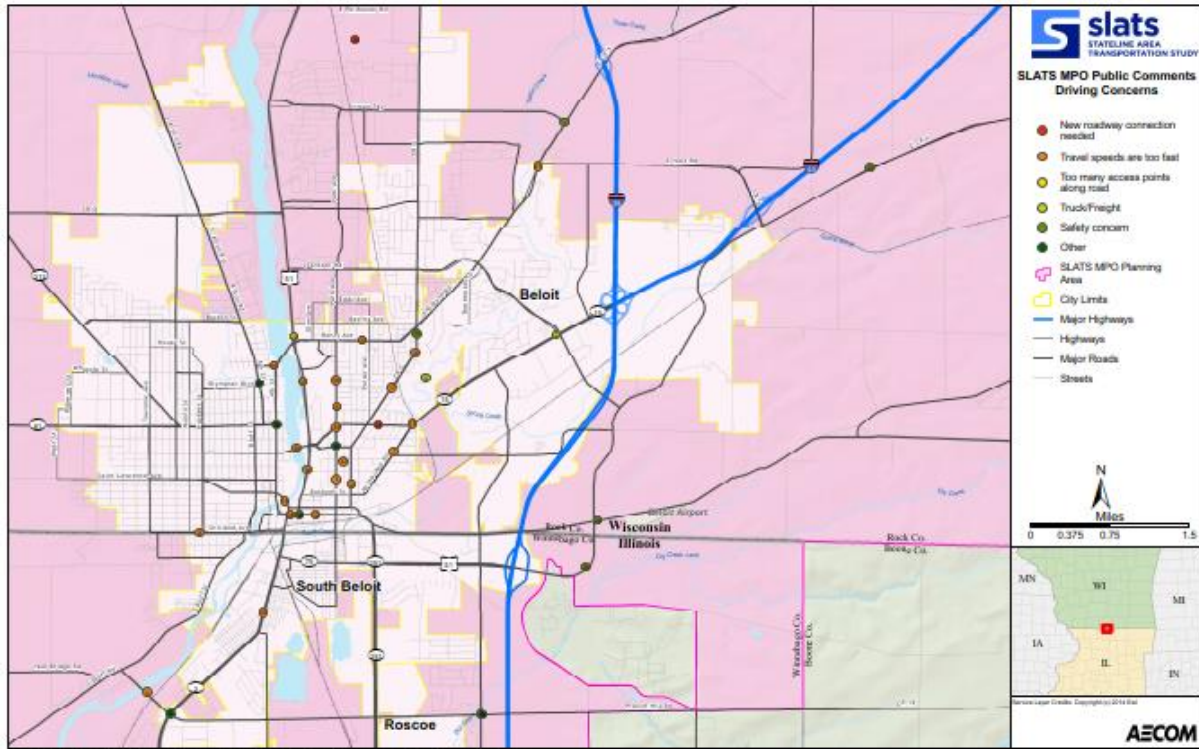
The online mapping tool recorded the location of potential roadway concerns within the SLATS MPA. In total, 39 individuals identified existing concerns, and/or potential improvements, related to driving/roadways within the region. **Figure 33** displays the driving/roadway areas of concern as identified through the online mapping tool. Additional details from the online mapping is provided in **Appendix A**.

High travel speeds were identified in a number of locations within the SLATS MPA. In particular, respondents indicated concerns about high speeds near schools/parks. High travel speeds in the downtown area were also identified, with Broad Street being one street identified. The Rock River crossings were also identified as areas with high travel speeds. Beyond safety concerns, survey respondents indicated that speeding negatively impacts quality of life, in particular related to loud traffic from trucks and other motorists. These concerns were confirmed by local law enforcement who participated in the Safety Stakeholder meeting. Law enforcement officers added that reckless driving has been a significant concern within the MPA in recent months.

Truck traffic was another concern. A few respondents identified specific locations of concern. WIS 81 was identified as traversing through residential neighborhoods and trucks were a concern from a high speed and congestion perspective. Some respondents also identified concerns regarding trucks traveling through the downtown area, ultimately negatively impacting quality of life. Additional comments identified concerns regarding the need to improve intersection operations and traffic signal timings. Some suggested that roundabouts be considered as potential improvements. Willowbrook and Prairie Hill in Illinois, and Inman Parkway and Shopiere in Wisconsin were two locations identified. Some respondents suggested that the region needs to shift roadway improvements/priorities to better accommodate pedestrian and bike safety, while at the same time helping reduce vehicular travel speeds and creating safer environments for all roadway users.

Finally, it is worth noting that none of the mapping comments identified any significant concerns regarding traffic congestion within the MPA. This information is helpful in confirming the technical analysis and modeling results which show relatively little congestion issues currently, and in the future, within the MPA.

FIGURE 33. DRIVING/ROADWAY CONCERNS (AS IDENTIFIED BY THE PUBLIC)



Public Transportation

Public transportation in the region represents a relatively small percentage of commute trips to work; however, it provides a valuable service for many area residents who do not own or have access to a car. It is also an important transportation mode for younger individuals who may not have a driver’s license, access to a vehicle, or prefer not to drive.

There are two transit systems – the Beloit Transit System (BTS) and the Stateline Mass Transit District (SMTD) – that primarily serve the Stateline region.⁷ Most of the higher-density areas in Beloit are served by BTS fixed-route buses, while those in South Beloit are served by SMTD on-demand buses. In fact, approximately 50 percent of SMTD’s total rides occurred in South Beloit, with an additional 24 percent in Rockton and 16 percent in Roscoe. Together, these core urban areas accounted for 90 percent of total ridership in 2018. Within the MPA, there are also complementary systems that provide transit and transportation services to other communities.

⁷ COVID-19 Note: The coronavirus pandemic has created many uncertainties and has significantly impacted current and near-term ridership. Transit agencies have had to alter their service plans in light of COVID-19. To what degree service levels will be restored as well as longer-term ridership impacts created by the pandemic are unknown at this time.

Beloit Transit System

BTS is the municipal transit service of the City of Beloit. BTS offers local fixed-route service within the City, as well as the Beloit-Janesville Express (BJE), which provides express service between Beloit and Janesville, in partnership with the Janesville Transit System. BTS also operates complementary paratransit service and will deviate up to three-quarters of a mile from a fixed-route for registered paratransit riders. Prior to COVID-19, SLATS developed a Transit Plan⁸ to assess area transit needs and to develop a set of service recommendations. The Transit Plan identified the following transit gaps in the MPA:

1. **Geographic Gap** – Lack of service around the Gateway Business Park along the I-39/90 corridor beyond the span of the Red route. Gap where the Blue route fails to serve the entirety of the transit-supportive area on Beloit's west side.
2. **Temporal Gap** – Lack of availability of service during specific hours when customers need to travel.
3. **Quality-of-Service Gap** – Lack of frequency, long travel times and inefficient trips, challenging transfers, and other characteristics that make the service less useful for customers.

The recommendations contained in the Transit Plan focused on changes to fixed-route service to improve service connectivity and frequency to low-income and minority areas in central Beloit, while adding service connectivity to the Gateway area, the Town of Beloit, and other parts of the region that are currently unserved. The proposed service changes covered three areas: coordinating service to neighboring communities, accommodating employment centers, and addressing weaknesses of the current system.

Since completion of the Transit Plan, BTS now operates six fixed local bus routes Monday through Friday as of October 2020 and provides on-demand service for all fixed routes on Saturdays except the BJE. **Figure 34** displays the BTS current service (as of July 2021) within the MPA.

Stateline Mass Transit District

SMTD is the other primary transit service provider in the MPA. SMTD is a demand-response system that serves the Illinois portion of the region, including South Beloit, Rockton, and Roscoe, as well as Rockton Township and Roscoe Township. In order to facilitate regional travel, SMTD provides transfer connections to BTS fixed-route service at the Beloit Transfer Center and to the Rockford Mass Transit District (RMTD) in Machesney Park, as well as special service stops to businesses along the Highway 173 corridor.

Other transportation service providers include the RMTD, which serves Rockford, IL and surrounding communities with predominantly fixed-route service. Two RMTD routes provide a connection to the SMTD service area at the Machesney Park Target transfer point.

Rock County Transit

The Rock County Council on Aging also operates Rock County Transit, which provides demand-response transportation services anywhere within Rock County to individuals age 55 and older, regardless of health, and to any individual with a disability, regardless of age. The Medical Transportation Management (MTM) is the non-emergency medical transportation (NEMT) manager for the state of Wisconsin, which arranges transportation for eligible Medicaid and BadgerCare Plus members throughout the state to qualifying medical appointments. Finally, intercity bus providers in the greater Rockford – Beloit – Janesville region

⁸ Stateline Area Transportation Study Transit Plan Final Report (May 2020)

include Greyhound Bus Lines (Rockford only), Burlington Trailways (Rockford only), and Van Galder Bus Lines (Rockford, South Beloit, and Janesville). **Figure 35** displays the regional public transit network throughout the bi-state planning area, including portions of Rock County, WI and Winnebago County, IL.

FIGURE 34. BELOIT TRANSIT SERVICE (FIXED-ROUTE SERVICE)

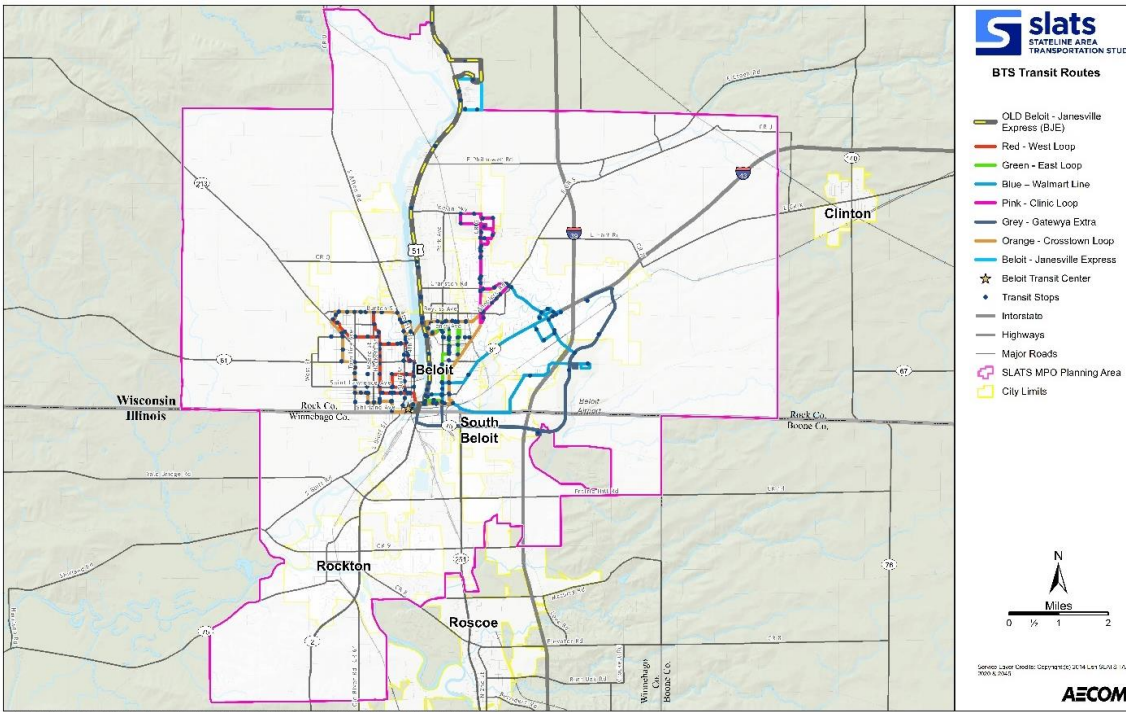
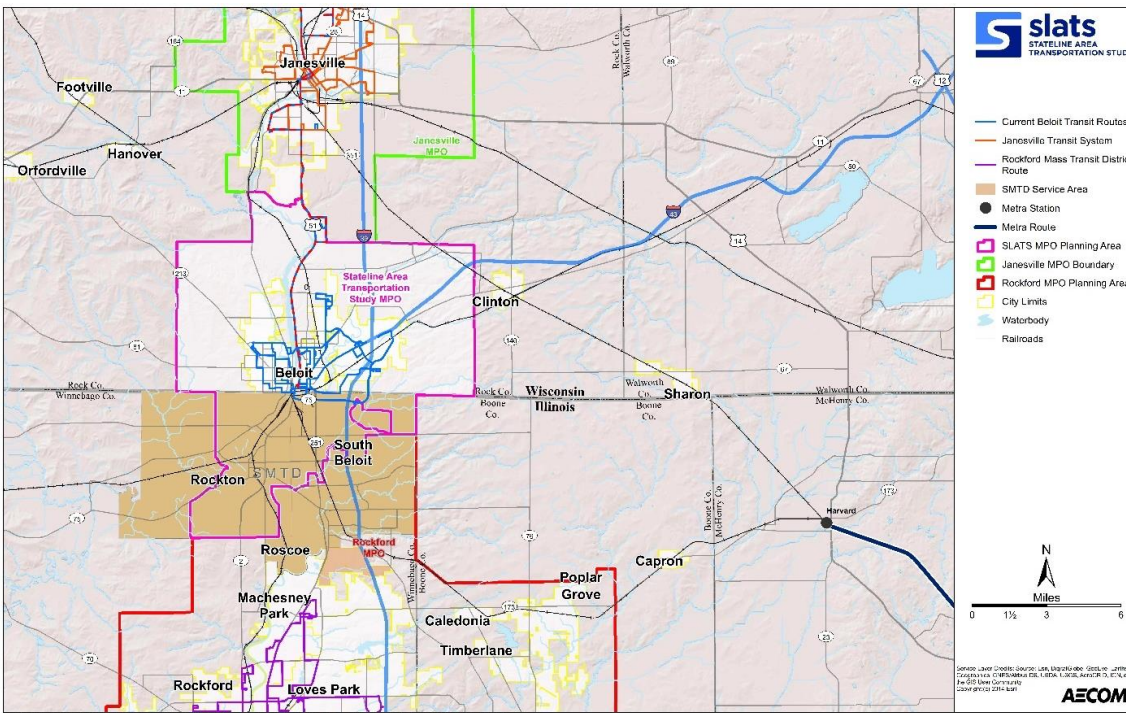


FIGURE 35. REGIONAL TRANSIT SERVICE



Regional Passenger Rail Study

In February 2021, SLATS completed the SLATS Passenger Rail Study. Since early 2000, SLATS has explored the possibility of extending passenger rail service to the region as part of studies in 2002 and 2008. As more than a decade has passed since the last study, and in preparation for the 2045 LRTP update, SLATS determined that it was an appropriate time to revisit the feasibility of extending passenger/intercity and/or commuter rail to the Stateline Area (it should be noted that this decision was made pre-COVID-19).

The closest rail service to SLATS is the Metra station located in Harvard, IL which provides commuter service along the Union Pacific-Northwest (UP-NW) line. IDOT has also advanced plans to restore intercity passenger rail service between Rockford and Chicago. Primary factors in studying passenger rail service to the Stateline Area is the potential benefits associated with improving workforce mobility, supporting economic development, expanding alternative travel options, reducing roadway congestion, and encouraging compact development patterns.

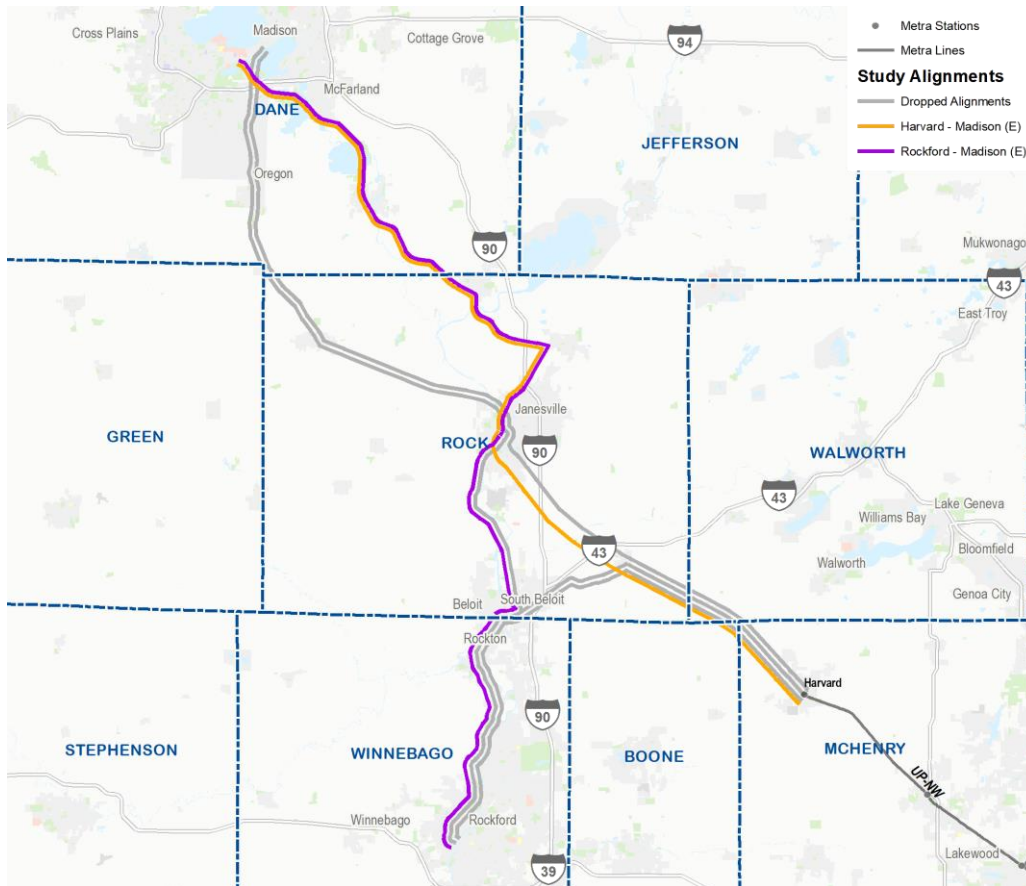
Data on commuter origins, destinations, and travel modes were gathered from the Census Transportation Planning Products (CTPP) using the most current five-year estimates (2012-2016). This data was combined with year 2050 regional population and employment projections to evaluate ridership potential at a high level of analysis. A progressive screening process was used to evaluate previously identified rail alignments and five viable study corridors. These included an extension of the Metra UP-NW to Beloit, an extension of rail service from Harvard to Madison (no direct connection to Beloit), and a new rail service connecting Rockford to Madison (with service through Beloit). The alternatives to Madison included two route variations between Janesville and Madison.

