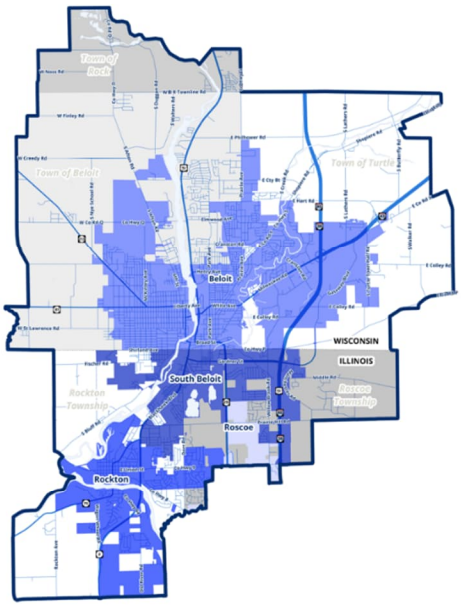




slats
STATELINE AREA
TRANSPORTATION STUDY

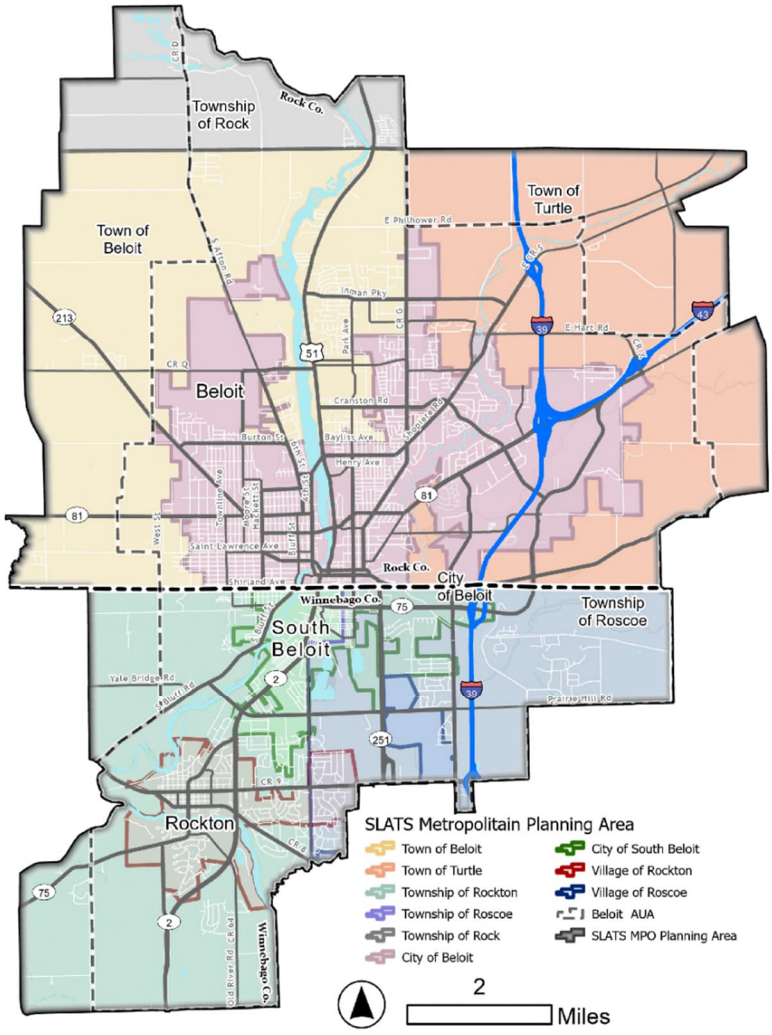
Appendix D

Existing and Future Year Conditions

This appendix summarizes existing conditions and projected future conditions for the SLATS multimodal transportation system. The analysis begins with an overview of regional travel characteristics and patterns and continues with an assessment of existing roadway, freight, public transportation, and active transportation facilities within the SLATS Metropolitan Planning Area (MPA).

Future transportation conditions are evaluated using the regional travel demand forecasting model and associated socioeconomic forecasts. The results provide insight into projected travel demand, system performance, and transportation needs through the planning horizon year of 2055. **Figure 1** illustrates the geographic boundary of the SLATS MPA and provides regional context for the transportation system analysis presented in this appendix.

FIGURE 1. SLATS METROPOLITAN PLANNING AREA



Area Travel Patterns/Characteristics

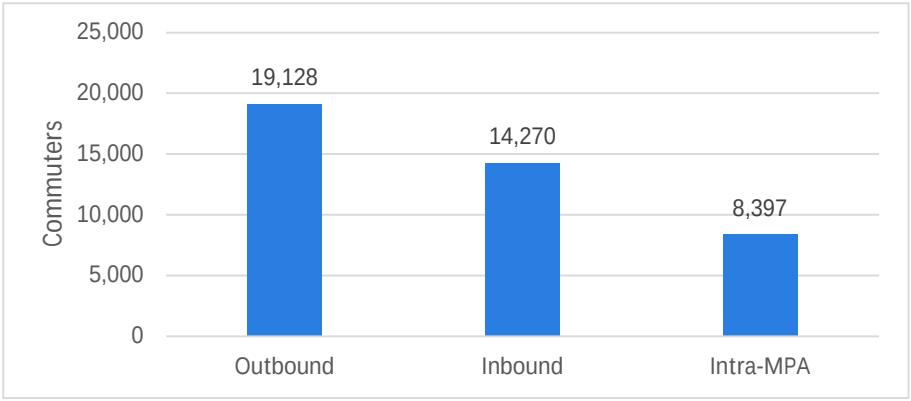
The following provides an overview of commute flows, travel mode choice, and average commute times for workers residing within the SLATS MPA.

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 regional roadway network.

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 41,795. As displayed in **Figure 2**, among these work trips, 14,270 (34 percent) are inbound (i.e., workers residing outside the MPA but working within), 19,129 (46 percent are outbound), and 8,397 (20 percent) are intra-MPA (i.e., locations where home and work are both inside the approximate MPA boundary).

FIGURE 2. SLATS MPA COMMUTERS BY DIRECTION



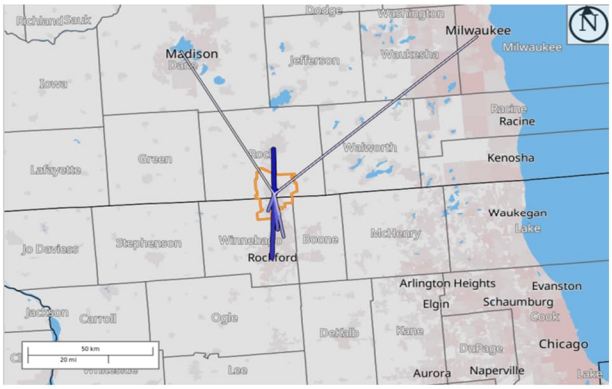
Source: LODES 2023, All Jobs. Estimated MPA includes the following County Subdivisions: Beloit city, Beloit town, Rock town, and Turtle town in Wisconsin; Rockton and Roscoe townships in Illinois.

Figure 3 illustrates the geographic distribution of inbound and outbound commuter trips associated with the SLATS MPA. The largest share of commuting activity occurs between the SLATS MPA and portions of Rock County and Winnebago County located outside the MPA, including the Janesville and Rockford urban areas.

These commuting patterns demonstrate the strong economic and transportation connections between the SLATS MPA and surrounding communities. They highlight the region's role within a broader bi-state labor market and underscore the importance of maintaining efficient transportation connections to major employment centers throughout southern Wisconsin and northern Illinois. This data is also supported by discussions with large employers in the SLATS MPA who have indicated that they are seeing an increase in employees traveling longer distances to access jobs within the region. This is an important finding to note as it supports the need for enhanced north-south and east-west connectivity within the area to better facilitate regional travel needs.

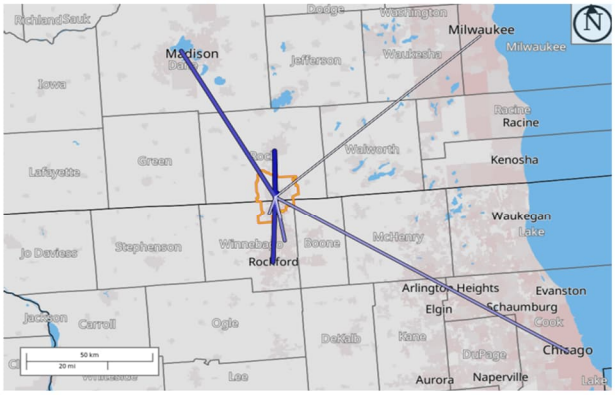
FIGURE 3. INBOUND AND OUTBOUND COMMUTER FLOWS

Where People who Work in the SLATS MPA Live



Location	Count	Share
Beloit city, WI	5,117	22.6%
Janesville city, WI	2,123	9.4%
Rockford city, IL	1,524	6.7%
South Beloit city, IL	805	3.6%
Machesney Park village, IL	614	2.7%
Rockton village, IL	577	2.5%
Loves Park city, IL	468	2.1%
Roscoe village, IL	446	2.0%
Milwaukee city, WI	307	1.4%
Madison city, WI	294	1.3%
All Other Locations	10,392	45.8%

Where People who Live in the SLATS MPA Work



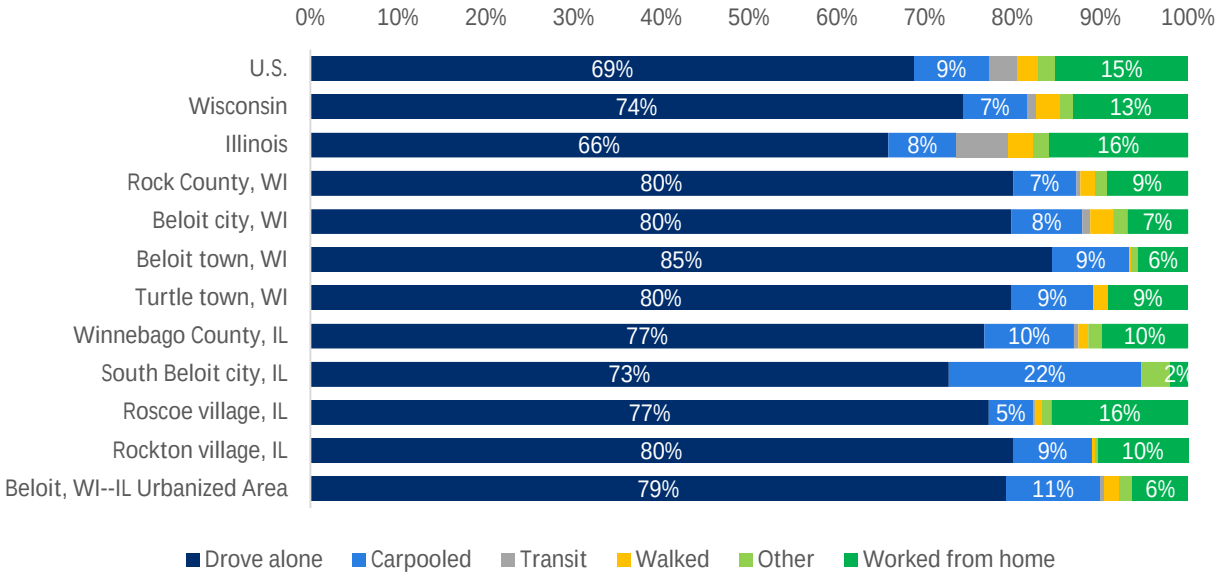
Location	Count	Share
Beloit city, WI	6,080	22.1%
Janesville city, WI	3,626	13.2%
Rockford city, IL	1,958	7.1%
Madison city, WI	1,391	5.1%
South Beloit city, IL	906	3.3%
Loves Park city, IL	639	2.3%
Chicago city, IL	473	1.7%
Rockton village, IL	471	1.7%
Roscoe village, IL	435	1.6%
Milwaukee city, WI	395	1.4%
All Other Locations	11,151	40.5%

Source: LODES 2023, 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.

Mode Choice

Driving alone is the predominant mode of travel to work for residents of the SLATS MPA. Based on the most recent American Community Survey (ACS) 2020–2024 5-Year Estimates, most workers within the SLATS MPA commute by automobile, either by driving alone or carpooling. **Figure 4** and **Table 1** summarize journey-to-work mode choice patterns for communities within the MPA.

FIGURE 4. MEANS OF TRANSPORTATION TO WORK (PERCENT OF TOTAL)



Source: Table DP03, ACS 2020-2024 (5-year estimates).

TABLE 1. MEANS OF TRANSPORTATION TO WORK

	Drove alone	Car-pooled	Transit	Walked	Other	Worked from home
U.S.	**109,447,738**	**13,569,614**	**5,157,401**	**3,772,609**	**3,124,243**	**24,042,489**
Wisconsin	**2,219,659**	**217,057**	**32,528**	**78,486**	**46,360**	**390,479**
Illinois	**4,051,863**	**479,801**	**358,398**	**169,919**	**116,955**	**975,779**
Rock County, WI	**65,296**	**5,884**	**372**	**1,404**	**1,062**	**7,531**
Beloit city, WI	*13,717*	*1,386*	*157*	*458*	*266*	*1,189*
Beloit town, WI	*3,121*	*321*	*0*	*10*	*30*	*208*
Turtle town, WI	*1,115*	*129*	*0*	*24*	*0*	*127*
Rock town, WI	*1,037*	*226*	*0*	*0*	*15*	*270*
Winnebago County, IL	**96,594**	**12,849**	**628**	**1,444**	**1,926**	**12,345**
Rockton township, IL	*6,203*	*1,297*	*8*	*17*	*135*	*632*
Roscoe township, IL	*7,542*	*560*	*2*	*138*	*98*	*1,191*
South Beloit city, IL	*3,178*	*956*	*1*	*1*	*142*	*90*
Roscoe village, IL	*4,001*	*261*	*9*	*42*	*57*	*805*
Rockton village, IL	*3,335*	*375*	*0*	*16*	*12*	*427*
Beloit, WI--IL Urbanized Area	**24,236**	**3,271**	**158**	**493**	**484**	**1,923**

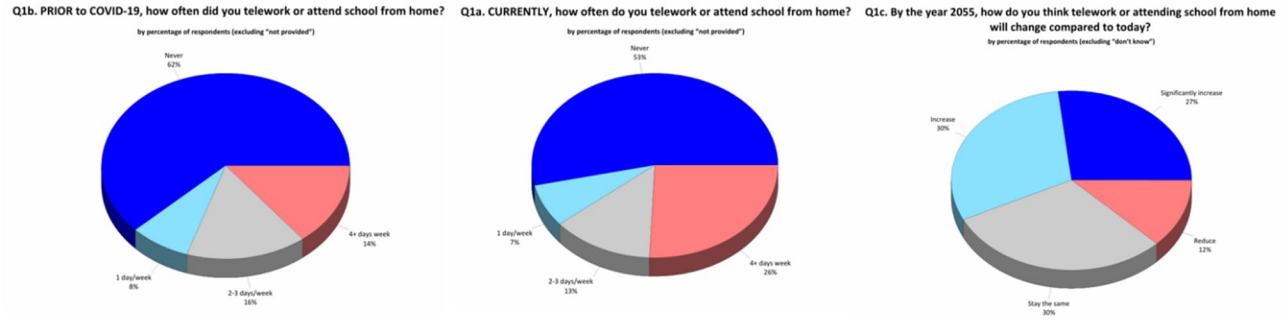
Source: Table DP03, ACS 2020-2024 (5-year estimates).

Consistent with historic trends, the City of Beloit has a more diverse mix of commute modes than surrounding communities, supported by its more compact development pattern, greater concentration of employment, and pedestrian and bicycle infrastructure. In contrast, communities such as South Beloit, Roscoe, and Rockton tend to rely mostly on private vehicles for work trips, reflecting more dispersed development patterns and generally longer commute distances.

Walking and bicycling account for a relatively small share of commute trips throughout the MPA but are higher in Beloit than in the surrounding communities. Similarly, public transportation represents a small share of work trips within the SLATS MPA, reflecting the region's overall travel patterns and land use characteristics with fixed-route transit coverage in the City of Beloit, and on-demand service provided through SMTD in the Illinois portion of the SLATS MPA. Despite accounting for a relatively small share of trips overall, these services provide critical mobility options for many area residents.

Unlike the pre-pandemic conditions, the most recent ACS data indicate that working from home has become more common impacting regional travel behavior. The growth in remote and hybrid work arrangements since 2020 has reduced commute travel for some workers and altered traditional peak-period travel patterns. As a result, current mode choice patterns differ from those observed in earlier ACS datasets (prior to 2020) and should be interpreted within the context of these broader changes in travel behavior. Additionally, the statistically valid survey conducted for the 2055 LRTP further supports this increase in work from home. **Figure 5** displays pre-and-post pandemic work from home estimates, as well as showing the anticipated increase in work from home arrangements by the year 2055.

