

Programmed Projects and System Performance

BACKGROUND

MAP-21 and the FAST Act require MPOs to incorporate performance-based planning and programming when developing the MTP and the TIP. 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.

LAPC PERFORMANCE MONITORING PROCESS

The LAPC, as a metropolitan planning organization, is required to establish performance targets that address the performance measures established under 23 CFR 490 (where applicable), 49 U.S.C. 5326(c), and 49 U.S.C. 5329(d). The measures and targets are used to track progress toward meeting performance goals for the planning area. Rather than develop their own targets, the LAPC agreed in 2017 to plan and program projects that support WisDOT and MnDOT performance targets. The cooperative agreements between the LAPC and its transportation partners ([LAPC/MnDOT/MTU](#) and [LAPC/WisDOT/MTU](#)) include the commitment to cooperatively select and establish performance targets.

The LAPC Policy Board approved in November 2020 to plan and program projects that contribute toward the accomplishment of State targets.

As a small attainment MPO, the LAPC TIP reports the Wisconsin and Minnesota targets for five Highway Safety Improvement Program (HSIP) measures, nine National Highway Performance Program (NHPP) measures, three Transit Asset Management (TAM) measures, and seven transit safety measures relevant to our planning area.

HIGHWAY SAFETY TARGETS

The Wisconsin and Minnesota targets for the HSIP measures are illustrated in tables 6 and 7, respectively. Each measure is based on a five-year rolling average and targets are updated annually.

WisDOT targets are adjusted from the baseline to reflect a goal of a 2% reduction in fatalities and fatality rate and a 5% reduction in serious injuries, serious injury rate, and non-motorized fatalities and serious injuries.

TABLE 6: WISDOT HIGHWAY SAFETY IMPROVEMENT PROGRAM PERFORMANCE TARGETS, 2021

Safety Performance Measure	2015-2019 baseline	2019	2020	2021
<i>Fatalities</i> : Number of fatalities	587.8	555.7	564.7	576.0
<i>Fatality Rate</i> : Fatalities per 100 million vehicle miles traveled	0.908	0.915	0.888	0.890
<i>Serious Injuries</i> : Number of serious injuries	3,050.4	2,967.6	2,907.0	2,897.9
<i>Serious Injury Rate</i> : Serious injuries per 100 million vehicle miles traveled	4.718	4.785	4.585	4.482
<i>Non-motorized Fatalities and Serious Injuries</i> : Number of non-motorized fatalities and non-motorized serious injuries	368.6	342.0	344.7	350.2

Source: Wisconsin Department of Transportation.

The 2021 MnDOT targets were established based on a trend from the 2019 outcome to the Strategic Highway Safety Plan goal for 2025 of no more than 225 traffic deaths and 980 serious injuries.

TABLE 7: MNDOT HIGHWAY SAFETY IMPROVEMENT PROGRAM PERFORMANCE TARGETS, 2021

Safety Performance Measure	2015-2019 baseline	2019	2020	2021
<i>Fatalities</i> : Number of fatalities	381.2	372.2	375.4	352.4
<i>Fatality Rate</i> : Fatalities per 100 million vehicle miles traveled	0.644	0.622	0.626	0.582
<i>Serious Injuries</i> : Number of serious injuries	1,629.6	1,711.0	1,714.2	1,579.8
<i>Serious Injury Rate</i> : Serious injuries per 100 million vehicle miles traveled	2.755	2.854	2.854	2.606
<i>Non-motorized Fatalities and Serious Injuries</i> : Number of non-motorized fatalities and non-motorized serious injuries	285.8	267.5	317.0	281.2

Source: Minnesota Department of Transportation.

Fatalities in the planning area in 2019 (3) were down 57.1% from the 5-year average for 2015-2019 (7.0) while serious injuries in 2019 (61) were up 6.3% from the 5-year average for 2015-2019 (57.4). Non-motorized fatalities and serious injuries in 2019 (9) was at its lowest total since 2015, resulting in a drop of 6.3% from the 5-year average of 9.6.

