

Chapter 5: System Safety and Performance Report

To support the national transportation goals described in [23 U.S.C. 150\(b\)](#) and the general purposes described in [49 U.S.C. 5301\(b\)](#), metropolitan planning organizations are required under [23 CFR 450](#) to engage in a planning process that uses a performance-based approach to transportation decision-making. Each MPO must establish performance targets that address the performance measures or standards established under [23 CFR part 490](#), [49 U.S.C. 5326\(c\)](#), and [49 U.S.C. 5329\(d\)](#) and use those targets to track progress toward attaining critical outcomes for the region.

MPOs must choose to adopt their state(s) targets and agree to plan and program projects that contribute toward meeting those targets, develop their own targets, or provide for a combination of state-supported and locally developed targets. As discussed in chapter 1, the LAPC has opted to support the targets developed by the Minnesota and Wisconsin Departments of Transportation (MnDOT and WisDOT).

This chapter, as the system performance report required under 23 CFR 450.324 (4), evaluates the condition and performance of the transportation system as related to 21 federal performance measures and the adopted state targets relevant to our MPO. It discusses how the MPO supports the targets and the progress achieved in meeting the targets.

This chapter also discusses additional performance measures used by the LAPC to track:

- ⇒ Freight movement and economic vitality
- ⇒ Safety
- ⇒ System Management, operations, and reliability
- ⇒ Accessibility and mobility
- ⇒ Integration and connectivity
- ⇒ Preservation and infrastructure
- ⇒ Environment and quality of life

The LAPC has been reporting its tracking measures in its annual Transportation Performance Report since 2016.

Federal Measures and State Targets

The performance measures established in 23 CFR 490 for safety, system condition, system performance, and system reliability and in 49 CFR 625 for transit asset management were developed to meet the federal performance goals outlined below:

- ⇒ **Safety:** To achieve a significant reduction in traffic fatalities and serious injuries on all public roads;

- ⇒ **Infrastructure condition:** To maintain the highway infrastructure asset system in a state of good repair;
- ⇒ **Congestion reduction:** To achieve a significant reduction in congestion on the National Highway System (NHS);
- ⇒ **System reliability:** To improve the efficiency of the surface transportation system;
- ⇒ **Freight movement and economic vitality:** To improve the national freight network, strengthen the ability of rural communities to access national and international trade markets, and support regional economic development;
- ⇒ **Environmental sustainability:** To enhance the performance of the transportation system while protecting and enhancing the natural environment; and,
- ⇒ **Reduced project delivery delays:** To reduce project costs, promote jobs and the economy, and expedite the movement of people and goods by accelerating project completion through eliminating delays in the project development and delivery process, including reducing regulatory burdens and improving agencies' work practices.

Highway Safety Measures

Safety performance requirements are codified in Subpart B of 23 CFR Part 490 National Performance Management Measures (NPMM). The NPMM established five safety performance measures for the purpose of carrying out the Highway Safety Improvement Program (HSIP) and to assess fatalities and serious injuries on all public roads:

- ⇒ Number of fatalities
- ⇒ Fatalities per 100 million vehicle miles traveled
- ⇒ Number of serious injuries
- ⇒ Serious injuries per 100 million vehicle miles traveled
- ⇒ Number of non-motorized fatalities and non-motorized serious injuries

The performance measure for each of the safety measures is the five-year rolling average for the most recent five consecutive years ending in the year for which the targets are established. These five-year averages are compared to their respective baseline performance (the average for the five consecutive years whose end year is two years prior to the target year).

Minnesota and Wisconsin State Targets and Performance

WisDOT establishes its safety targets as a percentage reduction from the baseline five-year average—two percent reduction from the baseline in fatalities and fatality rate and five percent reduction from the baseline in serious injuries, serious injury rate, and non-

motorized fatalities and serious injuries. MnDOT establishes its safety targets as the five-year average of the baseline and projecting forward to the target year.

The State DOTs are required to report their performance and targets annually to the Federal Highway Administration (FHWA), which determines if the State has met or made significant progress toward meeting its targets.

With limited historical data to compare at this time (only three five-year rolling averages), it appears that Wisconsin is trending in the right direction (down) in four of the five measures (fatalities, fatality rate, serious injuries, and serious injury rate). Minnesota, on the other hand, is trending downward in only two of the measures (fatalities and fatality rate). A better picture will emerge in 2022 when we have additional averages to include in the trend assessment.

Table 15: State Highway Safety Improvement Program Performance Targets

Safety Performance Measure	2018 Baseline ¹	2018 Target	2019 Baseline ²	2019 Target	2020 Baseline ³	2020 Target
Wisconsin Department of Transportation						
<i>Fatalities</i> : Number of fatalities	567.4	556.1	567.0	555.7	576.2	564.7
<i>Fatality Rate</i> : Fatalities per 100 million vehicle miles traveled	0.936	0.917	0.934	0.915	0.906	0.888
<i>Serious Injuries</i> : Number of serious injuries	3,183.0	3,023.9	3,123.8	2,967.6	3,060.0	2,907.0
<i>Serious Injury Rate</i> : Serious injuries per 100 million vehicle miles traveled	5.260	4.997	5.037	4.785	4.826	4.585
<i>Non-motorized Fatalities & Serious Injuries</i> : Number of non-motorized fatalities and non-motorized serious injuries	361.4	343.3	360.0	342.0	362.8	344.7
Minnesota Department of Transportation						
<i>Fatalities</i> : Number of fatalities	389.2	375.0	381.8	372.0	----	375.4
<i>Fatality Rate</i> : Fatalities per 100 million vehicle miles traveled	0.674	0.620	0.656	0.620	----	0.626
<i>Serious Injuries</i> : Number of serious injuries	1,331.0	1,935.0	1,447.2	1,711.0	----	1,714.2
<i>Serious Injury Rate</i> : Serious injuries per 100 million vehicle miles traveled	2.298	3.190	2.468	2.850	----	2.854
<i>Non-motorized Fatalities & Serious Injuries</i> : Number of non-motorized fatalities and non-motorized serious injuries	220.8	348.0	246.4	267.5	----	317.0
¹ Five-year average for 2012-2016.						
² Five-year average for 2013-2017.						
³ Five-year average for 2014-2018.						
Source: Wisconsin and Minnesota Departments of Transportation.						

Planning Area Performance

Figure 39 shows the fatalities, serious injuries, and non-motorized fatalities and serious injuries in the planning area.

Between 2012 and 2018, the planning area experienced a 45.9 percent decrease in serious injuries, a 12.5 percent increase in fatalities, and a 37.5 percent decrease in non-motorized fatalities and serious injuries. Change between the five-year averages for 2012-2016 and 2014-2018 shows a more realistic picture because all years are considered. The trends, however, are the same: Serious injuries and non-motorized fatalities and serious injuries are decreasing while fatalities are increasing. Serious injuries and non-motorized fatalities and serious injuries decreased 18.6 percent and 10.0 percent, respectively, between 2012-2016 and 2014-2018. Fatalities on the other hand increased 34.5 percent.