FIGURE 5. WORK FROM HOME ARRANGEMENTS

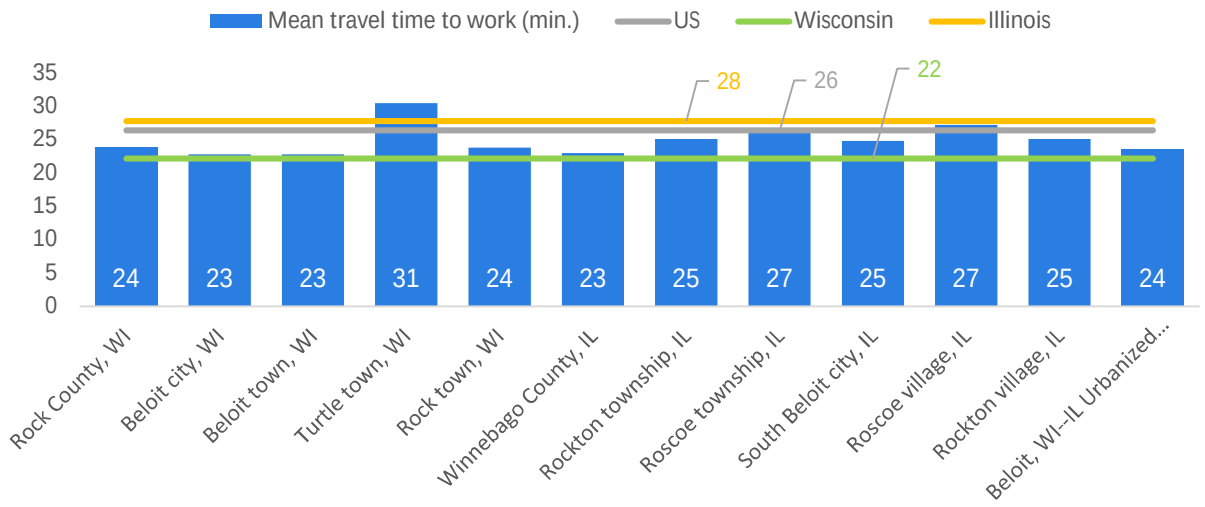


Source: 2026 ETC Transportation Survey.

Mean Travel Time

Mean travel time to work provides insight into commuting patterns and the relationship between residential areas and employment centers. **Figure 6** summarizes average commute times for workers residing within the SLATS MPA and surrounding jurisdictions.

FIGURE 6. MEAN TRAVEL TIME TO WORK



Source: Table DP03, ACS 2020-2024 (5-year estimates).

Average commute times within the SLATS MPA generally range from approximately 24 to 28 minutes, slightly higher compared to Wisconsin statewide averages and somewhat shorter than national and Illinois averages. It should be noted that the average commute time did increase from about 20 to 24 minutes, which was identified in the 2045 LRTP. Commute times tend to be lower in communities with a greater concentration of local employment opportunities, while longer commute times are often associated with communities that experience higher levels of regional commuting to employment centers such as Madison, Janesville, Rockford, and the greater Chicago region. Additionally, the longer commute times is consistent with the outbound travel numbers discussed earlier in this appendix.

Overall, the SLATS MPA continues to benefit from relatively short commute times compared to many larger metropolitan areas, reflecting the region's proximity to employment centers and the availability of an interconnected regional transportation network.

Roadways

The SLATS MPA is served by an extensive roadway network that provides critical local, regional, and interstate connections for residents, businesses, and visitors. The network supports the movement of people and goods throughout the Stateline region while providing connectivity to major employment centers, commercial areas, and neighboring metropolitan regions.

I-39/90 serves as the principal north-south transportation corridor through the eastern portion of the MPA, connecting the Stateline region to Rockford and the Chicago metropolitan area to the southeast and to Janesville, Madison, and other destinations in Wisconsin to the north. I-43 intersects I-39/90 near Milwaukee Road and provides a key northeast connection to the Milwaukee metropolitan region. Together, these interstate facilities form the backbone of the regional transportation system and support both passenger and freight travel.

The roadway network also includes a system of state highways, county highways, and local streets that provide access to residential neighborhoods, commercial centers, industrial areas, and community destinations throughout the MPA. As a bi-state region located between major metropolitan areas, the SLATS MPA experiences travel demand generated by local trips, regional commuting, and through traffic.

In addition to serving daily travel needs, the roadway network plays a vital role in supporting the regional economy by facilitating the movement of freight and commercial vehicles. Efficient transportation connections are essential to the area's manufacturing, distribution, agricultural, and service sectors. Freight movement and the transportation needs of the regional economy are discussed in greater detail later in this appendix.

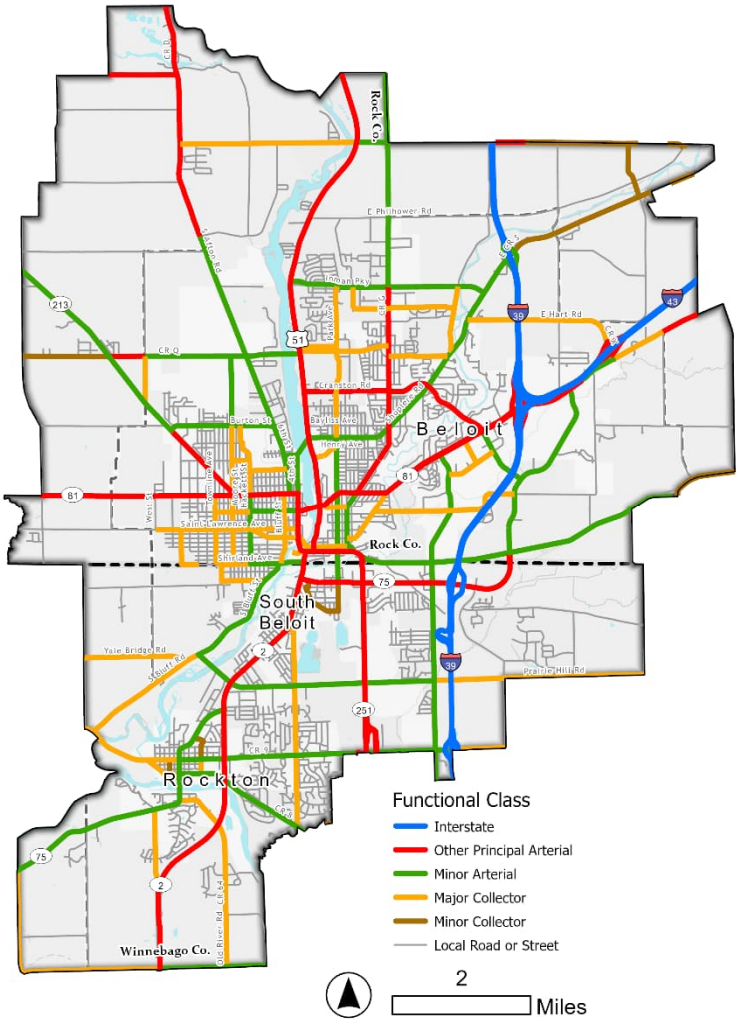
Functional Classification

Functional classification is the process of categorizing roadways based on the level and type of service they provide within the transportation network. The functional classification system helps define a roadway's role in balancing mobility and land access, and it serves as an important factor in transportation planning, design, maintenance, and funding decisions.

The higher-order roadway system within the SLATS MPA includes Interstate highways, U.S. highways, and State highways, which are designed primarily to accommodate regional and interregional travel. Lower-order facilities, including collector and local roadways, provide access to neighborhoods, businesses, agricultural areas, and community destinations and are generally under the jurisdiction of county or local governments.

The SLATS roadway functional classification system is displayed in **Figure 7**.

FIGURE 7. FUNCTIONAL CLASSIFICATION SYSTEM



Source: WisDOT and IDOT (2025).

The roadway functional classification system is based on Federal Highway Administration (FHWA) guidance and is implemented by individual state transportation agencies. Functional classification categorizes roadways according to the role they serve within the overall transportation network, balancing mobility and land access. In general, roadways that serve longer-distance travel and connect major population and employment centers are classified at higher functional levels, while roadways that primarily provide direct access to adjacent land uses are classified at lower functional levels.

Because the SLATS MPA spans both Wisconsin and Illinois, the roadway functional classification system reflects classifications established by WisDOT and IDOT. While the two states follow the same FHWA framework, minor differences exist in classification practices and terminology. Accordingly, the SLATS functional classification map incorporates the most recently approved classifications from both states.

Table 2 summarizes the functional classification categories and provides representative examples from within the SLATS MPA.

TABLE 2. FUNCTIONAL CLASSIFICATION CATEGORIES

Functional Classification Category	SLATS MPA Example
Interstates are the highest classification and are designed and constructed with mobility and long-distance travel in mind. The Interstate System provides limited access, divided highways offering high levels of mobility while linking the major urban areas of the United States. Roadways in this category are officially designated by the Secretary of Transportation, and all routes are part the Dwight D. Eisenhower National System of Interstate and Defense Highways.	- I-39/90 provides access to major metropolitan areas including Rockford and Chicago to the south and southeast, Madison to the north, and Minneapolis to the northwest. - I-43 provides access to the northeast toward Milwaukee, and continuing north to Green Bay.
Other Principal Arterials serve major centers of metropolitan areas, provide a high degree of mobility and can also provide mobility through rural areas. Unlike their access-controlled counterparts, abutting land uses can be served directly. Forms of access include driveways to specific parcels and at-grade intersections with other roadways.	- US-51 provides the northern portion of the MPA in Wisconsin north-south access to Janesville and Madison. - WI-81 provides east-west access through the Wisconsin portion of the MPA connecting the interstates to western Wisconsin. - WI-67 provides the eastern portion of the MPA east-west access to and from the east and north - WI-213 provides regional connections from the northwest portion of the MPA to downtown Beloit and IL-2. - IL-2 and IL-251 provide regional connections to and from the south. - IL-75 provides regional connections from the southwest portion of the MPA to I-39/90 and WI- 67.
Minor Arterials provide service for trips of moderate length, serve geographic areas that are smaller than their higher Arterial counterparts and offer connectivity to the higher Arterial system. In an urban context, they interconnect and augment the higher Arterial system, provide intra-community continuity and may carry local bus routes. In rural settings, Minor Arterials should be identified and spaced at intervals consistent with population density, so that all developed areas are within a reasonable distance of a higher level Arterial. Additionally, Minor Arterials in rural areas are typically designed to provide relatively high overall travel speeds, with minimum interference to through movement.	- Portions of Park Avenue, Shopiere Road, Henry Avenue, Inman Parkway, Stateline Road, Burton Street, Hackett Street, South Bluff, Willowbrook Road, Rockton Road, and Hononegah Road.
Collectors serve a critical role in the roadway network by gathering traffic from Local Roads and funneling them to the Arterial network. Within the context of functional classification, Collectors are broken down into two categories: Major Collectors and Minor Collectors. Until recently, this division was considered only in the rural environment. Currently, all Collectors, regardless of whether they are within a rural area or an urban area, may be sub-stratified into major and minor categories. The distinctions between Major Collectors and Minor Collectors are often subtle. Generally, Major Collector routes are longer in length; have lower connecting driveway densities; have higher speed limits; are spaced at greater intervals; have higher annual average traffic volumes; and may have more travel lanes than their Minor Collector counterparts. Careful consideration should be given to these factors when assigning a Major or Minor Collector designation. In rural areas, AADT and spacing may be the most significant designation factors. Since Major Collectors offer more mobility and Minor Collectors offer more access, it is beneficial to reexamine these two fundamental concepts of functional classification.	- Hart Road, Colley Road, Elmwood Avenue, portions of McKinley Avenue and Prairie Hill Road, Old River Road and Dorr Road.
Local Roads account for the largest percentage of all roadways in terms of mileage. They are not intended for use in long distance travel, except at the origin or destination end of the trip, due to their provision of direct access to abutting land. Bus routes generally do not run on Local Roads. They are often designed to discourage through traffic. As public roads, they should be accessible for public use throughout the year. Local Roads are often classified by default. In other words, once all Arterial and Collector roadways have been identified, all remaining roadways are classified as Local Roads.	- All neighborhood or residential streets.

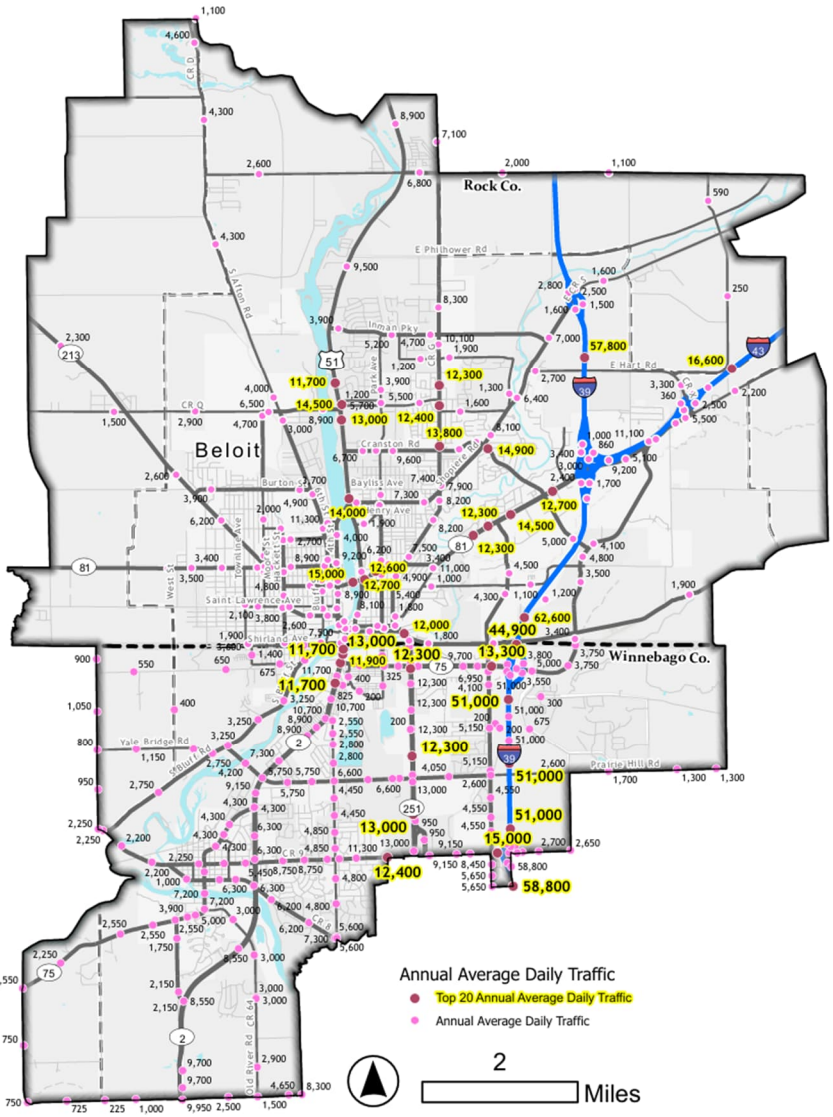
Source: FHWA (https://www.fhwa.dot.gov/planning%20/processes/statewide/related/highway_functional_classifications/section03.cfm#Toc336872980)

Daily Traffic Volumes

Average Annual Daily Traffic (AADT) volumes within the MPA reflect the importance of the SLATS roadway network in accommodating local, regional, and interstate travel. The highest traffic volumes are concentrated along the interstate system and within the more developed portions of the MPA east of the Rock River, and many in proximity to the I-39/90 corridor.

As shown in Figure 8, the highest traffic volumes in the SLATS MPA occur along the I-39/90 corridor. The highest observed AADT within the planning area is approximately 62,200 vehicles per day on I-39/90 just north of the Stateline. Traffic volumes along the remainder of the interstate corridor remain consistently high, generally ranging from approximately 51,000 to 59,000 vehicles per day. These volumes underscore the corridor's critical role in facilitating regional travel and interstate freight movement between Wisconsin and Illinois. I-43 east of the I-39/90 interchange, carries approximately 16,600 vehicles per day.

FIGURE 8. AVERAGE ANNUAL DAILY TRAFFIC (AADT) VOLUMES



Traffic volumes decline substantially on facilities outside of the interstate system. The highest-volume non-interstate facility include WIS 81 (Milwaukee Road), where daily traffic volumes generally range between 12,000 to 15,000 vehicles per day, and Cranston Road, which carries between close to 15,000 vehicles per day in the most heavily traveled segment.

Several key east-west corridors also accommodate significant traffic volumes. Portland Avenue, one of the principal crossings of the Rock River within the MPA, carries approximately 15,000 vehicles per day, while segments of Prairie Avenue, Henry Avenue, Shopiere Road, and Willowbrook Road also serve important local and regional travel functions, each carrying volumes between 10,000 to 15,000 vehicles per day.

Table 3 summarizes the locations of the highest-volume roadway segments within the MPA. Volumes are broken down by location in Wisconsin or Illinois.