The Harvard-Beloit extension showed very low ridership potential and was dropped from consideration. The remaining four alignments showed ridership that ranged from approximately 850 to 2,150 passenger trips per day. The higher end of this range was found to be comparable to some existing passenger rail operations nationally, although these systems generally have the lowest levels of ridership and cost-effectiveness among all commuter rail systems. Ultimately, two potential alignments were identified for as corridor that would warrant further consideration (see **Figure 36**).

While all stations along the potentially viable rail alignments contribute to the overall demand for each route, the single most important source of demand appeared to be from the concentration of jobs in proximity to a potential Madison station. In conclusion, additional analysis would be required to identify the most appropriate passenger rail alignment option within the region. Some important factors for consideration include:

- Implementation will require the active involvement of all major governmental units affected, including the states (Wisconsin and Illinois), counties, local governments, other MPOs, and other regional stakeholders.
- The willingness of railroad owners to consider hosting a passenger rail service.
- Existing and future rail network capacity for passenger and freight needs.
- Alignment capital cost, including any right-of-way needs for stations and other supportive infrastructure (e.g., track/signal upgrades, rolling stock, yards, maintenance facilities).
- An identified funding source to sustain the ongoing operational and maintenance of the service.

FIGURE 36. PASSENGER RAIL ALIGNMENTS TO ADVANCE FOR FURTHER STUDY



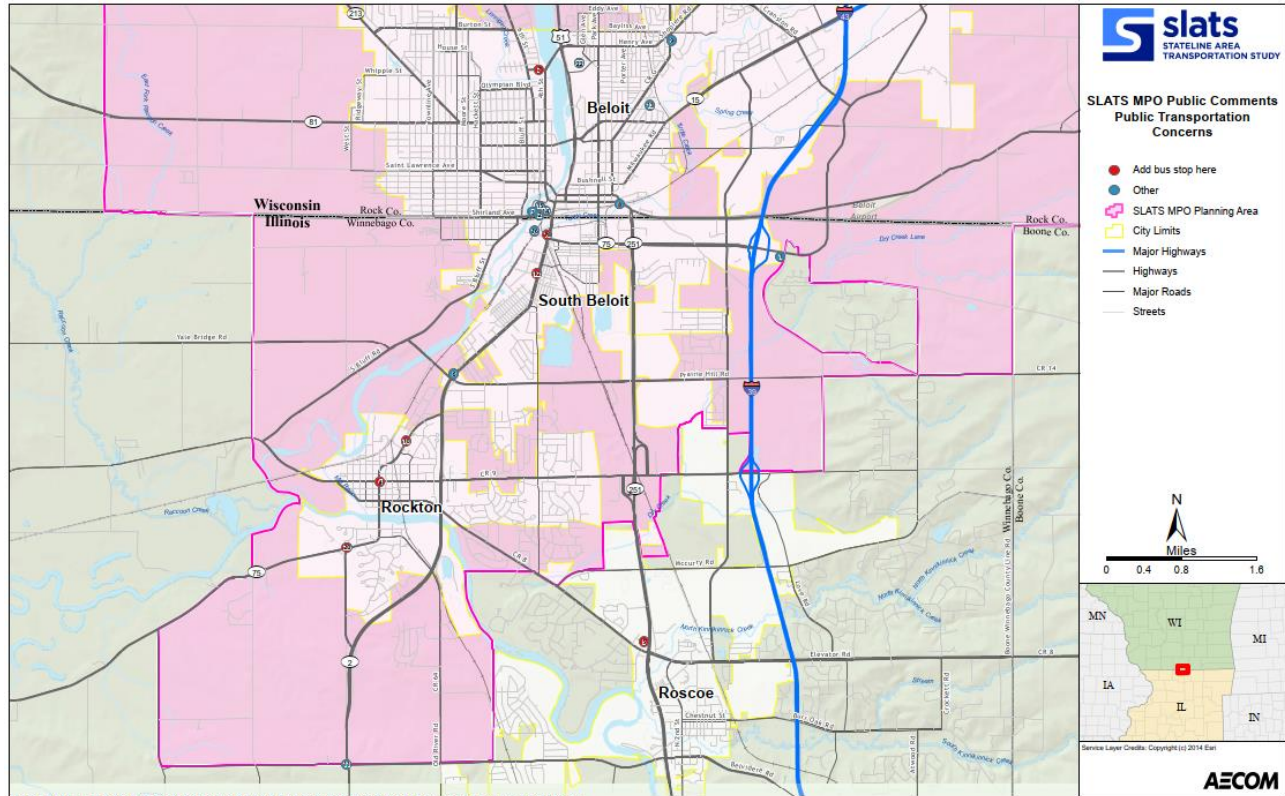
Source: SLATS Passenger Rail Study, February 2021.

Issues Identified by the Public

The online mapping tool recorded the location of potential public transportation concerns within the SLATS MPA. In total, 27 individuals identified existing concerns, and/or potential improvements, related to transit service within the region. **Figure 37** displays the areas of concern as identified through the online mapping tool. Additional details are included in **Appendix A**.

In general, the comments focused on a desire to enhance regional connections. Rockford was mentioned a few times as some desire more direct service. One respondent suggested an express route, similar to the Beloit-Janesville Express service. Rockton, although serviced by SMTD, was mentioned a few times as wanting enhanced service. While not directly stated, it appears this is reference to wanting a regular fixed-route transit service that would connect to the broader Beloit area. One response suggested a special game day express service for Beloit Snappers games, although no further details were provided regarding the location of this service. Finally, some respondents stated a desire to have better coordinated service within the region, including the ability to purchase monthly, or annual, transit passes.

FIGURE 37. PUBLIC TRANSPORTATION CONCERNS (AS IDENTIFIED BY THE PUBLIC)



Bicycle and Pedestrian

The SLATS 2017 Pedestrian and Bicycle System Plan Update (Pedestrian and Bicycle Plan) provides a roadmap for a more connected bicycle and pedestrian network, with a focus on regional connections to be constructed by local agencies and organizations. The Pedestrian and Bicycle Plan includes an existing conditions assessment. Some of the key findings from the analysis are summarized as follows:

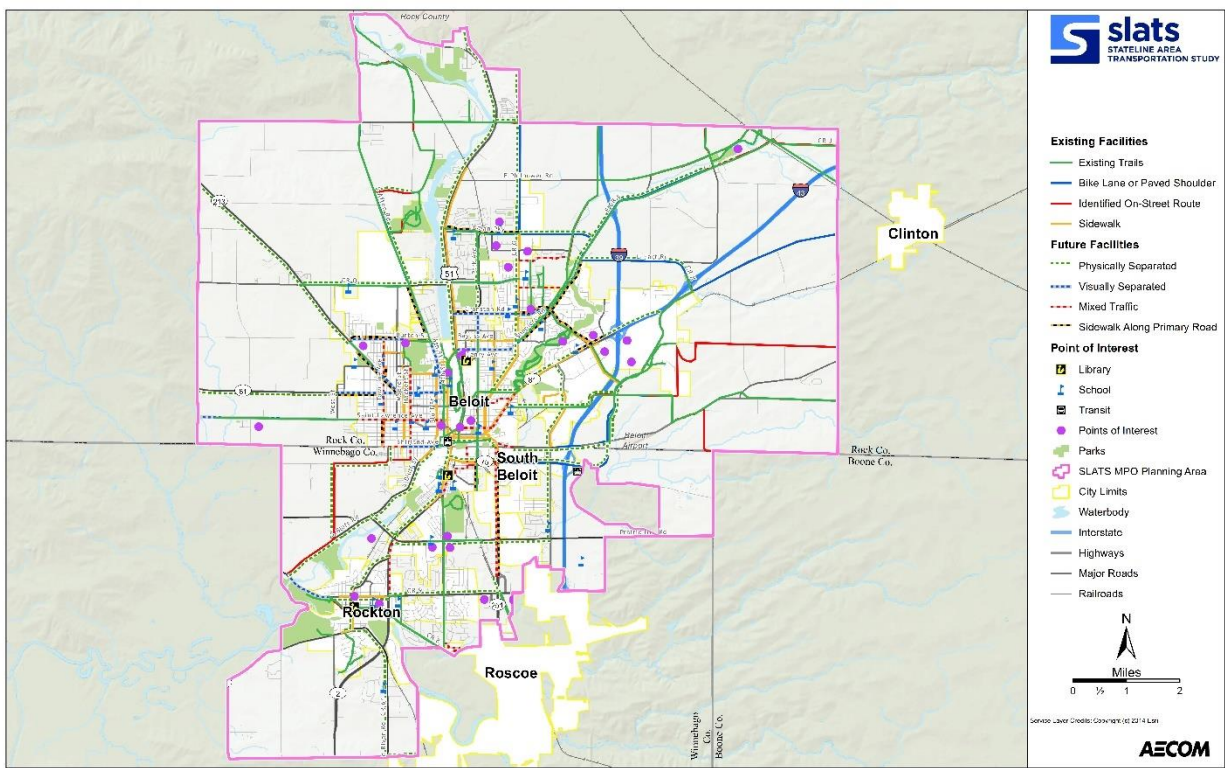
- Beloit has historically acted as the region’s center. Downtown Beloit, South Beloit, and Rockton, as well as Rock Township at the northern end of the SLATS Region, are important areas to connect through regional walking and bicycling routes.
- The region lacks east-west connectivity. There is also a desire to improve north-south connections into downtown Beloit and the riverfront.
- Residents desire places to walk and bike that feel like the riverfront: comfortable, separated from traffic, and scenic. They look for connections to the river as well as comfortable routes in their home communities.
- Equity is a key issue for the plan. Areas of high socioeconomic need must be included in system planning efforts.
- In Wisconsin, areas with the highest demand for walking and bicycling correlate with areas of high levels of socioeconomic need. The correlation is not as pronounced on the Illinois side of the study area.
- Streets perceived as high-stress routes in urban areas have multiple lanes and high traffic speeds. High stress routes in rural areas lack space to separate people walking and bicycling from people driving at high speeds.
- Low-stress areas are primarily located in residential neighborhoods. However, residents must cross busy roads to reach important destinations.
- Pedestrian crashes occur mainly at intersections of busy streets (i.e., arterials and collectors).
- Bicycle crashes occur mainly at intersections of busy streets that lack bicycle specific infrastructure, such as bike lanes. West Beloit is one exception. Many crashes in this area occurred on streets with low posted speed limits and low traffic volumes.

- The majority of bicycle and pedestrian crashes in the region resulted in injury.

To address these needs, the Pedestrian and Bicycle Plan recommended various infrastructure treatments to support walking and biking as follows. A map of the existing bicycle network as well as future facilities as envisioned in the Pedestrian and Bicycle Plan is shown in **Figure 38**.

- Mixed Traffic (bike route, shared roadway)
- Visually Separated (bike lane, paved shoulder)
- Physically Separated (trail, sidepath, separated bike lane)
- Regional Sidewalk (along primary roads, i.e. regional arterial, or collector)

FIGURE 38. SLATS EXISTING AND PLANNED BICYCLE NETWORK



Opportunities and Challenges

Education, outreach, and encouragement strategies are key to enhancing walking and bicycling and the infrastructure. The Pedestrian and Bicycle Plan recommends a number of these types of strategies to support the creation of more walkable and bicycle-friendly regional connections including:

- Create Bicycle and Pedestrian Coordinator Position – This position would serve as point person for bicycle and pedestrian policy, planning, project development, design, construction, maintenance, and related matters.
- Bicycle Friendly Communities – The League of American Bicyclist offers a certification for communities that improve conditions for recreational and transportation related bicycling.
- Implement Bike and Walk to School Days at Regional Schools – The bike/ped coordinator can serve as the regional manager with the schools themselves being responsible for planning and executing the events at their school.

- Provide Schools with an In-school Curriculum for Safe Walking and Biking – The League of American Bicyclists has a variety of educational materials for children of all ages. For the SLATS Region, good focus ages are 7, 10 and 15 (2nd, 5th and 10th Grades).
- Conduct Outreach at New Infrastructure – Providing context and education for any new facility can be enhanced by allowing the public to answer questions face to face about that facility.
- Review the Network Bike Map on a Regular Schedule – The SLATS Region might not require a yearly update but reviewing it on a yearly basis will help keep the map current with the network as both are updated.
- Regional Count Program – Count programs use automated equipment or short-term volunteers to collect data. A regional bicycle and pedestrian count program would help the region benchmark existing bicycling and walking levels, understand regional crash trends, and help communities be more competitive for grant funding opportunities.
- Review of Existing Walking and Biking Policies – Each community in the SLATS Region has its own approach and/or policy position when it comes to bicycling and pedestrian rights as well as the rights and duties of road users. Individual communities will have to modify their municipal code to accommodate any infrastructure changes and will need to assess their vehicle codes to account for changing roadway behavior.
- Stage Bike Rodeos, Community Bike Rides, Open Streets – Events highlighting biking in the region will help promote the current state of infrastructure and safety

Issues Identified by the Public

The online mapping tool recorded the location of bicycle and pedestrian concerns within the SLATS MPA. In total, 76 individuals identified bicycle concerns, and 44 identified walking/pedestrian concerns. Some of the comments included potential improvements. **Figure 39** displays the bicycle areas of concern as identified through the online mapping tool. **Figure 40** displays the walking areas of concern.

Bicycling Comments

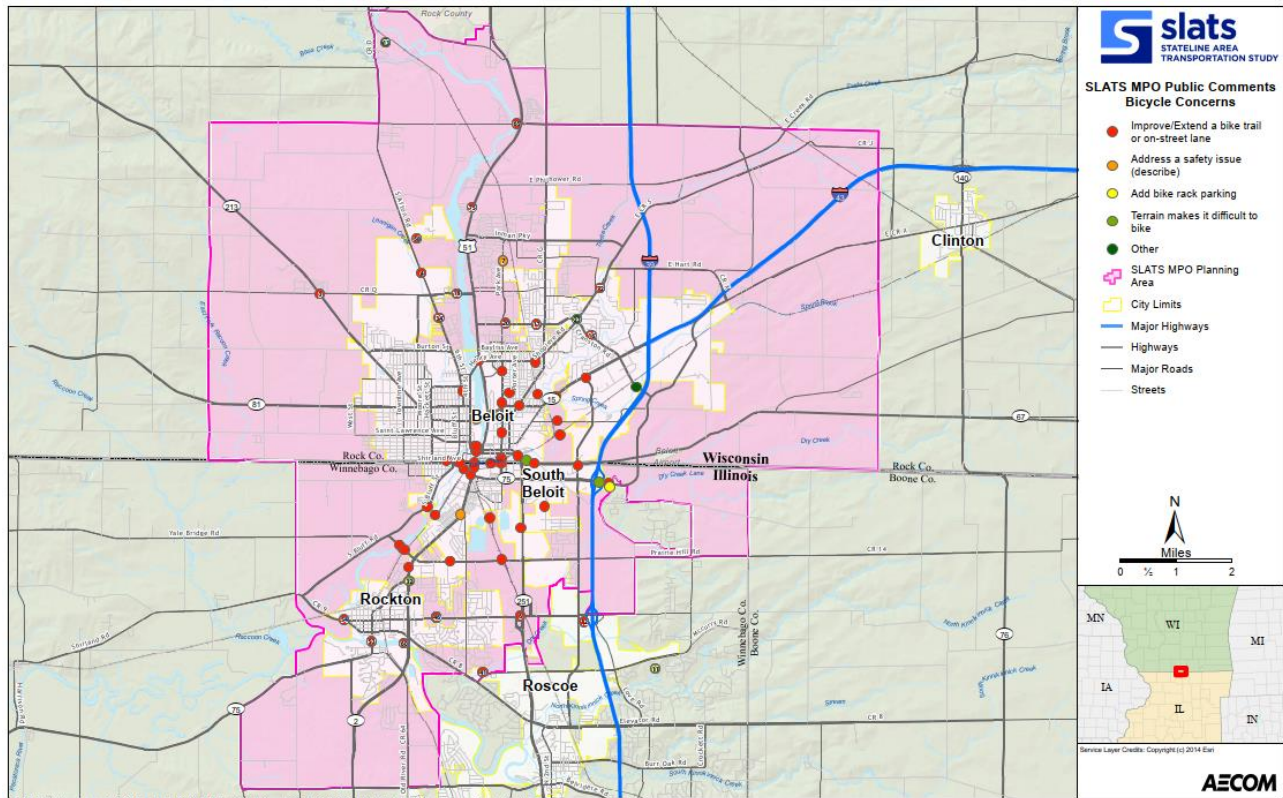
In general, the bicycle comments mirror priority recommendations that have been included in the recent Bicycle plan. Respondents expressed a desire to complete link for Peace Trail off road path from Big Hill Park into City of Beloit, and stakeholder meetings identified work to identify a connection to Big Hill Park as a top priority.

