

## Performance Measures and the Chippewa-Eau Claire MPO

### Introduction

#### Transportation Improvement Programs (TIP)

The federal transportation bills MAP-21 and FAST Act require incorporation of Performance-Based Planning and Programming (PBPP) in the development of the Metropolitan Planning Organization (MPO) Long Range Transportation Plans (LRTP) and Transportation Improvement Programs (TIP). The Final Rule on Statewide and Nonmetropolitan Transportation Planning and Metropolitan Transportation Planning further defined that the TIP shall include, to the maximum extent practicable, a description of the anticipated effect of the TIP toward achieving the 23 CFR 490 performance measures targets identified in the metropolitan transportation plan, linking investment priorities to those performance targets (23 CFR 450.326(d)).

The Chippewa-Eau Claire Metropolitan Planning Organization has participated in performance-based planning and programming and intends to continue doing so under the pertinent rules, goals, and performance measure targets described here. In addition, the MPO will continue to actively comply with subsequent WisDOT targets and target dates, as required. The Chippewa-Eau Claire MPO webpage and the MPO's Long Range Transportation Plan and Transportation Improvement Program can be accessed here: <http://wcvrpc.org/Chippewa-Eau-Claire-MPO.html>.

The broad national performance measure goals (23 USC 150) are listed here:

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

From these goals, the specific national performance measures, as established under MAP-21/FAST Act (49 USC 625 and 23 CFR 490) are as follows. (In the Chippewa-Eau Claire Metropolitan Planning Area, Transit goals are being tracked by transit providers and CMAQ goals do not apply, as it is not a non-attainment area for air pollution):

- PM1 – Safety
  - 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
- PM2 – Infrastructure
  - Percentage of pavements of the Interstate System in Good condition
  - Percentage of pavements of the Interstate System in Poor condition
  - Percentage of pavements of the non-Interstate NHS in Good condition
  - Percentage of pavements of the non-Interstate NHS in Poor condition
  - Percentage of NHS bridges classified as in Good condition
  - Percentage of NHS bridges classified as in Poor condition
- PM3 – System Performance on NHS
  - Interstate Travel Time Reliability Measure: Percent of person-miles traveled on the Interstate that are reliable
  - Non-Interstate Travel Time Reliability Measure: Percent of person-miles traveled on the non-Interstate NHS that are reliable
- PM3 – Freight Movement
  - Freight Reliability Measure: Truck Travel Time Reliability (TTTR) Index
- Transit
  - Rolling Stock: The percentage of revenue vehicles (by type) that exceed the useful life benchmark (ULB).
  - Equipment: The percentage of non-revenue service vehicles (by type) that exceed the ULB.
  - Facilities: The percentage of facilities (by group) that are rated less than 3.0 on the Transit Economic Requirements Model (TERM) Scale.
  - Infrastructure: The percentage of track segments (by mode) that have performance restrictions. Track segments are measured to the nearest 0.01 of a mile.
- CMAQ - Congestion Reduction (as applicable)
  - Peak Hour Excessive Delay (PHED) Measure: Annual Hours of Peak Hour Excessive Delay (PHED) Per Capita
  - Non-Single Occupancy Vehicle Travel (SOV) Measure: Percent of Non-Single Occupancy Vehicle (SOV) Travel
  - Emissions Measure: Total Emission Reductions

#### Long Range Transportation Plan

The Chippewa-Eau Claire MPO first formally included a set of transportation related performance indicators in its 2010 Long Range Transportation Plan (LRTP). The full list of those indicators is included below. The MPO continued to track those indicators annually over the following years and published several years' worth of data in the 2016 Long Range Transportation Plan. This data shows trends and changes and, with continued tracking, will help illustrate the condition of the transportation system in this area. The indicators are shown below. To access the Long Range Transportation Plan, go to <http://wcrpc.org/Chippewa-Eau-Claire-MPO.html> and scroll down to its section. The Performance Indicators are in Chapter IX, which can be accessed independently of the entire plan.

#### *Long Range Transportation Plan – Performance Indicators*

1. Safety
  - a. Streets and Highways
    - i. Total crashes
    - ii. Total fatal crashes
    - iii. Total severe injury crashes
2. Accessibility and Mobility of People and Freight