TABLE 3. TOP AADTS WITHIN THE SLATS MPA

ROAD_NAME / Location	AADT	State
I-39/I-90 BTWN WI-IL STATE LINE & I-43/STH 81 - HPMS	62,600	WI
JANE ADDAMS MEMORIAL TOLLWAY	58,800	IL
I-39/I-90 BTWN I-43 & CTH S - HPMS	57,800	WI
JANE ADDAMS MEMORIAL TOLLWAY	51,000	IL
JANE ADDAMS MEMORIAL TOLLWAY	51,000	IL
JANE ADDAMS MEMORIAL TOLLWAY	51,000	IL
JANE ADDAMS MEMORIAL TOLLWAY	44,900	IL
I-43 WEST OF STH 140 - HPMS	16,600	WI
ROCKTON RD	15,000	IL
STH 81 PORTLAND BTWN 3RD ST & USH 51 BELOIT - HPMS	15,000	WI
CRANSTON RD BTWN BOOTMAKER DR & AUSTIN PL BELOIT - HPMS	14,900	WI
STH 81 MILWAUKEE RD EAST OF MORGAN TERR BELOIT - HPMS	14,500	WI
USH 51 BTWN BRIAR LN & ELMWOOD AVE BELOIT	14,500	WI
USH 51 RIVERSIDE DR BTWN HENRY & BAYLISS AVES BELOIT - HPMS	14,000	WI
CTH G PRAIRIE BTWN MASON & CRANSTON BELOIT	13,800	WI
GARDNER AVE	13,300	IL
BLACKHAWK BLVD	13,000	IL
N 2ND ST	13,000	IL
USH 51 RIVERSIDE DR BTWN CTH Q & WEIRICK RD BELOIT - HPMS	13,000	WI
STH 81/ WHITE AVE BTWN WOODWARD & PARK AVES BELOIT	12,700	WI
STH 81 BTWN CRANSTON RD & BRANIGAN BELOIT - HPMS	12,700	WI
STH 81 WHITE AVE BTWN USH 51 & WOODWARD DR BELOIT	12,600	WI
ROCKTON RD	12,400	IL
CTH G PRAIRIE RD NORTH OF MURPHY WOODS RD BELOIT	12,400	WI
N 2ND ST	12,300	IL
DEARBORN AVE	12,300	IL
STH 81 BTWN S RIDGE RD & HICKORY DR BELOIT - HPMS	12,300	WI
STH 81 BTWN W INDIAN RD & MORGAN TERR BELOIT - HPMS	12,300	WI
PRAIRIE AVE BTWN POST & W HART RD BELOIT	12,300	WI
USH 51 SOUTH OF EAST BROAD ST BELOIT	12,000	WI
STH 213 STATE ST BTWN SHIRLAND & GARDNER BELOIT	11,900	WI
BLACKHAWK BLVD	11,700	IL
BLACKHAWK BLVD	11,700	IL
USH 51 NORTH OF BRIAR LA BELOIT	11,700	WI

Source: 2026 WisDOT and IDOT Traffic Counts.

Historic Interstate Volumes

Overall, interstate traffic volumes have increased substantially over the past decade, reflecting continued growth in regional travel demand, freight movement, and economic activity. Between 2010 and 2023, traffic volumes on I-39/90 increased at all count locations, with the largest growth occurring north of the I-43 interchange, where ADT increased from approximately 40,800 vehicles per day to 57,800 vehicles per day, a growth of 17,000 vehicles (41.7 percent). Significant increases were also recorded near the Wisconsin-Illinois state line, where volumes grew by 12,500 vehicles (25.0 percent),

and north of the SLATS MPA, where volumes increased by 12,400 vehicles (26.0 percent). South of Exit 1 in Illinois, traffic volumes increased by 9,000 vehicles (12.9 percent) during the same period.

Traffic volumes on I-43 east of Hart Road also experienced growth, increasing from approximately 14,100 vehicles per day in 2010 to 16,600 vehicles per day in 2023, an increase of 1,500 vehicles (17.7 percent). The highest interstate traffic volumes in 2023 were observed near the Wisconsin-Illinois state line (62,600 ADT). The sustained increase in interstate traffic throughout the region highlights the importance of the I-39/90 corridor as a key regional transportation and freight route connecting southern Wisconsin and northern Illinois. These trends underscore the need to continue monitoring interstate system performance and coordinating transportation investments to support regional mobility, economic development, and freight movement.

Figures 9 and **10** illustrate historic traffic volumes on I-39/90 and I-43 within the SLATS MPA.

FIGURE 9. HISTORIC INTERSTATE VOLUMES

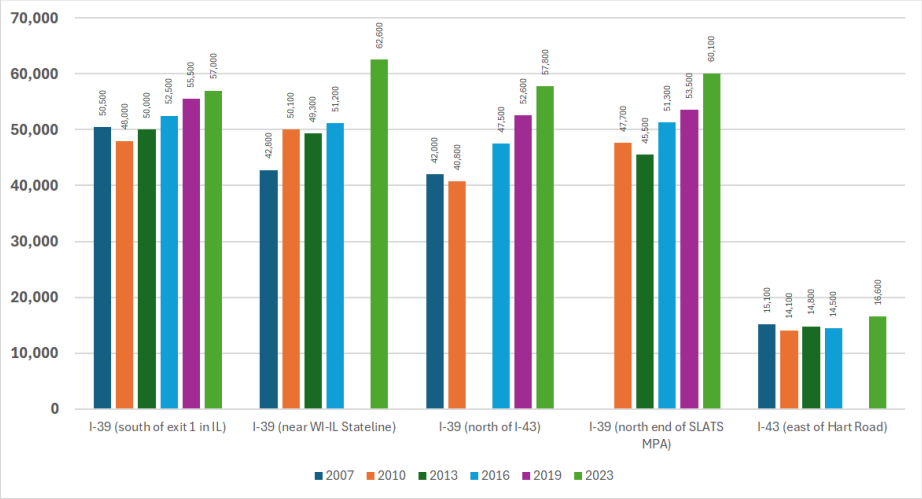
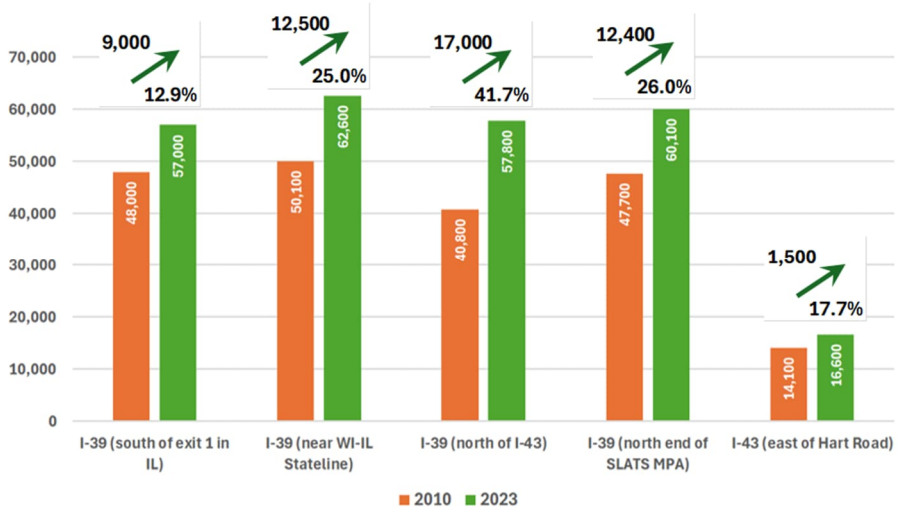


FIGURE 10. HISTORIC INTERSTATE VOLUMES (2010 VS. 2023)



Historic River Crossing Volumes

Overall, river crossing volumes within the SLATS MPA declined between 2016 and 2023, with total daily crossings decreasing from approximately 68,700 vehicles to 64,300 vehicles, a reduction of 4,400

vehicles (6.4 percent). The decline occurred on both sides of the state line, with Illinois crossings decreasing from approximately 7,500 to 6,400 vehicles per day (-14.7 percent) and Wisconsin crossings decreasing from approximately 61,200 to 57,900 vehicles per day (-5.4 percent).

While overall cross-river travel declined, volumes varied by crossing location. Portland Avenue remained the busiest river crossing in the region, carrying approximately 15,000 vehicles per day in 2023, followed by Henry Avenue with 10,800 vehicles per day and County Highway Q with 8,900 vehicles per day. Among the Wisconsin crossings, the largest decreases between 2016 and 2023 occurred on County Highway Q (-800 vehicles per day, -8.2 percent), Town Line Road (-800 vehicles per day, -11.6 percent), and 4th Street (-900 vehicles per day, -15.8 percent). Illinois river crossings also experienced declines, with Prairie Hill Road decreasing from approximately 5,000 to 4,200 vehicles per day (-16.0 percent) and Rockton Road declining from 2,500 to 2,200 vehicles per day (-12.0 percent).

Figures 11 and **12** illustrate historic traffic volumes at Rock River crossings within the SLATS MPA.

FIGURE 11. HISTORIC RIVER CROSSING VOLUMES

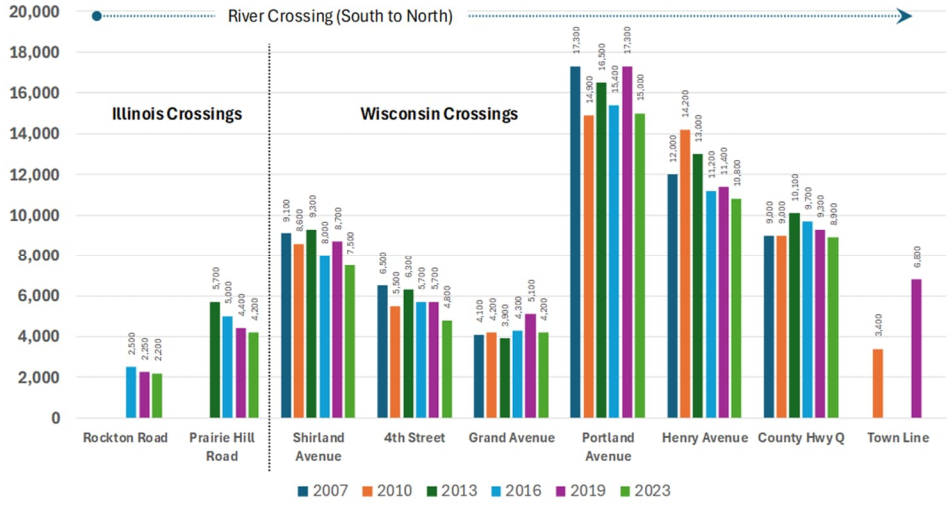
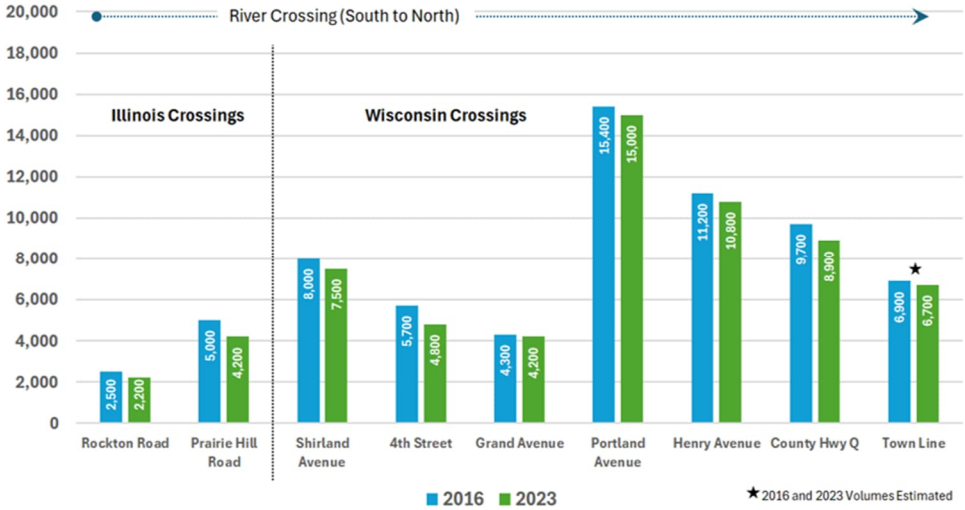


FIGURE 12. HISTORIC RIVER CROSSING VOLUMES (2016 VS. 2023)



Continued monitoring of river crossing volumes is particularly important because the Rock River serves as a significant barrier to east-west travel within the region. With a limited number of roadway crossings available, traffic disruptions, capacity constraints, or changes in travel demand at any of these

crossings can have impacts across the broader transportation network. Understanding how traffic is distributed among the river crossings helps identify potential bottlenecks, supports infrastructure maintenance and investment decisions, and ensures that adequate connectivity is maintained between communities on both sides of the river. As population, employment, and travel patterns evolve, ongoing evaluation of river crossing performance will remain an important component of regional transportation planning and system resiliency.

Existing System Performance

SLATS coordinates with WisDOT modeling staff to analyze existing and future traffic conditions using the regional travel demand forecasting model. The model encompasses all of Rock County, Wisconsin, as well as the Illinois portion of the SLATS MPA. As part of the 2055 LRTP update, WisDOT provided model results for base year 2022 conditions. These model outputs, together with observed traffic count data, were used to evaluate existing roadway performance and identify potential areas of recurring traffic congestion within the SLATS MPA.

For the LRTP, and long-range planning purposes, the primary focus with using the model is on identifying locations that experience recurring congestion and operational deficiencies rather than isolated or short-term traffic delays. The travel demand model incorporates regional population, employment, and land use data to estimate current travel patterns and roadway utilization.

The travel demand modeling process determines level-of-service (LOS) for roadways by considering modeled volumes, the number of lanes, cross section, area type, signalization, and the functional classification of the road. LOS is a traffic flow measure describing conditions experienced by travelers and is one of the key indicators used to understand transportation system performance and to identify deficiencies in the roadway network. The ADT thresholds are based on the Transportation Research Board's (TRB) Highway Capacity Manual 6th Edition (HCM6) capacity calculations. High level descriptions of the congestion, or delay, a traveler might experience for each LOS category is described in **Table 4**.

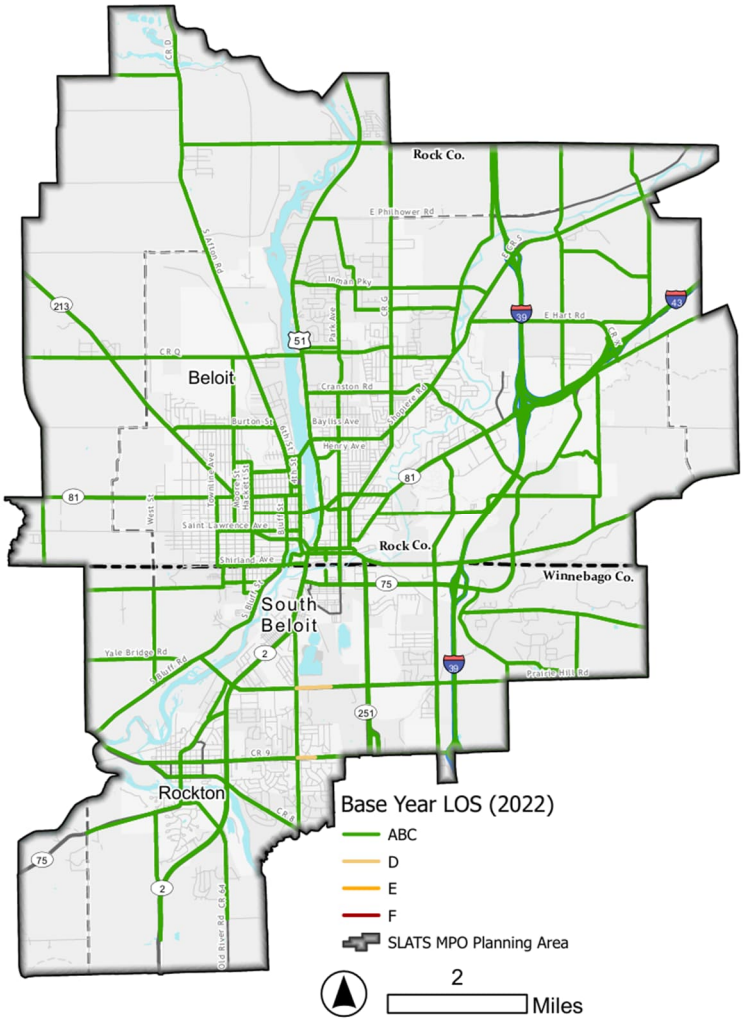
TABLE 4. CONGESTION LEVELS FOR EACH LOS VALUE

	LOS	Description
Best ↓ Worst	A	Not congested. Free flow - Users unaffected by one another. Free to maneuver and select desired speed. High level of comfort.
	B	Not congested. Stable flow – Users notice the presence of other drivers. Free to select desired speed, but slight decrease in maneuverability. Comfort slightly less, due to increased presence of other drivers.
	C	Minimal congestion. Stable to beginning of high-density flow - Other drivers affect your speed and force you to maneuver carefully. Comfort begins to decline noticeably. Point where other drivers begin to significantly impact your driving.
	D	Moderate congestion. High-density, stable flow - Speed and maneuvering are severely restricted. Comfort level is poor. Point where a minimal increase in traffic will cause problems.
	E	Severe congestion. Operating at or near capacity level. All speeds are reduced to a uniform low value. Maneuvering is very difficult. Comfort level are extremely poor, driver frustration levels are generally high. Point where small increases in traffic or minor problems in the traffic stream will cause backups.
	F	Extreme congestion. Forced or break-down flow. Characterized by stop and go traffic. Created when the amount of traffic approaching a point is greater than the capacity that can pass that point.