Another area that was highlighted was a desire to connect the Rockton Road bike path to Stone Bridge Trail. The path ends by Walmart, but some would like to see this extended to the NorthPointe Health & Wellness Campus. One new comment related to developing a bike path that would connect the new ABC Supply Stadium in Beloit to the Nature at the Confluence in South Beloit. This was also mentioned during stakeholder meetings.

Comments also focused on enhancing safety for bicyclists, and pedestrians. Adding a bike trail along Milwaukee Road from White Ave to Fruzen Middle School was identified as part of the online mapping and represents a priority project in the Bicycle plan. Several roadways throughout the MPA were mentioned for possible road diets, again consistent with the current Bicycle Plan. The Willowbrook corridor was also identified as an area that should be given special attention, especially with the casino complex opening in a few years. Other comments focused on the need to better maintain bicycle facilities, and some mentioned specific roadways in need of repair (i.e., potholes, poor pavement, etc.) that should be improved to better, and more safely, accommodate bicycle travel. Cranston and Elmwood were both identified as important roadways to address.

Comments from the stakeholder meetings also reflect several of the online mapping issues. One comment, which expanded upon an online mapping comment, was related to bicycle travel along Blackhawk Boulevard (IL 2). It was mentioned that it is difficult to bike along this corridor and it will be important to secure funds for bicycle facilities to be incorporated into the planned roadway reconstruction (IDOT is currently studying this corridor). A complete list of comments received is included in **Appendix A**. This includes comments from the community surveys, online mapping, and stakeholder meetings.

FIGURE 39. BICYCLE CONCERNS (AS IDENTIFIED BY THE PUBLIC)

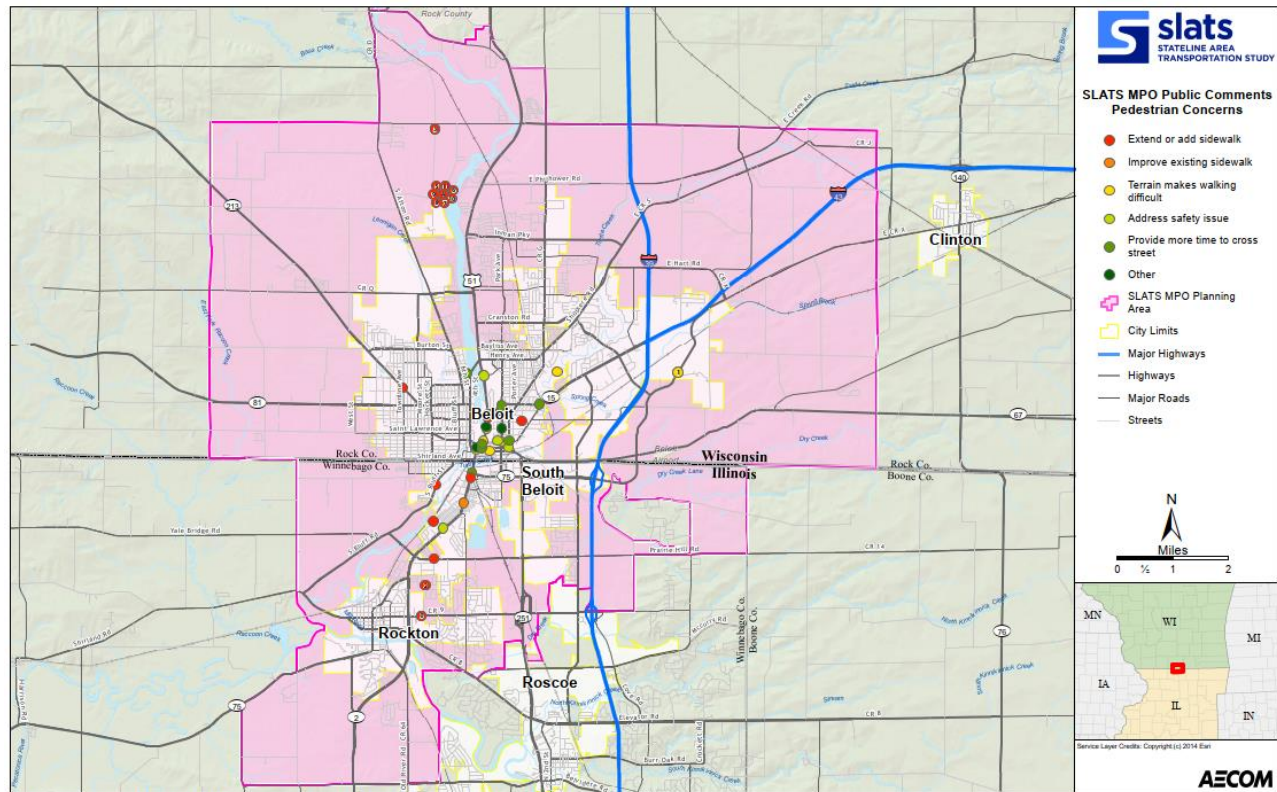


Walking/Pedestrian Comments

With regard to walking (pedestrians), the comments generally reflect a desire to improve overall safety. Several comments identified the need to improve intersection crossings and some identified locations where sidewalks do not exist. In particular, several locations near schools were identified as concerns due to a lack of nearby sidewalks, or gaps in the sidewalk network. On area that was identified with no sidewalks was along IL 251. This was of particular concern given the high travel speeds along this corridor.

As part of the stakeholder meetings, some individuals discussed the challenges of safely accessing areas in downtown Beloit. In general, concerns regarding east-west connectivity, and crossing the river, were of high importance. Improving connections to schools was another important concern. Finally, some mentioned the need to better enforce keeping bikes off of sidewalks to enhance pedestrian safety. This was a concern that was also identified as part of the online mapping. Additional comments are included in **Appendix A**.

FIGURE 40. PEDESTRIAN CONCERNS (AS IDENTIFIED BY THE PUBLIC)



Aviation

The Southern Wisconsin Regional Airport and Beloit Airport are located within the immediate vicinity of the SLATS MPA. The Southern Wisconsin Regional Airport (KJVL) is located in the City of Janesville, just a few minutes off of the I-39/ I-90 and STH 11 Interchange. The Airport is approximately 60 miles southwest of Milwaukee, 90 miles northwest of Chicago, 30 miles north of Rockford and 40 miles south of Madison.

Serving the region since the late 1940’s, the airport is owned and operated by Rock County. The 1,400 acre property consists of three runways; two serving as the primary and one as the secondary approach. According to the airport, there are over 50,000 landing/take-off operations and the movement of one-half million pounds of freight annually. The airport includes a FAA maintained on-site control tower in addition to accommodating T-Hangars, corporate aviation, and air cargo development sites.

The Beloit Airport, designated as 44C by the FAA, is located in southeastern portion of the MPA boundary and is in close proximity to I-39/90. The privately-owned airport includes one runway at approximately 3,300 feet and with a few support hangars. As of June 2020, there were 51 aircraft based at the airport and for the 12-month period ending in May 2019 there were 19,630 aircraft operations.

There are no commercial flights available out of Southern Wisconsin Regional Airport or Beloit Airport. Most of the current airway passengers from the SLATS region travel to Rockford-Chicago International Airport, Dane County Regional Airport, O’Hare International Airport, Chicago Midway International Airport or General Mitchell International Airport for general aviation purposes.

Emerging Technology

Communities throughout the country are going through a period of profound change and transition that will affect how individuals travel now and in the future. New technologies and services have been under development and many are now being deployed throughout the built environment to enable greater efficiency and offer more mobility options. As a result, these have also introduced new actors into the transportation landscape, affecting how both the physical space of transportation networks and transport information is shared. Still to come are emerging technologies that, when deployed, will have profound effects only nearly every aspect of society.

Many technologies and services are still so young that they have not been proven yet. However, it is important to be mindful of the changing mobility landscape as SLATS determines where to invest its limited transportation funds. An overview of some of these technologies and services are described briefly below:

- **Mobility on Demand** – MoD is the ability for riders to hail/request a transportation mode to complete an end-to-end journey. MoD could be a private partnership with a company, such as transportation network companies (TNCs) or could be operated by a public agency with their own fleet. While many MoD providers have been TNCs offering private rides, there has been significant public-private-partnerships with TNCs to provide first/last mile journeys from transit stops, paratransit trips, or to supplement transit services during non-operational transit hours, and connect transit deserts.
- **Micromobility** – Micromobility represents small mobility devices such as bicycles, tricycles, cargo bikes and trikes, scooters, mopeds, and others. Micromobility devices can be docked, with devices located and secured to a network of stations, or can be dockless, with devices available to pick up, use, and drop off within a defined service area. These devices can also be human-powered or electrically powered. There is also the potential to include adaptive bicycles or tricycles that would expand access to shared transportation services to people with special needs or disabilities. The City of Beloit deployed e-scooters in July 2021 (discussed in the following section).
- **Mobility as a Service (MaaS)** – MaaS integrates various types of transportation vehicles and services (e.g., transit, micromobility for point-to-point or first/last mile trips, car share, TNCs, carpooling in) to a single mobility service via a smart phone platform.
- **Smart Roadway Infrastructure** – Smart Road technologies collect data that can be analyzed in real-time primarily to support traffic management, and could include speed and acoustic sensors, CCTV cameras, smart traffic lights, condition/weather monitoring systems, digital signage, and others. Smart Road infrastructure may also include in-road electric charging lanes, solar roadways, and other applications.
- **Smart Transit Infrastructure** – Smart infrastructure focused on transit assets such as solar panels on the roof of bus shelters, WiFi, USB charging points, real-time multimodal information, & digital local information (e.g., traffic, weather, news, and headlines). This may also include smart infrastructure that supports transit such as light-emitting treatments embedded in sidewalks, bike paths, and bus pads.
- **Autonomous vehicles (AVs)** – AVs use connected vehicle technology and sensors to sense the environment and safely operate with little to no human control. Vehicle-to-vehicle technologies allow vehicles to "talk" to each other and are used to monitor speed and position. Vehicle to infrastructure technologies are used to determine intersection geometry, detect signal phases and overhead safety messages. AV shuttles range in capacity from 4 to 16 passengers, have ramps for ADA accessibility, and are fully electric with ranges of up to 14 hours.

City of Beloit E-scooters

In June 2021, the Beloit City Council approved an ordinance allowing the use of e-scooters within the City limits (outside city limits the scooters slow to one-mile per hour). The e-scooters are operated by Bird and

residents over the age of 18 are eligible to rent the scooters. Riders use a smart phone application to rent a scooter and pay per-minute. The e-scooter was deployed for operation beginning at the end of July 2021.

Initial reaction to the scooters have been mixed with the City receiving several complaints regarding safety and ordinance compliance issues within the first weeks of operation. Complaints were mainly focused on:

- Scooters illegally being used on sidewalks
- Scooter improperly parked
- Riders disobeying traffic laws

In response to the criticism, the City contacted Bird and the company lowered the maximum speed limit of the scooters in the downtown. Furthermore, Bird added signage indicating that scooters should not be operated on sidewalks. The City intends to continue to monitor the program and if necessary, will work with Bird to implement additional service modifications.

Chapter 6. Project Identification Framework

A review of the existing and future year conditions helps to identify key LRTP themes, or guiding principles, which in turn help to identify projects and policies that will best address the SLATS 2045 LRTP goals and objectives. Input from stakeholders and the general public was a critical part of documenting, and confirming, current and future year needs, and it is also useful in identifying, evaluating, and prioritizing multimodal improvements within the SLATS MPA. A second community survey was used to help confirm regional transportation values and refine the guiding principles. The following highlights the project identification framework for the SLATS 2045 LRTP.

Key Themes / Guiding Principles

Consideration of the technical analysis, along with the public input and stakeholder input, has resulted in key themes, or guiding principles being identified for the SLATS 2045 LRTP. As these themes were developing, they were discussed, and confirmed, with the SLATS TAC and Policy Board during a workshop in May 2021. The key themes were then incorporated into a second community survey which was used to gauge the general public's perception regarding possible transportation investments within the region. The key LRTP themes, summarized below, are discussed in the following sections. The results of the second community survey⁹ are included to support the discussion of each theme, or guiding principle.

- Advance Complete Streets Principles
- Accommodate New Technologies and Mobility Solutions
- Apply an Equity Lens
- Advance Regional Transit Service
- Continued Investments to Support Economic Development

Advance Complete Streets Principles

SLATS places a high priority on creating a transportation network that is accessible to all transportation users. The region has very active bicycle user groups and a desire by residents to walk and bike more to promote a healthier community, and to provide important connections to transit (first and last mile connections) and to employment opportunities within the MPA. This commitment is demonstrated by recent road diet projects on Cranston Road, as well as a broader vision which calls for additional road diets as documented in the region's 2017 Bicycle Plan.

⁹ Survey results are based on 92 responses and should not by themselves be the sole basis for identifying potential projects, policies, or recommendations. As such, the survey results take into consideration the feedback of stakeholders, technical analysis, and previous and on-going studies to inform the project identification.

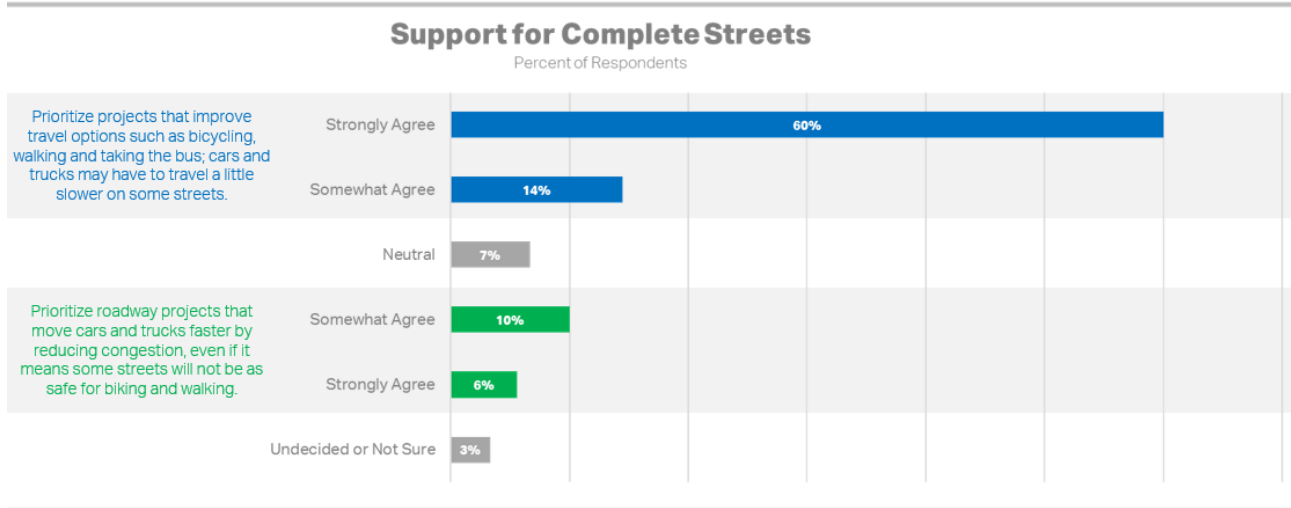
Furthermore, unlike many metropolitan areas, and communities, across the country that face high levels of traffic congestion, the SLATS roadway network was found to have widespread acceptable levels of service, or little traffic congestion. This was confirmed through the technical analysis (modeling), stakeholder meetings, public surveys, and online issues mapping. The relatively low level of traffic congestion provides the SLATS region with the opportunity to explore alternatives that potentially repurpose a roadway's cross section to better accommodate bicyclists and pedestrians. This is consistent with the LRTP goals and objectives that support accommodating alternative modes, improving safety, and providing a high quality of life.

As part of the LRTP development process, area Comprehensive Plans were reviewed to identify specific references to bicycle and pedestrian accommodations (**Appendix E** provides additional details). Overall, SLATS area jurisdictions/communities place a high value on developing a multimodal transportation system. The following is a brief overview of the relevant findings:

- The City of Beloit requires sidewalks or pedestrian pathways in all new resident and commercial developments.
- The Town of Beloit highlights the need to accommodate the needs of pedestrians, bicycles, transit riders and persons with disabilities in new developments, and develop or modify site review and conditional use standards to address these needs. The plan also encourages innovative transportation design standards to facilitate multimodal accommodations.
- The Town of Turtle plans highlights the need to ensure that the Town is a safe and enjoyable location for recreational transportation, such as snowmobiling, boating, bicycle, and walking.
- The City of South Beloit identified the need to address missing connectivity between trails and key destinations, with the Dorr Road Trail specifically mentioned. The plan also highlights the need to improve the sidewalk network, especially in commercial areas along arterial roadways. Finally, the plan also recommends the City adopt a Complete Streets policy.
- The Village of Rockton supports the planning and implementation of the bike network in and around the village. The plan also calls for adding sidewalks on streets currently without and to recommends a new ordinance that all new road are designed with sidewalks.
- The Rock County plan focuses on reducing Single Occupancy Vehicle use by increasing bicycle and pedestrian infrastructure countywide. The plan also mentions the use of traffic calming devices where there are safety issues.
- The Winnebago County plan promotes enhancing interconnectivity among modes, including non-vehicular pathways and encouraging the use of alternate means of transportation.