The rates (number of occurrences divided by million vehicle miles traveled) for fatalities, serious injuries, and non-motorized fatalities and serious injuries for 2012-2019 are shown in Figure 2 along with the trends in the moving averages from 2012-2016 to 2015-2019. From 2012-2016 to 2015-2019, the 5-year averages for the serious injury and non-motorized rates declined 25.6% and 29.5%, respectively. Then

change in the 5-year average fatality rate between the two time periods increased 7.9% because of the high number of fatalities in 2017 (13) and second lowest VMT in 2015-2019.

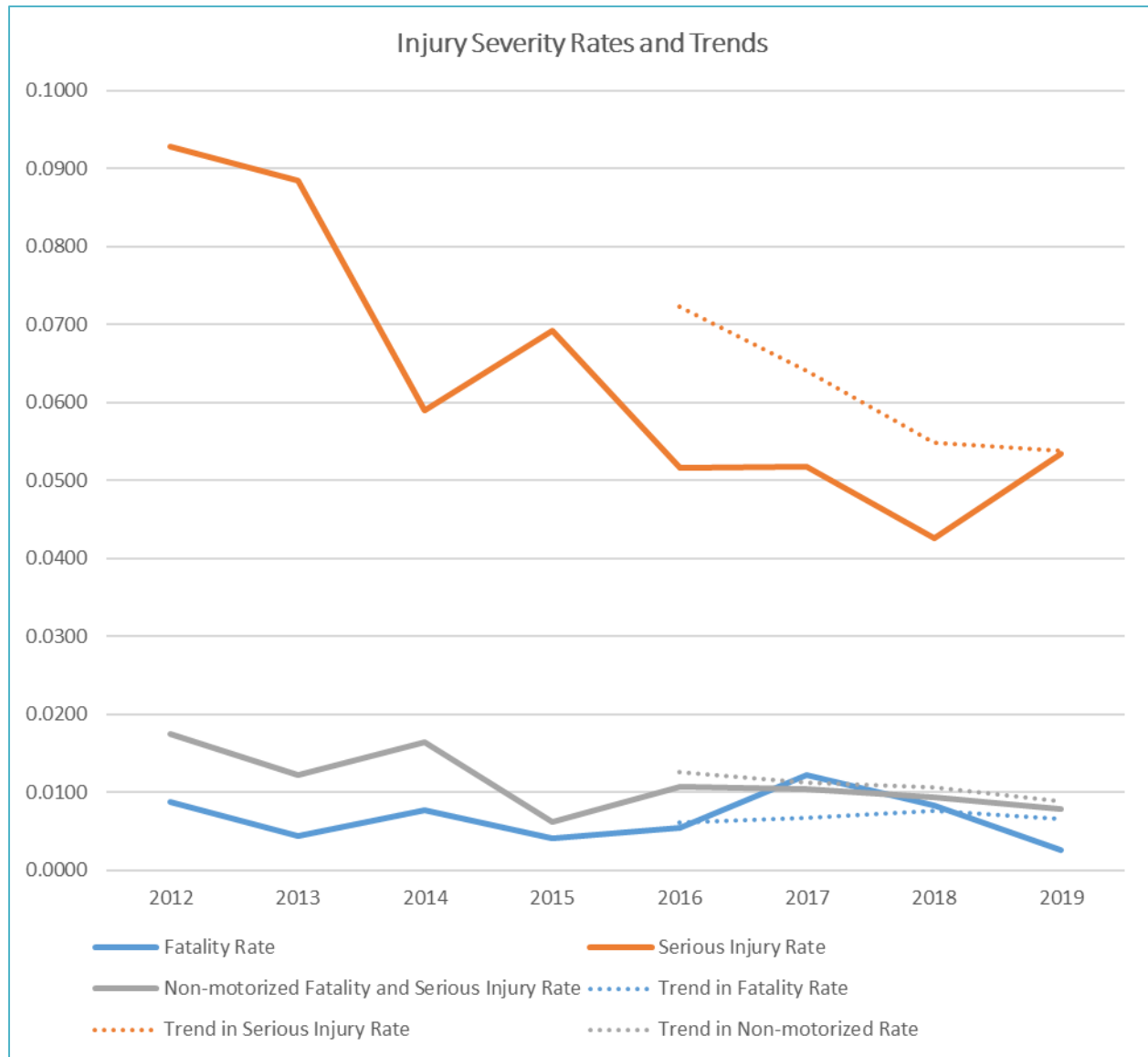


Figure 2: Injury severity rates and trends, 2012-2019. Rates are calculated using MPA totals and La Crosse County VMT. Trend lines derived from 5-year rolling averages. *Data sources:* TOPS Lab, UW-Madison; WisDOT website; MnDOT.