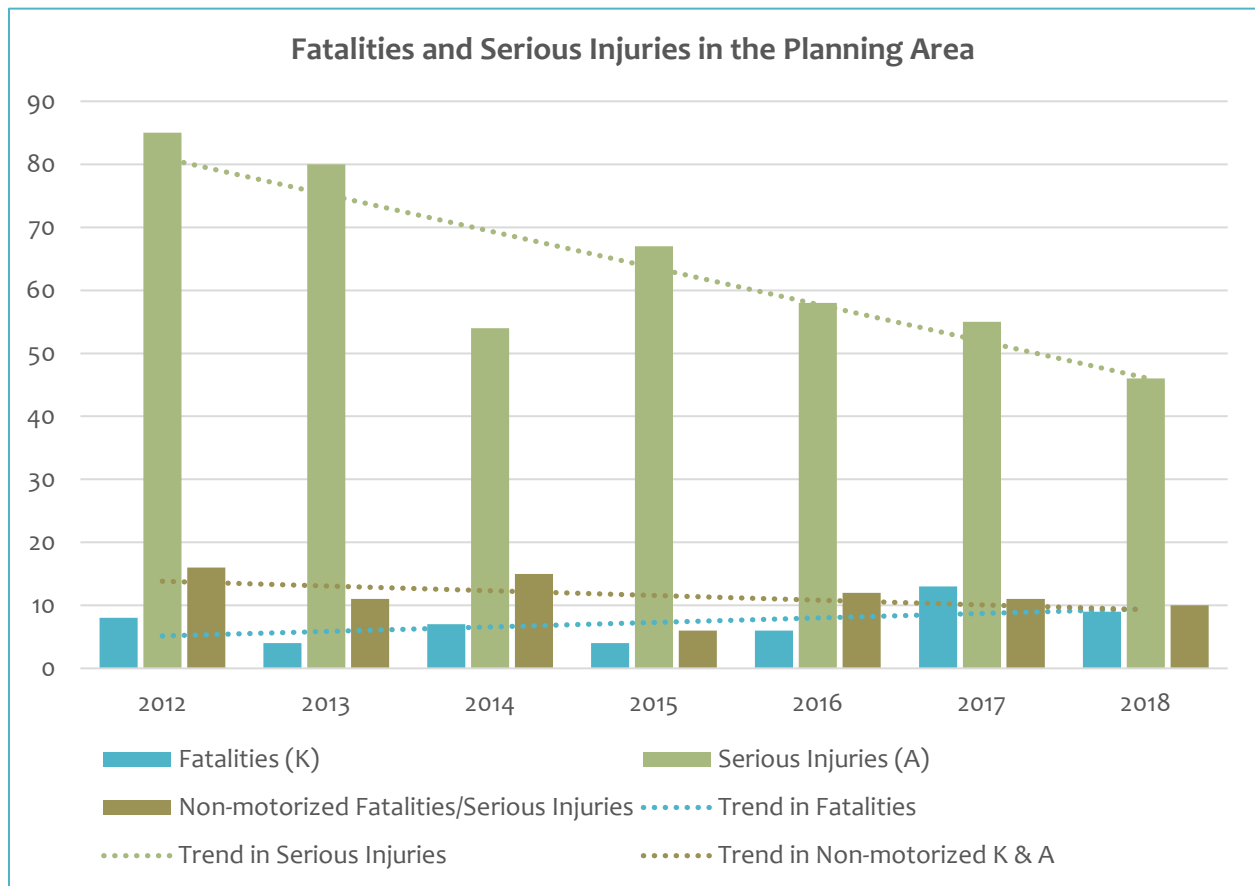


Figure 39: Fatalities and serious injuries in the planning area, 2012-2018. Trendlines are linear trends. Sources: Traffic Operations and Safety Laboratory, UW-Madison, www.topslab.wisc.edu; Minnesota Department of Transportation.

Because we do not have vehicle miles traveled (VMT) for the planning area, Figure 40 shows the rates (number of occurrences divided by 100 million vehicle miles traveled) and linear

trends for fatalities and serious injuries for 2012-2018 for La Crosse County. Like the occurrence trends for the planning area, La Crosse County is experiencing a decrease in the serious injury rate and an increase in the fatality rate.

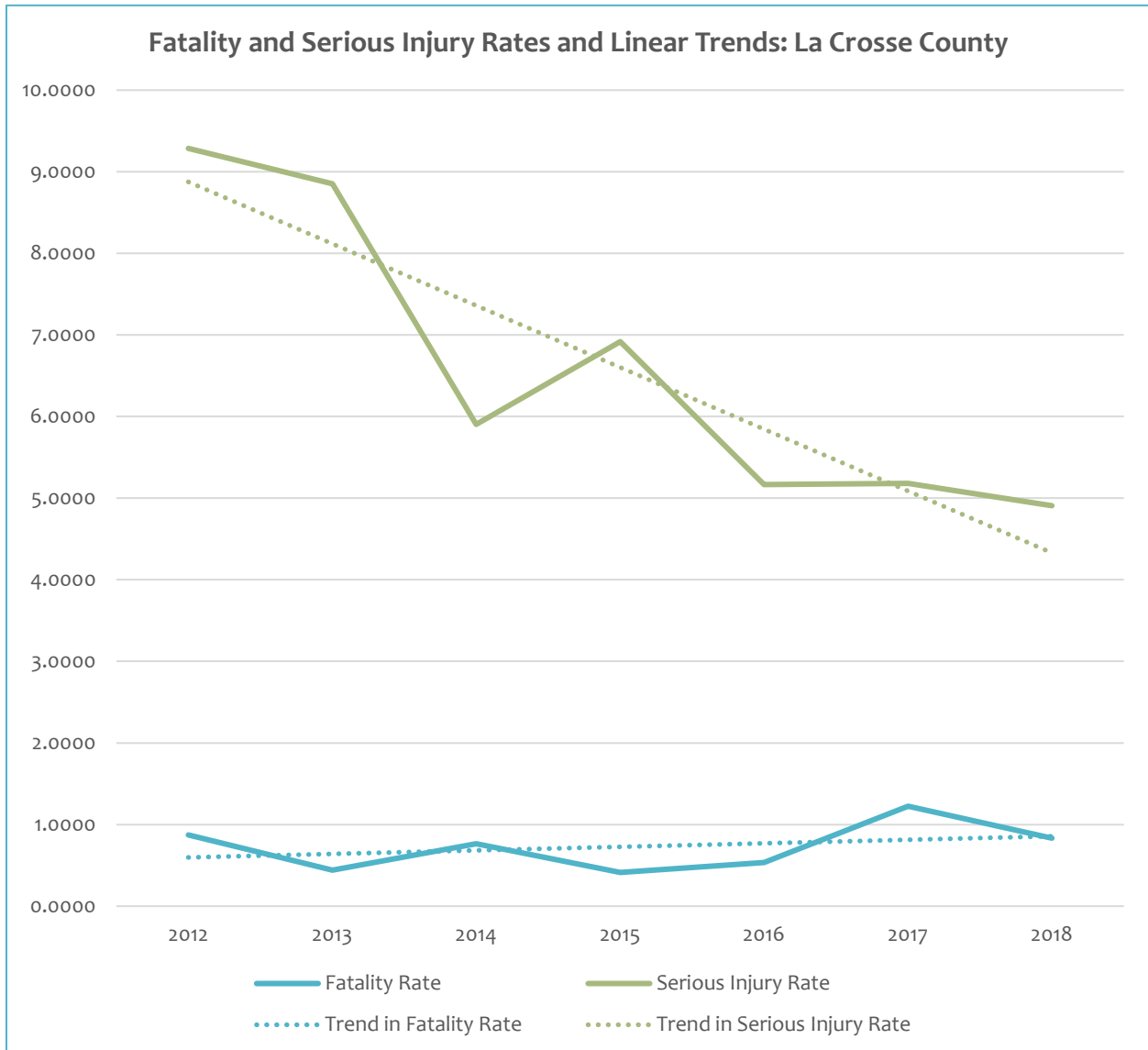


Figure 40: Highway safety performance: Injury severity rates and trends in La Crosse County. Sources: Traffic Operations and Safety Laboratory, UW Madison; WisDOT and MnDOT VMT data from respective websites.

How the LAPC Supports the State Targets

The LAPC supports the State targets through its transportation improvement program (TIP) and its project prioritization process.

The 2020-2023 Transportation Improvement Program (TIP) as amended in May 2020 includes 10 projects funded by the HSIP:

- ⇒ USH 14 South Ave, City of La Crosse; Green Bay St to Ward Ave. Reconstruct the roadway and improve the intersections. (Also funded by the NHPP.)
- ⇒ STH 16 La Crosse St, City of La Crosse; Oakland St to Losey Blvd. Patch and overlay. (Also funded by the NHPP.)
- ⇒ STH 16, City of Onalaska; Braund St to CTH OS. Monotubes and left-turn lane improvements.
- ⇒ STH 108, West Salem to Melrose; Stan Olson Rd to L Pfaff Rd. Safety improvements.
- ⇒ Design for various intersection improvements on USH 14, STH 16, and STH 33; Left-turn lanes and monotubes.
- ⇒ USH 14/61, Mormon Coulee Rd/Broadview Pl intersection, City of La Crosse. Left-turn lanes and monotubes.
- ⇒ STH 33/35, West Ave/Jackson St intersection, City of La Crosse. Left-turn lanes and monotubes.
- ⇒ STH 16/35, West Ave/La Crosse St intersection, City of La Crosse. Left-turn lanes and monotubes.
- ⇒ STH 35, West Ave/King St and West Ave/Badger St intersections, City of La Crosse. Close medians and add crosswalks.
- ⇒ Burlington Northern Santa Fe Railroad and 2nd Ave SW crossing (#079897G), City of Onalaska.