Figure 41 shows the results of the survey question when residents were asked if they wanted to prioritize biking, walking, and riding the bus (resulting in slower travel speeds on some streets), or if they preferred to prioritize projects that move cars and trucks faster (resulting in some streets potentially being less safe). Sixty percent of respondents 'strongly agree' that they want to prioritize biking, walking, and riding the bus even it means some streets within the MPA could experience slower travel speeds. An additional 14% 'somewhat agree.' In total, 74% of respondents favor prioritizing alternative travel modes.

FIGURE 41. SUPPORT FOR COMPLETE STREETS



Source: SLATS 2045 LRTP Survey #2 – June/July 2021.

Accommodate New Technologies and Mobility Solutions

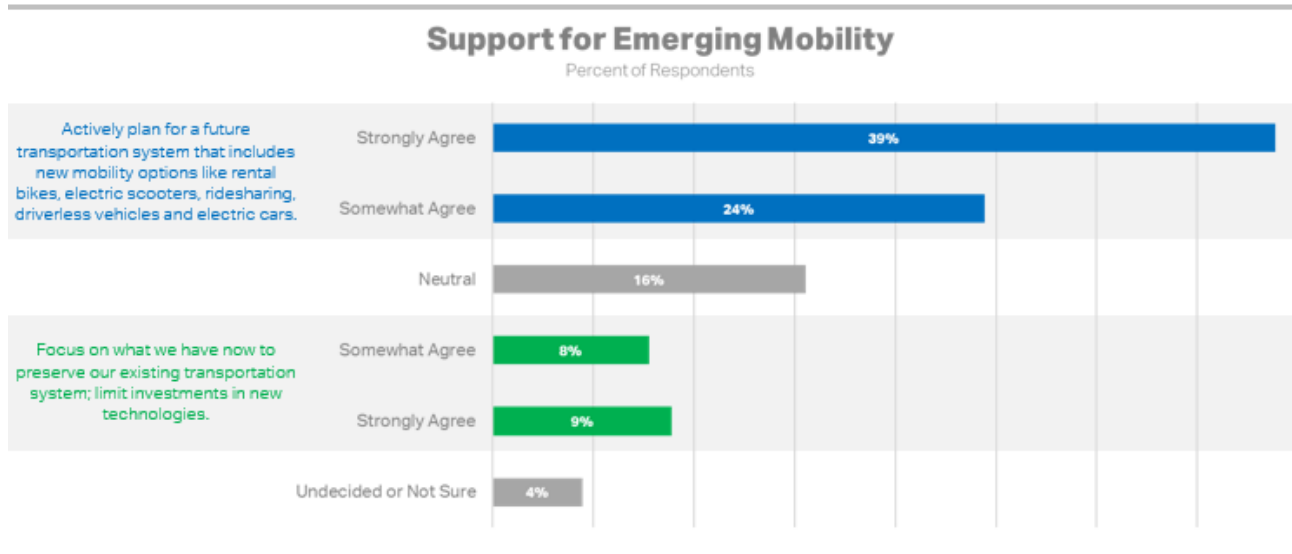
The transportation landscape is changing, and new technology and mobility solutions will offer new ways for people to travel through the horizon year 2045. As such, it is important that the SLATS LRTP consider the potential impacts, and opportunities, to improve travel efficiency and safety within the MPA.

As previously discussed in Chapter 5, e-scooters recently began operation in the City of Beloit. This represents one example of how these services are changing the way a region thinks about delivering transportation solutions, and mobility as a service. At the time this LRTP was prepared, the e-scooters in Beloit were only a few weeks into operation and were being met with mixed reviews. As with any new service or technology, there is often a learning curve that includes education, and service modifications. It will be important to continue to monitor this service to see if there are opportunities to potentially expand operations in the future. If successful, this service could potentially help to fill a mobility gap identified by some through the stakeholder outreach.

Another potential application of technology that might be considered to improve transportation services in the SLATS area is microtransit. Microtransit utilizes tech-enabled applications (similar to popular ridesharing applications such as Uber, and Lyft) to schedule trips. Microtransit is somewhat of a shared transportation space in that connects traditional fixed-route transit routes with service zones that are typically used to serve lower density areas, often located on the urban fringe that are typically inefficient to serve by fixed-route buses. Riders within a zone can request a trip on-demand and will often have a vehicle available within 15 to 20 minutes. Furthermore, microtransit can utilize existing transit buses, or it can use vans or shuttles. This type of service could potentially benefit the east side of the MPA, especially east of the I-39/90 corridor which is challenging to serve via fixed-route. This service could support economic development activity in the Gateway area, and other areas to the east and to the north along the I-43 corridor, as it could potentially better connect area residents to job opportunities. Looking long-term, autonomous vehicles could one day be another option that increases service options in the area east of the interstate, helping address first- and last-mile connectivity challenges.

Figure 42 shows the results of the survey question when residents were asked if they wanted to actively plan for new mobility options (e-scooters, rental bikes, etc.), or if they preferred to focus on current transportation assets (limit new investment in new technology). Thirty-nine percent of respondents ‘strongly agree’ that the region should actively plan for emerging technologies. An additional 24% ‘somewhat agree.’ In total, 63% of respondents favor investing in new mobility options, or emerging technology.

FIGURE 42. SUPPORT FOR EMERGING MOBILITY



Source: SLATS 2045 LRTP Survey #2 – June/July 2021.

Apply an Equity Lens

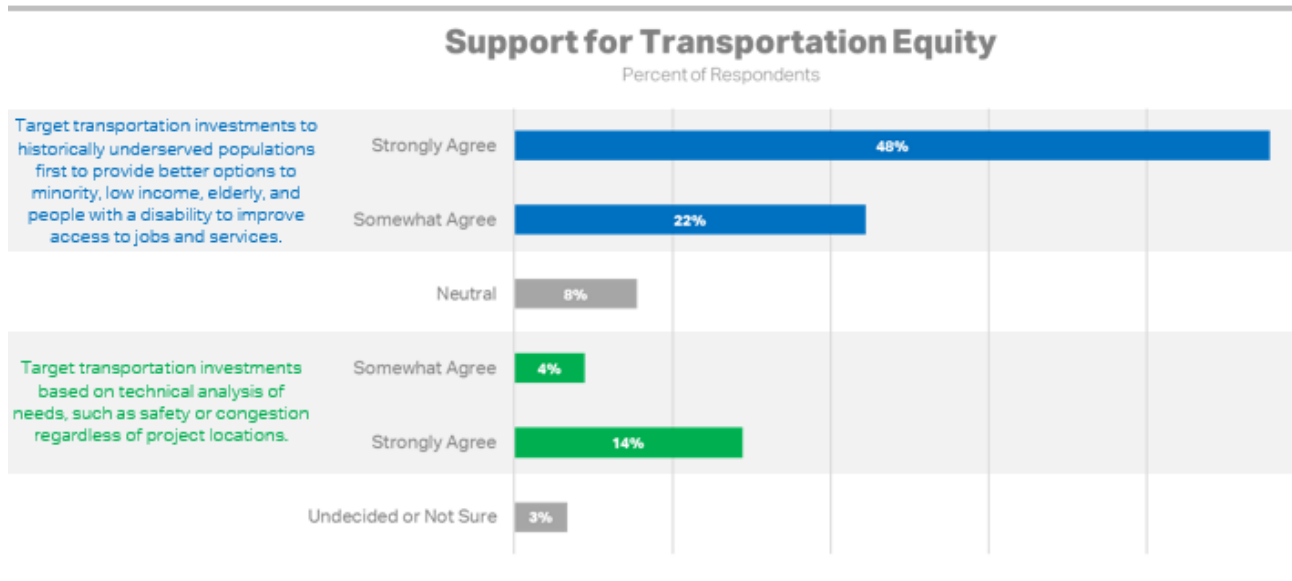
The SLATS 2045 LRTP included a new goal, and objectives, that placed an increased focus on ensuring that transportation investments within the region are equitable, and support historically underserved residents. SLATS is committed to implementing a regional transportation system that serves all area residents, employees, visitors and businesses without discriminating based on race, income, or ability, and to institutionalizing transportation planning and development processes that elevate the voices, concerns, and preferences of those individuals and communities traditionally underrepresented in transportation decision making.

Transportation issues facing people of color, low income populations and people with disabilities are complex, ranging from lack of access to vehicles, physical and operational barriers separating travelers from their destinations, and lack of sufficient transportation options, among many others. In stakeholder meetings, area residents described significant barriers to efficient transportation for environmental justice populations. Examples include weak understanding of how to utilize transit service for people with low English proficiency, transit service that doesn’t accommodate work schedules, challenging and unsafe walking and biking conditions on roadways that serve minority neighborhoods, lack of access to park and recreational facilities, high traffic speeds around schools, and limited options for travel to Janesville, the site of many county services.

Figure 43 shows the results of the survey question when residents were asked if they wanted to target transportation investments in areas that have historically been underserved (such as low income

neighborhoods, minority populations, and persons with disabilities), or if they preferred to base transportation investments primarily on where the technical analysis shows transportation needs are the greatest (such as congestion, safety, etc.). Forty percent of respondents ‘strongly agree’ that the LRTP should consider historically underserved areas when making transportation investments. An additional 22% ‘somewhat agree.’ In total, 62% of respondents favor considering historically underserved areas when identifying projects, and ultimately helping underserved populations increase access to jobs and services. Further analysis of the SLATS LRTP fiscally constrained projects are evaluated with an equity lens in Chapter 8.

FIGURE 43. SUPPORT FOR TRANSPORTATION EQUITY



Source: SLATS 2045 LRTP Survey #2 – June/July 2021.

Advance Regional Transit Service

Generally speaking, the previous three LRTP guiding principles in one way or another apply to multiple transportation modes (roadways, transit, walking, biking, etc.). This principle, advancing regional transit service, focuses specifically on a desire to enhance transit service coordination within the SLATS MPA, as well as identifying opportunities to improve regional connections that extend beyond the MPA. Along these lines, SLATS conducted a passenger rail study, completed in March 2021, that examined the high-level feasibility of introducing passenger rail service to potentially connect to Chicago, IL; Madison, WI; Janesville, WI; and, Rockford, IL. That study found potential ridership, albeit on the low end, that would be comparable to some existing commuter rails services operating across the United States. A few respondents from the second LRTP survey indicated that constructing passenger rail service was there top priority for future transportation investments for the SLATS area.

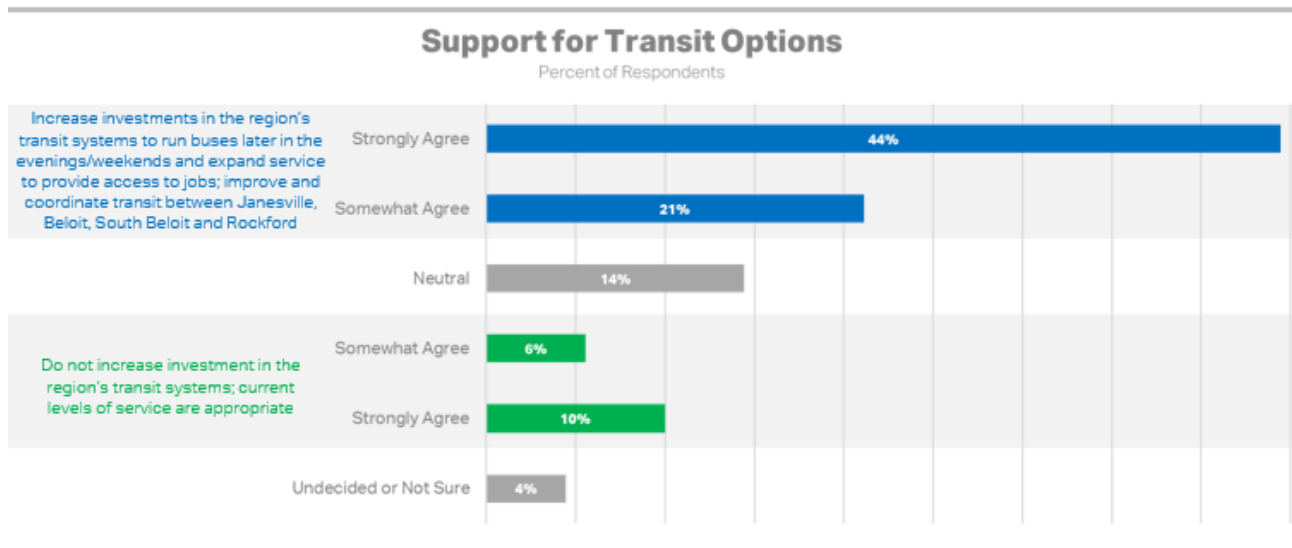
The discussion of enhancing regional transit service within in the SLATS MPA is not new. Previous LRTPs have identified the challenges associated with a bi-state MPO, and the recent Transit Plan also discussed the concern. The most obvious of these challenges is seen through the type, and coverage, of service – fixed-route service operating in the Wisconsin portion of the MPA (provided by BTS) and on-demand service operating in the Illinois portion of the MPA (provided by SMTD). As part of the LRTP stakeholder

meetings, participants talked about the challenges of transferring between services, and the different technology used by each agency to make payments, access schedules, access route information, etc. These issues were also raised by some survey respondents who talked about being unable to catch a SMTD bus at the Beloit transfer center as the trip originates in Wisconsin. Hours of service were also mentioned as a concern, with later evening service identified as a need to link second and third shift workers to jobs throughout the region.

In talking with the transit providers, it is clear that both BTS and SMTD are providing quality service within their fiscal constraints. One example is the Beloit-Janesville Express that has been operating for a number of years and provides an important regional connection between SLATS MPA and the Janesville MPA. It was pointed out that while this is a well-received service it is always a question as to whether or not there will be sufficient funding to operate the service each year.

Figure 44 shows the results of the survey question when residents were asked if they wanted to increase the level of transit service or maintain current levels of service. Forty-four percent of respondents ‘strongly agree’ that the more should be done to improve regional transit services, including expanding service to provide enhanced regional connections. An additional 21% ‘somewhat agree.’ In total, 65% of respondents favor increased investments in transit services. It should be noted that these surveys generally reflect individuals who primarily drive within the region.

FIGURE 44. SUPPORT FOR TRANSIT OPTIONS



Source: SLATS 2045 LRTP Survey #2 – June/July 2021.

Continued Investments to Support Economic Development

The SLATS 2045 LRTP recognizes that investing in the region’s current infrastructure assets, as well as identifying new investments, is critical to supporting and sustaining continued economic growth within the MPA. A review of area Comprehensive Plans highlighted the importance of integrating land use and transportation decisions. It was important to note that development near existing city infrastructure generally provides for greater travel options including transit service, bicycle and pedestrian accommodations. The plans also discussed how compact development can also result in lower housing costs to the community. Furthermore, in the long term, land use decisions can impact future transit

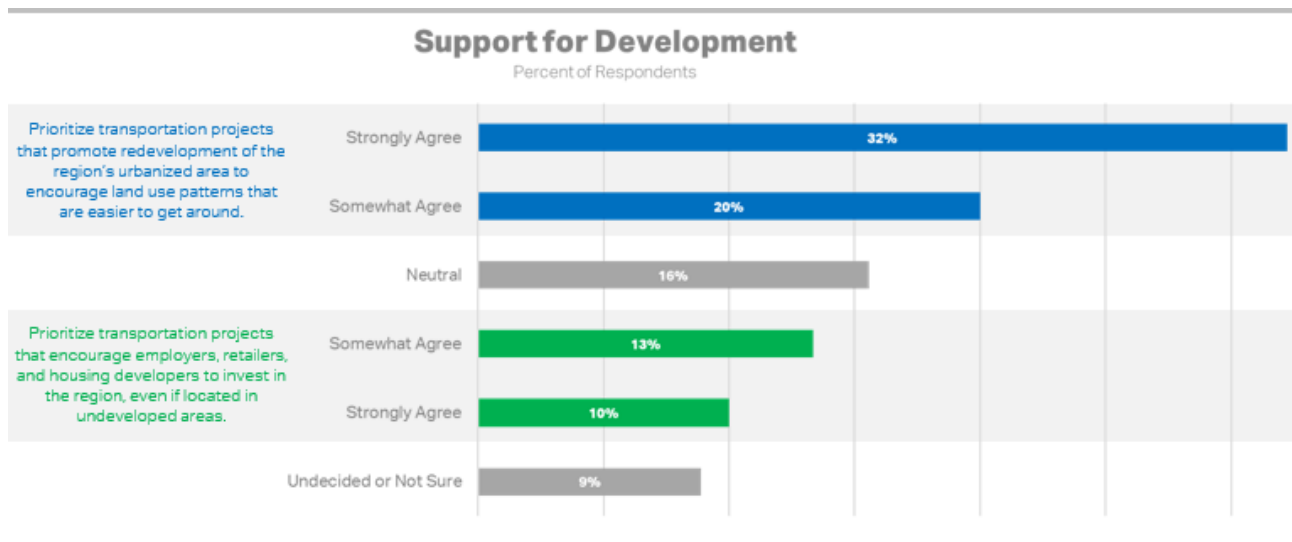
opportunities, such as potentially operating a passenger rail service that could connect Beloit to Madison, WI, Rockford, IL and Chicago, IL. Adding such a service to the SLATS MPA could have potentially significant impacts to attract additional residents, and employers to the area.