Source: WisDOT Model Documentation.

Figure 13 displays the modeled 2022 roadway LOS results. Nearly all the roadway segments within the MPA were found to be operating at LOS C or better, indicating stable traffic flow and minimal delay. A few localized segments on east-west roadway corridors in the Illinois portion of the MPA were found to be operating at LOS D. From a long-range planning perspective, LOS D is considered an acceptable operating condition in urban areas and does not indicate a significant capacity deficiency.

FIGURE 13. YEAR 2022 SYSTEM PERFORMANCE – LEVEL OF SERVICE RESULTS



Overall, the 2022 model results suggest that the existing transportation system is functioning efficiently and that widespread congestion is not currently a major concern within the SLATS MPA. However, continued monitoring of key corridors is always an important and on-going planning task as population, employment, and travel patterns evolve over the planning horizon.

Intersection and Traffic Operations

In addition to evaluating travel demand model results, it is important to assess how traffic operates at key intersections throughout the SLATS MPA. It is not uncommon for motorists to experience some travel delays during the morning and afternoon peak periods when travel demand is highest. While the regional roadway network generally operates efficiently, some corridors and intersections have been identified through public input, stakeholder feedback, traffic data, and field observations as locations

that warrant continued monitoring. As part of the public engagement process, including comments in the statistically valid survey, there were some residents who were concerned with recent roadway reconfigurations adversely impacting travel conditions.

Cranston Road, Milwaukee Road and White Avenue are corridors that the public commonly referenced as having delays, and a significant amount of truck traffic. The region's limited number of Rock River crossings presents another important transportation consideration. As previously discussed, the Rock River is a barrier to east-west travel, concentrating traffic onto a relatively small number of bridge crossings. Although current daily traffic volumes do not indicate capacity deficiencies, peak-period traffic can be substantial, and operational challenges may occur at nearby intersections.

Public comments and stakeholder feedback indicate that large trucks traveling through Downtown Beloit can experience difficulty making turning movements at some intersections, particularly left turns, which may contribute to perceived congestion and delay. Continued monitoring of bridge crossings and adjacent intersections is important to identify potential operational issues and maintain reliable connectivity between communities on both sides of the river. As improvements are considered, it will also be important to evaluate impacts on other travel modes, particularly pedestrians and bicyclists, who may be affected by high traffic volumes and turning movements near bridge approaches.

Another area that warrants continued monitoring is Gardner Street (IL 75) west of the I-39/90 interchange. This corridor carries substantial truck traffic, and the high concentration of freight activity contributes to operational challenges and periodic congestion near the interchange area, particularly during peak travel periods. The opening of the Ho-Chunk Nation Casino and Convention Center in Fall 2026 is expected to increase traffic demand along this corridor, as Gardner Street will serve as a primary access route for visitors, employees, and service vehicles. As traffic volumes continue to grow, improvements such as traffic signal coordination, access management, intersection enhancements, and other operational strategies may help address traffic flow issues. Given its importance as both a regional freight corridor and gateway to a major new economic development, Gardner Street is discussed further in the Freight section of this appendix.

Roadway Safety

SLATS places great importance on providing a safe roadway network that accommodates all users and facilitates the efficient movement of people and goods. This commitment is reflected in the goals and objectives of the SLATS 2055 LRTP, which emphasize the need for a transportation system that is safe, accessible, and reliable for all roadway users. Furthermore, SLATS supports the efforts of WisDOT and IDOT to reduce crashes resulting in fatalities and serious injuries through implementation of the Safe System Approach and other safety-focused initiatives. These efforts are consistent with the performance-based planning and programming requirements established under the Infrastructure Investment and Jobs Act (IIJA) and with safety targets established through each state's Highway Safety Improvement Program (HSIP).

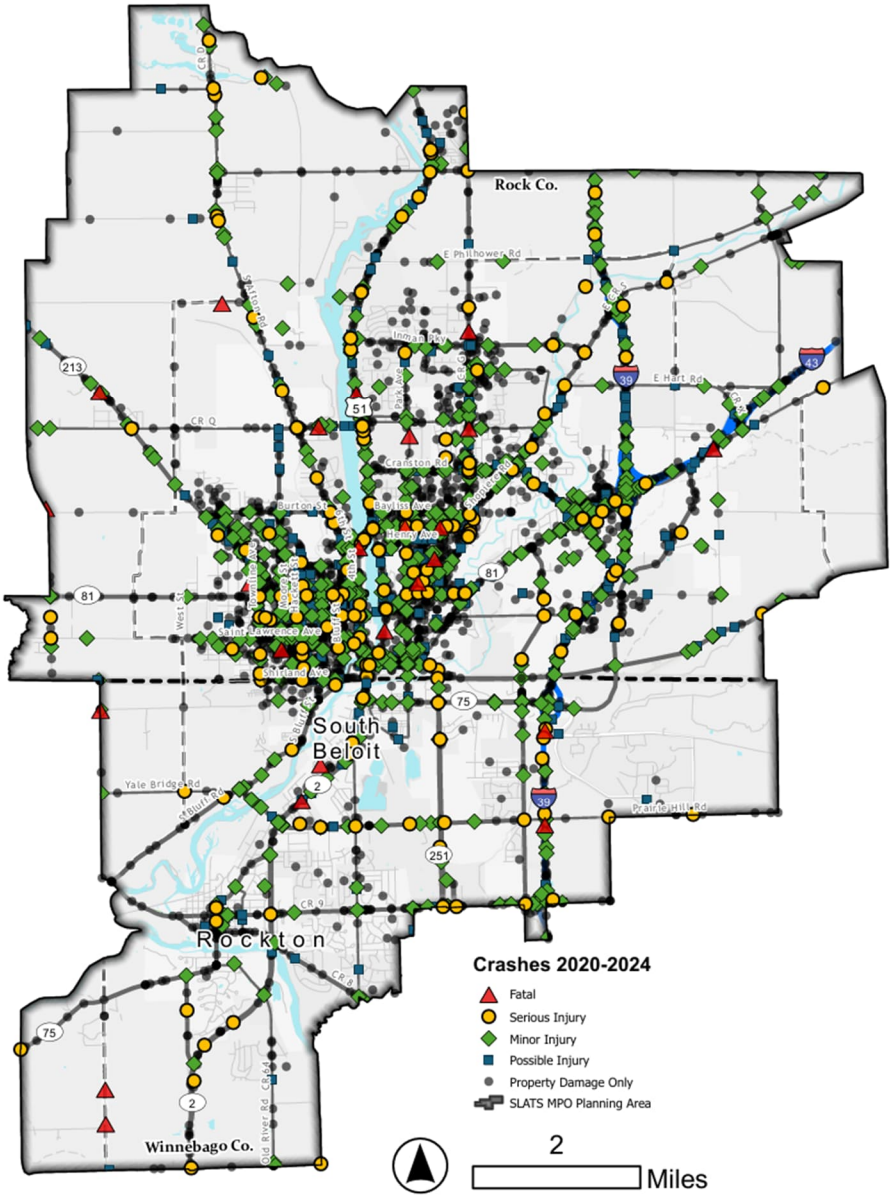
Table 5 summarizes recent crash trends within the SLATS MPA while **Figure 14** displays the geographic distribution of crashes throughout the region, helping to identify high-crash locations and areas where safety improvements may be warranted.

TABLE 5. TOTAL CRASHES, BY SEVERITY (2020 TO 2024)

	MPO Area	Fatal (K)	Serious Injury (A)	Minor Injury (B)	Possible Injury (C)	Property Damage Only (PDO)	Total
2020	Wisconsin	5	38	136	101	1,009	1,289
	Illinois	1	5	23	9	181	219
	Subtotal	***6***	***43***	***159***	***110***	***1,190***	***1,508***
2021	Wisconsin	6	34	115	89	1,163	1,407
	Illinois	0	11	30	10	188	239
	Subtotal	**6**	**45**	**145**	**99**	**1,351**	***1,646***
2022	Wisconsin	3	36	104	85	1,012	1,240
	Illinois	2	6	33	13	188	242
	Subtotal	**5**	**42**	**137**	**98**	**1,200**	***1,482***
2023	Wisconsin	1	23	124	95	954	1,197
	Illinois	2	3	33	27	195	260
	Subtotal	**3**	**26**	**157**	**122**	**1,149**	***1,457***
2024	Wisconsin	2	26	92	78	986	1,184
	Illinois	2	12	35	27	224	300
	Subtotal	**4**	**38**	**127**	**105**	**1,210**	***1,484***
	Grand Total	**24**	**194**	**725**	**534**	**6,100**	**7,577**

Source: WisDOT and IDOT Crash Data, 2020 to 2024.

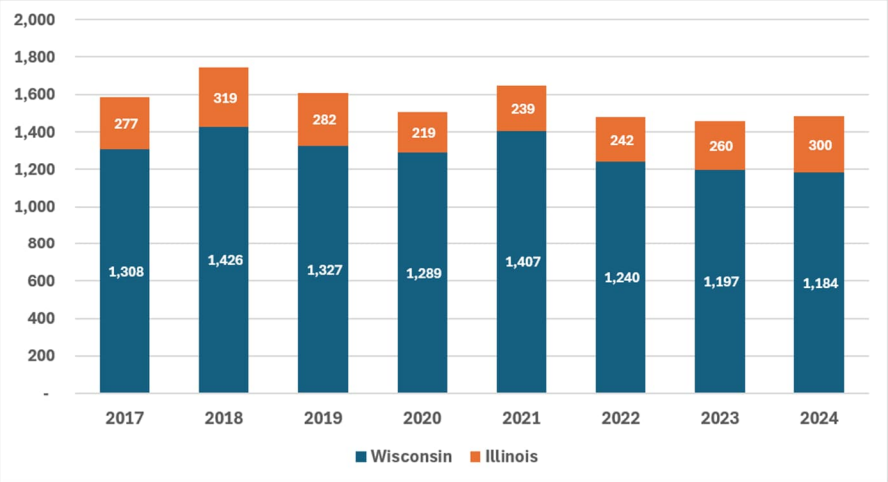
FIGURE 14. CRASH LOCATIONS (2020-2024)



A review of crash data for the 2020-2024 period indicates that 7,577 crashes were reported within the SLATS MPA. Approximately 82 percent of all crashes occurred within the Wisconsin portion of the planning area, while the remaining 18 percent occurred in Illinois. Property damage only (PDO) crashes accounted for the vast majority of incidents, representing approximately 80 percent of all reported crashes. During this five-year period, there were 24 fatal crashes and 194 serious injury crashes. Combined, fatal and serious injury crashes accounted for less than 3 percent of all crashes, although they represent the most severe outcomes and remain a primary focus of regional safety efforts.

As shown in **Figure 15**, total crashes within the SLATS MPA have generally declined since reaching a recent high of 1,745 crashes in 2018. Annual crash totals fluctuated between 2017 and 2024, with increases occurring in some years and declines in others. More recently, however, crashes have trended slightly downward. The region recorded 1,482 crashes in 2022, 1,457 crashes in 2023, and 1,484 crashes in 2024, representing a modest trend decline compared to pre-2022 levels. Throughout the period, the Wisconsin portion of the MPA consistently accounted for the majority of crashes, reflecting its larger population and geographic coverage.

FIGURE 15. CRASH TREND, 2017 TO 2024

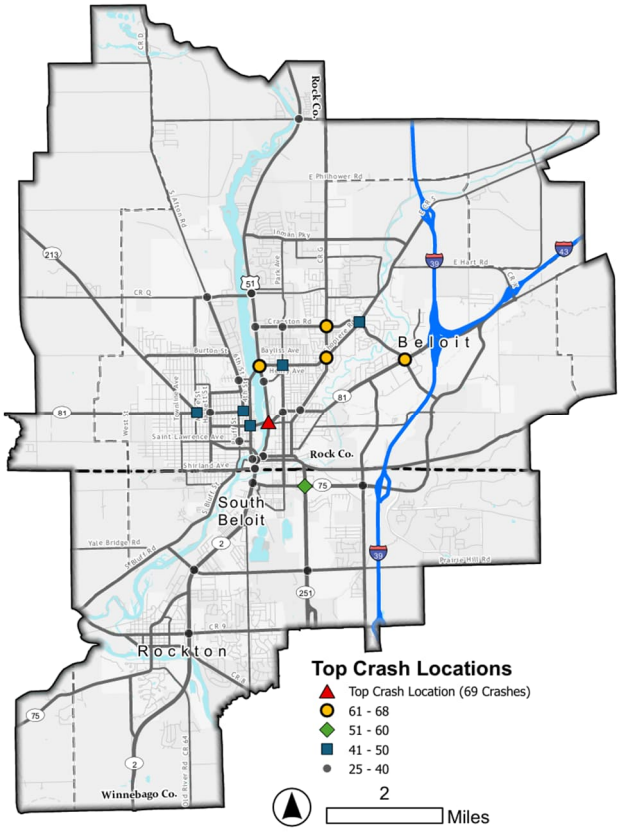


Source: WisDOT and IDOT Crash Data, 2017 to 2024.

Figure 16 displays the highest crash locations within the SLATS MPA based on reported crashes during the analysis period. The most significant concentrations of crashes are located within the Beloit urban area, particularly along major arterial corridors and at intersections that provide access to commercial centers, employment areas, and regional highway facilities. The highest-crash location recorded 69 crashes during the study period, while several other locations experienced between 61 and 68 crashes.

The spatial distribution of crashes demonstrates that safety concerns are generally associated with locations that carry higher traffic volumes and accommodate numerous turning movements and driveway access points. Many of the identified locations are situated along key east-west and north-south corridors that serve both local and regional travel demand. These corridors play an important role in connecting residential neighborhoods, commercial districts, industrial areas, and I-39/90 and I-43.

FIGURE 16. HIGH CRASH LOCATIONS (2020 – 2024)



The concentration of crashes at a relatively small number of intersections and roadway segments suggests that targeted safety improvements could provide meaningful benefits. Potential countermeasures may include signal timing modifications, access management strategies, geometric intersection improvements, enhanced signing and pavement markings, lighting upgrades, pedestrian crossing enhancements, and other measures identified through future corridor and intersection studies. Consistent with the Safe System Approach, SLATS will continue to work with WisDOT, IDOT, local jurisdictions, and law enforcement agencies to identify and prioritize projects that reduce both crash frequency and crash severity throughout the region.

While crash frequency is useful for identifying locations that may warrant additional study, the number of crashes alone does not fully reflect roadway safety performance. Locations with a high number of crashes often experience primarily PDO incidents, while locations with fewer total crashes may experience more severe outcomes, including fatalities and serious injuries. For this reason, crash severity was also evaluated as part of the safety analysis. **Figure 17** displays the location of fatal, serious injury, and minor injury crashes reported within the SLATS MPA between 2020 and 2024.

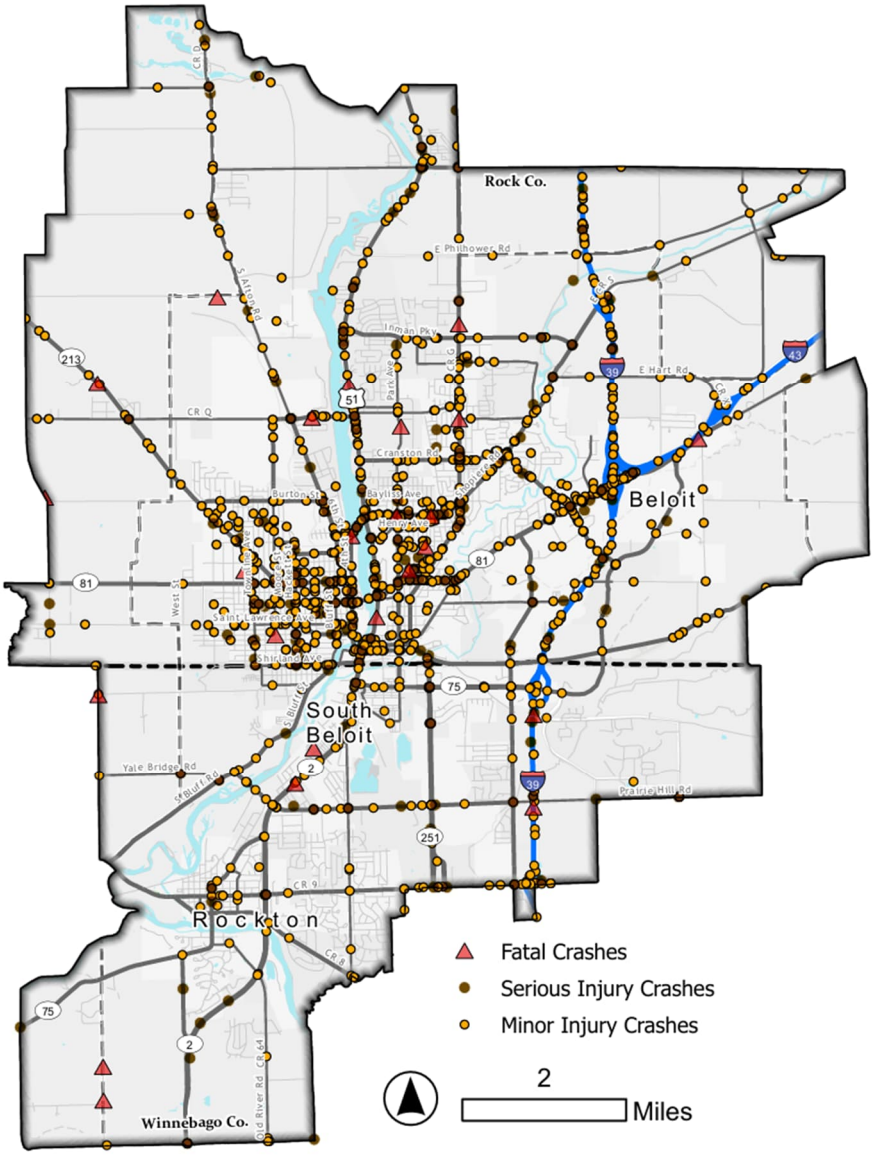
The greatest concentration of injury crashes occurs along major arterial corridors and at key intersections within the Beloit and South Beloit urbanized area, reflecting higher traffic volumes and increased conflict points. However, fatal and serious injury crashes are distributed throughout the transportation network and are not limited to the locations with the highest overall crash frequencies. As shown in **Figure 17**, some fatal and serious injury crashes occur outside the more urbanized portions of the region, particularly along higher-speed roadways in outlying areas. This pattern

suggests that factors such as operating speed, roadway geometry, access conditions, and roadway departure crashes may contribute to the severity of crashes in these locations.