- a. Streets and Highways
    - i. Level of Service (LOS)
    - ii. System mileage
  - b. Transit
    - i. Eau Claire Transit (fixed route), ECT ADA paratransit service (urban), Chippewa Falls Shared Ride Taxi
      - 1. Unlinked passenger trips
      - 2. Revenue miles of service
      - 3. Revenue hours of service
      - 4. Passengers per revenue mile
      - 5. Passengers per revenue hour
    - ii. Eau Claire Transit (fixed route), Chippewa Falls Shared Ride Taxi
      - 1. Percent urbanized area served by transit
      - 2. Percent urbanized area served by shared ride taxi
3. Integration and Connectivity of the Transportation System, Across and Between Modes for People and Freight
- a. Streets and Highways
    - i. Designated park-ride capacity and use
  - b. Air
    - i. Airport Passenger Volume (*enplanements*)
4. Efficient Management and Operations
- a. Streets and Highways
    - i. Deficient directional miles, based on Level of Service (LOS) determinations for base 2010 model network
    - ii. Hours of congested travel
  - b. Transit
    - i. Passengers/revenue hour of operation, passengers/revenue mile of operation, passenger miles traveled, number of passenger trips
5. System Preservation
- a. Streets and Highways
    - i. Pavement condition – number of miles and percent of total miles in each category
    - ii. Bridge Structure Condition – Sufficiency Rating
6. Regional Trends
- a. Population
  - b. Housing Units: Total, Occupied, and Vacant
  - c. Employment
  - d. Economic Development - Housing permits and housing razing by county and municipality

As shown in this set of performance indicators that the MPO tracks, several of them are directly connected to the national performance measures. The MPO already tracks crashes, pavement condition, and bridge condition. The MPO is ready to start tracking these as part of the national performance measure requirements.

### **Performance Measure Targets - Tracking**

The Chippewa-Eau Claire Metropolitan Planning Organization has officially adopted the State's 2019 requirements for PM 1, PM 2, PM 3, and Transit targets. It was decided to adopt the State's requirements after reviewing the existing conditions in the Metropolitan Planning Area and discussing different alternatives. These adoptions have all been done by formal resolutions. Projects related to each State requirement can be seen in the following Transportation Improvement Program Projects section.

#### Safety Performance Measure Targets (PM 1)

In 2019, the Chippewa-Eau Claire Metropolitan Planning Organization will continue to plan and program projects that will contribute toward the accomplishment of the WisDOT's 2019 safety program target(s). The Chippewa-Eau Claire MPO has officially adopted the State's most recent PM 1 Performance Measure Targets, as listed:

- Number of fatalities – 555.7,
- Rate of fatalities – 0.915 per 100 million vehicle miles traveled,
- Number of serious injuries – 2,967.6,
- Rate of serious injuries – 4.785 per 100 million vehicle miles traveled, and
- Number of non-motorized fatalities and non-motorized serious injuries – 342.0

Additionally, the MPO's Surface Transportation Block Grant-Urban (STBG-U) selection process uses criteria that include safety performance and improvements, including the inclusion of multimodal improvements. The MPO will track targets as required. The MPO will work closely with WisDOT and will plan and program projects so that they contribute toward the accomplishment of WisDOT's future safety targets. Future decisions within the TIP development process will be made with these targets in consideration.

#### Pavement and Bridge Condition Performance Measure Targets (PM 2)

In 2019, the Chippewa-Eau Claire Metropolitan Planning Organization will continue to plan and program projects that will contribute toward the accomplishment of the WisDOT's 2019 pavement and bridge condition target(s). The Chippewa-Eau Claire MPO has officially adopted the State's most recent PM 2 Performance Measure Targets, as listed:

<u>Measure</u>	<u>2019 Target</u>	<u>2021 Target</u>
Interstate -Percentage of pavement in "Good" condition	N/A	≥ 45%
Interstate -Percentage of pavement in "Poor" condition	N/A	≤ 5%
Non -Interstate -Percentage of pavement in "Good" condition	≥ 20%	≥ 20%
Non-Interstate -Percentage of pavement in "Poor" condition	≤ 12 %	≤ 12%
Percentage of NHS bridges by deck area in "Good" condition	≥ 50%	≥ 50%
Percentage of NHS bridges by deck area in "Poor" condition	≤ 3%	≤ 3%

The MPO will track these targets as required. The MPO will work closely with WisDOT and will plan and program projects so that they contribute toward the accomplishment of WisDOT's future bridge condition targets. Future decisions within the TIP development process will be made with these targets in consideration.

#### Freight Movement and Congestion Mitigation and Air Quality Performance Measure Targets (PM 3)

In 2019, the Chippewa-Eau Claire Metropolitan Planning Organization will continue to plan and program projects that will contribute toward the accomplishment of the WisDOT's 2019 freight movement,

congestion mitigation, and air quality target(s). The Chippewa-Eau Claire MPO has officially adopted the State's most recent PM 3 Performance Measure Targets, as listed:

<u>Measure</u>	<u>2019 Target</u>	<u>2021 Target</u>
Travel Reliability		
1) Percent of person-miles traveled that are reliable on the Interstate	94 %	90 %
2) Percent of person-miles traveled that are reliable on Non-Interstate	N/A	86 %
Freight Reliability		
3) Truck Travel Time Reliability Index on the Interstate	1.4	1.6

The MPO will track these targets as required. The MPO will work closely with WisDOT and will plan and program projects so that they contribute toward the accomplishment of WisDOT's future freight movement, congestion mitigation, and air quality performance targets. Future decisions within the TIP development process will be made with these targets in consideration.