When discussing economic development, it is important to adequately accommodate truck/freight traffic within the region. The I-39/90 corridor carries significant north-south truck traffic, but east-west movements are more challenging as there are limited crossings of the Rock River. Gardner Street, in South Beloit, is a heavily used truck corridor, and as previously discussed in Chapter 5, this corridor is identified as one of top freight bottlenecks in Illinois. Furthermore, there is available land in South Beloit so this area will likely experience future economic development, and increased truck traffic, especially once the casino opens.

Finally, it is important to recognize that maintaining infrastructure in a state of good repair is important from a safety standpoint, both for retaining existing businesses, and attracting new ones. Accommodating truck traffic is not only important from an economic development standpoint, but it is also a quality of life issue. One area that was identified through stakeholder meetings, surveys, and online mapping was WIS 81 (Milwaukee Road) as it transitions into White Avenue. Several respondents discussed the concern about heavy truck traffic traveling through residential areas.

Figure 45 shows the results of the survey question when residents were asked if they wanted to target transportation investments that prioritize investments primarily in the urbanized area (support more compact land uses, development, and redevelopment), or if they preferred transportation investments that supported development in currently undeveloped areas (such as projects that push development beyond the urban fringe, thus requiring expansion of utilities and other public services). Thirty-two percent of respondents ‘strongly agree’ that the LRTP should promote more compact development patterns. An additional 20% ‘somewhat agree.’ In total, 52% of respondents favor investing in historically underserved areas to increase access to jobs and services.

FIGURE 45. SUPPORT FOR DEVELOPMENT



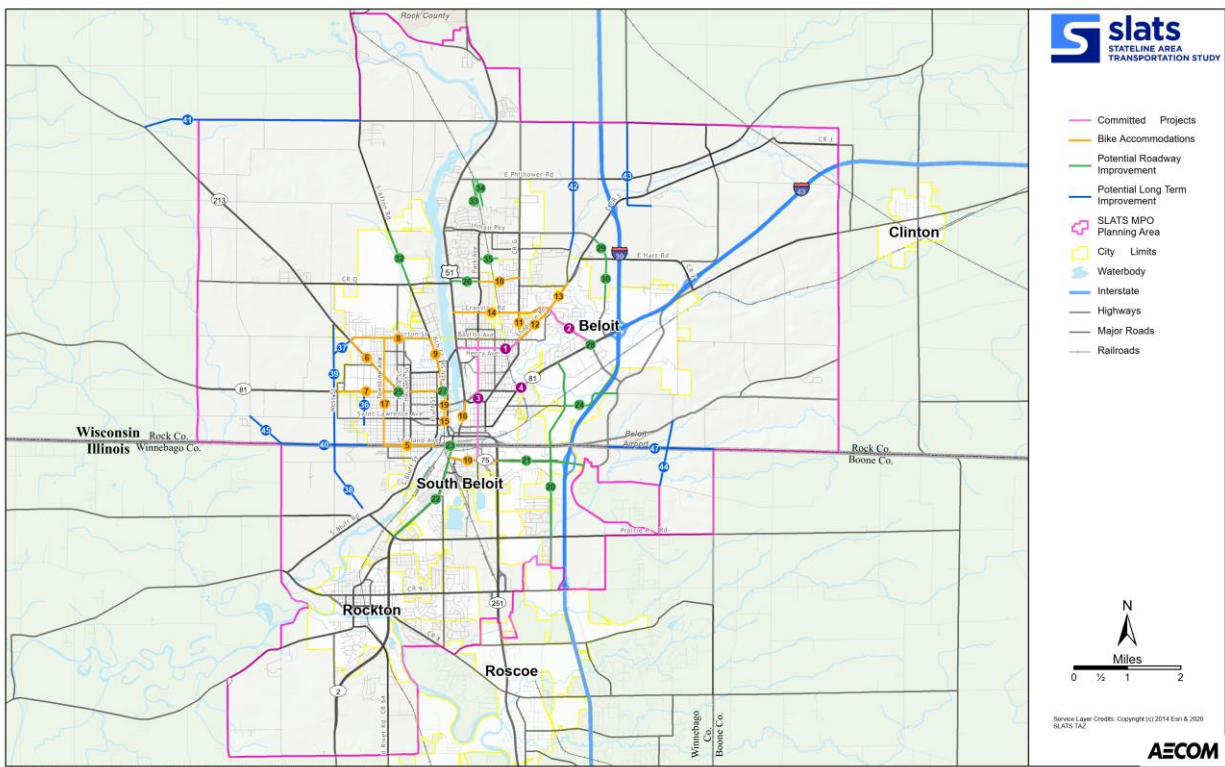
Source: SLATS 2045 LRTP Survey #2 – June/July 2021.

Identifying Potential Transportation Projects

Using the guiding principles, or key LRTP themes, along with the results of the technical analysis, and reviewing past LRTP recommendations/projects, the project team identified potential transportation projects that might be needed through the year 2045. **Figure 46** displays potential roadway projects, some of which also address freight related issues, for consideration in the SLATS MPA.

It is important to note that the potential projects, as shown on the map, does not mean that these are the recommend projects as part of the SLATS 2045 LRTP. In fact, only a few select projects will end up part of the fiscally constrained projects. Additional discussion of the project groupings follows this figure.

FIGURE 46. POTENTIAL ROADWAY/FREIGHT PROJECTS



Committed Projects

A few projects that are currently committed, meaning they have funding and are in, or nearing, construction, include the following projects. These projects are listed as they provide background information on recent improvements that are included in the base year model network.

1. **Henry from 51 to Prairie** – four lanes to two lanes with bike lanes and some parking lanes
2. **Cranston from Shopiere to Milwaukee** - four lanes to two lanes with bike lanes and painted median
3. **Park from Broad to north to Bayliss (and Broad south to Ingersol with South Beloit)** – Some sections are currently two lanes, some are four lanes. All sections will be two lanes with bike lanes and some parking lanes.
4. **Milwaukee Road from Leeson Park to White Avenue** – potential four lane to two lane conversion with a TWLTL from Lesson Park to the railroad, and left-turn only from the railroad to the curve that transitions to White Avenue. (Note this project is “committed” in for the purpose of traffic modelling, but final plans, funding and timing have yet to be determined).

Potential Projects

Consistent with complete streets principles, and the Pedestrian and Bicycle Plan, several projects were identified for possible inclusion of bike accommodations. Some projects involve restriping two-lane roads with excessively wide lanes or extra space, other projects include converting four-lane roadways to three-lanes, and a few projects involve reconstruction (such as Elmwood and Townline). These projects are coded in orange in **Figure 46**.

Additional roadway improvements were also categorized into two tiers, the first being projects that focus primarily on needs within the existing urbanized area (identified in green). Generally speaking, these are projects that would most likely be candidates for the priorities through the LRTP horizon year 2045. A second tier of projects, identified in blue, are potential projects that could address long-term needs beyond the 2045 planning horizon. These projects primarily address potential network connectivity issues and were not modeled for as part of the 2045 LRTP analysis. While not modeled, identifying these projects helps inform other transportation project development, future land use decisions, and future development decisions.

Once again, it is important to note that just because a potential project is included on this map does not mean that SLATS will construct it. Several factors are taken into consideration and projects that eventually end up in construction require additional detailed study, engineering, and design. In conclusion, the bike accommodation and potential roadway improvement projects were coded into the regional travel demand model and there were no noticeable negative impacts on traffic congestion identified.

Community Feedback on Project Priorities

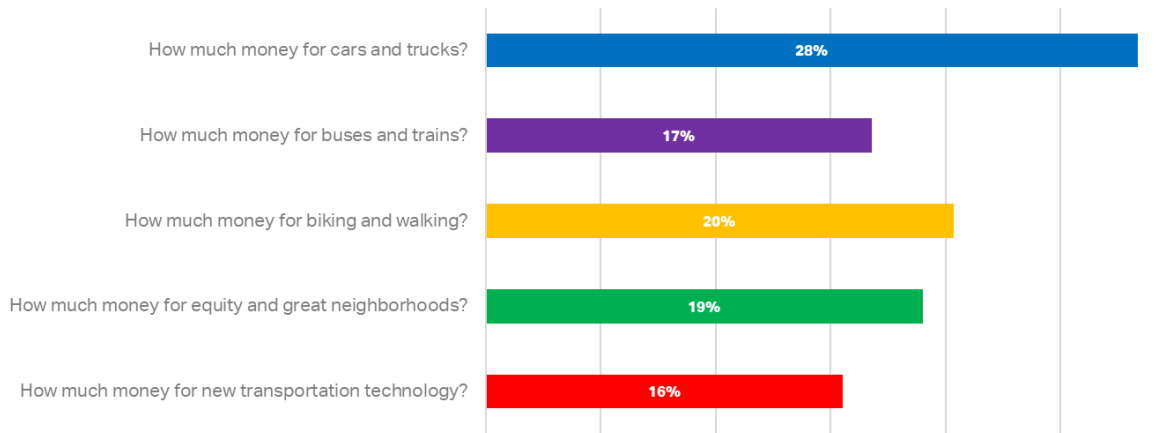
As part of the second community survey, respondents were asked to allocate \$100 to the categories summarized below. Respondents could allocate the budget any way they wanted, for example, someone could place \$100 in one category, or they could spread it around among the five categories (which is how most respondents completed this exercise). **Figure 47** shows how respondents allocated the budget.

- Cars and trucks
- Buses and trains
- Biking and walking
- Equity and great neighborhoods
- New transportation technology

FIGURE 47. PROJECT FUNDING PRIORITIES

Financial Support for Various Improvements

Respondents were allocated \$100 to spend on the 5 improvements.
The scale represents the percent of money spent on each improvement.



Source: SLATS 2045 LRTP Survey #2 – June/July 2021.

Overall, 28% of respondents identified spending money on cars and trucks as a top priority. This is not surprising but what is somewhat surprising is that the remaining categories were fairly evenly distributed, with each category receiving approximately 16% to 20% of the budget. Typically, with surveys for comparable MPOs, spending for transit, technology, biking/walking, and great neighborhoods receives some funding, but typically below 10% (with higher percentages seen for roadway/freight investments). While caution should be used in drawing too many conclusions from a relatively small survey sample size, this messaging is consistent with key themes that have come up during other outreach efforts, and as reflected in other relevant planning documents.

In conclusion, survey respondents were also asked to identify their top investment project within the SLATS MPA. The survey responses were reviewed and found to strongly support the key themes identified here. Particular emphasis was placed on accommodating modes other than automobiles within the rights of way (Complete Streets), improving local and regional transit service, and improving equity in transportation system development. The full set of comments is included in **Appendix A**.

Chapter 7. Recommended Plan

The SLATS 2045 LRTP process identified transportation challenges, as well as great opportunities to utilize future transportation investments to advance regional goals including expanding mobility options, growing the economy and tourism, increasing safety for the traveling public, expanding access to jobs, and improving the efficient movement of freight. This chapter summarizes the recommended plan, by mode, and includes a discussion of actions to support project implementation to advance the region’s transportation vision. As reference, supporting background material related to transportation performance measures, fiscal constraint analysis, environmental justice analysis, and environmental mitigation analysis are included as appendices.

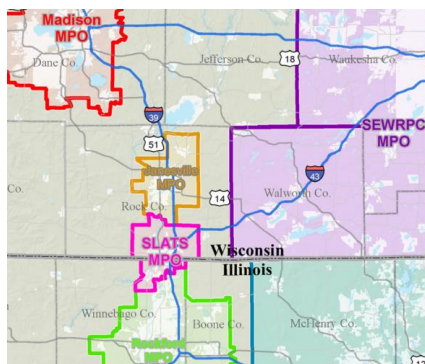
Future Growth and Development Considerations

Earlier chapters of this plan summarized the anticipated the growth in population and employment between 2020 and 2045. As noted, the SLATS MPA is projected to have a population of approximately 84,000 and employment totaling approximately 38,000 by the year 2045. Furthermore, the plan highlighted recent development activity within the region, including the opening of an Amazon distribution center, a new minor league baseball park/event center in downtown Beloit, and the planned construction and opening of a casino in 2022. These developments are just a few examples that demonstrate the area is well positioned to experience continued growth over the coming decades. As the region grows, it will be important to consider the following with on-going planning activities, as well as the next LRTP update.

Potential Expansion of Metropolitan Planning Area Boundary

Growth and development along the I-39/90 corridor has been well documented and the area to the east is expected to see much of the projected growth. The completion of improvements to I-43, including the interchange at I-39/90, is likely to also attract future development. As noted in previous LRTPs, the current SLATS MPA boundary currently ends about six miles from the Rock – Walworth County line, and the western boundary of the SEWRPC MPO (see **Figure 48**). While no action has been taken to date to expand the SLATS MPA, this topic should be revisited following the release of the 2020 U.S. Census data. If changes to the SLATS MPA are necessary, this should be addressed prior to the next LRTP update.

FIGURE 48. SLATS MPA IN RELATIONSHIP TO SURROUNDING MPOs



Enhanced Coordination of Transportation and Land Use Planning

An understanding of transportation and land use policies plays an important role in the long-term success of the regional transportation system as local development patterns and decision-making impact mobility, efficiency, and mode choice. The SLATS LRTP covers over 20 years of potential transportation investments through the horizon year 2045. Given this long timeframe, it is important for the SLATS planning partners to be on the same page when it comes to planning, designing, and constructing future transportation investments that are compatible with future development. Improved integration of land use and transportation planning requires regional coordination and a commitment from local agencies to strengthen this relationship. As such, land use/development decisions can help (or hinder) transportation system users in accessing employment opportunities, goods, services, medical facilities, and other resources.

As part of the LRTP update, the most recent comprehensive plans that cover the SLATS MPA were reviewed. Generally speaking, the comprehensive plans highlight the importance of integrating land use and transportation decisions. Furthermore, the plans encourage development near existing city infrastructure, thus providing better opportunities to deliver higher quality transit service, bicycle and pedestrian accommodations and more accessible housing.

In accommodating future growth/development, it is important to understand that short-term development decisions can have significant impacts on long-term projects, including potentially negative impacts on the region's larger transportation vision. For example, allowing development to occur without accommodating future transportation corridors, extensions or connections (e.g. a building being placed where a roadway extension is planned or may be needed in the future) is not only shortsighted, but can hinder future growth and economic development and cause connectivity issues, similar to the east-west connectivity issues throughout the MPA. These decades-old decisions have lasting impacts that are difficult to remedy. Two important tools that can address these issues are up-to-date comprehensive plans consistent with the LRTP and up-to-date official mapping.

As another example, SLATS has studied extending regional passenger rail service to the MPA for over two decades. In February 2021, the SLATS Passenger Rail Study identified two potential corridors that might warrant future analysis. While it is too early to identify potential station locations, it is important for local planning partners to understand that short-term development decisions should consider the potential long-term impacts on accommodating future passenger rail service. Planning partners want to avoid short-term decisions that could negatively impact plans to build passenger rail service or make it more difficult and less convenient to access.

Embracing Emerging Technology

Emerging technology will have significant impacts on how the SLATS region develops over the next 20 plus years. The introduction of e-scooters (July 2021) in the City of Beloit is the first of several new transportation/mobility solutions that are likely to impact the SLATS region over the next two decades. Carsharing, such as Zipcar, and ridesharing, such as Uber and Lyft, will likely grow over time as many young adults gravitate toward a model of personal mobility consumption based on pay-per-use rather than upfront purchase of a personal vehicle.

Rapid advances in vehicle technology will also change future mobility. New vehicles, including autonomous and connected vehicles, will allow for self-driving vehicles that communicate with each other. Technology advancements will allow cars to be more closely spaced together on the roadways, thus allowing a facility to accommodate a higher number of vehicles (for example, what we commonly use now for level of service analysis will likely change in the future as a roadway will be able to accommodate more traffic). While still several years away, these features will eventually allow communities and regions to design and construct more efficient infrastructure. For example, a roadway that might typically need 4-lanes could potentially be narrowed to 2-lanes as technology will allow the same number of vehicles to be processed. In many ways, SLATS is well positioned to accommodate future technology as 2045 traffic volumes do not indicate concerns related to reoccurring traffic congestion. As such, SLATS is able to evaluate select corridors to repurpose the roadway cross section to accommodate bicyclists and pedestrians in the short-term, while remaining well positioned to accommodate future technologies.