Minor injury crashes are also included in the analysis because they may indicate emerging safety concerns and provide opportunities to address operational or geometric deficiencies before more severe crashes occur. Evaluating the spatial distribution of minor injury crashes alongside fatal and serious injury crashes helps identify corridors and intersections that may benefit from proactive safety improvements.

Additional discussion of fatal and serious injury crash trends, including federally required safety performance measures and targets, is provided in **Appendix G – System Performance Report**. That section discusses progress toward reducing fatalities and serious injuries and documents how SLATS supports statewide safety performance objectives through the overall metropolitan transportation planning process.

FIGURE 17. FATAL, SERIOUS INJURY, AND MINOR INJURY CRASH LOCATIONS (2020 – 2024)



Intelligent Transportation Systems

WisDOT and IDOT continue to expand the use of Intelligent Transportation Systems (ITS) and Transportation Systems Management and Operations (TSMO) strategies to improve safety, mobility, system reliability, and traveler information throughout the SLATS MPA. ITS encompasses a wide range of communications, sensing, monitoring, and traffic management technologies that help transportation agencies operate the existing transportation network more efficiently while enhancing safety and supporting informed travel decisions.

Both states participate in statewide ITS architecture and operations programs that provide a framework for coordinating transportation technologies, data sharing, incident management, emergency response, traveler information systems, transit operations, and freight mobility. These efforts rely on collaboration among state and local transportation agencies, public safety organizations, transit providers, emergency management agencies, and other transportation stakeholders.

Significant ITS infrastructure has been deployed along the I-39/90 corridor and at key locations throughout the region. Existing technologies include dynamic message signs (DMS), closed-circuit television (CCTV) cameras, traffic detection equipment, traffic monitoring systems, and fiber optic communications infrastructure. These systems support real-time traffic monitoring, incident management, work zone operations, traveler information services, and coordination between Wisconsin and Illinois transportation agencies. Ongoing coordination between WisDOT and IDOT seeks to improve data sharing and operational coordination across the state line, particularly along major freight and commuter corridors.

Looking forward, opportunities may exist to expand ITS and TSMO applications throughout the SLATS MPA. Potential improvements include adaptive signal control technologies, enhanced traffic signal coordination, connected vehicle infrastructure, integrated corridor management strategies, real-time traffic monitoring, and expanded data collection capabilities. Advanced traffic signal technologies can also support emergency vehicle preemption and transit signal priority, helping improve response times, increase system efficiency, and enhance safety.

As transportation technologies continue to evolve, SLATS is committed to coordinating with WisDOT, IDOT, local governments, and regional partners to support the planning and implementation of ITS investments that improve system performance, enhance safety, increase reliability, and maximize the efficiency of the region's existing transportation infrastructure.

Public Transportation

Existing and future transit conditions within the SLATS MPA are evaluated in greater detail in the SLATS Transit Development Plan (TDP), finalized in September 2026. The TDP includes an assessment of existing transit services, ridership patterns, demographic trends, and projected future transportation needs. The plan also identifies strategies and recommended improvements to maintain and enhance public transportation services, improve access to employment and community destinations, and support the mobility needs of transit-dependent populations. The findings and recommendations of the TDP have been incorporated into the 2055 LRTP and serve as the foundation for future transit investments within the region. Please refer to the TDP and the main 2055 LRTP for detailed analysis and recommendations.

Active Transportation



Existing and future active transportation conditions within the SLATS MPA are evaluated in greater detail in the SLATS Active Transportation Plan (ATP), adopted in 2026. The ATP includes an assessment of existing bicycle and pedestrian facilities, travel patterns, connectivity gaps, safety concerns, and demographic trends that influence walking and bicycling throughout the region. The plan also identifies strategies and recommended improvements to expand and enhance the bicycle and pedestrian network, improve safety and accessibility for users of all ages and abilities, and strengthen connections to key destinations such as employment centers, schools, parks, commercial areas, and transit services. The findings and recommendations of the ATP have been incorporated into the 2055 LRTP and serve as the foundation for future bicycle and pedestrian investments within the region. Please refer to the ATP and the main 2055 LRTP for detailed analysis and recommendations.

Regional Passenger Rail

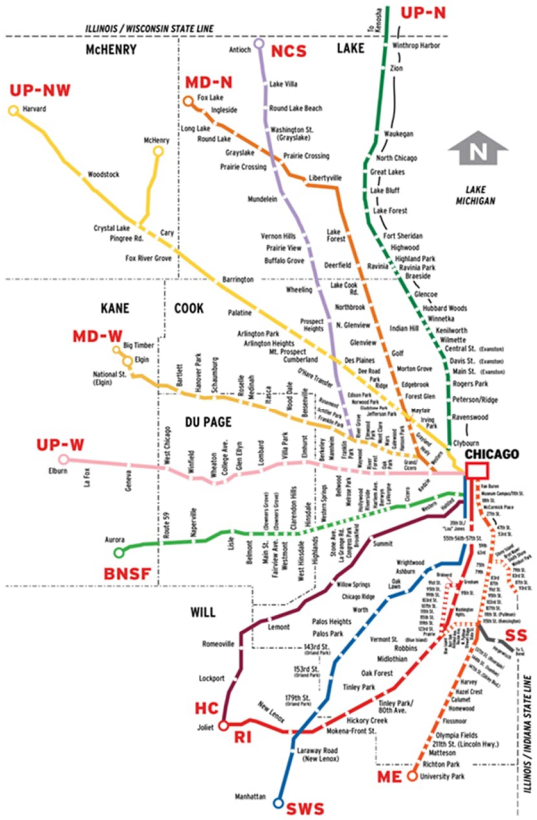
Although the SLATS MPA is not currently served by passenger rail, residents have access to both intercity and commuter rail services through nearby facilities in Wisconsin and Illinois. Amtrak service available to the region includes the Borealis, Hiawatha Service, and Empire Builder routes, providing connections to Chicago, Milwaukee, Minneapolis-Saint Paul, and destinations throughout the national passenger rail network. Access to these services is available through nearby stations and connecting Amtrak Thruway/intercity bus services serving southern Wisconsin and northern Illinois.

In addition, Metra commuter rail service provides access to employment, educational, healthcare, and cultural destinations throughout the Chicago metropolitan area. The most convenient commuter rail access for many residents of the SLATS region is the Metra Union Pacific Northwest (UP-NW) Line, which terminates in Harvard, Illinois and provides direct commuter rail service to downtown Chicago. **Figures 18** and **19** illustrate existing Amtrak and Metra passenger rail services in proximity to the the Stateline region.

FIGURE 18. EXISTING AMTRAK PASSENGER RAIL SERVICES IN WISCONSIN AND THE MIDWEST REGION



FIGURE 19. METRA COMMUTER RAIL SERVICE IN ILLINOIS



Passenger rail continues to receive renewed interest at the federal, state, and regional levels as a strategy to improve mobility, expand transportation options, strengthen workforce connections, support economic development, and reduce reliance on single-occupant vehicle travel. Recent investments in Midwest passenger rail service, including the expanded Borealis service between Chicago and the Twin Cities, demonstrate continued commitment to expanding passenger rail travel throughout the region. While the SLATS MPA does not currently have direct passenger rail service, the Stateline Area is strategically positioned between major population centers in Wisconsin and Illinois and could benefit from future passenger rail investments.

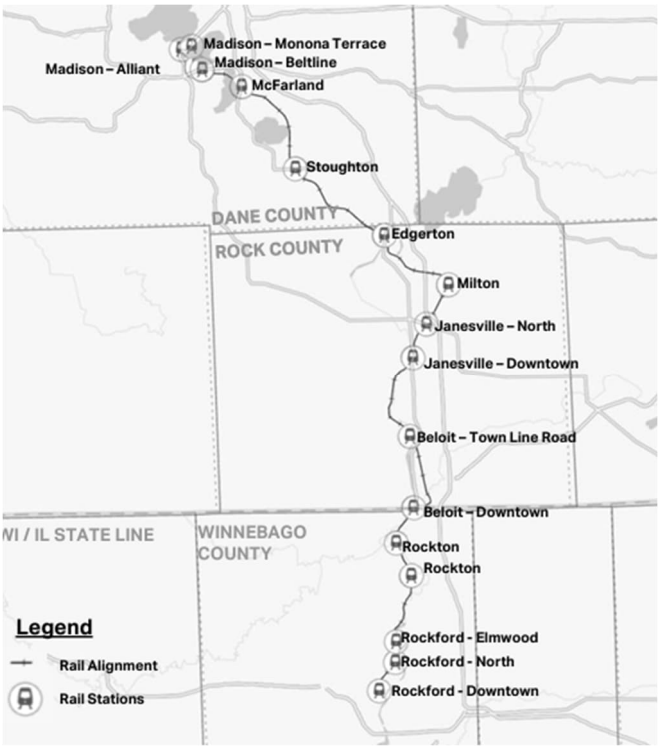
Another significant passenger rail initiative affecting the region is the restoration of intercity passenger rail service between Chicago and Rockford. Led by IDOT, the project will reestablish passenger rail service to Rockford for the first time in several decades and provide a direct connection to the Chicago rail network. When completed, in 2027 or 2028, the Rockford service would significantly improve passenger rail access for residents of the SLATS region and could serve as an important building block for future rail expansion within northern Illinois and southern Wisconsin.

Recognizing the long-term potential of passenger rail to improve regional connectivity, SLATS has continued to evaluate opportunities for expanded passenger rail service within and beyond the Stateline Area. In 2021, SLATS completed the ***SLATS Passenger Rail Study***, which examined the feasibility of extending passenger and commuter rail service to the region. The study evaluated potential corridors, market demand, ridership potential, service concepts, and implementation

considerations. The analysis identified several potential benefits associated with passenger rail investment, including improved workforce mobility, increased access to employment and educational opportunities, support for economic development, enhanced tourism, and greater transportation choice for residents and visitors.

Building upon that work, SLATS completed the ***SLATS Passenger Rail Impact Study*** in 2025 to further inform the development of the 2055 LRTP. The study evaluated a potential passenger rail corridor connecting Madison, Janesville, Beloit, and Rockford, including potential alignment, station locations, ridership opportunities, economic impacts, land use implications, and implementation strategies. As shown in **Figure 20**, the corridor would create a strategic north-south passenger rail connection between two major economic centers while improving access throughout south-central Wisconsin and northern Illinois.

FIGURE 20. MADISON-ROCKFORD PASSENGER RAIL ALIGNMENT



Source: SLATS Passenger Rail Impact Study, 2025.

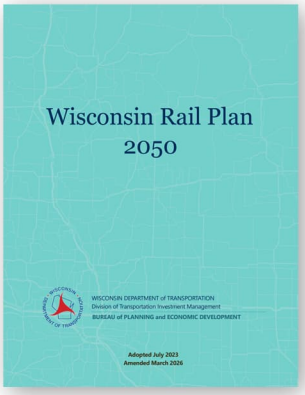
The 2025 study also found that passenger rail could play an important role in supporting the region's long-term economic competitiveness and growth. Previous high-level ridership projections developed during the 2021 study estimated that the corridor could support between approximately 800 and 2,200 weekday passenger trips, driven largely by travel demand associated with employment, education, and regional business activity. The 2025 study concluded that passenger rail investment could generate substantial long-term economic benefits through job creation, increased wages, additional regional economic output, and expanded fiscal benefits. The analysis also highlighted opportunities for transit-oriented development and redevelopment around potential station areas, particularly within the downtown areas of Beloit, Janesville, Rockford, and Madison.

In addition to transportation benefits, passenger rail may support broader regional development goals by encouraging higher-density mixed-use development near station locations, increasing housing and employment accessibility, supporting redevelopment of underutilized properties, and strengthening connections between existing economic centers. The study identified both urban redevelopment opportunities and longer-term greenfield development opportunities near potential station locations throughout the corridor.

While implementation of new passenger rail service remains a long-term objective, the 2055 LRTP supports continued coordination with WisDOT, IDOT, neighboring MPOs, local governments, rail operators, federal partners, and regional stakeholder groups such as the Rock County Passenger Rail Commission/Ad Hoc Rail Committee to preserve potential rail corridors, protect future station location opportunities, advance corridor planning efforts, and pursue funding opportunities when available.

Consistent with the recommendations of the 2025 Passenger Rail Impact Study, SLATS will continue to monitor developments in the Chicago-Rockford corridor, evaluate future connections to southern Wisconsin communities, and support initiatives that improve regional passenger rail access. The continued involvement of regional partners will be critical in building support for future passenger rail investments, evaluating service opportunities, and positioning the Stateline Area to benefit from emerging state and federal passenger rail funding programs.

Finally, it is important to note that, in spring 2026, WisDOT added the Madison-Rockford passenger rail corridor to the ***Wisconsin Rail Plan 2050***. SLATS intends to work with IDOT and other regional partners to encourage consideration of the corridor within future Illinois passenger rail planning efforts as well. The inclusion of the corridor in state rail planning documents represents an important step toward preserving future passenger rail opportunities and positioning the corridor for potential state and federal funding programs.




BUREAU of PLANNING and ECONOMIC DEVELOPMENT

WISCONSIN RAIL PLAN 2050

Table 20: Long-Range Intercity Passenger and Commuter Rail Projects (Amended March 2026)

Description	Cost	Funding Source
Milwaukee to Chicago Hiawatha Service Expansion (10 round trips) – Step 3: Preliminary Engineering and NEPA	TBD	Not yet programmed
Milwaukee to Green Bay Service Extension – Step 3: Preliminary Engineering and NEPA	TBD	Not yet programmed
Milwaukee – Madison – Eau Claire – Twin Cities (MMET) – Step 3: Preliminary Engineering and NEPA	TBD	Not yet programmed
Twin Cities – Milwaukee – Chicago Service Expansion via La Crosse (TCMC2) – Step 3: Preliminary Engineering and NEPA	TBD	Not yet programmed
Northern Lights Express (NLX) through Superior	TBD	Not yet programmed
Milwaukee – Racine – Kenosha – Chicago Rail Service	TBD	Not yet programmed
Madison – Janesville – Rockford Rail Service	TBD	Not yet programmed
Eau Claire-Twin Cities Corridor	TBD	Not yet programmed

Additional information regarding passenger rail opportunities, ridership projections and methodology, economic impacts, corridor alternatives, and implementation considerations can be found in the SLATS Passenger Rail Study (2021) and the SLATS Passenger Rail Impact Study (2025).

Freight

The SLATS MPA is strategically located within one of the nation's most important freight transportation corridors. Positioned between the Chicago metropolitan region, southern Wisconsin, and the Upper Midwest, the Stateline Area serves as a critical gateway for the movement of goods by truck, rail, and air. The region benefits from direct access to major interstate highways, multiple freight rail carriers, intermodal facilities, and nearby air cargo services, allowing businesses to efficiently connect to national and international markets.

Freight transportation plays a vital role in the regional economy, supporting the manufacturing, logistics, warehousing, distribution, agricultural, and retail sectors that contribute significantly to employment and economic activity throughout the SLATS MPA. The region's location along the Chicago-to-Minneapolis freight corridor and its proximity to major population and employment centers continue to attract freight-dependent industries and distribution facilities.