CONDITION AND PERFORMANCE TARGETS

Table 8 lists the federal performance measures for the National Highway Performance Program (NHPP) and the targets established by the Wisconsin and Minnesota DOTs. Wisconsin DOT made no adjustments to their 4-year targets as is allowed by federal regulation at the period midpoint. Minnesota DOT, on the other hand, adjusted their 4-year targets for bridges in “good” condition for Interstate reliability.

TABLE 8: WISDOT & MNDOT NATIONAL HIGHWAY PERFORMANCE PROGRAM TARGETS, 2018-2021

Performance Measure	2-yr target (2018-2019)		4-yr target (2018-2021)	
	WisDOT	MnDOT	WisDOT	MnDOT
<i>Pavement Condition</i>				
Interstate – Percentage pavements in “Good” condition	NA ¹	NA	45%	55%
Interstate – Percentage pavements in “Poor” condition	NA	NA	5%	2%
Non-Interstate NHS ² – Percentage pavements in “Good” condition	20%	50%	20%	50%
Non-Interstate NHS – Percentage pavements in “Poor” condition	12%	4%	12%	4%
<i>Bridge Condition</i>				
Percentage of NHS bridges by deck area in “Good” condition	50%	50%	50%	35% ³
Percentage of NHS bridges by deck area in “Poor” condition	3%	4%	3%	4%
<i>Travel Time Reliability</i>				
Interstate – Percent of person-miles traveled that are reliable	94.0%	80.0%	90.0%	80.0%
Non-Interstate NHS – Percent of person-miles traveled that are reliable	NA	NA	86.0%	90.0% ⁴
Interstate – Truck travel time reliability index	1.40	1.50	1.60	1.50

¹ NA: Not required by Code of Federal Regulations (CFR).

² National Highway System.

³ Adjusted down from 50%.

⁴ Adjusted up from 75.0%

Sources: Wisconsin and Minnesota Departments of Transportation.

Table 9 reports the pavement and bridge condition and travel time reliability in the metropolitan planning area (MPA) for 2018 and 2019.

Over 73% of Wisconsin Interstate pavements (2018)¹ and over 70% of Minnesota Interstate pavements (2019) in the MPA are rated “good.” None of the Interstate in the MPA is rated “poor.”

The percentage of pavements in the Minnesota MPA rated “good” for the non-Interstate National Highway System (NHS) went up slightly from just over 65% in 2018 to nearly 69% in 2019. Although “good” pavements in the Wisconsin MPA are at a low 25%, the percentage of “poor” pavements is also low (11%), revealing that a significant percentage (64%) of pavements are only in “fair.”

All the bridges in the Minnesota portion of the planning area and just over 56% of the bridges in the Wisconsin portion of the planning area are rated “good.” Less than 1% of bridges (1) in the planning area are rated “poor.”

Travel time reliability in the planning area as calculated by the Wisconsin Traffic Operations and Safety Laboratory is 100% for the Interstate, 90.4% for the non-Interstate NHS, and 1.25 for the Interstate truck travel time reliability index.

¹ Pavement condition for Wisconsin pavements has not yet been made available for 2019.