These advancements will not only enhance regional mobility, but they will also enhance safety for the traveling public. Most new vehicles, and most smart phones, already have the ability to provide real-time information that can proactively suggest re-routings to avoid road hazards and call for assistance in the event of an accident. Increasingly, more and more vehicles that will have on-board computer systems that will make decisions and reduce or eliminate human error. As such, technology advancements will support SLATS efforts to support WisDOT and IDOT in reducing fatalities and serious injuries. It will also help reduce crashes involving pedestrians and bicyclists, all of which are stated objectives of Federal transportation performance measures (see **Appendix G** for details on performance measures).

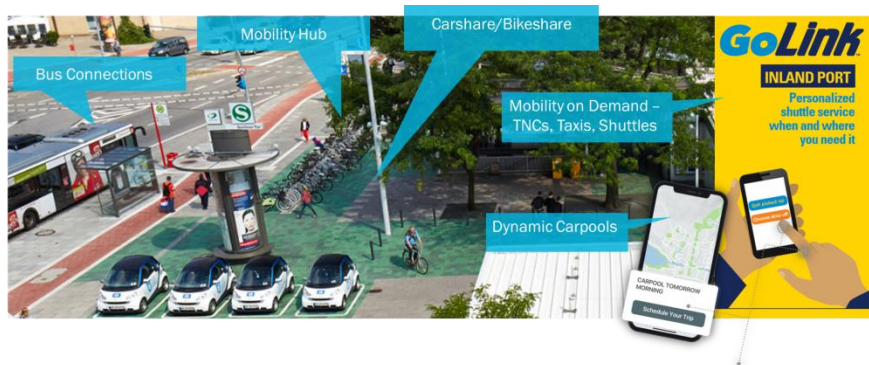
Preparing to Accommodate Future Technology

It remains to be seen what Mobility-on-Demand, Mobility-as-a-Service, or any of the other mobility frameworks of the future will be in practice. That doesn’t mean that SLATS and the regional partners should not start thinking about ways to accommodate future technologies. In many ways, the best approach to accommodate future technologies will be in how we plan future development, and how we make future land use decisions.

Mobility hubs, for example, are a concept that bring together multiple mobility options in one location.

Figure 49 provides an example of a conceptual mobility hub from the Dallas Metro area. While this example is from a large metropolitan area, the concept can be scaled to meet the needs of the SLATS region. As shown, this mobility hub incorporates bus connections (which could eventually be automated shuttles to transport people to their final destination), charging ports for an electric carshare station, pick-up and drop-off space for transportation network company (TNC) partners, and bikeshare options.

FIGURE 49. EXAMPLE MOBILITY HUB CONCEPT (DALLAS METRO AREA)



Change is likely to happen unevenly. Simply stated, electric vehicles, or autonomous vehicles, will not overnight replace the current fleet of vehicles on our roadway system. There are still many factors that will impact how quickly technology becomes mainstream. This includes such things as: regulation, social attitudes, privacy/cybersecurity, and equity issues. Furthermore, many drivers will still prefer owning their own vehicles over using shared mobility services.

As SLATS develops through the year 2045, it will be important to keep technology on the forefront of factors that should be considered in future infrastructure decisions. Ultimately, the region should take an approach that will allow new technology to be incorporated into future developments and future transportation investments. Similar to the discussion of passenger rail, SLATS and local planning partners want to avoid decisions that could potentially prohibit the region from utilizing future technologies because short-term decisions override a long-term vision. Identifying a long-term vision to accommodate future technology is an on-going process, and one that will change rapidly as new technology develops. SLATS and local planning partners should consider the following as the region begins to consider potential future technology investments, and new mobility solutions.

- Continue to monitor the use of the recently introduced e-scooters program in the City of Beloit. This is one of the first significant technology advancements that impacts mobility and it should be studied to determine who is using the service, including determining if it is helping the EJ population improve access to resources within the City.
- Investigate the possibility of adding a bikeshare program. SLATS is well positioned to continue to implement the regional Pedestrian and Bike Plan vision and a bikeshare program could support on-going efforts to expand the use of alternative transportation modes within the region.
- Incorporate future transportation accommodations into the development of the new casino. This location could be an ideal candidate for the development of a future mobility hub. In addition, begin to identify other locations where mobility hubs might be considered throughout the region.
- In the more immediate future, the SLATS region should start to prepare for a transition to electric vehicles. The Infrastructure Investment and Jobs Act, at time this plan was being developed, fully supports a transition to electric vehicles, both privately owned vehicles as well as investments in electric buses. If enacted into law, the program would significantly increase spending for electric vehicles, and electric charging. Current estimates suggest there are 280 million cars and trucks on the road in the US today, of which only three percent are electric. However, there are an increasing number of manufactures that are producing electric vehicles and President Biden's administration has set an ambition goal to cut carbon emissions in half by 2030. The infrastructure deal would make it easier for Americans to buy and own an electric vehicle. While details could change, the current bill includes \$7.5 billion to build half a million electric vehicle chargers across the country. Expanding the charging stations will create a more dependable charging network which is likely to boost electric vehicle sales in the US over the next decade. Any new development planned within the SLATS region should consider the appropriate facilities to accommodate electric vehicles, including electric vehicle charging stations. Finally, a discussion regarding electric buses is included in the public transportation recommendations.
- While SLATS can help lead the effort to identify an overall vision to accommodate future transportation technology, it is ultimately the local planning partners that must be on-board and implement policies that support the vision. As such, it would be timely for the local agencies to review and update comprehensive plans.

Implementation of Growth Management Policies

While current comprehensive plans are consistent with the SLATS 2045 LRTP goals, specifically those of preserving and protecting the environment, providing well-connected and sustainable neighborhoods that enhance quality of life, and strengthening the integration between land use and transportation to promote transportation system efficiency, many of the comprehensive plans are several years old. As such, the

regional planning partners may want to update their comprehensive plans to ensure they reflect current conditions, and are consistent with other planning efforts, including the LRTP.

SLATS supports a future that includes a greater focus on infill development, less urban sprawl, alternative transportation modes and ultimately recognizes that the region needs to continue to manage and preserve existing infrastructure. As funding for transportation projects becomes scarcer, and increasingly competitive, it is critical for the region to have a cohesive vision that maintains the existing transportation infrastructure in a state of good repair, promotes efficient transportation investments, and promotes efficient land use and development decisions.

To support this effort, an update of local comprehensive plans would provide an opportunity to address new topics, such as climate change, infrastructure resiliency, and emerging technology. It also provides local planning partners the opportunity to reinforce sound growth management policies, which cannot be overstated. As an example, the 2040 LRTP identified a future extension of Hart Road (part of a long-term vision for an eastern loop) that is likely no longer possible due to a proposed development. This LRTP sets forth a vision for the region and encourages local planning partners to utilize this a guiding resource for future planning and development activities. Some growth management policy considerations that should be reviewed, discussed, and incorporated into future planning efforts, and plan updates, include:

- Maintain a compact and orderly pattern of urban growth and development to promote an efficient use of present and future public investments in roadways, utilities, and other services.
- Maintain balanced land use patterns that provide for residential, commercial, industrial, and public uses as the region grows.
- Preserve open spaces and natural areas in developing areas.
- Ensure all developments are adequately served by a multimodal transportation system, avoiding disconnected enclaves.
- Apply Complete Street standards to all new and reconstructed streets and corridors.
- Ensure balanced neighborhoods provide a variety of housing types and densities that are safe and well-maintained, and that are well-connected to work, shopping, education, and recreation destinations.
- Promote Transit Oriented Development that encourages mixed-use development by integrating housing, office, retail, parks, and other civic uses within a short walking distance of a bus stop, or potential future passenger rail station.
- Maintain adequate service levels and current response times for emergency and public safety services as the region grows geographically.

Priority Roadway/Freight Investments

The potential projects, identified in Chapter 6, were reviewed to identify improvements that would be included as part of the SLATS 2045 LRTP fiscally constrained plan. The selection of these projects is based on a number of factors, including addressing a future year need, responding to the LRTP goals and objectives, supporting Federal transportation performance measures, and how far along projects have advanced with detailed planning, engineering, and design.

Priority projects have also undergone a detailed comparison of estimated project costs to projected revenues that are anticipated to be available through the year 2045 from federal funding received through WisDOT and IDOT. The following sections discuss the identification of projects for the SLATS 2045 LRTP fiscally constrained plan, and well as additional topics that need to be considered as part of the LRTP development process. Detailed information regarding the fiscal constraint analysis, and the recommended

projects, is included in **Appendix F**. **Appendix G** provides information on how the recommended projects support SLATS in addressing Federal transportation performance measures.

Fiscally Constrained Plan

Generally speaking, the LRTP is considered to be fiscally constrained when reasonable funding sources are available to cover the proposed transportation projects at the year of expenditure (YOE, or the fiscal year (FY) the project is likely to be constructed). Given that the LRTP addresses projects through the year 2045, it is important to note that the proposed project programming and phasing is subject to change as SLATS continually monitors on-going transportation needs throughout the region.

Projects that are programmed earlier in the planning cycle, such as FY 2024 to FY 2030, have a higher likelihood of being constructed while projects in the outer years (beyond FY 2030) are routinely revisited as part of the LRTP planning process that occurs every five years to determine if they continue to meet a regional transportation need. The SLATS Policy Board has the authority to review and confirm the projects, and the project programming and phasing. They also have the authority to amend the LRTP projects/phasing, in necessary, before the next LRTP update.

As a bi-state MPO, SLATS receives federal funding from both Wisconsin and Illinois. Wisconsin provides funding every two years as part of a five-year programming cycle. The next programming cycle that is available to SLATS is the 2024 to 2029 cycle. Based on recent funding trends, and discussions with WisDOT, it is estimated that there will be \$1,900,495 available during this cycle (and approximately this same amount every two years barring any local or State delays).

Illinois provides a smaller portion of federal funding on an annual basis, which totals approximately \$200,000 per year. As such, SLATS has historically taken the approach of “banking” the annual funds in order to build-up funding to complete “larger” projects. As of FY 2021, there was a balance of \$1,064,395. This balance, along with approximately an additional \$935,000 is set aside for the completion of the Old River Road (currently programmed in the TIP for construction in FY 2024. SLATS has committed a maximum of \$2,000,000 in federal funding for this project).

Figure 50 displays the fiscally constrained LRTP projects and **Table 9** summarizes the projects. A detailed description of the fiscally constrained projects, along with additional details regarding the fiscal constraint methodology, is provided in **Appendix F**.

FIGURE 50. FISCALLY CONSTRAINED PROJECTS

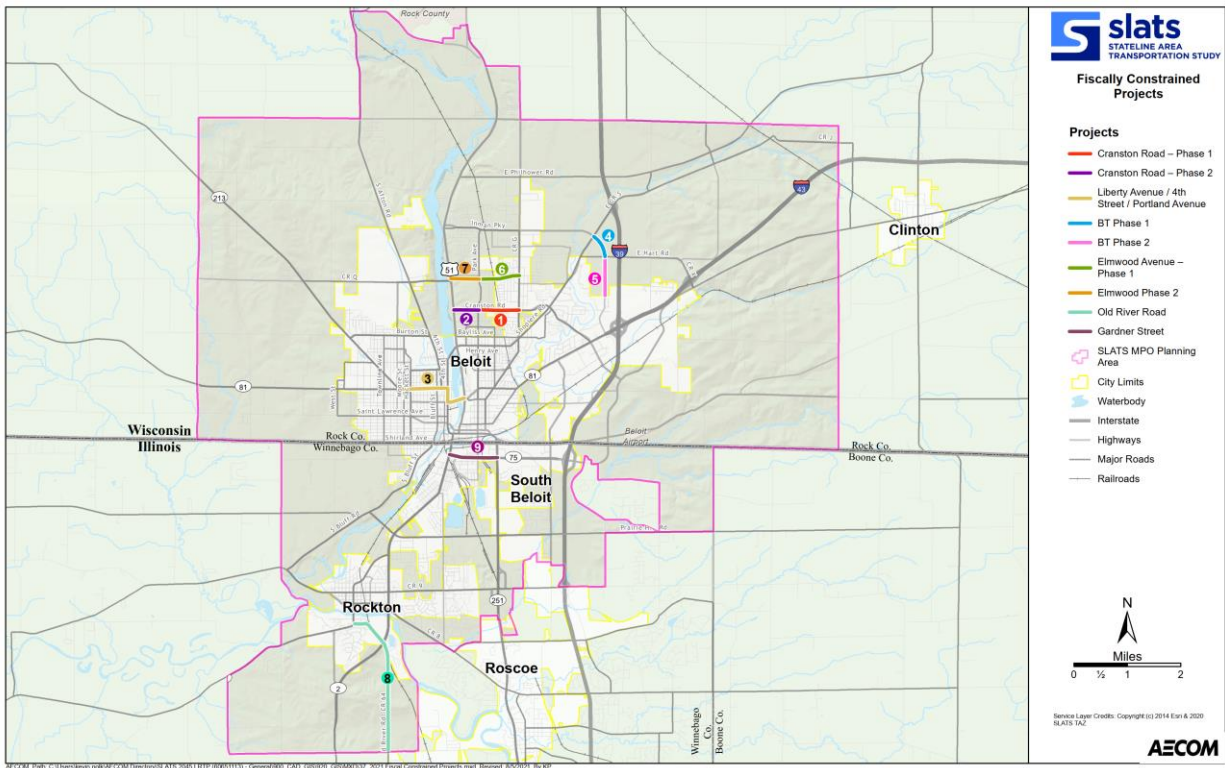


TABLE 9. SLATS 2045 LRTP FISCALLY CONSTRAINED PROJECTS (INCLUDING PROGRAM FY, AND PROJECT PHASING)

Wisconsin

- 1. Cranston Road – Phase 1 (Park Avenue to Prairie Avenue) – FY 2025
- 2. Cranston Road – Phase 2 (Riverside Drive to Park Avenue) – FY 2027 / 2029
- 3. Liberty Avenue / 4th Street / Portland Avenue – FY 2027
- 4. BT Extension – Phase 1 (S to approx. 200 feet south of Hart) – FY 2029
- 5. BT Extension – Phase 2 (200 feet south of Hart to Winchester) – FY 2031
- 6. Elmwood Avenue – Phase 1 (Riverside Drive to Park) – FY 2033
- 7. Elmwood Avenue – Phase 2 (Park to Prairie) – 2035

NOTE: Funds beyond FY 2035 have not been identified for a specific project at this time.

Illinois

- 8. Old River Road (IL-75 to Roscoe Road) – FY 2024 (currently in the 2021 TIP)
- 9. Gardner Street – Phase 1 (FY 2028) and Phase 2 (FY 2032); the limits of phase 1 and phase 2 to be determined.

NOTE: Funds beyond FY 2032 have not been identified for a specific project at this time.

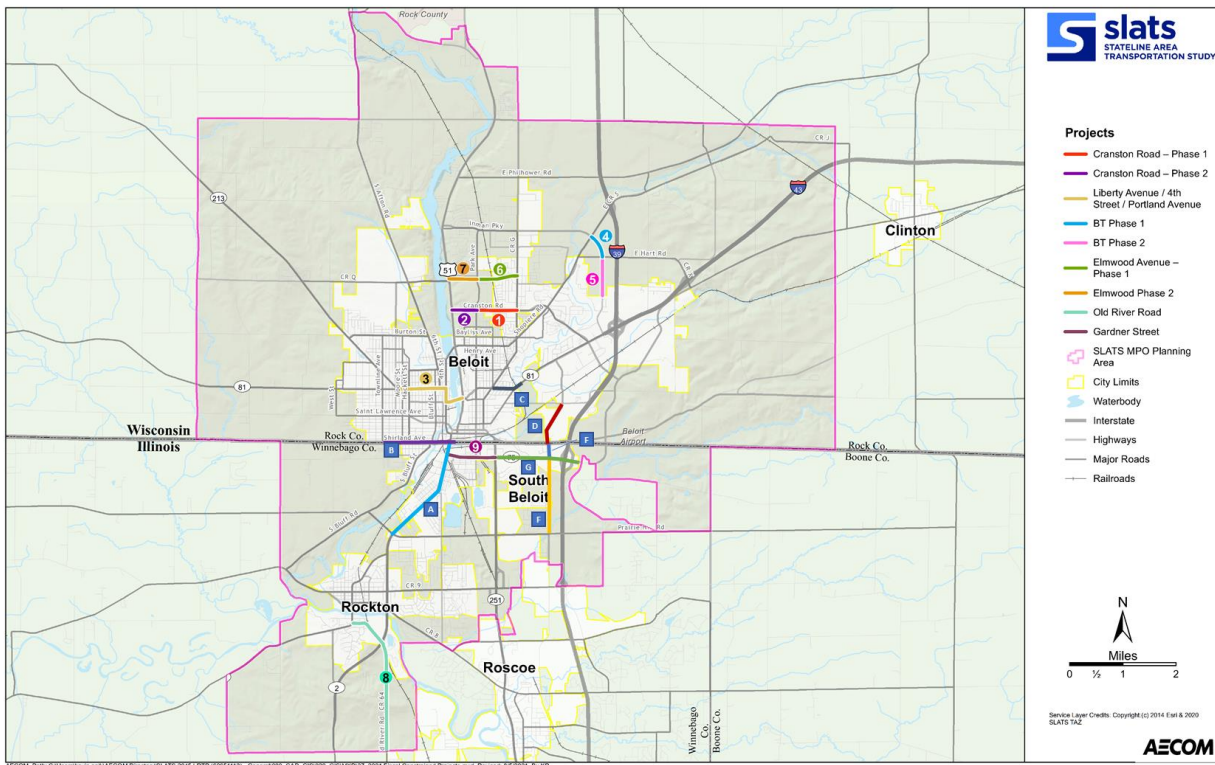
NOTE: See **Appendix F** for a detailed description of each fiscally constrained project.