Over 14 percent of the projects in the 2020-2023 TIP has the HSIP as a funding source. These projects total almost \$10.3 million in HSIP funds and 6.4 percent of the estimated available funding (in 2020 dollars) for 2020-2023.

The LAPC has processes in place to prioritize projects submitted for funding by the Surface Transportation Program-Urban (STP-U) and the Transportation Alternatives Program (TAP). The ranking criteria explicitly consider safety in the LAPC's effort to support Federal safety goals and State HSIP targets. During the last four TAP cycles, the LAPC recommended and La Crosse County received funding for its Safe Routes to School Program.

Highway Condition and Performance Measures

Pavement condition, bridge condition, and highway performance requirements are codified in the NPMM in Subparts C, D, E, and F. For the purpose of carrying out the National Highway Performance Program (NHPP) and the National Highway Freight Program (NHFP), the NPMM established the following four pavement condition, two bridge condition, and three travel time reliability measures relevant to air quality attainment areas:

- ⇒ Pavement Condition

- Percentage of Interstate pavements in “good” condition
- Percentage of Interstate pavements in “poor” condition
- Percentage of non-Interstate NHS pavements in “good” condition
- Percentage of non-Interstate NHS pavements in “poor” condition
- ⇒ Bridge Condition
 - Percentage of NHS bridges by deck area in “good” condition
 - Percentage of NHS bridges by deck area in “poor” condition
- ⇒ Travel Time Reliability
 - Percent of Interstate person-miles traveled that are reliable
 - Percent of non-Interstate NHS person-miles traveled that are reliable
 - Interstate truck travel time reliability index

Minnesota and Wisconsin State Targets and Performance

The Federal Highway Administration (FHWA) requires that the DOTs update and use the data in the Highway Performance Monitoring System (HPMS) and the National Bridge Inventory (NBI) to assess condition and performance measures and to set targets. The travel time data needed to calculate reliability come from the National Performance Management Research Data Set (NPMRDS).

Table 16 illustrates the baseline values and targets developed by WisDOT and MnDOT. The DOTs evaluate the data over time and then develop reasonable performance targets for two-year and four-year target years. Currently limited data prevent a realistic trend assessment of pavement and bridge condition and travel time reliability in Wisconsin and Minnesota.

The performance reports and methodologies for all states can be accessed from FHWA’s [Transportation Performance Management](#) site.

Table 16: State Highway Condition and Performance Targets for the National Highway Performance Program

Performance Measure	2018 Performance		2020 2-yr target		2022 4-yr target	
	WisDOT	MnDOT	WisDOT	MnDOT	WisDOT	MnDOT
<i>Pavement Condition</i>						
Interstate – Percentage pavements in “Good” condition	N/A	N/A	NA	NA	≥45.0%	≥55.0%
Interstate – Percentage pavements in “Poor” condition	N/A	N/A	NA	NA	≤5.0%	≤2.0%
Non-Interstate NHS – Percentage pavements in “Good” condition	39.7%	67.9%	≥20.0%	≥50.0%	≥20.0%	≥50.0%
Non-Interstate NHS – Percentage pavements in “Poor” condition	18.8%	5.2%	≤12.0%	≤4.0%	≤12.0%	≤4.0%
<i>Bridge Condition</i>						
Percentage of NHS bridges by deck area in “Good” condition	56.2%	48.0%	≥50.0%	≥50.0%	≥50.0%	≥50.0%
Percentage of NHS bridges by deck area in “Poor” condition	1.8%	1.9%	≤3.0%	≤4.0%	≤3.0%	≤4.0%
<i>Travel Time Reliability</i>						
Interstate – Percent of person-miles traveled that are reliable	97.9%	80.2%	94.0%	80.0%	90.0%	80.0%
Non-Interstate NHS – Percent of person-miles traveled that are reliable	N/A	N/A	NA	NA	86.0%	75.0%
Interstate – Truck travel time reliability index	1.16	1.43	1.40	1.50	1.60	1.50
Source: Wisconsin and Minnesota Departments of Transportation, State Highway Infrastructure Reports; www.fhwa.dot.gov/tpm/reporting/state .						

Planning Area Performance

Table 17 shows the performance of the pavement and bridge condition and travel time reliability measures in the planning area.

Performance in the planning area from 2017 to 2018 for all measures has either stayed the same or improved.

Table 17: Planning Area Performance: National Highway Performance Program Measures

Performance Measure	2017		2018	
	WI MPA	MN MPA	WI MPA	MN MPA
<i>Pavement Condition</i>				
Interstate – Percentage pavements in “Good” condition	34.58	59.40	73.71	73.57
Interstate – Percentage pavements in “Poor” condition	0.00	0.00	0.00	0.00
Non-Interstate NHS – Percentage pavements in “Good” condition	12.51	27.55	25.09	65.08
Non-Interstate NHS – Percentage pavements in “Poor” condition	6.40	0.00	10.95	0.00
<i>Bridge Condition</i>				
Percentage of NHS bridges by deck area in “Good” condition	56.08	81.72	60.36	81.70
Percentage of NHS bridges by deck area in “Poor” condition	0.52	0.00	0.00	0.00
<i>Travel Time Reliability</i>				
Interstate – Percent of person-miles traveled that are reliable	100.0	100.0	100.0	100.0
Non-Interstate NHS – Percent of person-miles traveled that are reliable	89.0	93.2	89.0	94.3
Interstate – Truck travel time reliability index	1.16	1.13	1.16	1.14
Sources: Wisconsin and Minnesota Departments of Transportation; Travel time reliability (TTR) values for the Wisconsin portion of the MPA were obtained from the Traffic Operations and Safety Laboratory, University of Wisconsin-Madison and dated “as of February 6, 2019.” Minnesota Truck TTR obtained from the MnDOT performance dashboard.				

How the LAPC Supports the State Targets

The LAPC supports the State targets through its transportation improvement program (TIP) and its project prioritization process.

The 2020-2023 Transportation Improvement Program (TIP) as amended in May 2020 includes 23 projects funded by the NHPP:

- ⇒ IH 90, Black River bridges, Round Lake bridges, Bainbridge pedestrian bridge. Concrete overlays on B-32-34, 35, 46, 47 and bridge replacement of B-32-73.
- ⇒ IH 90, CTH BW, CTH B and STH 157 eastbound bridges (B-32-51, 52, 55). Thin polymer overlays.
- ⇒ IH 90, Onalaska to West Salem. Asphalt deck overlay on bridges B-32-0023,24,25,26,27,28. Concrete deck overlay on bridge B-32-0057.
- ⇒ IH-90, STH 16 to CTH C. Pavement and bridge replacements.
- ⇒ IH-90, CTH C to east La Crosse County Line. Resurface.

- ⇒ IH 90, STH 16 Interchange area (STH 16 - S Kinney Coulee Rd to CTH OS). Interchange improvements. Bridge replacements of B-32-0053, -0054.
- ⇒ IH 90, STH 157 Interchange resurface.
- ⇒ IH-90, STH 157 Interchange reconstruction.
- ⇒ Coulee Region Transportation Study, USH 53, CTH SS - South Ave. Planning and Environmental Linkage Study.
- ⇒ USH 53 / 12th Avenue Extended from CTH SS - Gillette St. New Roadway.
- ⇒ USH 53, Black River bridge B-32-0079. Bridge rehabilitation.
- ⇒ USH 53, City of La Crosse, Third and Fourth Streets (Cass Street to 2nd Street). Pavement replacement.
- ⇒ USH 14, Brickyard Lane - CTH M. Mill and overlay.
- ⇒ USH 14, City of La Crosse, South Avenue, Green Bay St to Ward Ave. Reconstruct roadway and improve intersections. (Also funded by the HSIP.)
- ⇒ USH 14, Cameron Ave and Cass St structures B-32-202 & -300. Paint and repair.
- ⇒ STH 35, Genoa - La Crosse (Village of Stoddard north limit to north Vernon County line). Mill and overlay.
- ⇒ STH 35, La Crosse County line to Garner Place. Reconstruct STH 35 / USH 14/61 intersection.
- ⇒ STH 16 (La Crosse Street, City of La Crosse), Oakland St to Losey Blvd. Patch and overlay. (Also funded by the HSIP.)
- ⇒ STH 16, Gillette St to STH 157. Bridge and approach reconstruction.
- ⇒ STH 16, Medary Overpass structures B-32-111 & 115. Concrete overlay, paint, repair.
- ⇒ STH 16, La Crosse - Sparta (Losey Blvd to South Kinney Coulee Rd). Repair, mill and overlay.
- ⇒ STH 33 (Jackson St, City of La Crosse), 3rd St to 23th St. Surface (1.67 mi).
- ⇒ CTH B (Clinton St), Black River bridge B-32-0077. Bridge rehabilitation.