TABLE 9: PLANNING AREA PERFORMANCE: NATIONAL HIGHWAY PERFORMANCE PROGRAM MEASURES

Performance Measure	2018		2019	
	WI MPA	MN MPA	WI MPA	MN MPA
<i>Pavement Condition</i>				
Interstate – Percentage pavements in “Good” condition	73.71	73.57	NA ¹	70.31
Interstate – Percentage pavements in “Poor” condition	0.00	0.00	NA	0.00
Non-Interstate NHS – Percentage pavements in “Good” condition	25.09	65.08	NA	68.67
Non-Interstate NHS – Percentage pavements in “Poor” condition	10.95	0.00	NA	0.00
<i>Bridge Condition</i>				
Percentage of NHS bridges by deck area in “Good” condition	60.36	81.70	56.34	100.00
Percentage of NHS bridges by deck area in “Poor” condition	0.00	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	NA
Non-Interstate NHS – Percent of person-miles traveled that are reliable	89.0	94.3	90.4	NA
Interstate – Truck travel time reliability index	1.16	1.14	1.25	NA

¹ NA: Data not yet available.

Sources: Wisconsin and Minnesota Departments of Transportation; Wisconsin Traffic Operations and Safety Laboratory, University of Wisconsin-Madison; MnDOT performance dashboard.

TRANSIT ASSET MANAGEMENT (TAM) TARGETS

49 CFR 625 establishes a National Transit Asset Management (TAM) System to monitor and manage the State of Good Repair (SGR) of public transportation capital assets to enhance safety, reduce maintenance costs, increase reliability, and improve performance. Tier II transit providers like our La Crosse Municipal Transit Utility (MTU) and Onalaska Shared Ride (OSR) must either develop their own TAM plan or participate in a group TAM plan. La Crosse MTU and OSR have both have opted to join the Wisconsin group TAM plan. Performance measures relevant to our area include:

- **Rolling stock:** Percent of 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; and,
- **Facility:** Percent of facilities rated below “3” on the TERM condition scale.

Table 10 summarizes the performance for all bus, cutaway, and minivan vehicles (the types of vehicles used by MTU or OSR) assessed in the State TAM Plan. WisDOT established targets whose percentages are rounded down from the respective percentage of vehicles exceeding the ULB. Under these targets, the rolling stock performance for MTU and OSR vehicles meets State targets.

The State targets for **Equipment** are 33 percent for automobiles and 29 percent for trucks or other rubber-tired vehicles. The State target for **Facilities** is 10 percent.

TABLE 10: STATE OF GOOD REPAIR FOR ROLLING STOCK FOR LA CROSSE MUNICIPAL TRANSIT UTILITY (MTU) AND ONALASKA SHARED RIDE (OSR)

Vehicle Type	ULB ¹ (years)	2021 TAM ² Target	Wisconsin		MTU		OSR	
			# vehicles	>ULB	# vehicles	>ULB	# vehicles	>ULB
Bus	12	44.00%	158	58.22%	20	20.00%	0	0.00%
Cutaway	7	47.00%	536	54.29%	1	100.00%	0	0.00%
Minivan	4	51.00%	488	47.95%	0	0.00%	13	38.46%

¹Useful life benchmark.

²Transit Asset Management.

Source: Wisconsin Department of Transportation Transit Asset Management Plan October 2019 to 2022, updated September 2020.

PUBLIC TRANSPORTATION AGENCY SAFETY PLAN TARGETS

La Crosse MTU and OSR each approved and certified their respective PTASP in December 2020. The baselines and targets developed through coordination between the transit agencies and LAPC staff are reported in Table 11.

TABLE 11: PUBLIC TRANSIT AGENCY SAFETY PLAN MEASURES AND TARGETS

Measure	La Crosse MTU		Onalaska Shared Ride	
	2014-2018 Baseline ¹	2021 Target ²	2014-2018 Baseline ¹	2021 Target ²
Total number of reportable fatalities	0.0	0.0	0.0	0.0
Rate of reportable fatalities per total VRM	0.0	0.0	0.0	0.0
Total number of reportable injuries	0.2	0.2	0.6	0.6
Rate of reportable injuries per total VRM	0.0	0.0	0.0	0.0
Total number of reportable safety events	0.4	0.2	2.0	2.0
Rate of reportable safety events per total VRM	0.0	0.0	0.0	0.0
Average distance between major mechanical failures	9,180.9	11,272.2	322,848.9	322,848.9

¹ 5-year average for the 5-yr period ending with the year of most recent data (2018).

² Best case from the 5-year averages for the three most recent 5-year periods (2012-2016, 2013-2017, 2014-2018) inclusive of the baseline period (2014-2018).