Transit State of Good Repair and Transit Asset Management (Transit)

In 2019, the Chippewa-Eau Claire Metropolitan Planning Organization will continue to plan and program projects that will contribute toward the accomplishment of the WisDOT's 2019 transit target(s). The Chippewa-Eau Claire MPO has officially adopted the State's most recent Transit Performance Measure Targets, as listed:

<u>Performance Measure</u>	<u>2018 Performance (%)</u>	<u>2019 Target (%)</u>
1) Rolling Stock - Percent of revenue vehicles that have met or exceeded their useful life benchmark		
AB - Articulated Bus		
AO – Automobile	100.00	20.00
BR - Over-the-road Bus		
BU – Bus	19.23	58.00
CU - Cutaway	10.31	54.00
DB - Double Decker Bus		
MV – Minivan	33.33	47.00
OR - Other		
SB - School Bus		
SV - Sports Utility Vehicle		
VN – Van	0.00	

2) Equipment - Percent of service vehicles that have met or exceeded their useful life Benchmark - None

<u>Performance Measure</u>	<u>2019 Target (%)</u>
3) Facility - Percent of facilities rated below 3 on the condition scale	
Passenger/Parking Facilities	
Administrative/Maintenance Facilities	10.00

4) Eau Claire Transit

Prior to 2018, Eau Claire Transit (ECT) worked with the Wisconsin Department of Transportation in the setting of targets for the percentage of transit vehicles, service vehicles, passenger facilities, and maintenance facilities expected to fall within their designated useful life benchmarks (ULB). ECT

adopted their Transit Asset Management (TAM) Plan on September 19, 2018. The targets set for WisDOT's 5307 group are as follows:

- Vehicles and equipment: Not more than 25 percent of vehicles at or exceeding their useful life benchmark of 14 years.
- Facilities: 50 percent of facilities (by group) that are rated less than 3.0 on the Transit Economic Requirements Model (TERM) Scale.

ECT currently reports 14 percent of their 22 buses that exceed the ULB of 14 years. The system has only one service vehicle which is within its ULB. The system's only passenger facility is well beyond its useful life. A replacement is programmed for 2020. The office and maintenance facility is less than 50 years old, so there is zero percent of maintenance facilities beyond the ULB.

#### 5) Chippewa Falls Shared Ride Taxi

While Chippewa Falls Shared-Ride Taxi is a 5307-funded transit service (urban), it is included in the WisDOT's sponsored asset management group for 5311-funded services (rural). With only eight vans providing CFSRT's demand responsive service, there is more similarity with assets of services in WisDOT's 5311 group, than the buses and facilities in other 5307 systems. Targets set for the 5311 group are as follows:

- Vehicles and Equipment: WisDOT, and its sub-recipients, set the 2019 TAM performance target to only allow for 48 percent of the vehicles and capital equipment to pass beyond useful life.
- Facilities: WisDOT, and its sub-recipients, set the 2019 percentage of facilities (by group) that are allowed to age beyond a useful life of 50 years, (more than the FTA minimum standard of 40 years) at ten percent. (There are no federally-funded facilities utilized in the provision of CFSRT services.)

Currently, 100% of the CFSRT vans are within the four-year useful life benchmark (ULB). The oldest two vans, 2014 model year, will go beyond the four-year ULB in 2019, and funding is available to replace only one prior to 2019. This will result in 12.5 percent of the fleet beyond the ULB of four years.

#### Coordination and Use of Transit Asset Performance Data

The transit systems will report their performance data to WisDOT and FTA, as required under the regulations. They also agree to share their annual data, and or that of the appropriate WisDOT sponsored group, with the MPO.

The MPO will review the reported standing of transit system assets in the programming of projects for the Transportation Improvement Program (TIP), and in the development of recommendations for asset replacement and related future funding needs, in the development of the Long-Range Transportation Plan.

ECT adopted their standalone Transit Asset Management Plan in September 2018. CFSRT anticipates continuation in the WisDOT-sponsored group for 5311 funded transit systems.

The MPO will track these targets as required. The MPO will work closely with WisDOT and will plan and program projects so that they contribute toward the accomplishment of WisDOT's future transit targets. Future decisions within the TIP development process will be made with these targets in consideration.