Over 32 percent of the projects in the TIP has the NHPP as a funding source. These projects total around \$57.5 million in NHPP funds and 35.6 percent of the estimated available funding (in 2020 dollars) for the 2020-2023 TIP.

Additional projects in the TIP funded through the Surface Transportation Block Grant (STBG) program are designed to improve the condition of urban and rural roads and bridges and total more than \$18 million in Federal and State funds obligated in 2020-2023. Three of the projects were funded through the LAPC STP-U.

Transit Asset Management Measures

The Transit Asset Management Rule (49 CFR Part 625) requires all recipients and subrecipients of Federal financial assistance under 49 U.S.C. Chapter 53 that own, operate, or manage capital assets used for providing public transportation to develop a Transit Asset Management (TAM) plan (Tier I³³ or Tier II³⁴ transit providers) or to participate in a group TAM plan (Tier II providers only). The Rule established four state of good repair (SGR) measures of which the following three are relevant to the providers in our area:

- ⇒ **Rolling stock:** Percent of revenue service vehicles that have met or exceeded their useful life benchmark (ULB).
- ⇒ **Equipment:** Percent of non-revenue service vehicles that have met or exceeded their ULB.
- ⇒ **Facilities:** Percent of facilities rated below “3” on the Transit Economic Requirements Model (TERM) condition scale.

A provider may update its TAM plan at any time and should amend its plan whenever there is a significant change to the asset inventory, condition assessments, or investment prioritization that was not anticipated during the plan development. A provider must update the entire plan at least every four years.

Each provider or group sponsor must report performance data annually to the National Transit Database (NTD).

Minnesota and Wisconsin State Targets and Performance

The MnDOT and WisDOT serve as the sponsors for the Minnesota and Wisconsin group TAM plans for the Tier II providers that have opted into their plans. All of Minnesota’s urban 5307 systems submit their own plans and are not included in the state plan (the city of La Crescent is included in the Wisconsin TAM because it is served by the La Crosse Municipal Transit Utility). The Wisconsin TAM plan includes some of the smaller urban systems, including the urban systems operating in our planning area.

Because the Minnesota TAM does not apply to the transit operators in our planning area, only the Wisconsin TAM Plan SGR performance and targets are shown in Table 18.

³³ A Tier I provider is a recipient that owns, operates, or manages either 1) 101 or more vehicles in revenue service during peak regular service across all fixed-route modes or in any one non-fixed-route mode or 2) rail transit.

³⁴ A Tier II provider is a recipient that owns, operates, or manages 100 or fewer vehicles in revenue service during peak regular service across all non-rail fixed-route modes or in any one non-fixed-route mode; is a subrecipient under the 5311 Rural Area Formula Program; or belongs to any American Indian tribe.

Table 18: Wisconsin Transit Asset Management Plan State of Good Repair Performance and Targets

Measure	2019 Performance (%)	2020 Target (%)
Rolling Stock (Percent of revenue service vehicles that have met or exceeded their useful life benchmark)		
Automobile (4 ¹)	94.87	77.00
Minivan (4)	68.52	51.00
Bus (12)	60.98	44.00
Cutaway (7)	51.79	47.00
School bus (12)	0.00	100.00
Van (4)	88.64	27.00
Equipment (Percent of non-revenue service vehicles that have met or exceeded their useful life benchmark)		
Automobiles (4)	0.00	33.00
Trucks & other rubber tire vehicles (4)	Not provided	29.00
Facilities (Percent of facilities rated below “3” on the Transit Economic Requirements Model (TERM) condition scale)	0.00	10.00
¹ The useful life in years.		
Source: Wisconsin Department of Transportation.		

Planning Area Performance

The three public transit providers in the planning area—La Crosse Municipal Transit Utility (MTU), Onalaska/Holmen/West Salem Public Transit (OHWSPT), and Scenic Mississippi River Transit (SMRT)—are all Tier II providers that opted to participate in the State of Wisconsin group TAM plan. (Providers can participate in only one group TAM plan which is why MTU participates in the Wisconsin group plan and not the Minnesota group plan.)

Table 19 reports the 2019 WisDOT TAM targets and the 2018 (most recent data available) performance for our general public transit agencies. OHWSPT and SMRT meet their respective state targets. MTU meets the state targets only for facilities and cutaway rolling stock, which is leased from the city of La Crescent to serve Route 10 Apple Express.

Table 19: State of Good Repair Performance (Percent at or Beyond the Useful Life) for General Public Transit Agencies

Measure	WisDOT TAM 2019 Target (%)	La Crosse MTU 2018 Performance (%)	OHWSPT 2018 Performance (%)	La Crosse County SMRT 2018 Performance (%)
Rolling Stock				
Bus	44.00	55.00	N/A	0.00
Cutaway	47.00	0.00 ¹	N/A	0.00
Minivan	51.00	N/A	6.25	N/A
Equipment				
Automobiles	33.00	100.00	N/A	N/A
Trucks	29.00	100.00	N/A	N/A
Facilities	10.00	0.00	N/A	0.00

¹ Leased from the city of La Crescent, MN to serve Route 10 Apple Express.
Acronyms: TAM, Transit Asset Management; MTU, Municipal Transit Utility; OHWSPT, Onalaska/Holmen/West Salem Public Transit; SMRT, Scenic Mississippi River Transit.

How the LAPC Supports the State Targets

The LAPC supports the State SGR targets through the award of STP-U funds to transit projects and by processing TIP amendments for transit projects in a timely manner.

The last two cycles (2019-2024 and 2020-2025) of the STP-U has resulted in nearly \$1.7 million being awarded to the city of Onalaska for ten vans and to the city of La Crosse for four buses.

The 2020-2023 TIP as amended in May 2020 includes 10 transit capital projects funded through the Surface Transportation Block Grant (STBG), 5339 Bus and Bus Facilities, 5310 Enhanced Mobility of Seniors & Individuals with Disabilities, and Volkswagen Mitigation programs:

- ⇒ MTU purchase of one 35-ft Diesel Bus. (Capital acquired in 2020.)
- ⇒ MTU purchase of one 35-ft Clean Diesel Bus. (Capital acquired in 2021.)
- ⇒ MTU Buses, MTU Public Transit, 3 MTU Buses.
- ⇒ MTU Low- or No-Emission - 2 Electric Buses, 2 Charging Stations, Infrastructure on Electric Grid.
- ⇒ Transit Vans, OHWS Public Transit, 6 Transit Vans.
- ⇒ Three (3) medium bus replacement vehicles for Vernon County Rehabilitation Center.
- ⇒ Two battery electric cutaway buses and associated infrastructure equipment for Scenic Mississippi Regional Transit (SMRT) service.

Wholly bus capital projects comprise 14.1 percent of the projects and more than \$6 million (includes \$2.6 million obligated in 2019) of the funding in the 2020-2023 TIP as amended in May 2020. Two additional projects for Couleecap and Vernon County have transit capital components.

Public Transportation Safety Measures

Four transit safety measures were established in the [National Public Transportation Safety Plan](#) (Federal Transit Administration (FTA), January 2017)—a national plan required of the FTA by Subpart D of 49 CFR Part 670. The purpose of the Safety Plan is to guide the national effort in managing the safety risks and safety hazards within our public transportation systems.

The transit measures include:

- ⇒ Total number of reportable³⁵ fatalities and rate per total vehicle revenue miles by mode.
- ⇒ Total number of reportable injuries and rate per total vehicle revenue miles by mode.
- ⇒ Total number of reportable events and rate per total vehicle miles by mode.
- ⇒ Mean distance between major mechanical failures by mode.

Operators of a public transportation system that receive Federal financial assistance under 49 U.S.C. Chapter 53, exclusive of operators that receive assistance only under 49 U.S.C. 5310 and/or 49 U.S.C. 5311 (i.e. SMRT), must develop a Public Transportation Agency Safety Plan. Because these plans have a Federal Rule deadline of July 19, 2020 and a new compliance deadline of December 31, 2020,³⁶ the safety performance and targets for La Crosse MTU and OHWSPT were not able to be incorporated into this MTP.