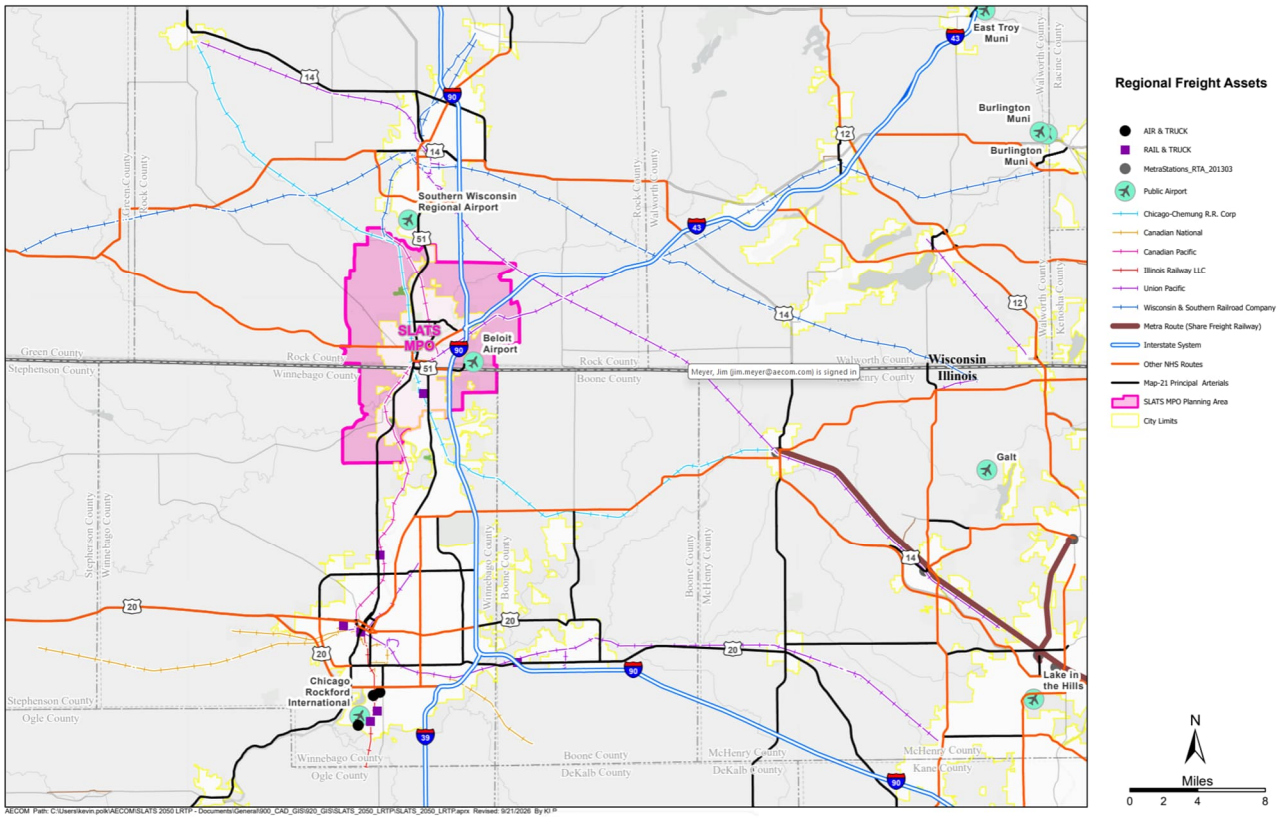
While freight movements occur by multiple transportation modes, truck movements have the greatest influence on the regional transportation network. I-39/90 serves as the primary north-south freight corridor through the SLATS region and carries substantial volumes of commercial vehicle traffic connecting Wisconsin, Illinois, and destinations throughout the Midwest. I-39/90 has improved system reliability, enhanced safety, reduced congestion, and increased the corridor's ability to accommodate growing freight demand. In addition to I-39/90, I-43, WIS 81, US 51, and other principal arterial roadways provide important freight connections linking the Stateline Area to regional markets, industrial centers, and intermodal facilities.

Freight rail also remains an important component of the regional transportation system. The SLATS region is served by multiple freight rail operators, including Class I and short-line railroads that provide connections to Chicago, Milwaukee, Janesville, Madison, and national freight rail networks. Rail facilities located within and near the region support the movement of bulk commodities, manufactured goods, agricultural products, and industrial materials. These freight rail assets provide businesses with transportation options that complement the highway network and support regional economic competitiveness.

The region also benefits from its proximity to several significant freight assets, including the Chicago freight hub, the Chicago Rockford International Airport, Southern Wisconsin Regional Airport, regional intermodal facilities, and major warehousing and distribution centers. Continued growth in logistics and e-commerce activity has increased demand for freight transportation services throughout the Stateline Area. The expansion of distribution and fulfillment operations, including major facilities developed within the region, has further highlighted the importance of maintaining an efficient and reliable multimodal freight network.

Figure 21 displays the major freight transportation assets serving the SLATS region, including interstate highways, freight rail corridors, airports, intermodal facilities, and regional freight connections. These facilities collectively support the efficient movement of goods and help position the Stateline Area as an important freight and logistics hub within southern Wisconsin and northern Illinois.

FIGURE 21. REGIONAL FREIGHT FACILITIES AND ASSETS



As freight volumes continue to grow, preserving mobility and reliability on key freight corridors will remain an important consideration for transportation planning and investment decisions. Future improvements may include roadway capacity enhancements, intersection upgrades, freight-supportive operational improvements, rail infrastructure investments, intelligent transportation systems technologies, and other strategies that improve the safe and efficient movement of goods throughout the region. Maintaining strong connections between industrial areas, freight generators, distribution centers, and major transportation corridors will be critical to supporting the long-term economic competitiveness of the SLATS MPA.

National Freight Perspective

Freight transportation plays a critical role in the national, state, and regional economy. The movement of goods supports manufacturing, agriculture, retail trade, logistics, construction, and other key economic sectors. In recent years, federal transportation policy has continued to emphasize the importance of maintaining a safe, reliable, and resilient freight transportation system capable of meeting growing demand while supporting economic competitiveness.

The IIJA expanded federal freight investment programs and continued support for the National Highway Freight Program (NHFP), competitive freight grant programs, freight planning requirements, and multimodal freight investments. These programs are intended to improve freight mobility, reduce bottlenecks, enhance supply chain resiliency, improve safety, and strengthen connections between highway, rail, air, and water transportation systems. Freight planning efforts at the federal level

increasingly emphasize system reliability, resiliency, technology deployment, and the efficient movement of goods across state and regional boundaries.

At the same time, freight transportation and supply chains continue to evolve. E-commerce growth, changing consumer expectations, advanced manufacturing practices, and increasingly complex supply chains have increased the importance of reliable transportation networks. Distribution centers, fulfillment facilities, and intermodal freight operations continue to expand throughout the Midwest, increasing demand on highway, rail, and aviation freight networks. These trends have reinforced the importance of strategic freight corridors such as I-39/90, which serves as a key connection between the Chicago region, Wisconsin, and destinations throughout the Upper Midwest.

The SLATS region is also uniquely positioned within the national freight network due to its proximity to the Chicago metropolitan area, one of the largest freight hubs in North America. This location provides significant economic advantages but also means that national and regional freight trends directly influence transportation conditions within the Stateline Area.

WisDOT State Freight Plan

Freight mobility remains a top priority for WisDOT. The current 2023 Wisconsin State Freight Plan provides a multimodal vision for freight transportation and positions Wisconsin to remain competitive in the national and global economy. WisDOT is currently updating the plan, with adoption of the next update anticipated in 2027. The freight plan emphasizes freight safety, system preservation, mobility, reliability, resiliency, economic competitiveness, and multimodal connectivity.

Key themes of the Wisconsin freight program include:

- Improving freight mobility and system reliability.
- Supporting economic development and freight-dependent industries.
- Preserving critical highway, rail, airport, and waterway infrastructure.
- Enhancing freight safety and transportation system resiliency.
- Leveraging federal freight funding through the National Highway Freight Program and other discretionary grant programs.

WisDOT's freight planning efforts continue to identify strong growth in freight movement throughout Wisconsin, particularly along major Interstate corridors. For the SLATS region, the importance of I-39/90 is reflected in both statewide and regional analyses, which identify the corridor as one of Wisconsin's most significant freight routes. The corridor serves long-distance truck traffic moving between the Chicago region and major markets in Wisconsin, Minnesota, and beyond. Continued growth in logistics, warehousing, manufacturing, and distribution activity within southern Wisconsin is expected to reinforce the importance of the Stateline Area as a freight gateway.

Recent WisDOT freight studies have also placed increased emphasis on intermodal freight, highlighting the importance of rail, truck, airport, and terminal connections that support supply chain efficiency and economic competitiveness throughout Wisconsin.

IDOT State Freight Plan

IDOT adopted the 2023 Illinois State Freight Plan in accordance with requirements established under the IIJA. The plan recognizes Illinois as one of the nation's premier freight transportation states and identifies freight transportation as a critical component of economic growth and competitiveness. Illinois' multimodal freight system includes extensive highway, rail, air cargo, waterway, and pipeline networks that serve local, national, and international markets.

According to the Illinois Freight Plan, approximately 1.5 billion tons of freight valued at $2.4 trillion move into, out of, and through Illinois annually. The plan identifies Illinois as a national freight hub due to its extensive transportation infrastructure, including the nation's largest rail hub, one of the country's most significant interstate highway systems, major waterways, and world-class air cargo facilities.

For the SLATS region, one of the most significant freight assets in northern Illinois is the Chicago Rockford International Airport, which serves as a major air cargo facility and logistics hub. While located south of the SLATS MPA, the airport strengthens the region's multimodal freight network and complements the area's proximity to the Chicago freight hub, Interstate highway system, and freight rail network. Together, these assets help make the Stateline Area an attractive location for manufacturing, warehousing, distribution, and logistics operations.

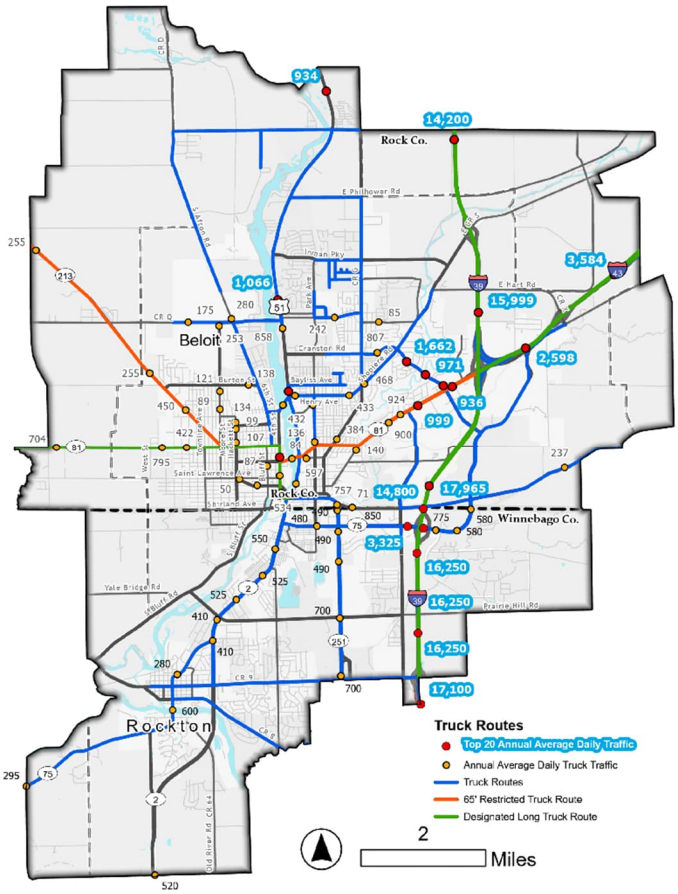
The Illinois Freight Plan also emphasizes investments that improve the safety, reliability, resiliency, sustainability, and efficiency of the multimodal freight system. These priorities closely align with freight needs identified within the SLATS region, particularly along the I-39/90 corridor and other facilities supporting regional freight movement.

Together, the Wisconsin and Illinois freight plans recognize the strategic importance of the southern Wisconsin and northern Illinois transportation network. Given its location along I-39/90 and in close proximity to both the Chicago freight hub and the Chicago Rockford International Airport, the SLATS region is well positioned to support future freight growth while continuing to serve as a critical link in the Midwest freight transportation system.

SLATS Designated Truck Routes and Volumes

The efficient movement of freight depends on a roadway network that can safely accommodate truck traffic while balancing the needs of local communities and other transportation users. Figure 22 identifies designated truck routes within the SLATS MPA and displays the average daily truck volumes on key regional corridors. The designated truck route network provides connections between major employment centers, industrial areas, freight generators, Interstate highways, and regional markets throughout southern Wisconsin and northern Illinois.

FIGURE 22. DESIGNATED TRUCK ROUTES AND AVERAGE DAILY TRUCK VOLUMES (2025)



As shown in Figure 22, the highest truck volumes in the region occur along I-39/90 and I-43. Truck volumes on I-39/90 range from approximately 14,200 to nearly 18,000 trucks per day within the SLATS MPA, reinforcing the corridor's role as the primary north-south freight route serving the Stateline Area. I-43 also carries significant truck traffic, with volumes reaching approximately 3,600 trucks per day near the eastern SLATS MPA boundary. These findings are consistent with the regional truck analysis, which identify the interstate system as the primary facility for regional and pass-through freight movement. Additional analysis of the regional truck movements through the SLATS MPA are summarized in Appendix J.

Outside of the interstate, truck traffic is concentrated along several designated truck routes that provide access to industrial and commercial destinations. Notable corridors include Gardner Street (IL 75), portions of WIS 81, White Avenue, Milwaukee Road, Cranston Road, and other facilities that connect major employment centers to the regional freight network. Truck volumes on Gardner, just west of I-39/90, reach 3,300 trucks per day, nearly the same daily truck volumes observed on I-43 within the SLATS MPA.

While the Interstate system accommodates the majority of freight movement within the region, truck traffic on local roadways can create operational, safety, and infrastructure challenges. Areas where truck traffic mixes with pedestrian activity, bicyclists, residential neighborhoods, and downtown business districts often require additional consideration to balance freight mobility with community objectives. In addition, sustained truck traffic contributes to accelerated pavement deterioration and increased infrastructure maintenance needs on designated truck routes.

Truck Route Designations

Wisconsin and Illinois are required to designate a truck route system on which heavier and larger trucks are allowed to travel on area roadways. Local roadway authorities may also designate Class II or Class III highways within and under their jurisdiction. The government agency controlling the truck route designates the class of the roadway. In Wisconsin, there are two classes of weight limitations:

- Class A: The gross weight imposed on the highway by any one wheel or multiple wheels supporting one end of an axle may not exceed 11,000 pounds and the gross weight imposed on the highway by the wheels of any one axle may not exceed 20,000 pounds.
- Class B: No person, without a permit, may operate on a Class B highway with any vehicle or combination of vehicles on the highway exceeding 60 percent of the weights authorized within the designated route.

In Illinois, there are three classes of truck routes:

- Class I: Limited access divided highways;
- Class II: Non-interstates with same weight and size restrictions; and,
- Class III: Permits 80,000 pounds but further limits vehicle width and total length.

These route designations are reflected in **Figure 22**.

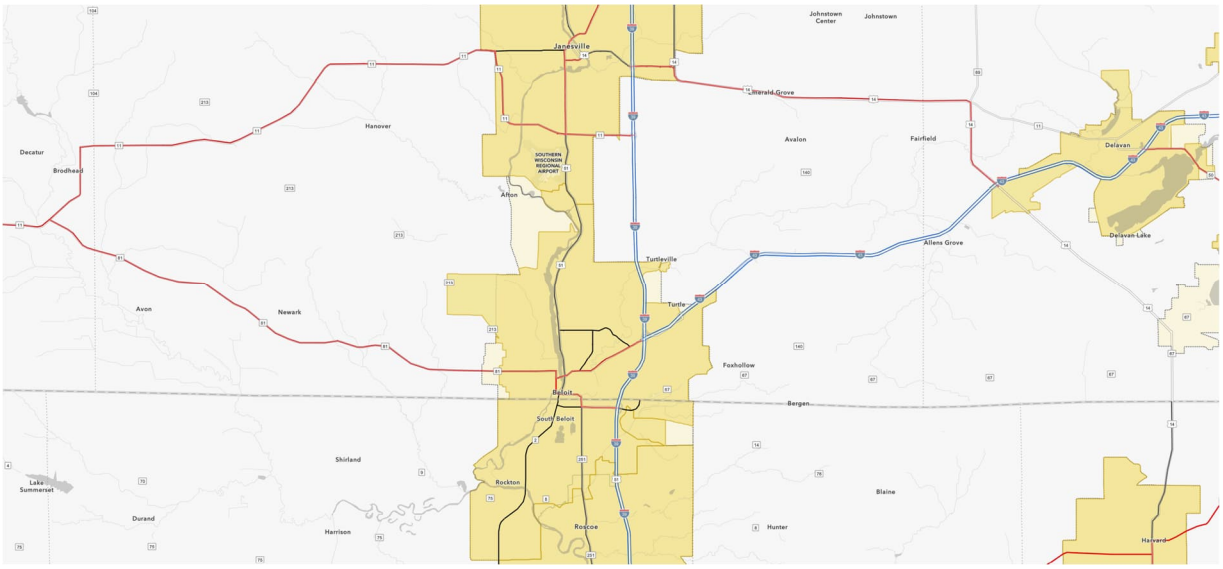
Freight Intermodal Connectors and National Highway System Facilities

Consideration of freight movement and multimodal connectivity is incorporated into the metropolitan transportation planning process and supports the development of an integrated transportation system that facilitates the efficient movement of people and goods. Consistent with the planning requirements for MTPs, the SLATS 2055 LRTP evaluated the regional freight network, including key freight corridors, NHS facilities, and connections serving major employment, industrial, and commercial areas.

