

Performance Measures and the Chippewa-Eau Claire MPO 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. 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://wcvrpc.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 razings 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.

Safety Performance Measure Targets

In February 2018, the Chippewa-Eau Claire Metropolitan Planning Organization resolved to plan and program projects so that they contribute toward the accomplishment of the WisDOT's calendar year 2018 HSIP target(s) for the following performance measures:

- Number of fatalities – 556.1,
- Rate of fatalities – 0.917 per 100 million vehicle miles traveled,
- Number of serious injuries – 3023.9,
- Rate of serious injuries – 4.997 per 100 million vehicle miles traveled, and
- Number of non-motorized fatalities and non-motorized serious injuries – 343.3

The MPO's projects related to safety can be seen below in a number of TIP projects. Additionally, the MPO's Surface Transportation Block Grant-Urban (STBG-U) selection process uses criteria that include safety performance and improvements, including for multimodal enhancement. Future decisions within the TIP development process will be made with these targets in consideration.

Transportation Improvement Program (TIP)

In the Chippewa-Eau Claire TIP 2018-2022, there are several safety projects funded by the federal Highway Safety Improvement Program (HSIP). These include two traffic signal installations, seven railroad crossings, and two segments of safety cable barrier on two major highways. To access the TIP, go to <http://wcrpc.org/Chippewa-Eau-Claire-MPO.html> and scroll down to the TIP section.

Safety Projects in the 2018-2022 TIP

- Federal Highway Safety Improvement Program (HSIP) Projects
 - Traffic signal installation
 - STH 312/Riverview Drive
 - USH 12/CTH EE (Town Hall Road)
 - Railroad Crossing
 - Starr Avenue/Union Pacific Railroad Crossing
 - Eddy Lane/Union Pacific Railroad Crossing
 - Melby Street/Union Pacific Railroad Crossing
 - 40th Avenue/Union Pacific Railroad Crossing
 - Main Street/Union Pacific Railroad Crossing
 - Pumphouse Road/Union Pacific Railroad Crossing
 - Hogarth Street/Union Pacific Railroad Crossing
 - Safety Cable Barrier
 - STH 29: 90th Street to 103rd 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

Performance measure targets timeline

- PM1 – Safety: February 27, 2018
- MAP-21/FAST Act Performance Measure Planning Rule Adoption in TIP: May 27, 2018
- PM2 – Pavement and Bridge: November 16, 2018
- PM3 – System Performance: November 16, 2018