Minnesota and Wisconsin State Targets and Performance

Neither Minnesota nor Wisconsin is an operator of a public transportation system and thus is not required to develop a safety plan. WisDOT has, however, developed a plan template for its operators to use in developing their own safety plans.

³⁵ A reportable event is one that meets any National Transit Database reporting threshold: occurs on transit right-of-way or infrastructure, at a transit revenue facility, at a maintenance facility or rail yard, during a transit-related maintenance activity; or involves a transit-revenue vehicle.

³⁶ As posted on the Federal Transit Administration website: “In light of the extraordinary operational challenges presented by the COVID-19 public health emergency, FTA issued a [Notice of Enforcement Discretion](#) effectively extending the PTASP compliance deadline from July 20, 2020 to December 31, 2020.”

Planning Area Performance

As recipients of the 5307 Urbanized Area Formula Grant (among others), the La Crosse MTU and the OHWSPT must each prepare a Safety Plan as required under 49 CFR Part 673. The Plans have a deadline of July 19, 2020 and will be finalized too late to be incorporated into this MTP update. The following information provides the safety performance for MTU and OHWSPT as obtained from the National Transit Database (NTD). Data for major mechanical failures is not available for OHWSPT.

No fatalities have been reported for any of our transit operators from 2014-2018. The MTU reported one injury for its fixed-route service in 2014 and no injuries for its complementary paratransit, Mobility Plus. OHWSPT reported one injury in 2014 and two in 2015. The occurrences are so low that their rates are zero. The same applies to the rates for reportable events. MTU reported two events in 2014 and OHWSPT reported four in 2015 and one in 2016.

Figure 41 illustrates the mean distance in vehicle revenue miles between major mechanical failures for MTU's fixed route and complementary paratransit services. The trends in this measure are directly impacted by the age and condition of the rolling stock. As vehicles remain in operation beyond their useful life, they are more likely to experience frequent major breakdowns, resulting in a decreasing trend in the mean distance between breakdowns.

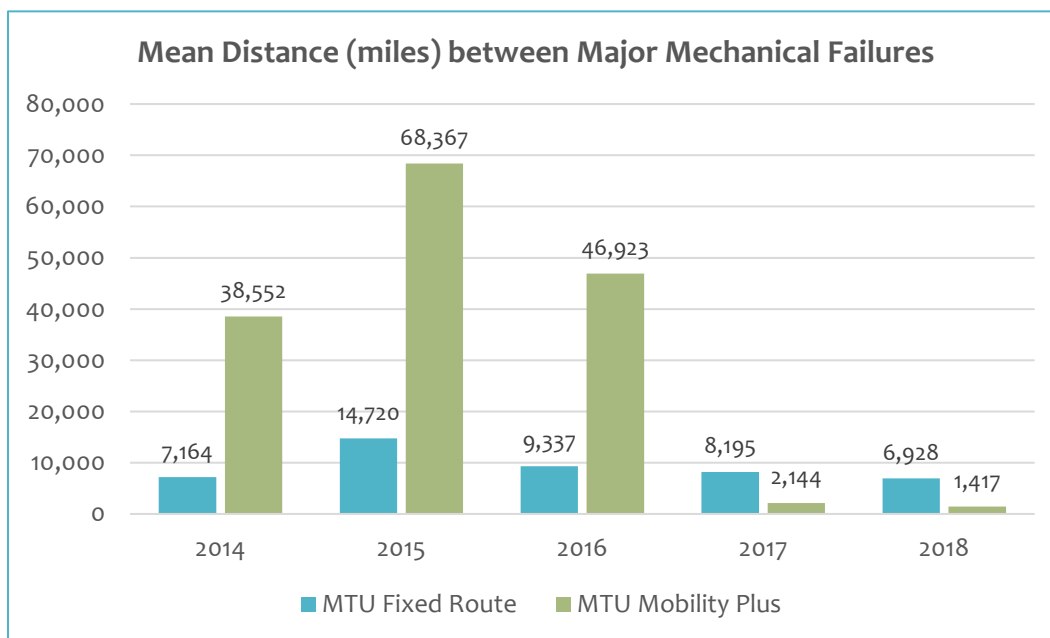


Figure 41: Mean distance between major mechanical failures. Source: National Transit Database, Federal Transit Administration.

How the LAPC Supports Transit Safety

The LAPC supports transit safety by awarding STP-U funds to bus capital projects. As stated in the section on SGR, the last two cycles (2019-2024 and 2020-2025) of the STP-U has resulted in nearly \$1.7 million being awarded to the city of Onalaska for ten vans and to the city of La Crosse for four buses. Improving the condition and reliability of the rolling stock results in fewer breakdowns and increasing the mean distance between major mechanical failures.

Local Tracking Measures

The LAPC has maintained around 30 tracking measures designed to illustrate the performance of the planning area as related to the [10 planning factors](#). Measures available at the county subdivision level are aggregated and illustrated at the planning area level. Other measures are illustrated for La Crosse County (most of the planning area is in La Crosse County) or for the La Crosse-Onalaska, WI Metropolitan Statistical Area (MSA), which includes La Crosse County, WI and Houston County, MN.

With adoption and integration of the Federal performance measures and State targets, the LAPC tracking measures have been updated to mirror the Federal measures at the planning area level when possible. Additional local tracking measures are continued or modified to better align with [Federal goals](#) and [planning factors](#), State targets, and [local goals and guiding principles](#).

The LAPC tracking measures are outlined below. Those that have been addressed in another part of this plan are linked to that section. The other measures are discussed here.

The area of interest is the planning area unless otherwise noted.

- ⇒ Freight Movement and Economic Vitality
 - [Median income](#)
 - [Poverty](#)
 - [Employment](#) in the Western Workforce Development Area
 - [Freight movement](#) in La Crosse County
- ⇒ Safety
 - [Fatalities](#)
 - [Fatality rate](#) for La Crosse County
 - [Serious injuries](#)
 - [Serious injury rate](#) for La Crosse County
 - [Non-motorized fatalities and serious injuries](#)
 - Highway-rail accidents/incidents
 - [Reportable injuries and rate per total vehicle revenue miles by service.](#)

- [Reportable events and rate per total vehicle miles by service.](#)
- ⇒ System Management, Operations, and Reliability
 - [Mean distance between major mechanical failures by service](#) (federally classified as a safety measure)
 - Trips per vehicle revenue hour by service provider
 - Trips per vehicle revenue mile by service provider
 - On-time performance of the Empire Builder (Amtrak reliability)
 - Percent of tows locking through Lock 7 at Dresbach, MN that experienced delay
- ⇒ Accessibility and Mobility
 - [Annual trips in the planning area made on general public transit](#)
 - [Annual passengers boarding/alighting at the La Crosse Amtrak Station](#)
 - Vehicle revenue hours of service for La Crosse MTU
 - [Bike lane miles in the planning area](#)
 - [Percent of centerline miles in the urbanized area with a sidewalk or a trail on one or both sides](#)
- ⇒ Integration and Connectivity
 - Transfers between La Crosse MTU and OHWSPT
- ⇒ Preservation and Infrastructure
 - [Percent of revenue service vehicles by service provider that have met or exceeded their useful life benchmark](#)
- ⇒ Environment and Quality of Life
 - Air quality for ozone in La Crosse County
 - Air quality for particulates (PM_{2.5}) in La Crosse County
 - [Vehicle miles traveled](#) in the MSA

Safety Measures

Highway-Rail Accidents/Incidents

Figure 42 shows the number of highway-rail accidents/incidents that occurred in the planning area between 2014 and 2018. Table 20 provides additional details.

One of the six incidents resulted in a fatality. On January 29, 2018 a 11:15 p.m. a pedestrian was found lying in a Canadian Pacific (CP) siding track having been killed during the process of securing cars and cutting away the engines.

Two of the incidents involved Amtrak trains—one in 2016 at St Cloud St and Liberty St in La Crosse and one in 2018 on Shore Acres Rd in La Crescent. The incident in La Crosse involved a bicyclist who drove around/through the gate and subsequently fled the scene. The incident in La Crescent involved a CP employee driving through a temporary crossing.