The SLATS MPA serves as an important freight gateway between southern Wisconsin and northern Illinois. The region's location along the I-39/90 corridor, access to freight rail service, and proximity to major manufacturing, agricultural, warehousing, and distribution activities make freight transportation a vital component of the regional transportation system.

Intermodal freight connectors provide roadway access between freight-generating land uses and the broader transportation network. NHS routes play an important role in facilitating freight movement by connecting industrial areas, business centers, and regional markets. As shown in **Figure 23**, the SLATS MPA is served by several NHS facilities, including Interstate highways and other NHS-designated routes that provide regional and national connectivity. These facilities support the efficient movement of goods within the Stateline region and beyond.

FIGURE 23. NATIONAL HIGHWAY SYSTEM ROUTES IN AND AROUND THE SLATS MPA



Source: National Highway System Map

The development of the SLATS 2055 LRTP considered freight transportation needs, NHS facilities, and connections between major freight generators and the regional transportation network. Consistent with the goals of the 2023 Wisconsin State Freight Plan and the 2023 Illinois State Freight Plan, the 2055 LRTP supports maintaining and improving freight connectivity, system reliability, and access to regional, state, and national markets.

SLATS will continue to coordinate with WisDOT, IDOT, local governments, freight stakeholders, and economic development partners to identify infrastructure, operational, and safety needs affecting freight movement. Future planning and project development efforts should consider improvements that enhance freight reliability, truck access, roadway connectivity, and access between industrial and employment centers and the NHS, supporting the long-term economic vitality of the Stateline region. Additionally, SLATS is planning to continue to evaluate opportunities to further understand truck movements within and around the SLATS MPA. This analysis is expected to potentially help inform future strategies or investments to better accommodate heavy truck traffic within the broader region.

Gardner Street Freight Bottleneck

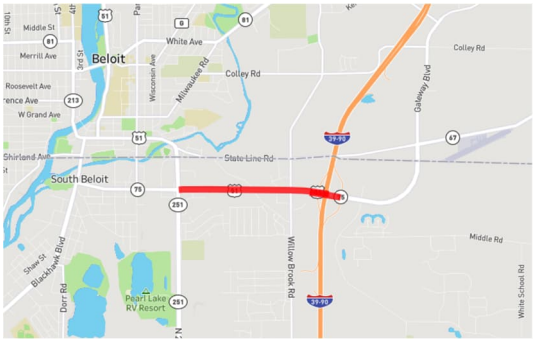
The movement of freight through the SLATS region is generally efficient, particularly along the Interstate highway system. However, localized operational constraints can affect freight mobility, travel-time reliability, and roadway safety. One such location, which is located on the NHS, is the Gardner Street (IL 75) corridor in South Beloit, which serves as an important connection between I-39/90, IL 251, local industrial areas, and freight-oriented commercial development.

An IDOT freight bottleneck analysis identified the Gardner Street corridor between I-39/90 and IL 251 as one of the more significant freight bottlenecks in northern Illinois. More recently, the 2023 Illinois State Freight Plan continued to identify IL 75 (Gardner Street) as a freight bottleneck, citing truck stops, a major concrete manufacturing facility, traffic signal operations, and truck-related delays as contributing factors. The corridor experiences relatively high truck volumes, frequent turning movements, closely

spaced intersections, and numerous commercial access points that collectively reduce travel-time reliability and create operational challenges for both freight and passenger traffic.

As shown in **Figure 24**, Gardner Street functions as a key freight corridor linking the Interstate system to industrial, manufacturing, and commercial destinations within South Beloit and the surrounding area. Truck traffic exceeds 3,500 vehicles per day west of I-39/90 and remains substantial east of the interchange, representing a significant share of total corridor traffic.

FIGURE 24. GARDNER STREET BOTTLENECK (SOUTH BELOIT)



Several factors contribute to the corridor's operational challenges. Heavy truck activity associated with nearby truck service facilities, industrial businesses, and freight generators creates frequent turning movements and traffic conflicts. Truck traffic entering and exiting facilities near the I-39/90 interchange can affect traffic flow, particularly during peak periods. Local stakeholders have also identified recurring delays between the Interstate ramps, Willowbrook Road, and IL 251, where closely spaced intersections, driveway access, and traffic signals contribute to congestion and reduced freight reliability.

While the regional travel demand model does not identify Gardner Street as a long-term capacity deficiency, the corridor illustrates how operational issues can affect freight mobility even when the daily roadway capacity is considered to be sufficient. Such bottlenecks can increase travel times, reduce reliability for freight carriers, increase operating costs, and accelerate pavement deterioration.

The importance of the Gardner Street corridor is consistent with priorities identified in both the 2023 Illinois State Freight Plan and the 2023 Wisconsin State Freight Plan, which emphasize improving freight reliability, strengthening first- and last-mile freight connections, enhancing access to freight generators, and preserving the efficiency of critical freight corridors. Future improvements may include access management strategies, intersection modifications, signal timing and coordination improvements, geometric enhancements, and other operational measures designed to improve freight mobility while maintaining safe access for local businesses and residents.

More broadly, freight bottlenecks within the SLATS MPA are best addressed through a regional and multimodal approach. Although severe congestion is generally limited compared to larger metropolitan areas, growing freight activity can create conflicts between trucks and other roadway users, particularly where industrial, commercial, and residential land uses converge. Continued coordination among SLATS, WisDOT, IDOT, local governments, and private-sector freight stakeholders will be important to ensure that future transportation investments support both economic development and the efficient movement of goods throughout the Stateline Area.

Regional Truck Analysis

Truck traffic is a frequent topic of concern throughout the Stateline Area, particularly along portions of WIS 81 and other roadways that pass through developed areas. To better understand freight movement patterns and identify potential impacts on local communities, SLATS conducted a regional truck travel analysis as part of the 2055 LRTP. The analysis utilized StreetLight truck origin-destination data to evaluate truck travel patterns, identify pass-through movements, and better understand how freight traffic interacts with the regional transportation network.

The analysis found that approximately 15,500 trucks per day travel through the SLATS MPA. Most interstate truck trips are pass-through movements that remain on the interstate system, particularly along the I-39/90 corridor. The highest concentrations of pass-through truck traffic occur on I-39/90, reinforcing the corridor's role as the region's primary freight route and one of the most important north-south freight corridors in the Midwest.

In contrast, most trucks using U.S. and State highways either originate or terminate within the SLATS MPA. Approximately 3,800 trucks per day are destined to locations within the planning area. Of those trips, approximately 63 percent utilize the Interstate system for a portion of their travel, while approximately 37 percent rely on U.S. and State highways to access local destinations, including industrial areas, distribution facilities, commercial centers, and freight-dependent businesses.

The analysis also examined east-west freight movements through the region. Results indicate that only a relatively small share of trucks traveling on I-43 continue west onto WIS 81. Findings from the analysis further indicate that truck trips originating from or destined to locations within the SLATS MPA tend to utilize the roadway network to access nearby destinations rather than crossing the entire region. For example, trucks entering the region from the south are generally destined to industrial, commercial, and logistics facilities within the Beloit area rather than continuing north through the region on local roadways. Most truck destinations within the planning area are concentrated near the I-39/90 corridor, reflecting the location of major employment centers, manufacturing facilities, warehousing operations, and distribution activities.

While the regional analysis demonstrates that the interstate system functions as the primary freight corridor, localized truck traffic impacts remain an important consideration. Concentrated truck activity can affect downtown Beloit, portions of White Avenue and Gardner Street, key rail crossing locations, and other corridors where freight traffic interacts with residential neighborhoods, pedestrians, bicyclists, and local businesses. These locations may warrant additional operational improvements, route management strategies, or infrastructure investments to balance freight mobility needs with community quality-of-life considerations. Results of the regional analysis are summarized in **Appendix J**.

Freight Rail

Freight rail plays an important role in supporting the SLATS region's manufacturing, agricultural, warehousing, and distribution industries by providing cost-effective connections to national and international markets.

The regional rail network is served by both Class I and regional freight railroads. Major freight rail operators with service in or near the SLATS region include CPKC (Canadian Pacific Kansas City), Union Pacific Railroad (UP), and the Wisconsin & Southern Railroad (WSOR). These railroads provide

connections to major freight hubs throughout the Midwest, including Chicago, Milwaukee, Madison, Janesville, and national rail markets beyond the region. The Wisconsin & Southern Railroad also serves as an important regional carrier linking industries in southern Wisconsin to the national freight rail network through connections with Class I railroads.

The Stateline Area benefits from its strategic location near the Chicago rail hub, the largest rail interchange region in North America. Illinois remains one of the nation's most significant freight rail states, serving as a critical gateway for rail movements between eastern and western North America. As a result, freight rail activity within the SLATS region is influenced by both local industrial demand and broader national freight movements.

Although rail traffic volumes within the SLATS MPA are lower than those found in major rail corridors serving the Chicago region, existing rail infrastructure continues to support several major industrial and manufacturing employers. Rail access remains a valuable economic development asset that helps attract and retain freight-dependent businesses and supports regional competitiveness.

In addition to supporting freight mobility, maintaining safe and efficient interactions between railroads and the roadway network remains an important regional objective. Highway-rail grade crossings throughout the region affect roadway operations, emergency response, and traffic safety. **Figure 25** illustrates the regional freight rail network serving the SLATS MPA, while **Figure 26** identifies at-grade rail crossing locations within the SLATS MPA.

FIGURE 25. FRIGHT RAIL REGIONAL PERSPECTIVE

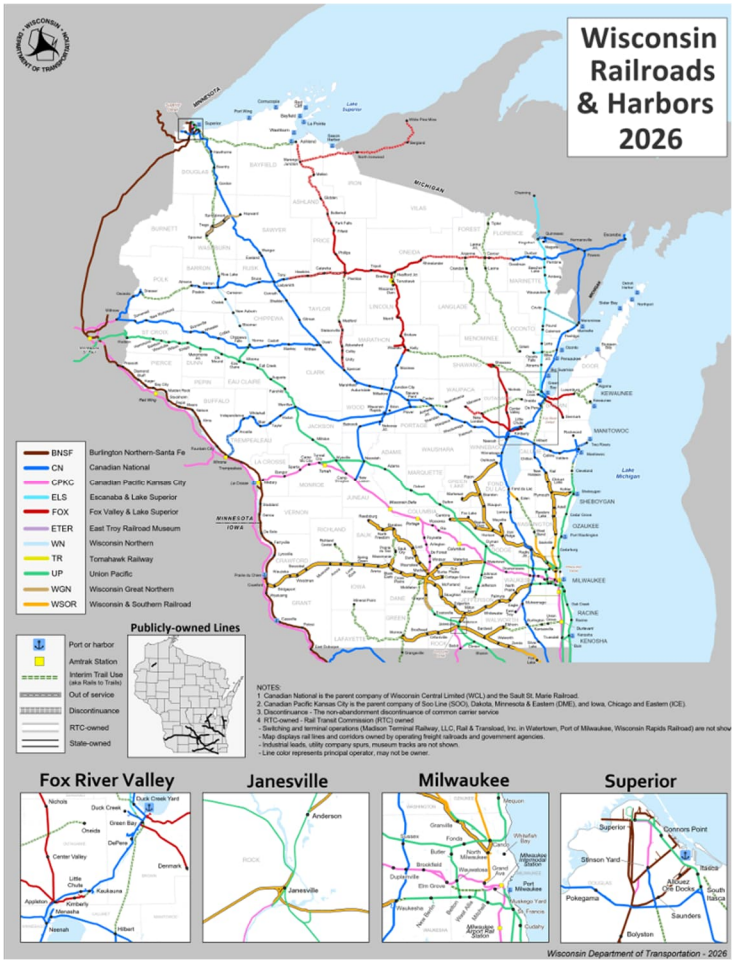
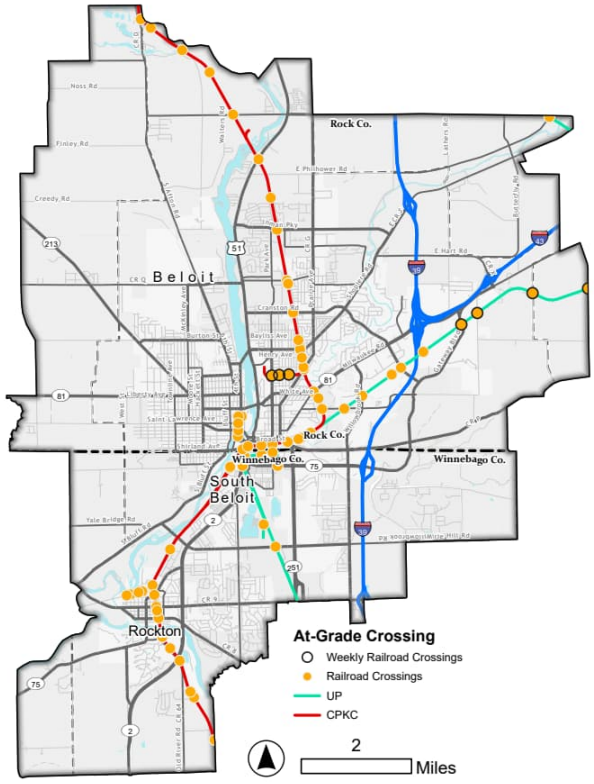


FIGURE 26. AT-GRADE RAIL CROSSINGS



The role of rail transportation within the Stateline Area may continue to evolve over the life of this LRTP. In addition to ongoing freight rail operations, passenger rail planning activities are occurring throughout southern Wisconsin and northern Illinois. The anticipated restoration of Chicago-Rockford passenger rail service in 2027 and WisDOT's inclusion of the Madison-Rockford corridor in statewide rail planning efforts highlight growing interest in expanding rail transportation options throughout the region. These efforts could create future opportunities to enhance regional connectivity and support economic development within the SLATS MPA. Additionally, while passenger rail is a long-term investment, coordination with the freight rail providers in the region will be a critical next step as additional passenger rail planning occurs in the future.

Aviation

Aviation plays a supporting role in the regional transportation system by providing business, recreational, and freight transportation services. While the region is not served by commercial passenger flights, local aviation facilities contribute to regional mobility, economic development, workforce recruitment, and connectivity to state, national, and international transportation networks.

The SLATS region is served by two general aviation airports: Southern Wisconsin Regional Airport (JVL) and Beloit Airport (44C). Together, these facilities support a range of aviation activities, including business aviation, pilot training, aircraft maintenance, emergency services, recreational flying, and limited air cargo operations.

Southern Wisconsin Regional Airport is in the City of Janesville, just north of the SLATS MPA. Owned and operated by Rock County, the airport occupies more than 1,300 acres and features three paved

runways, including a primary runway approximately 7,300 feet in length. Designated by the Federal Aviation Administration (FAA) as a National General Aviation Airport, the facility supports corporate aviation, air charter services, flight training, aircraft maintenance, and aviation-related business development. The airport recorded approximately 54,700 annual aircraft operations and was home to 87 based aircraft in 2024.

Beloit Airport is a privately owned public-use airport located on the east side of the City of Beloit near the Wisconsin-Illinois state line. The airport features a single 3,300-foot paved runway and supports recreational aviation, flight training, aircraft storage, and other general aviation activities. The facility complements the services available at Southern Wisconsin Regional Airport and provides an important local aviation resource for the Stateline region.

Commercial air service for residents and businesses within the SLATS MPA is primarily provided through nearby regional and national airports, including Chicago Rockford International Airport (RFD), Dane County Regional Airport (MSN), Milwaukee Mitchell International Airport (MKE), Chicago O'Hare International Airport (ORD), and Chicago Midway International Airport (MDW). These facilities provide access to domestic and international destinations and support passenger travel, freight movement, tourism, and regional economic activity.

The region's airports are expected to continue serving an important role in supporting business aviation, pilot training, emergency services, recreational flying, and economic development. Maintaining safe and reliable access to these facilities, particularly through the regional roadway network, will remain important to their long-term viability and continued contribution to the regional economy.