Illustrative Projects

In addition to the fiscally constrained projects, illustrative projects, or projects that make up the fiscally unconstrained vision, is another important element in helping the region plan for and accommodate future growth/development. Illustrative projects, as displayed in **Figure 51**, represent projects for which funding has not been programmed/ identified, or for projects that are more conceptual and may not be needed before 2045. These projects remain as illustrative projects, as shown with the fiscally constrained projects, to help convey a long-term transportation vision for the SLATS MPA. A discussion of the illustrative list of projects is provided in the following:

- **A - Blackhawk Boulevard** – This corridor is currently being studied by IDOT for improvements. The SLATS Bicycle Plan identifies this corridor as an important multimodal/bicycle connection and the SLATS Blackhawk Boulevard Corridor Study identified a number of recommendations for bicycle accommodations as well as intersection upgrades and other improvements. SLATS strongly supports the inclusion of the study recommendations including bicycle and pedestrian accommodations as part of the final design, as well as necessary upgrades to the bridge over Turtle Creek to not only accommodate bikes, but also address flooding issues and as a result spur economic (re)development in South Beloit along 2 key State Highways (Illinois 2 and Illinois 75)
- **B - Shirland Avenue** – The development of the new ABC Supply Stadium is adjacent to Shirland Avenue. Shirland Avenue, as it heads west away from the stadium and downtown area, is a four-lane cross section that travels through a residential area. This corridor could be a candidate for a potential repurposing of travel lanes to accommodate bicycle facilities. Traffic volumes on Shirland Avenue are relatively low (particularly west of the Rock River) and do not appear to require four travel lanes. Furthermore, traffic that would be traveling to the stadium, for the most part, would not utilize this stretch of Shirland. Another related improvement involves the potential extension of Shirland Avenue to connect with Colby Street. Finally, as heard through the stakeholder outreach process, it will be important to evaluate potential options to improve a bicycle connection from north of Shirland, that would connect to areas south of the stadium including Nature at the Confluence.
- **C - Milwaukee Road / White Avenue** – Generally speaking, the travel demand model results showed relatively no major capacity concerns within the SLATS MPA. One area that is worth monitoring is the Milwaukee Road/White Avenue corridor. The segment of White Avenue (Park Avenue to Milwaukee Road, mostly east of Prairie Avenue) is shown to approach a LOS D and this area should be monitored for potential improvements.
- **D, E, and F - Willowbrook Road and Colley Road**– Once the new casino opens along Willowbrook Road, just north of the Wisconsin-Illinois state line, this corridor will see a significant increase in traffic. Improvements to Willowbrook (and Colley between Willowbrook and Gateway) on the Wisconsin portion are being planned, and additional improvements to Willowbrook will be needed on the Illinois side. The top priority is to address the segment of Willowbrook from the State Line Road to Gardner Street. This area just south of the State Line Road will serve as a primary access point to the casino, and a primary entry point into South Beloit which is likely to see increased development activity resulting from the casino development. The portion of Willowbrook Road heading south of Gardner Street to Prairie Hill Road will experience growth over the next several years and this segment of the corridor will need to be reconditioned to preserve the integrity of the roadway surface.
- **G - Gardner Street** – Similar to the Willowbrook Road discussion, Gardner Street will serve as a primary entry point to the new casino and provides an entry point into South Beloit. The portion of Gardner Street from Blackhawk Boulevard to IL 251 is identified as a fiscally constrained project; however, the area from IL 251 to the I-39/90 interchange ramps have heavy truck traffic and operational concerns, including the need to evaluate traffic signal coordination.

FIGURE 51. FISCALLY CONSTRAINED AND ILLUSTRATIVE PROJECTS



Approach to Project Programming

Programming projects within the SLATS MPA can be challenging, especially in the Illinois portion where annual federal funding is approximately \$200,000. As such, this limits the ability for SLATS to plan for and construct larger projects. For example, the current Old River Road fiscally constrained project has been planned for over a decade and has been included in multiple LRTPs. In approaching the project programming for future investments, SLATS intends to focus on programming a project every four to five years, thus resulting in a funding balance that would build up to support a project between \$800,000 and \$1,000,000. In doing so, additional projects within the Illinois portion of the SLATS MPA will be programmed, and constructed, on a more consistent basis.

Continued Commitment to Safety

Safety remains a top priority for the region and SLATS is a committed partner to work with WisDOT and IDOT in meeting statewide safety performance measures/targets (see **Appendix G** for additional details). As documented in this LRTP update, one of the guiding principles for this planning effort is to advance complete streets principles. Incorporating, or at a minimum considering, complete streets principles into all area roadway projects is a best practice to ensure that SLATS residents have safe, and accessible options to travel through the region, by car, bike, transit, or walking.

Furthermore, the use of Intelligent Transportation System (ITS) applications could potentially be expanded throughout the region to support safety. ITS already plays an important role in providing real time traffic information, including information related to traffic crashes or incidents, along the interstate. It could also

have local applications including enhancing traffic operations at signalized intersections through enhanced signal timings and signal coordination. ITS applications could also incorporate signal preemption to ensure emergency responders are able to quickly, and safely, respond to incidents throughout the region.

Environmental Justice (Equity) Analysis

SLATS conducted a detailed review of the fiscally constrained projects (see **Appendix H**) and believes there are no environmental justice (EJ) concerns associated with the proposed roadway/freight projects. In fact, the fiscally constrained projects strongly benefit the EJ communities, respond directly to items of concern raised by minority and low income populations, and support the 2045 LRTP transportation equity goals. Furthermore, policy changes envisioned in this plan have the unique potential to establish a project development framework that institutionalizes equity considerations in transportation planning, through the operationalization of equity in the project evaluation scheme. Furthermore, outreach conducted during the 2045 LRTP showed strong public support for these efforts.

It is important to note that the potential EJ impacts of projects were concerned at a very high level as the LRTP often contains conceptual projects. As projects advance through the planning and design phases and they become more specific, the TIP documents the region's prioritization of limited transportation resources available among the various needs of the region. TIP projects are also reviewed for potential EJ and equity impacts. Together, it is through the LRTP and its implementing program (the TIP) that investments to the transportation system can be examined for any disparate impacts to EJ communities. As such, the EJ process does not end with the LRTP, instead it is an on-going effort that SLATS is committed to as part of on-going transportation planning activities.

Environmental Mitigation Analysis

SLATS conducted a detailed review of the fiscally constrained projects (see **Appendix I**) and believes there are no environmental concerns associated with the proposed roadway/freight projects. The environmental mitigation analysis discussed two projects in detail. First, the BT Extension project will be constructed in area designated as cropland/farmland; however, this project is consistent with future growth plans and no environmental concerns are currently identified. Second, the Elmwood Avenue project is likely to have some right-of-way impacts that will need to be studied in more detail with preliminary design and engineering; however, at this time there are no known environmental impacts that have been identified.

Another key finding from that environmental mitigation analysis is that the majority of the recommended fiscally constrained projects occur within the existing roadway right-of-way and do not include capacity improvements (i.e., such as widening an existing roadway). As such, these projects are less likely to negatively impact the surrounding area and the environment. Furthermore, it is SLATS policy to ensure that all projects incorporate complete streets principles, and most of the projects identified will include bicycle and pedestrian accommodations (the BT Extension, as a new roadway construction, will be evaluated to identify appropriate non-motorized accommodations).

SLATS on-going support to incorporate non-motorized accommodations into roadway projects, as well as continued support to implement the regional Pedestrian and Bicycle Plan, are actions that also have a positive impact on the environment, promote healthy living, and improve overall quality of life for area residents.

Advancing Performance-Based Planning

As part of the 2045 LRTP update, SLATS worked with the project team to develop a project evaluation matrix to correspond to the LRTP goals and objectives. This evaluation matrix is a first step toward developing a more detailed performance-based planning evaluation process that SLATS intends to explore with on-going transportation activities, and future LRTP updates.

The purpose of this simplified scoring process is intended to inform the consideration of future investment priorities within the SLATS MPA. In other words, the ranking process is designed to support the decision-making process, rather than render a decision. The scoring results are not intended to be the final ranking; meaning that projects that do not score highly may still be considered for other reasons beyond those described in the evaluation criteria. As such, a project that scores highest does not necessarily mean that it reflects the top priority or that it will necessarily become the next project to be implemented/constructed.

The planning process provides an allowance for non-technical considerations, recognizing that there are other factors that go into the decision-making process that cannot be captured simply through a project scoring process. For example, one consideration that factors into project programming is if the project has local funding to meet the required 80/20 match. Another factor that must be considered is if the project design will be completed in time to allow the project to be let in time for a particular programming cycle.

It is also worth noting that the project matrix advances equity in the transportation planning process. The SLATS 2045 LRTP recognized the importance of incorporating this into the planning process and as such a new equity / environment justice goal was added to this plan. **Table 10** provides the project evaluation matrix.

TABLE 10. PROJECT EVALUATION MATRIX

		SLATS 2045 LRTP Evaluation Measures		
LRTP Goals	Evaluation Measures	Rating		
		2	1	0
Economic Vitality	Improves access to employment / Supports tourism	Direct and positive effect on planned or existing economic development activity, or discernibly increases the region's economic competitiveness to significantly attract new development, jobs and/or increase tourism. Directly improves employment access (including multimodal access).	Indirect and positive effect on planned or existing economic development activity, but no discernably increase the region's economic competitiveness to significantly attract new development, jobs and/or increase tourism. Minor or no improvement to employment access.	No direct/indirect effect or has a negative effect on planned or existing economic development activity.
System Preservation	Maintains existing infrastructure / Utilizes technology to enhance operation efficiency / Supports redevelopment on existing transportation network	Directly addresses a critical or high priority existing infrastructure need (e.g. SO/SD bridge or pavement with a poor or lesser PASER/CRS rating), or is a targeted investment to enhance system performance and resiliency, and directly supports reinvestment in existing transportation assets, especially in the Adjusted Urbanized Area (AUA).	Indirectly or minimally addresses an infrastructure need (e.g. pavement with a fair or better PASER/CRS rating), or limited enhancements to system performance and resiliency.	Does not support system preservation, or does not enhance system performance. The construction of a new roadway facility would be scored a '0' for this category.
Mobility and Accessibility	Strengthens alternative transportation modes / Reduces congestion / Enhances network connectivity / Improves freight movements	Includes project-wide transit*, biking, and walking accommodations that meet or exceed facility design standards (national/federal/state), and targets improvements** to address corridors or intersections that are determined to be at or over-capacity, and (if applicable) targets improvements to more efficiently accommodate freight within the region. *If on an existing, planned or potential transit route. **Includes new or significantly improved corridor connections meeting all other requirements above.	Includes project-wide transit*, biking, and walking accommodations that meet or exceed facility design standards (national/federal/state), and reduces existing or projected future year travel delay/congestion or maintains baseline conditions, and (if applicable) indirectly enhances the movement of freight within the region. *If on an existing, planned or potential transit route. **Includes new or significantly improved corridor connections meeting all other requirements above.	Does not include project-wide transit*, biking, and walking accommodations. Does not address an existing or projected future year congestion or travel delay concern. Has no discernable benefit to the movement of freight. *If on an existing, planned or potential transit route.
Safety and Security	Potential to reduce crashes / Enhances safety for all transportation users	Directly targets a high crash location, or identified safety concern (including excessive motor vehicle speeds) in the LRTP, County or State HSP, ICE, corridor, TIA or similar study/data analysis. Crash Mitigation Factors (CMF) may also be used to inform appropriate solutions. Improvement also increases safety for transit users*, bicyclists and pedestrians. *If on an existing, planned or potential transit route.	Indirectly benefits a high crash location, or identified safety concern, or generally improves safety through implementation of current facility design standards. Potential safety benefits for transit users*, bicyclists, and pedestrians. *If on an existing, planned or potential transit route.	Does not specifically address a specific safety concern.
Environmentally Friendly / Healthy Neighborhoods / Land Use Integration	Minimizes negative impacts to existing land uses / Supports mixed-use, walkable neighborhoods, particularly access to parks and recreation / Consistent with growth and land use plans	No known environmental issues or avoids/significantly reduces negative environmental impacts. Project directly benefits neighborhood walkability/bikability (enhanced connection to jobs, schools, services, parks). Project is consistent with local land use and/or economic development plans, and planned future growth patterns.	Minimizes or mitigates negative environmental impacts. Project indirectly benefits area neighborhoods. Project is consistent with local land use and/or economic development plans, and planned future growth patterns.	Negative impacts to the environment are known, or are likely to occur. Adversely impacts area neighborhoods, or makes them less bikeable/walkable. Project is inconsistent with local land use and/or economic development plans, and/or contradicts planned future growth patterns. Project may also potentially prevent future projects from occurring.
Environmental Justice (EJ) and Equity	Advances equitable investments for EJ populations and persons with disabilities	Directly benefits or significantly benefits EJ populations/neighborhoods or persons with disabilities	Indirectly benefits EJ populations/neighborhoods or persons with disabilities	Does not benefit EJ populations/neighborhoods or persons with disabilities (0 points). Adversely impacts EJ populations/neighborhoods or persons with disabilities (-1 point).

Ultimately, it is envisioned that this matrix can support local planning partners in evaluating potential future year projects before they are introduced for consideration in future LRTP updates, or as part of the TIP selection process. By conducting a self-evaluation, local partners should receive some indication as to how well a particular project responds against the LRTP goals and objectives. Finally, there are no thresholds established for what defines a “high quality” project. Instead, this scoring should be considered a data point to help inform a decision, and potentially help a local planning partner improve a project by modifying a concept to result in a better score.

Priority Public Transportation Investments

The challenges related to public transportation have been well documented, in this LRTP as well as previous LRTPs, the Transit Development Plan, and other related studies. Regional coordination/governance continues to be the biggest challenge facing the SLATS region. This LRTP has documented the concerns raised by local stakeholders, including the most difficult challenge of operating across the state line.

Enhance Regional Coordination

The planning and provision of a coordinated regional transit system is a complex process, especially for a bi-state MPO such as SLATS. Identifying the challenges to operating a regionally coordinated system is the easy part; however, identifying a solution has proven to be difficult. The Transit Plan articulated opportunities for transit coordination and expansion, including the implementation of new transit modes, workforce-specific transit programs, and regional governance structures. Expanding regional transit service could take many different forms depending on the SLATS region’s funding priorities, available resources, and community feedback. For example, BTS and SMTD could implement additional fixed-route service, workforce-oriented transportation (via demand-response services, employer sponsored routes, vanpools, marketing partnerships), or school tripper service. BTS and SMTD could also create a single, bi-state entity to fund and manage an integrated transportation system to provide regional transit, which is a common arrangement among metropolitan areas that straddle state boundaries.

SLATS is committed to working with BTS and SMTD to support potential service enhancements that will allow residents of the SLATS MPA to experience more efficient, and connected, transit options within the region. Throughout the development of this plan, it was clear that area residents desire to have a seamless transit system that is not constrained by a geographic boundary. Ultimately, transit riders desire a fast, convenient, and reliable service that will provide increased access to regional employment opportunities, medical services, and other services, regardless of where those opportunities are located within the MPA.

The solution to addressing regional transit in the SLATS region involves multiple components. There may be some initial, small steps that could be discussed to coordinate systems between transit providers. Throughout the LRTP development, transit riders discussed the inconvenience of having different payment systems, and difficulty in locating service information for multiple service providers. As such, the region may want to advance conversations about finding opportunities to coordinate service and payment platforms.

SLATS, along with local transit representatives and local officials, may also want to consider convening a transit workshop. This event could provide the region an opportunity to discuss current conditions, learn

about innovative forms of delivering service, and discuss actionable steps to breakdown some of the barriers that exist to operating service across the state line.

While these are important steps toward developing a regional system, it is equally important, and perhaps even more important, to identify a local champion for advancing public transit within the region. In order for regional transit service to advance, it will require political support from area representatives. Without this support, it will be difficult to breakdown some of the barriers that currently prevent a seamless operation.

Finally, this plan fully acknowledges that these are small steps toward identifying a long-term regional transit solution; however, it is clear from residents and stakeholders alike that it is critical to start somewhere to build support for enhanced, expanded, and viable regional transit options. Furthermore, it is important to note that funding plays a critical role when discussing potential solutions. An example of this is the Beloit-Janesville Express service which is constantly dealing with financial uncertainty each year. This route serves as an important mobility option for many area residents who need to access County services located in Janesville and discontinuing this service would have a negative impact on area residents, and in particular members of the EJ population. Establishing a consistent, reliable funding source to operate this express bus is important to address the long-term regional mobility needs of SLATS residents.

Explore New Service Delivery Options

During COVID-19, BTS implemented fixed-route service improvements that were aimed at improving enhanced service coverage, including enhanced service to the Gateway area. Due to COVID-19, these service changes have never really had an opportunity to be evaluated under “normal” conditions. Recent ridership numbers remain below pre-pandemic levels and it is still to be determined how transit systems across the country will recover over the next two to three years. An overarching issue is related to how COVID-19 has changed commuting, and increased work at home options. As such, it is recommended that BTS continue to monitor the recent service improvements over the next few years and to implement service modifications as needed (as was done in summer 2021 when this plan was being developed).