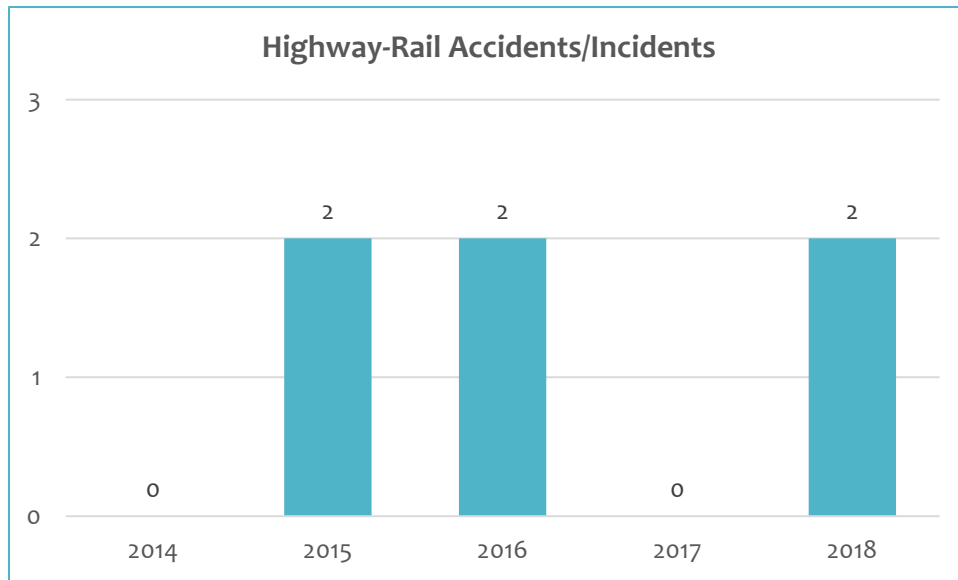


Figure 42: Highway-rail accidents/incidents. Source: Federal Railroad Administration, <http://safetydata.fra.dot.gov/OfficeofSafety>.

Table 20: Characteristics of Highway-Rail Accidents/Incidents Charted in Figure 42

Date/Time	Railroad	Location	Injuries/Severity	Explanation
9/15/15 5:05 am	BNSF	Jackson St at 2 nd St/Norplex Dr, La Crosse	0	Train struck truck trailer after driver went around/through a temporary barricade
11/13/15 8:54 am	BNSF	33 rd St at Rivercrest Mobile Home Park, La Crosse	0	Auto struck freight train while moving over crossing; no additional narrative provided; weather likely a factor (raining)
9/11/16 7:09 pm	Amtrak	St Cloud St/Liberty St just southwest of yard, La Crosse	0	Bicyclist fled scene after riding around gates and being struck by Amtrak train
10/11/16 1:30 am	BNSF	Ward Ave at Chart plant driveway, La Crosse	1 injured	Auto drove into the first car of trainset; no additional narrative provided
1/29/18 11:15 pm	CP	Siding track near Avon St/Hagar St, La Crosse	1 killed	22-yr old pedestrian killed by freight train during process of separating engines from cars
7/4/18 11:54 am	Amtrak	Temporary crossing near Shore Acres Rd, La Crescent	1 injured	Truck with two occupants and driven by CP trainmaster struck by Amtrak train on private crossing for railroad employees to access work area

BNSF: Burlington Northern & Santa Fe; CP: Canadian Pacific

Source: Rail Equipment Accidents (6180.54) and Highway-Rail Grade Crossing Accident/Incident Reports, Federal Railroad Administration, <http://safetydata.fra.dot.gov/OfficeofSafety>.

System Management, Operations, and Reliability Measures

Trips per Vehicle Revenue Hour

Trips per vehicle revenue hour (VRH) is a measure of service effectiveness and performance measure reported in the annual agency profiles available from the Federal Transit Administration's (FTA) National Transit Database (NTD).

Except for a 0.5 percent increase for Scenic Mississippi River Transit (SMRT) between 2016 and 2017, general public transit services providing service to or within the planning area experienced an annual decline in service effectiveness from 2014 to 2018.

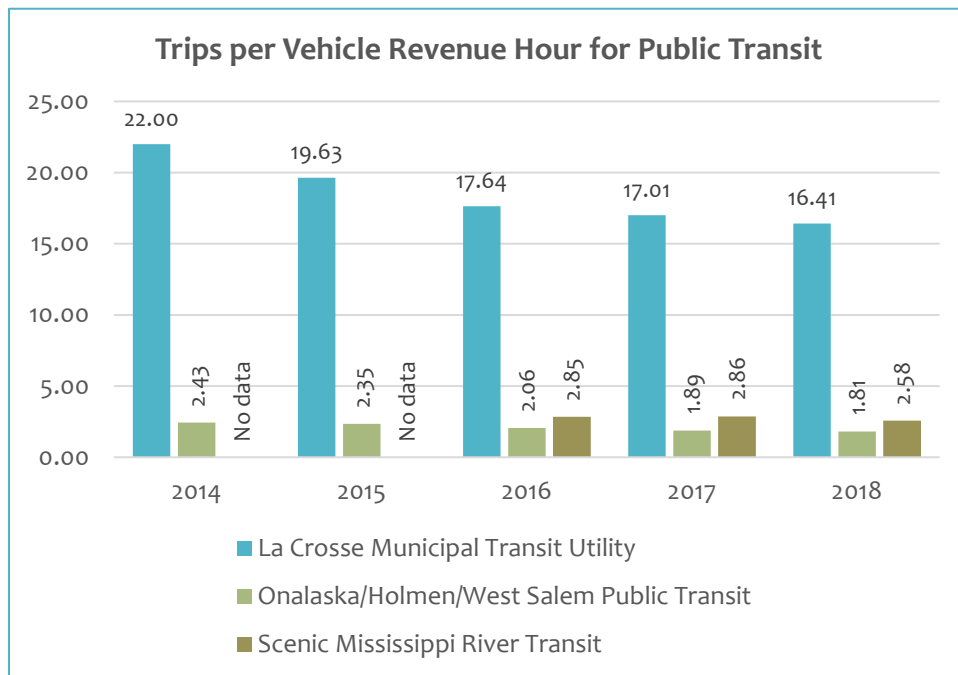


Figure 43: Trips per vehicle revenue hour for general public transit services. Source: Annual profiles, National Transit Database, Federal Transit Administration.

Trips per Vehicle Revenue Mile

Trips per vehicle revenue mile (VRM) is another measure of service effectiveness reported in the annual agency profiles. Unlike trips per VRH, which are declining for all services, trips per VRM (Figure 44) are rather flat for La Crosse Municipal Transit Utility (MTU) and Scenic Mississippi River Transit (SMRT) and trending slightly downward for Onalaska/Holmen/West Salem Public Transit (OHWSPT).

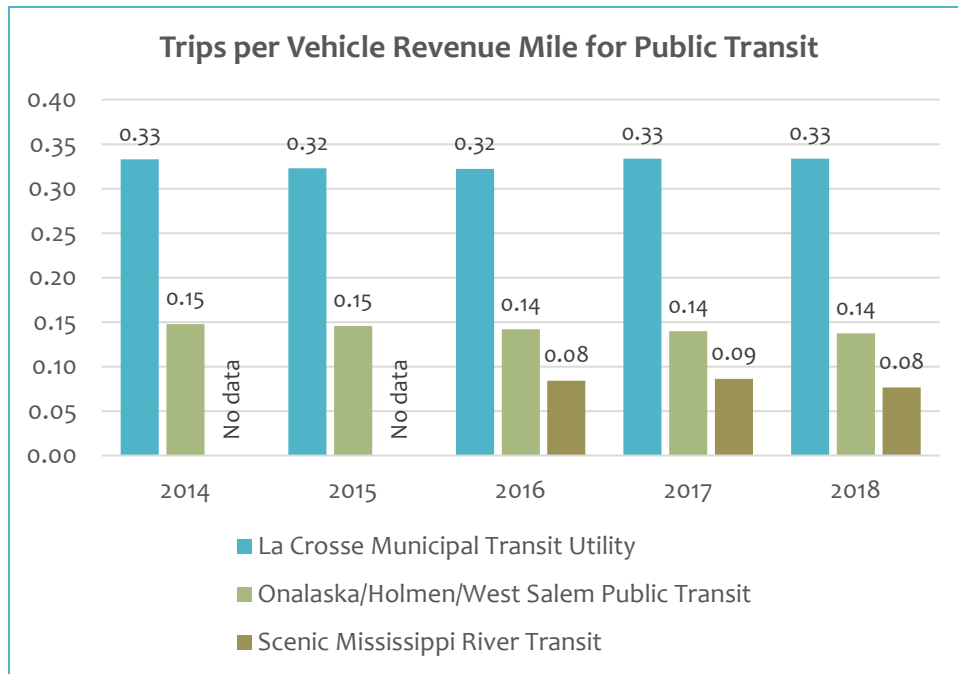


Figure 44: Trips per vehicle revenue mile for general public transit services. Source: Annual profiles, National Transit Database, Federal Transit Administration.