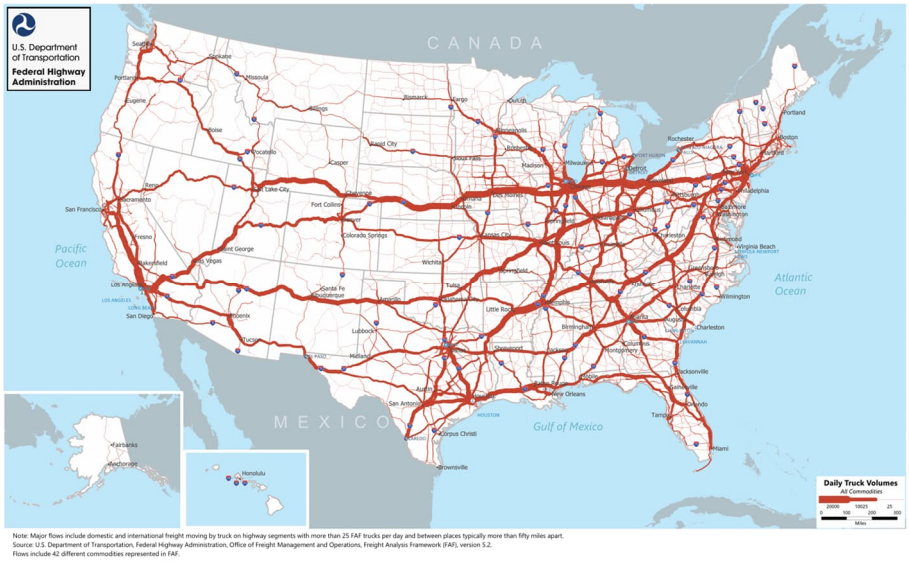
Future transportation planning efforts should continue to consider opportunities to improve connections between aviation facilities and the broader multimodal transportation system. Coordination with roadway, transit, freight, and land use planning initiatives can help ensure that airports remain accessible to businesses, employees, visitors, and aviation users while supporting future economic development opportunities throughout the Stateline region.

Freight Projections

To provide a national perspective on future freight movement, the Federal Highway Administration's (FHWA) Freight Analysis Framework (FAF) was reviewed as part of the 2055 LRTP. The FAF integrates commodity flow, economic, trade, and transportation network data to estimate future freight demand and truck movements throughout the United States. While the FAF forecast horizon currently extends to 2050, it provides the most current nationally consistent assessment of long-range freight activity and truck movement patterns available for transportation planning.

The FAF forecasts indicate continued growth in truck freight activity throughout the United States, with particularly strong freight flows concentrated in and around the Chicago metropolitan region and along major interstate corridors serving the Midwest. Given the SLATS region's strategic location between Chicago and the Upper Midwest, these forecasts reinforce the importance of the Stateline Area as a key freight gateway and transportation corridor. The following figures summarize selected FAF 2050 freight forecasts and highlight the national significance of transportation corridors serving the SLATS region.

FIGURE 27. ESTIMATED AVERAGE FAF DAILY VOLUMES FOR TRUCKS ON THE NATIONAL HIGHWAY SYSTEM: 2050

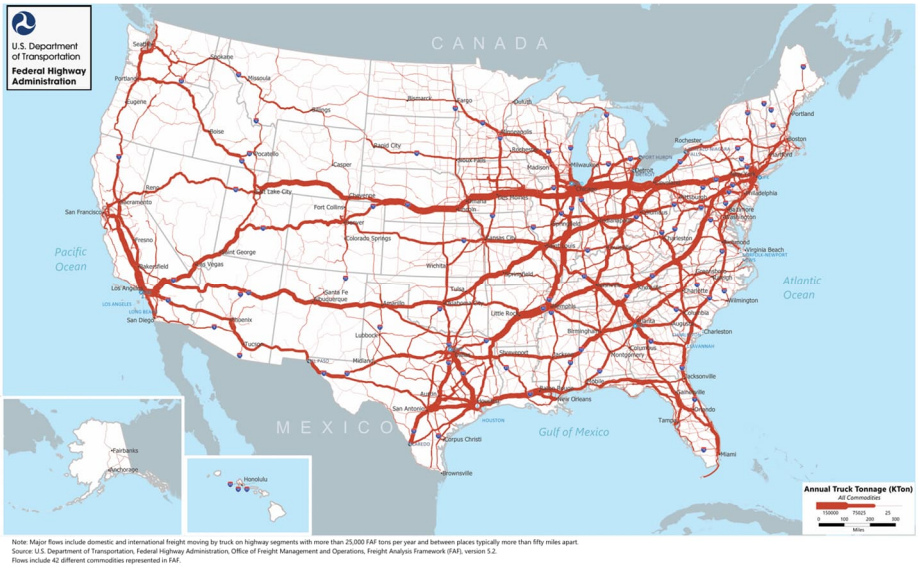


Source: Federal Highway Administration, Freight Analysis Framework (FAF) Version 5.2, 2050 Forecasts.

Figure 27 displays projected daily truck volumes on the National Highway System in 2050. The map highlights the concentration of freight activity along major interstate corridors connecting national and international freight markets. One of the most notable patterns is the concentration of truck traffic associated with the Chicago metropolitan area, which continues to function as one of the nation's most important freight hubs. Major freight corridors radiating from Chicago exhibit some of the highest projected truck volumes in the country, including the I-39/90 corridor through southern Wisconsin and northern Illinois.

The location of the SLATS MPA directly along I-39/90 places the region within one of the primary freight gateways connecting Chicago with Wisconsin, Minnesota, and destinations throughout the Upper Midwest. The FAF forecasts suggest that truck traffic along this corridor will continue to grow through 2050, reinforcing its importance to both regional and national supply chains.

FIGURE 28. ESTIMATED ANNUAL FAF TONNAGE FLOW FOR TRUCKS ON THE NATIONAL HIGHWAY SYSTEM: 2050



Source: Federal Highway Administration, Freight Analysis Framework (FAF) Version 5.2, 2050 Forecasts.

Figure 28 displays projected annual truck tonnage flows on the National Highway System in 2050. Similar to the daily truck volume forecasts, the map highlights the significant concentration of freight tonnage moving through the Chicago region and along major interstate corridors throughout the Midwest. The forecast identifies I-39/90 as a major freight route, with substantial truck tonnage projected to move through the Stateline Area as freight travels between the Chicago region and markets to the north and west.

Together, **Figures 27** and **28** demonstrate the strategic location of the SLATS region within the national freight network. The forecasts indicate that both truck volumes and freight tonnage will remain concentrated along the I-39/90 corridor, consistent with historic traffic trends, recent WisDOT traffic forecasts, and the regional truck analysis completed as part of the 2055 LRTP. The regional truck analysis found that the majority of pass-through truck traffic utilizes the Interstate system, while WisDOT forecasts similarly project continued growth along I-39/90 over the planning horizon.

These findings underscore the importance of preserving the operational efficiency, safety, and reliability of the Interstate system within the Stateline Area. As freight demand continues to grow, continued monitoring of corridor performance, targeted freight-supportive investments, and coordination with WisDOT, IDOT, freight carriers, and regional stakeholders will remain important considerations for the long-term transportation planning process.

Future Growth and Roadway System Performance

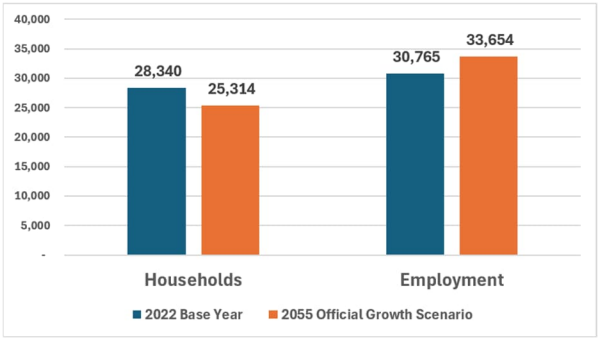
Population, household, and employment forecasts are a critical input to the SLATS travel demand model and provide the foundation for estimating future travel patterns, roadway demand, and transportation system needs. For the Wisconsin portion of the SLATS MPA, forecasts were developed by WisDOT using projections from the Wisconsin Department of Administration (DOA). For the Illinois portion of the MPA, the most recent available projections from previous regional modeling efforts were utilized.

The demographic forecasts used in the 2055 LRTP are based primarily on the Wisconsin DOA's Vintage 2024 population and household projections, which were released in 2025. Compared to previous statewide forecasts, these projections generally indicate slower population growth throughout Wisconsin and project population declines for many communities. The forecasts reflect broader demographic trends occurring throughout the state, including an aging population and changing household characteristics.

For the Wisconsin communities within the SLATS MPA, according to the WisDOT modeling/demographic projections, the population is projected to decline from approximately 49,750 residents in 2020 to approximately 41,800 residents by 2050, a decrease of about 16 percent. Despite the projected population decline, employment is anticipated to remain relatively stable or increase modestly over time. Employment forecasts were developed using Woods & Poole economic projections in combination with the updated demographic forecasts and reflect continued economic activity within the region.

While some local stakeholders have expressed concerns that the forecasts may understate future growth potential within portions of the Stateline Area, the projections used in this LRTP represent the best available demographic information available at the time of plan development and provide a reasonable basis for evaluating long-range transportation needs. **Figure 29** summarizes the household and employment forecasts used in the 2055 LRTP. The household numbers are multiplied by an average household size to arrive at the population number previously presented.

FIGURE 29. YEAR 2055 HOUSEHOLD AND EMPLOYMENT PROJECTIONS



A significant factor influencing the forecasts is the changing demographic structure of Wisconsin and Rock County. Over the last several decades, birth rates have declined while the share of older residents has increased. In Rock County, the number of annual births has gradually decreased while deaths have increased, with recent years showing more deaths than births. At the statewide level, population projections indicate continued aging of the "Baby Boomer" generation and a smaller number of younger residents available to replace them in the workforce and household population. As a result, many communities throughout Wisconsin, including in the SLATS MPA, are expected to experience slower population growth or population decline despite continued economic activity.

Future System Performance

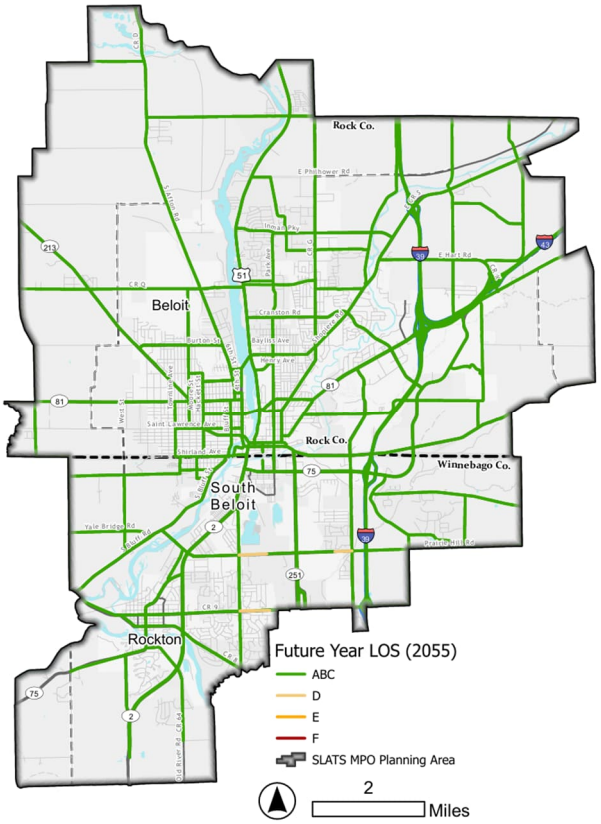
Consistent with the growth assumptions described above, WisDOT developed 2055 travel demand model forecasts for the SLATS region. The results indicate that overall roadway performance in 2055 remains largely consistent with existing conditions. As shown in **Figure 30**, projected LOS throughout the regional roadway network are very similar to those observed in the 2022 base year.

The little to no change in system performance is largely attributable to the modest growth assumptions reflected in the demographic forecasts. Although employment is projected to increase, the travel demand model does not identify widespread congestion or significant capacity deficiencies on the regional transportation network through the planning horizon.

It is anticipated that the most notable transportation impacts are expected to occur along the interstate system, particularly the I-39/90 corridor. As discussed previously in this appendix, the regional truck analysis found that the majority of pass-through freight traffic remains on the interstate system, with most external-to-external truck trips utilizing I-39/90 as they travel through the region. Given the corridor's importance for freight movement, regional mobility, and economic activity, continued monitoring of traffic operations along I-39/90 will be the primary long-term focus for the SLATS MPA.

Finally, as the 2055 baseline modeling results did not identify any LOS deficiencies or capacity-related concerns on the regional roadway network, no future improvement scenarios were modeled as part of the 2055 LRTP.

FIGURE 30. 2055 SYSTEM PERFORMANCE – LEVEL OF SERVICE



Established and Emerging Transportation Technology

The transportation industry continues to evolve as technological advancements influence how people and goods move throughout communities. Many innovations once considered emerging technologies have become commonplace, including real-time traveler information, electric vehicles, adaptive traffic signal systems, and shared micromobility services. At the same time, new technologies continue to be developed and deployed that have the potential to improve safety, mobility, system efficiency, accessibility, freight movement, and environmental sustainability. While the pace and extent of adoption remain uncertain, it is important for SLATS and its transportation partners to remain aware of these trends when considering long-term transportation investment decisions.

Examples of established and emerging transportation technologies include:

- **Mobility on Demand (MoD)** – Transportation services that allow users to request trips as needed through digital platforms. Examples include transportation network companies (TNCs), demand-response transit services, microtransit, and public-private partnerships that provide first-mile/last-mile connections.
- **Micromobility** – Small, lightweight transportation devices such as bicycles, e-bikes, cargo bikes, scooters, and other personal mobility devices. These options can improve local mobility and

provide alternatives to automobile travel for shorter trips. The Stateline Area has previously tested a pilot micromobility program, demonstrating both the opportunities and challenges associated with deploying these services in smaller urban areas.

- **Mobility as a Service (MaaS)** – Digital platforms that integrate multiple transportation options, allowing users to plan, book, and pay for trips using a single application. MaaS can combine transit, ridesharing, carpooling, micromobility, and other travel options into a seamless user experience. This also has potential applications to the Beloit Transit System as they look for opportunities to implement microtransit in the future.
- **Smart Transportation Infrastructure** – Technologies that support Transportation Systems Management and Operations (TSMO), including adaptive traffic signals, traffic sensors, connected vehicle infrastructure, dynamic message signs, weather monitoring systems, real-time traveler information, fiber optic communications, and data analytics tools. Recent investments along the I-39/90 corridor have expanded the use of these technologies within the Stateline Area and improved agencies' ability to monitor traffic conditions, respond to incidents, and provide real-time traveler information.
- **Smart Transit Technologies** – Transit-related technologies such as real-time vehicle tracking, mobile fare payment, demand-responsive transit services, enhanced passenger information systems, and accessibility improvements designed to enhance the customer experience and improve operating efficiency. In 2025, Beloit Transit System implemented the Wisco transit platform, including real-time bus tracking and mobile trip-planning tools that improve access to transit information for riders.
- **Connected and Automated Vehicles (CAVs)** – Technologies that enable vehicles to communicate with other vehicles, roadway infrastructure, and transportation management systems. While fully autonomous vehicles remain under development, connected vehicle technologies are increasingly being incorporated into new vehicle fleets and transportation infrastructure. WisDOT continues to advance implementation planning through its Connected and Automated Vehicle Strategic Work Plan and statewide CAV initiatives, which focus on safety, infrastructure readiness, freight mobility, data management, and public education. These efforts recognize that future roadway investments may need to account for evolving vehicle technologies, pavement markings, communications infrastructure, and operational requirements.
- **Electric Vehicle (EV) Infrastructure** – Continued growth in electric vehicle ownership is increasing demand for publicly accessible charging infrastructure throughout Wisconsin and Illinois. Both WisDOT and IDOT have developed Electric Vehicle Infrastructure Deployment Plans through the National Electric Vehicle Infrastructure (NEVI) Program to guide investment in a statewide network of fast-charging stations along designated alternative fuel corridors. Wisconsin's Electric Vehicle Infrastructure (WEVI) Program and Illinois' EV Infrastructure Deployment Plan prioritize development of charging infrastructure along major interstate corridors, including I-39, I-43, and I-90, which directly serve the SLATS region. Wisconsin and

Illinois are also participating in broader Midwest electrification initiatives intended to support seamless interstate EV travel. For the SLATS MPA, these plans suggest that future charging investments will likely continue to focus on the I-39/90 corridor and other major regional travel routes, helping to support both local travel and longer-distance passenger and freight movements. As electric vehicle adoption continues to expand, additional charging opportunities may emerge within commercial centers, employment districts, major activity centers, and freight-related locations throughout the region.

Additionally, Beloit Transit System and the Stateline Mass Transit District both completed ***Zero Emission Bus Transition Plan*** studies in November 2023. These studies document steps that support BTS and SMTD in transitioning the vehicle fleet to electric vehicles, helping reduce emissions, improving local air quality and public health. These efforts are also aligned with the City of Beloit that has maintained a long-standing commitment to sustainability, including efforts to reach carbon neutrality by 2040.

As these technologies continue to evolve, they may influence future travel behavior, infrastructure needs, freight movement, and transportation investment priorities within the SLATS region. Several technologies, particularly EV infrastructure, intelligent transportation systems, connected vehicle applications, and advanced traffic management strategies, are already being incorporated into statewide transportation plans and investment programs. Given the SLATS region's location along the I-39/90 corridor and its role as a key freight and commuter corridor between Wisconsin and Illinois, the area is well positioned to benefit from many of these advancements.

SLATS and its transportation partners should continue to monitor technological developments and coordinate with WisDOT, IDOT, local governments, transit providers, and private-sector stakeholders to identify implementation opportunities. Future transportation investments should consider how emerging technologies can improve system safety, reliability, accessibility, and efficiency while supporting the long-term mobility needs of residents, businesses, freight operators, and visitors throughout the Stateline Area.