One option BTS may want to explore is microtransit, a form of on-demand transportation. The service includes defining zones (often in locations where providing frequent fixed-route service is difficult) where riders can request a trip through a smartphone application. The flexible routing and scheduling allow riders to request a trip when needed, as opposed to adhering to the fixed-route schedule. In many cases, riders are picked-up within 10 to 15 minutes of requesting a ride (depending on the zone size). The service can be combined with fixed-route service, meaning a fixed-route still might operate within a zone, thus allowing riders to make transfers if desired. Ultimately, the use of technology for scheduling trips, and the flexibility of identifying a pick-up location, make this a convenient, desirable mobility option. Furthermore, while many transit agencies choose to operate smaller vehicles to serve the on-demand zones, some agencies operate regular size buses for the on-demand service.

Another potential service enhancement, discussed in the most recent SLATS Transit Plan as well as the 2015 SMTD Transit Development Plan (TDP), involves establishing fixed-route or deviated fixed-route (in addition to on-demand service) to serve the northern Illinois communities of SLATS. Alternatives were identified for providing fixed-route service south of the Wisconsin-Illinois border, with two conceptual alignment options identified in SMTD’s TDP. These recommendations could be implemented at any time, either by SMTD directly or by BTS with an interagency contract or cost-sharing agreement. It is recommended that both

agencies continue to coordinate to ensure effective transit connections throughout the SLATS planning area.

Advancing Passenger Rail Planning in the Region

The SLATS Passenger Rail Study, completed in February 2021, determined through a high-level market analysis that passenger rail service within the region could warrant additional study. The study, started near the beginning of the COVID-19, acknowledges that the pandemic has had significant impacts on commuting patterns and the short and long-term impacts are yet to be fully realized. At this point in time, it is too early to know if the trend of lower transit ridership is temporary, or if there will be extended impacts on transit usage. Other factors that need to be considered include: will individuals spend more time working remotely (and thus less time traveling into an office)? Could individuals live further away from an office if they only have to travel into the workplace a couple times per week, or per month? And, if so, could passenger rail serve as a viable travel mode?

The long-term impacts of COVID-19 are likely to affect the next steps to advance passenger rail service within the region. Implementing any form of passenger rail service within the larger region would require significant lead time to conduct robust technical analyses, engage and collaborate with stakeholders, define an institutional framework and execute a legal agreement, and design and construct all required infrastructure. As such, the following are some specific near-term actions that SLATS can take as a follow-up to this study. Additional action steps are included in the SLATS Passenger Rail Study.

- **Refine Demand Analysis** | The methodology employed for the Passenger Rail Study involved a high-level travel market analysis to determine the potential demand for passenger rail service. Exploring ways of refining the market analysis would likely include a means of incorporating level of service as a variable in the analysis. For example, previous commuter rail feasibility studies completed by the project team have shown that high-wage job density, availability of morning trains, and walkability index values for non-downtown station areas produces robust daily alighting estimates
- **Monitor Socioeconomic Projections** | Another area of refinement are the socioeconomic projections, which should be further reviewed with the regional MPOs to ensure that they reflect the most current expectations. Future employment projections in downtown Madison were found to have a significant impact on the overall ridership potential. A good time to revisit the ridership projections would be when MPOs within the region develop new population and employment projections, likely as part of future LRTP updates, and when new US Census data becomes available.
- **Define Service Models** | Identify possible service models that can be considered (e.g., commuter rail, hybrid rail, or intercity rail), and adjust the market analysis to account for variations in service levels, speeds, station spacing, and other factors that would be characteristic of each mode. Differences in service characteristics that could affect the demand analysis approach and data used include the following.
 - **Commuter Rail** | The market analysis was based on replicating demand for Metra, that is, representative of commuter rail service, and the underlying data used was Census-reported work trips. Commuter rail assumes focus of travel is a center city and is characterized by frequent and fast peak period service (i.e., express trains), and less frequent and non-express service in the off-peak.
 - **Hybrid Rail** | This service is characterized by higher frequencies throughout the day, with more station-to-station travel, and less dependency on a single node like a center city. While work travel is likely the most important travel market, the higher frequencies and more opportunity for station-to-station travel can also attract higher levels of non-work travel than is the case for commuter rail.
 - **Intercity Rail** | Since intercity rail travel markets would not be focused on work travel, gauging demand would need to rely on different datasets than Census reported work travel statistics. Estimating demand would require an alternative analytic approach than used in for the Passenger Rail Study. Furthermore, as intercity rail service has greater spacing between stations (i.e., fewer stations), this service is less likely to be an effective form of passenger rail for the two alignments identified for the super region.

- **Support Transit-Oriented Development (TOD)** | TOD encourages mixed-use development by integrating housing, office, retail, parks, and other civic uses within a short walking distance of a train or bus station. This type of development can occur in anticipation of a transit project to help build the case for the investment and enhance the market demand for the service once implemented. It is also important to note that since TODs result in economically, socially and sustainable communities by creating walkable, vibrant places with a range of uses and diversity of people in close proximity, these developments can be beneficial even without transit. To the extent that the prospective rail station locations are in downtown areas or near other existing transit facilities (e.g., bus transfer centers), the benefits can be realized more quickly.

Embrace Emerging Technology for Public Transportation

As documented in this LRTP, emerging technology will have a significant impact on the delivery of future transportation and mobility services. This was briefly described earlier in this section when discussing the microtransit, or on-demand service. As emerging technologies develop at a rapid pace, it will also be important to accommodate them in future infrastructure planning efforts throughout the SLATS region.

Transition to Electric Buses

As of December 2020, there were an estimated 2,790 zero-emission buses (ZEBs) in operation in the U.S., representing a 24% increase in deployments over 2019. ZEBs include battery electric vehicles (BEB) and hybrid vehicles. Of this total, there were approximately 700 BEBs. A 2016 study by the California Fuel Cell Partnership found BEBs to be four times more fuel efficient than diesel buses. BEBs are also quieter due to the use of electric drive motors as opposed to combustion engines. In fact, they are so quiet that most states are requiring noise generators be added to the vehicle so that pedestrians can hear the vehicles. Overall, BEBs have less maintenance costs per mile than their diesel equivalents.

Looking into the future, some estimates suggest that 84% of all transit bus sales worldwide in 2030 are expected to be electric. Furthermore, new advancements in developing higher-capacity batteries now offer greater range and reliability than even a few years ago. Also, new chargers can now replenish batteries faster making BEBs an even more attractive option.

While the buses are the most obvious component in transitioning to electric, it is also critical that the transit agencies plan accordingly to upgrade bus garages/maintenance facilities to accommodate BEBs. The capacity of garages is an important consideration when planning for BEBs and the charger type affects how much space is needed to accommodate the buses. It is also important to coordinate with local utility companies regarding potential electrical upgrades that will be required to accommodate the service.

The Infrastructure Investment and Jobs Act, as currently proposed at the time of this LRTP, also supports a transition to electric buses as the bill would add \$1 billion from 2021 to 2022 (\$180 million was awarded in 2021). Over the course of the next five years (2022 to 2026), the program could award over \$5 billion.

It is important to note that there are certain requirements for transit agencies to pursue competitive grants for buses, and bus facilities. Competitive grants under 5339 requires a zero-emission transition plan that demonstrates a long-term fleet management plan with a strategy for use of the current application with future acquisitions. As part of this process, the applicant must examine the impact of the transition on the current workforce and avoid the displacement of the existing workforce. As such, this most likely will require consideration for retraining the current workforce to maintain the new bus technology. In conclusion, SLATS should review the final version of the Infrastructure Investment and Jobs Act when it becomes law and should coordinate with the local transit agencies to discuss the next steps in developing a plan to transition to BEBs.

Priority Non-Motorized Investments

The LRTP guiding principles support continued investment in the region's non-motorized transportation system. Furthermore, the technical analysis shows that the region has relatively low traffic congestion which provides the opportunity to advance the recommendations outlined in the Pedestrian and Bicycle Plan.

Throughout the development of the LRTP, stakeholders and the public talked about the importance of slowing travel speeds, creating a safer walking and biking environment, and enhancing local and regional bicycle connections (in particular to connect to natural resources, parks, and schools). The plan also highlighted the importance of biking from an equity standpoint. For some SLATS area residents, bicycling may be the only form of transportation to access employment, and providing sidewalks are also critical to safely accommodate pedestrians, transit riders (who are pedestrians before and after their ride), and persons with disabilities.

The Pedestrian and Bicycle Plan identifies key opportunities and challenges towards creating more walkable and bicycle-friendly regional connections. Safety, demand, and equity analyses, along with current street characteristics, such as traffic volume, speed, and lane width, and public comments, were used to develop a comprehensive regional walking and bicycling network.

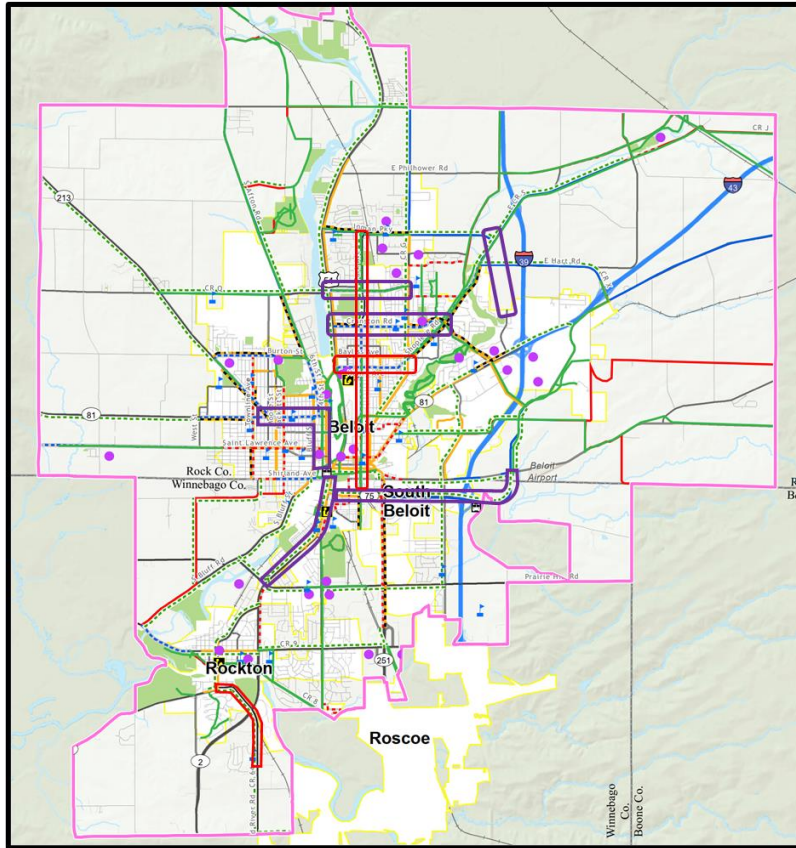
Priority Improvements

The Pedestrian and Bicycle Plan sets forth the overall vision of the SLATS region. The plan includes numerous recommendations/projects that identify opportunities to improve existing walkways and create regionally significant routes.

Specific themes that were heard as part of the LRTP outreach effort echo concerns documented in the Pedestrian and Bicycle Plan. A major concern is the need to provide access to recreational areas. Enhancing access to Big Hill Park was a priority as was enhancing access to/from schools, and local parks. Another concern was enhancing connections to the downtown areas throughout the region and improving east-west connectivity.

The following summarize the priority non-motorized improvements, including a discussion of the planned roadway projects identified in the LRTP. Furthermore, the highlighted projects are improvements that help address system gaps and improve regional connections. This is not to suggest that other recommendations in the Pedestrian and Bicycle Plan are not valid, they are also important to developing a comprehensive system; however, with limited funding opportunities the LRTP is focused on priority investment that might occur in the short- to mid-range timeframe. Furthermore, these projects, and regional priorities, should be revisited as part of the next Pedestrian and Bicycle Plan update. **Figure 52** displays the committed projects and fiscally constrained roadway projects that include bicycle and pedestrian accommodations.

FIGURE 52. PRIORITY BICYCLE IMPROVEMENTS



Committed Projects

The following projects are currently underway, or planned, and will help address important segments of the overall bicycle vision for the region.

- Park Avenue from Ingersol to Inman Parkway
- Henry Avenue from Riverside Drive (US-51) to Prairie Avenue
- Old River Road from IL-75 to Stephen Mack Middle School

Fiscally Constrained Roadway Projects

The recommended roadway projects, identified as fiscally constrained projects, include bicycle and pedestrian accommodations. These projects include at least portions of the following bicycle and pedestrian projects:

- Cranston Road from Riverside Drive (US-51) to Prairie Avenue (while not part of a fiscally constrained project, this connection would continue east of Prairie Avenue to Shopiere Road)
- Elmwood Avenue from Riverside Drive (US-51) to Prairie Avenue
- Blackhawk Boulevard from Prairie Hill Road to the state line
- Gardner Street from Blackhawk Boulevard to IL 251 (while not part of a fiscally constrained project, this connection would continue east of IL 251 to Gateway Boulevard)
- Liberty Avenue from West Street to Fourth Street (fiscally constrained roadway improvements are only portions of this corridor)

- Fourth Street from Broad Street to Liberty Avenue (fiscally constrained roadway improvements are only portions of this corridor)
- BT Extension – This is a new roadway project and as such is not currently identified in the Pedestrian and Bicycle Plan. However, SLATS requires that appropriate complete streets concepts be included in all new roadway projects that use STBG-U funding.

Additional Priority Projects

The following are additional projects that are currently included in the Pedestrian and Bicycle Plan or further identified through this LRTP development process. These projects would help address system gaps and improve network connectivity. This is not to suggest the other projects in the bike plan are not important and all of the plan recommendations, and priorities, should be revisited and update with the next plan update.

- Afton Road from Newark Road/CTH Q to Big Hill Road
- Milwaukee Road from White Avenue to Lee Lane
- White Avenue from Milwaukee Road to Park Avenue
- ABC Supply Stadium to Nature at the Confluence – study connections to support the new stadium and link to regional facilities.
- Stateline Road (including Manchester Street) from Turtle Creek Park to Willowbrook Road
- Stonebridge Trail to Broad Street
- Shirland Avenue from State Street to Townline Avenue
- Willowbrook Road from Milwaukee Road to Rockton Road
- Portland Avenue from Fifth Street to Fourth Street
- Rockton Road from east limits of path near 251 to Willowbrook Road
- Rockton Road from Nazarene Drive to Old Meadow Lane
- Illinois 2/Nazarene from Prairie Hill Road to Rockton Road/ improvements at intersection with I-75
- Shopiere Road from Prairie Avenue to Murphy Woods Road
- Prairie Avenue from Shopiere Road to Cranston Road
- Sixth Street from Burton Street to Liberty Avenue
- Madison Road from Liberty Avenue to Burton Street
- Burton Street from Madison Road to Sixth Street
- Townline Avenue from Shirland Avenue to Burton Street

Review of Existing Walking and Biking Policies

Each community in the SLATS region has its own policy position when it comes to bicycling and pedestrian rights. Both Illinois and Wisconsin have their own approach when it comes to the rights and duties of road users. This means that each community may need to modify its municipal code to accommodate any infrastructure changes. With the installation of new facilities, municipalities must assess their vehicle codes to account for changing roadway behavior. The Pedestrian and Bicycle Plan documents changes that the local planning partners should consider. These recommendations should be reviewed and implemented by the local planning partners, as needed, to help implement the regional non-motorized vision.

Future Pedestrian and Bicycle Plan Updates

SLATS completed the most recent Pedestrian and Bicycle Plan update in 2018. This plan provides a very detailed vision for developing a comprehensive non-motorized system within the SLATS MPA. Given that

the plan is only three years old, and the plan recommendations are still valid, it is recommended that SLATS and local planning partners focus on implementing the plan recommendations in the short-term. An update of the Pedestrian and Bicycle Plan would be most beneficial if it occurs just prior to the development of the next LRTP update, which will occur in late 2025, or early 2026.

Conclusion

The SLATS 2045 LRTP establishes a roadmap to utilize future transportation investments to advance regional goals including expanding mobility options, growing the economy and tourism, increasing safety for the traveling public, expanding access to jobs, and improving the efficient movement of freight. This roadmap is intended to help the region develop in a manner that is consistent with a cohesive vision that will protect the environment and enhance quality of life.

It is important to acknowledge that this roadmap is not set in stone, and in fact the plan should be frequently reviewed, and if necessary amended, to respond to changing transportation priorities. As discussed throughout this LRTP, technology is rapidly changing, and the SLATS region should be prepared to adapt and leverage future mobility solutions to continue to provide a high-quality, safe, and connected transportation system.

Finally, at the time this LRTP was being finalized (August 2021), the U.S. Senate passed one of the largest infrastructure investment bills in history. If enacted into law, the program would jump-start road and bridge-building projects across the United States over the next five years which could potentially increase available funding for the SLATS region. As such, the completion of the LRTP does not end the transportation planning process but instead SLATS is committed to conducting a continuing, comprehensive, and cooperative (3-C) transportation planning process to support the implementation of the recommended plan.