On-time performance of the Empire Builder (Amtrak reliability)

On-time performance is a quality of service measure of reliability and a possible indicator of future ridership. Although the impact on ridership is observed more for bus transit,³⁷ consistent poor performance could result in discretionary riders choosing such competing modes as air travel, intercity motor coach, and personal automobile. The lack of reliability in the Empire Builder was the main reason for Amtrak pursuing a feasibility study and Wisconsin and Minnesota partnering on the Twin Cities-Milwaukee-Chicago Intercity Passenger Rail Service Project. (See the discussion on [passenger services](#) in Chapter 4 for more information.)

Figure 45 shows the on-time performance for all stations along the Empire Builder long-distance route between Chicago and Portland/Seattle. Amtrak's on-time performance standard is 80.0 percent, which was not met in any of the five years. Performance was improving until 2018 when Amtrak- and host railroad-responsible delays dropped performance to 25.0 percent.

³⁷ Chapter 4 of the [Transit Capacity and Quality of Service Manual, 3rd Edition](#) provides a comprehensive discussion of the impacts of quality of service on ridership. The Manual is designed for public transit practitioners and policy makers, generally for city and regional services. It does not include discussion of long-distance services such as the Empire Builder.

Amtrak-responsible delays included holding for connections for other trains and buses and crew- and engineer-related delays. Delays caused by a host railroad [Burlington Northern & Santa Fe (BNSF), Canadian Pacific (CP), Metra] included freight train interference (BNSF and CP), temporary slow orders (BNSF and CP), delays for meeting or following commuter trains (Metra), and signal failures or other signal delays (Metra).

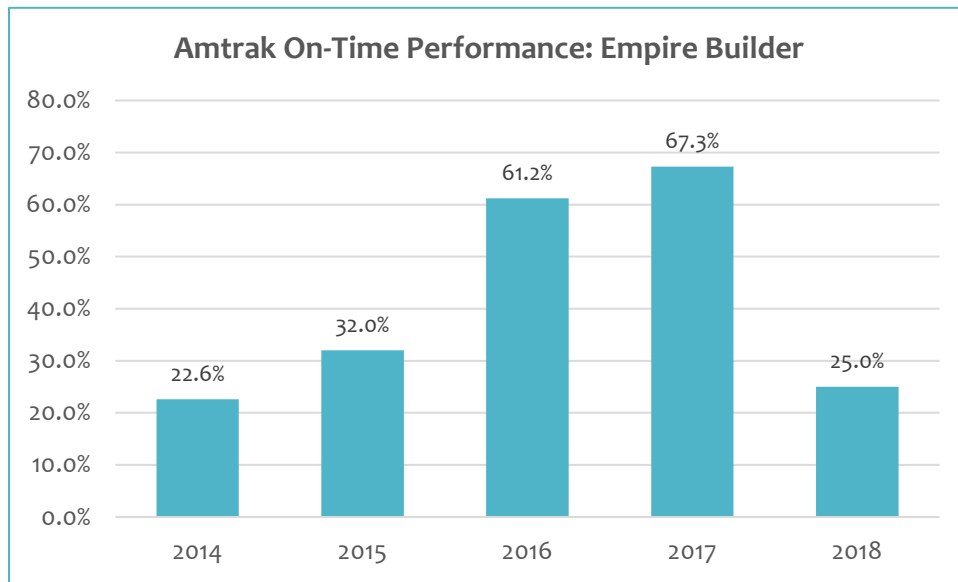


Figure 45: Amtrak on-time performance for the Empire Builder. Source: Fiscal year fourth quarter reports (2014-2018) for Performance and Service Quality of Intercity Passenger Train Operations, Federal Railroad Administration.

Percent of Tows Delayed

The LAPC tracks the percent of tows delayed when locking through Lock and Dam 7 at Dresbach as a measure for the efficiency of water freight operations.

The lock and dam system was built in the 1930s and designed to handle tow lengths of up to 600 feet. Today, tows regularly push 15 barges with a length up to 1,200 feet. These large tows require double lockages (half the barges are split off and locked through as a second group), which can be costly and time consuming.

Figure 46 shows how the percent of tows delayed has increased annually. Part is due to the increased length in tows and part is due to the increase in recreational watercraft using the lock.

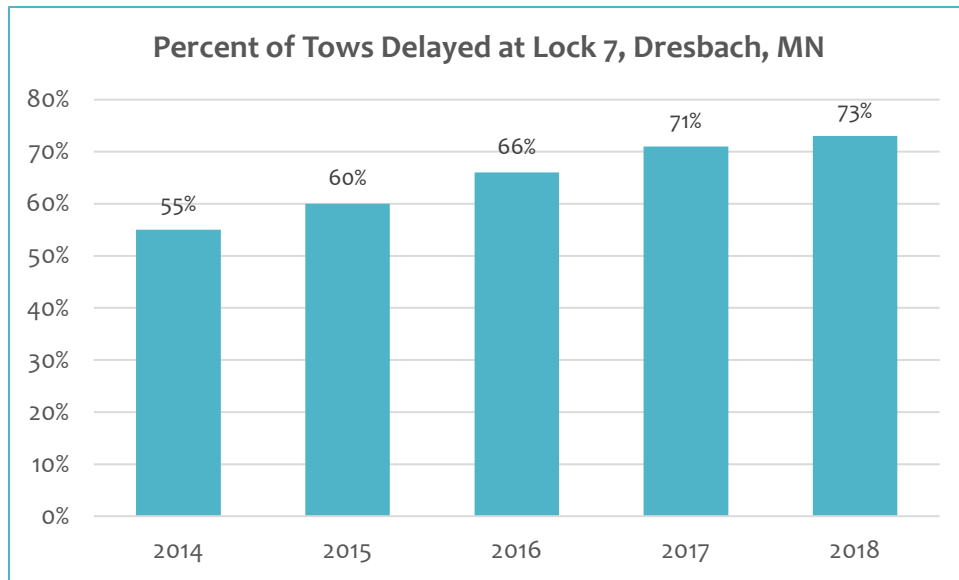


Figure 46: Percent of tows delayed at Lock 7, Dresbach, MN. Source: LPMS Summary by River Basin, Institute for Water Resources, U.S. Army Corps of Engineers.

Accessibility and Mobility Measures

Vehicle revenue hours of service

Vehicle revenue hours of service is a measure of transit availability, reflecting the number of hours during the day when service is available.

Figure 47 shows annual VRH for La Crosse MTU, OHWSPT, and SMRT.

MTU and SMRT experienced moderate growth in hours of service. In 2018, MTU was up 7.8 percent from 2014 and 2.1 percent from the five-year average. SMRT was up 8.6 percent increase from 2016 (first year reported in the NTD) and 5.5 percent from the three-year average (2016-2018).

Although OHWSPT experienced 1.4 percent fewer hours in 2018 than in 2014, VRH in 2018 was still up 0.4 percent over the five-year average.

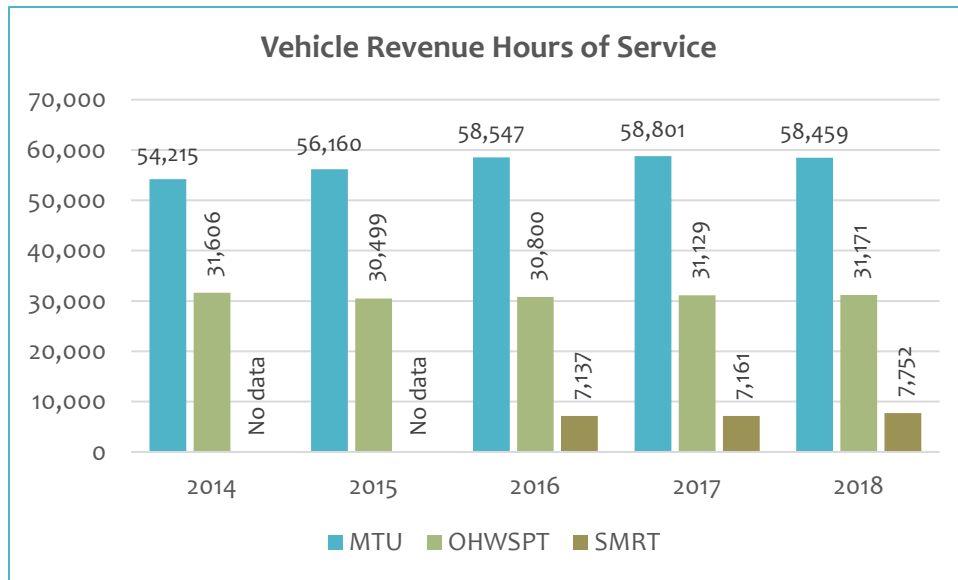


Figure 47: Vehicle revenue hours of service for general public transit services.