## **Transportation Improvement Program Projects**

### Linkages of Investments to Established Performance Measures

Federal planning requirements for MPOs mandate inclusion of a description of the effects of these planning documents toward meeting the transportation system performance targets that were established. This section links projects with the respective performance measures. In the Chippewa-Eau Claire TIP 2018-2022, there are several projects funded by the federal Highway Safety Improvement Program (HSIP) that pertain to the State performance measure targets. To access the TIP, go to <http://wcvrpc.org/Chippewa-Eau-Claire-MPO.html> and scroll down to the TIP section.

### Safety (PM 1)

Safety projects in the 2018-2022 TIP

- Federal Highway Safety Improvement Program (HSIP) Projects
  - Traffic signal installation (increase safety at intersections that have been identified as dangerous)
    - STH 312/Riverview Drive
    - USH 12/CTH EE (Town Hall Road)
  - Railroad Crossing (improve safety railroad crossings that have been rated the highest as needing safety improvements)
    - 40<sup>th</sup> Avenue/Union Pacific Railroad Crossing
    - Eddy Lane/Union Pacific Railroad Crossing
    - Halblieb Road/Union Pacific Railroad Crossing (addition)
    - Hogarth Street/Union Pacific Railroad Crossing
    - Kennedy Street/Union Pacific Railroad Crossing (addition)
    - Main Street/Union Pacific Railroad Crossing
    - Melby Street/Union Pacific Railroad Crossing
    - Pumphouse Road/Union Pacific Railroad Crossing
    - Starr Avenue/Union Pacific Railroad Crossing
  - Bridge (improve safety of a bridge section that needs increase safety)
    - North Crossing: wing wall replacement (addition)
  - Safety Cable Barrier (improve safety for sections of roads that have been identified as needing safety improvements)
    - STH 29: 90<sup>th</sup> Street to 103<sup>rd</sup> Street
    - USH 53: Melby Street interchange

Additionally, there are four projects receiving funding from the STBG-U program that will improve safety with improvements like a road diet, addition of bike lanes, addition of a multiuse trail, wider shoulders, and simple pavement replacement. The list of criteria for the selection of STBG-U projects follows the list of projects. The criteria include safety and crashes. The STBG-U selection and funding process is the only project selection role that the MPO has.

- Surface Transportation Block Grant – Urban (STBG-U) Projects
  - Fairfax Street - Spooner Ave (CTH A) to Hastings Way – Road diet and bike lanes
  - Jeffers Rd - STH 312 to Countyline Rd – Roadway reconstruction, paved multi-use trail
  - CTH T - USH 12 to Chippewa County Line – Pavement replacement, wider shoulders
  - Elm St. - Wheaton St. to Perry St. – Pavement and sidewalk replacement

## Chippewa-Eau Claire MPO Project Prioritization for STBG-Urban Funding

1. Plan Consistency
2. Preserves Existing System
  - a. Highway applications
    - i. Existing highways
    - ii. New facilities
    - iii. Traffic operations improvements
  - b. Non-highway applications
    - i. Transit improvements
    - ii. Bicycle and pedestrian improvements
      1. Barrier crossing improvements
      2. Corridor improvements
3. Capacity
4. Safety
  - a. Segment crash rates
  - b. High crash locations
  - c. New facilities
5. Multimodal

### Pavement and Bridge Condition Performance Measure Targets (PM 2)

Pavement and bridge condition projects in the 2018-2022 TIP

- Federal Highway Safety Improvement Program (HSIP) Projects
  - Bridge (improve safety of a bridge section that needs increase safety)
    - North Crossing: wing wall replacement (addition)
- Surface Transportation Block Grant – Urban (STBG-U) Projects
  - Fairfax Street - Spooner Ave (CTH A) to Hastings Way – Road diet and bike lanes
  - Jeffers Rd - STH 312 to Countyline Rd – Roadway reconstruction, paved multi-use trail
  - CTH T - USH 12 to Chippewa County Line – Pavement replacement, wider shoulders
  - Elm St. - Wheaton St. to Perry St. – Pavement and sidewalk replacement

### Freight Movement and Congestion Mitigation and Air Quality Targets (PM 3)

Freight movement and congestion mitigation and air quality projects in the 2018-2022 TIP

- Federal Highway Safety Improvement Program (HSIP) Projects
  - Traffic signal installation
    - USH 12/CTH EE (Town Hall Road) (decrease wait times for entering and/or crossing USH 12 from CTH EE)

### **Performance measure targets timeline**

- PM1 – Safety: February 27, 2019 and annually
- MAP-21/FAST Act Performance Measure Planning Rule Adoption in TIP: February 27, 2019
- PM2 – Pavement and Bridge: May 20, 2019 and year 2022
- PM3 – System Performance: May 20, 2019 and year 2022