Source: Annual profiles, National Transit Database, Federal Transit Administration.

Integration and Connectivity

MTU and OHWSPT instituted a free transfer system in 2004. Riders of MTU can transfer for free to OHWSPT and vice versa at Valley View Mall and at Center 90. This agreement effectively increases the service areas of each provider and creates an affordable means for riders to travel between communities.

Figure 48 shows annual transfers from OHWSPT to MTU.³⁸ The number of transfers has declined annually from 2014 to 2018, dropping 17.5 percent over the time period. This is likely partly the result of MTU expanding through Onalaska along Main St and directly serving Onalaska residents and eliminating their need for transfers.

³⁸ The number of transfers from La Crosse Municipal Utility to Onalaska/Holmen/West Salem Public Transit is not available because transfers also occur at Valley View Mall between MTU Route 5 Valley View and MTU Route 9 Onalaska. Transfer slips are the same for all transfers and drivers do not inquire nor record the vehicle onto which the rider is transferring.

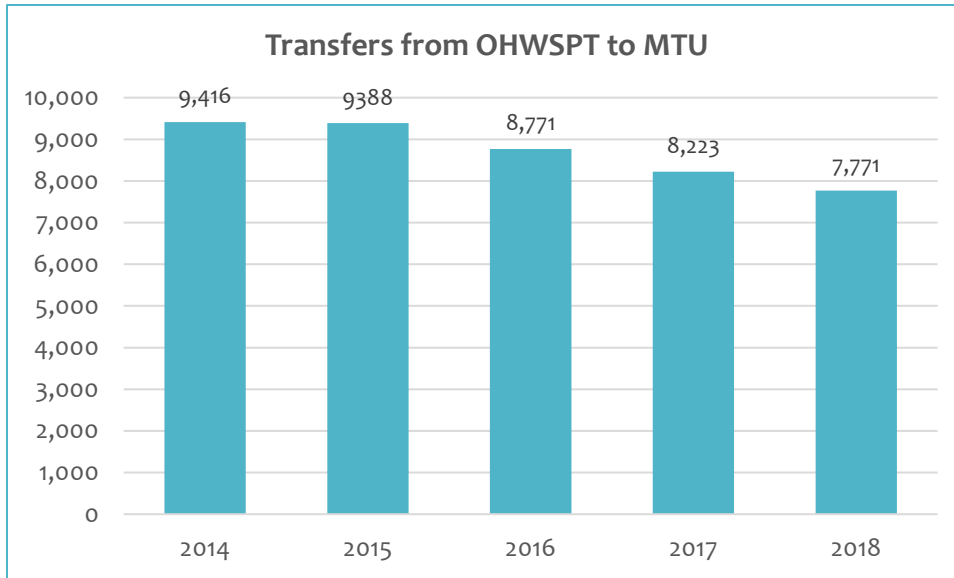


Figure 48: Transfers between La Crosse Municipal Transit Utility and Onalaska/Holmen/West Salem Public Transit. Source: Monthly total reports, Running, Inc.

Environment and Quality of Life

Air quality for ozone (Figure 49) and particulates (Figure 50) in La Crosse County continues to be excellent. The three-year averages in design values for La Crosse County continue to be below the National Ambient Air Quality Standards (NAAQS). Until 2016-2018, the County experienced a consistent decline in particulates.

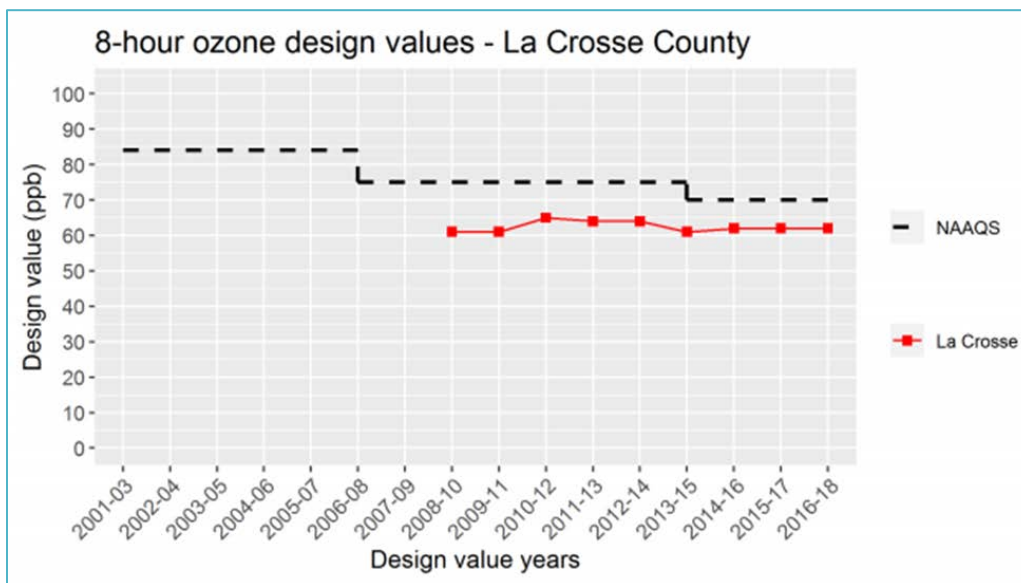


Figure 49: 8-hour ozone design values: La Crosse County. Source: Wisconsin Department of Natural Resources 2019 Wisconsin Air Quality Trends by County 2001-2018.

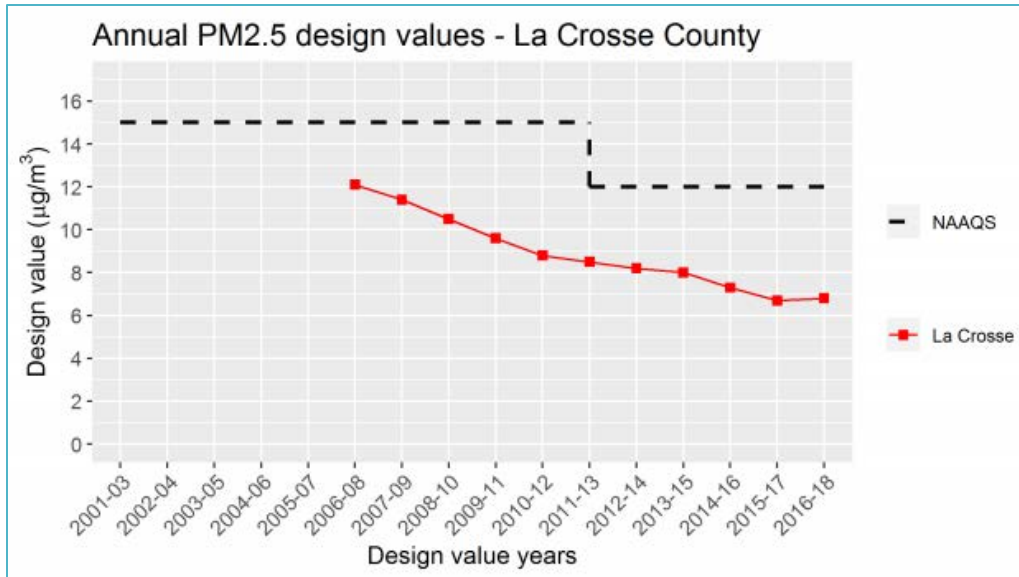


Figure 50: Annual PM2.5 design values: La Crosse County. Source: [Wisconsin Department of Natural Resources 2019 Wisconsin Air Quality Trends by County](#) 2001-2018.

This page intentionally left blank.